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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC15518

Sampling Dates: 03/02/16 - 03/03/16

Report to:

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Total number of pages in report: **1210**

Nancy Cole
Laboratory Director

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.

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Sample Summary

Anderson, Mulholland & Associates

Job No: JC15518

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC15518-1	03/02/16	12:35	NMR	03/07/16	AQ	Ground Water	VP-2
JC15518-2	03/02/16	13:56	NMR	03/07/16	AQ	Ground Water	VP-1
JC15518-3	03/02/16	15:28	NMR	03/07/16	AQ	Ground Water	A-1R4
JC15518-4	03/02/16	16:51	NMR	03/07/16	AQ	Ground Water	A-2R2
JC15518-5	03/03/16	12:00	NMR	03/07/16	AQ	Ground Water	S-35
JC15518-6	03/03/16	12:09	NMR	03/07/16	AQ	Ground Water	S-35D
JC15518-7	03/03/16	13:26	NMR	03/07/16	AQ	Ground Water	S-34
JC15518-8	03/03/16	14:42	NMR	03/07/16	AQ	Ground Water	S-33
JC15518-9	03/03/16	14:42	NMR	03/07/16	AQ	Trip Blank Water	TB030316

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC15518
Site:	BMSMC, Building 5 Area, PR	**Report Date**	3/21/2016 3:52:07 PM

On 03/07/2016, 8 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 2.6 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC15518 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.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** VU9377

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC15518-5MS, JC15518-5MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** VU9378

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC15614-6MS, JC15614-6MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2-Butanone (MEK) are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2-Butanone (MEK) are outside control limits. Probable cause due to matrix interference.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP91884

- All samples were extracted within the recommended method holding time.
- Sample(s) JC15518-1MS, JC15518-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP91884A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC15518-2MS, JC15518-2MSD were used as the QC samples indicated.

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

Matrix: AQ **Batch ID:** GGH5205

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC15518-1MS, JC15518-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for n-Butyl Alcohol are outside control limits for sample JC15518-1MSD. Outside control limits due to matrix interference.

Extractables by GC By Method SW846 8081B

Matrix: AQ	**Batch ID:** OP91903

- All samples were extracted within the recommended method holding time.
- Sample(s) JC15423-2MS, JC15423-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4,4'-DDD are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JC15518-4 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JC15518
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 03/02/16 thru 03/03/16

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC15518-1	**VP-2**					
Chlorobenzene		0.64 J	1.0	0.19	ug/l	SW846 8260C
1,2-Dichlorobenzene		0.33 J	1.0	0.19	ug/l	SW846 8260C
Isopropylbenzene		0.46 J	1.0	0.23	ug/l	SW846 8260C
Methyl Tert Butyl Ether		4.4	1.0	0.24	ug/l	SW846 8260C
1,4-Dioxane		358	10	7.2	ug/l	SW846 8270D
JC15518-2	**VP-1**					
Chlorobenzene		0.20 J	1.0	0.19	ug/l	SW846 8260C
Isopropylbenzene		52.1	1.0	0.23	ug/l	SW846 8260C
Anthracene		2.7	1.0	0.25	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		5.6	2.0	0.77	ug/l	SW846 8270D
1,4-Dioxane		1.47	0.10	0.053	ug/l	SW846 8270D BY SIM
JC15518-3	**A-1R4**					
Acetone		6.9 J	10	3.3	ug/l	SW846 8260C
Benzene		4.8	0.50	0.24	ug/l	SW846 8260C
Ethylbenzene		37.7	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene		58.1	1.0	0.23	ug/l	SW846 8260C
Methyl Tert Butyl Ether		197	1.0	0.24	ug/l	SW846 8260C
4-Methyl-2-pentanone(MIBK)		4.0 J	5.0	1.0	ug/l	SW846 8260C
Toluene		0.47 J	1.0	0.16	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.83 J	2.0	0.22	ug/l	SW846 8260C
m,p-Xylene		200	1.0	0.38	ug/l	SW846 8260C
o-Xylene		6.4	1.0	0.17	ug/l	SW846 8260C
Xylene (total)		206	1.0	0.17	ug/l	SW846 8260C
2,4-Dimethylphenol		1.8 J	5.0	1.3	ug/l	SW846 8270D
Anthracene		24.8	1.0	0.25	ug/l	SW846 8270D
Benzaldehyde		17.8	5.0	0.34	ug/l	SW846 8270D
Caprolactam		4.9	2.0	0.43	ug/l	SW846 8270D
1,4-Dioxane		83.4	1.0	0.72	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		6.7	2.0	0.77	ug/l	SW846 8270D
1-Methylnaphthalene		0.49 J	1.0	0.26	ug/l	SW846 8270D
2-Methylnaphthalene		0.62 J	1.0	0.29	ug/l	SW846 8270D
Naphthalene		0.90 J	1.0	0.28	ug/l	SW846 8270D
Naphthalene		0.611	0.10	0.013	ug/l	SW846 8270D BY SIM
JC15518-4	**A-2R2**					
Cyclohexane		0.74 J	5.0	0.28	ug/l	SW846 8260C
Ethylbenzene		1.6	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene		4.0	1.0	0.23	ug/l	SW846 8260C

Summary of Hits

Job Number: JC15518
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 03/02/16 thru 03/03/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methyl Tert Butyl Ether		38.7	1.0	0.24	ug/l	SW846 8260C
Tetrahydrofuran		11.2	10	1.4	ug/l	SW846 8260C
m,p-Xylene		2.3	1.0	0.38	ug/l	SW846 8260C
Xylene (total)		2.3	1.0	0.17	ug/l	SW846 8260C
bis(2-Ethylhexyl)phthalate		3.8	2.0	0.78	ug/l	SW846 8270D
1,4-Dioxane		0.281	0.10	0.054	ug/l	SW846 8270D BY SIM
JC15518-5	**S-35**					
Methyl Tert Butyl Ether		2.1	1.0	0.24	ug/l	SW846 8260C
1,4-Dioxane		255	10	7.4	ug/l	SW846 8270D
JC15518-6	**S-35D**					
Methyl Tert Butyl Ether		2.1	1.0	0.24	ug/l	SW846 8260C
1,4-Dioxane		285	10	7.3	ug/l	SW846 8270D
JC15518-7	**S-34**					
Methyl Tert Butyl Ether		4.4	1.0	0.24	ug/l	SW846 8260C
1,4-Dioxane		16.4	1.0	0.73	ug/l	SW846 8270D
JC15518-8	**S-33**					
Chlorobenzene		0.50 J	1.0	0.19	ug/l	SW846 8260C
Isopropylbenzene		57.8	1.0	0.23	ug/l	SW846 8260C
Methyl Tert Butyl Ether		8.9	1.0	0.24	ug/l	SW846 8260C
m,p-Xylene		0.45 J	1.0	0.38	ug/l	SW846 8260C
Xylene (total)		0.45 J	1.0	0.17	ug/l	SW846 8260C
Anthracene		1.6	1.1	0.27	ug/l	SW846 8270D
Benzaldehyde		1.6 J	5.6	0.37	ug/l	SW846 8270D
1,4-Dioxane		32.5	1.1	0.80	ug/l	SW846 8270D
JC15518-9	**TB030316**					

No hits reported in this sample.

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U203996.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.64	1.0	0.19	ug/l	J
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	0.33	1.0	0.19	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	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:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	0.46	1.0	0.23	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.4	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103214.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2	P103228.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.93	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.87	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.31	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.29	ug/l	

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

Report of Analysis

Client Sample ID:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.34	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.28	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.26	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.53	ug/l	
123-91-1	1,4-Dioxane	358 [a]	10	7.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.31	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.77	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.29	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.29	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.29	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.36	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:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%	51%	14-88%
4165-62-2	Phenol-d5	35%	35%	10-110%
118-79-6	2,4,6-Tribromophenol	87%	78%	39-149%
4165-60-0	Nitrobenzene-d5	74%	76%	32-128%
321-60-8	2-Fluorobiphenyl	77%	86%	35-119%
1718-51-0	Terphenyl-d14	84%	91%	10-126%

(a) Result is from Run# 2

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59952.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		24-125%
321-60-8	2-Fluorobiphenyl	66%		19-127%
1718-51-0	Terphenyl-d14	77%		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:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103677.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	86%		56-145%
111-27-3	Hexanol	90%		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:	VP-2		
Lab Sample ID:	JC15518-1	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32909.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		26-132%
877-09-8	Tetrachloro-m-xylene	80%		26-132%
2051-24-3	Decachlorobiphenyl	76%		10-118%
2051-24-3	Decachlorobiphenyl	88%		10-118%

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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:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204014.D	1	03/09/16	NH	n/a	n/a	VU9378
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.20	1.0	0.19	ug/l	J
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	52.1	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103215.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2							

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.93	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.87	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.31	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	2.7	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.29	ug/l	

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

Report of Analysis

Client Sample ID:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.34	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.28	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.26	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.53	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.31	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	5.6	2.0	0.77	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.29	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.29	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.29	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		14-88%

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

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

Report of Analysis

Client Sample ID:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	34%		10-110%
118-79-6	2,4,6-Tribromophenol	92%		39-149%
4165-60-0	Nitrobenzene-d5	74%		32-128%
321-60-8	2-Fluorobiphenyl	80%		35-119%
1718-51-0	Terphenyl-d14	91%		10-126%

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

SGS Accutest

Report of Analysis

Client Sample ID:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59953.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.013	ug/l	
123-91-1	1,4-Dioxane	1.47	0.10	0.053	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	59%		24-125%
321-60-8	2-Fluorobiphenyl	69%		19-127%
1718-51-0	Terphenyl-d14	83%		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:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103686.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	93%		56-145%
111-27-3	Hexanol	95%		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:	VP-1		
Lab Sample ID:	JC15518-2	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32910.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		26-132%
877-09-8	Tetrachloro-m-xylene	99%		26-132%
2051-24-3	Decachlorobiphenyl	91%		10-118%
2051-24-3	Decachlorobiphenyl	100%		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:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204019.D	1	03/09/16	NH	n/a	n/a	VU9378
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.9	10	3.3	ug/l	J
71-43-2	Benzene	4.8	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	37.7	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	58.1	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	197	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	4.0	5.0	1.0	ug/l	J
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	0.47	1.0	0.16	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.83	2.0	0.22	ug/l	J
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	200	1.0	0.38	ug/l	
95-47-6	o-Xylene	6.4	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	206	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

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SGS Accutest

Report of Analysis

Client Sample ID:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103216.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2							

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.93	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	1.8	5.0	1.3	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.87	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.31	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	24.8	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	17.8	5.0	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.29	ug/l	

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Report of Analysis

Client Sample ID:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	4.9	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.34	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.28	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.26	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.53	ug/l	
123-91-1	1,4-Dioxane	83.4	1.0	0.72	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.31	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	6.7	2.0	0.77	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.29	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.29	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	0.49	1.0	0.26	ug/l	J
91-57-6	2-Methylnaphthalene	0.62	1.0	0.29	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	0.90	1.0	0.28	ug/l	J
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.29	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.36	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:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		14-88%
4165-62-2	Phenol-d5	36%		10-110%
118-79-6	2,4,6-Tribromophenol	89%		39-149%
4165-60-0	Nitrobenzene-d5	76%		32-128%
321-60-8	2-Fluorobiphenyl	83%		35-119%
1718-51-0	Terphenyl-d14	77%		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:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59954.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.611	0.10	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%		24-125%
321-60-8	2-Fluorobiphenyl	68%		19-127%
1718-51-0	Terphenyl-d14	67%		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:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103687.D	1	03/11/16	XPL	n/a	n/a	GGH5205
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	103%		56-145%
111-27-3	Hexanol	97%		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:	A-1R4		
Lab Sample ID:	JC15518-3	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32911.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.011	0.0047	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0054	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0053	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		26-132%
877-09-8	Tetrachloro-m-xylene	77%		26-132%
2051-24-3	Decachlorobiphenyl	41%		10-118%
2051-24-3	Decachlorobiphenyl	40%		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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U203998.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	0.74	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	1.6	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	4.0	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	38.7	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	11.2	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	2.3	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	2.3	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103217.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2							

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.94	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	0.88	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.83	ug/l	
	3&4-Methylphenol	ND	2.0	0.68	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.5	ug/l	
108-95-2	Phenol	ND	2.0	0.32	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.5	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.30	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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.29	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.27	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.54	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.8	2.0	0.78	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.30	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.37	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.30	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.35	ug/l	
91-20-3	Naphthalene	ND	1.0	0.29	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.32	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.30	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	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	26%		14-88%

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

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

Report of Analysis

Client Sample ID:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	21%		10-110%
118-79-6	2,4,6-Tribromophenol	63%		39-149%
4165-60-0	Nitrobenzene-d5	43%		32-128%
321-60-8	2-Fluorobiphenyl	50%		35-119%
1718-51-0	Terphenyl-d14	55%		10-126%

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

SGS Accutest

Report of Analysis

Client Sample ID:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59955.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.013	ug/l	
123-91-1	1,4-Dioxane	0.281	0.10	0.054	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	36%		24-125%
321-60-8	2-Fluorobiphenyl	43%		19-127%
1718-51-0	Terphenyl-d14	53%		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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103688.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	93%		56-145%
111-27-3	Hexanol	94%		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:	A-2R2		
Lab Sample ID:	JC15518-4	**Date Sampled:**	03/02/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32912.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0043	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0048	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		26-132%
877-09-8	Tetrachloro-m-xylene	643% [a]		26-132%
2051-24-3	Decachlorobiphenyl	76%		10-118%
2051-24-3	Decachlorobiphenyl	83%		10-118%

(a) Outside control limits due to matrix interference.

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U203995.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	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:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.1	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103218.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2	P103229.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	980 ml	1.0 ml

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	0.89	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.83	ug/l	
	3&4-Methylphenol	ND	2.0	0.68	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.5	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.5	ug/l	
108-95-2	Phenol	ND	2.0	0.32	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.5	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.38	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.28	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.24	ug/l	
86-74-8	Carbazole	ND	1.0	0.30	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:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.44	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.29	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.27	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.54	ug/l	
123-91-1	1,4-Dioxane	255 [a]	10	7.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.80	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.78	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.30	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.37	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.30	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.35	ug/l	
91-20-3	Naphthalene	ND	1.0	0.29	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.32	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.30	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	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:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%	41%	14-88%
4165-62-2	Phenol-d5	31%	31%	10-110%
118-79-6	2,4,6-Tribromophenol	89%	68%	39-149%
4165-60-0	Nitrobenzene-d5	68%	62%	32-128%
321-60-8	2-Fluorobiphenyl	70%	73%	35-119%
1718-51-0	Terphenyl-d14	85%	82%	10-126%

(a) Result is from Run# 2

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59956.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	57%		24-125%
321-60-8	2-Fluorobiphenyl	61%		19-127%
1718-51-0	Terphenyl-d14	73%		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:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103689.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	98%		56-145%
111-27-3	Hexanol	98%		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:	S-35		
Lab Sample ID:	JC15518-5	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32913.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		26-132%
877-09-8	Tetrachloro-m-xylene	84%		26-132%
2051-24-3	Decachlorobiphenyl	54%		10-118%
2051-24-3	Decachlorobiphenyl	59%		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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204002.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.1	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103219.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2	P103230.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.94	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	0.88	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.83	ug/l	
	3&4-Methylphenol	ND	2.0	0.68	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.5	ug/l	
108-95-2	Phenol	ND	2.0	0.32	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.5	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.30	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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.29	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.27	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.54	ug/l	
123-91-1	1,4-Dioxane	285 [a]	10	7.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.78	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.30	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.37	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.30	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.35	ug/l	
91-20-3	Naphthalene	ND	1.0	0.29	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.32	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.30	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%	50%	14-88%
4165-62-2	Phenol-d5	38%	35%	10-110%
118-79-6	2,4,6-Tribromophenol	96%	66%	39-149%
4165-60-0	Nitrobenzene-d5	81%	79%	32-128%
321-60-8	2-Fluorobiphenyl	85%	86%	35-119%
1718-51-0	Terphenyl-d14	92%	88%	10-126%

(a) Result is from Run# 2

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59957.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		24-125%
321-60-8	2-Fluorobiphenyl	71%		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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103690.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	95%		56-145%
111-27-3	Hexanol	94%		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:	S-35D		
Lab Sample ID:	JC15518-6	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32914.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		26-132%
877-09-8	Tetrachloro-m-xylene	68%		26-132%
2051-24-3	Decachlorobiphenyl	52%		10-118%
2051-24-3	Decachlorobiphenyl	57%		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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204003.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.4	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103220.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2							

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.94	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	0.88	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.83	ug/l	
	3&4-Methylphenol	ND	2.0	0.68	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.5	ug/l	
108-95-2	Phenol	ND	2.0	0.32	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	1.5	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.34	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.30	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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.29	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.27	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.54	ug/l	
123-91-1	1,4-Dioxane	16.4	1.0	0.73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.78	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.30	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.37	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.30	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.39	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.35	ug/l	
91-20-3	Naphthalene	ND	1.0	0.29	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.47	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.32	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.30	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		14-88%
4165-62-2	Phenol-d5	35%		10-110%
118-79-6	2,4,6-Tribromophenol	92%		39-149%
4165-60-0	Nitrobenzene-d5	79%		32-128%
321-60-8	2-Fluorobiphenyl	84%		35-119%
1718-51-0	Terphenyl-d14	88%		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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59958.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
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	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		24-125%
321-60-8	2-Fluorobiphenyl	71%		19-127%
1718-51-0	Terphenyl-d14	73%		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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103691.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	98%		56-145%
111-27-3	Hexanol	98%		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:	S-34		
Lab Sample ID:	JC15518-7	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32915.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.011	0.0047	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0053	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0052	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		26-132%
877-09-8	Tetrachloro-m-xylene	96%		26-132%
2051-24-3	Decachlorobiphenyl	76%		10-118%
2051-24-3	Decachlorobiphenyl	87%		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:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204004.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.50	1.0	0.19	ug/l	J
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	57.8	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	8.9	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	0.45	1.0	0.38	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	0.45	1.0	0.17	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	P103221.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
Run #2							

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

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	1.6	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	1.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.6	0.97	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.91	ug/l	
	3&4-Methylphenol	ND	2.2	0.74	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	1.6	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.6	1.6	ug/l	
108-95-2	Phenol	ND	2.2	0.35	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	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	1.6	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.32	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.26	ug/l	
98-86-2	Acetophenone	ND	2.2	0.31	ug/l	
120-12-7	Anthracene	1.6	1.1	0.27	ug/l	
1912-24-9	Atrazine	ND	2.2	0.46	ug/l	
100-52-7	Benzaldehyde	1.6	5.6	0.37	ug/l	J
56-55-3	Benzo(a)anthracene	ND	1.1	0.35	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.37	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.35	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.41	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.41	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.30	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.29	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.26	ug/l	
86-74-8	Carbazole	ND	1.1	0.33	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
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Report of Analysis

Client Sample ID:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.48	ug/l	
218-01-9	Chrysene	ND	1.1	0.38	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.32	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.30	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.29	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.36	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.59	ug/l	
123-91-1	1,4-Dioxane	32.5	1.1	0.80	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.41	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.87	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.32	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.85	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.26	ug/l	
86-73-7	Fluorene	ND	1.1	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.47	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.40	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	0.33	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.24	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.43	ug/l	
78-59-1	Isophorone	ND	2.2	0.32	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.32	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.23	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.27	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.38	ug/l	
91-20-3	Naphthalene	ND	1.1	0.31	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.51	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.35	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.33	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.26	ug/l	
129-00-0	Pyrene	ND	1.1	0.37	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.40	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL List (SOM0 1.1)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		14-88%
4165-62-2	Phenol-d5	32%		10-110%
118-79-6	2,4,6-Tribromophenol	90%		39-149%
4165-60-0	Nitrobenzene-d5	78%		32-128%
321-60-8	2-Fluorobiphenyl	81%		35-119%
1718-51-0	Terphenyl-d14	77%		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:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	3M59959.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.015	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	65%		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:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	GH103692.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	97%		56-145%
111-27-3	Hexanol	97%		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:	S-33		
Lab Sample ID:	JC15518-8	**Date Sampled:**	03/03/16
Matrix:	AQ - Ground Water	**Date Received:**	03/07/16
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	6G32916.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.011	0.0045	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0051	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0050	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	85%		26-132%
2051-24-3	Decachlorobiphenyl	52%		10-118%
2051-24-3	Decachlorobiphenyl	58%		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:	TB030316		
Lab Sample ID:	JC15518-9	**Date Sampled:**	03/03/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U204005.D	1	03/08/16	NH	n/a	n/a	VU9377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	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:	TB030316		
Lab Sample ID:	JC15518-9	**Date Sampled:**	03/03/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/07/16
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

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:	TB030316		
Lab Sample ID:	JC15518-9	**Date Sampled:**	03/03/16
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/07/16
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	GH103696.D	1	03/11/16	XPL	n/a	n/a	GGH5205
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	100%		56-145%
111-27-3	Hexanol	98%		56-145%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
WTB

CHAIN OF CUSTODY

Fresh Ponds Corporate Village, Building B
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Accutest Job #: JC15518
Accutest Quote #:

Client Information

Name: Anderson Mulholland & Associates
Address: 2700 Westchester Avenue
City: Purchase State: NY Zip: 10577
Send Report to: Terry Taylor
Phone #: 914-251-0400

Facility Information

Project Name: Anderson Mulholland and Associates Inc.
Location:
Project/PO #: BMS: Building 5 Area
FAX #: 914-251-1286

Analytical Information

Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation HCL	NaOH	HNO3	H2So4	None	VOCs, 8260B	SVOC, 8270D	Volatile Alcohols, 8015B	Organo Pesticides, 8081B	SVOC, 8270D SIM						
1 UP-2	3/2/16	1235	NMR	GW	10	X				X	X	X	X	X	X						
2 UP-1	3/2/16	1356	NMR	GW	10	X				X	X	X	X	X	X						674
3 A-1R4	3/2/16	1528	NMR	GW	10	X				X	X	X	X	X	X						V652
4 A-2R2	3/2/16	1651	NMR	GW	10	X				X	X	X	X	X	X						
5 S-35	3/3/16	1200	NMR	GW	10	X				X	X	X	X	X	X			*			
6 S-35D		1209	NMR	GW	10	X				X	X	X	X	X	X						
7 S-34		1326	NMR	GW	10	X				X	X	X	X	X	X						
8 S-33	3/3/16	1442	NMR	GW	10	X				X	X	X	X	X	X						
			NMR	GW	10	X				X	X	X	X	X	X	INITIAL ASESSMENT					
9 TB030316	3/3/16	1442	NMR	WT	4	X					X		X			LABEL VERIFICATION					

Turnaround Information

- [X] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days *EMERGENCY*
- [ ] Other _____ (Days)

Approved By:

RUSH TAT is for FAX data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [X] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

Federal Express ID # 801219535629 * QC VOC
Lab Trip Blank Date 2/26/16 Time 1330
SVOC Analysis by Method 8270D SIM for 1,4 Dioxane and Napthalene only.

• 2x 500mL PLB (1) 3/7/16

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	3/3/16 1458	1 FEDEX	2 FEDEX	3-7-16 9:20	2 [signature]
3		3	4		4
5		5	Seal # 144, 146, 148	Preserved where applical yes	On Ice: yes 2.1 2.0 1.9 2.2 °C

150

Job Number: JC15518 **Client:** Anderson Mulholland **Project:** BMS: Building 5 Area

Date / Time Received: 3/7/2016 9:20:00 AM **Delivery Method:** FedEx **Airbill #'s:** 801219535629

Cooler Temps (Raw Measured) °C: Cooler 1: (2.1); Cooler 2: (2.0); Cooler 3: (1.9); Cooler 4: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.5); Cooler 2: (2.4); Cooler 3: (2.3); Cooler 4: (2.6);

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

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

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

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

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

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

Comments Did not receive any Custom forms with samples.

5.1

5

JC15518: Chain of Custody
Page 2 of 4

Problem Resolution

Accutest Job Number: JC15518

CSR: _____ **Response Date:** 3/7/2016

Response: Proceed with analysis

Job Change Order: JC15518

Requested Date:	3/17/2016	**Received Date:**	3/7/2016
Account Name:	Anderson, Mulholland & Associate	**Due Date:**	3/21/2016
Project Description:	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	matthews	**TAT (Days):**	14

==========

Sample #: JC15518-1 thru 8

Dept:

TAT: 14

Change:
please add VMS+THF, VMS+IPTOLU, VMS+124TMB, VMS+BNZLCHL AND BMS+MNAP

==========

==========

Sample #: JC15518-9

Dept:

TAT: 14

TB030316

Change:
please add VMS+THF, VMS+IPTOLU, VMS+124TMB, VMS+BNZLCHL

==========

Above Changes Per: Terry Taylor

Date/Time: 3/17/2016 4:46:17 PM

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

Page 1 of 1

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC15518

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC15518-1 VP-2	Collected: 02-MAR-16 12:35 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-1	SW846 8260C	08-MAR-16 16:23	NH			V8260TCL20
JC15518-1	SW846 8270D	09-MAR-16 19:23	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-1	SW846 8270D	10-MAR-16 02:11	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-1	SW846 8270D BY SIM	10-MAR-16 12:52	LK	09-MAR-16	NG	BSIM + NAP
JC15518-1	SW846-8015C (DAI)	11-MAR-16 09:56	XPL			D8015LMA
JC15518-1	SW846 8081B	15-MAR-16 21:06	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-2 VP-1	Collected: 02-MAR-16 13:56 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-2	SW846 8260C	09-MAR-16 11:49	NH			V8260TCL20
JC15518-2	SW846 8270D	09-MAR-16 19:53	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-2	SW846 8270D BY SIM	10-MAR-16 13:23	LK	09-MAR-16	NG	B8270SIM14DIOX,BSIM + NAP
JC15518-2	SW846-8015C (DAI)	11-MAR-16 12:23	XPL			D8015LMA
JC15518-2	SW846 8081B	15-MAR-16 21:22	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-3 A-1R4	Collected: 02-MAR-16 15:28 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-3	SW846 8260C	09-MAR-16 14:16	NH			V8260TCL20
JC15518-3	SW846 8270D	09-MAR-16 20:22	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-3	SW846 8270D BY SIM	10-MAR-16 13:54	LK	09-MAR-16	NG	BSIM + NAP
JC15518-3	SW846-8015C (DAI)	11-MAR-16 12:38	XPL			D8015LMA
JC15518-3	SW846 8081B	15-MAR-16 21:39	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-4 A-2R2	Collected: 02-MAR-16 16:51 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-4	SW846 8260C	08-MAR-16 17:22	NH			V8260TCL20
JC15518-4	SW846 8270D	09-MAR-16 20:51	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-4	SW846 8270D BY SIM	10-MAR-16 14:26	LK	09-MAR-16	NG	B8270SIM14DIOX,BSIM + NAP
JC15518-4	SW846-8015C (DAI)	11-MAR-16 12:59	XPL			D8015LMA
JC15518-4	SW846 8081B	15-MAR-16 21:55	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC15518

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC15518-5 S-35	Collected: 03-MAR-16 12:00 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-5	SW846 8260C	08-MAR-16 15:53	NH			V8260TCL20
JC15518-5	SW846 8270D	09-MAR-16 21:20	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-5	SW846 8270D	10-MAR-16 02:40	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-5	SW846 8270D BY SIM	10-MAR-16 14:57	LK	09-MAR-16	NG	BSIM + NAP
JC15518-5	SW846-8015C (DAI)	11-MAR-16 13:15	XPL			D8015LMA
JC15518-5	SW846 8081B	15-MAR-16 22:12	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-6 S-35D	Collected: 03-MAR-16 12:09 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-6	SW846 8260C	08-MAR-16 19:20	NH			V8260TCL20
JC15518-6	SW846 8270D	09-MAR-16 21:50	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-6	SW846 8270D	10-MAR-16 03:09	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-6	SW846 8270D BY SIM	10-MAR-16 15:28	LK	09-MAR-16	NG	BSIM + NAP
JC15518-6	SW846-8015C (DAI)	11-MAR-16 13:25	XPL			D8015LMA
JC15518-6	SW846 8081B	15-MAR-16 22:28	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-7 S-34	Collected: 03-MAR-16 13:26 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-7	SW846 8260C	08-MAR-16 19:49	NH			V8260TCL20
JC15518-7	SW846 8270D	09-MAR-16 22:19	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-7	SW846 8270D BY SIM	10-MAR-16 15:59	LK	09-MAR-16	NG	BSIM + NAP
JC15518-7	SW846-8015C (DAI)	11-MAR-16 13:42	XPL			D8015LMA
JC15518-7	SW846 8081B	15-MAR-16 22:44	DS	09-MAR-16	AQ	P8081BETABHC,PGC + 44DDD, PGC + 44DDT
JC15518-8 S-33	Collected: 03-MAR-16 14:42 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-8	SW846 8260C	08-MAR-16 20:19	NH			V8260TCL20
JC15518-8	SW846 8270D	09-MAR-16 22:48	LK	09-MAR-16	NG	AB8270TCL20-14DX
JC15518-8	SW846 8270D BY SIM	10-MAR-16 16:31	LK	09-MAR-16	NG	BSIM + NAP
JC15518-8	SW846-8015C (DAI)	11-MAR-16 13:56	XPL			D8015LMA

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC15518

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC15518-8	SW846 8081B	15-MAR-16 23:01	DS	09-MAR-16	AQ	P8081BETABHC,PGC+44DDD, PGC+44DDT
JC15518-9 TB030316	Collected: 03-MAR-16 14:42 By: NMR		Received: 07-MAR-16 By: AS			
JC15518-9	SW846 8260C	08-MAR-16 20:48	NH			V8260TCL20
JC15518-9	SW846-8015C (DAI)	11-MAR-16 16:14	XPL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/07/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-1.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-1.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-1.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-1.1
JC15518-1.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-1.1
JC15518-1.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-1.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-1.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-1.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-1.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-1.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-1.1
JC15518-1.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-1.1
JC15518-1.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-1.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-1.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-1.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-1.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-1.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-1.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-1.2	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-1.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-1.2.1	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-1.2
JC15518-1.2.1	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-1.2
JC15518-1.2.1	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-1.3	Secured Storage	Nicholas Goydish	03/09/16 13:16	Retrieve from Storage
JC15518-1.3	Nicholas Goydish		03/09/16 14:00	Depleted
JC15518-1.3.1	Nicholas Goydish	Organics Prep	03/09/16 13:17	Extract from JC15518-1.3
JC15518-1.3.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-1.3
JC15518-1.3.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-1.3.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-1.3.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-1.3.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-1.3.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-1.4	Secured Storage	Nicholas Goydish	03/09/16 13:16	Retrieve from Storage
JC15518-1.4	Nicholas Goydish		03/09/16 14:00	Depleted
JC15518-1.4.1	Nicholas Goydish	Organics Prep	03/09/16 13:17	Extract from JC15518-1.4
JC15518-1.4.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-1.4

SGS Accutest Internal Chain of Custody

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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-1.4.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-1.4.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-1.4.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-1.4.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-1.4.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-1.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-1.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-1.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-1.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-1.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-1.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-1.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-1.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-1.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-1.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-2.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-2.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-2.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-2.1
JC15518-2.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-2.1
JC15518-2.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-2.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-2.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-2.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-2.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-2.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-2.1
JC15518-2.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-2.1
JC15518-2.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-2.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-2.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-2.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-2.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-2.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-2.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-2.2	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-2.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-2.2.1	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-2.2
JC15518-2.2.1	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-2.2

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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-2.2.1	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-2.3	Secured Storage	Nicholas Goydish	03/09/16 13:16	Retrieve from Storage
JC15518-2.3	Nicholas Goydish		03/09/16 14:00	Depleted
JC15518-2.3.1	Nicholas Goydish	Organics Prep	03/09/16 13:17	Extract from JC15518-2.3
JC15518-2.3.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-2.3
JC15518-2.3.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-2.3.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-2.3.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-2.3.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-2.3.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-2.4	Secured Storage	Nicholas Goydish	03/09/16 13:16	Retrieve from Storage
JC15518-2.4	Nicholas Goydish		03/09/16 14:00	Depleted
JC15518-2.4.1	Nicholas Goydish	Organics Prep	03/09/16 13:17	Extract from JC15518-2.4
JC15518-2.4.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-2.4
JC15518-2.4.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-2.4.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-2.4.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-2.4.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-2.4.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-2.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-2.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-2.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-2.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-2.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-2.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-2.8	Secured Storage	Nicole Horvath	03/09/16 10:30	Retrieve from Storage
JC15518-2.8	Nicole Horvath	GCMSU	03/09/16 10:30	Load on Instrument
JC15518-2.8	GCMSU	Nicole Horvath	03/10/16 08:42	Unload from Instrument
JC15518-2.8	Nicole Horvath	Secured Storage	03/10/16 08:42	Return to Storage
JC15518-2.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-2.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-2.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-2.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-3.1	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage
JC15518-3.1	Brian Johnson		03/09/16 13:10	Depleted

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JC15518-3.1.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-3.1
JC15518-3.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-3.1
JC15518-3.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-3.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-3.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-3.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-3.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-3.2	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-3.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-3.2.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-3.2
JC15518-3.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-3.2
JC15518-3.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-3.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-3.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-3.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-3.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-3.2.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-3.2
JC15518-3.2.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-3.2
JC15518-3.2.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-3.2.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-3.2.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-3.2.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-3.2.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-3.2.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-3.2.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-3.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-3.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-3.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-3.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-3.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-3.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-3.8	Secured Storage	Nicole Horvath	03/09/16 10:30	Retrieve from Storage
JC15518-3.8	Nicole Horvath	GCMSU	03/09/16 10:30	Load on Instrument
JC15518-3.8	GCMSU	Nicole Horvath	03/10/16 08:42	Unload from Instrument
JC15518-3.8	Nicole Horvath	Secured Storage	03/10/16 08:42	Return to Storage
JC15518-3.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-3.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-3.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument

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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-3.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-4.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-4.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-4.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-4.1
JC15518-4.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-4.1
JC15518-4.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-4.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-4.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-4.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-4.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-4.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-4.1
JC15518-4.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-4.1
JC15518-4.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-4.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-4.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-4.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-4.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-4.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-4.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-4.2	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage
JC15518-4.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-4.2.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-4.2
JC15518-4.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-4.2
JC15518-4.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-4.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-4.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-4.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-4.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-4.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-4.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-4.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-4.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-4.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-4.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-4.8	Secured Storage	Xu Liu	03/14/16 08:26	Retrieve from Storage
JC15518-4.8	Xu Liu	Secured Storage	03/14/16 13:42	Return to Storage
JC15518-4.8	Secured Storage	Xu Liu	03/17/16 09:52	Retrieve from Storage

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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-4.8	Xu Liu	Secured Storage	03/17/16 15:10	Return to Storage
JC15518-4.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-4.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-4.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-4.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-5.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-5.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-5.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-5.1
JC15518-5.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-5.1
JC15518-5.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-5.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-5.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-5.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-5.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-5.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-5.1
JC15518-5.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-5.1
JC15518-5.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-5.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-5.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-5.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-5.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-5.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-5.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-5.2	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage
JC15518-5.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-5.2.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-5.2
JC15518-5.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-5.2
JC15518-5.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-5.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-5.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-5.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-5.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-5.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-5.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-5.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-5.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-5.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage

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Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-5.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-5.7	Secured Storage	Xu Liu	03/14/16 08:26	Retrieve from Storage
JC15518-5.7	Xu Liu	Secured Storage	03/14/16 13:42	Return to Storage
JC15518-5.7	Secured Storage	Xu Liu	03/17/16 09:52	Retrieve from Storage
JC15518-5.7	Xu Liu	Secured Storage	03/17/16 15:10	Return to Storage
JC15518-5.8	Secured Storage	Nicole Horvath	03/08/16 16:45	Retrieve from Storage
JC15518-5.8	Nicole Horvath	GCMSU	03/08/16 16:45	Load on Instrument
JC15518-5.8	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-5.8	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-5.9	Secured Storage	Nicole Horvath	03/08/16 16:45	Retrieve from Storage
JC15518-5.9	Nicole Horvath	GCMSU	03/08/16 16:45	Load on Instrument
JC15518-5.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-5.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-5.10	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-5.10	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-5.10	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-5.10	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-6.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-6.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-6.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-6.1
JC15518-6.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-6.1
JC15518-6.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-6.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-6.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-6.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-6.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-6.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-6.1
JC15518-6.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-6.1
JC15518-6.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-6.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-6.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-6.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-6.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-6.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-6.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-6.2	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/07/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-6.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-6.2.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-6.2
JC15518-6.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-6.2
JC15518-6.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-6.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-6.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-6.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-6.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-6.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-6.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-6.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-6.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-6.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-6.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-6.8	Secured Storage	Xu Liu	03/14/16 08:26	Retrieve from Storage
JC15518-6.8	Xu Liu	Secured Storage	03/14/16 13:42	Return to Storage
JC15518-6.8	Secured Storage	Xu Liu	03/17/16 09:52	Retrieve from Storage
JC15518-6.8	Xu Liu	Secured Storage	03/17/16 15:10	Return to Storage
JC15518-6.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-6.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-6.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-6.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-7.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-7.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-7.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-7.1
JC15518-7.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-7.1
JC15518-7.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-7.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-7.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-7.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-7.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-7.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-7.1
JC15518-7.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-7.1
JC15518-7.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-7.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-7.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-7.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/07/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-7.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-7.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-7.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-7.2	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage
JC15518-7.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-7.2.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-7.2
JC15518-7.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-7.2
JC15518-7.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-7.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-7.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-7.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-7.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-7.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-7.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-7.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-7.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-7.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-7.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-7.8	Secured Storage	Xu Liu	03/14/16 08:26	Retrieve from Storage
JC15518-7.8	Xu Liu	Secured Storage	03/14/16 13:42	Return to Storage
JC15518-7.8	Secured Storage	Xu Liu	03/17/16 09:52	Retrieve from Storage
JC15518-7.8	Xu Liu	Secured Storage	03/17/16 15:10	Return to Storage
JC15518-7.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-7.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-7.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-7.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-8.1	Secured Storage	Brian Johnson	03/09/16 04:42	Retrieve from Storage
JC15518-8.1	Brian Johnson		03/09/16 13:10	Depleted
JC15518-8.1.1	Brian Johnson	Organics Prep	03/09/16 04:49	Extract from JC15518-8.1
JC15518-8.1.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-8.1
JC15518-8.1.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-8.1.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-8.1.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-8.1.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-8.1.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-8.1.2	Brian Johnson	Organics Prep	03/09/16 04:59	Extract from JC15518-8.1

SGS Accutest Internal Chain of Custody

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/07/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC15518-8.1.2	Organics Prep	Nicholas Goydish	03/09/16 12:38	Extract from JC15518-8.1
JC15518-8.1.2	Nicholas Goydish	Extract Storage	03/09/16 12:38	Return to Storage
JC15518-8.1.2	Extract Storage	Julius Johnson	03/09/16 19:15	Retrieve from Storage
JC15518-8.1.2	Julius Johnson	GCMSP	03/09/16 19:15	Load on Instrument
JC15518-8.1.2	GCMSP	Linsey Kirschmann	03/10/16 10:24	Unload from Instrument
JC15518-8.1.2	Linsey Kirschmann	GCMS3M	03/10/16 10:24	Load on Instrument
JC15518-8.1.2	GCMS3M	Linsey Kirschmann	03/11/16 12:19	Unload from Instrument
JC15518-8.1.2	Linsey Kirschmann	Extract Freezer	03/11/16 12:19	Return to Storage
JC15518-8.2	Secured Storage	Brian Johnson	03/09/16 09:58	Retrieve from Storage
JC15518-8.2	Brian Johnson		03/09/16 13:10	Depleted
JC15518-8.2.1	Brian Johnson	Organics Prep	03/09/16 10:00	Extract from JC15518-8.2
JC15518-8.2.1	Organics Prep	Adil Quyser	03/09/16 16:45	Extract from JC15518-8.2
JC15518-8.2.1	Adil Quyser	Extract Storage	03/09/16 16:45	Return to Storage
JC15518-8.2.1	Extract Storage	Dhara Saparia	03/15/16 17:12	Retrieve from Storage
JC15518-8.2.1	Dhara Saparia	GC6G	03/15/16 17:12	Load on Instrument
JC15518-8.2.1	GC6G	Rebecca Krug	03/18/16 08:35	Unload from Instrument
JC15518-8.2.1	Rebecca Krug	Extract Freezer	03/18/16 08:35	Return to Storage
JC15518-8.5	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-8.5	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-8.5	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-8.5	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-8.5	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-8.5	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-8.9	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-8.9	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-8.9	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-8.9	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage
JC15518-9.1	Secured Storage	Xu Liu	03/09/16 07:08	Retrieve from Storage
JC15518-9.1	Xu Liu	Secured Storage	03/09/16 14:17	Return to Storage
JC15518-9.1	Secured Storage	Xu Liu	03/10/16 07:34	Retrieve from Storage
JC15518-9.1	Xu Liu	Secured Storage	03/11/16 07:36	Return to Storage
JC15518-9.1	Secured Storage	Xu Liu	03/11/16 10:13	Retrieve from Storage
JC15518-9.1	Xu Liu	Secured Storage	03/11/16 14:13	Return to Storage
JC15518-9.4	Secured Storage	Nicole Horvath	03/08/16 14:52	Retrieve from Storage
JC15518-9.4	Nicole Horvath	GCMSU	03/08/16 14:52	Load on Instrument
JC15518-9.4	GCMSU	Nicole Horvath	03/09/16 08:17	Unload from Instrument
JC15518-9.4	Nicole Horvath	Secured Storage	03/09/16 08:17	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9377-MB	U203992.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9377-MB	U203992.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	73-122%
2037-26-5	Toluene-D8	98%	84-119%
460-00-4	4-Bromofluorobenzene	99%	78-117%

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9378-MB	U204010.D	1	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
100-44-7	Benzyl Chloride	ND	5.0	0.21	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.37	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.21	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9378-MB	U204010.D	1	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
109-99-9	Tetrahydrofuran	ND	10	1.4	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.23	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	101%	78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9377-BS	U203993.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	59.6	119	47-144
71-43-2	Benzene	50	50.1	100	81-119
100-44-7	Benzyl Chloride	50	50.5	101	40-157
74-97-5	Bromochloromethane	50	53.9	108	84-120
75-27-4	Bromodichloromethane	50	51.7	103	81-125
75-25-2	Bromoform	50	52.5	105	74-128
74-83-9	Bromomethane	50	57.4	115	52-146
78-93-3	2-Butanone (MEK)	50	58.0	116	68-130
75-15-0	Carbon disulfide	50	53.6	107	71-129
56-23-5	Carbon tetrachloride	50	52.1	104	77-140
108-90-7	Chlorobenzene	50	51.3	103	84-116
75-00-3	Chloroethane	50	49.8	100	70-148
67-66-3	Chloroform	50	56.0	112	81-120
74-87-3	Chloromethane	50	44.3	89	50-143
110-82-7	Cyclohexane	50	46.3	93	77-125
96-12-8	1,2-Dibromo-3-chloropropane	50	57.1	114	66-132
124-48-1	Dibromochloromethane	50	51.5	103	81-122
106-93-4	1,2-Dibromoethane	50	50.3	101	81-120
95-50-1	1,2-Dichlorobenzene	50	51.9	104	80-117
541-73-1	1,3-Dichlorobenzene	50	50.1	100	81-116
106-46-7	1,4-Dichlorobenzene	50	49.4	99	80-115
75-71-8	Dichlorodifluoromethane	50	53.6	107	36-169
75-34-3	1,1-Dichloroethane	50	53.5	107	80-125
107-06-2	1,2-Dichloroethane	50	50.6	101	78-131
75-35-4	1,1-Dichloroethene	50	56.5	113	73-127
156-59-2	cis-1,2-Dichloroethene	50	52.3	105	77-118
156-60-5	trans-1,2-Dichloroethene	50	51.1	102	75-118
78-87-5	1,2-Dichloropropane	50	49.9	100	80-124
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	72-121
10061-02-6	trans-1,3-Dichloropropene	50	52.1	104	73-122
100-41-4	Ethylbenzene	50	51.1	102	80-118
76-13-1	Freon 113	50	59.2	118	76-140
591-78-6	2-Hexanone	50	52.2	104	66-128
98-82-8	Isopropylbenzene	50	51.5	103	78-125
99-87-6	p-Isopropyltoluene	50	53.9	108	81-124
79-20-9	Methyl Acetate	50	52.7	105	63-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9377-BS	U203993.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-87-2	Methylcyclohexane	50	52.0	104	69-132
1634-04-4	Methyl Tert Butyl Ether	100	106	106	73-122
108-10-1	4-Methyl-2-pentanone(MIBK)	50	53.3	107	73-129
75-09-2	Methylene chloride	50	51.6	103	75-122
100-42-5	Styrene	50	53.1	106	81-121
79-34-5	1,1,2,2-Tetrachloroethane	50	50.2	100	69-116
127-18-4	Tetrachloroethene	50	53.3	107	69-138
109-99-9	Tetrahydrofuran	50	55.0	110	56-132
108-88-3	Toluene	50	51.5	103	80-122
87-61-6	1,2,3-Trichlorobenzene	50	57.8	116	74-137
120-82-1	1,2,4-Trichlorobenzene	50	56.7	113	75-135
71-55-6	1,1,1-Trichloroethane	50	55.4	111	80-131
79-00-5	1,1,2-Trichloroethane	50	50.5	101	78-122
79-01-6	Trichloroethene	50	50.7	101	83-122
75-69-4	Trichlorofluoromethane	50	53.0	106	66-143
95-63-6	1,2,4-Trimethylbenzene	50	52.2	104	82-125
75-01-4	Vinyl chloride	50	46.6	93	57-138
	m,p-Xylene	100	104	104	82-119
95-47-6	o-Xylene	50	53.5	107	82-119
1330-20-7	Xylene (total)	150	157	105	82-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	98%	78-117%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9378-BS	U204011.D	1	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	56.7	113	47-144
71-43-2	Benzene	50	52.1	104	81-119
100-44-7	Benzyl Chloride	50	54.1	108	40-157
74-97-5	Bromochloromethane	50	55.3	111	84-120
75-27-4	Bromodichloromethane	50	53.7	107	81-125
75-25-2	Bromoform	50	52.5	105	74-128
74-83-9	Bromomethane	50	60.6	121	52-146
78-93-3	2-Butanone (MEK)	50	54.4	109	68-130
75-15-0	Carbon disulfide	50	55.3	111	71-129
56-23-5	Carbon tetrachloride	50	53.5	107	77-140
108-90-7	Chlorobenzene	50	53.4	107	84-116
75-00-3	Chloroethane	50	52.6	105	70-148
67-66-3	Chloroform	50	57.8	116	81-120
74-87-3	Chloromethane	50	47.8	96	50-143
110-82-7	Cyclohexane	50	53.3	107	77-125
96-12-8	1,2-Dibromo-3-chloropropane	50	54.2	108	66-132
124-48-1	Dibromochloromethane	50	52.7	105	81-122
106-93-4	1,2-Dibromoethane	50	51.1	102	81-120
95-50-1	1,2-Dichlorobenzene	50	53.4	107	80-117
541-73-1	1,3-Dichlorobenzene	50	52.6	105	81-116
106-46-7	1,4-Dichlorobenzene	50	51.7	103	80-115
75-71-8	Dichlorodifluoromethane	50	51.4	103	36-169
75-34-3	1,1-Dichloroethane	50	55.0	110	80-125
107-06-2	1,2-Dichloroethane	50	52.2	104	78-131
75-35-4	1,1-Dichloroethene	50	57.0	114	73-127
156-59-2	cis-1,2-Dichloroethene	50	54.3	109	77-118
156-60-5	trans-1,2-Dichloroethene	50	53.0	106	75-118
78-87-5	1,2-Dichloropropane	50	51.8	104	80-124
10061-01-5	cis-1,3-Dichloropropene	50	54.0	108	72-121
10061-02-6	trans-1,3-Dichloropropene	50	54.4	109	73-122
100-41-4	Ethylbenzene	50	53.1	106	80-118
76-13-1	Freon 113	50	56.8	114	76-140
591-78-6	2-Hexanone	50	50.9	102	66-128
98-82-8	Isopropylbenzene	50	54.1	108	78-125
99-87-6	p-Isopropyltoluene	50	56.7	113	81-124
79-20-9	Methyl Acetate	50	48.6	97	63-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU9378-BS	U204011.D	1	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-87-2	Methylcyclohexane	50	49.9	100	69-132
1634-04-4	Methyl Tert Butyl Ether	100	105	105	73-122
108-10-1	4-Methyl-2-pentanone(MIBK)	50	52.2	104	73-129
75-09-2	Methylene chloride	50	52.8	106	75-122
100-42-5	Styrene	50	55.1	110	81-121
79-34-5	1,1,2,2-Tetrachloroethane	50	50.4	101	69-116
127-18-4	Tetrachloroethene	50	55.6	111	69-138
109-99-9	Tetrahydrofuran	50	52.7	105	56-132
108-88-3	Toluene	50	54.0	108	80-122
87-61-6	1,2,3-Trichlorobenzene	50	55.9	112	74-137
120-82-1	1,2,4-Trichlorobenzene	50	56.4	113	75-135
71-55-6	1,1,1-Trichloroethane	50	57.6	115	80-131
79-00-5	1,1,2-Trichloroethane	50	52.0	104	78-122
79-01-6	Trichloroethene	50	53.0	106	83-122
75-69-4	Trichlorofluoromethane	50	54.2	108	66-143
95-63-6	1,2,4-Trimethylbenzene	50	55.0	110	82-125
75-01-4	Vinyl chloride	50	49.3	99	57-138
	m,p-Xylene	100	109	109	82-119
95-47-6	o-Xylene	50	55.5	111	82-119
1330-20-7	Xylene (total)	150	164	109	82-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	73-122%
2037-26-5	Toluene-D8	99%	84-119%
460-00-4	4-Bromofluorobenzene	99%	78-117%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15518-5MS	U203999.D	1	03/08/16	NH	n/a	n/a	VU9377
JC15518-5MSD	U204000.D	1	03/08/16	NH	n/a	n/a	VU9377
JC15518-5	U203995.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	JC15518-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	54.5	109	50	55.8	112	2	33-158/19
71-43-2	Benzene	ND		50	49.9	100	50	49.7	99	0	43-138/12
100-44-7	Benzyl Chloride	ND		50	55.7	111	50	55.5	111	0	48-155/17
74-97-5	Bromochloromethane	ND		50	52.0	104	50	51.9	104	0	75-127/12
75-27-4	Bromodichloromethane	ND		50	50.7	101	50	51.1	102	1	72-128/13
75-25-2	Bromoform	ND		50	51.2	102	50	50.6	101	1	70-131/12
74-83-9	Bromomethane	ND		50	59.5	119	50	61.1	122	3	47-142/16
78-93-3	2-Butanone (MEK)	ND		50	53.8	108	50	53.0	106	1	56-146/12
75-15-0	Carbon disulfide	ND		50	51.5	103	50	52.0	104	1	38-136/17
56-23-5	Carbon tetrachloride	ND		50	52.8	106	50	52.7	105	0	45-149/17
108-90-7	Chlorobenzene	ND		50	51.6	103	50	51.0	102	1	70-124/12
75-00-3	Chloroethane	ND		50	51.5	103	50	53.8	108	4	47-139/15
67-66-3	Chloroform	ND		50	55.8	112	50	55.5	111	1	66-126/13
74-87-3	Chloromethane	ND		50	48.5	97	50	49.5	99	2	41-140/15
110-82-7	Cyclohexane	ND		50	47.3	95	50	45.3	91	4	30-148/17
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	55.8	112	50	53.7	107	4	64-136/14
124-48-1	Dibromochloromethane	ND		50	50.8	102	50	50.4	101	1	75-126/12
106-93-4	1,2-Dibromoethane	ND		50	49.2	98	50	48.9	98	1	77-124/11
95-50-1	1,2-Dichlorobenzene	ND		50	52.2	104	50	51.1	102	2	71-124/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.3	101	50	49.8	100	1	69-125/12
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	50	49.5	99	1	69-122/12
75-71-8	Dichlorodifluoromethane	ND		50	59.5	119	50	55.9	112	6	24-161/20
75-34-3	1,1-Dichloroethane	ND		50	53.2	106	50	52.9	106	1	60-129/13
107-06-2	1,2-Dichloroethane	ND		50	50.0	100	50	49.7	99	1	72-133/12
75-35-4	1,1-Dichloroethene	ND		50	55.3	111	50	55.1	110	0	40-137/17
156-59-2	cis-1,2-Dichloroethene	ND		50	52.1	104	50	51.6	103	1	57-128/13
156-60-5	trans-1,2-Dichloroethene	ND		50	50.6	101	50	50.5	101	0	53-128/15
78-87-5	1,2-Dichloropropane	ND		50	48.9	98	50	48.7	97	0	69-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	51.5	103	50	51.3	103	0	67-129/14
10061-02-6	trans-1,3-Dichloropropene	ND		50	51.8	104	50	51.7	103	0	68-130/14
100-41-4	Ethylbenzene	ND		50	51.6	103	50	51.1	102	1	38-139/12
76-13-1	Freon 113	ND		50	65.6	131	50	63.7	127	3	34-154/18
591-78-6	2-Hexanone	ND		50	50.7	101	50	51.0	102	1	55-148/15
98-82-8	Isopropylbenzene	ND		50	52.8	106	50	51.7	103	2	54-137/15
99-87-6	p-Isopropyltoluene	ND		50	56.1	112	50	55.0	110	2	57-135/16
79-20-9	Methyl Acetate	ND		50	51.8	104	50	51.7	103	0	60-137/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15518-5MS	U203999.D	1	03/08/16	NH	n/a	n/a	VU9377
JC15518-5MSD	U204000.D	1	03/08/16	NH	n/a	n/a	VU9377
JC15518-5	U203995.D	1	03/08/16	NH	n/a	n/a	VU9377

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-1, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	JC15518-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-87-2	Methylcyclohexane	ND		50	56.4	113	50	54.5	109	3	30-152/17
1634-04-4	Methyl Tert Butyl Ether	2.1		100	106	104	100	108	106	2	64-132/13
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	52.5	105	50	52.2	104	1	68-139/12
75-09-2	Methylene chloride	ND		50	49.8	100	50	49.9	100	0	63-128/13
100-42-5	Styrene	ND		50	52.9	106	50	52.7	105	0	61-134/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.6	99	50	48.3	97	3	67-126/13
127-18-4	Tetrachloroethene	ND		50	55.1	110	50	54.1	108	2	43-145/15
109-99-9	Tetrahydrofuran	ND		50	51.4	103	50	50.0	100	3	49-135/14
108-88-3	Toluene	ND		50	51.9	104	50	51.7	103	0	51-136/13
87-61-6	1,2,3-Trichlorobenzene	ND		50	57.0	114	50	56.3	113	1	66-140/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	56.8	114	50	55.8	112	2	65-138/15
71-55-6	1,1,1-Trichloroethane	ND		50	56.5	113	50	56.5	113	0	51-141/16
79-00-5	1,1,2-Trichloroethane	ND		50	49.8	100	50	49.8	100	0	71-127/12
79-01-6	Trichloroethene	ND		50	51.3	103	50	51.3	103	0	55-136/14
75-69-4	Trichlorofluoromethane	ND		50	55.5	111	50	55.1	110	1	33-157/21
95-63-6	1,2,4-Trimethylbenzene	ND		50	53.2	106	50	52.3	105	2	40-143/13
75-01-4	Vinyl chloride	ND		50	50.6	101	50	51.7	103	2	34-147/17
	m,p-Xylene	ND		100	106	106	100	104	104	2	42-139/13
95-47-6	o-Xylene	ND		50	53.6	107	50	53.4	107	0	56-134/13
1330-20-7	Xylene (total)	ND		150	159	106	150	158	105	1	46-137/12

CAS No.	Surrogate Recoveries	MS	MSD	JC15518-5	Limits
1868-53-7	Dibromofluoromethane	103%	104%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	106%	106%	104%	73-122%
2037-26-5	Toluene-D8	99%	99%	98%	84-119%
460-00-4	4-Bromofluorobenzene	98%	96%	102%	78-117%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15614-6MS	U204020.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6MSD	U204021.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6	U204016.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6	U204019A.D	10	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	JC15614-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	60.5	121	50	53.3	107	13	33-158/19
71-43-2	Benzene	0.38	J	50	55.6	110	50	49.3	98	12	43-138/12
100-44-7	Benzyl Chloride	ND		50	56.6	113	50	54.0	108	5	48-155/17
74-97-5	Bromochloromethane	ND		50	57.5	115	50	51.1	102	12	75-127/12
75-27-4	Bromodichloromethane	ND		50	55.9	112	50	49.7	99	12	72-128/13
75-25-2	Bromoform	ND		50	55.2	110	50	49.0	98	12	70-131/12
74-83-9	Bromomethane	ND		50	61.4	123	50	59.7	119	3	47-142/16
78-93-3	2-Butanone (MEK)	ND		50	86.9	174* [a]	50	81.1	162* [a]	7	56-146/12
75-15-0	Carbon disulfide	ND		50	61.9	124	50	54.6	109	13	38-136/17
56-23-5	Carbon tetrachloride	ND		50	59.5	119	50	52.6	105	12	45-149/17
108-90-7	Chlorobenzene	6.0		50	61.6	111	50	55.7	99	10	70-124/12
75-00-3	Chloroethane	ND		50	54.6	109	50	52.3	105	4	47-139/15
67-66-3	Chloroform	ND		50	60.9	122	50	54.3	109	11	66-126/13
74-87-3	Chloromethane	ND		50	50.4	101	50	48.6	97	4	41-140/15
110-82-7	Cyclohexane	ND		50	51.7	103	50	55.3	111	7	30-148/17
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	56.9	114	50	51.1	102	11	64-136/14
124-48-1	Dibromochloromethane	ND		50	54.7	109	50	48.8	98	11	75-126/12
106-93-4	1,2-Dibromoethane	ND		50	52.5	105	50	47.6	95	10	77-124/11
95-50-1	1,2-Dichlorobenzene	5.0		50	59.6	109	50	54.3	99	9	71-124/12
541-73-1	1,3-Dichlorobenzene	ND		50	54.4	109	50	48.6	97	11	69-125/12
106-46-7	1,4-Dichlorobenzene	1.3		50	54.6	107	50	49.2	96	10	69-122/12
75-71-8	Dichlorodifluoromethane	ND		50	55.9	112	50	56.7	113	1	24-161/20
75-34-3	1,1-Dichloroethane	ND		50	58.9	118	50	52.8	106	11	60-129/13
107-06-2	1,2-Dichloroethane	0.58	J	50	55.1	109	50	49.2	97	11	72-133/12
75-35-4	1,1-Dichloroethene	3.9		50	68.1	128	50	61.6	115	10	40-137/17
156-59-2	cis-1,2-Dichloroethene	515 [b]		50	558	102	50	551	88	1	57-128/13
156-60-5	trans-1,2-Dichloroethene	1.1		50	57.6	113	50	52.2	102	10	53-128/15
78-87-5	1,2-Dichloropropane	ND		50	54.3	109	50	48.2	96	12	69-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	56.4	113	50	50.0	100	12	67-129/14
10061-02-6	trans-1,3-Dichloropropene	ND		50	56.5	113	50	50.5	101	11	68-130/14
100-41-4	Ethylbenzene	ND		50	55.8	112	50	49.8	100	11	38-139/12
76-13-1	Freon 113	ND		50	64.5	129	50	66.0	132	2	34-154/18
591-78-6	2-Hexanone	ND		50	53.6	107	50	48.2	96	11	55-148/15
98-82-8	Isopropylbenzene	ND		50	56.8	114	50	50.7	101	11	54-137/15
99-87-6	p-Isopropyltoluene	ND		50	59.5	119	50	53.5	107	11	57-135/16
79-20-9	Methyl Acetate	ND		50	52.3	105	50	50.6	101	3	60-137/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15614-6MS	U204020.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6MSD	U204021.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6	U204016.D	1	03/09/16	NH	n/a	n/a	VU9378
JC15614-6	U204019A.D	10	03/09/16	NH	n/a	n/a	VU9378

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC15518-2, JC15518-3

CAS No.	Compound	JC15614-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-87-2	Methylcyclohexane	ND		50	56.0	112	50	56.2	112	0	30-152/17
1634-04-4	Methyl Tert Butyl Ether	ND		100	112	112	100	103	103	8	64-132/13
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	55.9	112	50	50.4	101	10	68-139/12
75-09-2	Methylene chloride	ND		50	57.0	114	50	50.0	100	13	63-128/13
100-42-5	Styrene	ND		50	57.7	115	50	51.4	103	12	61-134/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	53.0	106	50	47.0	94	12	67-126/13
127-18-4	Tetrachloroethene	21.8		50	80.9	118	50	75.7	108	7	43-145/15
109-99-9	Tetrahydrofuran	ND		50	55.4	111	50	50.3	101	10	49-135/14
108-88-3	Toluene	ND		50	56.8	114	50	50.4	101	12	51-136/13
87-61-6	1,2,3-Trichlorobenzene	ND		50	59.6	119	50	54.3	109	9	66-140/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	59.0	118	50	53.5	107	10	65-138/15
71-55-6	1,1,1-Trichloroethane	ND		50	63.2	126	50	56.1	112	12	51-141/16
79-00-5	1,1,2-Trichloroethane	ND		50	53.9	108	50	47.7	95	12	71-127/12
79-01-6	Trichloroethene	25.7		50	82.8	114	50	76.5	102	8	55-136/14
75-69-4	Trichlorofluoromethane	ND		50	55.0	110	50	55.1	110	0	33-157/21
95-63-6	1,2,4-Trimethylbenzene	ND		50	57.5	115	50	50.9	102	12	40-143/13
75-01-4	Vinyl chloride	39.1		50	92.4	107	50	92.1	106	0	34-147/17
	m,p-Xylene	ND		100	114	114	100	101	101	12	42-139/13
95-47-6	o-Xylene	ND		50	59.0	118	50	52.2	104	12	56-134/13
1330-20-7	Xylene (total)	ND		150	173	115	150	154	103	12	46-137/12

CAS No.	Surrogate Recoveries	MS	MSD	JC15614-6	JC15614-6	Limits
1868-53-7	Dibromofluoromethane	104%	105%	103%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	106%	107%	105%	106%	73-122%
2037-26-5	Toluene-D8	101%	99%	99%	99%	84-119%
460-00-4	4-Bromofluorobenzene	98%	98%	102%	101%	78-117%

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

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VU9367-BFB
Lab File ID: U203694.D
Instrument ID: GCMSU
Injection Date: 02/26/16
Injection Time: 10:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15488	20.1		Pass
75	30.0 - 60.0% of mass 95	36613	47.5		Pass
95	Base peak, 100% relative abundance	77106	100.0		Pass
96	5.0 - 9.0% of mass 95	5147	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	70741	91.7		Pass
175	5.0 - 9.0% of mass 174	5299	6.87	(7.49) [a]	Pass
176	95.0 - 101.0% of mass 174	68253	88.5	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4560	5.91	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
VU9367-IC9367	U203695.D	02/26/16	11:10	00:44	Initial cal 0.2
VU9367-IC9367	U203696.D	02/26/16	11:39	01:13	Initial cal 0.5
VU9367-IC9367	U203697.D	02/26/16	12:08	01:42	Initial cal 1
VU9367-IC9367	U203698.D	02/26/16	12:38	02:12	Initial cal 2
VU9367-IC9367	U203699.D	02/26/16	13:07	02:41	Initial cal 5
VU9367-IC9367	U203700.D	02/26/16	13:37	03:11	Initial cal 10
VU9367-IC9367	U203701.D	02/26/16	14:06	03:40	Initial cal 20
VU9367-ICC9367	U203702.D	02/26/16	14:35	04:09	Initial cal 50
VU9367-IC9367	U203703.D	02/26/16	15:05	04:39	Initial cal 100
VU9367-IC9367	U203704.D	02/26/16	15:34	05:08	Initial cal 200
VU9367-ICV9367	U203707.D	02/26/16	17:02	06:36	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VU9377-BFB
Lab File ID: U203988.D
Instrument ID: GCMSU
Injection Date: 03/08/16
Injection Time: 12:26

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15062	20.2		Pass
75	30.0 - 60.0% of mass 95	35789	47.9		Pass
95	Base peak, 100% relative abundance	74701	100.0		Pass
96	5.0 - 9.0% of mass 95	4942	6.62		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	65930	88.3		Pass
175	5.0 - 9.0% of mass 174	5133	6.87	(7.79) [a]	Pass
176	95.0 - 101.0% of mass 174	64842	86.8	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4319	5.78	(6.66) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
VU9377-CC9367	U203989.D	03/08/16	12:55	00:29	Continuing cal 20
VU9377-CC9367	U203990.D	03/08/16	13:25	00:59	Continuing cal 20
VU9377-MB	U203992.D	03/08/16	14:24	01:58	Method Blank
VU9377-BS	U203993.D	03/08/16	14:54	02:28	Blank Spike
JC15518-5	U203995.D	03/08/16	15:53	03:27	S-35
JC15518-1	U203996.D	03/08/16	16:23	03:57	VP-2
JC15518-4	U203998.D	03/08/16	17:22	04:56	A-2R2
JC15518-5MS	U203999.D	03/08/16	17:51	05:25	Matrix Spike
JC15518-5MSD	U204000.D	03/08/16	18:21	05:55	Matrix Spike Duplicate
JC15518-6	U204002.D	03/08/16	19:20	06:54	S-35D
JC15518-7	U204003.D	03/08/16	19:49	07:23	S-34
JC15518-8	U204004.D	03/08/16	20:19	07:53	S-33
JC15518-9	U204005.D	03/08/16	20:48	08:22	TB030316

Instrument Performance Check (BFB)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: VU9378-BFB
Lab File ID: U204007.D
Instrument ID: GCMSU
Injection Date: 03/09/16
Injection Time: 08:22

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15200	20.5		Pass
75	30.0 - 60.0% of mass 95	35221	47.5		Pass
95	Base peak, 100% relative abundance	74136	100.0		Pass
96	5.0 - 9.0% of mass 95	4985	6.72		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	63277	85.4		Pass
175	5.0 - 9.0% of mass 174	4891	6.60	(7.73) [a]	Pass
176	95.0 - 101.0% of mass 174	61952	83.6	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4127	5.57	(6.66) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
VU9378-CC9367	U204008.D	03/09/16	08:53	00:31	Continuing cal 20
VU9378-MB	U204010.D	03/09/16	09:51	01:29	Method Blank
VU9378-BS	U204011.D	03/09/16	10:20	01:58	Blank Spike
ZZZZZZ	U204013.D	03/09/16	11:20	02:58	(unrelated sample)
JC15518-2	U204014.D	03/09/16	11:49	03:27	VP-1
ZZZZZZ	U204015.D	03/09/16	12:18	03:56	(unrelated sample)
JC15614-6	U204016.D	03/09/16	12:48	04:26	(used for QC only; not part of job JC15518)
ZZZZZZ	U204017.D	03/09/16	13:17	04:55	(unrelated sample)
ZZZZZZ	U204018.D	03/09/16	13:47	05:25	(unrelated sample)
JC15518-3	U204019.D	03/09/16	14:16	05:54	A-1R4
JC15614-6	U204019A.D	03/09/16	14:46	06:24	(used for QC only; not part of job JC15518)
JC15614-6MS	U204020.D	03/09/16	15:16	06:54	Matrix Spike
JC15614-6MSD	U204021.D	03/09/16	15:45	07:23	Matrix Spike Duplicate
ZZZZZZ	U204022.D	03/09/16	16:15	07:53	(unrelated sample)
ZZZZZZ	U204026.D	03/09/16	18:14	09:52	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	VU9377-CC9367	**Injection Date:**	03/08/16
Lab File ID:	U203989.D	**Injection Time:**	12:55
Instrument ID:	GCMSU	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	115510	7.86	229697	10.06	330574	10.98	306513	14.30	172130	16.88
Upper Limit [a]	231020	8.36	459394	10.56	661148	11.48	613026	14.80	344260	17.38
Lower Limit [b]	57755	7.36	114849	9.56	165287	10.48	153257	13.80	86065	16.38

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VU9377-MB	121394	7.87	232044	10.06	337079	10.98	307895	14.30	167391	16.88
VU9377-BS	121570	7.87	227287	10.06	330013	10.98	303371	14.30	169846	16.88
JC15518-5	113553	7.86	234159	10.06	339574	10.98	311491	14.30	166118	16.88
JC15518-1	113580	7.86	234746	10.06	338663	10.98	311972	14.30	167964	16.88
JC15518-4	115829	7.86	229683	10.06	331371	10.98	302829	14.30	161927	16.88
JC15518-5MS	120145	7.86	224550	10.06	329146	10.98	301055	14.30	168075	16.88
JC15518-5MSD	121870	7.86	226160	10.06	329051	10.98	305339	14.30	173617	16.88
JC15518-6	127542	7.86	237894	10.06	345168	10.98	314341	14.30	170133	16.88
JC15518-7	115293	7.86	238581	10.06	344322	10.98	313145	14.30	166951	16.88
JC15518-8	116087	7.86	236852	10.06	340117	10.98	307921	14.30	162096	16.88
JC15518-9	121136	7.86	233178	10.06	336492	10.98	308836	14.30	163721	16.88

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(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.

Volatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	VU9378-CC9367	**Injection Date:**	03/09/16
Lab File ID:	U204008.D	**Injection Time:**	08:53
Instrument ID:	GCMSU	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	115146	7.86	222018	10.06	321256	10.98	298383	14.30	166632	16.88
Upper Limit [a]	230292	8.36	444036	10.56	642512	11.48	596766	14.80	333264	17.38
Lower Limit [b]	57573	7.36	111009	9.56	160628	10.48	149192	13.80	83316	16.38

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VU9378-MB	116548	7.86	236747	10.06	341109	10.98	311519	14.30	163897	16.88
VU9378-BS	112003	7.86	230414	10.06	335025	10.98	308675	14.30	171610	16.88
ZZZZZZ	114200	7.86	235082	10.06	339110	10.98	310502	14.30	164944	16.88
JC15518-2	101951	7.86	229397	10.06	329487	10.98	303258	14.30	162954	16.88
ZZZZZZ	108678	7.86	231001	10.06	334284	10.98	307914	14.30	163702	16.88
JC15614-6	112288	7.86	230359	10.06	333053	10.98	307681	14.30	162980	16.88
ZZZZZZ	113056	7.86	228227	10.06	332131	10.98	302469	14.30	161182	16.88
ZZZZZZ	114610	7.86	229064	10.06	332244	10.98	304608	14.30	164084	16.88
JC15518-3	124577	7.86	234166	10.06	336314	10.98	312090	14.30	167604	16.88
JC15614-6	121877	7.86	228763	10.06	333034	10.98	304314	14.30	163505	16.88
JC15614-6MS	119149	7.86	222527	10.06	323011	10.98	301522	14.30	171052	16.88
JC15614-6MSD	118524	7.86	227233	10.06	332728	10.98	306028	14.30	173247	16.88
ZZZZZZ	119631	7.85	235103	10.06	341779	10.98	311480	14.30	164714	16.88
ZZZZZZ	120868	7.86	229149	10.06	333486	10.98	305858	14.30	163467	16.88

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(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.

Volatile Surrogate Recovery Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC15518-1	U203996.D	103	103	99	102
JC15518-2	U204014.D	104	103	99	101
JC15518-3	U204019.D	104	104	100	100
JC15518-4	U203998.D	103	104	99	101
JC15518-5	U203995.D	104	104	98	102
JC15518-6	U204002.D	103	104	98	101
JC15518-7	U204003.D	103	103	98	102
JC15518-8	U204004.D	102	103	98	102
JC15518-9	U204005.D	103	104	98	102
JC15518-5MS	U203999.D	103	106	99	98
JC15518-5MSD	U204000.D	104	106	99	96
JC15614-6MS	U204020.D	104	106	101	98
JC15614-6MSD	U204021.D	105	107	99	98
VU9377-BS	U203993.D	103	104	99	98
VU9377-MB	U203992.D	104	103	98	99
VU9378-BS	U204011.D	105	105	99	99
VU9378-MB	U204010.D	103	104	99	101

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	73-122%
S3 = Toluene-D8	84-119%
S4 = 4-Bromofluorobenzene	78-117%

Initial Calibration Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: VU9367-ICC9367
Lab FileID: U203702.D

```
                    Response Factor Report  MSU

Method       : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title        : SW-846  8260C, ZB624  60m x 250um x 1.40um
Last Update  : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Calibration Files
5   =u203699.D   2   =u203698.D   20  =u203701.D   50  =u203702.D
100 =u203703.D   1   =u203697.D   200 =u203704.D   10  =u203700.D
0.5 =u203696.D   0.2 =u203695.D       =                =

Compound
        5     2     20    50    100   1     200   10    0.5   0.2    Avg   %RSD
-------------------------------------------------------------------------------

1) I   Tert Butyl Alcohol-d9 ----------------ISTD---------------------
2)  tertiary butyl alcohol
     1.034 0.989 1.190 1.223 1.198 0.975 1.097 1.209              1.114    9.32
3)  Ethanol
                                                                  0.000   -1.00
4)  1,4-dioxane
     0.074 0.061 0.095 0.102 0.102       0.093 0.093              0.089   17.10

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  freon 115
                                                                  0.000   -1.00
7)  freon 23
                                                                  0.000   -1.00
8)  freon 143A
                                                                  0.000   -1.00
9)  freon 152A
                                                                  0.000   -1.00
10)  chlorotrifluoroethene
                                                                  0.000   -1.00
11)  chlorodifluoromethane
      0.485 0.441 0.587 0.603 0.579 0.568 0.526 0.589              0.547   10.57
12)  dichlorodifluoromethane
      0.481 0.402 0.480 0.520 0.492 0.552 0.481 0.472              0.485    8.87
13)  freon 142B
                                                                  0.000   -1.00
14)  freon 114
                                                                  0.000   -1.00
15)  chloromethane
      0.808 0.808 0.795 0.869 0.787 1.184 0.787 0.761              0.850   16.29
16)  vinyl chloride
      0.709 0.685 0.687 0.738 0.664 0.940 0.655 0.653              0.716   13.22
17)  acetaldehyde
                                                                  0.000   -1.00
18)  bromomethane
      0.361 0.358 0.358 0.380 0.335       0.283 0.343              0.345    8.94
19)  chloroethane
      0.376 0.379 0.372 0.398 0.359 0.488 0.353 0.352              0.385   11.59
20)  trichlorofluoromethane
      0.654 0.613 0.652 0.701 0.639       0.637 0.616              0.644    4.59
21)  pentane
                                                                  0.000   -1.00
22)  freon 123A
                                                                  0.000   -1.00
23)  ethyl ether
```

	0.251	0.197	0.281	0.301	0.295	0.279	0.293	0.280			0.272	12.57
24)	2-CHLOROPROPANE											
	1.006	0.744	1.093	1.137	1.070	1.085	1.066	1.086			1.036	11.93
25)	freon 141B											
											0.000	-1.00
26)	freon 123											
											0.000	-1.00
27)	acrolein											
	0.114	0.124	0.118	0.121		0.123		0.105			0.117	6.15
28)	1,1-dichloroethene											
	0.396	0.267	0.423	0.437	0.412	0.390	0.419	0.418	0.284		0.383	16.35
29)	acetone											
	0.033	0.037	0.043	0.048	0.045		0.046	0.040			0.042	12.66
30)	allyl chloride											
	0.294	0.199	0.337	0.352	0.335	0.296	0.336	0.324			0.309	15.88
31)	acetonitrile											
	0.053	0.056	0.056	0.057	0.053		0.050	0.059			0.055	5.24
32)	iodomethane											
	0.710	0.509	0.782	0.817	0.780	0.760	0.802	0.776			0.742	13.40
33)	carbon disulfide											
	1.461	1.035	1.586	1.646	1.551	1.526	1.566	1.597	1.418	1.295	1.468	12.49
34)	1-CHLOROPROPANE											
	0.039		0.045	0.047	0.044		0.044	0.045			0.044	5.65
35)	methylene chloride											
	0.471	0.379	0.509	0.523	0.494	0.510	0.501	0.512			0.487	9.53
36)	methyl acetate											
	0.385	0.362	0.476	0.479	0.459	0.413	0.427	0.492			0.436	10.89
37)	methyl tert butyl ether											
	1.334	1.084	1.458	1.502	1.444	1.513	1.459	1.444	1.316	1.154	1.371	10.80
38)	trans-1,2-dichloroethene											
	0.440	0.309	0.476	0.492	0.464	0.478	0.464	0.481			0.451	13.16
39)	di-isopropyl ether											
	1.691	1.637	1.983	2.036	1.949	1.978	1.838	2.009	1.989	1.829	1.894	7.36
40)	ethyl tert-butyl ether											
	1.427	1.374	1.679	1.747	1.679	1.668	1.612	1.703	1.645		1.615	7.91
41)	2-butanone											
	0.048		0.060	0.061	0.060		0.060	0.053			0.057	9.18
42)	1,1-dichloroethane											
	0.887	0.645	0.963	1.003	0.944	0.956	0.940	0.969	0.808		0.902	12.36
43)	chloroprene											
	0.627	0.591	0.762	0.797	0.766	0.690	0.716	0.767			0.715	10.28
44)	acrylonitrile											
	0.195	0.160	0.216	0.220	0.208	0.220	0.205	0.211	0.182		0.202	9.96
45)	vinyl acetate											
	0.065		0.086	0.096	0.094		0.087	0.084			0.085	12.64
46)	ethyl acetate											
	0.063		0.091	0.094	0.091		0.086	0.081			0.084	13.27
47)	2,2-dichloropropane											
	0.673	0.480	0.706	0.729	0.690	0.686	0.677	0.725			0.671	11.92
48)	cis-1,2-dichloroethene											
	0.486	0.354	0.521	0.544	0.519	0.512	0.519	0.521			0.497	12.08
49)	methyl acrylate											
	0.058		0.071	0.076	0.075		0.075	0.068			0.071	9.54
50)	propionitrile											
	0.076	0.063	0.085	0.086	0.082	0.083	0.082	0.083			0.080	9.16
51)	bromochloromethane											
	0.225	0.163	0.243	0.258	0.249	0.228	0.253	0.247			0.233	13.06
52)	tetrahydrofuran											
	0.193	0.145	0.218	0.220	0.211	0.193	0.210	0.215			0.201	12.30
53)	chloroform											

Initial Calibration Summary

Job Number: JC15518 **Sample:** VU9367-ICC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203702.D
Project: BMSMC, Building 5 Area, PR

```
      0.761 0.570 0.826 0.865 0.829 0.825 0.830 0.831 0.707 0.633  0.768   12.93
54)  tert-butyl Formate
      0.379 0.342 0.449 0.475 0.463 0.418 0.448 0.449              0.428   10.67
55)  iso-butyl alcohol
      0.024 0.023 0.030 0.031 0.030 0.027 0.027 0.031 0.021        0.027   13.76
56)  dibromofluoromethane (s)
      0.407 0.404 0.404 0.408 0.404 0.403 0.406 0.409 0.406 0.411  0.406    0.61
57)  1,2-dichloroethane-d4 (s)
      0.493 0.487 0.492 0.502 0.502 0.490 0.504 0.495 0.487 0.494  0.495    1.25
58)  freon 113
      0.256 0.192 0.299 0.310 0.306       0.281 0.307              0.279   15.29
59)  methacrylonitrile
      0.349 0.281 0.379 0.401 0.389 0.359 0.392 0.378 0.267        0.355   13.77
60)  1,1,1-trichloroethane
      0.640 0.433 0.680 0.713 0.692 0.636 0.696 0.678              0.646   13.97
61)  tert amyl alcohol
                                                                   0.000   -1.00
62)  tert-amyl methyl ether
      0.274 0.263 0.326 0.334 0.322 0.298 0.305 0.327 0.253        0.300   10.13
63)  iso-octane
      1.640 1.396 1.752 1.737 1.743 1.659 1.524 1.942              1.674    9.78

64) I   1,4-difluorobenzene   ----------------ISTD--------------------
65)  Di-isobutylene
                                                                   0.000   -1.00
66)  epichlorohydrin
      0.033 0.032 0.042 0.043 0.041 0.036 0.039 0.040 0.026        0.037   15.16
67)  n-butyl alcohol
      0.010 0.009 0.013 0.013 0.013 0.010 0.011 0.012              0.011   15.26
68)  Cyclohexane
      0.502       0.524 0.623 0.515       0.584 0.530              0.546    8.56
69)  carbon tetrachloride
      0.425 0.288 0.460 0.473 0.450 0.407 0.453 0.453              0.426   13.99
70)  1,1-dichloropropene
      0.452 0.303 0.483 0.505 0.480 0.456 0.474 0.484              0.455   13.97
71)  hexane
      0.416 0.350 0.457 0.462 0.465       0.413 0.495              0.437   10.97
72)  benzene
      1.362 1.027 1.458 1.497 1.407 1.520 1.370 1.457 1.325 1.369  1.379   10.09
73)  heptane
      0.259 0.208 0.287 0.298 0.310 0.263 0.281 0.312              0.277   12.37
74)  isopropyl acetate
      0.680 0.650 0.806 0.827 0.808 0.795 0.765 0.812 0.763        0.767    8.11
75)  1,2-dichloroethane
      0.444 0.357 0.481 0.498 0.477 0.494 0.472 0.483 0.442        0.461    9.42
76)  ethyl acrylate
                                                                   0.000   -1.00
77)  tert amyl ethyl ether
                                                                   0.000   -1.00
78)  trichloroethene
      0.328 0.222 0.352 0.371 0.357 0.348 0.360 0.344              0.335   14.13
79)  methylcyclohexane
      0.492 0.438 0.564 0.569 0.560 0.502 0.516 0.583              0.528    9.41
80)  2-nitropropane
      0.133 0.116 0.159 0.163 0.158 0.158 0.152 0.156 0.123        0.146   12.14
81)  2-chloroethyl vinyl ether
      0.187 0.179 0.237 0.246 0.240 0.214 0.219 0.232 0.204 0.158  0.212   13.91
82)  methyl methacrylate
      0.077 0.060 0.091 0.094 0.094       0.094 0.086              0.085   14.98
83)  1,2-dichloropropane
```

```
      0.373 0.290 0.407 0.423 0.407 0.422 0.402 0.412 0.374        0.390   10.67
 84)  propyl acetate
      0.060 0.054 0.070 0.072 0.069 0.051 0.064 0.070              0.064   12.58
 85)  dibromomethane
      0.193 0.154 0.216 0.221 0.216 0.213 0.220 0.210 0.145        0.199   14.71
 86)  bromodichloromethane
      0.440 0.331 0.485 0.507 0.493 0.492 0.505 0.478 0.422 0.326  0.448   15.29
 87)  cis-1,3-dichloropropene
      0.580 0.442 0.632 0.664 0.647 0.647 0.645 0.622 0.522        0.600   12.27
 88)  toluene-d8 (s)
      1.196 1.196 1.216 1.203 1.189 1.198 1.211 1.205 1.199 1.195  1.201    0.69
 89)  4-methyl-2-pentanone
      0.139 0.105 0.162 0.166 0.160       0.158 0.156              0.149   14.35
 90)  toluene
      0.824 0.610 0.891 0.928 0.892 0.912 0.888 0.894 0.770 0.718  0.833   12.40
 91)  3-methyl-1-butanol
      0.016 0.014 0.021 0.022 0.020 0.016 0.018 0.020              0.018   14.93
 92)  trans-1,3-dichloropropene
      0.516 0.410 0.576 0.604 0.587 0.571 0.590 0.566 0.465 0.444  0.533   13.07
 93)  ethyl methacrylate
      0.409 0.333 0.485 0.513 0.508 0.447 0.510 0.460              0.458   13.58
 94)  1,1,2-trichloroethane
      0.251 0.201 0.279 0.290 0.281 0.286 0.286 0.272 0.212        0.262   12.82
 95)  2-hexanone
      0.133       0.163 0.168 0.162       0.161 0.154              0.157    8.02

 96) I   chlorobenzene-d5      ----------------ISTD---------------------
 97)  cyclohexanone
      0.024 0.023 0.025 0.028 0.025 0.033 0.025 0.021              0.026   14.15
 98)  tetrachloroethene
      0.313 0.218 0.337 0.355 0.347 0.330 0.340 0.337 0.249        0.314   15.18
 99)  1,3-dichloropropane
      0.568 0.453 0.613 0.633 0.622 0.649 0.600 0.608 0.552        0.589   10.02
100)  butyl acetate
      0.248 0.230 0.298 0.304 0.302 0.274 0.274 0.292 0.214        0.271   12.23
101)  dibromochloromethane
      0.363 0.285 0.405 0.433 0.431 0.405 0.436 0.398 0.325        0.387   13.55
102)  1,2-dibromoethane
      0.313 0.251 0.347 0.366 0.363 0.345 0.366 0.341              0.337   11.48
103)  3,3-dimethyl-1-Butanol
      0.036 0.034 0.050 0.053 0.050       0.042 0.046              0.045   16.36
104)  n-butyl ether
      1.775 1.309 1.994 2.123 2.083 1.934 1.991 1.947 1.572        1.859   14.25
105)  chlorobenzene
      0.976 0.752 1.060 1.112 1.077 1.095 1.059 1.060 0.954 0.943  1.009   10.71
106)  1,1,1,2-tetrachloroethane
      0.360 0.275 0.391 0.410 0.400 0.392 0.397 0.394              0.377   11.56
107)  ethylbenzene
      1.726 1.255 1.859 1.940 1.880 1.877 1.818 1.873 1.705 1.742  1.768   11.08
108)  m,p-xylene
      0.646 0.480 0.713 0.742 0.713 0.718 0.685 0.709 0.623 0.585  0.661   12.19
109)  o-xylene
      0.650 0.481 0.709 0.730 0.715 0.707 0.696 0.696 0.573 0.543  0.650   13.32
110)  styrene
      1.069 0.789 1.203 1.272 1.238 1.135 1.206 1.168 0.916 0.953  1.095   14.57
111)  bromoform
      0.261 0.214 0.296 0.317 0.321 0.269 0.329 0.286              0.287   13.32

112) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
113)  isopropylbenzene
```

```
       3.116 2.266 3.351 3.467 3.351 3.444 3.342 3.358 2.887 2.584  3.117   13.13
114)  4-bromofluorobenzene (s)
       0.913 0.924 0.910 0.902 0.899 0.932 0.919 0.912 0.917 0.923  0.915    1.10
115)  bromobenzene
       0.828 0.628 0.891 0.917 0.889 0.980 0.899 0.892 0.822 0.776  0.852   11.39
116)  1,1,2,2-tetrachloroethane
       0.831 0.690 0.904 0.922 0.893 0.950 0.910 0.894 0.803 0.658  0.846   11.84
117)  trans-1,4-dichloro-2-butene
       0.209       0.275 0.291 0.287       0.297 0.261              0.270   11.99
118)  1,2,3-trichloropropane
       0.196 0.165 0.223 0.230 0.220 0.194 0.220 0.230              0.210   10.89
119)  n-propylbenzene
       3.786 2.696 4.061 4.183 3.988 4.050 3.856 4.063 3.538 3.351  3.757   12.09
120)  2-chlorotoluene
       0.770 0.581 0.823 0.846 0.820 0.897 0.813 0.831 0.701        0.787   11.97
121)  4-chlorotoluene
       2.317 1.834 2.496 2.574 2.498 2.653 2.529 2.505 2.258 2.391  2.406    9.68
122)  p-Ethyltoluene
                                                                    0.000   -1.00
123)  1,3,5-trimethylbenzene
       2.606 1.904 2.821 2.937 2.846 2.872 2.749 2.842 2.506 2.219  2.630   12.72
124)  tert-butylbenzene
       2.248 1.631 2.436 2.547 2.482 2.474 2.418 2.428 2.264 1.821  2.275   13.49
125)  pentachloroethane
       0.512 0.380 0.565 0.595 0.588 0.575 0.594 0.562 0.387        0.529   16.25
126)  1,2,4-trimethylbenzene
       2.638 1.964 2.899 3.018 2.922 2.946 2.859 2.894 2.510 2.524  2.717   11.79
127)  1,2,3-trimethylbenzene
                                                                    0.000   -1.00
128)  sec-butylbenzene
       3.362 2.378 3.701 3.862 3.754 3.626 3.624 3.711 3.212 2.810  3.404   14.04
129)  1,3-dichlorobenzene
       1.586 1.214 1.714 1.797 1.748 1.744 1.741 1.716 1.602 1.539  1.640   10.45
130)  p-isopropyltoluene
       2.822 2.054 3.131 3.269 3.192 3.012 3.062 3.114 2.719 2.403  2.878   13.49
131)  1,4-dichlorobenzene
       1.595 1.258 1.703 1.789 1.755 1.842 1.744 1.727 1.665        1.675   10.24
132)  benzyl chloride
       1.389 1.342 1.694 1.774 1.732 1.726 1.629 1.698 1.746 1.598  1.633    9.23
133)  1,2-dichlorobenzene
       1.461 1.168 1.604 1.680 1.651 1.668 1.626 1.596 1.438 1.436  1.533   10.39
134)  p-Diethylbenzene
                                                                    0.000   -1.00
135)  n-butylbenzene
       1.448 1.014 1.625 1.736 1.690 1.480 1.608 1.618 1.382 1.191  1.479   15.56
136)  1,2,4,5-Tetramethylbenzene
                                                                    0.000   -1.00
137)  1,2-dibromo-3-chloropropane
       0.134 0.119 0.165 0.174 0.174 0.123 0.182 0.159              0.154   16.00
138)  1,3,5-trichlorobenzene
       1.143 0.876 1.270 1.379 1.362 1.258 1.332 1.257 1.101        1.220   13.02
139)  1,2,4-trichlorobenzene
       0.862 0.704 1.017 1.118 1.121 0.955 1.109 0.988 0.828        0.967   15.04
140)  hexachlorobutadiene
       0.562 0.394 0.607 0.645 0.633 0.568 0.602 0.607              0.577   13.75
141)  naphthalene
       1.628 1.330 1.960 2.113 2.112 1.821 2.100 1.872 1.533 2.098  1.857   14.96
142)  INDANE
                                                                    0.000   -1.00
143)  1,2,3-trichlorobenzene
```

Initial Calibration Summary

Job Number: JC15518 **Sample:** VU9367-ICC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203702.D
Project: BMSMC, Building 5 Area, PR

```
       0.678 0.554 0.814 0.897 0.900 0.722 0.881 0.783              0.779   15.68
144)  hexachloroethane
       0.509 0.366 0.566 0.607 0.604 0.505 0.596 0.562              0.539   14.92
145)  MMT
                                                                    0.000   -1.00
146)  Bis(chloromethyl)ether
                                                                    0.000   -1.00
147)  Ethylenimine
                                                                    0.000   -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MU9367.M          Mon Feb 29 09:35:16 2016   U_CORE
```

6.7.1

6

Initial Calibration Verification

Job Number: JC15518 **Sample:** VU9367-ICV9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203707.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\u203707.D                    Vial: 14
Acq On    : 26 Feb 2016   5:02 pm                     Operator: NicoleH1
Sample    : icv9367-50                                Inst    : MSU
Misc      : ms98802,vu9367,5.0,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title        : SW-846  8260C, ZB624  60m x 250um x 1.40um
Last Update  : Mon Feb 29 09:33:35 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  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	Tert Butyl Alcohol-d9	1.000	1.000	0.0	98	0.00	7.86
2	M	tertiary butyl alcohol	1.114	1.215	-9.1	98	0.00	7.98
3		Ethanol		----------NA----------				
4	m	1,4-dioxane	0.089	0.095	-6.7	92	0.00	11.71
5	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	10.06
6	M	freon 115		----------NA----------				
7	M	freon 23		----------NA----------				
8	M	freon 143A		----------NA----------				
9	M	freon 152A		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.547	0.624	-14.1	103	0.00	4.40
12	M	dichlorodifluoromethane	0.485	0.500	-3.1	96	-0.01	4.38
13	M	freon 142B		----------NA----------				
14	M	freon 114		----------NA----------				
15	M	chloromethane	0.850	0.733	13.8	84	0.00	4.76
16	M	vinyl chloride	0.716	0.644	10.1	87	0.00	5.03
17	M	acetaldehyde		----------NA----------				
18	M	bromomethane	0.345	0.384	-11.3	101	-0.01	5.70
19	M	chloroethane	0.385	0.372	3.4	93	0.00	5.89
20	M	trichlorofluoromethane	0.644	0.648	-0.6	92	0.00	6.32
21	M	pentane		----------NA----------				
22	M	freon 123A		----------NA----------				
23	M	ethyl ether	0.272	0.294	-8.1	97	0.00	6.74
24		2-CHLOROPROPANE	1.036	1.119	-8.0	98	0.00	6.97
25	M	freon 141B		----------NA----------				
26	M	freon 123		----------NA----------				
27	M	acrolein	0.117	0.126	-7.7	103	0.00	7.04
28	M	1,1-dichloroethene	0.383	0.425	-11.0	97	0.00	7.19
29	M	acetone	0.042	0.047	-11.9	99	0.00	7.25
30	M	allyl chloride	0.309	0.333	-7.8	94	0.00	7.72
31	M	acetonitrile	0.055	0.054	1.8	96	0.00	7.72
32	M	iodomethane	0.742	0.790	-6.5	96	0.00	7.49
33	M	carbon disulfide	1.468	1.614	-9.9	98	0.00	7.61
34		1-CHLOROPROPANE	0.044	0.045	-2.3	96	0.00	7.95
35	M	methylene chloride	0.487	0.501	-2.9	96	0.00	7.92
36	M	methyl acetate	0.436	0.464	-6.4	97	0.00	7.70
37	M	methyl tert butyl ether	1.371	1.460	-6.4	97	0.00	8.22
38	M	trans-1,2-dichloroethene	0.451	0.470	-4.2	95	0.00	8.28
39	M	di-isopropyl ether	1.894	2.009	-6.1	98	0.00	8.79
40	M	ethyl tert-butyl ether	1.615	1.743	-7.9	99	0.00	9.25
41	M	2-butanone	0.057	0.061	-7.0	99	0.00	9.54

Initial Calibration Verification

Job Number: JC15518 **Sample:** VU9367-ICV9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203707.D
Project: BMSMC, Building 5 Area, PR

42	M	1,1-dichloroethane	0.902	0.972	-7.8	97	0.00	8.85
43	M	chloroprene	0.715	0.803	-12.3	100	0.00	8.94
44	M	acrylonitrile	0.202	0.217	-7.4	98	0.00	8.25
45	M	vinyl acetate	0.085	0.094	-10.6	98	0.00	8.81
46	M	ethyl acetate	0.084	0.092	-9.5	98	0.00	9.53
47	M	2,2-dichloropropane	0.671	0.714	-6.4	98	0.00	9.58
48	M	cis-1,2-dichloroethene	0.497	0.519	-4.4	95	0.00	9.57
49	M	methyl acrylate	0.071	0.077	-8.5	101	0.00	9.62
50	M	propionitrile	0.080	0.084	-5.0	97	0.00	9.66
51	M	bromochloromethane	0.233	0.249	-6.9	96	0.00	9.89
52	M	tetrahydrofuran	0.201	0.216	-7.5	98	0.00	9.91
53	M	chloroform	0.768	0.850	-10.7	98	0.00	9.93
54		tert-butyl Formate	0.428	0.406	5.1	85	0.00	9.96
55	M	iso-butyl alcohol	0.027	0.030	-11.1	95	0.00	10.35
56	S	dibromofluoromethane (s)	0.406	0.398	2.0	97	0.00	10.14
57	S	1,2-dichloroethane-d4 (s)	0.495	0.492	0.6	98	0.00	10.56
58	M	freon 113	0.279	0.340	-21.9	110	0.00	7.16
59	M	methacrylonitrile	0.355	0.379	-6.8	94	0.00	9.82
60	M	1,1,1-trichloroethane	0.646	0.728	-12.7	102	0.00	10.18
61	M	tert amyl alcohol		----------NA----------				
62	M	tert-amyl methyl ether	0.300	0.337	-12.3	101	0.00	10.63
63		iso-octane	1.674	1.807	-7.9	104	0.00	10.59
64	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.98
65	M	Di-isobutylene		----------NA----------				
66	M	epichlorohydrin	0.037	0.043	-16.2	98	0.00	12.28
67	M	n-butyl alcohol	0.011	0.013	-18.2	96	0.00	11.09
68	M	Cyclohexane	0.546	0.612	-12.1	96	0.00	10.25
69	M	carbon tetrachloride	0.426	0.473	-11.0	98	0.00	10.38
70	M	1,1-dichloropropene	0.455	0.524	-15.2	102	0.00	10.36
71	M	hexane	0.437	0.446	-2.1	95	0.00	8.55
72	M	benzene	1.379	1.466	-6.3	96	0.00	10.62
73	M	heptane	0.277	0.312	-12.6	103	0.00	10.75
74	M	isopropyl acetate	0.767	0.887	-15.6	105	0.00	10.51
75	M	1,2-dichloroethane	0.461	0.491	-6.5	97	0.00	10.64
76	M	ethyl acrylate		----------NA----------				
77		tert amyl ethyl ether		----------NA----------				
78	M	trichloroethene	0.335	0.366	-9.3	97	0.00	11.32
79	M	methylcyclohexane	0.528	0.604	-14.4	104	0.00	11.54
80	M	2-nitropropane	0.146	0.166	-13.7	100	0.00	12.13
81	M	2-chloroethyl vinyl ether	0.212	0.255	-20.3	102	0.00	12.12
82	M	methyl methacrylate	0.085	0.096	-12.9	100	0.00	11.58
83	M	1,2-dichloropropane	0.390	0.418	-7.2	97	0.00	11.60
84	M	propyl acetate	0.064	0.073	-14.1	100	0.00	11.61
85	M	dibromomethane	0.199	0.216	-8.5	96	0.00	11.77
86	M	bromodichloromethane	0.448	0.501	-11.8	97	0.00	11.90
87	M	cis-1,3-dichloropropene	0.600	0.654	-9.0	97	0.00	12.36
88	S	toluene-d8 (s)	1.201	1.206	-0.4	98	0.00	12.66
89	M	4-methyl-2-pentanone	0.149	0.168	-12.8	99	0.00	12.45
90	M	toluene	0.833	0.921	-10.6	97	0.00	12.74
91	M	3-methyl-1-butanol	0.018	0.022	-22.2	100	0.00	12.46
92	M	trans-1,3-dichloropropene	0.533	0.582	-9.2	94	0.00	12.95
93	M	ethyl methacrylate	0.458	0.510	-11.4	98	0.00	12.92
94	M	1,1,2-trichloroethane	0.262	0.285	-8.8	96	0.00	13.19
95	M	2-hexanone	0.157	0.172	-9.6	100	0.00	13.36
96	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	14.30
97	M	cyclohexanone	0.026	0.025	3.8	90	0.00	15.56
98	M	tetrachloroethene	0.314	0.355	-13.1	99	0.00	13.36
99	M	1,3-dichloropropane	0.589	0.616	-4.6	96	0.00	13.39

Initial Calibration Verification

Job Number: JC15518 **Sample:** VU9367-ICV9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203707.D
Project: BMSMC, Building 5 Area, PR

100	M	butyl acetate	0.271	0.322	-18.8	105	0.00	13.42
101	M	dibromochloromethane	0.387	0.424	-9.6	97	0.00	13.68
102	M	1,2-dibromoethane	0.337	0.359	-6.5	97	0.00	13.85
103		3,3-dimethyl-1-Butanol	0.045	0.054	-20.0	100	0.00	13.54
104		n-butyl ether	1.859	2.118	-13.9	98	0.00	14.20
105	M	chlorobenzene	1.009	1.109	-9.9	98	0.00	14.34
106	M	1,1,1,2-tetrachloroethane	0.377	0.399	-5.8	96	0.00	14.40
107	M	ethylbenzene	1.768	1.927	-9.0	98	0.00	14.38
108	M	m,p-xylene	0.661	0.735	-11.2	98	0.00	14.50
109	M	o-xylene	0.650	0.743	-14.3	100	0.00	14.97
110	M	styrene	1.095	1.244	-13.6	96	0.00	14.98
111	M	bromoform	0.287	0.320	-11.5	100	0.00	15.30
112	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	16.88
113	M	isopropylbenzene	3.117	3.378	-8.4	98	0.00	15.34
114	S	4-bromofluorobenzene (s)	0.915	0.890	2.7	99	0.00	15.58
115	M	bromobenzene	0.852	0.901	-5.8	99	0.00	15.80
116	M	1,1,2,2-tetrachloroethane	0.846	0.891	-5.3	97	0.00	15.70
117	M	trans-1,4-dichloro-2-bute	0.270	0.293	-8.5	101	0.00	15.74
118	M	1,2,3-trichloropropane	0.210	0.222	-5.7	97	0.00	15.78
119	M	n-propylbenzene	3.757	4.188	-11.5	101	0.00	15.79
120	M	2-chlorotoluene	0.787	0.824	-4.7	98	0.00	15.97
121	M	4-chlorotoluene	2.406	2.544	-5.7	99	0.00	16.08
122		p-Ethyltoluene		----------NA----------				
123	M	1,3,5-trimethylbenzene	2.630	2.899	-10.2	99	0.00	15.96
124	M	tert-butylbenzene	2.275	2.545	-11.9	100	0.00	16.35
125	M	pentachloroethane	0.529	0.597	-12.9	101	0.00	16.46
126	M	1,2,4-trimethylbenzene	2.717	3.028	-11.4	101	0.00	16.40
127		1,2,3-trimethylbenzene		----------NA----------				
128	M	sec-butylbenzene	3.404	3.808	-11.9	99	0.00	16.59
129	M	1,3-dichlorobenzene	1.640	1.773	-8.1	99	0.00	16.82
130	M	p-isopropyltoluene	2.878	3.322	-15.4	102	0.00	16.71
131	M	1,4-dichlorobenzene	1.675	1.780	-6.3	100	0.00	16.91
132	M	benzyl chloride	1.633	1.811	-10.9	103	0.00	17.04
133	M	1,2-dichlorobenzene	1.533	1.687	-10.0	101	0.00	17.35
134		p-Diethylbenzene		----------NA----------				
135	M	n-butylbenzene	1.479	1.724	-16.6	100	0.00	17.17
136		1,2,4,5-Tetramethylbenzen		----------NA----------				
137	M	1,2-dibromo-3-chloropropa	0.154	0.178	-15.6	103	0.00	18.21
138		1,3,5-trichlorobenzene	1.220	1.365	-11.9	99	0.00	18.40
139	M	1,2,4-trichlorobenzene	0.967	1.136	-17.5	102	0.00	19.13
140	M	hexachlorobutadiene	0.577	0.660	-14.4	103	0.00	19.24
141	M	naphthalene	1.857	2.107	-13.5	100	0.00	19.46
142		INDANE		----------NA----------				
143	M	1,2,3-trichlorobenzene	0.779	0.903	-15.9	101	0.00	19.74
144	M	hexachloroethane	0.539	0.623	-15.6	103	0.00	17.63
145	M	MMT		----------NA----------				
146	M	Bis(chloromethyl)ether		----------NA----------				
147	M	Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
u203702.D MU9367.M Mon Feb 29 09:35:09 2016 U_CORE

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203989.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\U-core\u203989.D          Vial: 2
Acq On    :  8 Mar 2016  12:55 pm                   Operator: NicoleH1
Sample    : CC9367-20                               Inst    : MSU
Misc      : ms99238,vu9377,5.0,,,,1                 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title        : SW-846  8260C, ZB624  60m x 250um x 1.40um
Last Update  : Mon Feb 29 09:33:35 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 : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	85	0.00	7.86
2	M	tertiary butyl alcohol	1.114	1.181	-6.0	85	0.00	7.97
3		Ethanol		----------NA----------				
4	m	1,4-dioxane	0.089	0.085	4.5	76	0.00	11.71
5	I	pentafluorobenzene	1.000	1.000	0.0	90	0.00	10.06
6	M	freon 115		----------NA----------				
7	M	freon 23		----------NA----------				
8	M	freon 143A		----------NA----------				
9	M	freon 152A		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.547	0.538	1.6	82	0.00	4.40
12	M	dichlorodifluoromethane	0.485	0.528	-8.9	99	0.00	4.39
13	M	freon 142B		----------NA----------				
14	M	freon 114		----------NA----------				
15	M	chloromethane	0.850	0.760	10.6	86	0.00	4.75
16	M	vinyl chloride	0.716	0.675	5.7	88	0.00	5.03
17	M	acetaldehyde		----------NA----------				
18	M	bromomethane	0.345	0.349	-1.2	88	0.00	5.71
19	M	chloroethane	0.385	0.362	6.0	88	0.00	5.89
20	M	trichlorofluoromethane	0.644	0.677	-5.1	93	0.00	6.32
21	M	pentane		----------NA----------				
22	M	freon 123A		----------NA----------				
23	M	ethyl ether	0.272	0.279	-2.6	89	0.00	6.75
24		2-CHLOROPROPANE	1.036	1.067	-3.0	88	0.00	6.97
25	M	freon 141B		----------NA----------				
26	M	freon 123		----------NA----------				
27	M	acrolein	0.117	0.115	1.7	88	0.00	7.04
28	M	1,1-dichloroethene	0.383	0.417	-8.9	89	0.00	7.20
29	M	acetone	0.042	0.042	0.0	87	0.00	7.26
30	M	allyl chloride	0.309	0.356	-15.2	95	0.00	7.73
31	M	acetonitrile	0.055	0.053	3.6	84	0.00	7.72
32	M	iodomethane	0.742	0.779	-5.0	90	0.00	7.49
33	M	carbon disulfide	1.468	1.501	-2.2	85	0.00	7.62
34		1-CHLOROPROPANE	0.044	0.044	0.0	87	0.00	7.95
35	M	methylene chloride	0.487	0.498	-2.3	88	0.00	7.92
36	M	methyl acetate	0.436	0.467	-7.1	88	0.00	7.70
37	M	methyl tert butyl ether	1.371	1.446	-5.5	89	0.00	8.22
38	M	trans-1,2-dichloroethene	0.451	0.472	-4.7	89	0.00	8.29
39	M	di-isopropyl ether	1.894	2.019	-6.6	91	0.00	8.79
40	M	ethyl tert-butyl ether	1.615	1.719	-6.4	92	0.00	9.25
41	M	2-butanone	0.057	0.061	-7.0	92	0.00	9.53

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203989.D
Project: BMSMC, Building 5 Area, PR

42	M	1,1-dichloroethane	0.902	0.964	-6.9	90	0.00	8.84
43	M	chloroprene	0.715	0.801	-12.0	94	0.00	8.94
44	M	acrylonitrile	0.202	0.203	-0.5	85	0.00	8.25
45	M	vinyl acetate	0.085	0.090	-5.9	93	0.00	8.81
46	M	ethyl acetate	0.084	0.081	3.6	80	0.00	9.53
47	M	2,2-dichloropropane	0.671	0.755	-12.5	96	0.00	9.58
48	M	cis-1,2-dichloroethene	0.497	0.521	-4.8	90	0.00	9.58
49	M	methyl acrylate	0.071	0.068	4.2	86	0.00	9.62
50	M	propionitrile	0.080	0.080	0.0	85	0.00	9.66
51	M	bromochloromethane	0.233	0.244	-4.7	90	0.00	9.89
52	M	tetrahydrofuran	0.201	0.204	-1.5	84	0.00	9.92
53	M	chloroform	0.768	0.831	-8.2	90	0.00	9.93
54		tert-butyl Formate	0.428	0.454	-6.1	91	0.00	9.96
55	M	iso-butyl alcohol	0.027	0.028	-3.7	85	0.00	10.35
56	S	dibromofluoromethane (s)	0.406	0.424	-4.4	94	0.00	10.14
57	S	1,2-dichloroethane-d4 (s)	0.495	0.512	-3.4	94	0.00	10.55
58	M	freon 113	0.279	0.341	-22.2#	102	0.00	7.16
59	M	methacrylonitrile	0.355	0.369	-3.9	88	0.00	9.83
60	M	1,1,1-trichloroethane	0.646	0.700	-8.4	93	0.00	10.19
61	M	tert amyl alcohol		----------NA----------				
62	M	tert-amyl methyl ether	0.300	0.333	-11.0	92	0.00	10.63
63		iso-octane	1.674	2.025	-21.0#	104	0.00	10.59
64	I	1,4-difluorobenzene	1.000	1.000	0.0	94	0.00	10.98
65	M	Di-isobutylene		----------NA----------				
66	M	epichlorohydrin	0.037	0.038	-2.7	85	0.00	12.27
67	M	n-butyl alcohol	0.011	0.012	-9.1	85	0.00	11.10
68	M	Cyclohexane	0.546	0.519	4.9	93	0.00	10.25
69	M	carbon tetrachloride	0.426	0.450	-5.6	92	0.00	10.39
70	M	1,1-dichloropropene	0.455	0.466	-2.4	91	0.00	10.36
71	M	hexane	0.437	0.539	-23.3#	111	0.00	8.55
72	M	benzene	1.379	1.381	-0.1	89	0.00	10.62
73	M	heptane	0.277	0.317	-14.4	104	0.00	10.75
74	M	isopropyl acetate	0.767	0.761	0.8	89	0.00	10.51
75	M	1,2-dichloroethane	0.461	0.458	0.7	89	0.00	10.64
76	M	ethyl acrylate		----------NA----------				
77		tert amyl ethyl ether		----------NA----------				
78	M	trichloroethene	0.335	0.337	-0.6	90	0.00	11.33
79	M	methylcyclohexane	0.528	0.602	-14.0	100	0.00	11.54
80	M	2-nitropropane	0.146	0.148	-1.4	87	0.00	12.13
81	M	2-chloroethyl vinyl ether	0.212	0.227	-7.1	90	0.00	12.12
82	M	methyl methacrylate	0.085	0.085	0.0	88	0.00	11.58
83	M	1,2-dichloropropane	0.390	0.390	0.0	90	0.00	11.61
84	M	propyl acetate	0.064	0.066	-3.1	88	0.00	11.62
85	M	dibromomethane	0.199	0.202	-1.5	88	0.00	11.77
86	M	bromodichloromethane	0.448	0.461	-2.9	89	0.00	11.90
87	M	cis-1,3-dichloropropene	0.600	0.610	-1.7	91	0.00	12.36
88	S	toluene-d8 (s)	1.201	1.192	0.7	92	0.00	12.66
89	M	4-methyl-2-pentanone	0.149	0.147	1.3	85	0.00	12.45
90	M	toluene	0.833	0.851	-2.2	90	0.00	12.74
91	M	3-methyl-1-butanol	0.018	0.019	-5.6	87	0.00	12.47
92	M	trans-1,3-dichloropropene	0.533	0.548	-2.8	89	0.00	12.95
93	M	ethyl methacrylate	0.458	0.450	1.7	87	0.00	12.92
94	M	1,1,2-trichloroethane	0.262	0.263	-0.4	89	0.00	13.19
95	M	2-hexanone	0.157	0.148	5.7	85	0.00	13.36
96	I	chlorobenzene-d5	1.000	1.000	0.0	94	0.00	14.30
97	M	cyclohexanone	0.026	0.026	0.0	99	0.00	15.56
98	M	tetrachloroethene	0.314	0.334	-6.4	93	0.00	13.36
99	M	1,3-dichloropropane	0.589	0.572	2.9	87	0.00	13.39

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203989.D
Project: BMSMC, Building 5 Area, PR

100	M	butyl acetate	0.271	0.277	-2.2	87	0.00	13.42
101	M	dibromochloromethane	0.387	0.392	-1.3	90	0.00	13.68
102	M	1,2-dibromoethane	0.337	0.331	1.8	89	0.00	13.85
103		3,3-dimethyl-1-Butanol	0.045	0.046	-2.2	87	0.00	13.54
104		n-butyl ether	1.859	1.916	-3.1	90	0.00	14.20
105	M	chlorobenzene	1.009	1.031	-2.2	91	0.00	14.34
106	M	1,1,1,2-tetrachloroethane	0.377	0.384	-1.9	92	0.00	14.40
107	M	ethylbenzene	1.768	1.802	-1.9	91	0.00	14.39
108	M	m,p-xylene	0.661	0.689	-4.2	90	0.00	14.50
109	M	o-xylene	0.650	0.678	-4.3	89	0.00	14.97
110	M	styrene	1.095	1.149	-4.9	89	0.00	14.98
111	M	bromoform	0.287	0.287	0.0	91	0.00	15.30
112	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	16.88
113	M	isopropylbenzene	3.117	3.242	-4.0	92	0.00	15.34
114	S	4-bromofluorobenzene (s)	0.915	0.888	3.0	93	0.00	15.58
115	M	bromobenzene	0.852	0.859	-0.8	92	0.00	15.80
116	M	1,1,2,2-tetrachloroethane	0.846	0.832	1.7	87	0.00	15.70
117	M	trans-1,4-dichloro-2-bute	0.270	0.257	4.8	89	0.00	15.74
118	M	1,2,3-trichloropropane	0.210	0.209	0.5	89	0.00	15.79
119	M	n-propylbenzene	3.757	3.866	-2.9	90	0.00	15.79
120	M	2-chlorotoluene	0.787	0.794	-0.9	92	0.00	15.97
121	M	4-chlorotoluene	2.406	2.353	2.2	89	0.00	16.08
122		p-Ethyltoluene		----------NA----------				
123	M	1,3,5-trimethylbenzene	2.630	2.740	-4.2	92	0.00	15.95
124	M	tert-butylbenzene	2.275	2.373	-4.3	92	0.00	16.35
125	M	pentachloroethane	0.529	0.543	-2.6	91	0.00	16.46
126	M	1,2,4-trimethylbenzene	2.717	2.807	-3.3	92	0.00	16.40
127		1,2,3-trimethylbenzene		----------NA----------				
128	M	sec-butylbenzene	3.404	3.611	-6.1	93	0.00	16.59
129	M	1,3-dichlorobenzene	1.640	1.656	-1.0	92	0.00	16.82
130	M	p-isopropyltoluene	2.878	3.069	-6.6	93	0.00	16.71
131	M	1,4-dichlorobenzene	1.675	1.652	1.4	92	0.00	16.91
132	M	benzyl chloride	1.633	1.761	-7.8	99	0.00	17.04
133	M	1,2-dichlorobenzene	1.533	1.572	-2.5	93	0.00	17.35
134		p-Diethylbenzene		----------NA----------				
135	M	n-butylbenzene	1.479	1.592	-7.6	93	0.00	17.17
136		1,2,4,5-Tetramethylbenzen		----------NA----------				
137	M	1,2-dibromo-3-chloropropa	0.154	0.162	-5.2	93	0.00	18.21
138		1,3,5-trichlorobenzene	1.220	1.292	-5.9	97	0.00	18.40
139	M	1,2,4-trichlorobenzene	0.967	1.011	-4.6	94	0.00	19.13
140	M	hexachlorobutadiene	0.577	0.629	-9.0	98	0.00	19.24
141	M	naphthalene	1.857	1.847	0.5	89	0.00	19.46
142		INDANE		----------NA----------				
143	M	1,2,3-trichlorobenzene	0.779	0.817	-4.9	95	0.00	19.73
144	M	hexachloroethane	0.539	0.563	-4.5	94	0.00	17.63
145	M	MMT		----------NA----------				
146	M	Bis(chloromethyl)ether		----------NA----------				
147	M	Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
u203701.D MU9367.M Wed Mar 09 10:23:36 2016 RPT1

6.7.3

6

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203990.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\U-core\u203990.D          Vial: 3
Acq On    :  8 Mar 2016   1:25 pm                   Operator: NicoleH1
Sample    : CC9367-20                               Inst    : MSU
Misc      : ms99238,vu9377,5.0,,,,1                 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title        : SW-846  8260C, ZB624  60m x 250um x 1.40um
Last Update  : Mon Feb 29 09:33:35 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 : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	93	0.00	7.86
2	M	tertiary butyl alcohol	1.114	1.192	-7.0	93	0.00	7.98
3		Ethanol		----------NA----------				
4	m	1,4-dioxane	0.089	0.090	-1.1	88	0.00	11.72
5	I	pentafluorobenzene	1.000	1.000	0.0	92	0.00	10.06
6	M	freon 115		----------NA----------				
7	M	freon 23		----------NA----------				
8	M	freon 143A		----------NA----------				
9	M	freon 152A		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.547	0.529	3.3	83	0.00	4.41
12	M	dichlorodifluoromethane	0.485	0.511	-5.4	98	-0.01	4.38
13	M	freon 142B		----------NA----------				
14	M	freon 114		----------NA----------				
15	M	chloromethane	0.850	0.756	11.1	87	-0.01	4.75
16	M	vinyl chloride	0.716	0.665	7.1	89	0.00	5.03
17	M	acetaldehyde		----------NA----------				
18	M	bromomethane	0.345	0.346	-0.3	89	0.00	5.71
19	M	chloroethane	0.385	0.360	6.5	89	0.00	5.89
20	M	trichlorofluoromethane	0.644	0.666	-3.4	94	0.03	6.35
21	M	pentane		----------NA----------				
22	M	freon 123A		----------NA----------				
23	M	ethyl ether	0.272	0.278	-2.2	91	0.00	6.74
24		2-CHLOROPROPANE	1.036	1.078	-4.1	91	0.01	6.97
25	M	freon 141B		----------NA----------				
26	M	freon 123		----------NA----------				
27	M	acrolein	0.117	0.117	0.0	91	0.01	7.04
28	M	1,1-dichloroethene	0.383	0.422	-10.2	92	0.00	7.20
29	M	acetone	0.042	0.042	0.0	90	0.00	7.26
30	M	allyl chloride	0.309	0.341	-10.4	93	0.00	7.73
31	M	acetonitrile	0.055	0.054	1.8	89	0.02	7.73
32	M	iodomethane	0.742	0.784	-5.7	92	0.00	7.50
33	M	carbon disulfide	1.468	1.526	-4.0	88	0.00	7.62
34		1-CHLOROPROPANE	0.044	0.046	-4.5	92	0.01	7.95
35	M	methylene chloride	0.487	0.503	-3.3	91	0.00	7.93
36	M	methyl acetate	0.436	0.480	-10.1	93	0.00	7.70
37	M	methyl tert butyl ether	1.371	1.441	-5.1	91	0.00	8.22
38	M	trans-1,2-dichloroethene	0.451	0.477	-5.8	92	0.01	8.29
39	M	di-isopropyl ether	1.894	2.020	-6.7	93	0.00	8.79
40	M	ethyl tert-butyl ether	1.615	1.727	-6.9	94	0.00	9.26
41	M	2-butanone	0.057	0.063	-10.5	97	0.01	9.54

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203990.D
Project: BMSMC, Building 5 Area, PR

42	M	1,1-dichloroethane	0.902	0.965	-7.0	92	0.00	8.85
43	M	chloroprene	0.715	0.819	-14.5	99	0.00	8.95
44	M	acrylonitrile	0.202	0.208	-3.0	88	0.00	8.26
45	M	vinyl acetate	0.085	0.091	-7.1	96	0.00	8.81
46	M	ethyl acetate	0.084	0.081	3.6	82	0.00	9.54
47	M	2,2-dichloropropane	0.671	0.757	-12.8	98	0.00	9.58
48	M	cis-1,2-dichloroethene	0.497	0.526	-5.8	93	0.00	9.58
49	M	methyl acrylate	0.071	0.071	0.0	92	0.00	9.62
50	M	propionitrile	0.080	0.082	-2.5	89	0.00	9.66
51	M	bromochloromethane	0.233	0.248	-6.4	93	0.00	9.89
52	M	tetrahydrofuran	0.201	0.208	-3.5	87	0.00	9.92
53	M	chloroform	0.768	0.836	-8.9	93	0.00	9.94
54		tert-butyl Formate	0.428	0.459	-7.2	94	0.00	9.96
55	M	iso-butyl alcohol	0.027	0.032	-18.5	100	0.00	10.35
56	S	dibromofluoromethane (s)	0.406	0.419	-3.2	95	0.00	10.14
57	S	1,2-dichloroethane-d4 (s)	0.495	0.509	-2.8	95	0.00	10.56
58	M	freon 113	0.279	0.323	-15.8	99	0.00	7.16
59	M	methacrylonitrile	0.355	0.382	-7.6	93	0.00	9.83
60	M	1,1,1-trichloroethane	0.646	0.699	-8.2	94	0.00	10.18
61	M	tert amyl alcohol		----------NA----------				
62	M	tert-amyl methyl ether	0.300	0.332	-10.7	94	0.00	10.63
63		iso-octane	1.674	2.001	-19.5	105	0.00	10.59
64	I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	10.98
65	M	Di-isobutylene		----------NA----------				
66	M	epichlorohydrin	0.037	0.040	-8.1	92	0.00	12.28
67	M	n-butyl alcohol	0.011	0.013	-18.2	96	0.00	11.10
68	M	Cyclohexane	0.546	0.514	5.9	94	0.00	10.25
69	M	carbon tetrachloride	0.426	0.452	-6.1	94	0.00	10.38
70	M	1,1-dichloropropene	0.455	0.472	-3.7	93	0.00	10.36
71	M	hexane	0.437	0.535	-22.4#	112	0.00	8.55
72	M	benzene	1.379	1.403	-1.7	92	0.00	10.62
73	M	heptane	0.277	0.323	-16.6	108	0.00	10.75
74	M	isopropyl acetate	0.767	0.787	-2.6	93	0.00	10.51
75	M	1,2-dichloroethane	0.461	0.466	-1.1	93	0.00	10.64
76	M	ethyl acrylate		----------NA----------				
77		tert amyl ethyl ether		----------NA----------				
78	M	trichloroethene	0.335	0.344	-2.7	93	0.00	11.33
79	M	methylcyclohexane	0.528	0.597	-13.1	101	0.00	11.54
80	M	2-nitropropane	0.146	0.154	-5.5	92	0.00	12.13
81	M	2-chloroethyl vinyl ether	0.212	0.234	-10.4	94	0.00	12.13
82	M	methyl methacrylate	0.085	0.087	-2.4	91	0.00	11.58
83	M	1,2-dichloropropane	0.390	0.401	-2.8	94	0.00	11.61
84	M	propyl acetate	0.064	0.070	-9.4	95	0.00	11.62
85	M	dibromomethane	0.199	0.205	-3.0	91	0.00	11.77
86	M	bromodichloromethane	0.448	0.466	-4.0	92	0.00	11.90
87	M	cis-1,3-dichloropropene	0.600	0.620	-3.3	94	0.00	12.36
88	S	toluene-d8 (s)	1.201	1.192	0.7	94	0.00	12.66
89	M	4-methyl-2-pentanone	0.149	0.154	-3.4	91	0.00	12.45
90	M	toluene	0.833	0.867	-4.1	93	0.00	12.74
91	M	3-methyl-1-butanol	0.018	0.021	-16.7	96	0.00	12.47
92	M	trans-1,3-dichloropropene	0.533	0.563	-5.6	94	0.00	12.95
93	M	ethyl methacrylate	0.458	0.462	-0.9	91	0.00	12.92
94	M	1,1,2-trichloroethane	0.262	0.265	-1.1	91	0.00	13.19
95	M	2-hexanone	0.157	0.153	2.5	90	0.00	13.36
96	I	chlorobenzene-d5	1.000	1.000	0.0	95	0.00	14.30
97	M	cyclohexanone	0.026	0.022	15.4	85	0.00	15.56
98	M	tetrachloroethene	0.314	0.339	-8.0	96	0.00	13.37
99	M	1,3-dichloropropane	0.589	0.587	0.3	91	0.00	13.39

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9377-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U203990.D
Project: BMSMC, Building 5 Area, PR

100	M	butyl acetate	0.271	0.286	-5.5	91	0.00	13.42
101	M	dibromochloromethane	0.387	0.398	-2.8	93	0.00	13.68
102	M	1,2-dibromoethane	0.337	0.334	0.9	91	0.00	13.85
103		3,3-dimethyl-1-Butanol	0.045	0.050	-11.1	95	0.00	13.54
104		n-butyl ether	1.859	1.974	-6.2	94	0.00	14.20
105	M	chlorobenzene	1.009	1.042	-3.3	93	0.00	14.34
106	M	1,1,1,2-tetrachloroethane	0.377	0.389	-3.2	95	0.00	14.40
107	M	ethylbenzene	1.768	1.823	-3.1	93	0.00	14.39
108	M	m,p-xylene	0.661	0.696	-5.3	93	0.00	14.50
109	M	o-xylene	0.650	0.689	-6.0	92	0.00	14.97
110	M	styrene	1.095	1.169	-6.8	92	0.00	14.98
111	M	bromoform	0.287	0.291	-1.4	93	0.00	15.30
112	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	16.88
113	M	isopropylbenzene	3.117	3.378	-8.4	95	0.00	15.34
114	S	4-bromofluorobenzene (s)	0.915	0.915	0.0	94	0.00	15.58
115	M	bromobenzene	0.852	0.888	-4.2	94	0.00	15.80
116	M	1,1,2,2-tetrachloroethane	0.846	0.858	-1.4	89	0.00	15.69
117	M	trans-1,4-dichloro-2-bute	0.270	0.268	0.7	92	0.00	15.74
118	M	1,2,3-trichloropropane	0.210	0.220	-4.8	93	0.00	15.78
119	M	n-propylbenzene	3.757	4.049	-7.8	94	0.00	15.79
120	M	2-chlorotoluene	0.787	0.832	-5.7	95	0.00	15.97
121	M	4-chlorotoluene	2.406	2.458	-2.2	92	0.00	16.08
122		p-Ethyltoluene		----------NA----------				
123	M	1,3,5-trimethylbenzene	2.630	2.835	-7.8	94	0.00	15.96
124	M	tert-butylbenzene	2.275	2.461	-8.2	95	0.00	16.35
125	M	pentachloroethane	0.529	0.569	-7.6	94	0.00	16.46
126	M	1,2,4-trimethylbenzene	2.717	2.895	-6.6	94	0.00	16.40
127		1,2,3-trimethylbenzene		----------NA----------				
128	M	sec-butylbenzene	3.404	3.739	-9.8	95	0.00	16.59
129	M	1,3-dichlorobenzene	1.640	1.709	-4.2	94	0.00	16.82
130	M	p-isopropyltoluene	2.878	3.171	-10.2	95	0.00	16.71
131	M	1,4-dichlorobenzene	1.675	1.703	-1.7	94	0.00	16.91
132	M	benzyl chloride	1.633	1.768	-8.3	98	0.00	17.04
133	M	1,2-dichlorobenzene	1.533	1.612	-5.2	94	0.00	17.35
134		p-Diethylbenzene		----------NA----------				
135	M	n-butylbenzene	1.479	1.658	-12.1	96	0.00	17.17
136		1,2,4,5-Tetramethylbenzen		----------NA----------				
137	M	1,2-dibromo-3-chloropropa	0.154	0.171	-11.0	97	0.00	18.21
138		1,3,5-trichlorobenzene	1.220	1.338	-9.7	99	0.00	18.40
139	M	1,2,4-trichlorobenzene	0.967	1.062	-9.8	98	0.00	19.13
140	M	hexachlorobutadiene	0.577	0.663	-14.9	102	0.00	19.24
141	M	naphthalene	1.857	1.991	-7.2	95	0.00	19.46
142		INDANE		----------NA----------				
143	M	1,2,3-trichlorobenzene	0.779	0.870	-11.7	100	0.00	19.74
144	M	hexachloroethane	0.539	0.583	-8.2	97	0.00	17.63
145	M	MMT		----------NA----------				
146	M	Bis(chloromethyl)ether		----------NA----------				
147	M	Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
u203701.D MU9367.M Wed Mar 09 10:25:28 2016 RPT1

6.7.4

6

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9378-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U204008.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\u204008.D                    Vial: 2
Acq On    :  9 Mar 2016   8:53 am                     Operator: NicoleH1
Sample    : CC9367-20                                 Inst    : MSU
Misc      : ms99351,vu9378,5.0,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title        : SW-846  8260C, ZB624  60m x 250um x 1.40um
Last Update  : Mon Feb 29 09:33:35 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 : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	85	0.00	7.86
2	M	tertiary butyl alcohol	1.114	1.163	-4.4	83	0.00	7.97
3		Ethanol		----------NA----------				
4	m	1,4-dioxane	0.089	0.098	-10.1	87	0.00	11.71
5	I	pentafluorobenzene	1.000	1.000	0.0	87	0.00	10.06
6	M	freon 115		----------NA----------				
7	M	freon 23		----------NA----------				
8	M	freon 143A		----------NA----------				
9	M	freon 152A		----------NA----------				
10	M	chlorotrifluoroethene		----------NA----------				
11	M	chlorodifluoromethane	0.547	0.552	-0.9	82	0.00	4.40
12	M	dichlorodifluoromethane	0.485	0.495	-2.1	90	0.00	4.38
13	M	freon 142B		----------NA----------				
14	M	freon 114		----------NA----------				
15	M	chloromethane	0.850	0.756	11.1	83	0.00	4.75
16	M	vinyl chloride	0.716	0.676	5.6	86	0.00	5.03
17	M	acetaldehyde		----------NA----------				
18	M	bromomethane	0.345	0.326	5.5	79	0.00	5.70
19	M	chloroethane	0.385	0.352	8.6	82	0.00	5.89
20	M	trichlorofluoromethane	0.644	0.666	-3.4	89	0.05	6.37
21	M	pentane		----------NA----------				
22	M	freon 123A		----------NA----------				
23	M	ethyl ether	0.272	0.278	-2.2	86	0.00	6.75
24		2-CHLOROPROPANE	1.036	1.099	-6.1	87	0.00	6.96
25	M	freon 141B		----------NA----------				
26	M	freon 123		----------NA----------				
27	M	acrolein	0.117	0.115	1.7	85	0.00	7.04
28	M	1,1-dichloroethene	0.383	0.423	-10.4	87	0.00	7.19
29	M	acetone	0.042	0.044	-4.8	88	0.01	7.26
30	M	allyl chloride	0.309	0.324	-4.9	83	0.00	7.72
31	M	acetonitrile	0.055	0.057	-3.6	88	0.01	7.72
32	M	iodomethane	0.742	0.791	-6.6	88	0.00	7.49
33	M	carbon disulfide	1.468	1.582	-7.8	87	0.00	7.62
34		1-CHLOROPROPANE	0.044	0.046	-4.5	88	0.01	7.95
35	M	methylene chloride	0.487	0.511	-4.9	87	0.00	7.92
36	M	methyl acetate	0.436	0.476	-9.2	87	0.00	7.70
37	M	methyl tert butyl ether	1.371	1.460	-6.5	87	0.00	8.22
38	M	trans-1,2-dichloroethene	0.451	0.475	-5.3	87	0.00	8.28
39	M	di-isopropyl ether	1.894	2.040	-7.7	89	0.00	8.79
40	M	ethyl tert-butyl ether	1.615	1.732	-7.2	90	0.00	9.25
41	M	2-butanone	0.057	0.060	-5.3	87	0.00	9.53

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9378-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U204008.D
Project: BMSMC, Building 5 Area, PR

42	M	1,1-dichloroethane	0.902	0.979	-8.5	88	0.00	8.85
43	M	chloroprene	0.715	0.811	-13.4	92	0.00	8.94
44	M	acrylonitrile	0.202	0.210	-4.0	84	0.00	8.25
45	M	vinyl acetate	0.085	0.088	-3.5	89	0.00	8.81
46	M	ethyl acetate	0.084	0.091	-8.3	87	0.00	9.53
47	M	2,2-dichloropropane	0.671	0.784	-16.8	96	0.00	9.58
48	M	cis-1,2-dichloroethene	0.497	0.533	-7.2	89	0.00	9.57
49	M	methyl acrylate	0.071	0.069	2.8	84	0.00	9.62
50	M	propionitrile	0.080	0.082	-2.5	84	0.00	9.65
51	M	bromochloromethane	0.233	0.247	-6.0	88	0.00	9.89
52	M	tetrahydrofuran	0.201	0.209	-4.0	83	0.00	9.92
53	M	chloroform	0.768	0.839	-9.2	88	0.00	9.93
54		tert-butyl Formate	0.428	0.470	-9.8	91	0.00	9.96
55	M	iso-butyl alcohol	0.027	0.030	-11.1	87	0.00	10.35
56	S	dibromofluoromethane (s)	0.406	0.425	-4.7	91	0.00	10.13
57	S	1,2-dichloroethane-d4 (s)	0.495	0.518	-4.6	92	0.00	10.56
58	M	freon 113	0.279	0.330	-18.3	96	0.00	7.16
59	M	methacrylonitrile	0.355	0.374	-5.4	86	0.00	9.82
60	M	1,1,1-trichloroethane	0.646	0.711	-10.1	91	0.00	10.18
61	M	tert amyl alcohol		----------NA----------				
62	M	tert-amyl methyl ether	0.300	0.334	-11.3	89	0.00	10.63
63		iso-octane	1.674	1.945	-16.2	96	0.00	10.59
64	I	1,4-difluorobenzene	1.000	1.000	0.0	91	0.00	10.98
65	M	Di-isobutylene		----------NA----------				
66	M	epichlorohydrin	0.037	0.039	-5.4	85	0.00	12.27
67	M	n-butyl alcohol	0.011	0.011	0.0	80	0.00	11.09
68	M	Cyclohexane	0.546	0.520	4.8	91	0.00	10.25
69	M	carbon tetrachloride	0.426	0.450	-5.6	89	0.00	10.38
70	M	1,1-dichloropropene	0.455	0.467	-2.6	88	0.00	10.35
71	M	hexane	0.437	0.506	-15.8	101	0.00	8.55
72	M	benzene	1.379	1.395	-1.2	87	0.00	10.62
73	M	heptane	0.277	0.299	-7.9	95	0.00	10.75
74	M	isopropyl acetate	0.767	0.762	0.7	86	0.00	10.51
75	M	1,2-dichloroethane	0.461	0.464	-0.7	88	0.00	10.64
76	M	ethyl acrylate		----------NA----------				
77		tert amyl ethyl ether		----------NA----------				
78	M	trichloroethene	0.335	0.342	-2.1	88	0.00	11.32
79	M	methylcyclohexane	0.528	0.583	-10.4	94	0.00	11.54
80	M	2-nitropropane	0.146	0.150	-2.7	86	0.00	12.12
81	M	2-chloroethyl vinyl ether	0.212	0.226	-6.6	87	0.00	12.12
82	M	methyl methacrylate	0.085	0.085	0.0	86	0.00	11.58
83	M	1,2-dichloropropane	0.390	0.394	-1.0	88	0.00	11.60
84	M	propyl acetate	0.064	0.066	-3.1	85	0.00	11.61
85	M	dibromomethane	0.199	0.205	-3.0	87	0.00	11.77
86	M	bromodichloromethane	0.448	0.465	-3.8	87	0.00	11.89
87	M	cis-1,3-dichloropropene	0.600	0.611	-1.8	88	0.00	12.36
88	S	toluene-d8 (s)	1.201	1.198	0.2	90	0.00	12.66
89	M	4-methyl-2-pentanone	0.149	0.147	1.3	83	0.00	12.45
90	M	toluene	0.833	0.863	-3.6	88	0.00	12.74
91	M	3-methyl-1-butanol	0.018	0.018	0.0	78	0.00	12.47
92	M	trans-1,3-dichloropropene	0.533	0.557	-4.5	88	0.00	12.96
93	M	ethyl methacrylate	0.458	0.445	2.8	84	0.00	12.92
94	M	1,1,2-trichloroethane	0.262	0.261	0.4	85	0.00	13.19
95	M	2-hexanone	0.157	0.144	8.3	80	0.00	13.36
96	I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	14.30
97	M	cyclohexanone	0.026	0.029	-11.5	108	0.00	15.56
98	M	tetrachloroethene	0.314	0.329	-4.8	89	0.00	13.36
99	M	1,3-dichloropropane	0.589	0.584	0.8	87	0.00	13.39

Continuing Calibration Summary

Job Number: JC15518 **Sample:** VU9378-CC9367
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** U204008.D
Project: BMSMC, Building 5 Area, PR

100	M	butyl acetate	0.271	0.273	-0.7	83	0.00	13.42
101	M	dibromochloromethane	0.387	0.392	-1.3	88	0.00	13.68
102	M	1,2-dibromoethane	0.337	0.329	2.4	86	0.00	13.85
103		3,3-dimethyl-1-Butanol	0.045	0.041	8.9	74	0.00	13.54
104		n-butyl ether	1.859	1.929	-3.8	88	0.00	14.20
105	M	chlorobenzene	1.009	1.030	-2.1	89	0.00	14.34
106	M	1,1,1,2-tetrachloroethane	0.377	0.384	-1.9	90	0.00	14.40
107	M	ethylbenzene	1.768	1.806	-2.1	89	0.00	14.38
108	M	m,p-xylene	0.661	0.683	-3.3	87	0.00	14.50
109	M	o-xylene	0.650	0.684	-5.2	88	0.00	14.97
110	M	styrene	1.095	1.152	-5.2	87	0.00	14.98
111	M	bromoform	0.287	0.283	1.4	87	0.00	15.30
112	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	16.88
113	M	isopropylbenzene	3.117	3.287	-5.5	90	0.00	15.34
114	S	4-bromofluorobenzene (s)	0.915	0.894	2.3	90	0.00	15.58
115	M	bromobenzene	0.852	0.854	-0.2	88	0.00	15.80
116	M	1,1,2,2-tetrachloroethane	0.846	0.842	0.5	86	0.00	15.70
117	M	trans-1,4-dichloro-2-bute	0.270	0.269	0.4	90	0.00	15.74
118	M	1,2,3-trichloropropane	0.210	0.211	-0.5	87	0.00	15.78
119	M	n-propylbenzene	3.757	3.952	-5.2	89	0.00	15.79
120	M	2-chlorotoluene	0.787	0.801	-1.8	89	0.00	15.97
121	M	4-chlorotoluene	2.406	2.380	1.1	88	0.00	16.08
122		p-Ethyltoluene		----------NA----------				
123	M	1,3,5-trimethylbenzene	2.630	2.792	-6.2	91	0.00	15.96
124	M	tert-butylbenzene	2.275	2.431	-6.9	92	0.00	16.35
125	M	pentachloroethane	0.529	0.546	-3.2	89	0.00	16.46
126	M	1,2,4-trimethylbenzene	2.717	2.843	-4.6	90	0.00	16.40
127		1,2,3-trimethylbenzene		----------NA----------				
128	M	sec-butylbenzene	3.404	3.661	-7.5	91	0.00	16.59
129	M	1,3-dichlorobenzene	1.640	1.671	-1.9	90	0.00	16.81
130	M	p-isopropyltoluene	2.878	3.105	-7.9	91	0.00	16.71
131	M	1,4-dichlorobenzene	1.675	1.664	0.7	90	0.00	16.91
132	M	benzyl chloride	1.633	1.779	-8.9	96	0.00	17.04
133	M	1,2-dichlorobenzene	1.533	1.585	-3.4	91	0.00	17.35
134		p-Diethylbenzene		----------NA----------				
135	M	n-butylbenzene	1.479	1.631	-10.3	92	0.00	17.17
136		1,2,4,5-Tetramethylbenzen		----------NA----------				
137	M	1,2-dibromo-3-chloropropa	0.154	0.161	-4.5	90	0.00	18.20
138		1,3,5-trichlorobenzene	1.220	1.311	-7.5	95	0.00	18.39
139	M	1,2,4-trichlorobenzene	0.967	1.031	-6.6	93	0.00	19.13
140	M	hexachlorobutadiene	0.577	0.645	-11.8	98	0.00	19.24
141	M	naphthalene	1.857	1.872	-0.8	88	0.00	19.46
142		INDANE		----------NA----------				
143	M	1,2,3-trichlorobenzene	0.779	0.837	-7.4	95	0.00	19.73
144	M	hexachloroethane	0.539	0.575	-6.7	93	0.00	17.63
145	M	MMT		----------NA----------				
146	M	Bis(chloromethyl)ether		----------NA----------				
147	M	Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
u203701.D MU9367.M Wed Mar 09 13:07:18 2016 U_CORE

6.7.5

6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203996.D
Acq On : 8 Mar 2016 4:23 pm
Operator : NicoleH1
Sample : JC15518-1
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 18 11:27:36 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.864	65	113580	500.00	ug/L	0.00
5) pentafluorobenzene	10.060	168	234746	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.980	114	338663	50.00	ug/L	0.00
96) chlorobenzene-d5	14.305	117	311972	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.877	152	167964	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.138	113	98503	51.66	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.32%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	119757	51.57	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.14%			
88) toluene-d8 (s)	12.663	98	401665	49.38	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.76%			
114) 4-bromofluorobenzene (s)	15.580	95	156737	50.99	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.98%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.984	59	1477	5.84	ug/L #	24
4) 1,4-dioxane	11.717	88	23972	1191.98	ug/L	99
37) methyl tert butyl ether	8.219	73	28144	4.37	ug/L	99
39) di-isopropyl ether	8.784	45	4828	0.54	ug/L #	69
105) chlorobenzene	14.341	112	4005	0.64	ug/L	96
113) isopropylbenzene	15.345	105	4830	0.46	ug/L	99
133) 1,2-dichlorobenzene	17.348	146	1706	0.33	ug/L	98

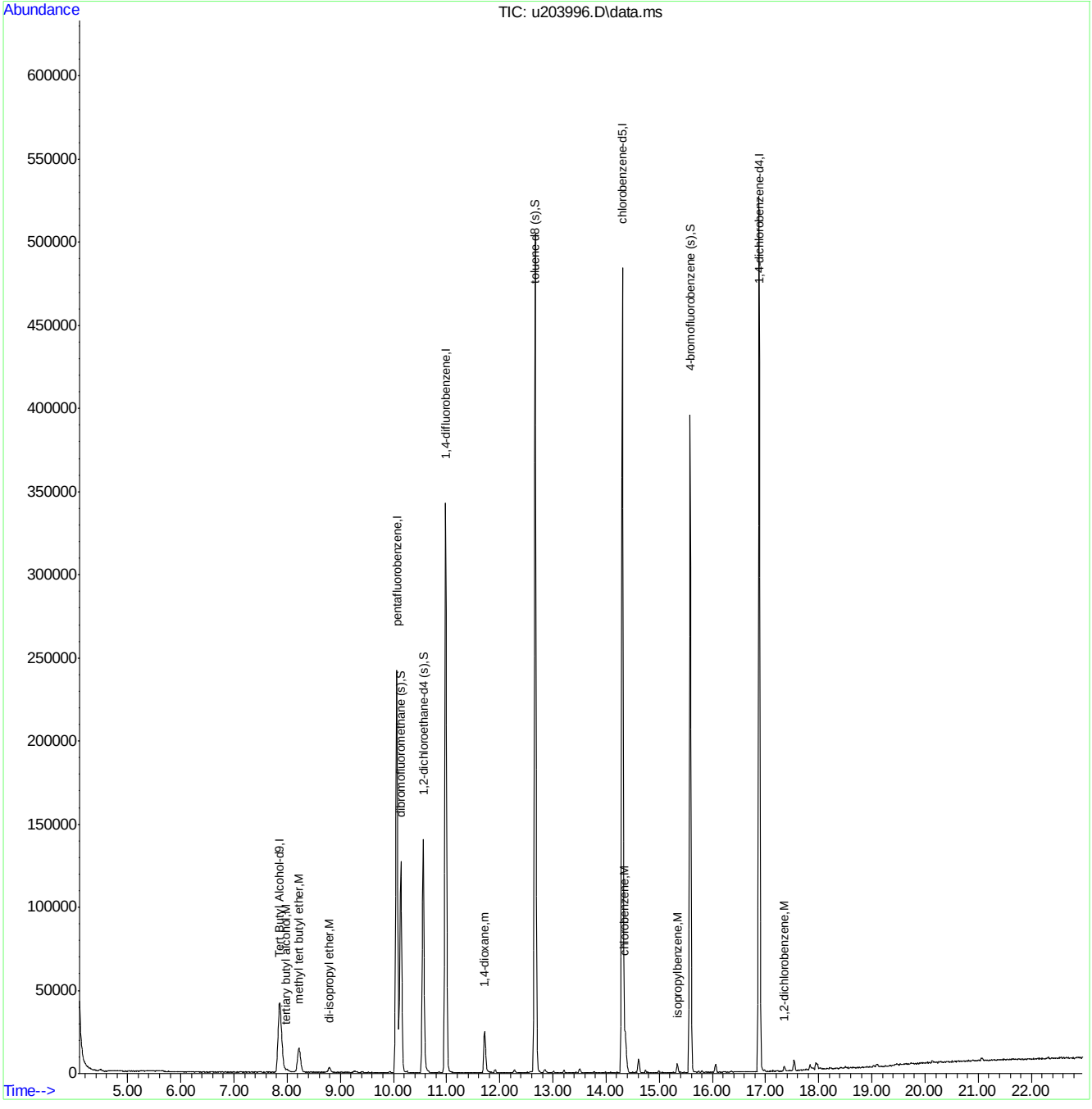
(#) = qualifier out of range (m) = manual integration (+) = signals summed

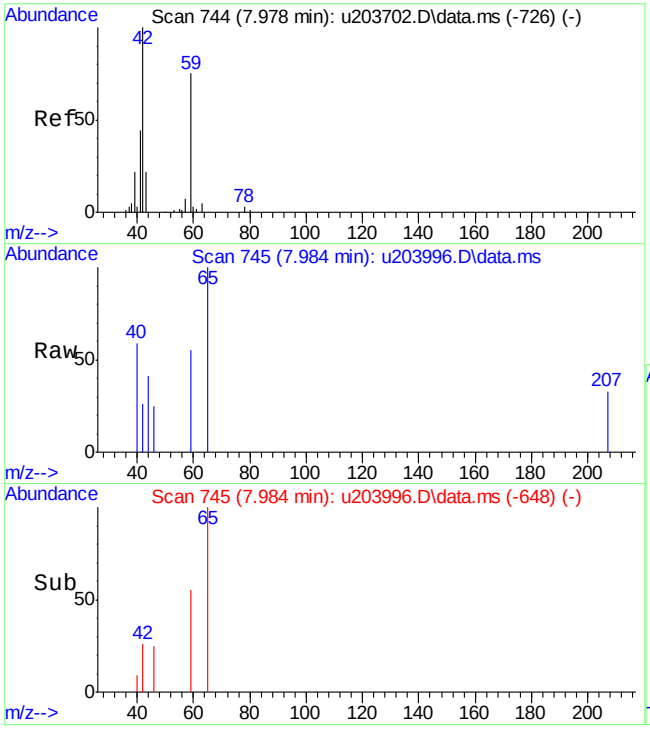
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203996.D
Acq On : 8 Mar 2016 4:23 pm
Operator : NicoleH1
Sample : JC15518-1
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 18 11:27:36 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

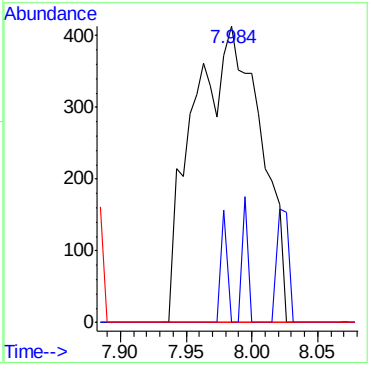


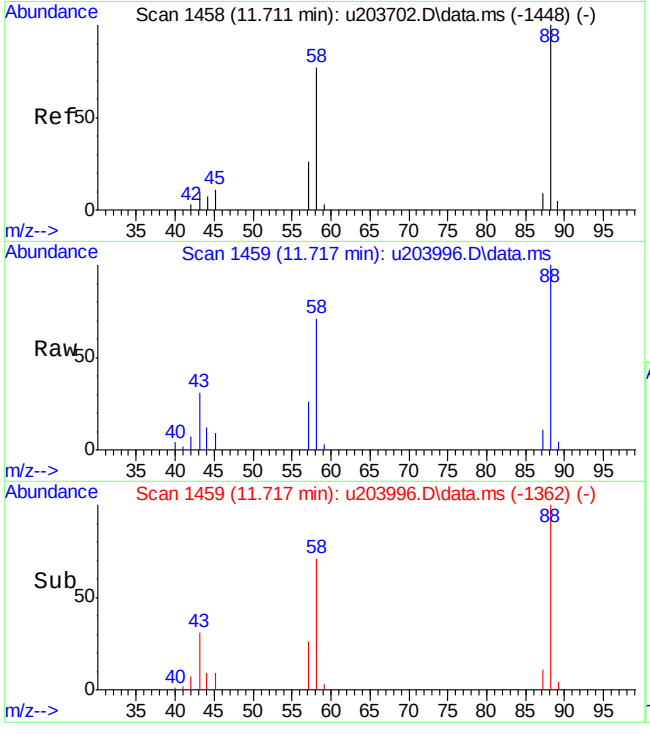


#2
tertiary butyl alcohol
Concen: 5.84 ug/L
RT: 7.984 min Scan# 745
Delta R.T. 0.006 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion: 59 Resp: 1477

Ion	Ratio	Lower	Upper
59	100		
41	0.0	38.3	98.3#
43	0.0	2.8	62.8#

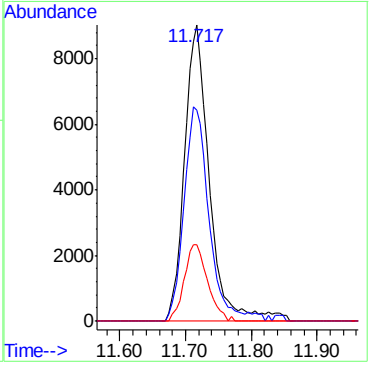


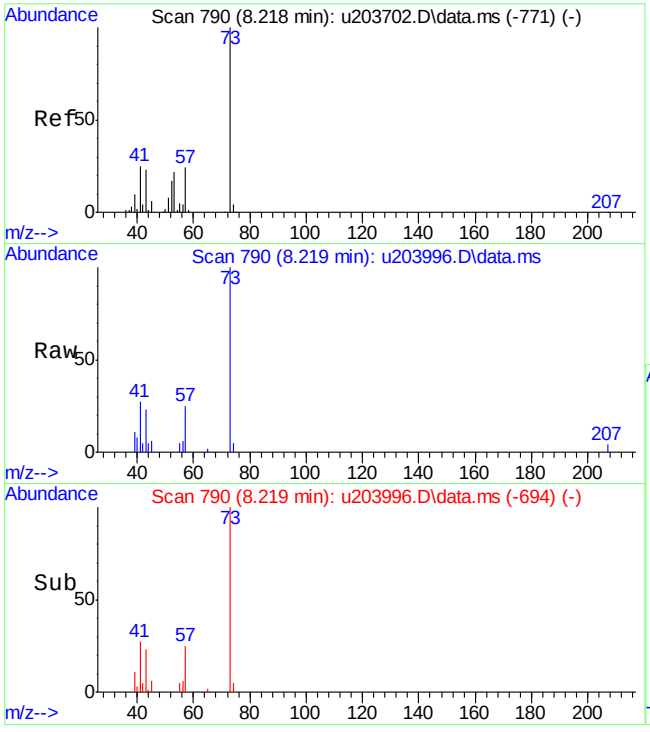


#4
1,4-dioxane
Concen: 1191.98 ug/L
RT: 11.717 min Scan# 1459
Delta R.T. 0.006 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion: 88 Resp: 23972

Ion	Ratio	Lower	Upper
88	100		
58	73.2	52.3	97.1
57	24.3	17.1	31.9

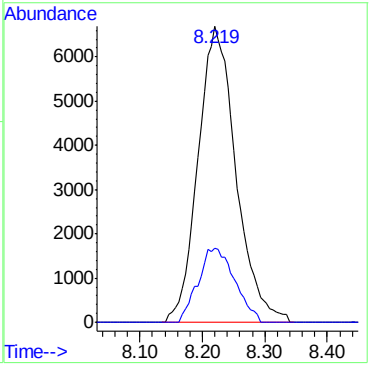


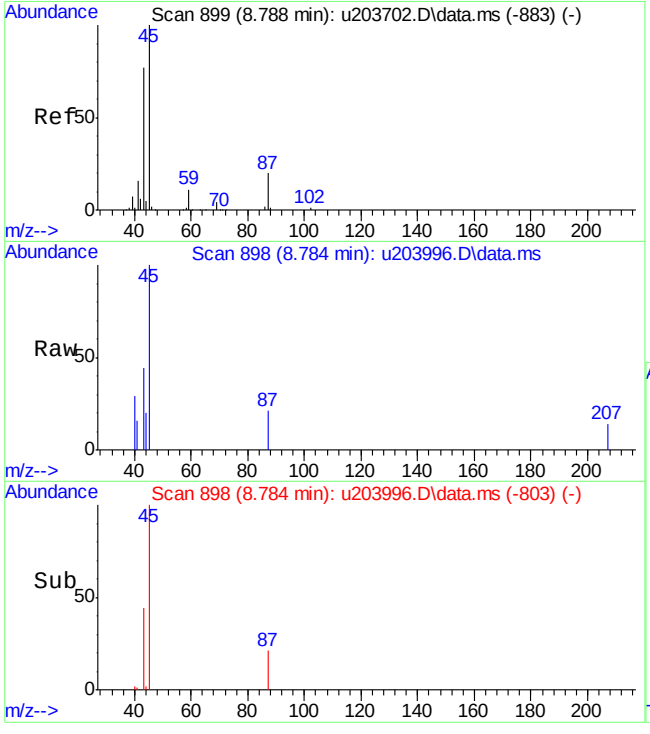


#37
methyl tert butyl ether
Concen: 4.37 ug/L
RT: 8.219 min Scan# 790
Delta R.T. 0.001 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion: 73 Resp: 28144

Ion	Ratio	Lower	Upper
73	100		
57	24.2	0.0	54.5

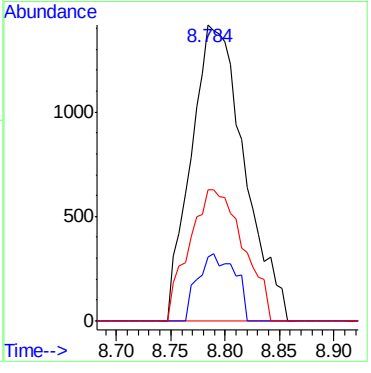


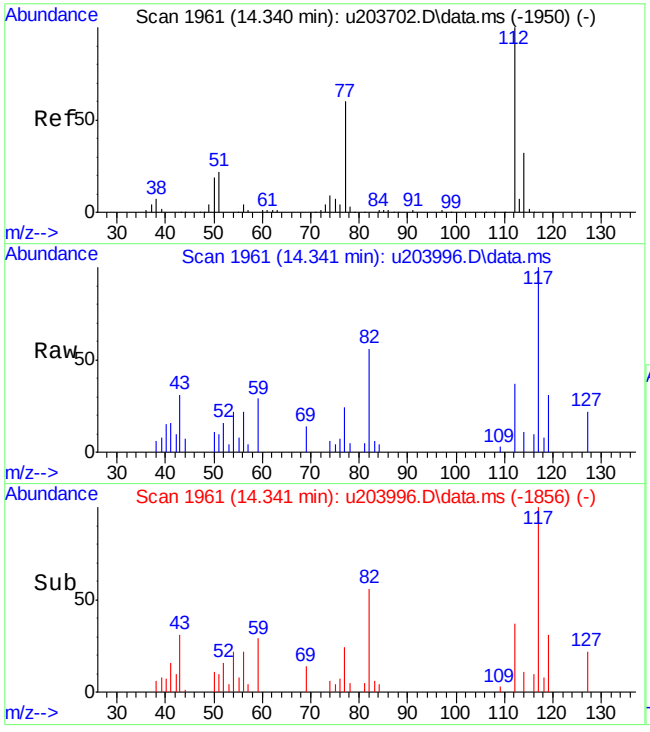


#39
di-isopropyl ether
Concen: 0.54 ug/L
RT: 8.784 min Scan# 898
Delta R.T. -0.004 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion: 45 Resp: 4828

Ion	Ratio	Lower	Upper
45	100		
87	21.5	0.0	50.1
43	44.2	47.2	107.2#

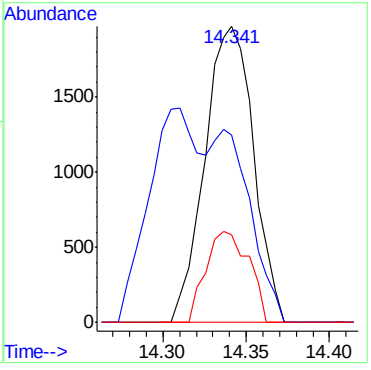


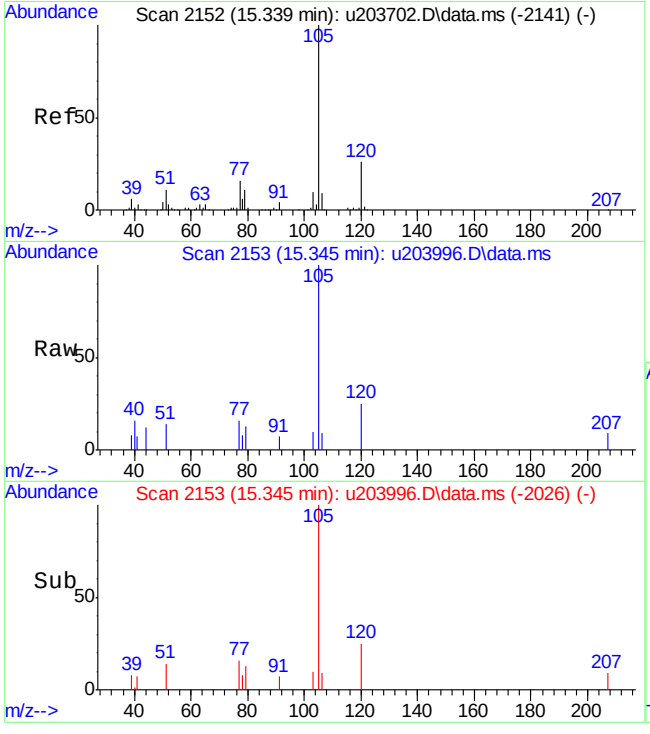


#105
chlorobenzene
Concen: 0.64 ug/L
RT: 14.341 min Scan# 1961
Delta R.T. 0.001 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion:112 Resp: 4005

Ion	Ratio	Lower	Upper
112	100		
77	63.3	30.1	90.1
114	29.7	2.0	62.0

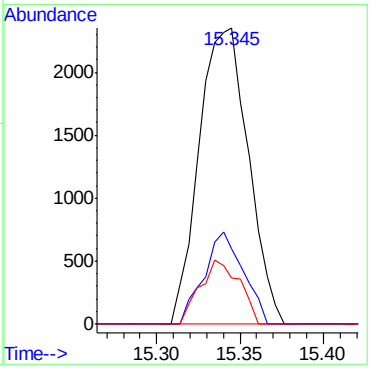


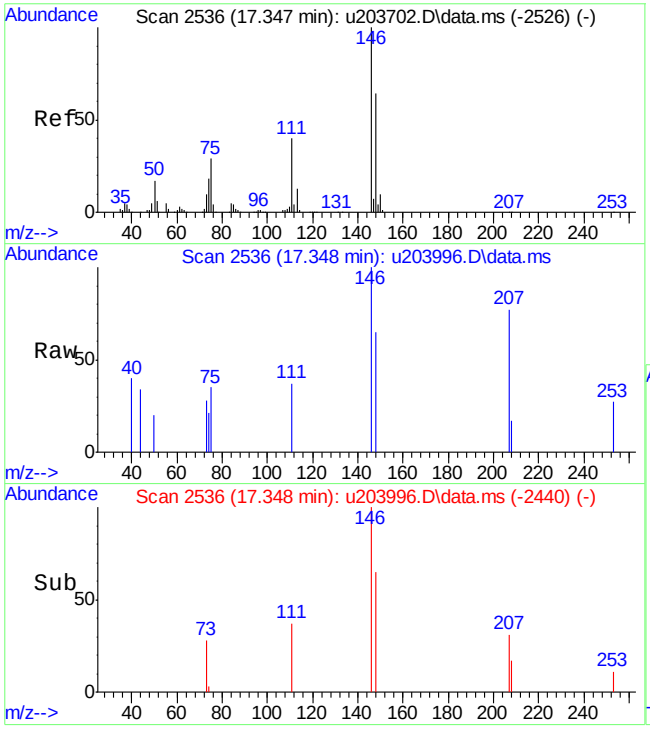


#113
isopropylbenzene
Concen: 0.46 ug/L
RT: 15.345 min Scan# 2153
Delta R.T. 0.006 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion:105 Resp: 4830

Ion	Ratio	Lower	Upper
105	100		
120	25.3	0.0	56.0
77	15.6	0.0	45.8

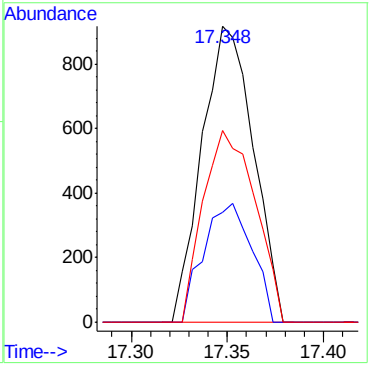




#133
1,2-dichlorobenzene
Concen: 0.33 ug/L
RT: 17.348 min Scan# 2536
Delta R.T. 0.001 min
Lab File: u203996.D
Acq: 8 Mar 2016 4:23 pm

Tgt Ion:146 Resp: 1706

Ion	Ratio	Lower	Upper
146	100		
111	37.1	9.9	69.9
148	64.7	33.9	93.9



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U\vu9378-vu9390\
Data File : u204014.D
Acq On : 9 Mar 2016 11:49 am
Operator : NicoleH1
Sample : JC15518-2
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 08:56:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	7.863	65	101951	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	229397	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	329487	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	303258	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	162954	50.00	ug/L	0.00
System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	96744	51.92	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.84%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	117079	51.59	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.18%			
88) toluene-d8 (s)	12.662	98	393065	49.67	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.34%			
114) 4-bromofluorobenzene (s)	15.580	95	150444	50.45	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.90%			
Target Compounds						Qvalue
105) chlorobenzene	14.341	112	1228	0.20	ug/L	95
113) isopropylbenzene	15.339	105	528829	52.06	ug/L	99

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

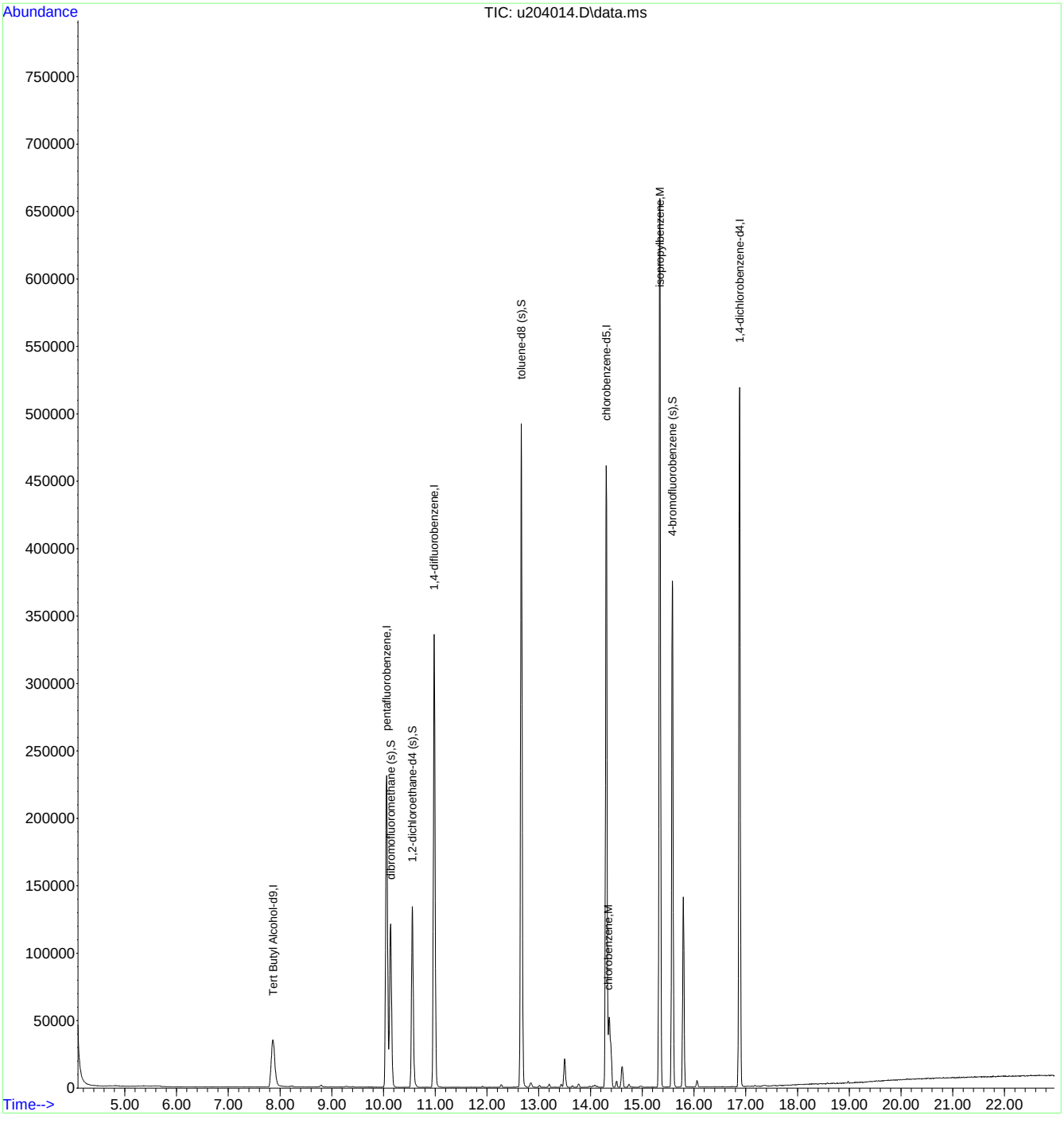
7.1.2

7

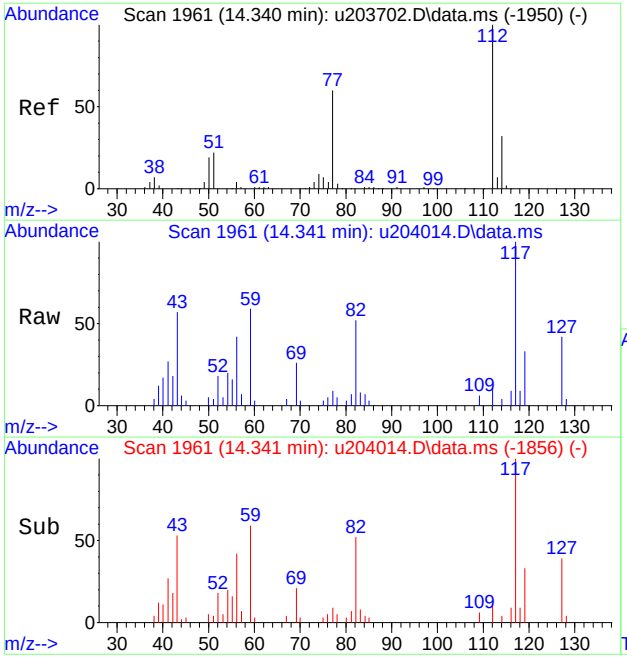
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U\vu9378-vu9390\
Data File : u204014.D
Acq On : 9 Mar 2016 11:49 am
Operator : NicoleH1
Sample : JC15518-2
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 21 08:56:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



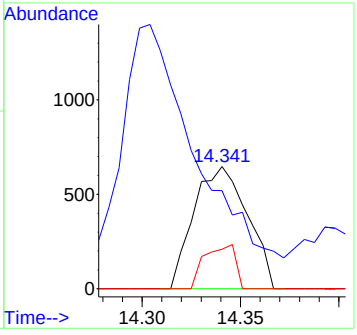
SGS ACCUTEST JC15518

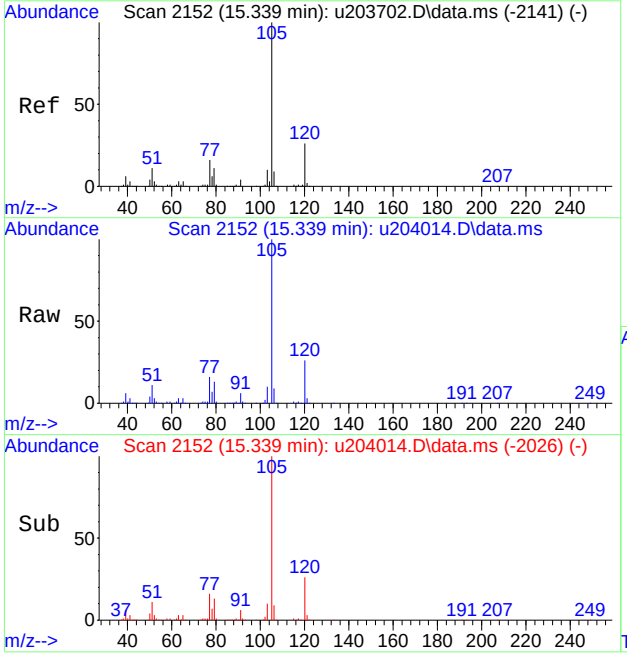


#105
chlorobenzene
Concen: 0.20 ug/L
RT: 14.341 min Scan# 1961
Delta R.T. 0.000 min
Lab File: u204014.D
Acq: 9 Mar 2016 11:49 am

Tgt Ion:112 Resp: 1228

Ion	Ratio	Lower	Upper
112	100		
77	55.0	30.1	90.1
114	32.5	2.0	62.0

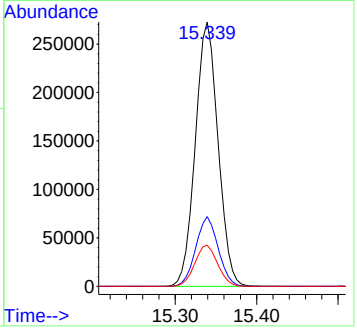




#113
isopropylbenzene
Concen: 52.06 ug/L
RT: 15.339 min Scan# 2152
Delta R.T. 0.000 min
Lab File: u204014.D
Acq: 9 Mar 2016 11:49 am

Tgt Ion:105 Resp: 528829

Ion	Ratio	Lower	Upper
105	100		
120	26.5	0.0	56.0
77	15.6	0.0	45.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204019.D
Acq On : 9 Mar 2016 2:16 pm
Operator : NicoleH1
Sample : JC15518-3
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 11:29:14 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	124577	500.00	ug/L	0.00
5) pentafluorobenzene	10.064	168	234166	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	336314	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	312090	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	167604	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	99305	52.21	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.42%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	120704	52.10	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.20%			
88) toluene-d8 (s)	12.662	98	402561	49.84	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.68%			
114) 4-bromofluorobenzene (s)	15.579	95	153462	50.03	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.06%			

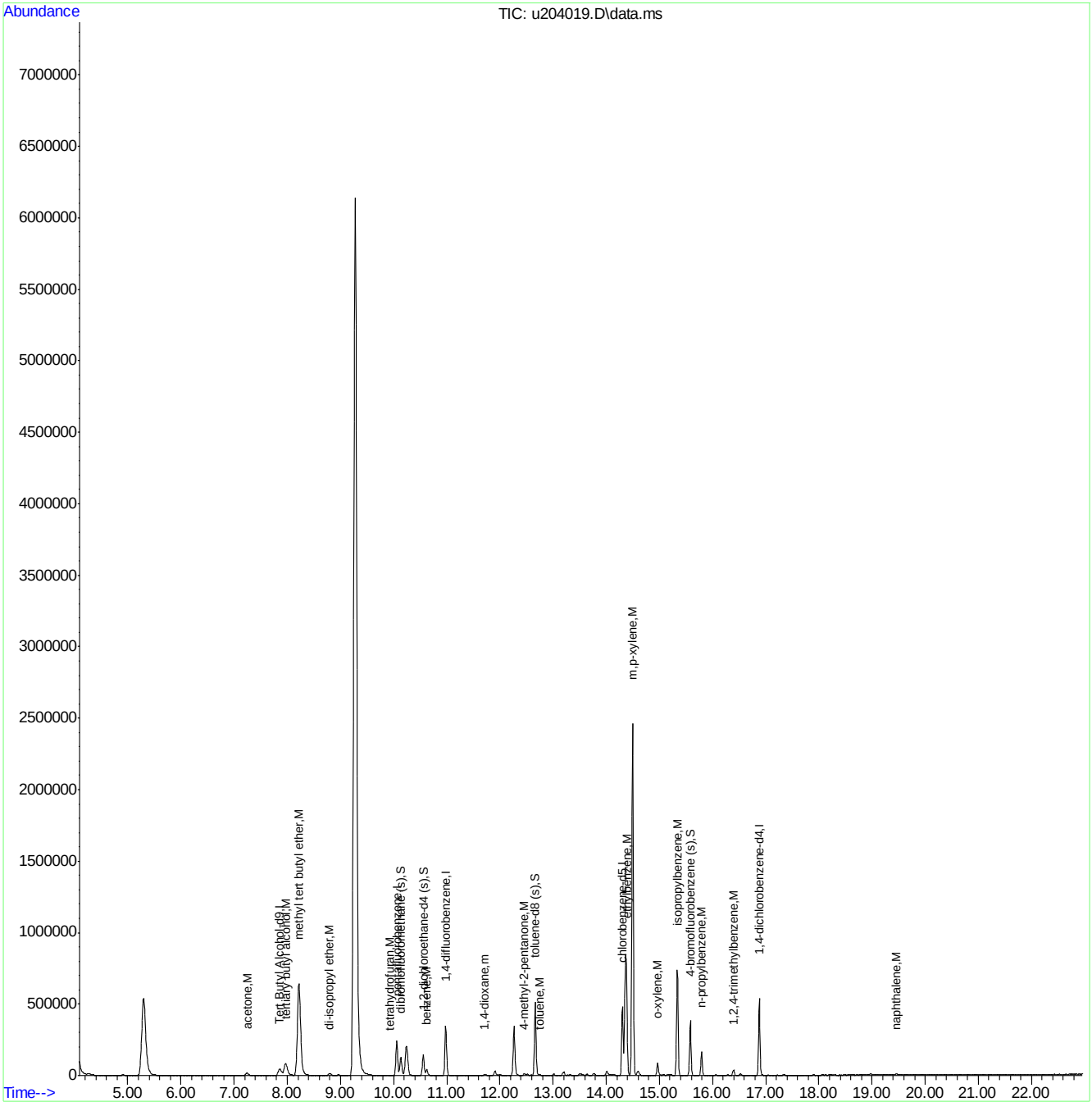
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.967	59	210217	757.25	ug/L #	50
4) 1,4-dioxane	11.716	88	8125	368.34	ug/L	99
29) acetone	7.261	58	1343	6.85	ug/L #	68
37) methyl tert butyl ether	8.218	73	1263931	196.88	ug/L	100
39) di-isopropyl ether	8.798	45	17095	1.93	ug/L #	71
52) tetrahydrofuran	9.922	42	1137	1.21	ug/L	70
72) benzene	10.623	78	44161	4.76	ug/L	99
89) 4-methyl-2-pentanone	12.453	58	4066	4.05	ug/L #	59
90) toluene	12.745	92	2638	0.47	ug/L	95
107) ethylbenzene	14.387	91	416400	37.74	ug/L	100
108) m,p-xylene	14.497	106	824811	199.82	ug/L	99
109) o-xylene	14.967	106	25958	6.40	ug/L	95
113) isopropylbenzene	15.339	105	607276	58.13	ug/L	99
119) n-propylbenzene	15.793	91	155552	12.35	ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	7534	0.83	ug/L	97
141) naphthalene	19.458	128	7477	1.20	ug/L	99

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

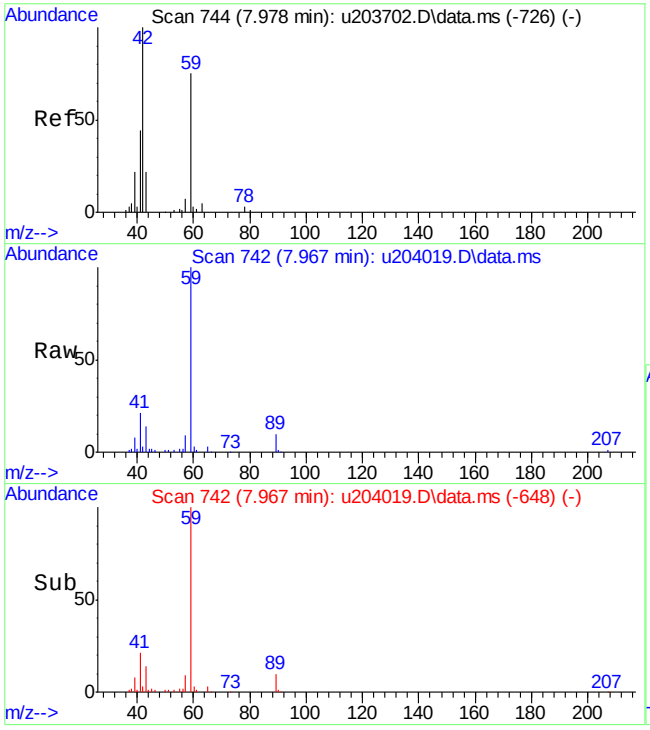
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204019.D
Acq On : 9 Mar 2016 2:16 pm
Operator : NicoleH1
Sample : JC15518-3
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 18 11:29:14 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



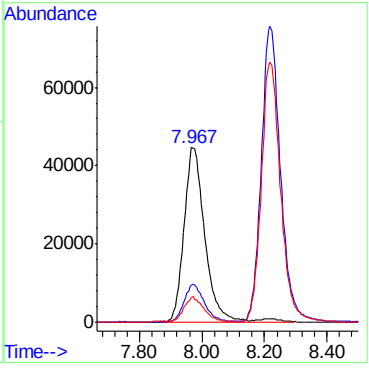
MU9367.M Fri Mar 18 11:33:53 2016 U_CORE

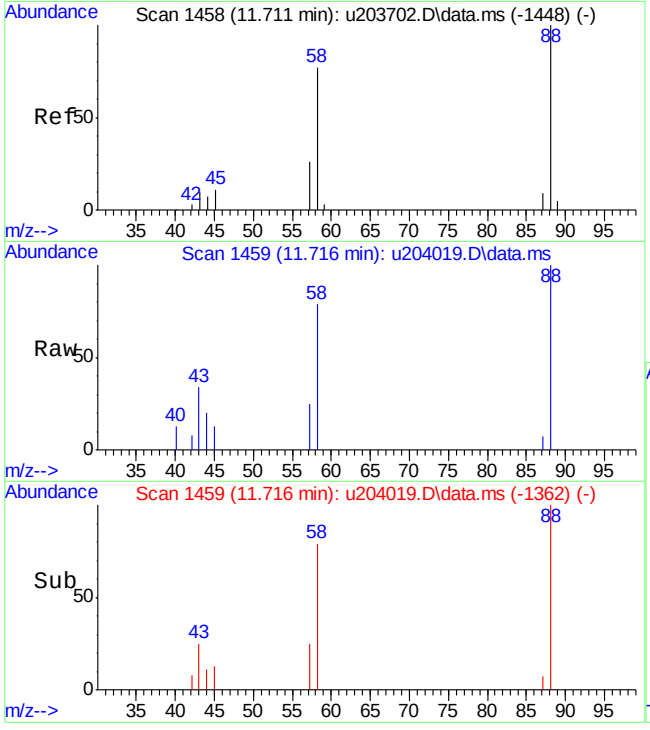


#2
tertiary butyl alcohol
Concen: 757.25 ug/L
RT: 7.967 min Scan# 742
Delta R.T. -0.011 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 59 Resp: 210217

Ion	Ratio	Lower	Upper
59	100		
41	21.2	38.3	98.3#
43	14.0	2.8	62.8

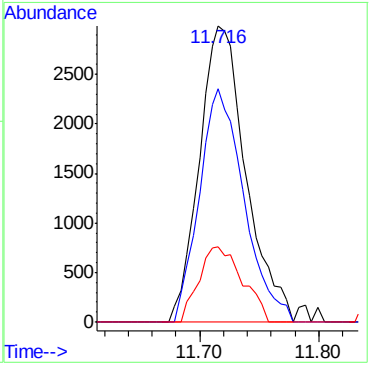


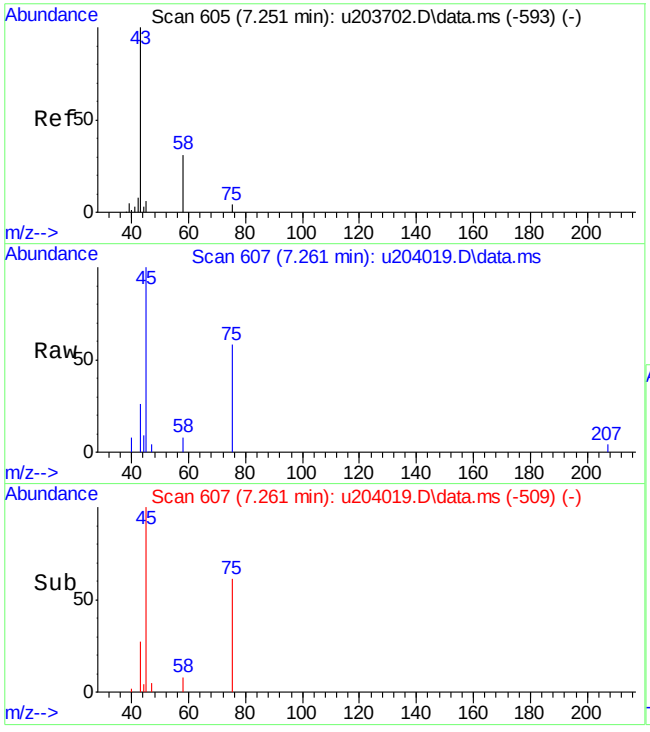


#4
1,4-dioxane
Concen: 368.34 ug/L
RT: 11.716 min Scan# 1459
Delta R.T. 0.005 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 88 Resp: 8125

Ion	Ratio	Lower	Upper
88	100		
58	75.4	52.3	97.1
57	23.6	17.1	31.9

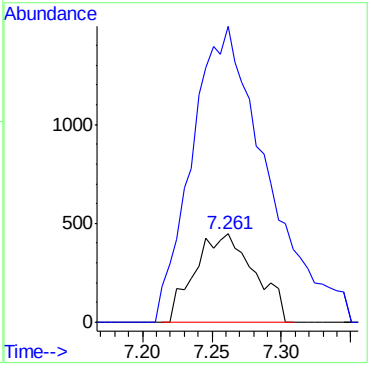


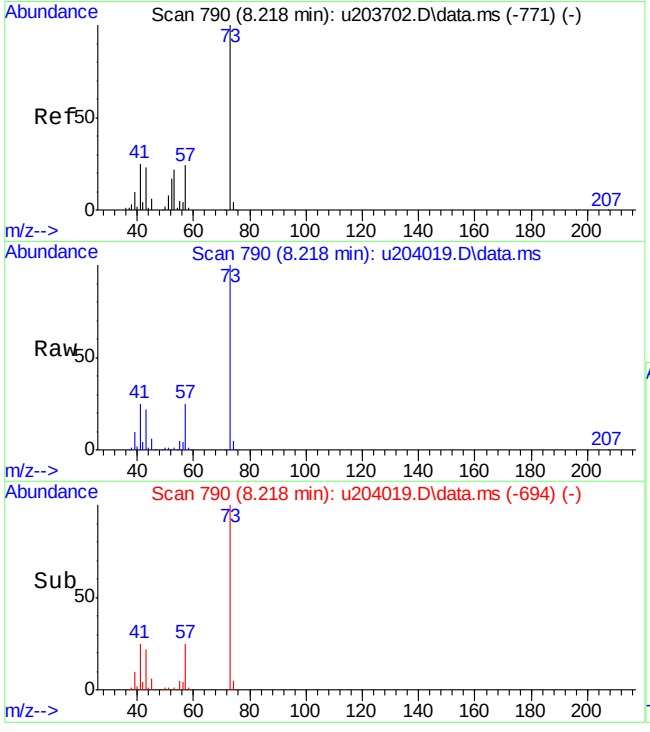


#29
acetone
Concen: 6.85 ug/L
RT: 7.261 min Scan# 607
Delta R.T. 0.010 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 58 Resp: 1343

Ion	Ratio	Lower	Upper
58	100		
43	420.4	321.2	381.2#

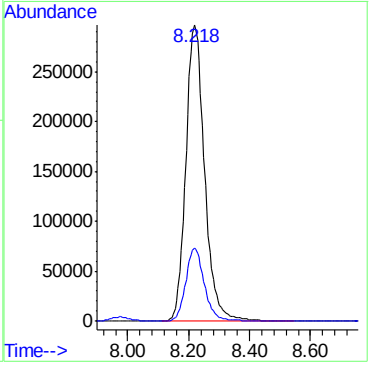


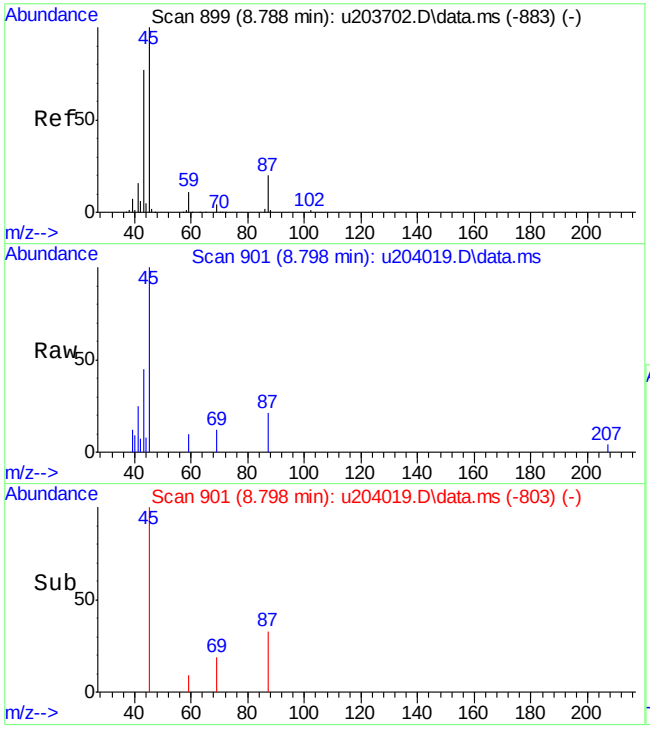


#37
methyl tert butyl ether
Concen: 196.88 ug/L
RT: 8.218 min Scan# 790
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 73 Resp: 1263931

Ion	Ratio	Lower	Upper
73	100		
57	24.5	0.0	54.5

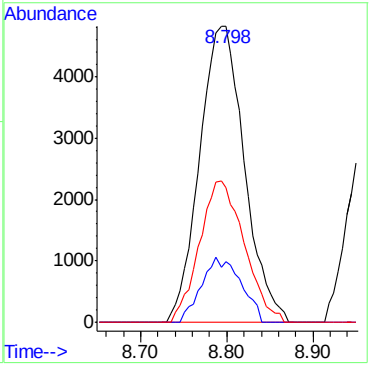


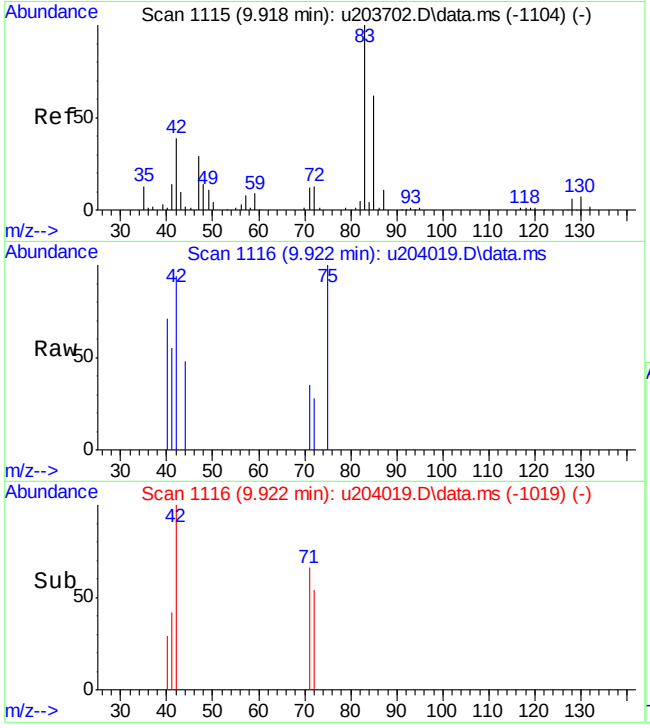


#39
di-isopropyl ether
Concen: 1.93 ug/L
RT: 8.798 min Scan# 901
Delta R.T. 0.010 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 45 Resp: 17095

Ion	Ratio	Lower	Upper
45	100		
87	20.5	0.0	50.1
43	45.4	47.2	107.2#

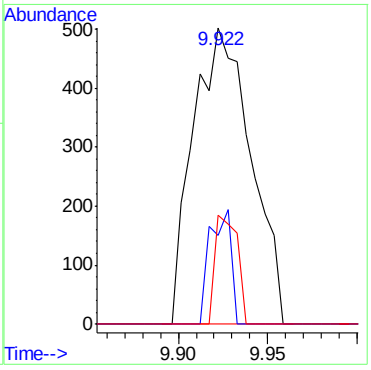


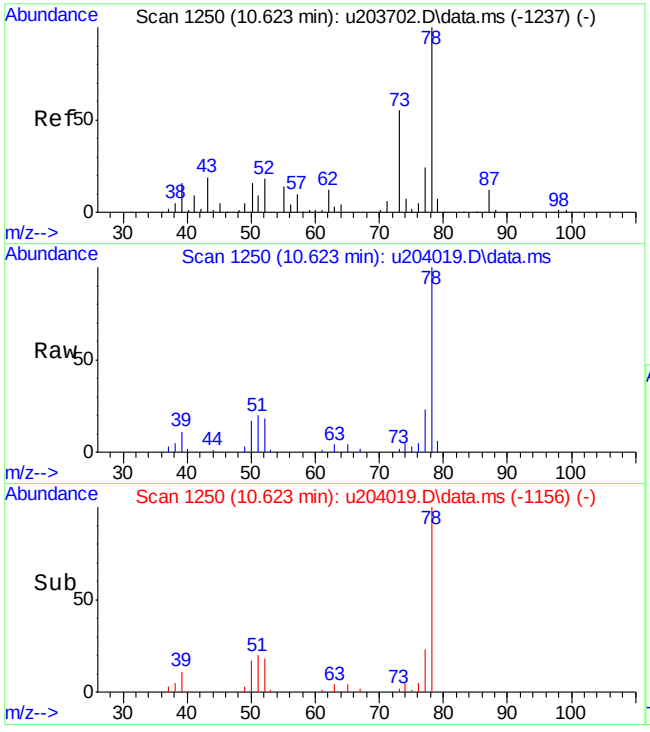


#52
tetrahydrofuran
Concen: 1.21 ug/L
RT: 9.922 min Scan# 1116
Delta R.T. 0.005 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 42 Resp: 1137

Ion	Ratio	Lower	Upper
42	100		
72	14.1	1.7	61.7
71	14.0	0.0	58.8

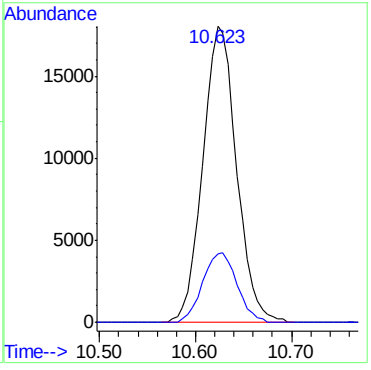


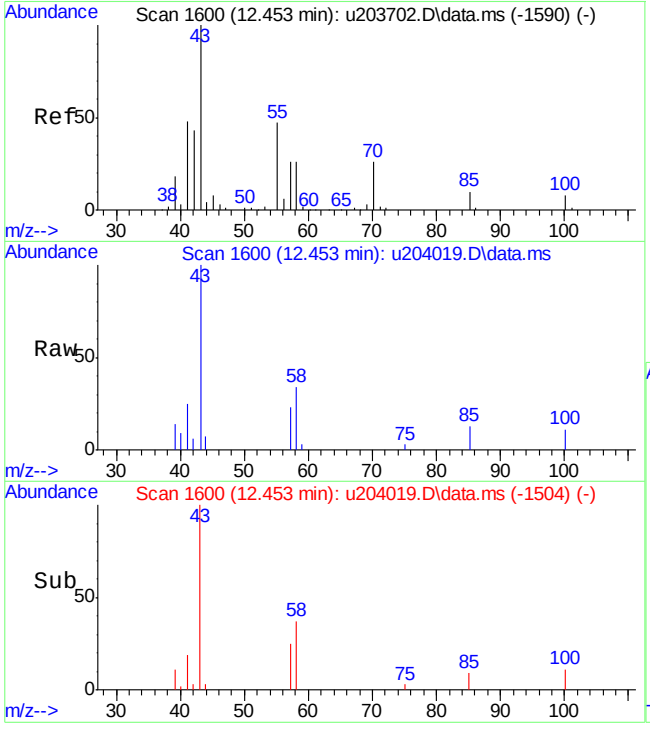


#72
benzene
Concen: 4.76 ug/L
RT: 10.623 min Scan# 1250
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 78 Resp: 44161

Ion	Ratio	Lower	Upper
78	100		
77	23.0	0.0	53.7

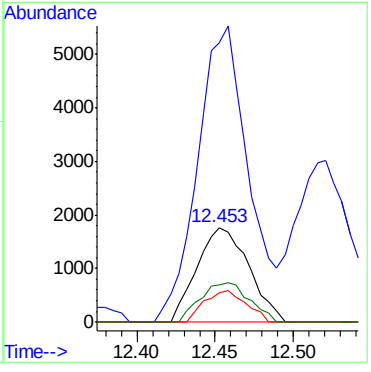


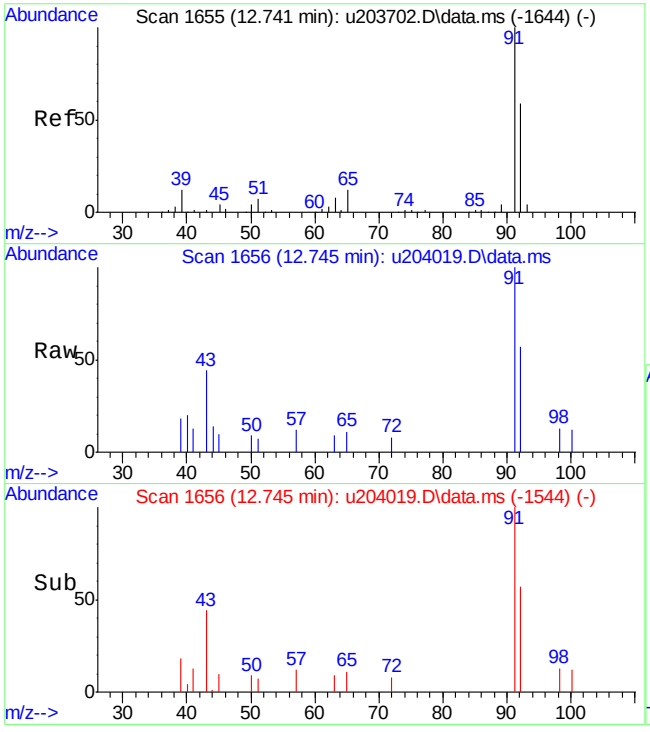


#89
4-methyl-2-pentanone
Concen: 4.05 ug/L
RT: 12.453 min Scan# 1600
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 58 Resp: 4066

Ion	Ratio	Lower	Upper
58	100		
43	315.1	410.5	450.5#
100	26.8	8.6	48.6
85	39.3	16.4	56.4

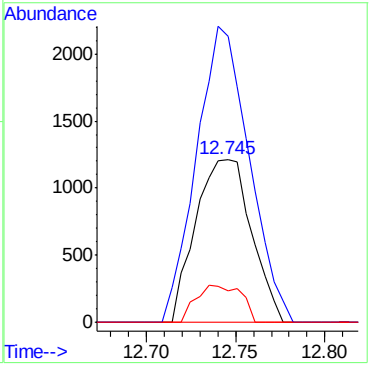


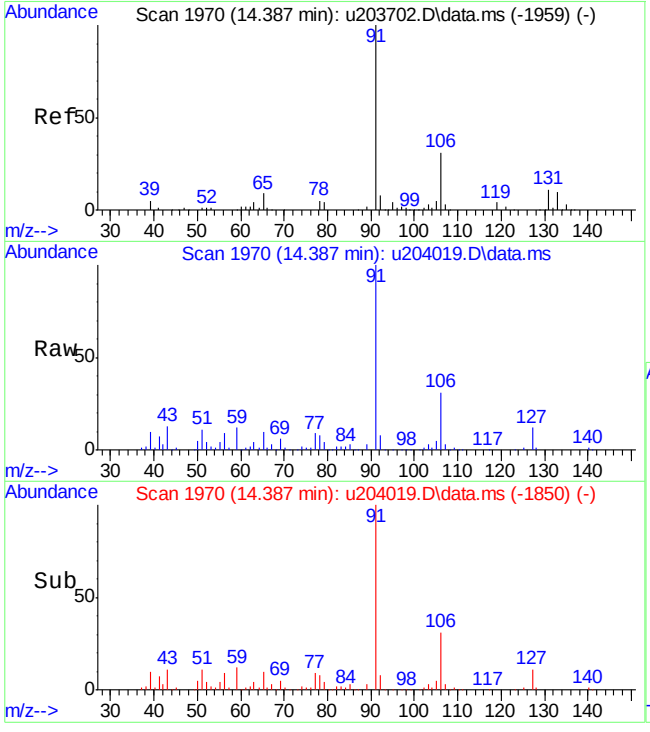


#90
toluene
Concen: 0.47 ug/L
RT: 12.745 min Scan# 1656
Delta R.T. 0.005 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 92 Resp: 2638

Ion	Ratio	Lower	Upper
92	100		
91	175.8	139.3	199.3
65	19.1	0.0	50.5

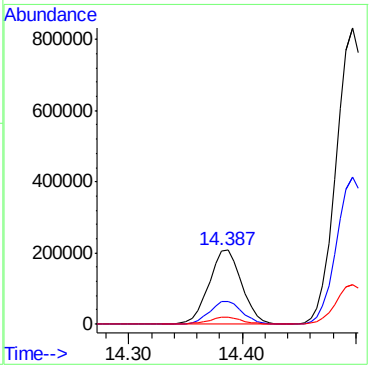


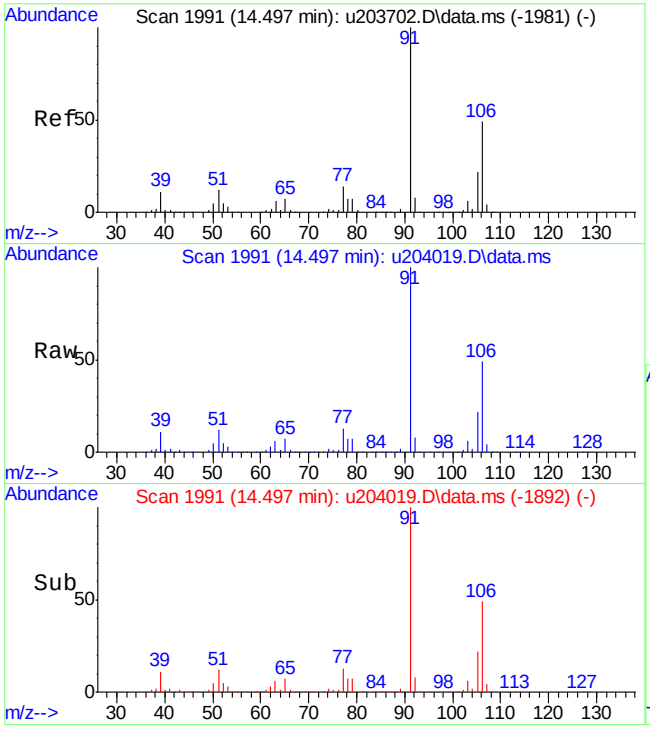


#107
ethylbenzene
Concen: 37.74 ug/L
RT: 14.387 min Scan# 1970
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 91 Resp: 416400

Ion	Ratio	Lower	Upper
91	100		
106	30.9	1.1	61.1
77	8.8	0.0	38.6

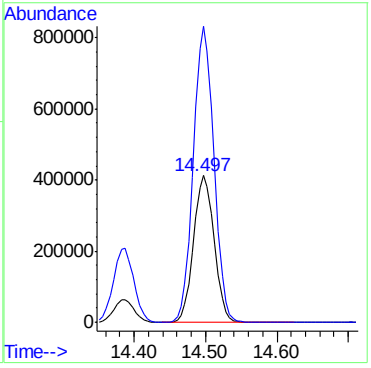


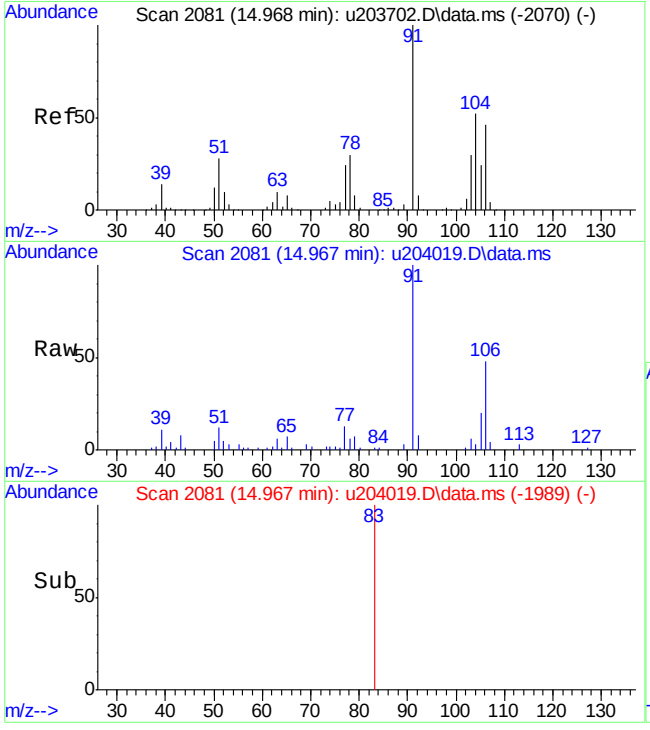


#108
m,p-xylene
Concen: 199.82 ug/L
RT: 14.497 min Scan# 1991
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion:106 Resp: 824811

Ion	Ratio	Lower	Upper
106	100		
91	202.0	173.9	233.9

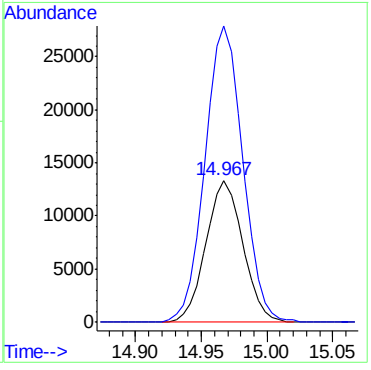


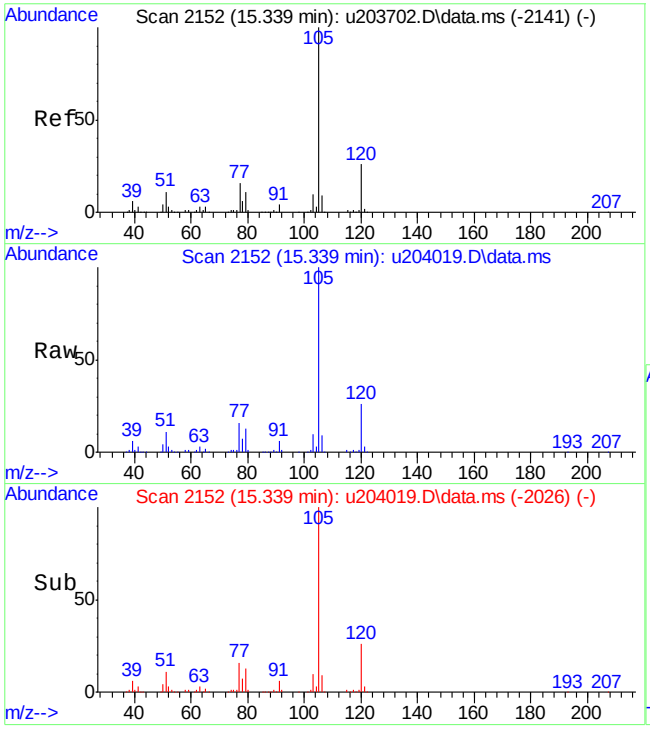


#109
o-xylene
Concen: 6.40 ug/L
RT: 14.967 min Scan# 2081
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion:106 Resp: 25958

Ion	Ratio	Lower	Upper
106	100		
91	209.3	186.5	246.5

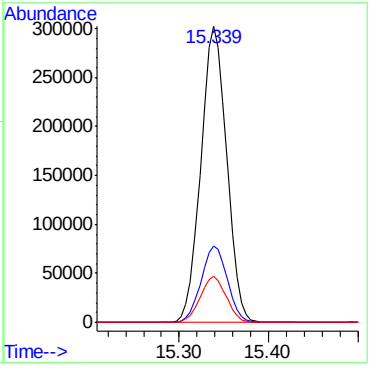


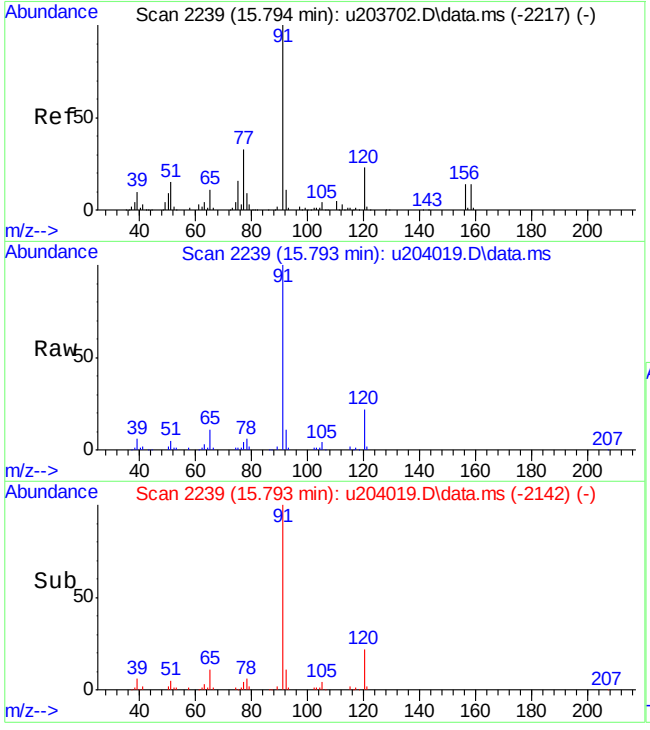


#113
isopropylbenzene
Concen: 58.13 ug/L
RT: 15.339 min Scan# 2152
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion:105 Resp: 607276

Ion	Ratio	Lower	Upper
105	100		
120	25.7	0.0	56.0
77	15.5	0.0	45.8

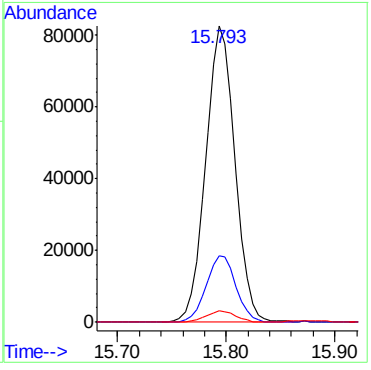


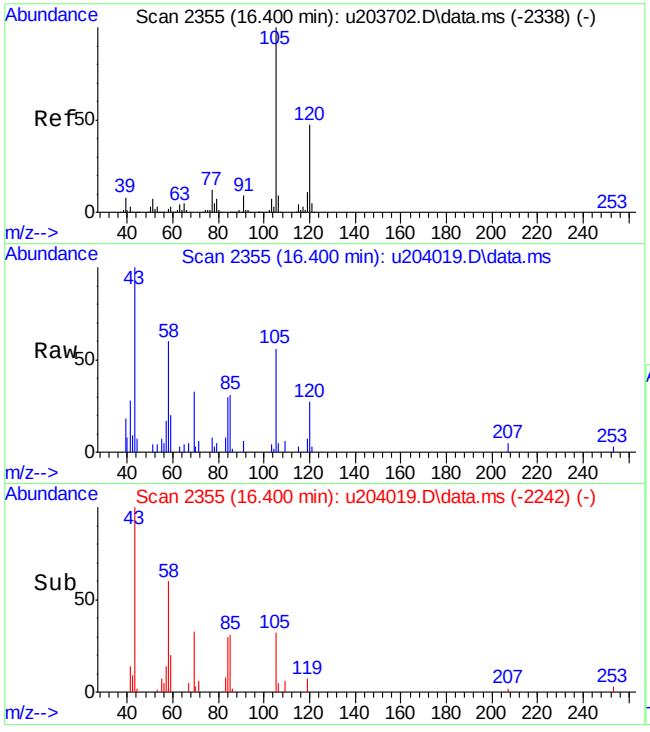


#119
n-propylbenzene
Concen: 12.35 ug/L
RT: 15.793 min Scan# 2239
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion: 91 Resp: 155552

Ion	Ratio	Lower	Upper
91	100		
120	22.3	0.0	52.8
105	3.9	0.0	33.8

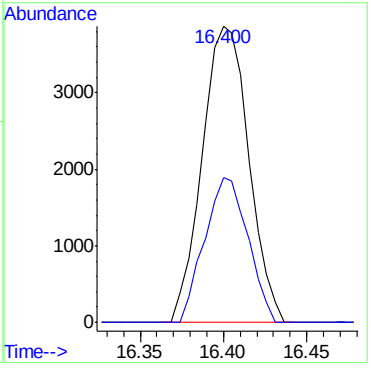


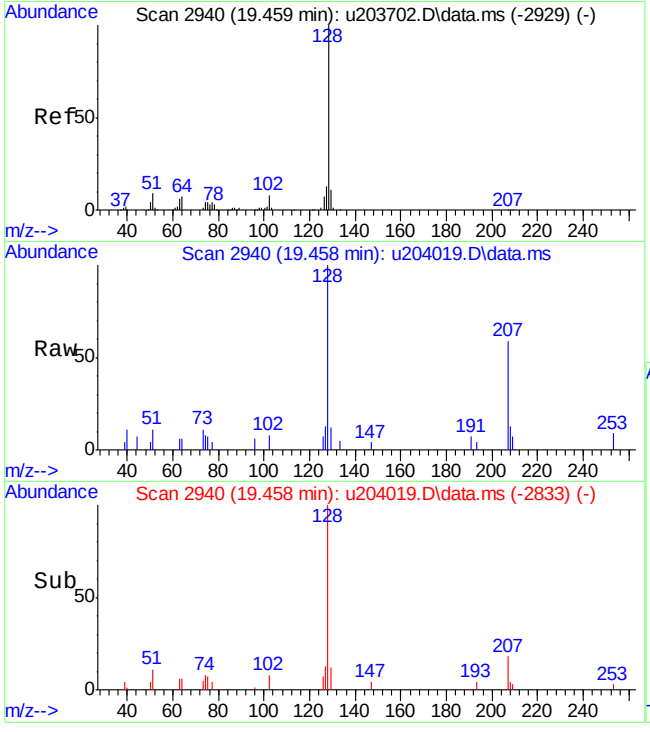


#126
1,2,4-trimethylbenzene
Concen: 0.83 ug/L
RT: 16.400 min Scan# 2355
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion:105 Resp: 7534

Ion	Ratio	Lower	Upper
105	100		
120	49.1	16.8	76.8

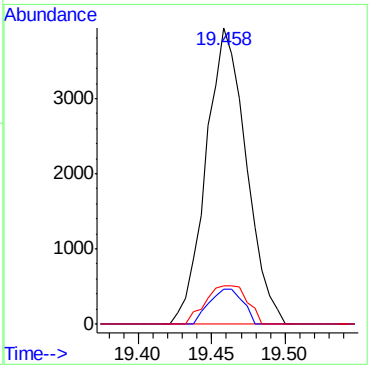




#141
naphthalene
Concen: 1.20 ug/L
RT: 19.458 min Scan# 2940
Delta R.T. -0.000 min
Lab File: u204019.D
Acq: 9 Mar 2016 2:16 pm

Tgt Ion:128 Resp: 7477

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	40.9
127	13.0	0.0	43.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203998.D
Acq On : 8 Mar 2016 5:22 pm
Operator : NicoleH1
Sample : JC15518-4
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 18 11:08:08 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	115829	500.00	ug/L	0.00
5) pentafluorobenzene	10.063	168	229683	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	331371	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	302829	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	161927	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	95964	51.44	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.88%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	117681	51.79	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.58%			
88) toluene-d8 (s)	12.667	98	392382	49.30	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.60%			
114) 4-bromofluorobenzene (s)	15.579	95	148920	50.25	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.50%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.962	59	4838	18.74	ug/L #	53
37) methyl tert butyl ether	8.218	73	243484	38.67	ug/L	100
39) di-isopropyl ether	8.798	45	2132	0.25	ug/L	65
52) tetrahydrofuran	9.922	42	10296	11.16	ug/L	97
68) Cyclohexane	10.257	84	2687	0.74	ug/L #	13
107) ethylbenzene	14.387	91	16969	1.59	ug/L	99
108) m,p-xylene	14.502	106	9265	2.31	ug/L	91
113) isopropylbenzene	15.338	105	40770	4.04	ug/L	98
119) n-propylbenzene	15.798	91	8145	0.67	ug/L	94

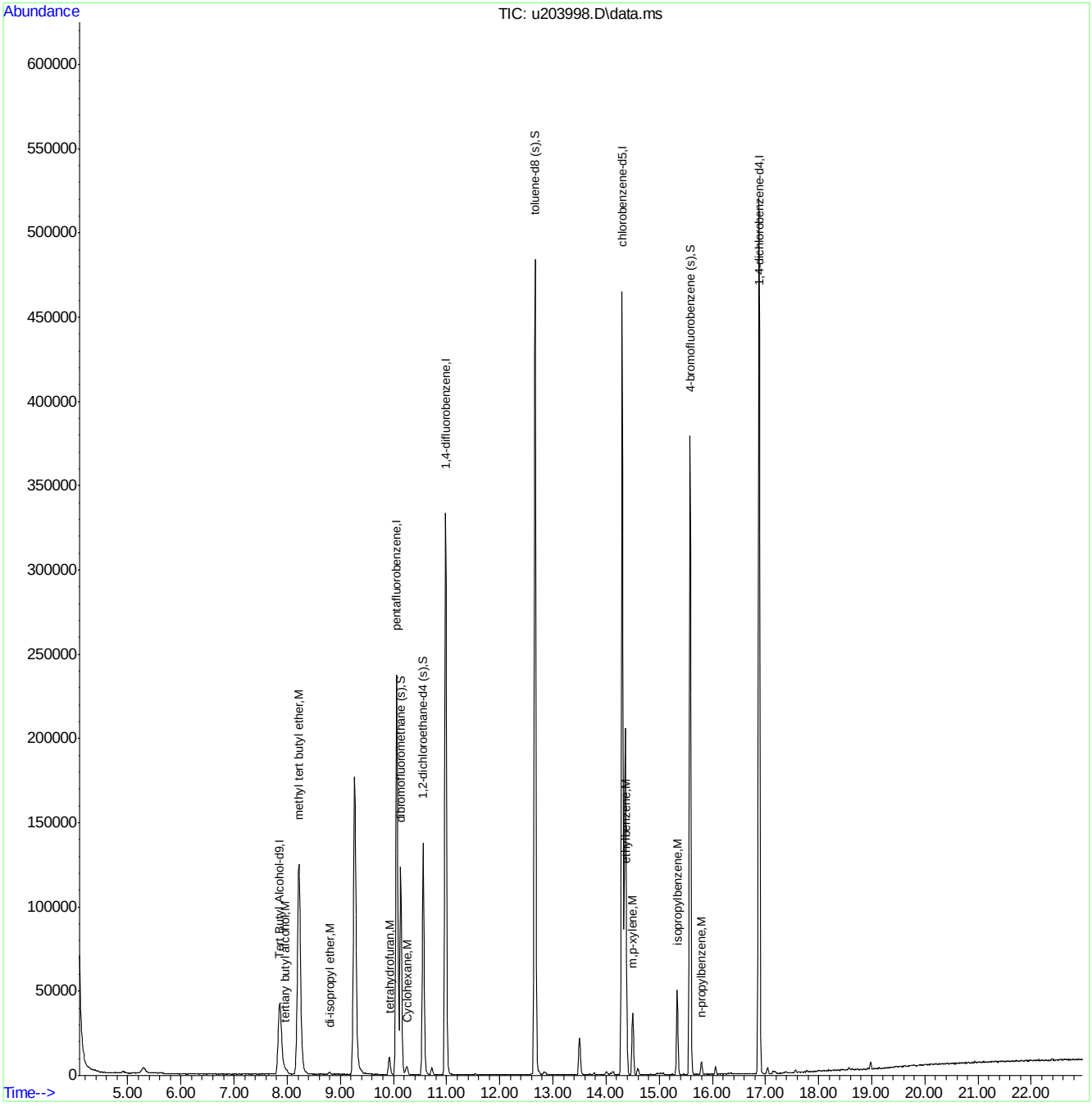
(#) = qualifier out of range (m) = manual integration (+) = signals summed

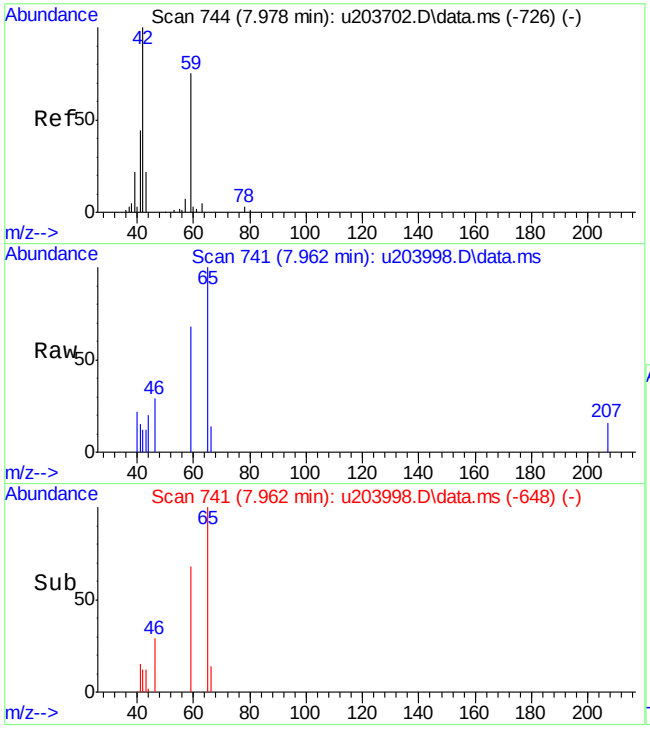
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203998.D
Acq On : 8 Mar 2016 5:22 pm
Operator : NicoleH1
Sample : JC15518-4
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 18 11:08:08 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

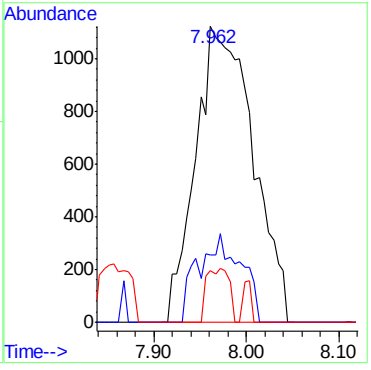


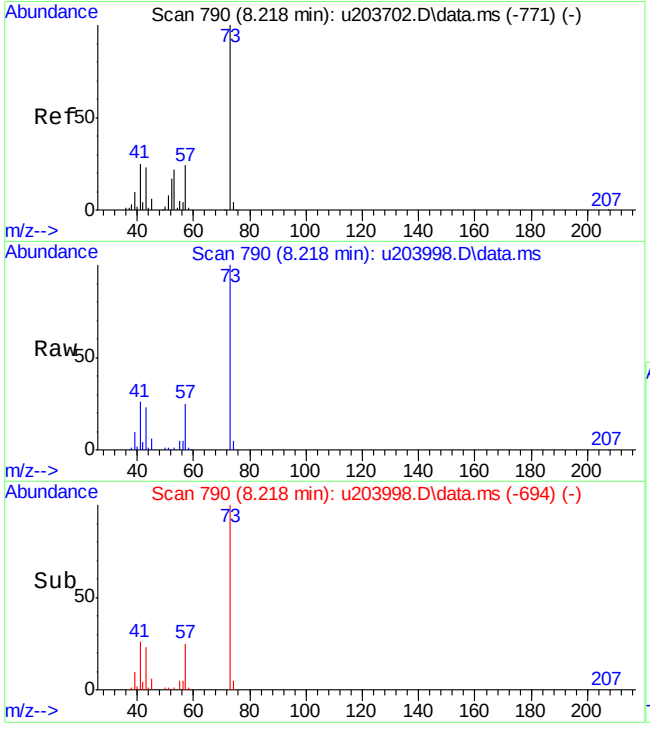


#2
tertiary butyl alcohol
Concen: 18.74 ug/L
RT: 7.962 min Scan# 741
Delta R.T. -0.016 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 59 Resp: 4838

Ion	Ratio	Lower	Upper
59	100		
41	22.6	38.3	98.3#
43	17.3	2.8	62.8

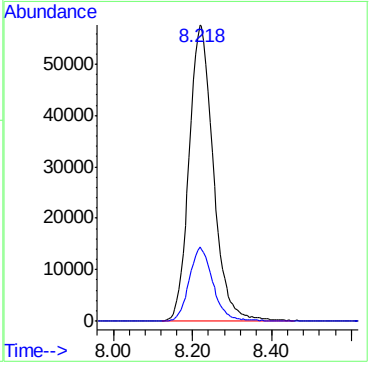


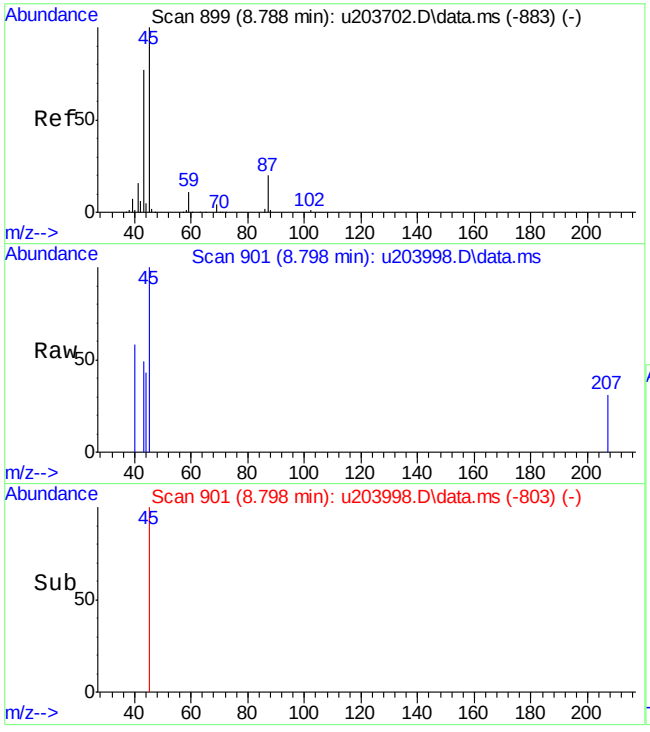


#37
methyl tert butyl ether
Concen: 38.67 ug/L
RT: 8.218 min Scan# 790
Delta R.T. -0.001 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 73 Resp: 243484

Ion	Ratio	Lower	Upper
73	100		
57	24.3	0.0	54.5

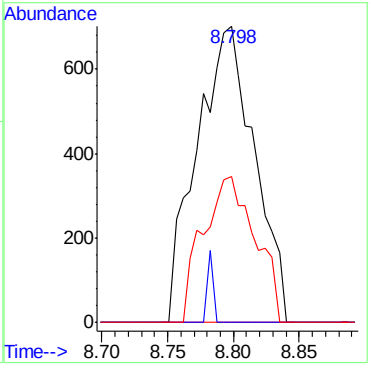


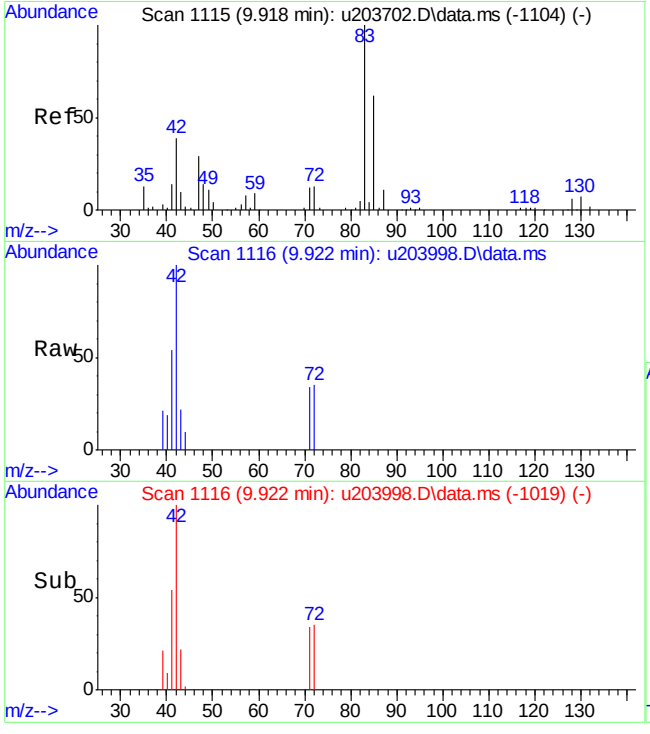


#39
di-isopropyl ether
Concen: 0.25 ug/L
RT: 8.798 min Scan# 901
Delta R.T. 0.010 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 45 Resp: 2132

Ion	Ratio	Lower	Upper
45	100		
87	0.0	0.0	50.1
43	49.1	47.2	107.2

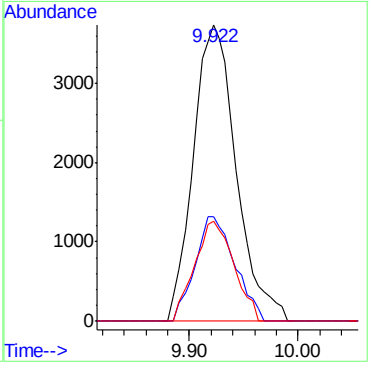


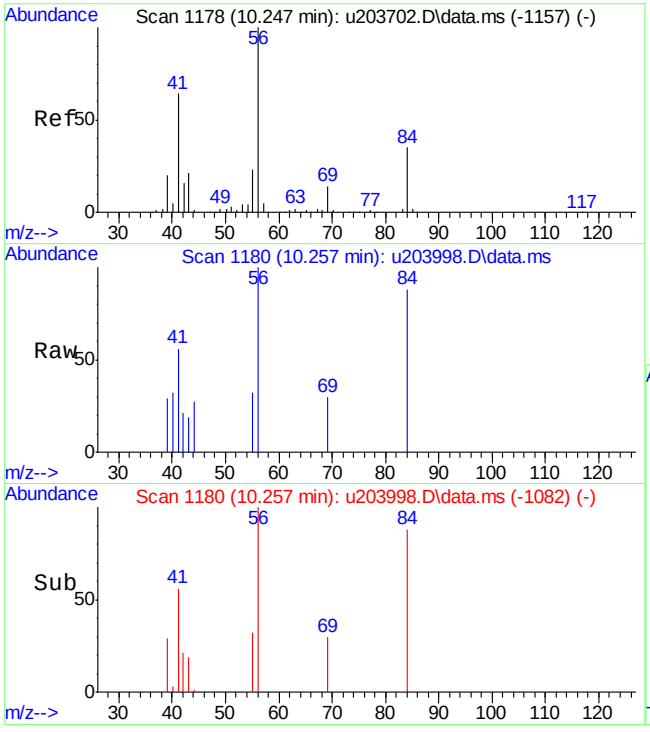


#52
tetrahydrofuran
Concen: 11.16 ug/L
RT: 9.922 min Scan# 1116
Delta R.T. 0.005 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 42 Resp: 10296

Ion	Ratio	Lower	Upper
42	100		
72	32.7	1.7	61.7
71	30.8	0.0	58.8

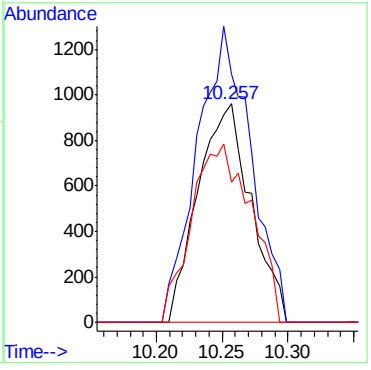


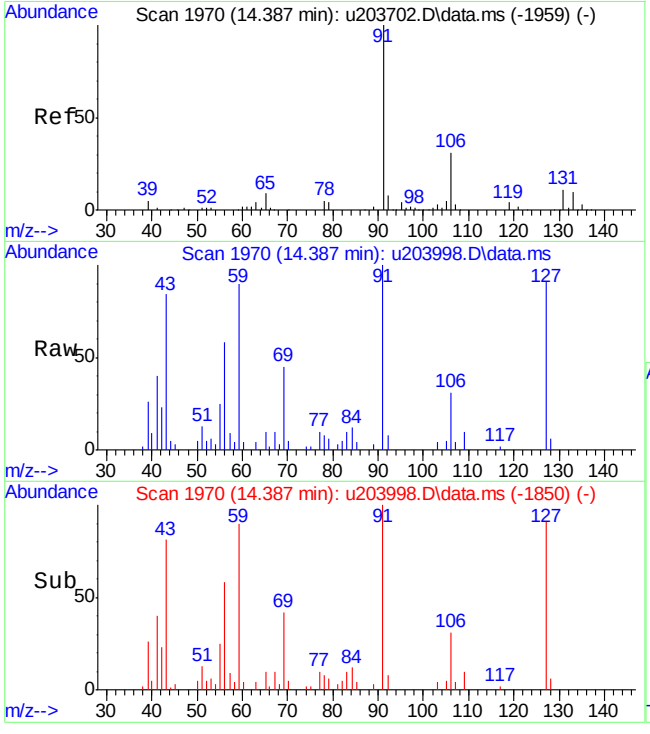


#68
Cyclohexane
Concen: 0.74 ug/L
RT: 10.257 min Scan# 1180
Delta R.T. 0.010 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 84 Resp: 2687

Ion	Ratio	Lower	Upper
84	100		
56	113.8	253.0	313.0#
41	64.2	150.0	210.0#

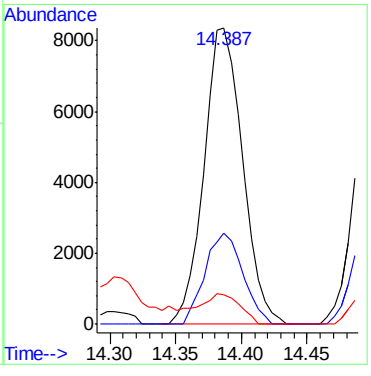


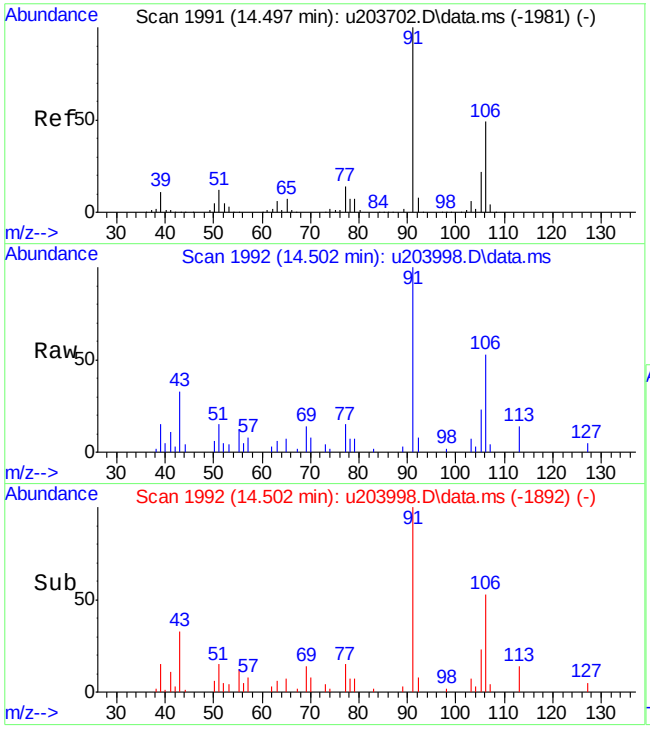


#107
ethylbenzene
Concen: 1.59 ug/L
RT: 14.387 min Scan# 1970
Delta R.T. -0.001 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 91 Resp: 16969

Ion	Ratio	Lower	Upper
91	100		
106	30.7	1.1	61.1
77	9.7	0.0	38.6

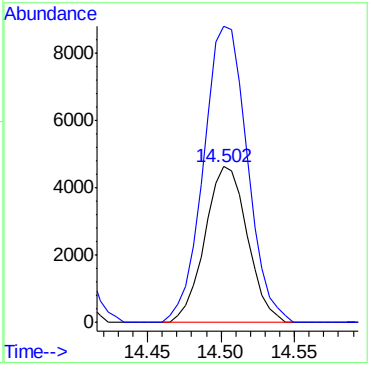


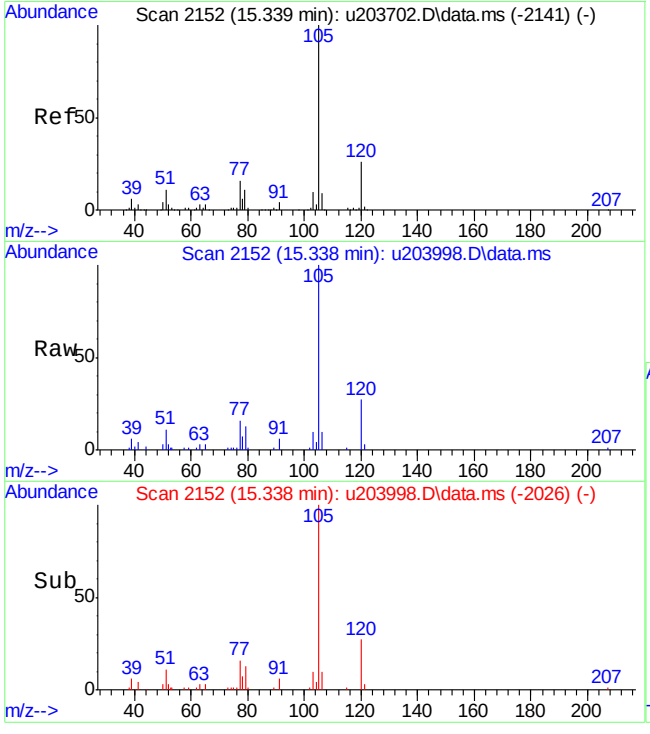


#108
m,p-xylene
Concen: 2.31 ug/L
RT: 14.502 min Scan# 1992
Delta R.T. 0.005 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion:106 Resp: 9265

Ion	Ratio	Lower	Upper
106	100		
91	190.1	173.9	233.9

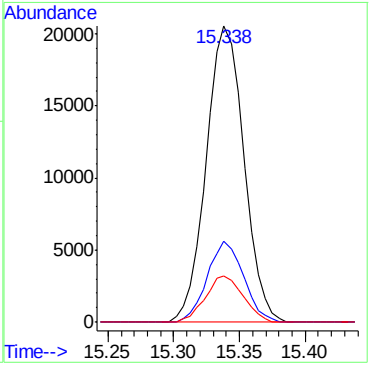


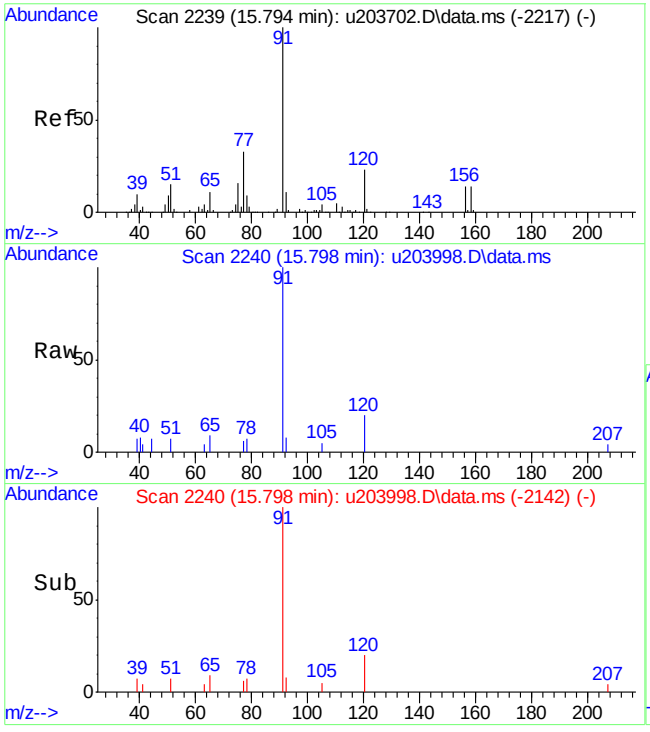


#113
isopropylbenzene
Concen: 4.04 ug/L
RT: 15.338 min Scan# 2152
Delta R.T. -0.001 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion:105 Resp: 40770

Ion	Ratio	Lower	Upper
105	100		
120	27.2	0.0	56.0
77	15.6	0.0	45.8

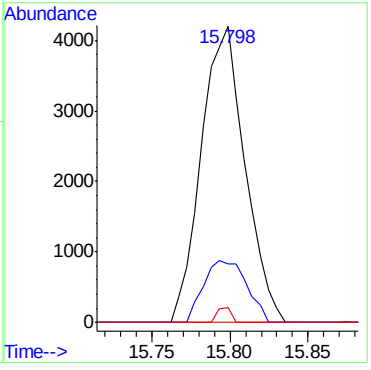




#119
n-propylbenzene
Concen: 0.67 ug/L
RT: 15.798 min Scan# 2240
Delta R.T. 0.005 min
Lab File: u203998.D
Acq: 8 Mar 2016 5:22 pm

Tgt Ion: 91 Resp: 8145

Ion	Ratio	Lower	Upper
91	100		
120	19.7	0.0	52.8
105	4.9	0.0	33.8



7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203995.D
Acq On : 8 Mar 2016 3:53 pm
Operator : NicoleH1
Sample : JC15518-5
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 18 11:30:45 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	113553	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	234159	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	339574	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	311491	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	166118	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	98602	51.84	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.68%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	120118	51.85	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.70%			
88) toluene-d8 (s)	12.662	98	401444	49.22	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.44%			
114) 4-bromofluorobenzene (s)	15.579	95	154481	50.82	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.64%			

Target Compounds

						Qvalue
4) 1,4-dioxane	11.715	88	20293	1009.29	ug/L	99
23) ethyl ether	6.754	74	790	0.62	ug/L #	50
37) methyl tert butyl ether	8.223	73	13465	2.10	ug/L	97

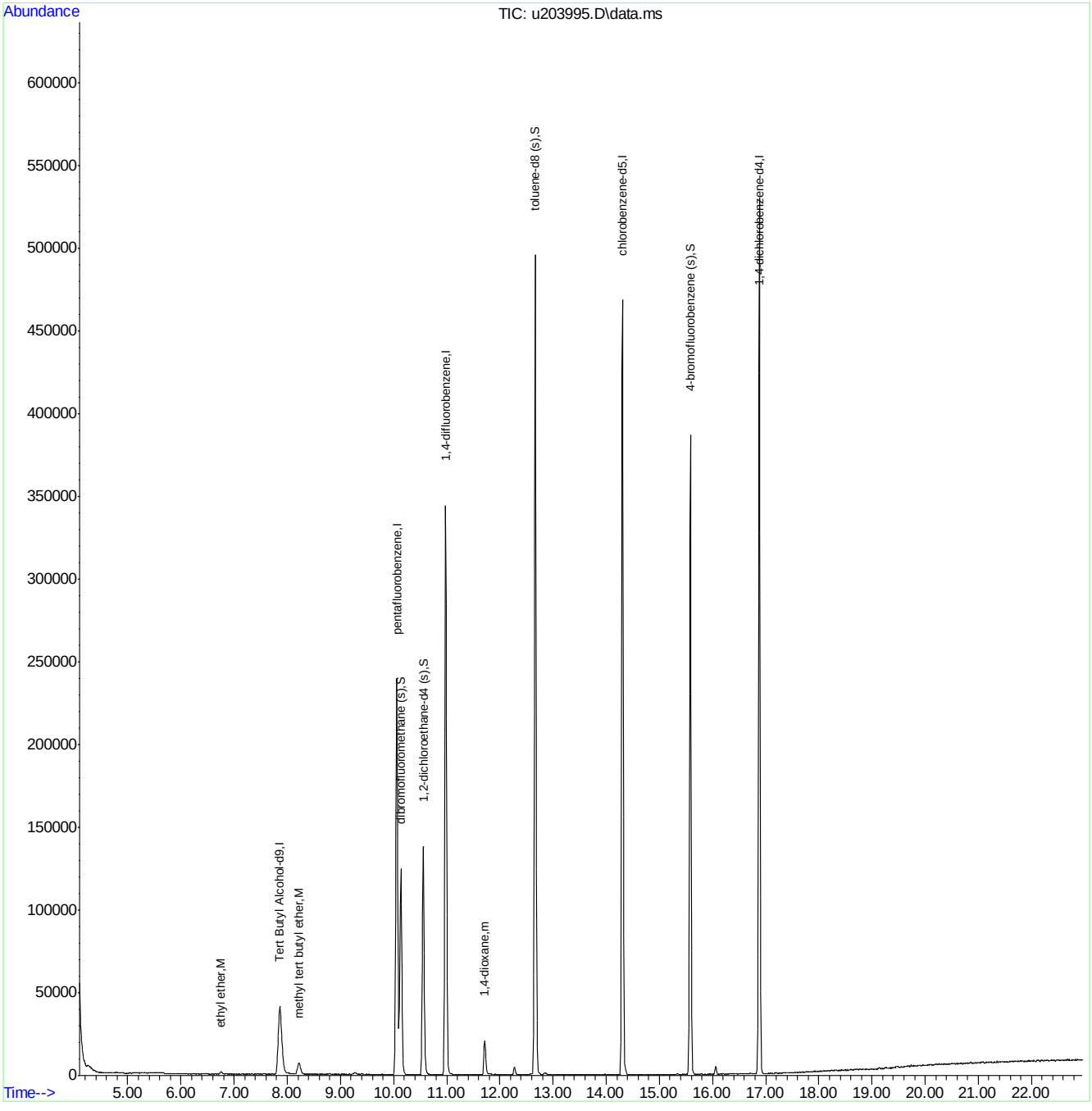
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

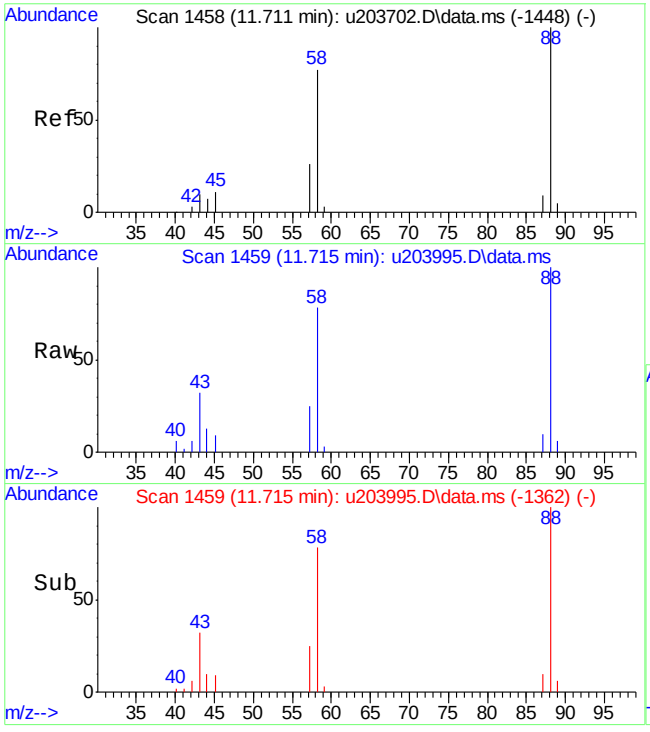
Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u203995.D
Acq On : 8 Mar 2016 3:53 pm
Operator : NicoleH1
Sample : JC15518-5
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 18 11:30:45 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



MU9367.M Fri Mar 18 11:33:29 2016 U_CORE

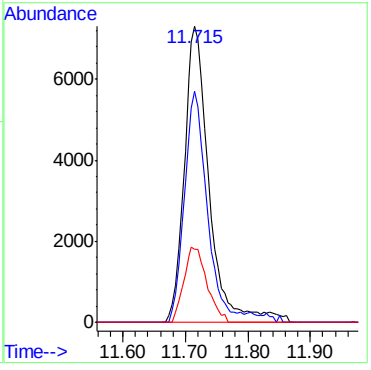
Page: 2

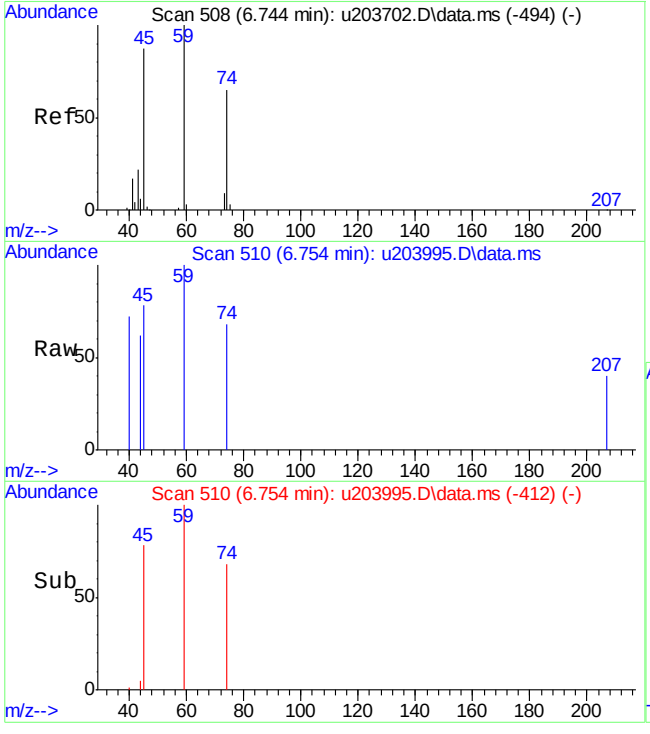


#4
1,4-dioxane
Concen: 1009.29 ug/L
RT: 11.715 min Scan# 1459
Delta R.T. 0.005 min
Lab File: u203995.D
Acq: 8 Mar 2016 3:53 pm

Tgt Ion: 88 Resp: 20293

Ion	Ratio	Lower	Upper
88	100		
58	74.5	52.3	97.1
57	23.5	17.1	31.9

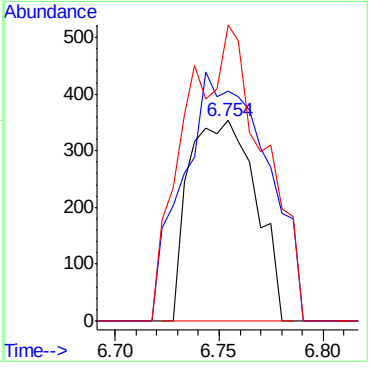




#23
ethyl ether
Concen: 0.62 ug/L
RT: 6.754 min Scan# 510
Delta R.T. 0.010 min
Lab File: u203995.D
Acq: 8 Mar 2016 3:53 pm

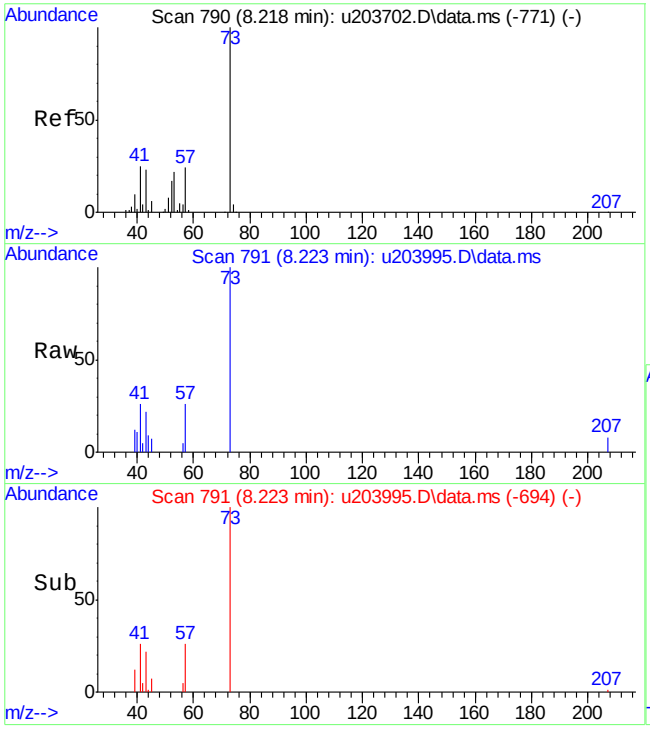
Tgt Ion: 74 Resp: 790

Ion	Ratio	Lower	Upper
74	100		
45	68.3	105.3	165.3#
59	97.7	125.0	185.0#



7.1.5

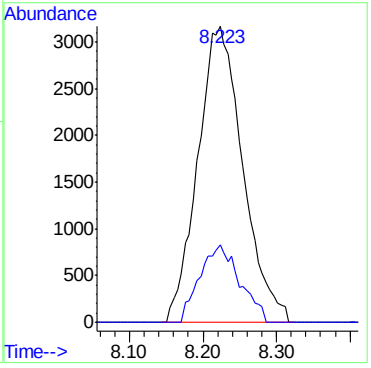
7



#37
methyl tert butyl ether
Concen: 2.10 ug/L
RT: 8.223 min Scan# 791
Delta R.T. 0.005 min
Lab File: u203995.D
Acq: 8 Mar 2016 3:53 pm

Tgt Ion: 73 Resp: 13465

Ion	Ratio	Lower	Upper
73	100		
57	23.2	0.0	54.5



7.1.5

7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204002.D
Acq On : 8 Mar 2016 7:20 pm
Operator : NicoleH1
Sample : JC15518-6
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 18 11:31:23 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	127542	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	237894	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	345168	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	314341	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.876	152	170133	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.132	113	99687	51.59	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.18%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	122094	51.88	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.76%			
88) toluene-d8 (s)	12.663	98	406446	49.03	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.06%			
114) 4-bromofluorobenzene (s)	15.580	95	156892	50.39	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.78%			

Target Compounds

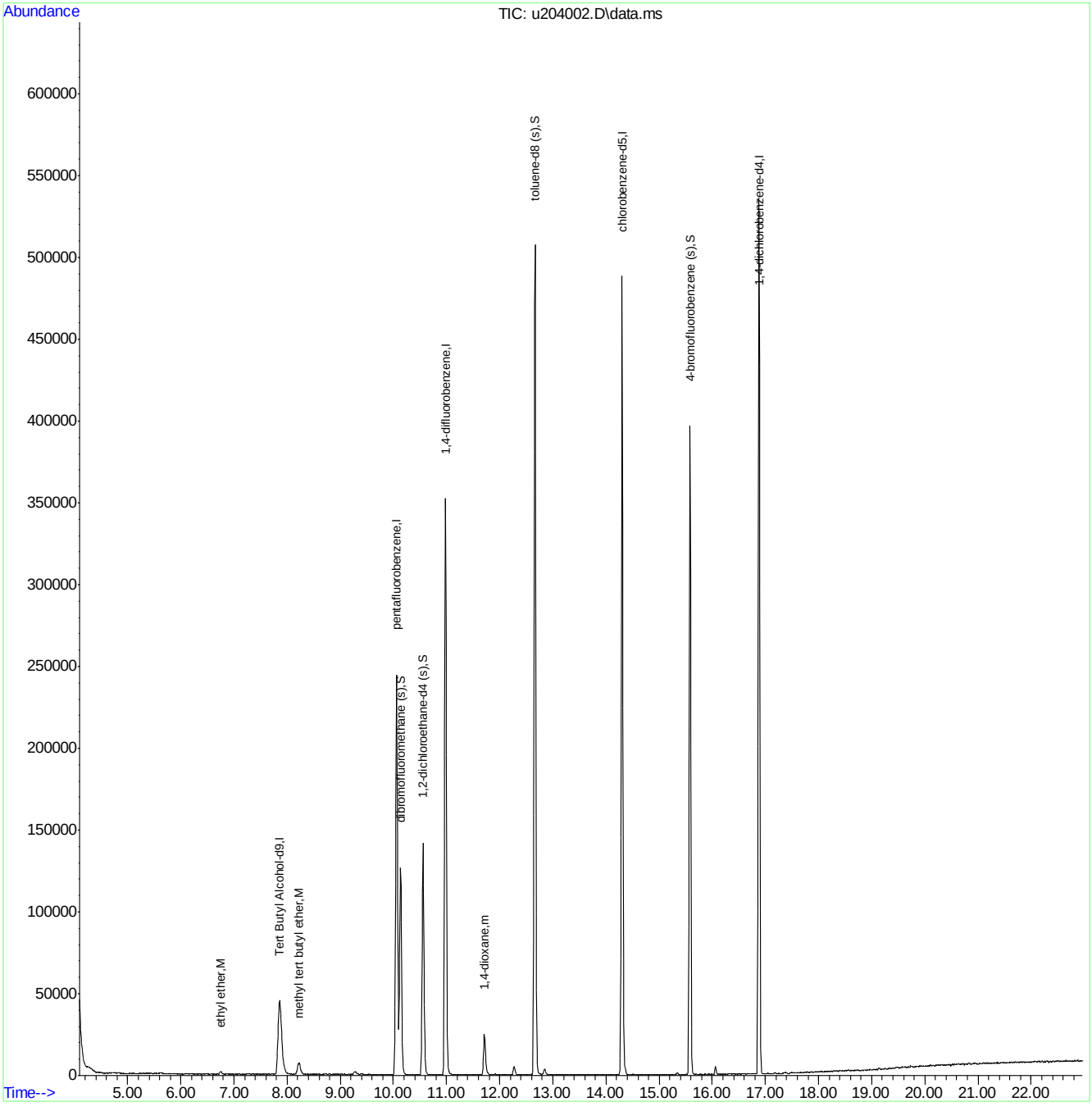
						Qvalue
4) 1,4-dioxane	11.711	88	23593	1044.71	ug/L	99
23) ethyl ether	6.755	74	828	0.64	ug/L	85
37) methyl tert butyl ether	8.219	73	13912	2.13	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204002.D
Acq On : 8 Mar 2016 7:20 pm
Operator : NicoleH1
Sample : JC15518-6
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 18 11:31:23 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



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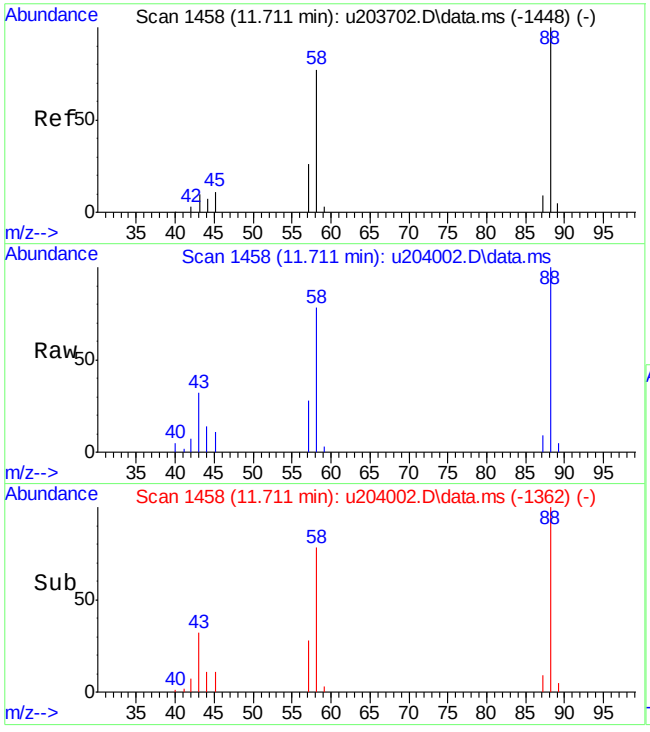
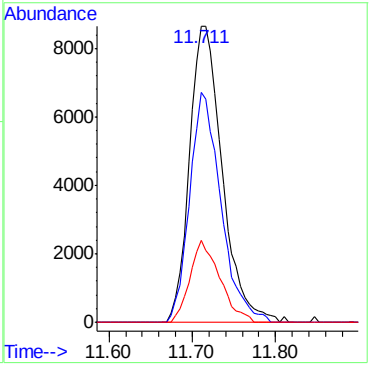
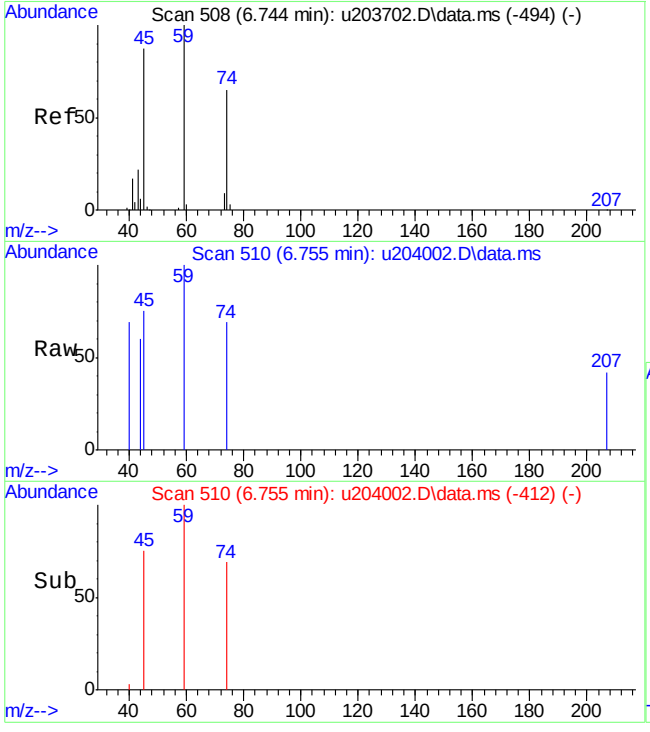


#4
1,4-dioxane
Concen: 1044.71 ug/L
RT: 11.711 min Scan# 1458
Delta R.T. 0.000 min
Lab File: u204002.D
Acq: 8 Mar 2016 7:20 pm

Tgt Ion: 88 Resp: 23593

Ion	Ratio	Lower	Upper
88	100		
58	74.1	52.3	97.1
57	25.2	17.1	31.9

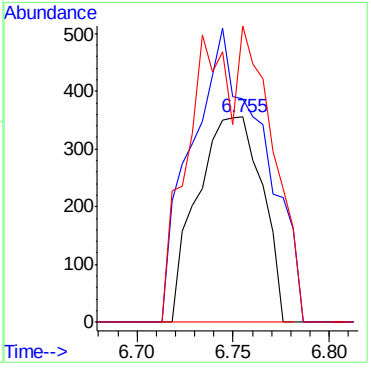


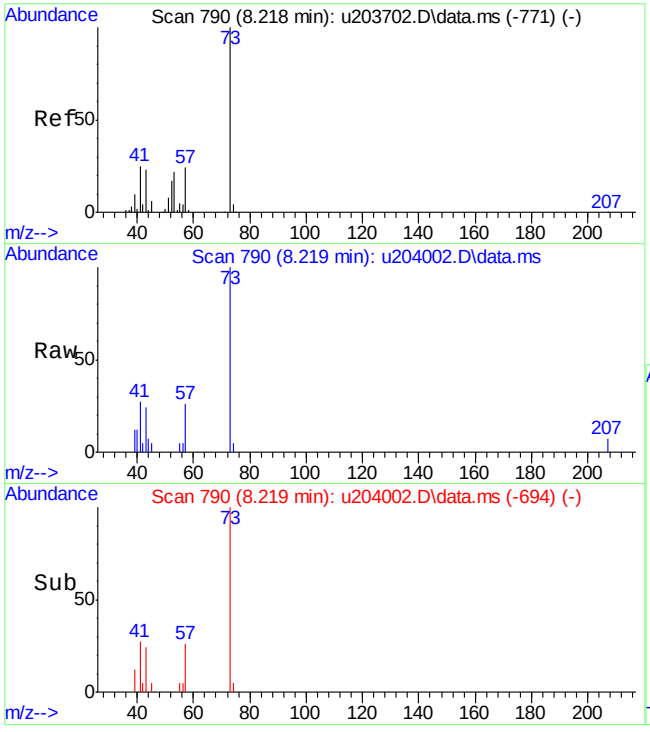


#23
ethyl ether
Concen: 0.64 ug/L
RT: 6.755 min Scan# 510
Delta R.T. 0.011 min
Lab File: u204002.D
Acq: 8 Mar 2016 7:20 pm

Tgt Ion: 74 Resp: 828

Ion	Ratio	Lower	Upper
74	100		
45	109.0	105.3	165.3
59	144.5	125.0	185.0

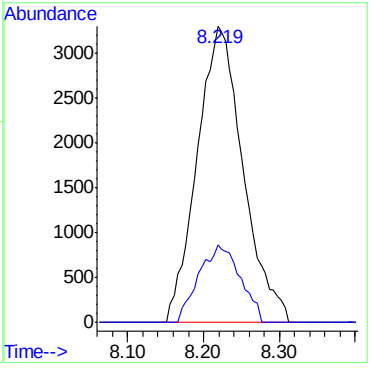




#37
methyl tert butyl ether
Concen: 2.13 ug/L
RT: 8.219 min Scan# 790
Delta R.T. 0.000 min
Lab File: u204002.D
Acq: 8 Mar 2016 7:20 pm

Tgt Ion: 73 Resp: 13912

Ion	Ratio	Lower	Upper
73	100		
57	23.4	0.0	54.5



7.1.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204003.D
Acq On : 8 Mar 2016 7:49 pm
Operator : NicoleH1
Sample : JC15518-7
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 18 11:31:59 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	115293	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	238581	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	344322	50.00	ug/L	0.00
96) chlorobenzene-d5	14.305	117	313145	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.877	152	166951	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.133	113	99451	51.32	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.64%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	122069	51.72	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.44%			
88) toluene-d8 (s)	12.663	98	406851	49.20	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.40%			
114) 4-bromofluorobenzene (s)	15.580	95	155560	50.92	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.84%			

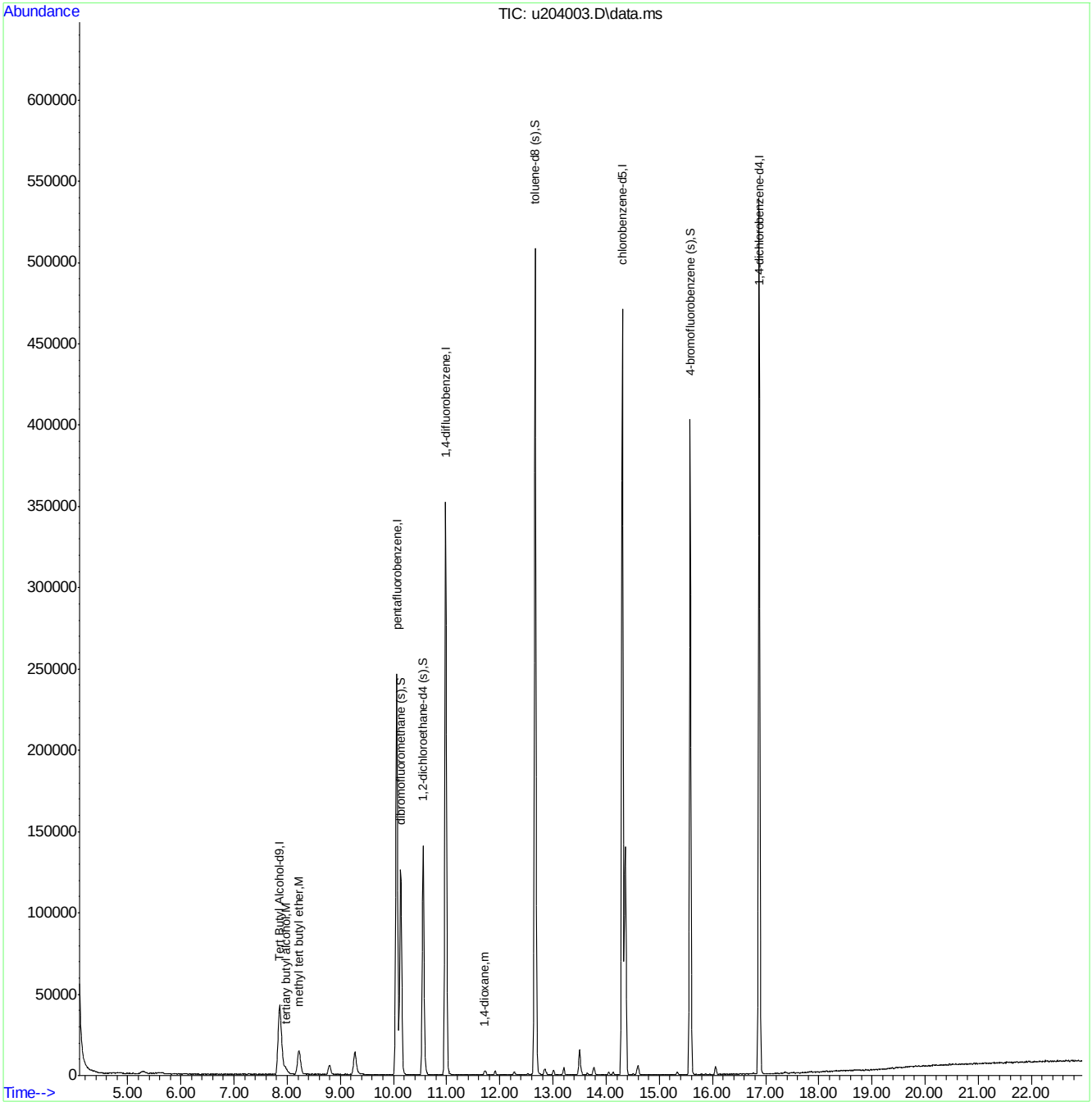
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.984	59	7706	29.99	ug/L #	52
4) 1,4-dioxane	11.717	88	2404	117.76	ug/L	97
37) methyl tert butyl ether	8.219	73	29080	4.45	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204003.D
Acq On : 8 Mar 2016 7:49 pm
Operator : NicoleH1
Sample : JC15518-7
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 18 11:31:59 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



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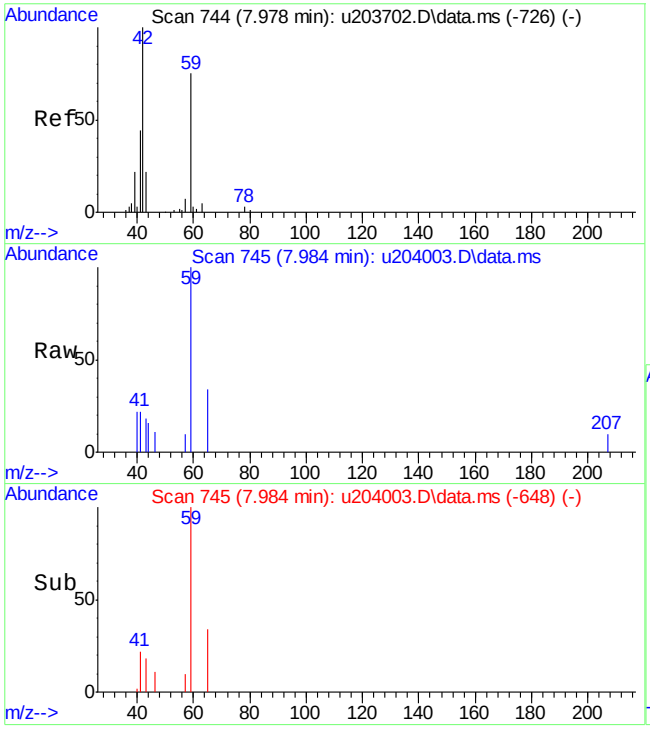
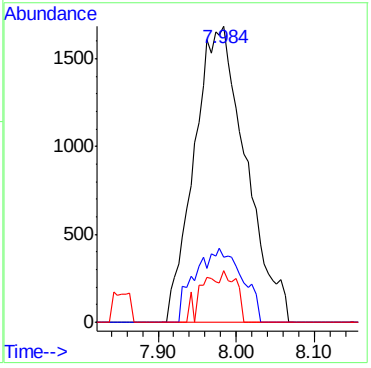
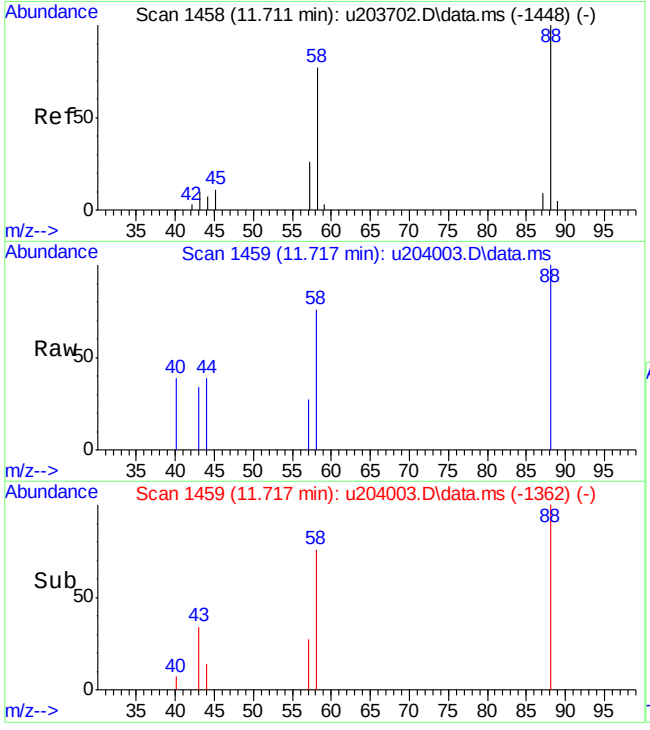


#2
tertiary butyl alcohol
Concen: 29.99 ug/L
RT: 7.984 min Scan# 745
Delta R.T. 0.006 min
Lab File: u204003.D
Acq: 8 Mar 2016 7:49 pm

Tgt Ion: 59 Resp: 7706

Ion	Ratio	Lower	Upper
59	100		
41	21.9	38.3	98.3#
43	17.6	2.8	62.8

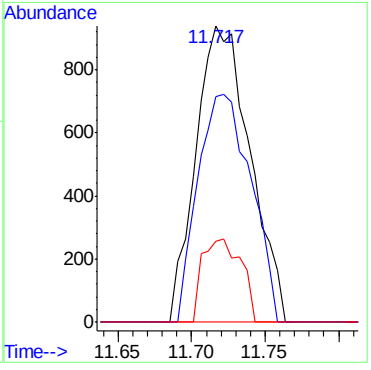


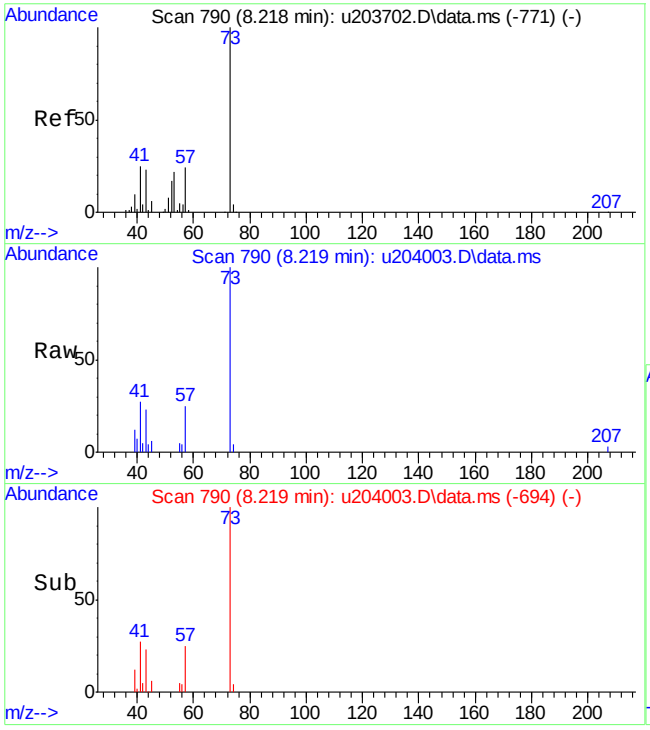


#4
1,4-dioxane
Concen: 117.76 ug/L
RT: 11.717 min Scan# 1459
Delta R.T. 0.006 min
Lab File: u204003.D
Acq: 8 Mar 2016 7:49 pm

Tgt Ion: 88 Resp: 2404

Ion	Ratio	Lower	Upper
88	100		
58	75.6	52.3	97.1
57	20.0	17.1	31.9

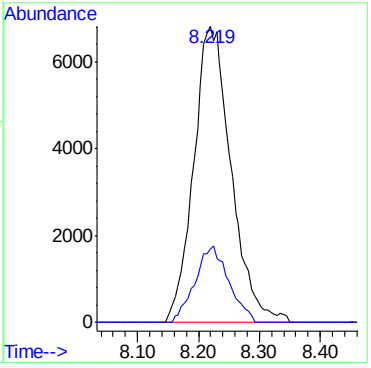




#37
methyl tert butyl ether
Concen: 4.45 ug/L
RT: 8.219 min Scan# 790
Delta R.T. 0.001 min
Lab File: u204003.D
Acq: 8 Mar 2016 7:49 pm

Tgt Ion: 73 Resp: 29080

Ion	Ratio	Lower	Upper
73	100		
57	23.1	0.0	54.5



7.1.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204004.D
Acq On : 8 Mar 2016 8:19 pm
Operator : NicoleH1
Sample : JC15518-8
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 18 11:32:47 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	116087	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	236852	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	340117	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	307921	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	162096	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	97755	50.81	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.62%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	121014	51.64	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.28%			
88) toluene-d8 (s)	12.662	98	400861	49.07	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.14%			
114) 4-bromofluorobenzene (s)	15.579	95	150731	50.81	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.62%			

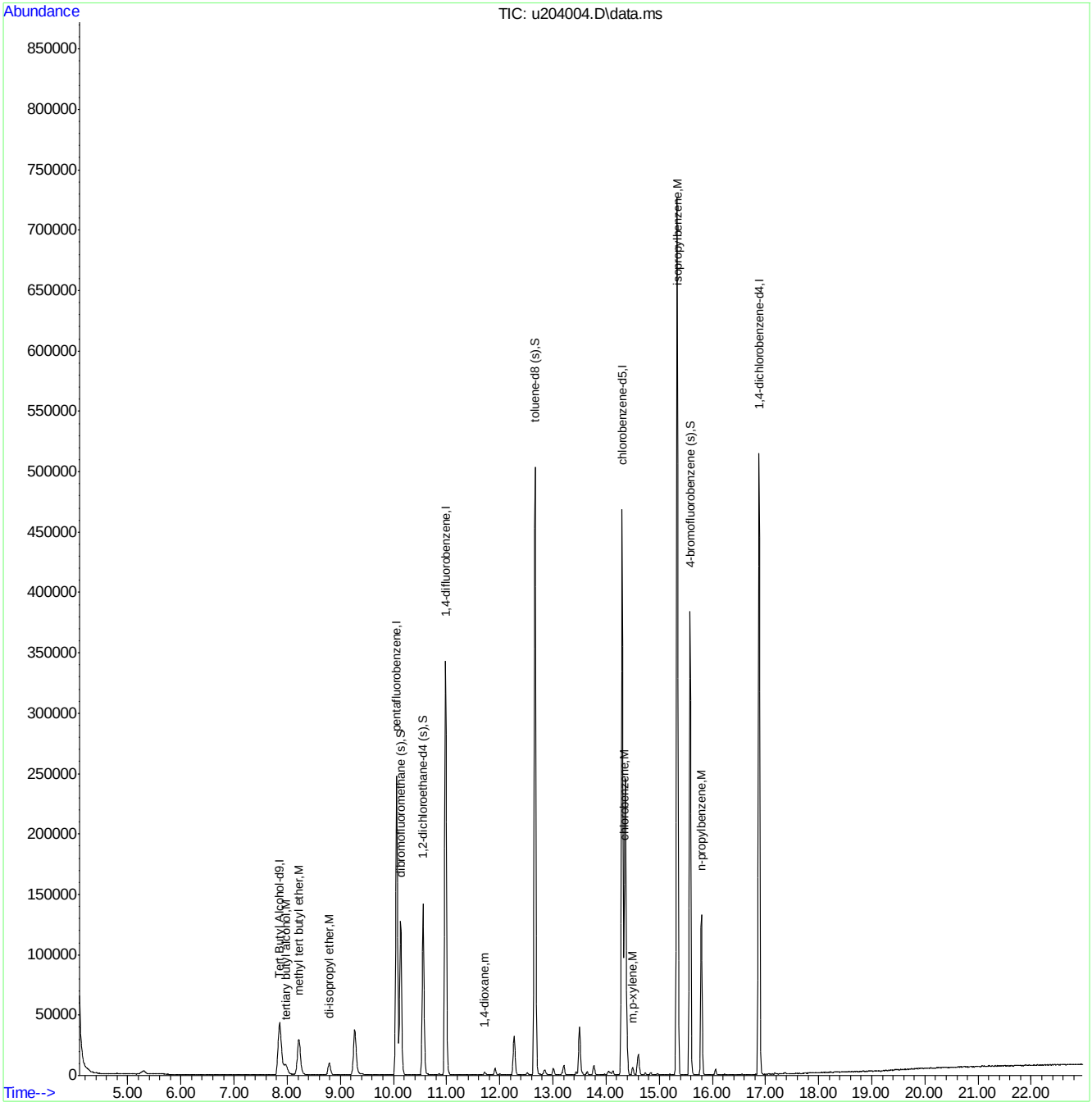
Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	19520	75.46	ug/L #	52
4) 1,4-dioxane	11.716	88	2072	100.80	ug/L #	95
37) methyl tert butyl ether	8.218	73	57541	8.86	ug/L	99
39) di-isopropyl ether	8.793	45	14687	1.64	ug/L #	71
105) chlorobenzene	14.340	112	3110	0.50	ug/L	85
108) m,p-xylene	14.497	106	1828	0.45	ug/L	99
113) isopropylbenzene	15.339	105	584480	57.85	ug/L	99
119) n-propylbenzene	15.794	91	126349	10.37	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204004.D
Acq On : 8 Mar 2016 8:19 pm
Operator : NicoleH1
Sample : JC15518-8
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 18 11:32:47 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



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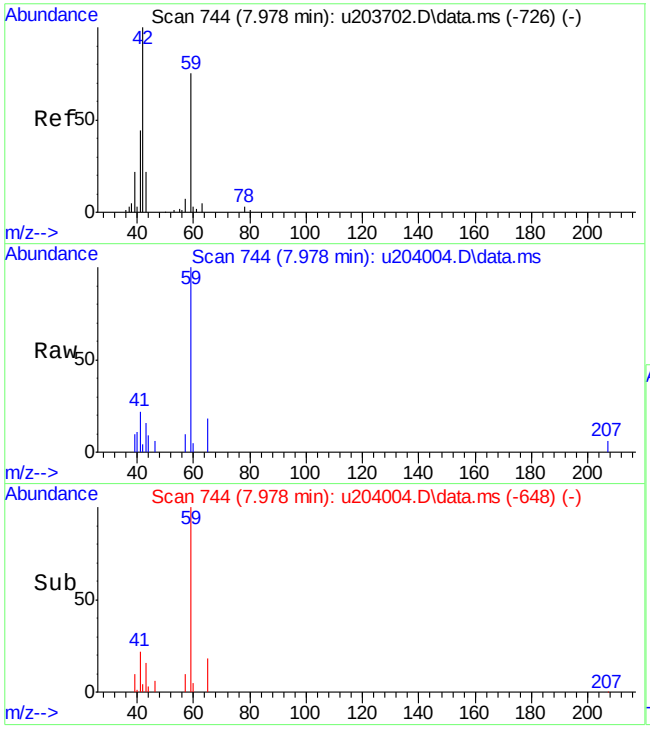
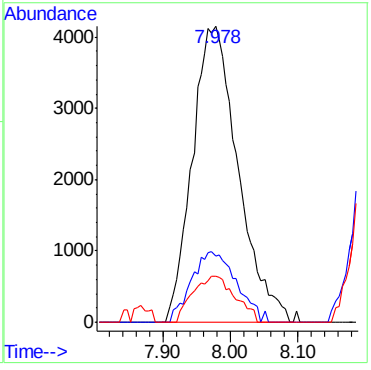
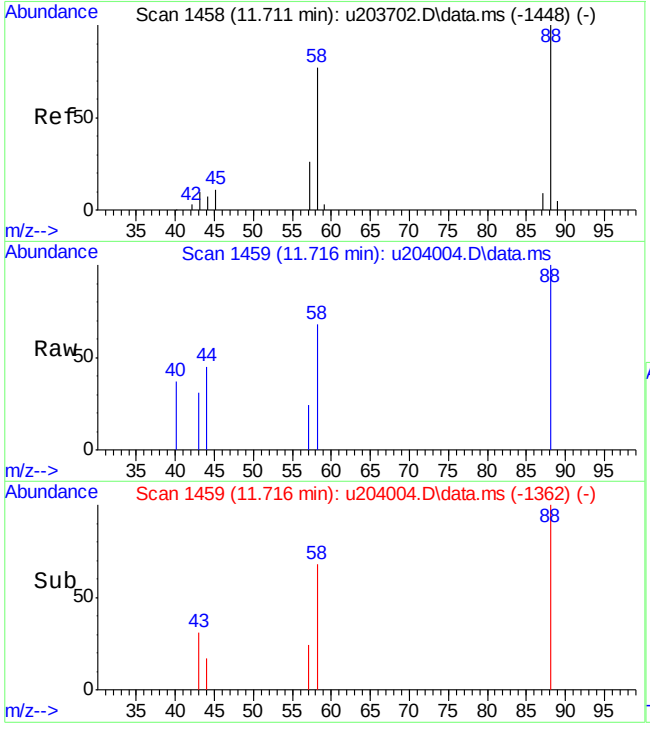


#2
tertiary butyl alcohol
Concen: 75.46 ug/L
RT: 7.978 min Scan# 744
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion: 59 Resp: 19520

Ion	Ratio	Lower	Upper
59	100		
41	22.3	38.3	98.3#
43	15.5	2.8	62.8

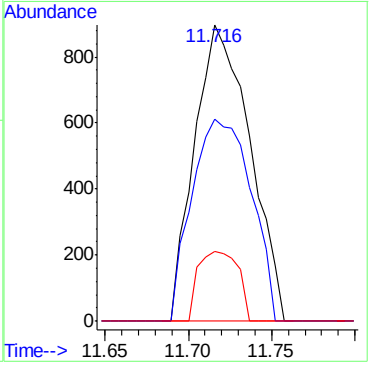


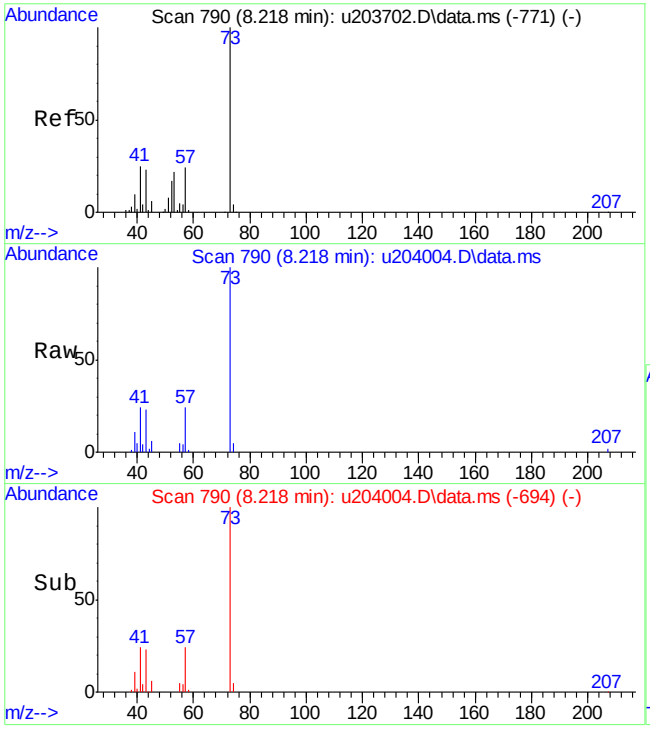


#4
1,4-dioxane
Concen: 100.80 ug/L
RT: 11.716 min Scan# 1459
Delta R.T. 0.005 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion: 88 Resp: 2072

Ion	Ratio	Lower	Upper
88	100		
58	73.3	52.3	97.1
57	16.9	17.1	31.9#

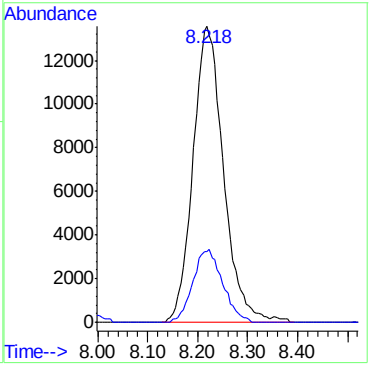


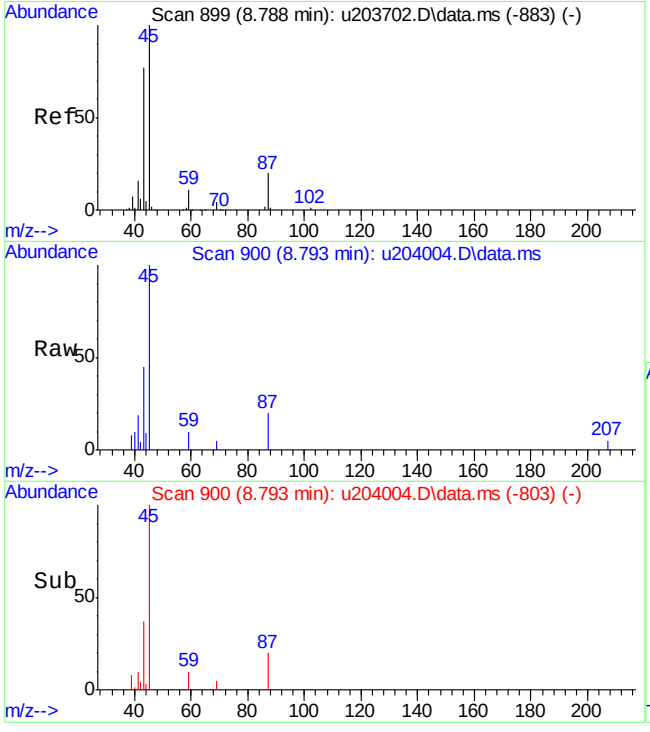


#37
methyl tert butyl ether
Concen: 8.86 ug/L
RT: 8.218 min Scan# 790
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion: 73 Resp: 57541

Ion	Ratio	Lower	Upper
73	100		
57	23.9	0.0	54.5

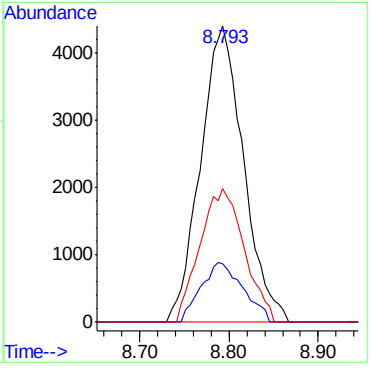


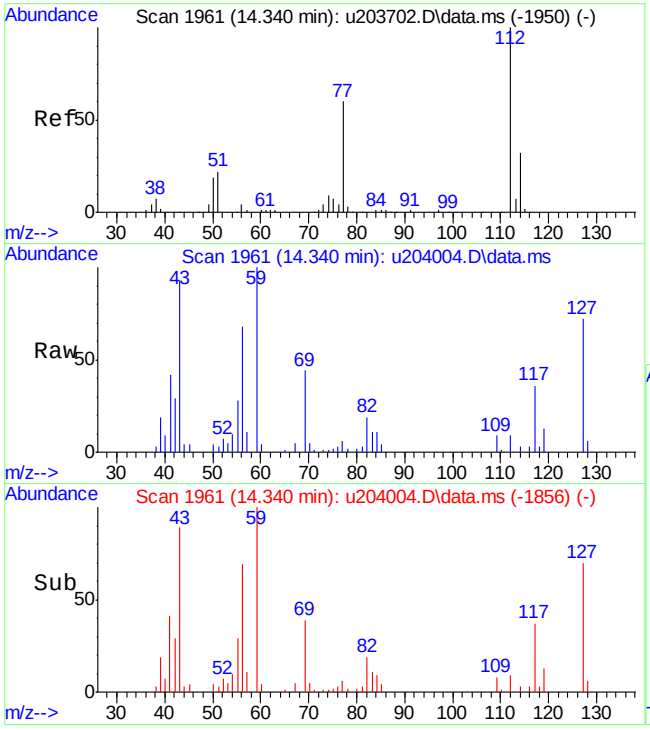


#39
di-isopropyl ether
Concen: 1.64 ug/L
RT: 8.793 min Scan# 900
Delta R.T. 0.005 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion: 45 Resp: 14687

Ion	Ratio	Lower	Upper
45	100		
87	19.9	0.0	50.1
43	45.3	47.2	107.2#

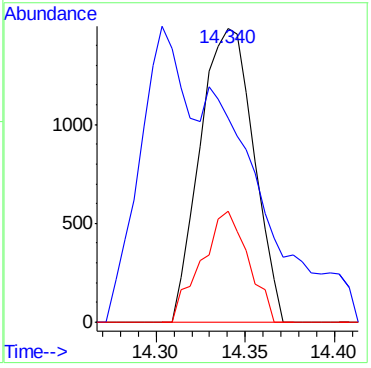


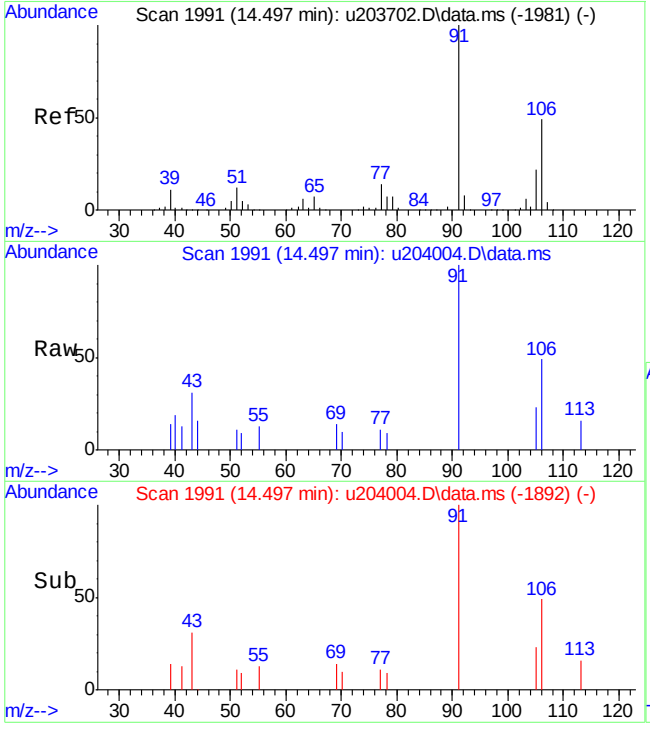


#105
chlorobenzene
Concen: 0.50 ug/L
RT: 14.340 min Scan# 1961
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion:112 Resp: 3110

Ion	Ratio	Lower	Upper
112	100		
77	46.5	30.1	90.1
114	37.6	2.0	62.0

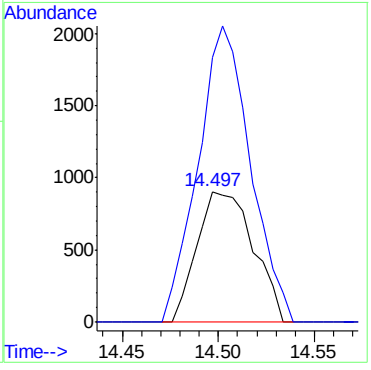


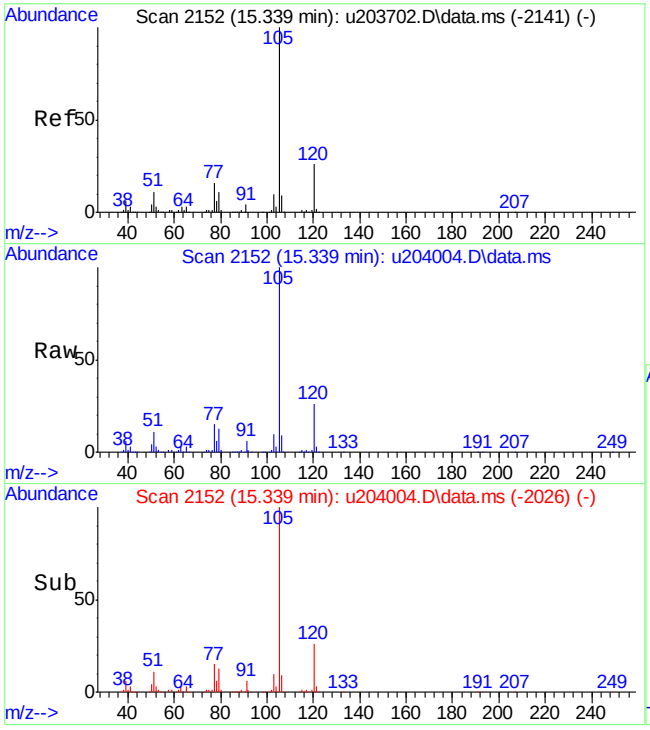


#108
m,p-xylene
Concen: 0.45 ug/L
RT: 14.497 min Scan# 1991
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion:106 Resp: 1828

Ion	Ratio	Lower	Upper
106	100		
91	202.5	173.9	233.9

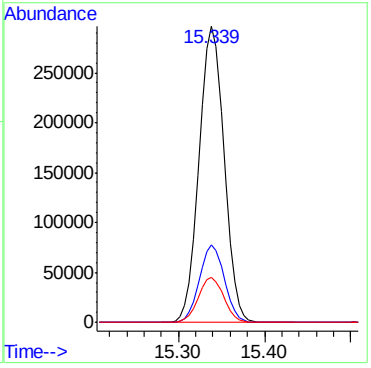


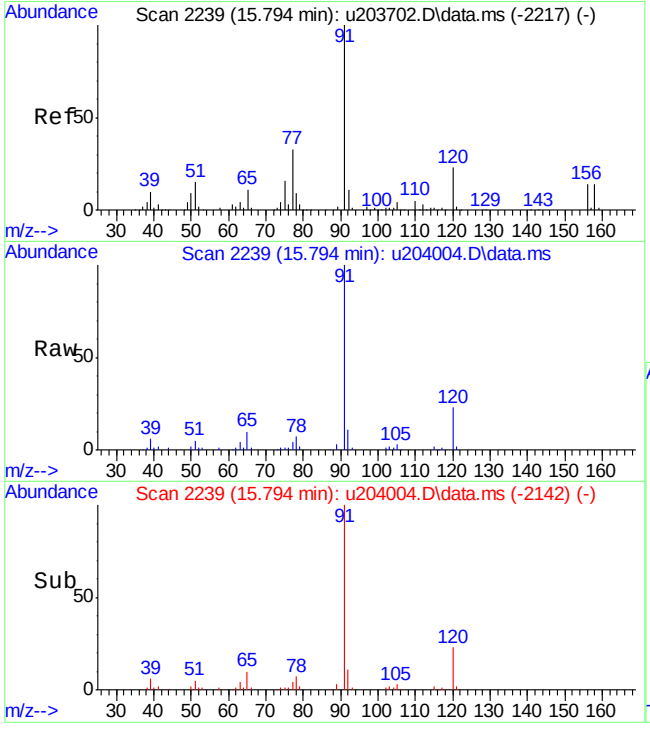


#113
isopropylbenzene
Concen: 57.85 ug/L
RT: 15.339 min Scan# 2152
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion:105 Resp: 584480

Ion	Ratio	Lower	Upper
105	100		
120	26.1	0.0	56.0
77	15.3	0.0	45.8

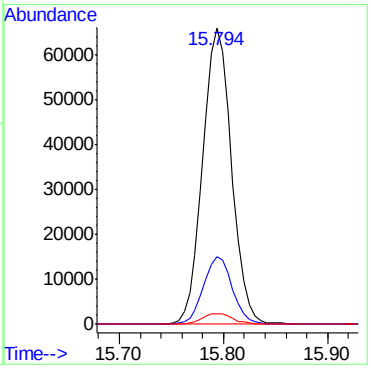




#119
n-propylbenzene
Concen: 10.37 ug/L
RT: 15.794 min Scan# 2239
Delta R.T. -0.000 min
Lab File: u204004.D
Acq: 8 Mar 2016 8:19 pm

Tgt Ion: 91 Resp: 126349

Ion	Ratio	Lower	Upper
91	100		
120	22.9	0.0	52.8
105	3.4	0.0	33.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204005.D
Acq On : 8 Mar 2016 8:48 pm
Operator : NicoleH1
Sample : JC15518-9
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 18 11:26:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	121136	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	233178	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	336492	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	308836	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	163721	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	97643	51.55	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.10%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	119834	51.95	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.90%			
88) toluene-d8 (s)	12.662	98	397666	49.21	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.42%			
114) 4-bromofluorobenzene (s)	15.579	95	152768	50.99	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.98%			

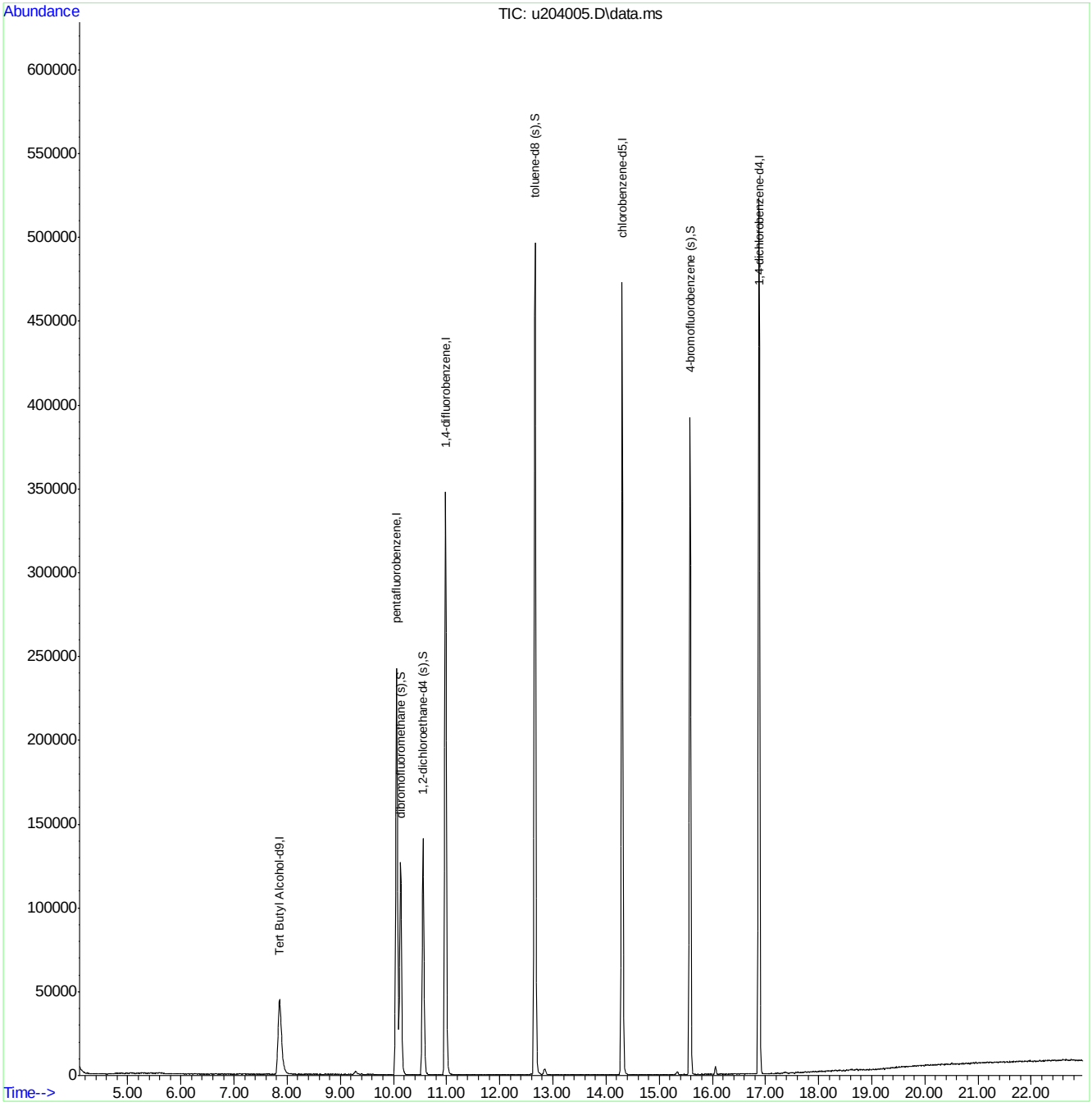
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9371-9380\
Data File : u204005.D
Acq On : 8 Mar 2016 8:48 pm
Operator : NicoleH1
Sample : JC15518-9
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 18 11:26:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



MU9367.M Fri Mar 18 11:33:50 2016 U_CORE

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203992.D
Acq On : 8 Mar 2016 2:24 pm
Operator : NicoleH1
Sample : mb
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:32:55 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.869	65	121394	500.00	ug/L	0.01
5) pentafluorobenzene	10.059	168	232044	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	337079	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	307895	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.882	152	167391	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.138	113	97782	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.76%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	118029	51.41	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.82%			
88) toluene-d8 (s)	12.663	98	398689	49.25	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 98.50%			
114) 4-bromofluorobenzene (s)	15.580	95	152252	49.70	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.40%			

Target Compounds Qvalue

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

7.2.1

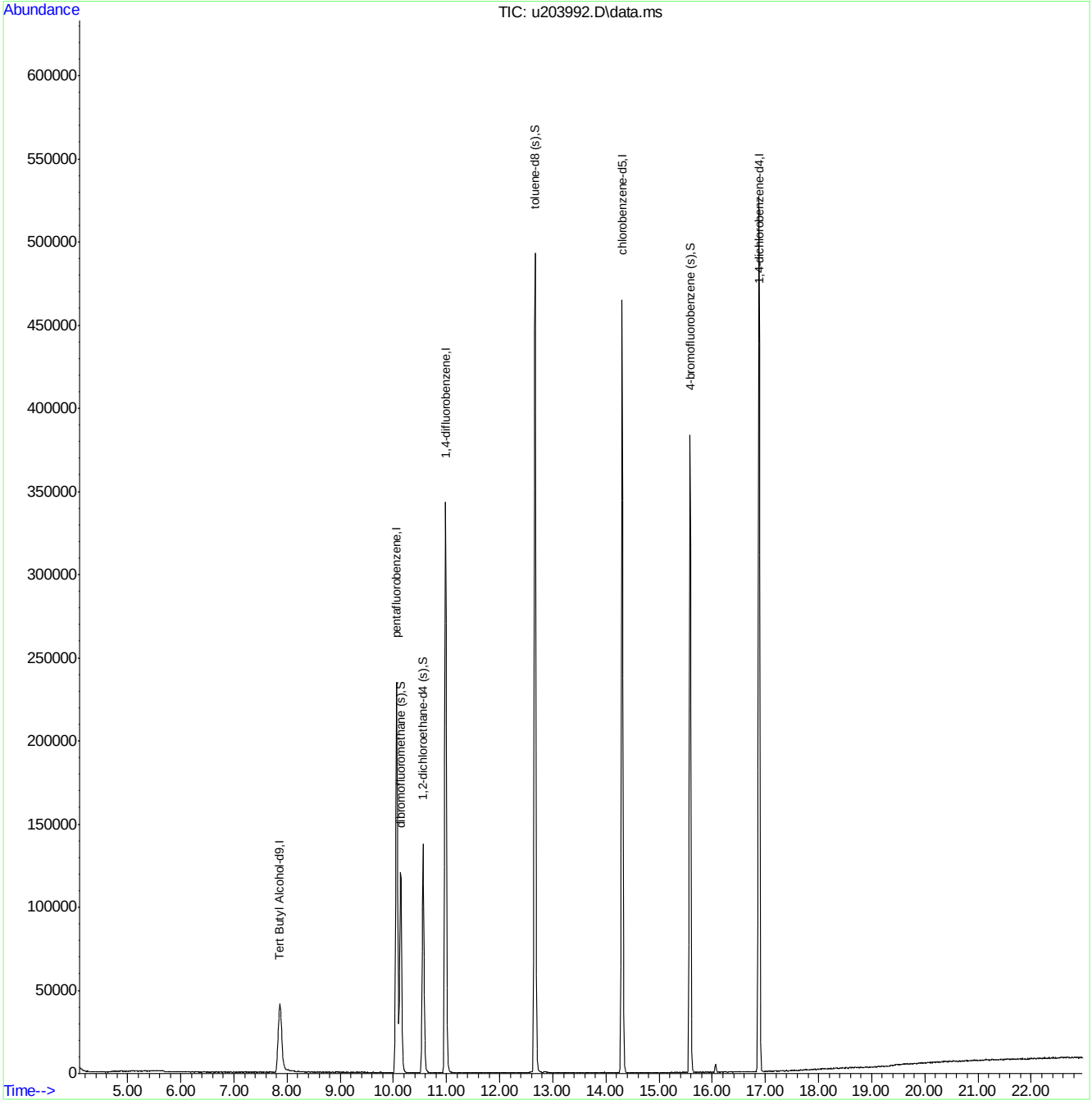
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203992.D
Acq On : 8 Mar 2016 2:24 pm
Operator : NicoleH1
Sample : mb
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 10:32:55 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



MU9367.M Wed Mar 09 11:35:14 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204010.D
Acq On : 9 Mar 2016 9:51 am
Operator : NicoleH1
Sample : MB
Misc : ms99376,vu9378,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 13:07:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.863	65	116548	500.00	ug/L	0.00
5) pentafluorobenzene	10.064	168	236747	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	341109	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	311519	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	163897	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	98840	51.40	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.80%			
57) 1,2-dichloroethane-d4 (s)	10.561	65	121454	51.86	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.72%			
88) toluene-d8 (s)	12.662	98	407491	49.74	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.48%			
114) 4-bromofluorobenzene (s)	15.580	95	151694	50.58	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.16%			

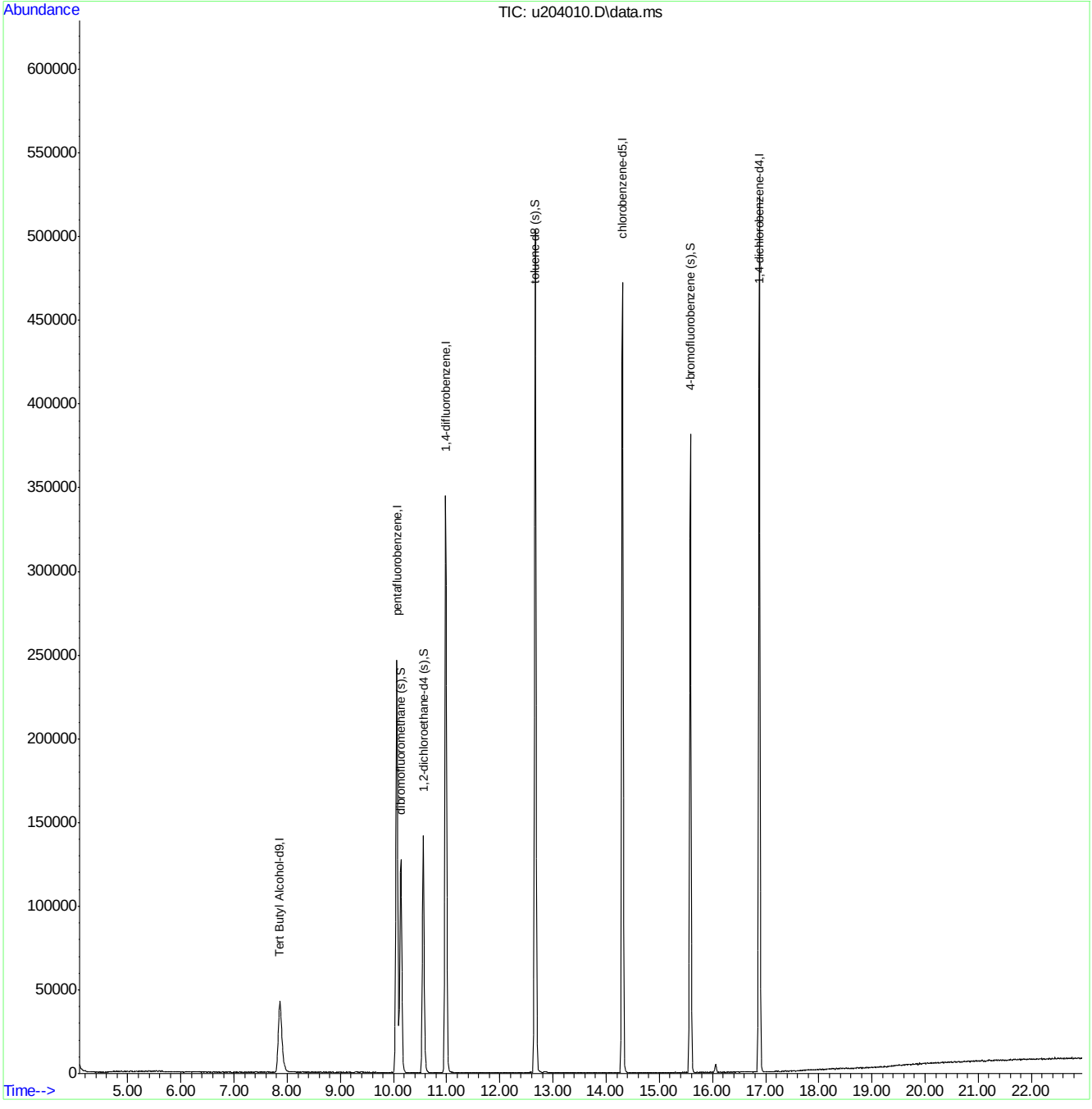
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204010.D
Acq On : 9 Mar 2016 9:51 am
Operator : NicoleH1
Sample : MB
Misc : ms99376,vu9378,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 13:07:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



MU9367.M Wed Mar 09 13:10:49 2016 U_CORE

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203993.D
Acq On : 8 Mar 2016 2:54 pm
Operator : NicoleH1
Sample : bs
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 10:34:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.867	65	121570	500.00	ug/L	0.00
5) pentafluorobenzene	10.063	168	227287	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.983	114	330013	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	303371	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	169846	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.136	113	95523	51.74	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.48%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	117273	52.15	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.30%			
88) toluene-d8 (s)	12.667	98	393543	49.65	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.30%			
114) 4-bromofluorobenzene (s)	15.579	95	152950	49.21	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.42%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.987	59	74921	276.56	ug/L	89
4) 1,4-dioxane	11.715	88	25783	1197.77	ug/L	100
11) chlorodifluoromethane	4.401	51	129597	52.11	ug/L	100
12) dichlorodifluoromethane	4.385	85	118298	53.64	ug/L	98
15) chloromethane	4.751	50	171275	44.33	ug/L	98
16) vinyl chloride	5.034	62	151725	46.60	ug/L	100
18) bromomethane	5.708	94	90171	57.44	ug/L	98
19) chloroethane	5.886	64	87035	49.78	ug/L	96
20) trichlorofluoromethane	6.320	101	155127	52.97	ug/L	99
23) ethyl ether	6.748	74	67870	54.86	ug/L	96
24) 2-CHLOROPROPANE	6.968	43	250860	53.28	ug/L	99
27) acrolein	7.041	56	278781	522.26	ug/L	98
28) 1,1-dichloroethene	7.198	96	98297	56.49	ug/L	99
29) acetone	7.261	58	11341	59.60	ug/L	98
30) allyl chloride	7.726	76	82885	59.00	ug/L	85
31) acetonitrile	7.726	40	117598	471.55	ug/L #	73
32) iodomethane	7.496	142	178392	52.88	ug/L	100
33) carbon disulfide	7.616	76	357680	53.59	ug/L	100
34) 1-CHLOROPROPANE	7.951	63	10131	50.53	ug/L	98
35) methylene chloride	7.925	84	114208	51.55	ug/L	98
36) methyl acetate	7.700	43	104450	52.65	ug/L	99
37) methyl tert butyl ether	8.218	73	662241	106.28	ug/L	91
38) trans-1,2-dichloroethene	8.286	96	104703	51.12	ug/L	99
39) di-isopropyl ether	8.793	45	453234	52.64	ug/L	91
40) ethyl tert-butyl ether	9.258	59	391625	53.35	ug/L	99
41) 2-butanone	9.540	72	15072	58.05	ug/L #	84
42) 1,1-dichloroethane	8.850	63	219508	53.55	ug/L	99
43) chloroprene	8.944	53	171447	52.78	ug/L	99
44) acrylonitrile	8.254	53	251778	274.21	ug/L	99
45) vinyl acetate	8.814	86	20833	53.61	ug/L #	92
46) ethyl acetate	9.535	45	21325	55.68	ug/L	92
47) 2,2-dichloropropane	9.577	77	158433	51.97	ug/L	99
48) cis-1,2-dichloroethene	9.577	96	118191	52.32	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203993.D
Acq On : 8 Mar 2016 2:54 pm
Operator : NicoleH1
Sample : bs
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 10:34:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) methyl acrylate	9.619	85	17758	55.30	ug/L	96
50) propionitrile	9.655	54	194815	535.66	ug/L	98
51) bromochloromethane	9.890	128	57192	53.93	ug/L	98
52) tetrahydrofuran	9.917	42	50234	55.03	ug/L	99
53) chloroform	9.938	83	195264	55.95	ug/L	97
54) tert-butyl Formate	9.964	59	91380	46.97	ug/L	98
55) iso-butyl alcohol	10.351	43	69527	561.31	ug/L	97
58) freon 113	7.161	151	75065	59.24	ug/L	95
59) methacrylonitrile	9.828	41	88665	54.95	ug/L	99
60) 1,1,1-trichloroethane	10.188	97	162563	55.36	ug/L	99
62) tert-amyl methyl ether	10.633	87	76622	56.15	ug/L	99
63) iso-octane	10.596	57	408581	53.69	ug/L	100
66) epichlorohydrin	12.274	57	67541	277.60	ug/L	99
67) n-butyl alcohol	11.098	56	214917	2850.28	ug/L	99
68) Cyclohexane	10.251	84	167134	46.35	ug/L	89
69) carbon tetrachloride	10.382	117	146619	52.13	ug/L	99
70) 1,1-dichloropropene	10.356	75	163686	54.56	ug/L	99
71) hexane	8.552	57	118031	40.95	ug/L	99
72) benzene	10.622	78	456492	50.15	ug/L	100
73) heptane	10.748	57	92845	50.77	ug/L	98
74) isopropyl acetate	10.513	43	279016	55.09	ug/L	99
75) 1,2-dichloroethane	10.649	62	154104	50.64	ug/L	100
78) trichloroethene	11.328	95	112120	50.65	ug/L	96
79) methylcyclohexane	11.543	83	181176	52.00	ug/L	100
80) 2-nitropropane	12.128	41	53528	55.39	ug/L	95
81) 2-chloroethyl vinyl ether	12.128	63	405211	290.02	ug/L	100
82) methyl methacrylate	11.579	100	29871	53.20	ug/L #	90
83) 1,2-dichloropropane	11.605	63	128546	49.92	ug/L	100
84) propyl acetate	11.616	73	22848	54.29	ug/L	98
85) dibromomethane	11.778	93	67450	51.44	ug/L	98
86) bromodichloromethane	11.898	83	152931	51.74	ug/L	98
87) cis-1,3-dichloropropene	12.363	75	203461	51.37	ug/L	100
89) 4-methyl-2-pentanone	12.452	58	52604	53.35	ug/L	97
90) toluene	12.740	92	283021	51.50	ug/L	99
91) 3-methyl-1-butanol	12.468	55	140234	1163.02	ug/L	99
92) trans-1,3-dichloropropene	12.954	75	183306	52.12	ug/L	99
93) ethyl methacrylate	12.923	69	159519	52.77	ug/L	99
94) 1,1,2-trichloroethane	13.189	83	87385	50.54	ug/L	99
95) 2-hexanone	13.357	58	54076	52.21	ug/L	100
97) cyclohexanone	15.558	55	44108	284.29	ug/L	99
98) tetrachloroethene	13.367	164	101485	53.27	ug/L	97
99) 1,3-dichloropropane	13.388	76	179625	50.28	ug/L	99
100) butyl acetate	13.425	56	93193	56.76	ug/L	96
101) dibromochloromethane	13.681	129	120976	51.53	ug/L	99
102) 1,2-dibromoethane	13.848	107	102748	50.31	ug/L	97
103) 3,3-dimethyl-1-Butanol	13.540	57	152198	563.21	ug/L	99
104) n-butyl ether	14.198	57	662384	58.74	ug/L	100
105) chlorobenzene	14.340	112	314004	51.30	ug/L	99
106) 1,1,1,2-tetrachloroethane	14.402	131	115318	50.37	ug/L	96
107) ethylbenzene	14.387	91	547818	51.08	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203993.D
Acq On : 8 Mar 2016 2:54 pm
Operator : NicoleH1
Sample : bs
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 10:34:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

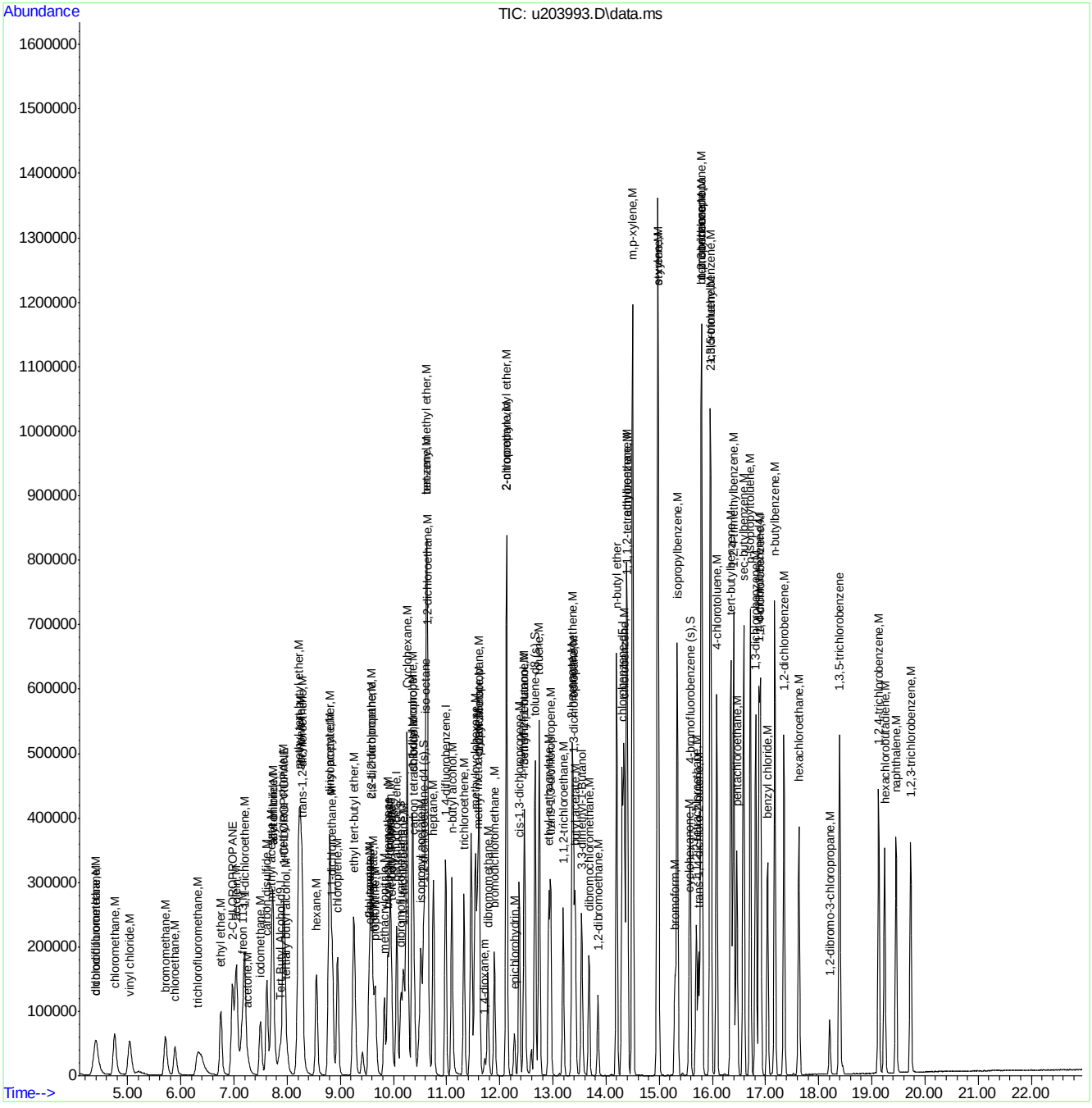
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	417139	103.96 ug/L	98
109) o-xylene	14.967	106	210878	53.47 ug/L	97
110) styrene	14.983	104	352896	53.13 ug/L	98
111) bromoform	15.296	173	91306	52.51 ug/L	99
113) isopropylbenzene	15.338	105	545347	51.51 ug/L	99
115) bromobenzene	15.803	156	143984	49.74 ug/L	99
116) 1,1,2,2-tetrachloroethane	15.699	83	144088	50.16 ug/L	99
117) trans-1,4-dichloro-2-b...	15.741	53	49758	54.26 ug/L	98
118) 1,2,3-trichloropropane	15.788	110	36140	50.74 ug/L	98
119) n-propylbenzene	15.793	91	673525	52.77 ug/L	100
120) 2-chlorotoluene	15.971	126	133747	50.03 ug/L	99
121) 4-chlorotoluene	16.080	91	405579	49.63 ug/L	100
123) 1,3,5-trimethylbenzene	15.955	105	464575	52.00 ug/L	100
124) tert-butylbenzene	16.352	119	407638	52.75 ug/L	96
125) pentachloroethane	16.462	167	94835	52.81 ug/L	99
126) 1,2,4-trimethylbenzene	16.399	105	481724	52.19 ug/L	100
128) sec-butylbenzene	16.588	105	609572	52.72 ug/L	99
129) 1,3-dichlorobenzene	16.818	146	278977	50.07 ug/L	99
130) p-isopropyltoluene	16.713	119	527230	53.93 ug/L	100
131) 1,4-dichlorobenzene	16.906	146	281142	49.40 ug/L	99
132) benzyl chloride	17.037	91	280001	50.48 ug/L	99
133) 1,2-dichlorobenzene	17.351	146	270275	51.91 ug/L	99
135) n-butylbenzene	17.173	92	270229	53.78 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.208	157	29824	57.10 ug/L	97
138) 1,3,5-trichlorobenzene	18.396	180	226690	54.70 ug/L	99
139) 1,2,4-trichlorobenzene	19.134	180	186181	56.69 ug/L	100
140) hexachlorobutadiene	19.243	225	108099	55.14 ug/L	99
141) naphthalene	19.458	128	348677	55.28 ug/L	100
143) 1,2,3-trichlorobenzene	19.735	180	152984	57.83 ug/L	99
144) hexachloroethane	17.628	201	99424	54.26 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203993.D
Acq On : 8 Mar 2016 2:54 pm
Operator : NicoleH1
Sample : bs
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 10:34:41 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204011.D
Acq On : 9 Mar 2016 10:20 am
Operator : NicoleH1
Sample : BS
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 13:08:18 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	112003	500.00	ug/L	0.00
5) pentafluorobenzene	10.063	168	230414	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.983	114	335025	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	308675	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	171610	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.136	113	98113	52.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.84%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	119661	52.49	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.98%			
88) toluene-d8 (s)	12.666	98	399347	49.63	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.26%			
114) 4-bromofluorobenzene (s)	15.584	95	154813	49.30	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.60%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.977	59	63469	254.30	ug/L	78
4) 1,4-dioxane	11.715	88	22879	1153.65	ug/L	99
11) chlorodifluoromethane	4.401	51	125649	49.83	ug/L	99
12) dichlorodifluoromethane	4.375	85	114826	51.36	ug/L	98
15) chloromethane	4.757	50	187328	47.82	ug/L	99
16) vinyl chloride	5.034	62	162805	49.32	ug/L	98
18) bromomethane	5.708	94	96434	60.60	ug/L	100
19) chloroethane	5.891	64	93203	52.58	ug/L	98
20) trichlorofluoromethane	6.314	101	160808	54.16	ug/L	99
23) ethyl ether	6.748	74	68829	54.88	ug/L	98
24) 2-CHLOROPROPANE	6.968	43	259928	54.46	ug/L	100
27) acrolein	7.036	56	272232	503.07	ug/L	99
28) 1,1-dichloroethene	7.198	96	100498	56.97	ug/L	99
29) acetone	7.250	58	10936	56.69	ug/L	98
30) allyl chloride	7.726	76	80160	56.29	ug/L	96
31) acetonitrile	7.716	40	118151	467.34	ug/L #	83
32) iodomethane	7.496	142	184309	53.89	ug/L	100
33) carbon disulfide	7.616	76	374325	55.33	ug/L	100
34) 1-CHLOROPROPANE	7.951	63	10556	51.94	ug/L	95
35) methylene chloride	7.925	84	118538	52.78	ug/L	100
36) methyl acetate	7.695	43	97831	48.65	ug/L	100
37) methyl tert butyl ether	8.217	73	660566	104.57	ug/L	90
38) trans-1,2-dichloroethene	8.280	96	109991	52.98	ug/L	97
39) di-isopropyl ether	8.793	45	442860	50.74	ug/L	89
40) ethyl tert-butyl ether	9.253	59	381825	51.30	ug/L	100
41) 2-butanone	9.535	72	14319	54.40	ug/L #	85
42) 1,1-dichloroethane	8.850	63	228555	55.00	ug/L	99
43) chloroprene	8.944	53	173746	52.77	ug/L	99
44) acrylonitrile	8.254	53	248924	267.43	ug/L	99
45) vinyl acetate	8.813	86	20175	51.21	ug/L #	92
46) ethyl acetate	9.535	45	19844	51.11	ug/L	89
47) 2,2-dichloropropane	9.577	77	180915	58.54	ug/L	100
48) cis-1,2-dichloroethene	9.577	96	124338	54.30	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204011.D
Acq On : 9 Mar 2016 10:20 am
Operator : NicoleH1
Sample : BS
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 13:08:18 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) methyl acrylate	9.624	85	17929	55.07	ug/L		99
50) propionitrile	9.655	54	189340	513.54	ug/L		96
51) bromochloromethane	9.890	128	59480	55.33	ug/L		100
52) tetrahydrofuran	9.917	42	48765	52.70	ug/L		99
53) chloroform	9.937	83	204635	57.84	ug/L		98
54) tert-butyl Formate	9.964	59	87937	44.58	ug/L		96
55) iso-butyl alcohol	10.350	43	61006	485.83	ug/L		97
58) freon 113	7.167	151	72972	56.81	ug/L		97
59) methacrylonitrile	9.828	41	88915	54.36	ug/L		99
60) 1,1,1-trichloroethane	10.188	97	171591	57.64	ug/L		99
62) tert-amyl methyl ether	10.628	87	74187	53.63	ug/L		99
63) iso-octane	10.591	57	401078	51.99	ug/L		100
66) epichlorohydrin	12.274	57	62201	251.83	ug/L		99
67) n-butyl alcohol	11.093	56	179270	2341.95	ug/L		99
68) Cyclohexane	10.251	84	195025	53.27	ug/L		86
69) carbon tetrachloride	10.382	117	152812	53.52	ug/L		99
70) 1,1-dichloropropene	10.356	75	172167	56.52	ug/L		100
71) hexane	8.552	57	141243	48.26	ug/L		97
72) benzene	10.622	78	481133	52.06	ug/L		99
73) heptane	10.748	57	93195	50.20	ug/L		99
74) isopropyl acetate	10.513	43	261415	50.84	ug/L		99
75) 1,2-dichloroethane	10.648	62	161235	52.19	ug/L		98
78) trichloroethene	11.328	95	119135	53.01	ug/L		96
79) methylcyclohexane	11.542	83	176630	49.94	ug/L		99
80) 2-nitropropane	12.128	41	53200	54.23	ug/L		98
81) 2-chloroethyl vinyl ether	12.128	63	387200	272.98	ug/L		99
82) methyl methacrylate	11.579	100	29846	52.36	ug/L	#	91
83) 1,2-dichloropropane	11.605	63	135461	51.82	ug/L		100
84) propyl acetate	11.616	73	21593	50.54	ug/L		96
85) dibromomethane	11.773	93	69795	52.43	ug/L		98
86) bromodichloromethane	11.898	83	161231	53.73	ug/L		100
87) cis-1,3-dichloropropene	12.363	75	217074	53.99	ug/L		99
89) 4-methyl-2-pentanone	12.452	58	52240	52.19	ug/L		95
90) toluene	12.745	92	301195	53.99	ug/L		98
91) 3-methyl-1-butanol	12.468	55	121516	992.70	ug/L		100
92) trans-1,3-dichloropropene	12.954	75	194398	54.45	ug/L		100
93) ethyl methacrylate	12.923	69	161130	52.51	ug/L		98
94) 1,1,2-trichloroethane	13.195	83	91258	52.00	ug/L		99
95) 2-hexanone	13.357	58	53566	50.94	ug/L		99
97) cyclohexanone	15.558	55	84588	535.83	ug/L		99
98) tetrachloroethene	13.367	164	107807	55.62	ug/L		99
99) 1,3-dichloropropane	13.388	76	185473	51.03	ug/L		99
100) butyl acetate	13.425	56	86677	51.88	ug/L		96
101) dibromochloromethane	13.681	129	125959	52.73	ug/L		100
102) 1,2-dibromoethane	13.848	107	106082	51.05	ug/L		98
103) 3,3-dimethyl-1-Butanol	13.540	57	132086	480.39	ug/L		99
104) n-butyl ether	14.198	57	695169	60.58	ug/L		100
105) chlorobenzene	14.339	112	332571	53.40	ug/L		100
106) 1,1,1,2-tetrachloroethane	14.402	131	121002	51.95	ug/L		98
107) ethylbenzene	14.387	91	579452	53.10	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204011.D
Acq On : 9 Mar 2016 10:20 am
Operator : NicoleH1
Sample : BS
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 13:08:18 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	443519	108.63 ug/L	97
109) o-xylene	14.967	106	222727	55.50 ug/L	96
110) styrene	14.983	104	372374	55.10 ug/L	98
111) bromoform	15.296	173	92846	52.48 ug/L	99
113) isopropylbenzene	15.338	105	578803	54.11 ug/L	100
115) bromobenzene	15.809	156	151556	51.82 ug/L	93
116) 1,1,2,2-tetrachloroethane	15.699	83	146204	50.38 ug/L	100
117) trans-1,4-dichloro-2-b...	15.741	53	51803	55.91 ug/L	99
118) 1,2,3-trichloropropane	15.788	110	36574	50.82 ug/L	100
119) n-propylbenzene	15.793	91	713424	55.33 ug/L	100
120) 2-chlorotoluene	15.971	126	140431	51.99 ug/L	99
121) 4-chlorotoluene	16.080	91	430900	52.19 ug/L	100
123) 1,3,5-trimethylbenzene	15.955	105	494000	54.72 ug/L	100
124) tert-butylbenzene	16.347	119	428461	54.88 ug/L	99
125) pentachloroethane	16.462	167	100165	55.20 ug/L	99
126) 1,2,4-trimethylbenzene	16.399	105	513414	55.05 ug/L	99
128) sec-butylbenzene	16.587	105	641648	54.92 ug/L	100
129) 1,3-dichlorobenzene	16.818	146	295842	52.55 ug/L	99
130) p-isopropyltoluene	16.713	119	560497	56.75 ug/L	100
131) 1,4-dichlorobenzene	16.906	146	297052	51.66 ug/L	99
132) benzyl chloride	17.037	91	303321	54.12 ug/L	99
133) 1,2-dichlorobenzene	17.351	146	280985	53.41 ug/L	99
135) n-butylbenzene	17.173	92	287214	56.57 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.208	157	28624	54.24 ug/L	99
138) 1,3,5-trichlorobenzene	18.396	180	232355	55.49 ug/L	100
139) 1,2,4-trichlorobenzene	19.134	180	187126	56.39 ug/L	99
140) hexachlorobutadiene	19.243	225	111413	56.25 ug/L	99
141) naphthalene	19.458	128	338155	53.06 ug/L	100
143) 1,2,3-trichlorobenzene	19.735	180	149475	55.92 ug/L	99
144) hexachloroethane	17.628	201	103650	55.99 ug/L	99

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

7.3.2

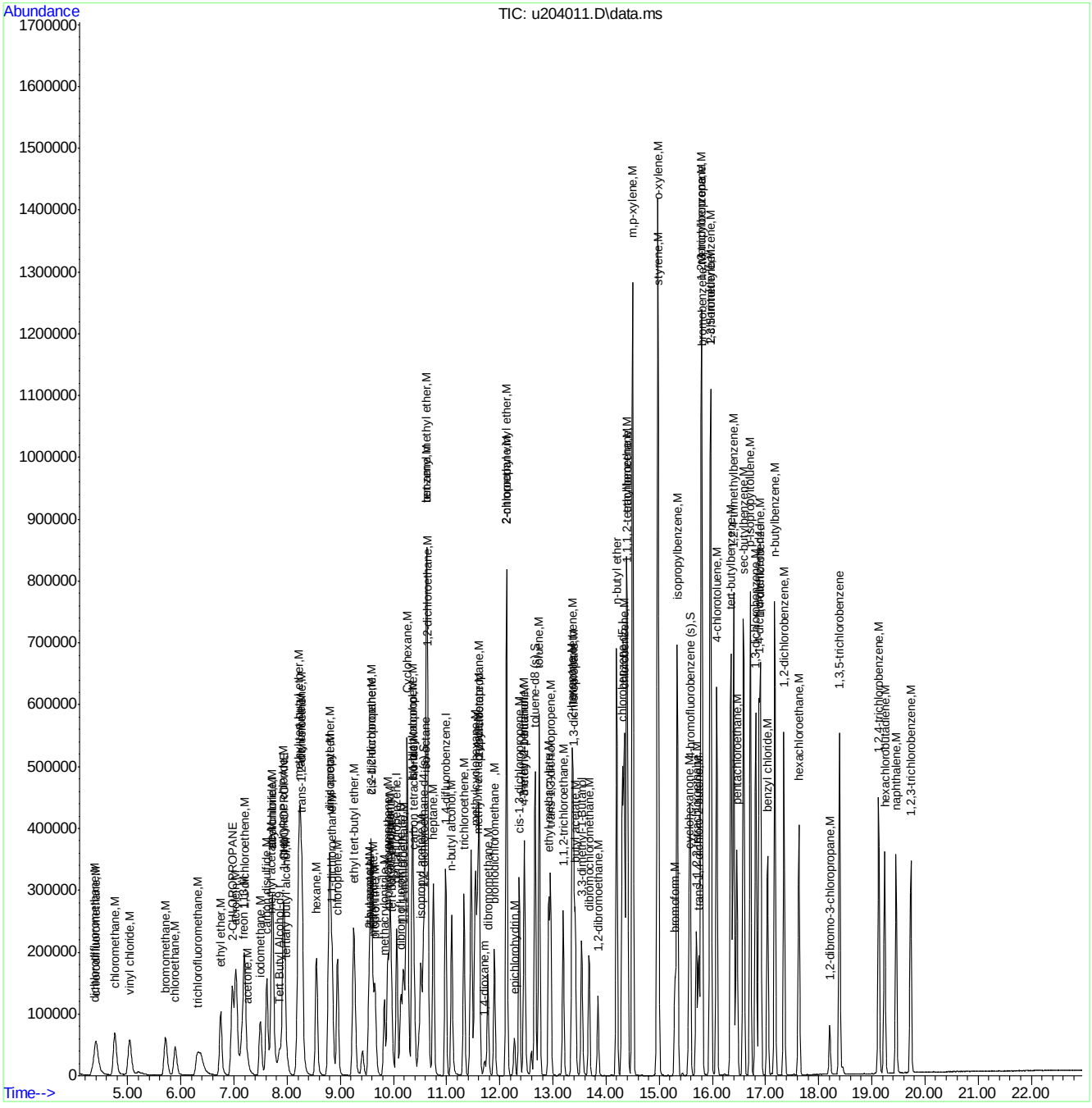
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204011.D
Acq On : 9 Mar 2016 10:20 am
Operator : NicoleH1
Sample : BS
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 13:08:18 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203999.D
Acq On : 8 Mar 2016 5:51 pm
Operator : NicoleH1
Sample : JC15518-5MS
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:41:50 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	120145	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	224550	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	329146	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	301055	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	168075	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	94362	51.73	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.46%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	117452	52.87	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.74%			
88) toluene-d8 (s)	12.662	98	391787	49.56	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.12%			
114) 4-bromofluorobenzene (s)	15.580	95	151276	49.18	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.36%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	72531	270.91	ug/L	96
4) 1,4-dioxane	11.711	88	50127	2356.32	ug/L	100
11) chlorodifluoromethane	4.407	51	140688	57.26	ug/L	98
12) dichlorodifluoromethane	4.371	85	129578	59.47	ug/L	99
15) chloromethane	4.758	50	184979	48.46	ug/L	99
16) vinyl chloride	5.040	62	162876	50.63	ug/L	100
18) bromomethane	5.704	94	92222	59.47	ug/L	97
19) chloroethane	5.887	64	89024	51.54	ug/L	99
20) trichlorofluoromethane	6.316	101	160723	55.54	ug/L	98
23) ethyl ether	6.750	74	64583	52.84	ug/L	98
24) 2-CHLOROPROPANE	6.969	43	243560	52.36	ug/L	99
27) acrolein	7.032	56	272578	516.87	ug/L	99
28) 1,1-dichloroethene	7.194	96	95078	55.30	ug/L	98
29) acetone	7.251	58	10244	54.49	ug/L	94
30) allyl chloride	7.727	76	82731	59.61	ug/L	91
31) acetonitrile	7.717	40	121445	492.91	ug/L #	85
32) iodomethane	7.497	142	168809	50.65	ug/L	99
33) carbon disulfide	7.612	76	339694	51.52	ug/L	100
34) 1-CHLOROPROPANE	7.952	63	10194	51.47	ug/L	98
35) methylene chloride	7.921	84	109047	49.82	ug/L	96
36) methyl acetate	7.696	43	101567	51.82	ug/L	100
37) methyl tert butyl ether	8.219	73	654620	106.33	ug/L	87
38) trans-1,2-dichloroethene	8.281	96	102358	50.59	ug/L	100
39) di-isopropyl ether	8.789	45	442718	52.05	ug/L	98
40) ethyl tert-butyl ether	9.254	59	381300	52.57	ug/L	99
41) 2-butanone	9.531	72	13791	53.76	ug/L #	95
42) 1,1-dichloroethane	8.846	63	215406	53.19	ug/L	98
43) chloroprene	8.945	53	176943	55.14	ug/L	99
44) acrylonitrile	8.250	53	238542	262.97	ug/L	99
45) vinyl acetate	8.815	86	20082	52.30	ug/L #	85
46) ethyl acetate	9.536	45	20551	54.31	ug/L	99
47) 2,2-dichloropropane	9.578	77	168779	56.04	ug/L	100
48) cis-1,2-dichloroethene	9.578	96	116314	52.12	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203999.D
Acq On : 8 Mar 2016 5:51 pm
Operator : NicoleH1
Sample : JC15518-5MS
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:41:50 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.625	85	17107	53.92 ug/L #	87
50) propionitrile	9.656	54	185405	516.00 ug/L	95
51) bromochloromethane	9.892	128	54468	51.99 ug/L	98
52) tetrahydrofuran	9.918	42	46354	51.40 ug/L	98
53) chloroform	9.933	83	192442	55.81 ug/L	98
54) tert-butyl Formate	9.965	59	49906	25.96 ug/L #	91
55) iso-butyl alcohol	10.352	43	66245	541.33 ug/L	98
58) freon 113	7.163	151	82088	65.57 ug/L	99
59) methacrylonitrile	9.829	41	85493	53.63 ug/L	98
60) 1,1,1-trichloroethane	10.184	97	163854	56.48 ug/L	99
62) tert-amyl methyl ether	10.634	87	74821	55.50 ug/L	98
63) iso-octane	10.592	57	447786	59.56 ug/L	99
66) epichlorohydrin	12.276	57	61087	251.74 ug/L	100
67) n-butyl alcohol	11.094	56	199568	2653.69 ug/L	99
68) Cyclohexane	10.252	84	170294	47.35 ug/L	86
69) carbon tetrachloride	10.383	117	148050	52.78 ug/L	98
70) 1,1-dichloropropene	10.357	75	166225	55.55 ug/L	100
71) hexane	8.548	57	173436	60.32 ug/L	99
72) benzene	10.624	78	453351	49.93 ug/L	99
73) heptane	10.749	57	104409	57.24 ug/L	98
74) isopropyl acetate	10.514	43	270386	53.52 ug/L	99
75) 1,2-dichloroethane	10.644	62	151764	50.00 ug/L	99
78) trichloroethene	11.329	95	113234	51.29 ug/L	96
79) methylcyclohexane	11.538	83	195898	56.37 ug/L	100
80) 2-nitropropane	12.129	41	34526	35.82 ug/L #	1
82) methyl methacrylate	11.580	100	29341	52.39 ug/L #	91
83) 1,2-dichloropropane	11.606	63	125595	48.90 ug/L	99
84) propyl acetate	11.612	73	21950	52.29 ug/L	99
85) dibromomethane	11.774	93	66017	50.48 ug/L	99
86) bromodichloromethane	11.899	83	149540	50.72 ug/L	99
87) cis-1,3-dichloropropene	12.364	75	203283	51.46 ug/L	100
89) 4-methyl-2-pentanone	12.453	58	51607	52.47 ug/L	98
90) toluene	12.741	92	284283	51.87 ug/L	100
91) 3-methyl-1-butanol	12.464	55	125995	1047.68 ug/L	99
92) trans-1,3-dichloropropene	12.955	75	181780	51.82 ug/L	99
93) ethyl methacrylate	12.919	69	156147	51.80 ug/L	100
94) 1,1,2-trichloroethane	13.190	83	85885	49.81 ug/L	98
95) 2-hexanone	13.358	58	52363	50.69 ug/L	99
97) cyclohexanone	15.559	55	43024	279.44 ug/L	99
98) tetrachloroethene	13.363	164	104157	55.09 ug/L	99
99) 1,3-dichloropropane	13.389	76	175903	49.62 ug/L	100
100) butyl acetate	13.421	56	90711	55.67 ug/L	99
101) dibromochloromethane	13.677	129	118283	50.77 ug/L	99
102) 1,2-dibromoethane	13.849	107	99687	49.19 ug/L	99
103) 3,3-dimethyl-1-Butanol	13.541	57	129095	481.40 ug/L	100
104) n-butyl ether	14.199	57	659031	58.89 ug/L	100
105) chlorobenzene	14.341	112	313535	51.62 ug/L	99
106) 1,1,1,2-tetrachloroethane	14.403	131	113511	49.97 ug/L	96
107) ethylbenzene	14.382	91	549028	51.59 ug/L	100
108) m,p-xylene	14.497	106	420281	105.55 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203999.D
Acq On : 8 Mar 2016 5:51 pm
Operator : NicoleH1
Sample : JC15518-5MS
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:41:50 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.968	106	209832	53.62 ug/L	98
110) styrene	14.978	104	348766	52.91 ug/L	99
111) bromoform	15.297	173	88287	51.16 ug/L	99
113) isopropylbenzene	15.339	105	552962	52.78 ug/L	100
115) bromobenzene	15.804	156	142348	49.69 ug/L	99
116) 1,1,2,2-tetrachloroethane	15.700	83	140916	49.58 ug/L	100
117) trans-1,4-dichloro-2-b...	15.742	53	48687	53.65 ug/L	98
118) 1,2,3-trichloropropane	15.784	110	35197	49.94 ug/L	98
119) n-propylbenzene	15.794	91	685337	54.26 ug/L	100
120) 2-chlorotoluene	15.972	126	132979	50.27 ug/L	99
121) 4-chlorotoluene	16.082	91	406797	50.31 ug/L	100
123) 1,3,5-trimethylbenzene	15.956	105	470479	53.21 ug/L	100
124) tert-butylbenzene	16.348	119	414237	54.17 ug/L	99
125) pentachloroethane	16.458	167	93978	52.88 ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	485647	53.17 ug/L	100
128) sec-butylbenzene	16.589	105	626186	54.72 ug/L	100
129) 1,3-dichlorobenzene	16.813	146	277253	50.28 ug/L	99
130) p-isopropyltoluene	16.714	119	542205	56.05 ug/L	100
131) 1,4-dichlorobenzene	16.908	146	282760	50.21 ug/L	99
132) benzyl chloride	17.038	91	305493	55.66 ug/L	100
133) 1,2-dichlorobenzene	17.347	146	269078	52.22 ug/L	99
135) n-butylbenzene	17.174	92	280860	56.48 ug/L	100
137) 1,2-dibromo-3-chloropr...	18.204	157	28818	55.76 ug/L	98
138) 1,3,5-trichlorobenzene	18.392	180	226019	55.11 ug/L	99
139) 1,2,4-trichlorobenzene	19.129	180	184663	56.82 ug/L	97
140) hexachlorobutadiene	19.244	225	110218	56.81 ug/L	99
141) naphthalene	19.459	128	339284	54.36 ug/L	99
143) 1,2,3-trichlorobenzene	19.736	180	149334	57.05 ug/L	99
144) hexachloroethane	17.629	201	100075	55.19 ug/L	100

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

7.4.1

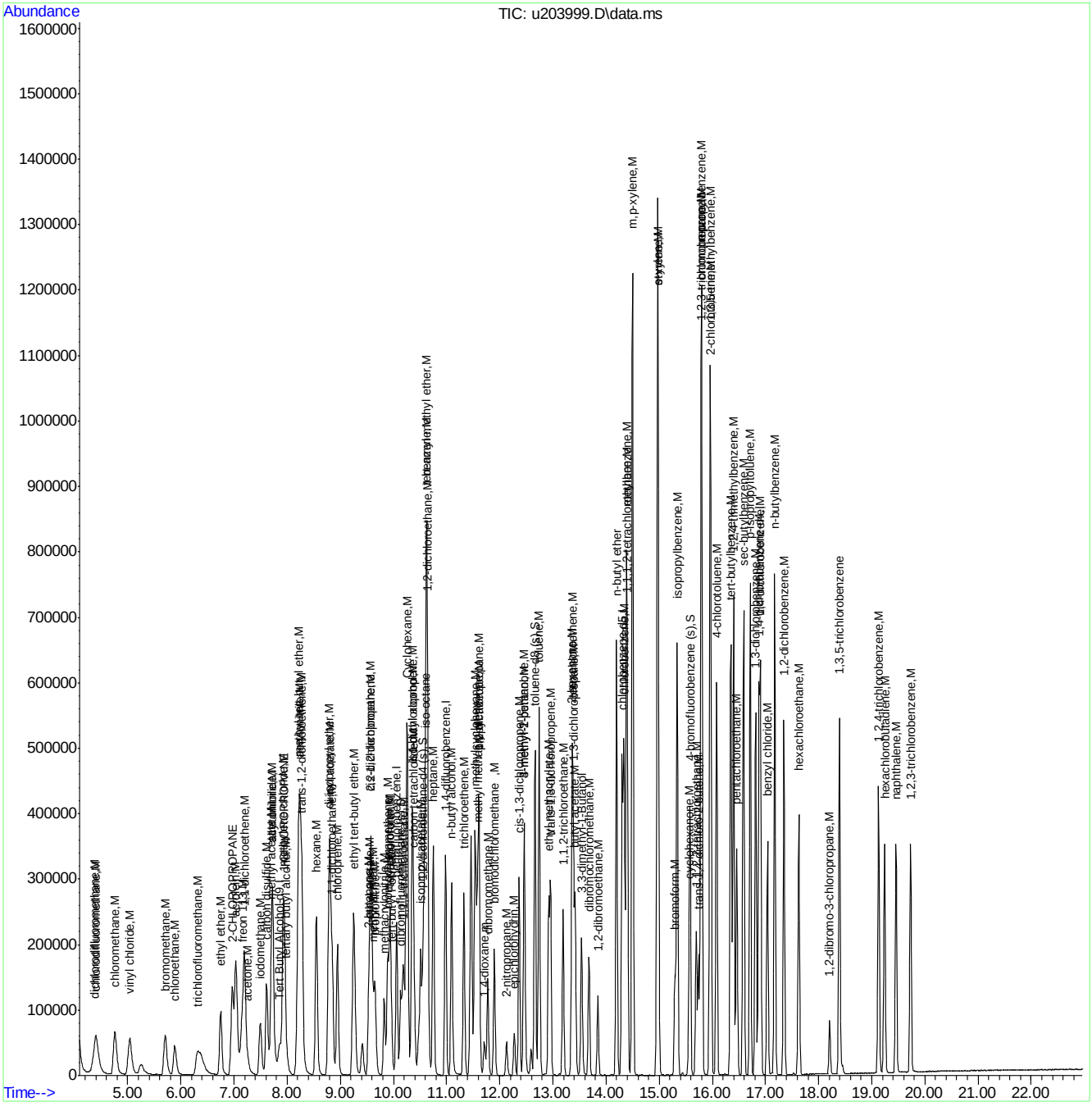
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203999.D
Acq On : 8 Mar 2016 5:51 pm
Operator : NicoleH1
Sample : JC15518-5MS
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 11:41:50 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204000.D
Acq On : 8 Mar 2016 6:21 pm
Operator : NicoleH1
Sample : JC15518-5MSD
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:45:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	121870	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	226160	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	329051	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	305339	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.876	152	173617	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	95636	52.06	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.12%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	118238	52.85	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.70%			
88) toluene-d8 (s)	12.662	98	392485	49.66	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.32%			
114) 4-bromofluorobenzene (s)	15.579	95	153286	48.24	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 96.48%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	76346	281.13	ug/L	99
4) 1,4-dioxane	11.711	88	54277	2515.28	ug/L	100
11) chlorodifluoromethane	4.407	51	139971	56.56	ug/L	98
12) dichlorodifluoromethane	4.386	85	122626	55.88	ug/L	96
15) chloromethane	4.757	50	190413	49.52	ug/L	99
16) vinyl chloride	5.040	62	167599	51.73	ug/L	97
18) bromomethane	5.709	94	95384	61.07	ug/L	99
19) chloroethane	5.892	64	93679	53.84	ug/L	96
20) trichlorofluoromethane	6.310	101	160496	55.07	ug/L	99
23) ethyl ether	6.749	74	64225	52.18	ug/L	98
24) 2-CHLOROPROPANE	6.969	43	244863	52.27	ug/L	99
27) acrolein	7.037	56	272744	513.50	ug/L	100
28) 1,1-dichloroethene	7.194	96	95484	55.14	ug/L	97
29) acetone	7.251	58	10572	55.84	ug/L	97
30) allyl chloride	7.722	76	82390	58.94	ug/L	86
31) acetonitrile	7.717	40	125012	503.78	ug/L #	85
32) iodomethane	7.497	142	172191	51.30	ug/L	99
33) carbon disulfide	7.617	76	345257	51.99	ug/L	99
34) 1-CHLOROPROPANE	7.947	63	9928	49.77	ug/L	96
35) methylene chloride	7.920	84	110067	49.93	ug/L	97
36) methyl acetate	7.696	43	101978	51.66	ug/L	100
37) methyl tert butyl ether	8.218	73	669490	107.98	ug/L	90
38) trans-1,2-dichloroethene	8.281	96	102936	50.51	ug/L	96
39) di-isopropyl ether	8.788	45	456687	53.31	ug/L	99
40) ethyl tert-butyl ether	9.254	59	396443	54.27	ug/L	99
41) 2-butanone	9.536	72	13693	53.00	ug/L	95
42) 1,1-dichloroethane	8.846	63	215683	52.88	ug/L	98
43) chloroprene	8.945	53	182000	56.31	ug/L	99
44) acrylonitrile	8.250	53	237457	259.91	ug/L	99
45) vinyl acetate	8.814	86	20560	53.17	ug/L #	81
46) ethyl acetate	9.531	45	20527	53.86	ug/L	94
47) 2,2-dichloropropane	9.578	77	168772	55.64	ug/L	99
48) cis-1,2-dichloroethene	9.572	96	115870	51.55	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204000.D
Acq On : 8 Mar 2016 6:21 pm
Operator : NicoleH1
Sample : JC15518-5MSD
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:45:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) methyl acrylate	9.620	85	17302	54.15	ug/L		92
50) propionitrile	9.656	54	186341	514.91	ug/L		95
51) bromochloromethane	9.891	128	54786	51.92	ug/L		99
52) tetrahydrofuran	9.918	42	45424	50.01	ug/L		97
53) chloroform	9.933	83	192704	55.49	ug/L		97
54) tert-butyl Formate	9.965	59	41610	21.49	ug/L	#	88
55) iso-butyl alcohol	10.351	43	69483	563.75	ug/L		97
58) freon 113	7.162	151	80301	63.69	ug/L		98
59) methacrylonitrile	9.823	41	84438	52.59	ug/L		99
60) 1,1,1-trichloroethane	10.184	97	165010	56.47	ug/L		99
62) tert-amyl methyl ether	10.629	87	77518	57.09	ug/L		99
63) iso-octane	10.592	57	418942	55.33	ug/L		100
66) epichlorohydrin	12.275	57	60404	248.99	ug/L		100
67) n-butyl alcohol	11.094	56	211240	2809.70	ug/L		98
68) Cyclohexane	10.252	84	162929	45.31	ug/L	#	80
69) carbon tetrachloride	10.383	117	147810	52.71	ug/L		97
70) 1,1-dichloropropene	10.351	75	165502	55.32	ug/L		99
71) hexane	8.548	57	148963	51.83	ug/L		99
72) benzene	10.623	78	451075	49.70	ug/L		100
73) heptane	10.749	57	95947	52.62	ug/L		98
74) isopropyl acetate	10.514	43	277681	54.98	ug/L		100
75) 1,2-dichloroethane	10.644	62	150829	49.71	ug/L		99
78) trichloroethene	11.329	95	113171	51.28	ug/L		96
79) methylcyclohexane	11.538	83	189485	54.54	ug/L		99
80) 2-nitropropane	12.129	41	34509	35.81	ug/L	#	1
82) methyl methacrylate	11.580	100	29350	52.42	ug/L		91
83) 1,2-dichloropropane	11.606	63	124975	48.68	ug/L		100
84) propyl acetate	11.611	73	22495	53.61	ug/L		98
85) dibromomethane	11.773	93	65483	50.09	ug/L		99
86) bromodichloromethane	11.899	83	150654	51.12	ug/L		98
87) cis-1,3-dichloropropene	12.364	75	202389	51.25	ug/L		99
89) 4-methyl-2-pentanone	12.453	58	51329	52.21	ug/L		99
90) toluene	12.741	92	283020	51.65	ug/L		100
91) 3-methyl-1-butanol	12.464	55	130841	1088.29	ug/L		99
92) trans-1,3-dichloropropene	12.955	75	181392	51.73	ug/L		99
93) ethyl methacrylate	12.918	69	154190	51.16	ug/L		98
94) 1,1,2-trichloroethane	13.190	83	85905	49.83	ug/L		98
95) 2-hexanone	13.358	58	52720	51.05	ug/L		99
97) cyclohexanone	15.559	55	45166	289.24	ug/L		99
98) tetrachloroethene	13.363	164	103702	54.08	ug/L		98
99) 1,3-dichloropropane	13.389	76	174117	48.43	ug/L		99
100) butyl acetate	13.420	56	92043	55.69	ug/L		97
101) dibromochloromethane	13.676	129	119022	50.37	ug/L		98
102) 1,2-dibromoethane	13.849	107	100597	48.94	ug/L		99
103) 3,3-dimethyl-1-Butanol	13.541	57	135536	498.32	ug/L		99
104) n-butyl ether	14.199	57	660300	58.17	ug/L		100
105) chlorobenzene	14.340	112	314324	51.03	ug/L		98
106) 1,1,1,2-tetrachloroethane	14.403	131	114682	49.77	ug/L		98
107) ethylbenzene	14.382	91	551343	51.08	ug/L		100
108) m,p-xylene	14.497	106	420683	104.17	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204000.D
Acq On : 8 Mar 2016 6:21 pm
Operator : NicoleH1
Sample : JC15518-5MSD
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:45:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.963	106	212078	53.43 ug/L	98
110) styrene	14.978	104	352343	52.70 ug/L	99
111) bromoform	15.297	173	88556	50.60 ug/L	100
113) isopropylbenzene	15.339	105	559266	51.68 ug/L	100
115) bromobenzene	15.804	156	143856	48.62 ug/L	99
116) 1,1,2,2-tetrachloroethane	15.700	83	141930	48.34 ug/L	100
117) trans-1,4-dichloro-2-b...	15.742	53	49070	52.35 ug/L	99
118) 1,2,3-trichloropropane	15.783	110	35576	48.86 ug/L	99
119) n-propylbenzene	15.794	91	692747	53.10 ug/L	100
120) 2-chlorotoluene	15.972	126	134338	49.16 ug/L	100
121) 4-chlorotoluene	16.081	91	413032	49.45 ug/L	100
123) 1,3,5-trimethylbenzene	15.956	105	476946	52.22 ug/L	100
124) tert-butylbenzene	16.348	119	422336	53.47 ug/L	99
125) pentachloroethane	16.458	167	95671	52.12 ug/L	98
126) 1,2,4-trimethylbenzene	16.400	105	493167	52.27 ug/L	100
128) sec-butylbenzene	16.588	105	636129	53.82 ug/L	100
129) 1,3-dichlorobenzene	16.813	146	283842	49.84 ug/L	99
130) p-isopropyltoluene	16.714	119	549877	55.03 ug/L	100
131) 1,4-dichlorobenzene	16.907	146	288053	49.52 ug/L	98
132) benzyl chloride	17.038	91	314604	55.49 ug/L	100
133) 1,2-dichlorobenzene	17.346	146	271748	51.06 ug/L	100
135) n-butylbenzene	17.174	92	283964	55.28 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.209	157	28647	53.66 ug/L	100
138) 1,3,5-trichlorobenzene	18.392	180	227826	53.78 ug/L	99
139) 1,2,4-trichlorobenzene	19.129	180	187249	55.77 ug/L	98
140) hexachlorobutadiene	19.244	225	112093	55.94 ug/L	98
141) naphthalene	19.459	128	344007	53.36 ug/L	100
143) 1,2,3-trichlorobenzene	19.730	180	152224	56.29 ug/L	98
144) hexachloroethane	17.629	201	101585	54.24 ug/L	99

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

7.4.2

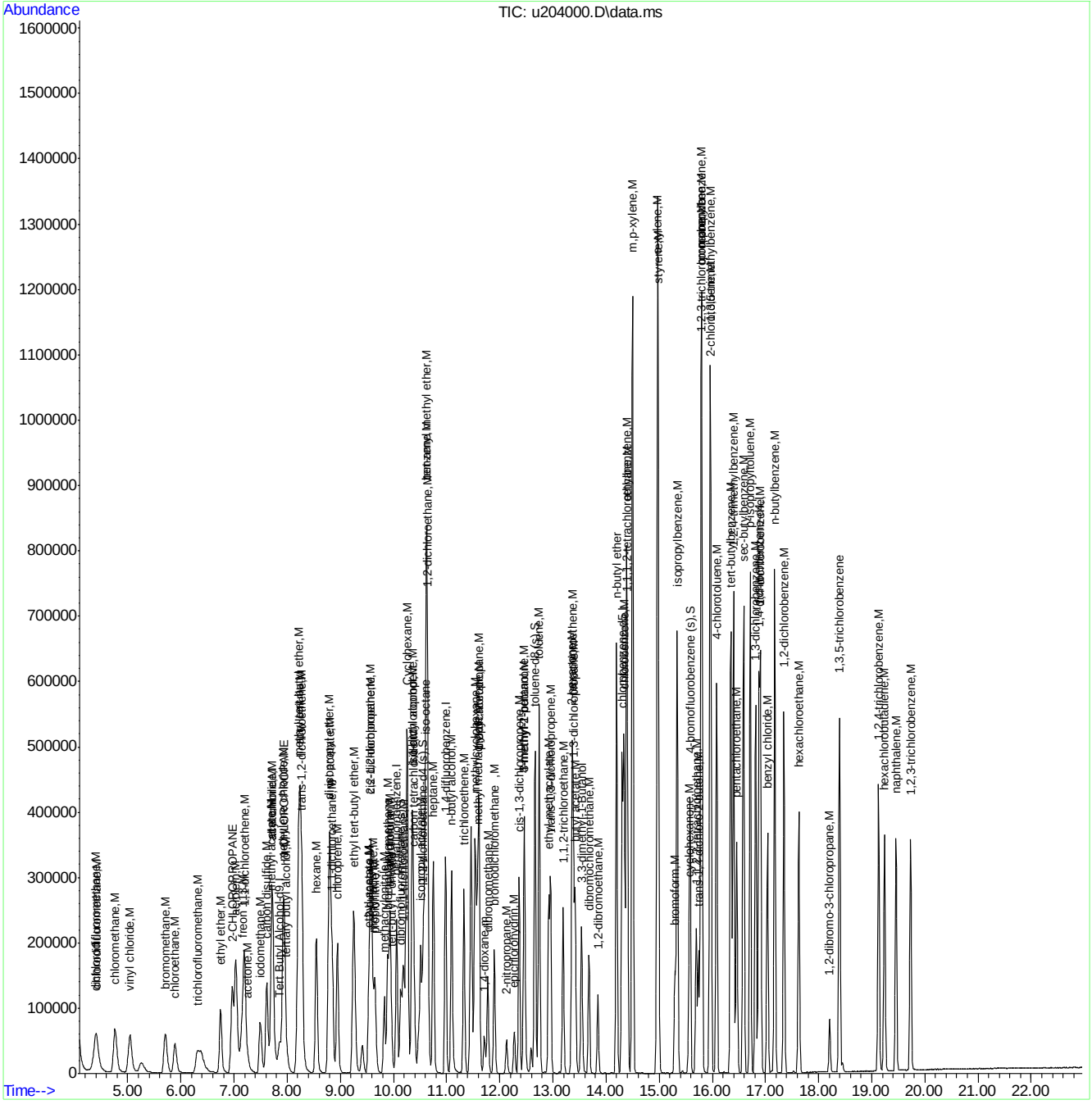
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204000.D
Acq On : 8 Mar 2016 6:21 pm
Operator : NicoleH1
Sample : JC15518-5MSD
Misc : ms99351,vu9377,5.0,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 11:45:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204020.D
Acq On : 9 Mar 2016 3:16 pm
Operator : NicoleH1
Sample : JC15614-6MS
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 10 11:45:24 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	119149	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	222527	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	323011	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	301522	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	171052	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	94435	52.24	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.48%			
57) 1,2-dichloroethane-d4 (s)	10.561	65	117057	53.17	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 106.34%			
88) toluene-d8 (s)	12.662	98	390865	50.38	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.76%			
114) 4-bromofluorobenzene (s)	15.580	95	153672	49.09	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.18%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	71946	270.97	ug/L	83
4) 1,4-dioxane	11.711	88	27807	1318.05	ug/L	99
11) chlorodifluoromethane	4.407	51	144596	59.38	ug/L	99
12) dichlorodifluoromethane	4.371	85	120717	55.91	ug/L	98
15) chloromethane	4.758	50	190713	50.41	ug/L	99
16) vinyl chloride	5.045	62	294587	92.41	ug/L	99
18) bromomethane	5.704	94	94382	61.41	ug/L	96
19) chloroethane	5.892	64	93385	54.55	ug/L	96
20) trichlorofluoromethane	6.326	101	157664	54.98	ug/L	99
23) ethyl ether	6.744	74	74962	61.89	ug/L	98
24) 2-CHLOROPROPANE	6.969	43	280443	60.84	ug/L	99
27) acrolein	7.037	56	242642	464.28	ug/L	99
28) 1,1-dichloroethene	7.199	96	116057	68.12	ug/L	96
29) acetone	7.251	58	11269	60.49	ug/L	100
30) allyl chloride	7.727	76	92186	67.03	ug/L	86
31) acetonitrile	7.717	40	125131	512.49	ug/L #	81
32) iodomethane	7.492	142	194593	58.92	ug/L	99
33) carbon disulfide	7.617	76	404174	61.86	ug/L	99
34) 1-CHLOROPROPANE	7.952	63	11113	56.62	ug/L	99
35) methylene chloride	7.921	84	123680	57.02	ug/L	97
36) methyl acetate	7.701	43	101501	52.26	ug/L	99
37) methyl tert butyl ether	8.219	73	684412	112.18	ug/L	89
38) trans-1,2-dichloroethene	8.281	96	115568	57.63	ug/L	98
39) di-isopropyl ether	8.794	45	455779	54.07	ug/L	88
40) ethyl tert-butyl ether	9.254	59	400115	55.67	ug/L	99
41) 2-butanone	9.531	72	22087	86.88	ug/L #	4
42) 1,1-dichloroethane	8.851	63	236340	58.89	ug/L	99
43) chloroprene	8.945	53	182558	57.41	ug/L	99
44) acrylonitrile	8.250	53	255528	284.25	ug/L	99
45) vinyl acetate	8.815	86	20195	53.08	ug/L #	80
46) ethyl acetate	9.536	45	20836	55.57	ug/L	97
47) 2,2-dichloropropane	9.578	77	184873	61.94	ug/L #	69
48) cis-1,2-dichloroethene	9.578	96	1234380	558.14	ug/L	91

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204020.D
Acq On : 9 Mar 2016 3:16 pm
Operator : NicoleH1
Sample : JC15614-6MS
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 10 11:45:24 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.620	85	18125	57.65 ug/L	94
50) propionitrile	9.656	54	196558	552.01 ug/L	96
51) bromochloromethane	9.892	128	59708	57.51 ug/L	99
52) tetrahydrofuran	9.918	42	49537	55.43 ug/L	98
53) chloroform	9.939	83	208220	60.94 ug/L	99
54) tert-butyl Formate	9.965	59	68374	35.89 ug/L #	94
55) iso-butyl alcohol	10.352	43	66104	545.09 ug/L	98
58) freon 113	7.168	151	80069	64.54 ug/L	96
59) methacrylonitrile	9.829	41	90613	57.36 ug/L	98
60) 1,1,1-trichloroethane	10.190	97	181708	63.20 ug/L	100
62) tert-amyl methyl ether	10.634	87	76906	57.56 ug/L	97
63) iso-octane	10.597	57	420623	56.46 ug/L	100
66) epichlorohydrin	12.276	57	62683	263.22 ug/L	99
67) n-butyl alcohol	11.094	56	194700	2638.13 ug/L	99
68) Cyclohexane	10.252	84	182572	51.72 ug/L	90
69) carbon tetrachloride	10.388	117	163856	59.53 ug/L	99
70) 1,1-dichloropropene	10.357	75	180262	61.38 ug/L	100
71) hexane	8.548	57	149905	53.13 ug/L	100
72) benzene	10.623	78	495342	55.60 ug/L	100
73) heptane	10.749	57	96846	54.11 ug/L	99
74) isopropyl acetate	10.514	43	270560	54.57 ug/L	100
75) 1,2-dichloroethane	10.644	62	164182	55.12 ug/L	99
78) trichloroethene	11.324	95	179302	82.76 ug/L	98
79) methylcyclohexane	11.538	83	190940	55.99 ug/L	99
80) 2-nitropropane	12.129	41	36395	38.48 ug/L #	1
82) methyl methacrylate	11.580	100	30592	55.66 ug/L #	89
83) 1,2-dichloropropane	11.606	63	136923	54.33 ug/L	99
84) propyl acetate	11.612	73	21616	52.47 ug/L	98
85) dibromomethane	11.774	93	70538	54.96 ug/L	99
86) bromodichloromethane	11.899	83	161774	55.91 ug/L	99
87) cis-1,3-dichloropropene	12.364	75	218697	56.42 ug/L	99
89) 4-methyl-2-pentanone	12.453	58	53936	55.88 ug/L	95
90) toluene	12.741	92	305277	56.76 ug/L	99
91) 3-methyl-1-butanol	12.469	55	123731	1048.39 ug/L	99
92) trans-1,3-dichloropropene	12.955	75	194431	56.48 ug/L	99
93) ethyl methacrylate	12.919	69	163046	55.11 ug/L	98
94) 1,1,2-trichloroethane	13.190	83	91184	53.89 ug/L	100
95) 2-hexanone	13.358	58	54313	53.57 ug/L	96
97) cyclohexanone	15.559	55	46053	298.65 ug/L	98
98) tetrachloroethene	13.363	164	153152	80.88 ug/L	99
99) 1,3-dichloropropane	13.389	76	186231	52.45 ug/L	98
100) butyl acetate	13.420	56	89064	54.57 ug/L	100
101) dibromochloromethane	13.682	129	127687	54.72 ug/L	99
102) 1,2-dibromoethane	13.849	107	106610	52.52 ug/L	98
103) 3,3-dimethyl-1-Butanol	13.541	57	127073	473.12 ug/L	99
104) n-butyl ether	14.199	57	710427	63.38 ug/L	99
105) chlorobenzene	14.341	112	374418	61.55 ug/L	99
106) 1,1,1,2-tetrachloroethane	14.403	131	124363	54.66 ug/L	98
107) ethylbenzene	14.388	91	595230	55.84 ug/L	100
108) m,p-xylene	14.497	106	454820	114.05 ug/L	98

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204020.D
Acq On : 9 Mar 2016 3:16 pm
Operator : NicoleH1
Sample : JC15614-6MS
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 10 11:45:24 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.968	106	231081	58.95 ug/L	96
110) styrene	14.978	104	381104	57.73 ug/L	100
111) bromoform	15.297	173	95425	55.21 ug/L	100
113) isopropylbenzene	15.339	105	606111	56.85 ug/L	100
115) bromobenzene	15.804	156	156150	53.56 ug/L	100
116) 1,1,2,2-tetrachloroethane	15.700	83	153363	53.02 ug/L	100
117) trans-1,4-dichloro-2-b...	15.742	53	54402	58.91 ug/L	98
118) 1,2,3-trichloropropane	15.784	110	37992	52.96 ug/L	98
119) n-propylbenzene	15.794	91	751624	58.48 ug/L	99
120) 2-chlorotoluene	15.972	126	145349	53.99 ug/L	99
121) 4-chlorotoluene	16.082	91	447781	54.41 ug/L	100
123) 1,3,5-trimethylbenzene	15.956	105	514485	57.18 ug/L	100
124) tert-butylbenzene	16.348	119	451680	58.04 ug/L	98
125) pentachloroethane	16.463	167	102101	56.45 ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	534255	57.47 ug/L	100
128) sec-butylbenzene	16.589	105	679217	58.33 ug/L	100
129) 1,3-dichlorobenzene	16.819	146	305371	54.42 ug/L	99
130) p-isopropyltoluene	16.714	119	586047	59.53 ug/L	100
131) 1,4-dichlorobenzene	16.908	146	313079	54.63 ug/L	99
132) benzyl chloride	17.038	91	315964	56.56 ug/L	100
133) 1,2-dichlorobenzene	17.347	146	312449	59.59 ug/L	100
135) n-butylbenzene	17.174	92	303217	59.92 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.209	157	29922	56.88 ug/L	99
138) 1,3,5-trichlorobenzene	18.392	180	239360	57.35 ug/L	99
139) 1,2,4-trichlorobenzene	19.129	180	195155	59.00 ug/L	99
140) hexachlorobutadiene	19.244	225	112667	57.07 ug/L	99
141) naphthalene	19.459	128	359659	56.62 ug/L	100
143) 1,2,3-trichlorobenzene	19.731	180	158726	59.58 ug/L	100
144) hexachloroethane	17.629	201	107740	58.39 ug/L	100

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

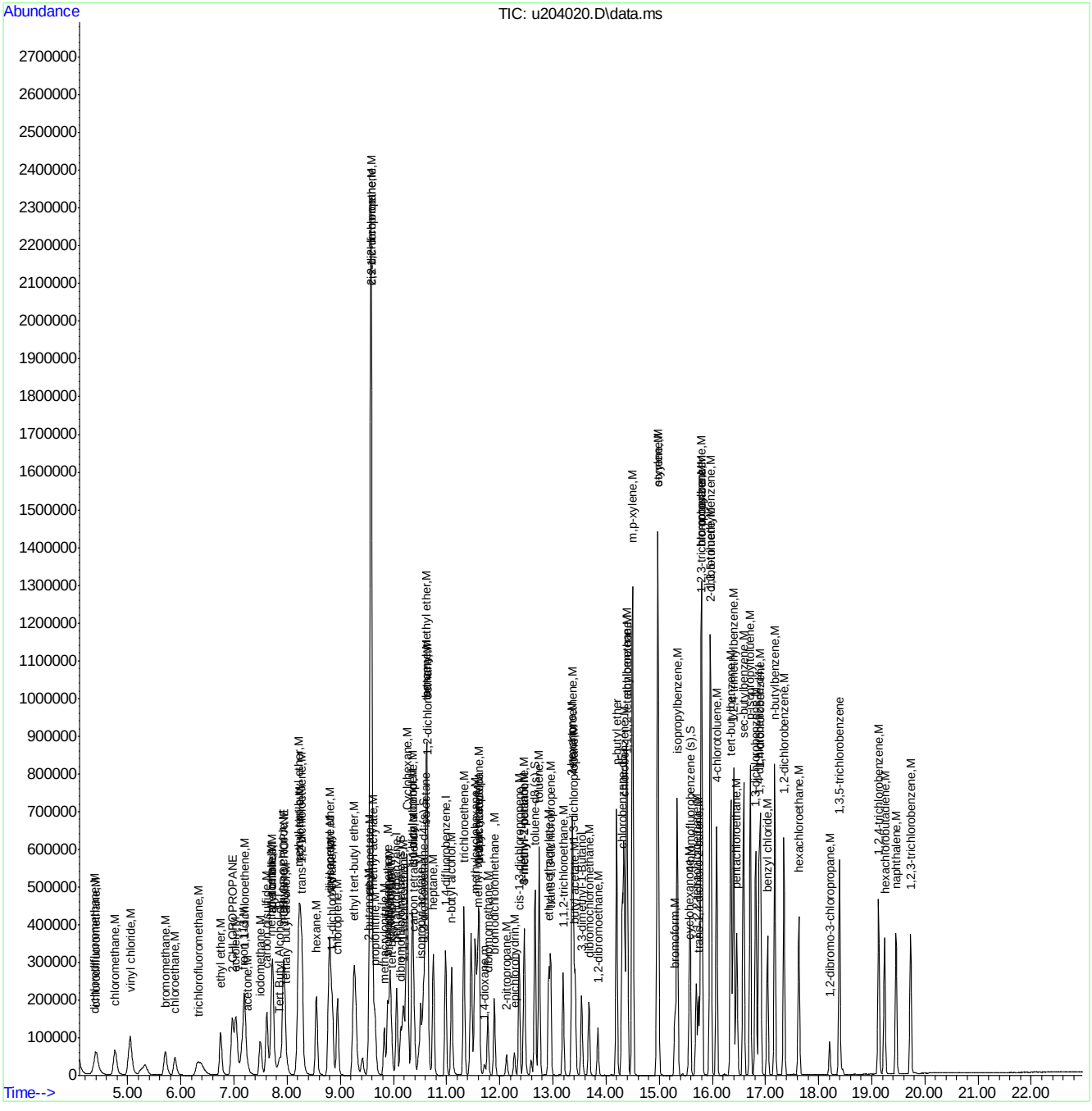
7.4.3

7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204020.D
Acq On : 9 Mar 2016 3:16 pm
Operator : NicoleH1
Sample : JC15614-6MS
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 10 11:45:24 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204021.D
Acq On : 9 Mar 2016 3:45 pm
Operator : NicoleH1
Sample : JC15614-6MSD
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 11:46:30 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	118524	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	227233	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	332728	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	306028	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	173247	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	96572	52.32	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.64%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	120400	53.56	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 107.12%			
88) toluene-d8 (s)	12.662	98	397073	49.69	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.38%			
114) 4-bromofluorobenzene (s)	15.580	95	155434	49.03	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 98.06%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	67949	257.27	ug/L	91
4) 1,4-dioxane	11.711	88	26251	1250.86	ug/L	99
11) chlorodifluoromethane	4.407	51	142657	57.37	ug/L	99
12) dichlorodifluoromethane	4.376	85	125089	56.73	ug/L	98
15) chloromethane	4.763	50	187894	48.64	ug/L	100
16) vinyl chloride	5.045	62	299840	92.11	ug/L	98
18) bromomethane	5.709	94	93738	59.73	ug/L	99
19) chloroethane	5.892	64	91390	52.28	ug/L	98
20) trichlorofluoromethane	6.321	101	161341	55.10	ug/L	99
23) ethyl ether	6.744	74	70013	56.61	ug/L	98
24) 2-CHLOROPROPANE	6.969	43	256037	54.39	ug/L	99
27) acrolein	7.037	56	251623	471.50	ug/L	98
28) 1,1-dichloroethene	7.199	96	107095	61.56	ug/L	98
29) acetone	7.251	58	10147	53.34	ug/L	95
30) allyl chloride	7.722	76	84092	59.88	ug/L	98
31) acetonitrile	7.717	40	119368	478.76	ug/L #	85
32) iodomethane	7.492	142	176543	52.35	ug/L	100
33) carbon disulfide	7.617	76	364428	54.62	ug/L	100
34) 1-CHLOROPROPANE	7.947	63	10231	51.04	ug/L	99
35) methylene chloride	7.921	84	110840	50.05	ug/L	97
36) methyl acetate	7.696	43	100303	50.57	ug/L	99
37) methyl tert butyl ether	8.219	73	642219	103.09	ug/L	89
38) trans-1,2-dichloroethene	8.281	96	106897	52.21	ug/L	99
39) di-isopropyl ether	8.788	45	444034	51.59	ug/L	98
40) ethyl tert-butyl ether	9.254	59	386014	52.59	ug/L	100
41) 2-butanone	9.536	72	21060	81.13	ug/L #	5
42) 1,1-dichloroethane	8.851	63	216331	52.79	ug/L	100
43) chloroprene	8.945	53	180801	55.68	ug/L	99
44) acrylonitrile	8.250	53	234732	255.71	ug/L	97
45) vinyl acetate	8.809	86	19943	51.33	ug/L	96
46) ethyl acetate	9.531	45	20141	52.60	ug/L	96
47) 2,2-dichloropropane	9.578	77	168163	55.18	ug/L #	66
48) cis-1,2-dichloroethene	9.573	96	1243654	550.69	ug/L	92

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204021.D
Acq On : 9 Mar 2016 3:45 pm
Operator : NicoleH1
Sample : JC15614-6MSD
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 11:46:30 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.620	85	16594	51.69 ug/L	99
50) propionitrile	9.656	54	177505	488.18 ug/L	97
51) bromochloromethane	9.891	128	54175	51.10 ug/L	99
52) tetrahydrofuran	9.918	42	45926	50.33 ug/L	99
53) chloroform	9.933	83	189447	54.30 ug/L	98
54) tert-butyl Formate	9.959	59	66199	34.03 ug/L #	94
55) iso-butyl alcohol	10.352	43	62156	501.92 ug/L	98
58) freon 113	7.162	151	83658	66.04 ug/L	99
59) methacrylonitrile	9.823	41	83590	51.82 ug/L	99
60) 1,1,1-trichloroethane	10.184	97	164850	56.15 ug/L	100
62) tert-amyl methyl ether	10.634	87	74373	54.51 ug/L	100
63) iso-octane	10.592	57	455198	59.83 ug/L	99
66) epichlorohydrin	12.275	57	60759	247.69 ug/L	99
67) n-butyl alcohol	11.094	56	184283	2424.06 ug/L	98
68) Cyclohexane	10.252	84	201173	55.33 ug/L	88
69) carbon tetrachloride	10.383	117	149193	52.62 ug/L	98
70) 1,1-dichloropropene	10.357	75	165614	54.75 ug/L	99
71) hexane	8.548	57	142602	49.07 ug/L	99
72) benzene	10.623	78	452700	49.33 ug/L	99
73) heptane	10.749	57	106425	57.72 ug/L	99
74) isopropyl acetate	10.514	43	266332	52.15 ug/L	100
75) 1,2-dichloroethane	10.644	62	151039	49.23 ug/L	100
78) trichloroethene	11.324	95	170678	76.48 ug/L	98
79) methylcyclohexane	11.544	83	197546	56.23 ug/L	99
80) 2-nitropropane	12.129	41	33467	34.35 ug/L #	1
82) methyl methacrylate	11.580	100	28142	49.71 ug/L	96
83) 1,2-dichloropropane	11.606	63	125047	48.17 ug/L	100
84) propyl acetate	11.611	73	21413	50.46 ug/L	99
85) dibromomethane	11.774	93	64806	49.02 ug/L	98
86) bromodichloromethane	11.899	83	148068	49.68 ug/L	98
87) cis-1,3-dichloropropene	12.364	75	199580	49.98 ug/L	99
89) 4-methyl-2-pentanone	12.453	58	50096	50.39 ug/L	95
90) toluene	12.741	92	279463	50.44 ug/L	100
91) 3-methyl-1-butanol	12.464	55	117229	964.29 ug/L	100
92) trans-1,3-dichloropropene	12.955	75	179157	50.52 ug/L	99
93) ethyl methacrylate	12.918	69	149847	49.17 ug/L	99
94) 1,1,2-trichloroethane	13.190	83	83087	47.67 ug/L	99
95) 2-hexanone	13.358	58	50326	48.19 ug/L	96
97) cyclohexanone	15.559	55	41578	265.66 ug/L	99
98) tetrachloroethene	13.363	164	145506	75.71 ug/L	98
99) 1,3-dichloropropane	13.389	76	169980	47.17 ug/L	99
100) butyl acetate	13.420	56	87680	52.94 ug/L	99
101) dibromochloromethane	13.682	129	115641	48.83 ug/L	99
102) 1,2-dibromoethane	13.849	107	98091	47.62 ug/L	99
103) 3,3-dimethyl-1-Butanol	13.541	57	122387	448.97 ug/L	100
104) n-butyl ether	14.199	57	649994	57.14 ug/L	99
105) chlorobenzene	14.341	112	344128	55.74 ug/L	99
106) 1,1,1,2-tetrachloroethane	14.403	131	111916	48.46 ug/L	96
107) ethylbenzene	14.388	91	538834	49.81 ug/L	100
108) m,p-xylene	14.497	106	410566	101.43 ug/L	99

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204021.D
Acq On : 9 Mar 2016 3:45 pm
Operator : NicoleH1
Sample : JC15614-6MSD
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 11:46:30 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.968	106	207795	52.23 ug/L	98
110) styrene	14.978	104	344471	51.41 ug/L	100
111) bromoform	15.297	173	86022	49.04 ug/L	98
113) isopropylbenzene	15.339	105	548043	50.75 ug/L	100
115) bromobenzene	15.804	156	140280	47.51 ug/L	99
116) 1,1,2,2-tetrachloroethane	15.700	83	137781	47.03 ug/L	100
117) trans-1,4-dichloro-2-b...	15.742	53	49142	52.54 ug/L	98
118) 1,2,3-trichloropropane	15.789	110	34487	47.47 ug/L	99
119) n-propylbenzene	15.794	91	681560	52.35 ug/L	100
120) 2-chlorotoluene	15.972	126	130405	47.82 ug/L	99
121) 4-chlorotoluene	16.081	91	404041	48.48 ug/L	100
123) 1,3,5-trimethylbenzene	15.956	105	466069	51.14 ug/L	100
124) tert-butylbenzene	16.348	119	409376	51.94 ug/L	98
125) pentachloroethane	16.463	167	92439	50.46 ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	479620	50.94 ug/L	100
128) sec-butylbenzene	16.589	105	620793	52.63 ug/L	100
129) 1,3-dichlorobenzene	16.819	146	276267	48.61 ug/L	99
130) p-isopropyltoluene	16.714	119	533153	53.47 ug/L	100
131) 1,4-dichlorobenzene	16.907	146	285727	49.22 ug/L	99
132) benzyl chloride	17.038	91	305362	53.97 ug/L	99
133) 1,2-dichlorobenzene	17.347	146	288636	54.35 ug/L	99
135) n-butylbenzene	17.174	92	277181	54.08 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.209	157	27244	51.14 ug/L	99
138) 1,3,5-trichlorobenzene	18.392	180	219820	52.00 ug/L	100
139) 1,2,4-trichlorobenzene	19.129	180	179370	53.54 ug/L	99
140) hexachlorobutadiene	19.244	225	105119	52.57 ug/L	98
141) naphthalene	19.459	128	331512	51.53 ug/L	100
143) 1,2,3-trichlorobenzene	19.731	180	146413	54.26 ug/L	99
144) hexachloroethane	17.629	201	97768	52.31 ug/L	99

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

7.4.4

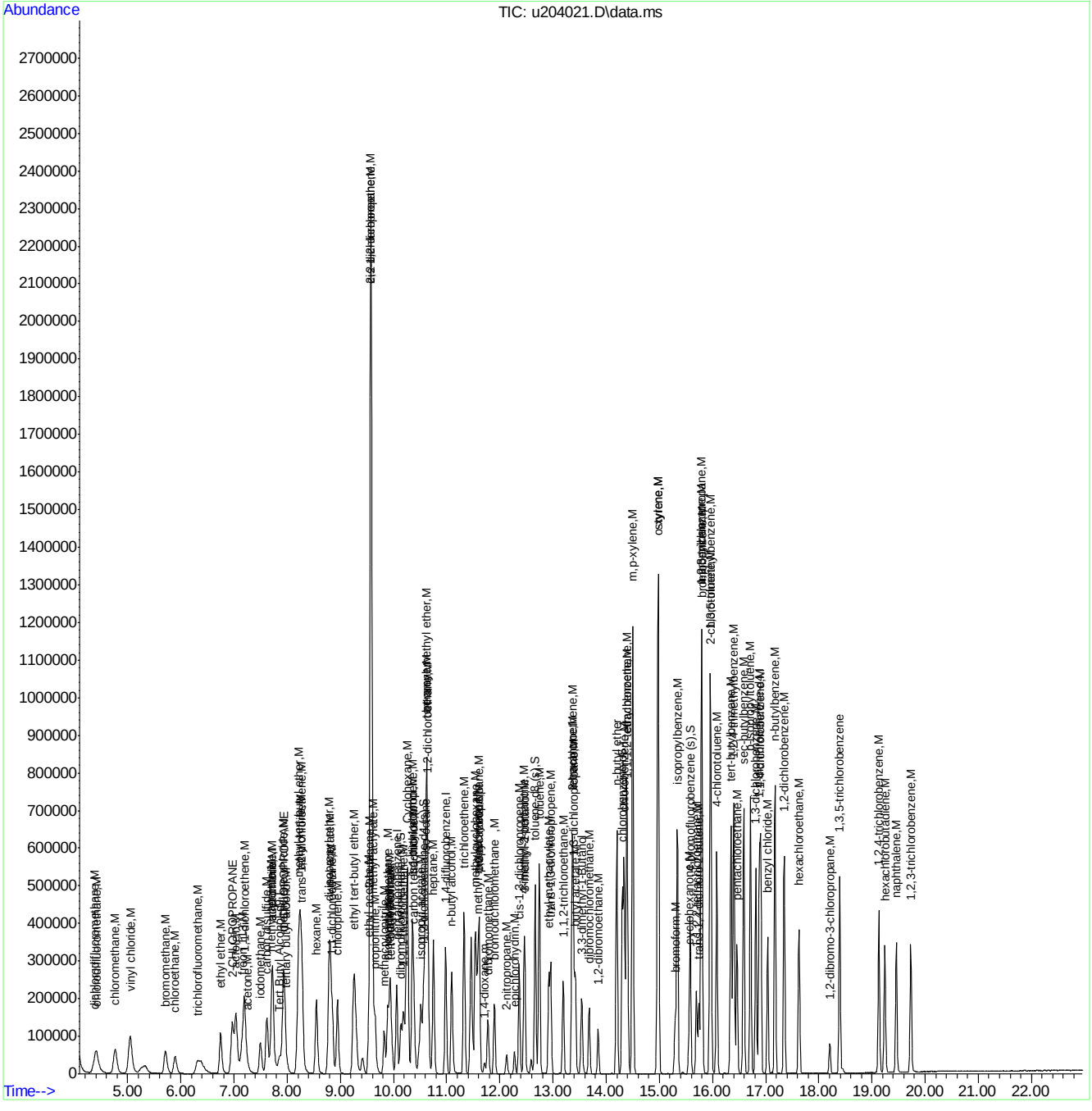
7

SGS ACCUTEST JC15518

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u204021.D
Acq On : 9 Mar 2016 3:45 pm
Operator : NicoleH1
Sample : JC15614-6MSD
Misc : ms99379,vu9378,5.0,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 10 11:46:30 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



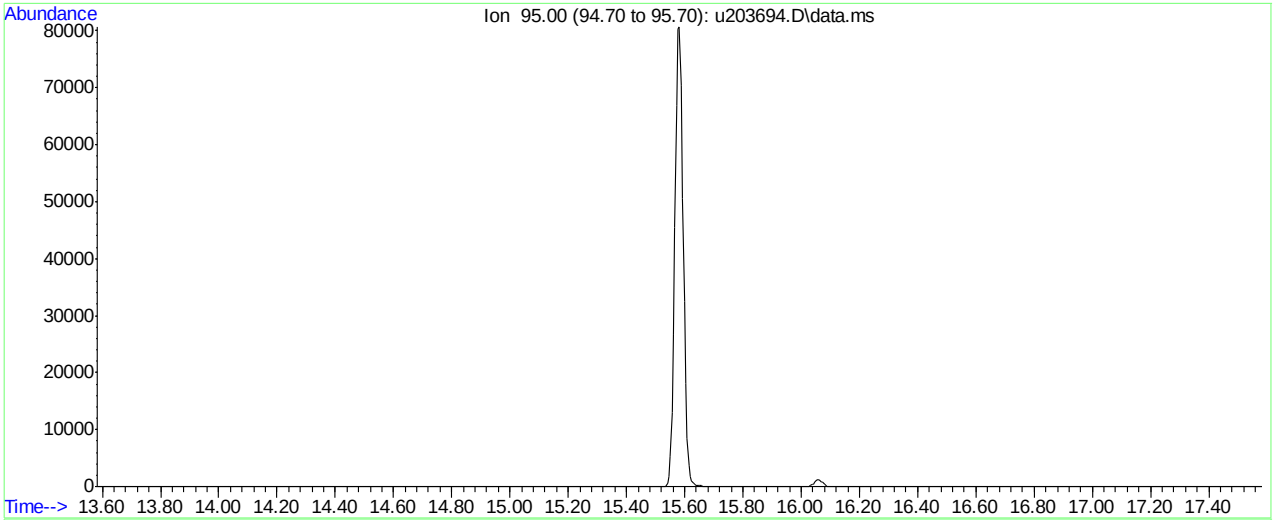
SGS ACCUTEST JC15518

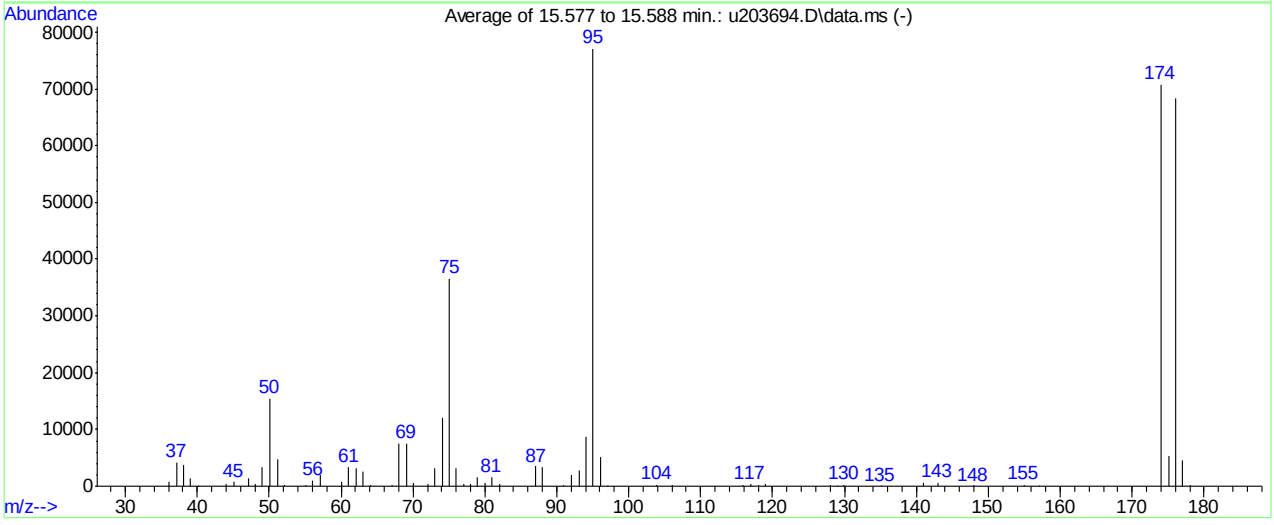
BFB

Data File : C:\msdchem\1\DATA\u203694.D
Acq On : 26 Feb 2016 10:26 am
Sample : bfb
Misc : ms98802,vu9367,5.0,,,,1
MS Integration Params: RTEINT.P

Vial: 1
Operator: NicoleH1
Inst : MSU
Multiplr: 1.00

Method : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title : SW-846 8260C, ZB624 60m x 250um x 1.40um





AutoFind: Scans 2197, 2198, 2199; Background Corrected with Scan 2187

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	15488	PASS
75	95	30	60	47.5	36613	PASS
95	95	100	100	100.0	77106	PASS
96	95	5	9	6.7	5147	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.7	70741	PASS
175	174	5	9	7.5	5299	PASS
176	174	95	101	96.5	68253	PASS
177	176	5	9	6.7	4560	PASS

u203694.D MU9367.M Mon Feb 29 09:09:53 2016 U_CORE

Average of 15.577 to 15.588 min.: u203694.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	810	51.15	4741	68.05	7472	80.00	562
37.10	4198	52.15	222	69.05	7520	80.95	1679
38.15	3787	55.10	207	70.05	555	82.00	364
39.10	1449	56.10	1064	72.05	405	87.05	3542
40.05	14	57.10	1909	73.05	3205	88.05	3415
44.05	463	60.05	717	74.05	12011	91.00	259
45.10	705	61.05	3435	75.05	36613	92.05	1940
47.10	1349	62.10	3241	76.05	3176	93.05	2861
48.10	483	63.05	2501	77.05	477	94.10	8706
49.05	3330	64.10	248	78.00	317	95.05	77106
50.10	15488	67.15	180	78.95	1617	96.05	5147

Average of 15.577 to 15.588 min.: u203694.D\data.ms
bfb
Modified:subtracted

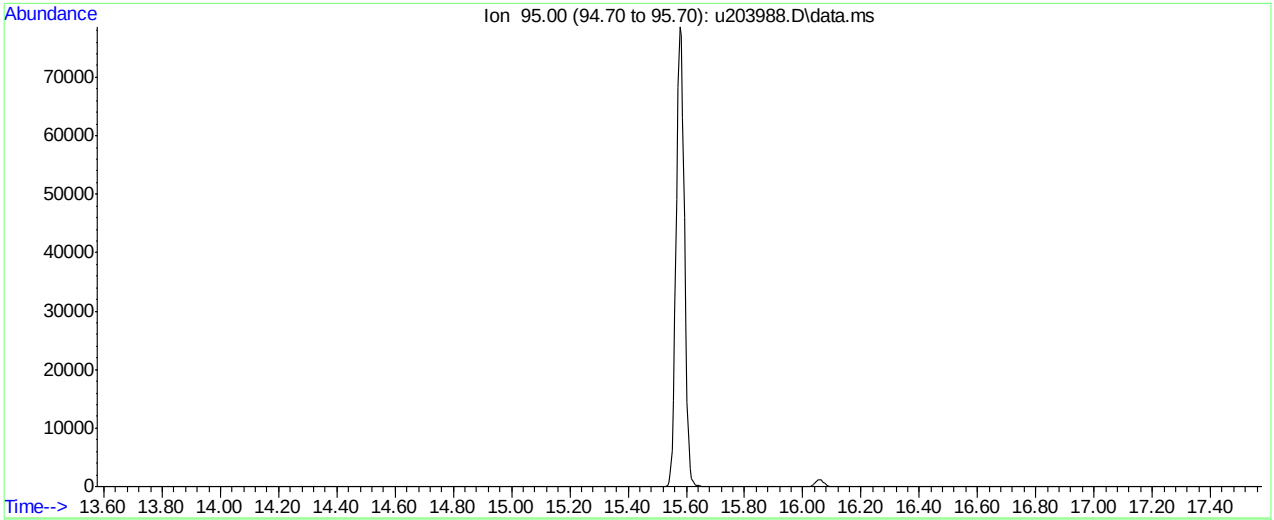
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.05	63	140.95	621				
103.95	265	142.95	658				
106.00	235	147.95	179				
115.95	247	154.95	218				
116.95	363	156.95	52				
118.00	227	174.00	70741				
119.00	350	175.05	5299				
128.00	254	176.00	68253				
128.95	56	176.95	4560				
129.95	299	178.05	111				
135.05	51						

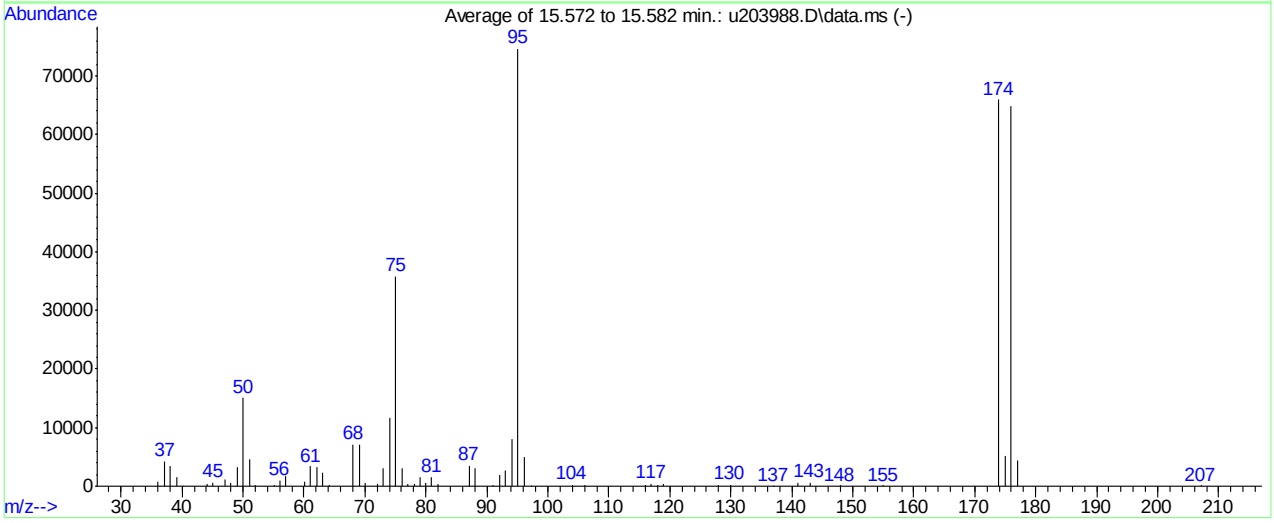
BFB

Data File : C:\msdchem\1\DATA\U-core\u203988.D
Acq On : 8 Mar 2016 12:26 pm
Sample : BFB
Misc : ms99238,vu9377,5.0,,,,1
MS Integration Params: RTEINT.P

Vial: 1
Operator: NicoleH1
Inst : MSU
Multiplr: 1.00

Method : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title : SW-846 8260C, ZB624 60m x 250um x 1.40um





AutoFind: Scans 2196, 2197, 2198; Background Corrected with Scan 2186

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	15062	PASS
75	95	30	60	47.9	35789	PASS
95	95	100	100	100.0	74701	PASS
96	95	5	9	6.6	4942	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	88.3	65930	PASS
175	174	5	9	7.8	5133	PASS
176	174	95	101	98.3	64842	PASS
177	176	5	9	6.7	4319	PASS

u203988.D MU9367.M Wed Mar 09 10:18:13 2016 RPT1

Average of 15.572 to 15.582 min.: u203988.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	845	51.10	4557	69.05	7149	80.95	1594
37.15	4277	52.10	199	70.05	537	82.00	334
38.10	3526	55.05	222	72.10	394	87.05	3490
39.10	1485	56.05	1052	73.05	3153	88.05	3118
40.05	22	57.05	1823	74.05	11688	91.00	247
44.05	417	60.05	696	75.05	35789	92.05	1845
45.10	671	61.05	3357	76.10	3094	93.05	2726
47.05	1204	62.05	3170	77.00	459	94.05	7977
48.05	519	63.05	2335	78.10	329	95.05	74701
49.05	3196	64.10	227	78.95	1524	96.05	4942
50.05	15062	68.05	7171	80.00	513	97.15	56

Average of 15.572 to 15.582 min.: u203988.D\data.ms
BFB
Modified:subtracted

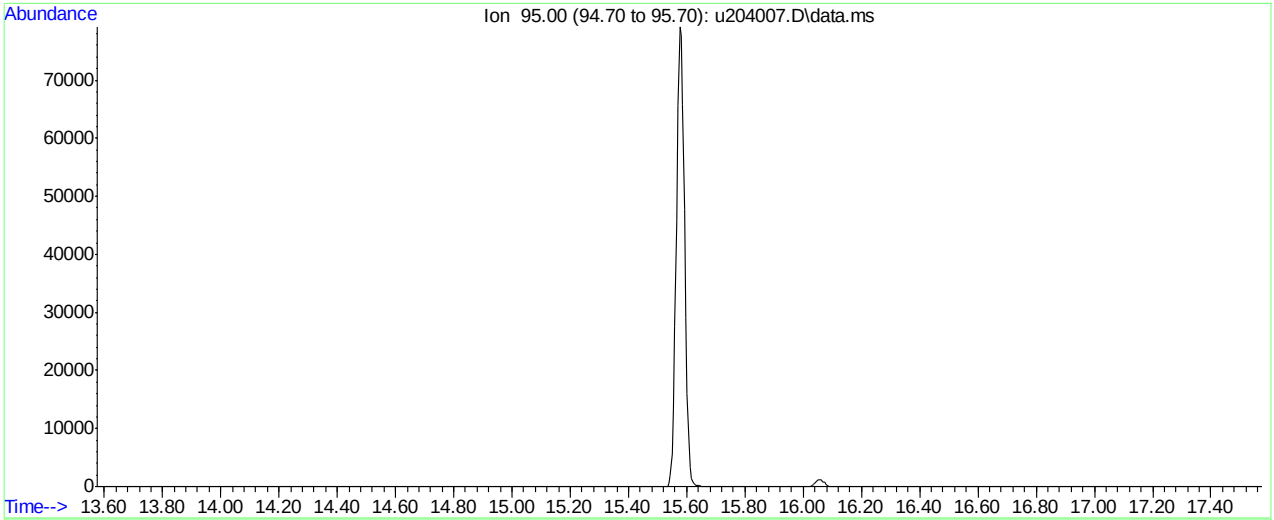
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.95	284	147.95	174				
106.00	242	155.00	181				
116.00	228	173.95	65930				
116.95	408	175.05	5133				
118.00	237	175.95	64842				
118.95	347	177.00	4319				
127.95	237	207.10	174				
129.95	268						
136.95	55						
140.90	558						
142.95	642						

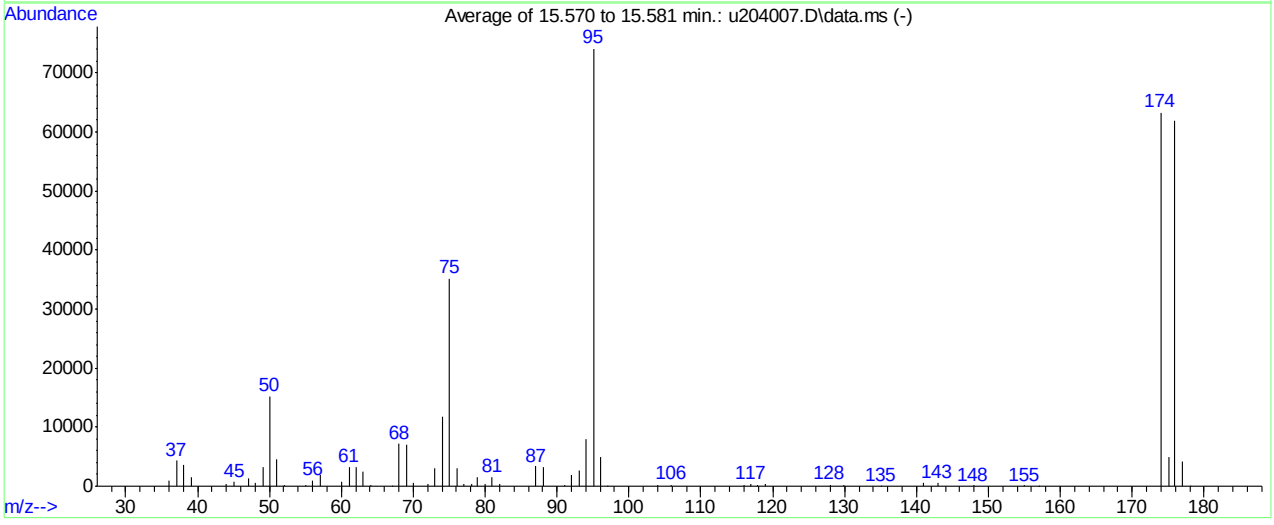
BFB

Data File : C:\msdchem\1\DATA\u204007.D
Acq On : 9 Mar 2016 8:22 am
Sample : BFB
Misc : ms99351,vu9378,5.0,,,,1
MS Integration Params: RTEINT.P

Vial: 1
Operator: NicoleH1
Inst : MSU
Multiplr: 1.00

Method : C:\msdchem\1\METHODS\MU9367.M (RTE Integrator)
Title : SW-846 8260C, ZB624 60m x 250um x 1.40um





AutoFind: Scans 2196, 2197, 2198; Background Corrected with Scan 2187

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	15200	PASS
75	95	30	60	47.5	35221	PASS
95	95	100	100	100.0	74136	PASS
96	95	5	9	6.7	4985	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	85.4	63277	PASS
175	174	5	9	7.7	4891	PASS
176	174	95	101	97.9	61952	PASS
177	176	5	9	6.7	4127	PASS

u204007.D MU9367.M Wed Mar 09 13:06:26 2016 U_CORE

Average of 15.570 to 15.581 min.: u204007.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	878	52.10	216	69.05	7076	80.95	1569
37.10	4318	55.05	194	70.05	546	81.95	350
38.10	3681	56.05	995	72.10	399	87.05	3418
39.10	1495	57.05	1838	73.05	3047	88.05	3144
44.05	362	60.05	724	74.05	11734	91.00	248
45.10	680	61.05	3326	75.05	35221	92.05	1817
47.05	1324	62.05	3304	76.05	3082	93.05	2741
48.05	507	63.05	2426	77.05	479	94.05	7894
49.10	3216	64.10	230	78.05	347	95.05	74136
50.05	15200	67.05	75	78.95	1570	96.05	4985
51.05	4625	68.05	7187	80.00	459	97.05	54

Average of 15.570 to 15.581 min.: u204007.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.00	234	147.90	110				
105.95	255	155.00	128				
115.95	226	156.95	62				
117.00	379	173.95	63277				
117.90	213	175.05	4891				
119.00	306	175.95	61952				
127.95	237	176.95	4127				
129.90	236	178.05	54				
135.05	52						
140.95	546						
142.95	562						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203695.D
Acq On : 26 Feb 2016 11:10 am
Operator : NicoleH1
Sample : ic9367-0.2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 29 09:14:20 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	124319	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	253177	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	349455	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	322032	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	173963	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.131	113	103970	53.50	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 107.00%			
57) 1,2-dichloroethane-d4 (s)	10.554	65	125070	52.90	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.80%			
88) toluene-d8 (s)	12.661	98	417646	44.83	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.66%			
114) 4-bromofluorobenzene (s)	15.579	95	160573	44.14	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 88.28%			

Target Compounds

						Qvalue
33) carbon disulfide	7.627	76	1311	0.20	ug/L	77
37) methyl tert butyl ether	8.217	73	1169	0.18	ug/L #	51
39) di-isopropyl ether	8.787	45	1852	0.22	ug/L #	51
53) chloroform	9.927	83	641	0.18	ug/L	79
72) benzene	10.628	78	1913	0.18	ug/L	98
81) 2-chloroethyl vinyl ether	12.128	63	1104	0.68	ug/L	79
86) bromodichloromethane	11.893	83	456	0.14	ug/L	91
90) toluene	12.740	92	1003	0.16	ug/L	92
92) trans-1,3-dichloropropene	12.959	75	620	0.16	ug/L	82
105) chlorobenzene	14.334	112	1215	0.17	ug/L	80
107) ethylbenzene	14.381	91	2244	0.19	ug/L	87
108) m,p-xylene	14.502	106	1507	0.33	ug/L	85
109) o-xylene	14.967	106	700	0.15	ug/L	90
110) styrene	14.983	104	1227	0.17	ug/L	88
113) isopropylbenzene	15.338	105	1798	0.15	ug/L	84
115) bromobenzene	15.809	156	540	0.17	ug/L	95
116) 1,1,2,2-tetrachloroethane	15.699	83	458	0.14	ug/L	96
119) n-propylbenzene	15.798	91	2332	0.16	ug/L	93
121) 4-chlorotoluene	16.080	91	1664	0.18	ug/L	85
123) 1,3,5-trimethylbenzene	15.955	105	1544	0.15	ug/L	85
124) tert-butylbenzene	16.347	119	1267	0.14	ug/L	96
126) 1,2,4-trimethylbenzene	16.405	105	1756	0.17	ug/L	96
128) sec-butylbenzene	16.588	105	1955	0.15	ug/L	94
129) 1,3-dichlorobenzene	16.818	146	1071	0.17	ug/L	95
130) p-isopropyltoluene	16.713	119	1672	0.15	ug/L	96
132) benzyl chloride	17.042	91	1112	0.18	ug/L	56
133) 1,2-dichlorobenzene	17.351	146	999	0.17	ug/L	92
135) n-butylbenzene	17.178	92	829	0.15	ug/L	91
141) naphthalene	19.463	128	1460	0.20	ug/L	74

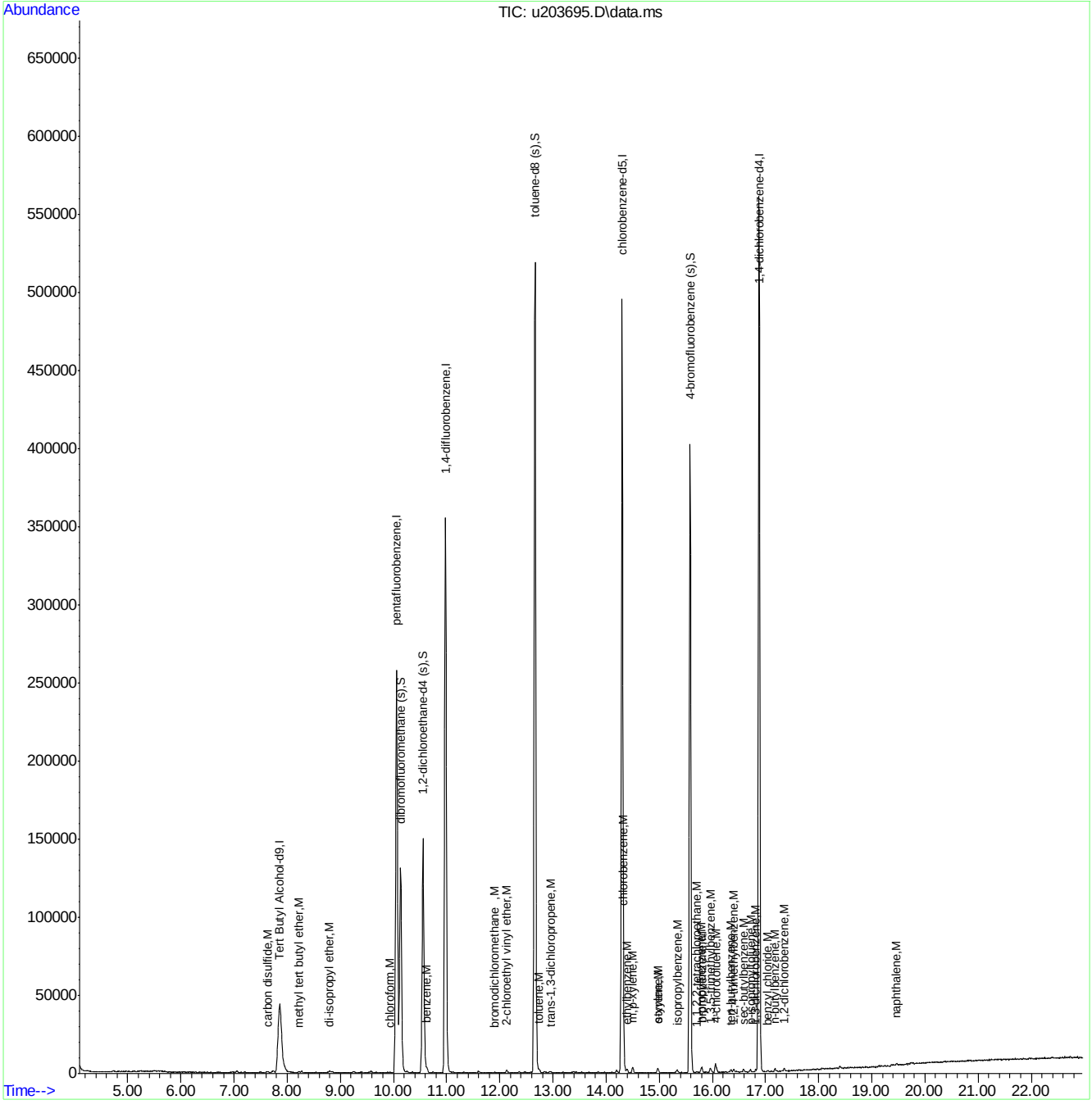
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203695.D
Acq On : 26 Feb 2016 11:10 am
Operator : NicoleH1
Sample : ic9367-0.2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 29 09:14:20 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



MU9367.M Thu Mar 03 10:06:47 2016 U_CORE

Page: 2

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203696.D
Acq On : 26 Feb 2016 11:39 am
Operator : NicoleH1
Sample : ic9367-0.5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 29 09:18:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	122337	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	255312	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	352633	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	325272	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	175004	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.136	113	103546	52.84	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.68%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	124341	52.15	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.30%			
88) toluene-d8 (s)	12.661	98	422744	44.97	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.94%			
114) 4-bromofluorobenzene (s)	15.578	95	160563	43.88	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 87.76%			

Target Compounds						Qvalue
28) 1,1-dichloroethene	7.198	96	724	0.42	ug/L #	69
33) carbon disulfide	7.606	76	3621	0.55	ug/L	80
37) methyl tert butyl ether	8.223	73	3359	0.53	ug/L	62
39) di-isopropyl ether	8.787	45	5078	0.59	ug/L #	64
40) ethyl tert-butyl ether	9.252	59	4200	0.57	ug/L	95
42) 1,1-dichloroethane	8.839	63	2064	0.50	ug/L	79
44) acrylonitrile	8.259	53	2323	2.54	ug/L	92
53) chloroform	9.932	83	1805	0.50	ug/L	94
55) iso-butyl alcohol	10.361	43	540	4.69	ug/L	81
59) methacrylonitrile	9.828	41	681	0.40	ug/L #	32
62) tert-amyl methyl ether	10.633	87	645	0.45	ug/L #	63
66) epichlorohydrin	12.285	57	465	1.69	ug/L	54
72) benzene	10.627	78	4671	0.44	ug/L	88
74) isopropyl acetate	10.518	43	2692	0.46	ug/L	88
75) 1,2-dichloroethane	10.643	62	1560	0.46	ug/L	93
80) 2-nitropropane	12.128	41	433	0.39	ug/L #	58
81) 2-chloroethyl vinyl ether	12.128	63	3597	2.19	ug/L	97
83) 1,2-dichloropropane	11.605	63	1319	0.45	ug/L	93
85) dibromomethane	11.778	93	511	0.34	ug/L	82
86) bromodichloromethane	11.898	83	1488	0.45	ug/L	86
87) cis-1,3-dichloropropene	12.368	75	1840	0.41	ug/L	82
90) toluene	12.745	92	2717	0.43	ug/L	98
92) trans-1,3-dichloropropene	12.959	75	1640	0.41	ug/L	89
94) 1,1,2-trichloroethane	13.189	83	747	0.38	ug/L	95
98) tetrachloroethene	13.367	164	809	0.36	ug/L	91
99) 1,3-dichloropropane	13.388	76	1796	0.46	ug/L	84
100) butyl acetate	13.424	56	695	0.37	ug/L #	63
101) dibromochloromethane	13.681	129	1056	0.40	ug/L	87
104) n-butyl ether	14.203	57	5113	0.40	ug/L #	94
105) chlorobenzene	14.334	112	3102	0.44	ug/L	82
107) ethylbenzene	14.386	91	5547	0.45	ug/L	98
108) m,p-xylene	14.507	106	4051	0.87	ug/L	94
109) o-xylene	14.967	106	1864	0.41	ug/L	96

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203696.D
Acq On : 26 Feb 2016 11:39 am
Operator : NicoleH1
Sample : ic9367-0.5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 29 09:18:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) styrene	14.982	104	2980	0.40 ug/L	90
113) isopropylbenzene	15.338	105	5053	0.42 ug/L	99
115) bromobenzene	15.808	156	1438	0.44 ug/L	95
116) 1,1,2,2-tetrachloroethane	15.704	83	1405	0.43 ug/L	89
119) n-propylbenzene	15.798	91	6191	0.42 ug/L	93
120) 2-chlorotoluene	15.976	126	1226	0.41 ug/L #	72
121) 4-chlorotoluene	16.086	91	3952	0.43 ug/L	98
123) 1,3,5-trimethylbenzene	15.955	105	4385	0.43 ug/L	95
124) tert-butylbenzene	16.347	119	3962	0.44 ug/L	98
125) pentachloroethane	16.462	167	678	0.33 ug/L #	70
126) 1,2,4-trimethylbenzene	16.404	105	4392	0.42 ug/L	92
128) sec-butylbenzene	16.587	105	5621	0.43 ug/L	97
129) 1,3-dichlorobenzene	16.823	146	2804	0.44 ug/L	97
130) p-isopropyltoluene	16.713	119	4759	0.43 ug/L	96
131) 1,4-dichlorobenzene	16.912	146	2913	0.45 ug/L	90
132) benzyl chloride	17.042	91	3056	0.49 ug/L	95
133) 1,2-dichlorobenzene	17.351	146	2516	0.42 ug/L	98
135) n-butylbenzene	17.178	92	2419	0.42 ug/L	91
138) 1,3,5-trichlorobenzene	18.396	180	1927	0.40 ug/L	99
139) 1,2,4-trichlorobenzene	19.133	180	1449	0.38 ug/L	96
141) naphthalene	19.463	128	2683	0.36 ug/L	73

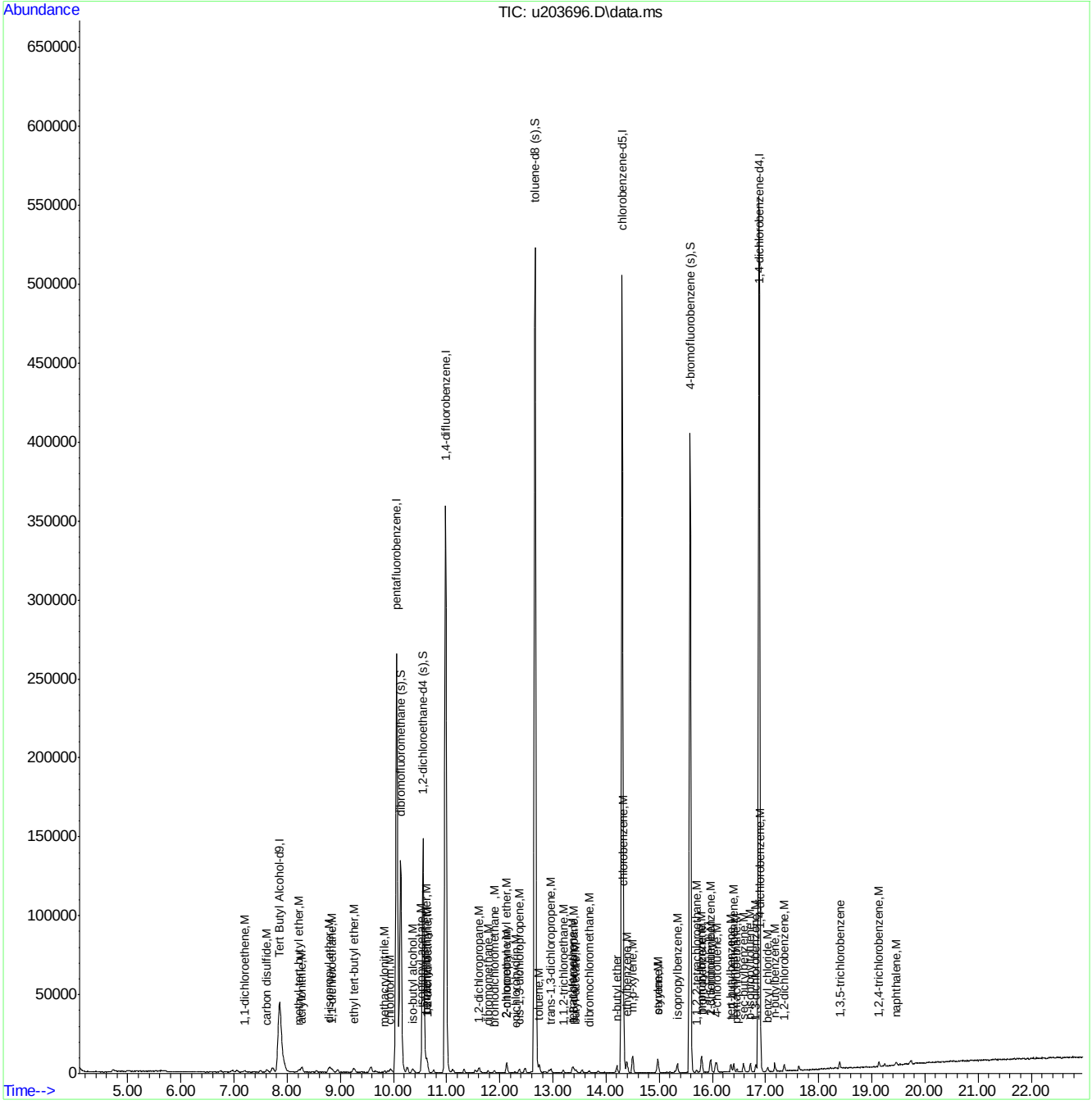
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203696.D
Acq On : 26 Feb 2016 11:39 am
Operator : NicoleH1
Sample : ic9367-0.5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 29 09:18:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203697.D
Acq On : 26 Feb 2016 12:08 pm
Operator : NicoleH1
Sample : ic9367-1
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 29 09:21:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.857	65	127332	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	260422	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	361342	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	329743	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	174229	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.136	113	104943	52.50	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.00%			
57) 1,2-dichloroethane-d4 (s)	10.560	65	127614	52.47	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.94%			
88) toluene-d8 (s)	12.661	98	432864	44.93	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.86%			
114) 4-bromofluorobenzene (s)	15.584	95	162303	44.55	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 89.10%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.951	59	1241	4.35	ug/L #	5
11) chlorodifluoromethane	4.401	51	2956	1.14	ug/L	66
12) dichlorodifluoromethane	4.364	85	2875	1.25	ug/L #	48
15) chloromethane	4.736	50	6167	1.60	ug/L	90
16) vinyl chloride	5.007	62	4894	1.57	ug/L	90
19) chloroethane	5.896	64	2543	1.50	ug/L	98
23) ethyl ether	6.738	74	1455	1.18	ug/L	91
24) 2-CHLOROPROPANE	6.968	43	5651	1.19	ug/L #	47
27) acrolein	7.036	56	641894	1223.40	ug/L	98
28) 1,1-dichloroethene	7.198	96	2031	1.15	ug/L	96
30) allyl chloride	7.726	76	1541	1.07	ug/L	95
32) iodomethane	7.496	142	3961	1.15	ug/L	99
33) carbon disulfide	7.616	76	7950	1.17	ug/L	93
35) methylene chloride	7.930	84	2656	1.18	ug/L	99
36) methyl acetate	7.710	43	2149	1.04	ug/L #	65
37) methyl tert butyl ether	8.223	73	7882	1.21	ug/L	91
38) trans-1,2-dichloroethene	8.280	96	2489	1.19	ug/L	92
39) di-isopropyl ether	8.793	45	10301	1.17	ug/L #	72
40) ethyl tert-butyl ether	9.253	59	8689	1.15	ug/L	97
42) 1,1-dichloroethane	8.850	63	4981	1.18	ug/L	99
43) chloroprene	8.949	53	3595	1.04	ug/L	94
44) acrylonitrile	8.259	53	5739	6.16	ug/L	91
47) 2,2-dichloropropane	9.572	77	3571	1.15	ug/L	98
48) cis-1,2-dichloroethene	9.577	96	2669	1.15	ug/L	94
50) propionitrile	9.666	54	4337	12.11	ug/L	94
51) bromochloromethane	9.890	128	1188	1.11	ug/L #	81
52) tetrahydrofuran	9.932	42	1004	1.11	ug/L	68
53) chloroform	9.943	83	4297	1.17	ug/L	92
54) tert-butyl Formate	9.969	59	2176	1.07	ug/L #	79
55) iso-butyl alcohol	10.361	43	1425	12.13	ug/L	83
59) methacrylonitrile	9.838	41	1871	1.08	ug/L	97
60) 1,1,1-trichloroethane	10.178	97	3312	1.08	ug/L	93
62) tert-amyl methyl ether	10.633	87	1554	1.07	ug/L #	66

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203697.D
Acq On : 26 Feb 2016 12:08 pm
Operator : NicoleH1
Sample : ic9367-1
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 29 09:21:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) iso-octane	10.591	57	8641	1.09 ug/L	98
66) epichlorohydrin	12.280	57	1308	4.65 ug/L	93
67) n-butyl alcohol	11.109	56	3450	46.34 ug/L	86
69) carbon tetrachloride	10.382	117	2940	0.91 ug/L	95
70) 1,1-dichloropropene	10.356	75	3294	0.97 ug/L	95
72) benzene	10.622	78	10987	1.02 ug/L	96
73) heptane	10.748	57	1898	0.89 ug/L	94
74) isopropyl acetate	10.518	43	5747	0.97 ug/L	98
75) 1,2-dichloroethane	10.649	62	3571	1.02 ug/L	92
78) trichloroethene	11.328	95	2517	1.00 ug/L	96
79) methylcyclohexane	11.542	83	3625	0.88 ug/L	96
80) 2-nitropropane	12.128	41	1143	1.00 ug/L #	85
81) 2-chloroethyl vinyl ether	12.128	63	7748	4.60 ug/L	98
83) 1,2-dichloropropane	11.600	63	3051	1.02 ug/L	86
84) propyl acetate	11.621	73	368	0.75 ug/L	41
85) dibromomethane	11.778	93	1538	0.98 ug/L	90
86) bromodichloromethane	11.903	83	3557	1.04 ug/L	95
87) cis-1,3-dichloropropene	12.363	75	4676	1.02 ug/L	94
90) toluene	12.745	92	6590	1.01 ug/L	98
91) 3-methyl-1-butanol	12.478	55	2314	18.11 ug/L	93
92) trans-1,3-dichloropropene	12.964	75	4130	1.01 ug/L	94
93) ethyl methacrylate	12.923	69	3227	0.92 ug/L	98
94) 1,1,2-trichloroethane	13.195	83	2067	1.02 ug/L	95
97) cyclohexanone	15.563	55	2198	20.93 ug/L	97
98) tetrachloroethene	13.367	164	2174	0.97 ug/L	96
99) 1,3-dichloropropane	13.388	76	4278	1.07 ug/L	96
100) butyl acetate	13.425	56	1804	0.96 ug/L #	81
101) dibromochloromethane	13.681	129	2674	1.00 ug/L	95
102) 1,2-dibromoethane	13.848	107	2272	0.97 ug/L	93
104) n-butyl ether	14.198	57	12753	0.98 ug/L #	97
105) chlorobenzene	14.339	112	7221	1.00 ug/L	84
106) 1,1,1,2-tetrachloroethane	14.402	131	2582	0.97 ug/L	93
107) ethylbenzene	14.387	91	12376	1.00 ug/L	98
108) m,p-xylene	14.502	106	9474	2.00 ug/L	94
109) o-xylene	14.967	106	4661	1.01 ug/L	88
110) styrene	14.983	104	7486	0.99 ug/L	98
111) bromoform	15.301	173	1775	0.88 ug/L	92
113) isopropylbenzene	15.338	105	12001	0.99 ug/L	98
115) bromobenzene	15.809	156	3414	1.05 ug/L	91
116) 1,1,2,2-tetrachloroethane	15.699	83	3311	1.02 ug/L	98
118) 1,2,3-trichloropropane	15.788	110	677	0.83 ug/L	98
119) n-propylbenzene	15.793	91	14112	0.97 ug/L	98
120) 2-chlorotoluene	15.976	126	3124	1.06 ug/L	87
121) 4-chlorotoluene	16.080	91	9245	1.01 ug/L	95
123) 1,3,5-trimethylbenzene	15.960	105	10006	0.98 ug/L	97
124) tert-butylbenzene	16.352	119	8622	0.95 ug/L	98
125) pentachloroethane	16.462	167	2002	0.96 ug/L	96
126) 1,2,4-trimethylbenzene	16.405	105	10266	0.98 ug/L	94
128) sec-butylbenzene	16.587	105	12636	0.97 ug/L	98
129) 1,3-dichlorobenzene	16.818	146	6077	0.96 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203697.D
Acq On : 26 Feb 2016 12:08 pm
Operator : NicoleH1
Sample : ic9367-1
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 29 09:21:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
130) p-isopropyltoluene	16.718	119	10494	0.94 ug/L	99
131) 1,4-dichlorobenzene	16.906	146	6417	1.00 ug/L	90
132) benzyl chloride	17.042	91	6015	0.96 ug/L	98
133) 1,2-dichlorobenzene	17.351	146	5811	0.97 ug/L	98
135) n-butylbenzene	17.178	92	5156	0.90 ug/L	92
137) 1,2-dibromo-3-chloropr...	18.203	157	430	0.72 ug/L	92
138) 1,3,5-trichlorobenzene	18.396	180	4385	0.92 ug/L	96
139) 1,2,4-trichlorobenzene	19.134	180	3328	0.88 ug/L	88
140) hexachlorobutadiene	19.243	225	1980	0.94 ug/L	92
141) naphthalene	19.463	128	6345	0.86 ug/L	98
143) 1,2,3-trichlorobenzene	19.735	180	2517	0.86 ug/L	96
144) hexachloroethane	17.633	201	1761	0.88 ug/L	97

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

7.6.3

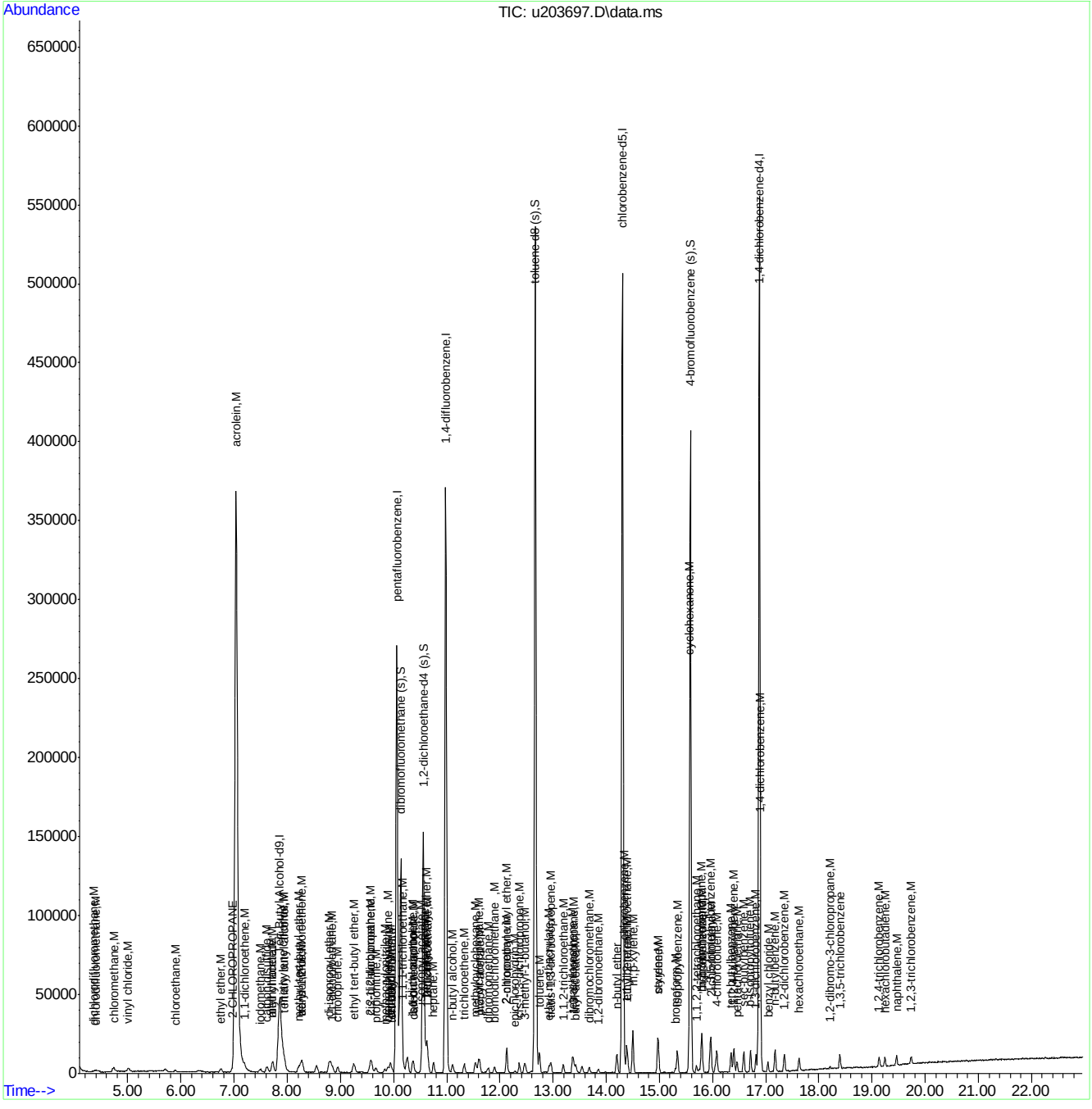
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203697.D
Acq On : 26 Feb 2016 12:08 pm
Operator : NicoleH1
Sample : ic9367-1
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 29 09:21:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



MU9367.M Thu Mar 03 10:06:52 2016 U_CORE

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203698.D
Acq On : 26 Feb 2016 12:38 pm
Operator : NicoleH1
Sample : ic9367-2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 29 09:25:39 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.863	65	124239	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	253524	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	351067	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	322600	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.882	152	175210	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.138	113	102546	52.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.40%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	123581	52.20	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.40%			
88) toluene-d8 (s)	12.663	98	419906	44.86	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.72%			
114) 4-bromofluorobenzene (s)	15.580	95	161938	44.20	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 88.40%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.963	59	2457	8.82	ug/L	99
4) 1,4-dioxane	11.722	88	762	40.93	ug/L #	84
11) chlorodifluoromethane	4.402	51	4474	1.77	ug/L	78
12) dichlorodifluoromethane	4.366	85	4073	1.82	ug/L	93
15) chloromethane	4.732	50	8192	2.19	ug/L	95
16) vinyl chloride	5.009	62	6949	2.29	ug/L	91
18) bromomethane	5.694	94	3626	2.16	ug/L	88
19) chloroethane	5.892	64	3848	2.33	ug/L	91
20) trichlorofluoromethane	6.332	101	6212	2.15	ug/L	81
23) ethyl ether	6.750	74	1993	1.66	ug/L	91
24) 2-CHLOROPROPANE	6.969	43	7541	1.63	ug/L #	47
27) acrolein	7.032	56	1254718	2456.45	ug/L	100
28) 1,1-dichloroethene	7.194	96	2710	1.57	ug/L	88
29) acetone	7.267	58	379	2.03	ug/L #	1
30) allyl chloride	7.717	76	2013	1.44	ug/L	79
31) acetonitrile	7.712	40	5684	23.94	ug/L #	39
32) iodomethane	7.492	142	5161	1.53	ug/L	98
33) carbon disulfide	7.612	76	10495	1.59	ug/L	97
35) methylene chloride	7.916	84	3844	1.76	ug/L	90
36) methyl acetate	7.701	43	3669	1.82	ug/L #	82
37) methyl tert butyl ether	8.224	73	10988	1.73	ug/L	97
38) trans-1,2-dichloroethene	8.276	96	3133	1.54	ug/L	99
39) di-isopropyl ether	8.789	45	16605	1.93	ug/L #	66
40) ethyl tert-butyl ether	9.259	59	13938	1.90	ug/L	98
42) 1,1-dichloroethane	8.846	63	6545	1.59	ug/L	96
43) chloroprene	8.940	53	5997	1.77	ug/L	96
44) acrylonitrile	8.256	53	8102	8.93	ug/L	97
47) 2,2-dichloropropane	9.578	77	4863	1.62	ug/L	98
48) cis-1,2-dichloroethene	9.578	96	3587	1.59	ug/L	93
50) propionitrile	9.657	54	6430	18.44	ug/L	86
51) bromochloromethane	9.892	128	1658	1.60	ug/L	97
52) tetrahydrofuran	9.934	42	1475	1.68	ug/L	83
53) chloroform	9.939	83	5782	1.62	ug/L	88

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203698.D
Acq On : 26 Feb 2016 12:38 pm
Operator : NicoleH1
Sample : ic9367-2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 29 09:25:39 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) tert-butyl Formate	9.960	59	3471	1.76 ug/L #	94
55) iso-butyl alcohol	10.357	43	2302	20.13 ug/L	90
58) freon 113	7.158	151	1951	1.47 ug/L #	45
59) methacrylonitrile	9.840	41	2847	1.68 ug/L	97
60) 1,1,1-trichloroethane	10.190	97	4387	1.47 ug/L	89
62) tert-amyl methyl ether	10.624	87	2663	1.88 ug/L #	80
63) iso-octane	10.587	57	14154	1.84 ug/L	97
66) epichlorohydrin	12.276	57	2216	8.11 ug/L	99
67) n-butyl alcohol	11.105	56	6337	87.61 ug/L	99
69) carbon tetrachloride	10.389	117	4040	1.29 ug/L	96
70) 1,1-dichloropropene	10.357	75	4254	1.28 ug/L	93
71) hexane	8.548	57	4916	1.40 ug/L	94
72) benzene	10.624	78	14423	1.38 ug/L	96
73) heptane	10.755	57	2916	1.40 ug/L	97
74) isopropyl acetate	10.519	43	9126	1.58 ug/L	99
75) 1,2-dichloroethane	10.645	62	5019	1.48 ug/L	99
78) trichloroethene	11.330	95	3122	1.28 ug/L	85
79) methylcyclohexane	11.539	83	6147	1.54 ug/L	98
80) 2-nitropropane	12.129	41	1622	1.47 ug/L #	85
81) 2-chloroethyl vinyl ether	12.129	63	12543	7.66 ug/L	98
82) methyl methacrylate	11.586	100	841	1.33 ug/L #	37
83) 1,2-dichloropropane	11.607	63	4075	1.41 ug/L	98
84) propyl acetate	11.622	73	758	1.59 ug/L	94
85) dibromomethane	11.774	93	2159	1.42 ug/L	92
86) bromodichloromethane	11.899	83	4646	1.40 ug/L	99
87) cis-1,3-dichloropropene	12.365	75	6210	1.40 ug/L	99
89) 4-methyl-2-pentanone	12.459	58	1471	1.32 ug/L #	79
90) toluene	12.741	92	8563	1.35 ug/L	95
91) 3-methyl-1-butanol	12.475	55	4026	32.43 ug/L	95
92) trans-1,3-dichloropropene	12.961	75	5760	1.45 ug/L	97
93) ethyl methacrylate	12.929	69	4673	1.37 ug/L	99
94) 1,1,2-trichloroethane	13.191	83	2826	1.44 ug/L	96
97) cyclohexanone	15.564	55	2991	29.11 ug/L	97
98) tetrachloroethene	13.363	164	2817	1.28 ug/L	88
99) 1,3-dichloropropane	13.389	76	5850	1.50 ug/L	95
100) butyl acetate	13.426	56	2963	1.60 ug/L	90
101) dibromochloromethane	13.677	129	3683	1.41 ug/L	94
102) 1,2-dibromoethane	13.849	107	3242	1.41 ug/L	92
103) 3,3-dimethyl-1-Butanol	13.541	57	4425	16.33 ug/L #	98
104) n-butyl ether	14.200	57	16889	1.33 ug/L #	99
105) chlorobenzene	14.336	112	9698	1.38 ug/L	90
106) 1,1,1,2-tetrachloroethane	14.404	131	3553	1.37 ug/L	96
107) ethylbenzene	14.388	91	16197	1.34 ug/L	100
108) m,p-xylene	14.498	106	12376	2.67 ug/L	98
109) o-xylene	14.974	106	6203	1.37 ug/L	92
110) styrene	14.984	104	10179	1.37 ug/L	99
111) bromoform	15.298	173	2764	1.41 ug/L	95
113) isopropylbenzene	15.339	105	15884	1.30 ug/L	98
115) bromobenzene	15.810	156	4401	1.34 ug/L	93
116) 1,1,2,2-tetrachloroethane	15.700	83	4837	1.48 ug/L	98

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203698.D
Acq On : 26 Feb 2016 12:38 pm
Operator : NicoleH1
Sample : ic9367-2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 29 09:25:39 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
118) 1,2,3-trichloropropane	15.789	110	1155	1.40 ug/L	95
119) n-propylbenzene	15.794	91	18894	1.29 ug/L	97
120) 2-chlorotoluene	15.972	126	4070	1.37 ug/L	96
121) 4-chlorotoluene	16.082	91	12852	1.40 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	13347	1.30 ug/L	97
124) tert-butylbenzene	16.354	119	11430	1.26 ug/L	99
125) pentachloroethane	16.463	167	2663	1.28 ug/L	90
126) 1,2,4-trimethylbenzene	16.401	105	13764	1.30 ug/L	99
128) sec-butylbenzene	16.589	105	16668	1.27 ug/L	99
129) 1,3-dichlorobenzene	16.819	146	8510	1.34 ug/L	95
130) p-isopropyltoluene	16.714	119	14394	1.28 ug/L	99
131) 1,4-dichlorobenzene	16.908	146	8820	1.36 ug/L	94
132) benzyl chloride	17.039	91	9408	1.49 ug/L	100
133) 1,2-dichlorobenzene	17.352	146	8186	1.37 ug/L	97
135) n-butylbenzene	17.180	92	7107	1.24 ug/L	95
137) 1,2-dibromo-3-chloropr...	18.215	157	836	1.39 ug/L	87
138) 1,3,5-trichlorobenzene	18.398	180	6139	1.29 ug/L	98
139) 1,2,4-trichlorobenzene	19.135	180	4935	1.30 ug/L	92
140) hexachlorobutadiene	19.245	225	2758	1.30 ug/L	92
141) naphthalene	19.459	128	9324	1.25 ug/L	96
143) 1,2,3-trichlorobenzene	19.736	180	3885	1.33 ug/L	99
144) hexachloroethane	17.629	201	2564	1.28 ug/L	96

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

7.6.4

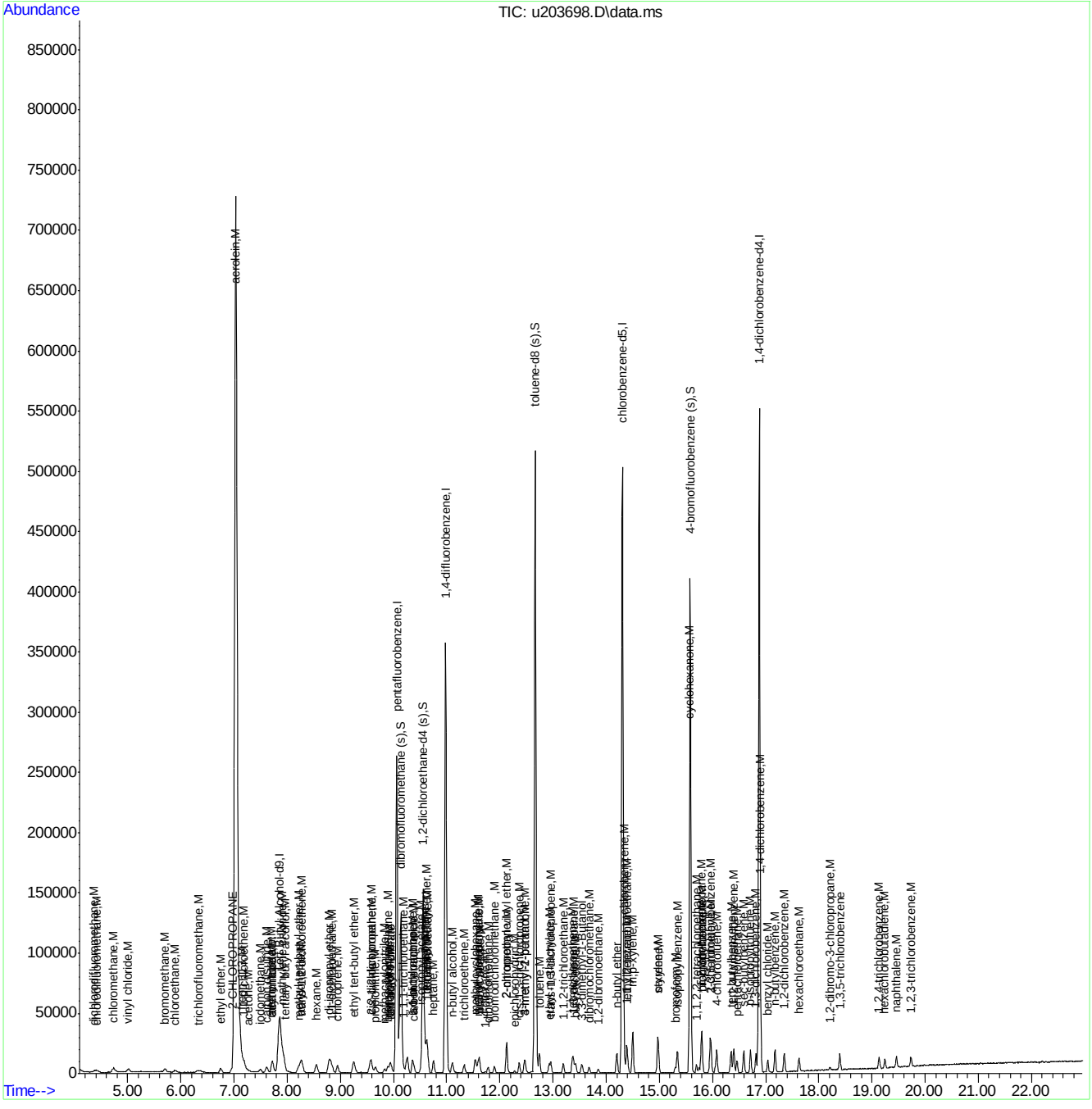
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203698.D
Acq On : 26 Feb 2016 12:38 pm
Operator : NicoleH1
Sample : ic9367-2
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 29 09:25:39 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



MU9367.M Thu Mar 03 10:06:55 2016 U_CORE

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203699.D
Acq On : 26 Feb 2016 1:07 pm
Operator : NicoleH1
Sample : ic9367-5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 29 09:27:54 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	130628	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	257829	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	358120	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	328955	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	179090	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	104840	52.97	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.94%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	127092	52.78	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.56%			
88) toluene-d8 (s)	12.662	98	428265	44.85	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.70%			
114) 4-bromofluorobenzene (s)	15.579	95	163454	43.65	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 87.30%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.967	59	6753	23.06	ug/L #	72
4) 1,4-dioxane	11.716	88	2423	123.78	ug/L	97
11) chlorodifluoromethane	4.412	51	12510	4.87	ug/L	98
12) dichlorodifluoromethane	4.391	85	12410	5.46	ug/L	94
15) chloromethane	4.737	50	20842	5.47	ug/L	98
16) vinyl chloride	5.008	62	18279	5.93	ug/L	96
18) bromomethane	5.704	94	9310	5.46	ug/L	97
19) chloroethane	5.897	64	9694	5.77	ug/L	99
20) trichlorofluoromethane	6.331	101	16851	5.74	ug/L	95
23) ethyl ether	6.744	74	6464	5.28	ug/L	97
24) 2-CHLOROPROPANE	6.969	43	25928	5.50	ug/L	98
27) acrolein	7.037	56	29351	56.50	ug/L	97
28) 1,1-dichloroethene	7.194	96	10222	5.82	ug/L	99
29) acetone	7.251	58	848	4.48	ug/L #	85
30) allyl chloride	7.727	76	7572	5.32	ug/L	96
31) acetonitrile	7.716	40	13732	56.87	ug/L	93
32) iodomethane	7.492	142	18300	5.35	ug/L	99
33) carbon disulfide	7.617	76	37663	5.62	ug/L	98
34) 1-CHLOROPROPANE	7.947	63	1018	4.94	ug/L #	47
35) methylene chloride	7.920	84	12140	5.47	ug/L	97
36) methyl acetate	7.706	43	9918	4.83	ug/L	93
37) methyl tert butyl ether	8.218	73	34392	5.33	ug/L	99
38) trans-1,2-dichloroethene	8.281	96	11351	5.50	ug/L	99
39) di-isopropyl ether	8.788	45	43604	5.00	ug/L	75
40) ethyl tert-butyl ether	9.254	59	36790	4.93	ug/L	99
41) 2-butanone	9.541	72	1239	4.89	ug/L #	90
42) 1,1-dichloroethane	8.846	63	22868	5.47	ug/L	96
43) chloroprene	8.940	53	16177	4.71	ug/L	99
44) acrylonitrile	8.255	53	25143	27.26	ug/L	96
45) vinyl acetate	8.814	86	1687	4.12	ug/L #	52
46) ethyl acetate	9.531	45	1635	4.45	ug/L #	96
47) 2,2-dichloropropane	9.578	77	17357	5.67	ug/L	97
48) cis-1,2-dichloroethene	9.578	96	12521	5.44	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203699.D
Acq On : 26 Feb 2016 1:07 pm
Operator : NicoleH1
Sample : ic9367-5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 29 09:27:54 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.625	85	1501	4.68 ug/L #	47
50) propionitrile	9.656	54	19609	55.29 ug/L	92
51) bromochloromethane	9.886	128	5789	5.49 ug/L	96
52) tetrahydrofuran	9.917	42	4983	5.58 ug/L	93
53) chloroform	9.933	83	19630	5.42 ug/L	98
54) tert-butyl Formate	9.959	59	9777	4.87 ug/L #	85
55) iso-butyl alcohol	10.357	43	6304	54.21 ug/L	88
58) freon 113	7.152	151	6597	4.88 ug/L	89
59) methacrylonitrile	9.829	41	8994	5.22 ug/L	98
60) 1,1,1-trichloroethane	10.184	97	16509	5.45 ug/L	99
62) tert-amyl methyl ether	10.628	87	7065	4.91 ug/L	93
63) iso-octane	10.592	57	42284	5.41 ug/L	100
66) epichlorohydrin	12.281	57	5832	20.92 ug/L	96
67) n-butyl alcohol	11.104	56	17562	238.00 ug/L	98
68) Cyclohexane	10.252	84	17981	4.55 ug/L	99
69) carbon tetrachloride	10.388	117	15238	4.77 ug/L	98
70) 1,1-dichloropropene	10.357	75	16172	4.78 ug/L	96
71) hexane	8.542	57	14889	4.16 ug/L	99
72) benzene	10.623	78	48784	4.57 ug/L	100
73) heptane	10.749	57	9262	4.37 ug/L	95
74) isopropyl acetate	10.513	43	24344	4.13 ug/L	97
75) 1,2-dichloroethane	10.644	62	15918	4.59 ug/L	98
78) trichloroethene	11.329	95	11732	4.72 ug/L	97
79) methylcyclohexane	11.538	83	17627	4.32 ug/L	100
80) 2-nitropropane	12.129	41	4769	4.23 ug/L #	93
81) 2-chloroethyl vinyl ether	12.124	63	33460	20.04 ug/L	99
82) methyl methacrylate	11.580	100	2753	4.28 ug/L #	58
83) 1,2-dichloropropane	11.606	63	13370	4.53 ug/L	98
84) propyl acetate	11.617	73	2141	4.42 ug/L	95
85) dibromomethane	11.773	93	6914	4.46 ug/L	95
86) bromodichloromethane	11.899	83	15752	4.65 ug/L	98
87) cis-1,3-dichloropropene	12.364	75	20781	4.58 ug/L	98
89) 4-methyl-2-pentanone	12.453	58	4989	4.37 ug/L	97
90) toluene	12.741	92	29493	4.56 ug/L	94
91) 3-methyl-1-butanol	12.469	55	11254	88.85 ug/L	100
92) trans-1,3-dichloropropene	12.955	75	18463	4.55 ug/L	97
93) ethyl methacrylate	12.924	69	14650	4.20 ug/L	98
94) 1,1,2-trichloroethane	13.195	83	8977	4.48 ug/L	98
95) 2-hexanone	13.363	58	4755	4.21 ug/L	99
97) cyclohexanone	15.558	55	7779	74.25 ug/L	92
98) tetrachloroethene	13.363	164	10298	4.58 ug/L	98
99) 1,3-dichloropropane	13.389	76	18697	4.70 ug/L	100
100) butyl acetate	13.425	56	8165	4.33 ug/L	92
101) dibromochloromethane	13.682	129	11955	4.48 ug/L	94
102) 1,2-dibromoethane	13.849	107	10310	4.41 ug/L	100
103) 3,3-dimethyl-1-Butanol	13.546	57	11937	43.19 ug/L #	99
104) n-butyl ether	14.199	57	58396	4.51 ug/L	98
105) chlorobenzene	14.340	112	32106	4.47 ug/L	91
106) 1,1,1,2-tetrachloroethane	14.403	131	11842	4.47 ug/L	93
107) ethylbenzene	14.387	91	56774	4.59 ug/L	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203699.D
Acq On : 26 Feb 2016 1:07 pm
Operator : NicoleH1
Sample : ic9367-5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 29 09:27:54 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	42484	8.98 ug/L	99
109) o-xylene	14.968	106	21396	4.63 ug/L	97
110) styrene	14.978	104	35152	4.64 ug/L	99
111) bromoform	15.297	173	8571	4.28 ug/L	99
113) isopropylbenzene	15.339	105	55796	4.48 ug/L	99
115) bromobenzene	15.809	156	14823	4.41 ug/L	97
116) 1,1,2,2-tetrachloroethane	15.694	83	14889	4.47 ug/L	94
117) trans-1,4-dichloro-2-b...	15.741	53	3748	3.74 ug/L	98
118) 1,2,3-trichloropropane	15.783	110	3505	4.17 ug/L	94
119) n-propylbenzene	15.794	91	67797	4.53 ug/L	100
120) 2-chlorotoluene	15.971	126	13790	4.54 ug/L	98
121) 4-chlorotoluene	16.081	91	41498	4.41 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	46664	4.43 ug/L	99
124) tert-butylbenzene	16.348	119	40260	4.33 ug/L	100
125) pentachloroethane	16.463	167	9175	4.30 ug/L	95
126) 1,2,4-trimethylbenzene	16.400	105	47250	4.37 ug/L	100
128) sec-butylbenzene	16.588	105	60203	4.49 ug/L	100
129) 1,3-dichlorobenzene	16.818	146	28407	4.36 ug/L	98
130) p-isopropyltoluene	16.714	119	50546	4.41 ug/L	99
131) 1,4-dichlorobenzene	16.907	146	28559	4.32 ug/L	99
132) benzyl chloride	17.038	91	24871	3.86 ug/L	97
133) 1,2-dichlorobenzene	17.352	146	26174	4.27 ug/L	98
135) n-butylbenzene	17.174	92	25941	4.42 ug/L	100
137) 1,2-dibromo-3-chloropr...	18.209	157	2403	3.92 ug/L	88
138) 1,3,5-trichlorobenzene	18.392	180	20469	4.20 ug/L	99
139) 1,2,4-trichlorobenzene	19.129	180	15438	3.97 ug/L	98
140) hexachlorobutadiene	19.244	225	10068	4.63 ug/L	96
141) naphthalene	19.459	128	29163	3.84 ug/L	99
143) 1,2,3-trichlorobenzene	19.736	180	12135	4.05 ug/L	99
144) hexachloroethane	17.629	201	9119	4.46 ug/L	96

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

7.6.5

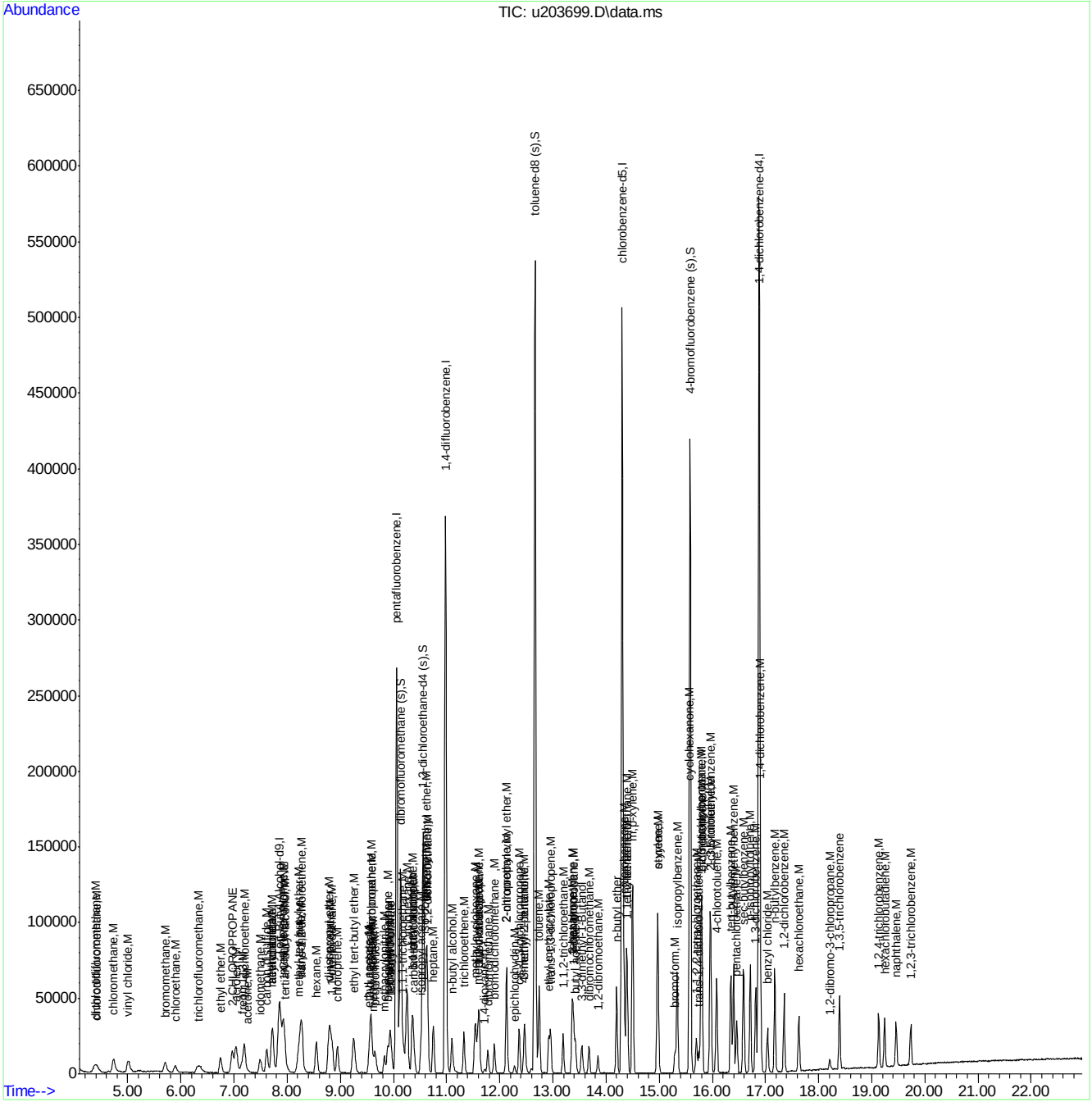
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203699.D
Acq On : 26 Feb 2016 1:07 pm
Operator : NicoleH1
Sample : ic9367-5
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 29 09:27:54 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203700.D
Acq On : 26 Feb 2016 1:37 pm
Operator : NicoleH1
Sample : ic9367-10
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 29 09:29:00 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.852	65	132708	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	255503	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	353951	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	327890	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	179845	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.136	113	104439	53.25	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.50%			
57) 1,2-dichloroethane-d4 (s)	10.554	65	126383	52.97	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.94%			
88) toluene-d8 (s)	12.667	98	426638	45.21	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 90.42%			
114) 4-bromofluorobenzene (s)	15.579	95	163966	43.60	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 87.20%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.972	59	16038	53.91	ug/L	97
4) 1,4-dioxane	11.720	88	6146	309.06	ug/L	99
11) chlorodifluoromethane	4.401	51	30080	11.81	ug/L	97
12) dichlorodifluoromethane	4.375	85	24131	10.71	ug/L	99
15) chloromethane	4.736	50	38895	10.30	ug/L	98
16) vinyl chloride	5.013	62	33357	10.92	ug/L	99
18) bromomethane	5.708	94	17511	10.36	ug/L	94
19) chloroethane	5.896	64	17968	10.80	ug/L	99
20) trichlorofluoromethane	6.335	101	31453	10.80	ug/L	96
23) ethyl ether	6.748	74	14303	11.80	ug/L	97
24) 2-CHLOROPROPANE	6.968	43	55487	11.88	ug/L	99
27) acrolein	7.036	56	53550	104.03	ug/L	96
28) 1,1-dichloroethene	7.198	96	21352	12.28	ug/L	97
29) acetone	7.256	58	2062	10.98	ug/L #	83
30) allyl chloride	7.721	76	16576	11.75	ug/L	98
31) acetonitrile	7.716	40	30073	125.69	ug/L	93
32) iodomethane	7.486	142	39633	11.68	ug/L	100
33) carbon disulfide	7.616	76	81583	12.28	ug/L	98
34) 1-CHLOROPROPANE	7.951	63	2280	11.16	ug/L	89
35) methylene chloride	7.925	84	26165	11.89	ug/L	95
36) methyl acetate	7.695	43	25126	12.34	ug/L	96
37) methyl tert butyl ether	8.217	73	73794	11.54	ug/L	100
38) trans-1,2-dichloroethene	8.280	96	24596	12.03	ug/L	98
39) di-isopropyl ether	8.787	45	102686	11.87	ug/L	76
40) ethyl tert-butyl ether	9.253	59	87005	11.76	ug/L	99
41) 2-butanone	9.540	72	2731	10.87	ug/L #	81
42) 1,1-dichloroethane	8.850	63	49520	11.96	ug/L	99
43) chloroprene	8.944	53	39178	11.50	ug/L	100
44) acrylonitrile	8.249	53	53907	58.97	ug/L	99
45) vinyl acetate	8.813	86	4310	10.63	ug/L #	75
46) ethyl acetate	9.535	45	4131	11.35	ug/L	91
47) 2,2-dichloropropane	9.572	77	37024	12.20	ug/L	97
48) cis-1,2-dichloroethene	9.577	96	26599	11.66	ug/L	96

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203700.D
Acq On : 26 Feb 2016 1:37 pm
Operator : NicoleH1
Sample : ic9367-10
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 29 09:29:00 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.619	85	3500	11.02 ug/L #	68
50) propionitrile	9.655	54	42297	120.34 ug/L	98
51) bromochloromethane	9.890	128	12627	12.07 ug/L	95
52) tetrahydrofuran	9.922	42	11005	12.44 ug/L	97
53) chloroform	9.932	83	42462	11.83 ug/L	99
54) tert-butyl Formate	9.964	59	22934	11.53 ug/L	98
55) iso-butyl alcohol	10.351	43	16003	138.86 ug/L	96
58) freon 113	7.161	151	15685	11.70 ug/L	92
59) methacrylonitrile	9.828	41	19324	11.33 ug/L	99
60) 1,1,1-trichloroethane	10.183	97	34639	11.54 ug/L	98
62) tert-amyl methyl ether	10.633	87	16713	11.71 ug/L	97
63) iso-octane	10.591	57	99228	12.81 ug/L	99
66) epichlorohydrin	12.274	57	14254	51.74 ug/L	98
67) n-butyl alcohol	11.098	56	43908	602.06 ug/L	99
68) Cyclohexane	10.251	84	37543	9.61 ug/L	99
69) carbon tetrachloride	10.382	117	32039	10.15 ug/L	99
70) 1,1-dichloropropene	10.356	75	34287	10.26 ug/L	100
71) hexane	8.547	57	35027	9.91 ug/L	96
72) benzene	10.622	78	103156	9.79 ug/L	99
73) heptane	10.748	57	22078	10.55 ug/L	98
74) isopropyl acetate	10.513	43	57489	9.87 ug/L	99
75) 1,2-dichloroethane	10.643	62	34173	9.98 ug/L	100
78) trichloroethene	11.328	95	24387	9.93 ug/L	98
79) methylcyclohexane	11.543	83	41286	10.23 ug/L	97
80) 2-nitropropane	12.128	41	11019	9.88 ug/L	95
81) 2-chloroethyl vinyl ether	12.128	63	82101	49.74 ug/L	98
82) methyl methacrylate	11.579	100	6081	9.57 ug/L #	79
83) 1,2-dichloropropane	11.605	63	29149	9.99 ug/L	97
84) propyl acetate	11.616	73	4943	10.31 ug/L	92
85) dibromomethane	11.778	93	14886	9.73 ug/L	95
86) bromodichloromethane	11.898	83	33837	10.11 ug/L	96
87) cis-1,3-dichloropropene	12.363	75	44008	9.82 ug/L	100
89) 4-methyl-2-pentanone	12.457	58	11019	9.77 ug/L	93
90) toluene	12.740	92	63265	9.89 ug/L	97
91) 3-methyl-1-butanol	12.468	55	28322	226.25 ug/L	99
92) trans-1,3-dichloropropene	12.954	75	40034	9.97 ug/L	99
93) ethyl methacrylate	12.923	69	32581	9.45 ug/L	98
94) 1,1,2-trichloroethane	13.189	83	19241	9.72 ug/L	98
95) 2-hexanone	13.362	58	10932	9.79 ug/L	94
97) cyclohexanone	15.558	55	14084	134.88 ug/L	97
98) tetrachloroethene	13.362	164	22110	9.88 ug/L	97
99) 1,3-dichloropropane	13.388	76	39878	10.05 ug/L	98
100) butyl acetate	13.425	56	19173	10.21 ug/L	97
101) dibromochloromethane	13.681	129	26118	9.82 ug/L	99
102) 1,2-dibromoethane	13.848	107	22386	9.61 ug/L	99
103) 3,3-dimethyl-1-Butanol	13.545	57	30439	110.49 ug/L	99
104) n-butyl ether	14.198	57	127650	9.90 ug/L	99
105) chlorobenzene	14.339	112	69524	9.72 ug/L	100
106) 1,1,1,2-tetrachloroethane	14.402	131	25835	9.78 ug/L	98
107) ethylbenzene	14.387	91	122816	9.97 ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203700.D
Acq On : 26 Feb 2016 1:37 pm
Operator : NicoleH1
Sample : ic9367-10
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 29 09:29:00 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	92958	19.72 ug/L	99
109) o-xylene	14.967	106	45636	9.91 ug/L	99
110) styrene	14.977	104	76619	10.15 ug/L	98
111) bromoform	15.296	173	18736	9.38 ug/L	98
113) isopropylbenzene	15.338	105	120770	9.66 ug/L	100
115) bromobenzene	15.803	156	32090	9.52 ug/L	94
116) 1,1,2,2-tetrachloroethane	15.699	83	32159	9.62 ug/L	98
117) trans-1,4-dichloro-2-b...	15.741	53	9389	9.32 ug/L	98
118) 1,2,3-trichloropropane	15.788	110	8279	9.81 ug/L	95
119) n-propylbenzene	15.793	91	146129	9.73 ug/L	99
120) 2-chlorotoluene	15.971	126	29908	9.80 ug/L	98
121) 4-chlorotoluene	16.080	91	90088	9.53 ug/L	100
123) 1,3,5-trimethylbenzene	15.955	105	102230	9.66 ug/L	100
124) tert-butylbenzene	16.347	119	87340	9.36 ug/L	97
125) pentachloroethane	16.462	167	20228	9.44 ug/L	98
126) 1,2,4-trimethylbenzene	16.399	105	104110	9.59 ug/L	100
128) sec-butylbenzene	16.588	105	133492	9.91 ug/L	99
129) 1,3-dichlorobenzene	16.818	146	61723	9.44 ug/L	99
130) p-isopropyltoluene	16.713	119	111995	9.74 ug/L	100
131) 1,4-dichlorobenzene	16.906	146	62136	9.35 ug/L	99
132) benzyl chloride	17.037	91	61072	9.43 ug/L	99
133) 1,2-dichlorobenzene	17.351	146	57421	9.33 ug/L	99
135) n-butylbenzene	17.178	92	58214	9.87 ug/L	98
137) 1,2-dibromo-3-chloropr...	18.213	157	5711	9.28 ug/L	95
138) 1,3,5-trichlorobenzene	18.396	180	45228	9.23 ug/L	99
139) 1,2,4-trichlorobenzene	19.134	180	35544	9.11 ug/L	95
140) hexachlorobutadiene	19.243	225	21821	9.99 ug/L	98
141) naphthalene	19.458	128	67323	8.83 ug/L	99
143) 1,2,3-trichlorobenzene	19.735	180	28181	9.37 ug/L	99
144) hexachloroethane	17.628	201	20215	9.84 ug/L	98

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

7.6.6

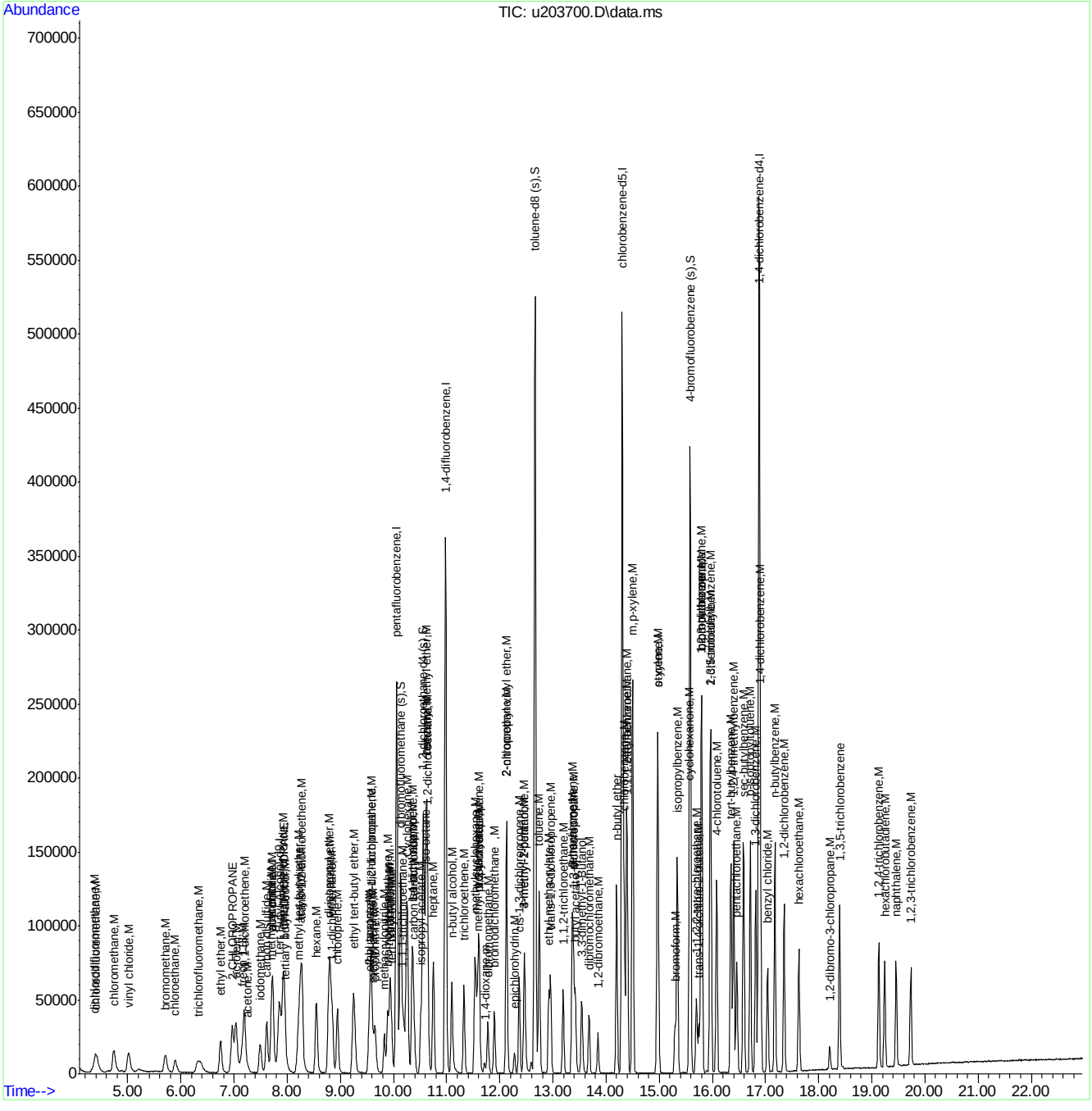
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203700.D
Acq On : 26 Feb 2016 1:37 pm
Operator : NicoleH1
Sample : ic9367-10
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 29 09:29:00 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



MU9367.M Thu Mar 03 10:07:01 2016 U_CORE

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203701.D
Acq On : 26 Feb 2016 2:06 pm
Operator : NicoleH1
Sample : ic9367-20
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 29 09:30:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	135206	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	255557	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	352149	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	327466	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.880	152	181314	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.136	113	103296	52.66	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.32%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	125772	52.70	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.40%			
88) toluene-d8 (s)	12.667	98	428280	45.62	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 91.24%			
114) 4-bromofluorobenzene (s)	15.584	95	164952	43.51	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 87.02%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.977	59	32169	106.13	ug/L	85
4) 1,4-dioxane	11.715	88	12900	636.70	ug/L	98
11) chlorodifluoromethane	4.406	51	59957	23.54	ug/L	97
12) dichlorodifluoromethane	4.380	85	49097	21.79	ug/L	95
15) chloromethane	4.751	50	81299	21.53	ug/L	100
16) vinyl chloride	5.023	62	70188	22.97	ug/L	99
18) bromomethane	5.708	94	36595	21.64	ug/L	97
19) chloroethane	5.886	64	38030	22.85	ug/L	99
20) trichlorofluoromethane	6.341	101	66609	22.87	ug/L	94
23) ethyl ether	6.749	74	28712	23.68	ug/L	96
24) 2-CHLOROPROPANE	6.968	43	111747	23.93	ug/L	99
27) acrolein	7.031	56	120311	233.67	ug/L	98
28) 1,1-dichloroethene	7.193	96	43243	24.86	ug/L	99
29) acetone	7.250	58	4422	23.54	ug/L	92
30) allyl chloride	7.721	76	34492	24.44	ug/L	95
31) acetonitrile	7.716	40	57416	239.91	ug/L	93
32) iodomethane	7.491	142	79975	23.57	ug/L	99
33) carbon disulfide	7.616	76	162171	24.40	ug/L	100
34) 1-CHLOROPROPANE	7.951	63	4633	22.67	ug/L	91
35) methylene chloride	7.920	84	52062	23.66	ug/L	96
36) methyl acetate	7.695	43	48615	23.87	ug/L	98
37) methyl tert butyl ether	8.218	73	149091	23.31	ug/L	100
38) trans-1,2-dichloroethene	8.280	96	48701	23.82	ug/L	98
39) di-isopropyl ether	8.787	45	202738	23.43	ug/L	78
40) ethyl tert-butyl ether	9.248	59	171651	23.20	ug/L	99
41) 2-butanone	9.535	72	6131	24.40	ug/L #	93
42) 1,1-dichloroethane	8.845	63	98463	23.78	ug/L	98
43) chloroprene	8.944	53	77929	22.87	ug/L	98
44) acrylonitrile	8.249	53	110566	120.93	ug/L	99
45) vinyl acetate	8.814	86	8837	21.79	ug/L #	77
46) ethyl acetate	9.535	45	9258	25.44	ug/L	97
47) 2,2-dichloropropane	9.577	77	72211	23.79	ug/L	100
48) cis-1,2-dichloroethene	9.577	96	53270	23.35	ug/L	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203701.D
Acq On : 26 Feb 2016 2:06 pm
Operator : NicoleH1
Sample : ic9367-20
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 29 09:30:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.619	85	7257	22.84 ug/L #	79
50) propionitrile	9.655	54	86418	245.82 ug/L	99
51) bromochloromethane	9.891	128	24874	23.78 ug/L	95
52) tetrahydrofuran	9.917	42	22293	25.20 ug/L	98
53) chloroform	9.938	83	84484	23.54 ug/L	99
54) tert-butyl Formate	9.959	59	45945	23.10 ug/L	98
55) iso-butyl alcohol	10.351	43	30443	264.10 ug/L	97
58) freon 113	7.156	151	30589	22.81 ug/L	98
59) methacrylonitrile	9.828	41	38751	22.71 ug/L	94
60) 1,1,1-trichloroethane	10.189	97	69494	23.15 ug/L	99
62) tert-amyl methyl ether	10.633	87	33289	23.32 ug/L	95
63) iso-octane	10.591	57	179094	23.12 ug/L	99
66) epichlorohydrin	12.275	57	29284	106.85 ug/L	98
67) n-butyl alcohol	11.098	56	91934	1267.03 ug/L	100
68) Cyclohexane	10.251	84	73826	19.00 ug/L	98
69) carbon tetrachloride	10.382	117	64772	20.62 ug/L	98
70) 1,1-dichloropropene	10.356	75	68049	20.46 ug/L	99
71) hexane	8.547	57	64325	18.30 ug/L	97
72) benzene	10.623	78	205389	19.58 ug/L	99
73) heptane	10.748	57	40423	19.41 ug/L	98
74) isopropyl acetate	10.513	43	113599	19.60 ug/L	98
75) 1,2-dichloroethane	10.643	62	67747	19.88 ug/L	99
78) trichloroethene	11.328	95	49646	20.31 ug/L	99
79) methylcyclohexane	11.537	83	79378	19.78 ug/L	100
80) 2-nitropropane	12.128	41	22411	20.20 ug/L	95
81) 2-chloroethyl vinyl ether	12.128	63	167068	101.74 ug/L	99
82) methyl methacrylate	11.579	100	12798	20.24 ug/L #	90
83) 1,2-dichloropropane	11.605	63	57386	19.77 ug/L	98
84) propyl acetate	11.616	73	9921	20.81 ug/L	93
85) dibromomethane	11.778	93	30491	20.02 ug/L	98
86) bromodichloromethane	11.898	83	68343	20.52 ug/L	98
87) cis-1,3-dichloropropene	12.363	75	89043	19.98 ug/L	99
89) 4-methyl-2-pentanone	12.458	58	22838	20.36 ug/L	94
90) toluene	12.740	92	125510	19.72 ug/L	98
91) 3-methyl-1-butanol	12.468	55	58719	471.47 ug/L	99
92) trans-1,3-dichloropropene	12.954	75	81094	20.30 ug/L	98
93) ethyl methacrylate	12.923	69	68318	19.91 ug/L	99
94) 1,1,2-trichloroethane	13.189	83	39279	19.95 ug/L	98
95) 2-hexanone	13.357	58	23005	20.71 ug/L	98
97) cyclohexanone	15.558	55	32522	311.85 ug/L	98
98) tetrachloroethene	13.367	164	44133	19.74 ug/L	95
99) 1,3-dichloropropane	13.388	76	80338	20.28 ug/L	99
100) butyl acetate	13.419	56	39060	20.83 ug/L	98
101) dibromochloromethane	13.681	129	53108	19.99 ug/L	97
102) 1,2-dibromoethane	13.848	107	45431	19.53 ug/L	100
103) 3,3-dimethyl-1-Butanol	13.540	57	65512	238.12 ug/L	100
104) n-butyl ether	14.198	57	261201	20.28 ug/L	100
105) chlorobenzene	14.340	112	138850	19.43 ug/L	99
106) 1,1,1,2-tetrachloroethane	14.402	131	51151	19.39 ug/L	99
107) ethylbenzene	14.387	91	243531	19.79 ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203701.D
Acq On : 26 Feb 2016 2:06 pm
Operator : NicoleH1
Sample : ic9367-20
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 29 09:30:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	186892	39.69 ug/L	97
109) o-xylene	14.967	106	92921	20.20 ug/L	99
110) styrene	14.983	104	157522	20.90 ug/L	99
111) bromoform	15.296	173	38831	19.47 ug/L	97
113) isopropylbenzene	15.338	105	243040	19.29 ug/L	99
115) bromobenzene	15.809	156	64600	19.00 ug/L	97
116) 1,1,2,2-tetrachloroethane	15.699	83	65582	19.46 ug/L	98
117) trans-1,4-dichloro-2-b...	15.741	53	19926	19.62 ug/L	98
118) 1,2,3-trichloropropane	15.788	110	16163	18.99 ug/L	96
119) n-propylbenzene	15.793	91	294548	19.44 ug/L	99
120) 2-chlorotoluene	15.976	126	59709	19.40 ug/L	95
121) 4-chlorotoluene	16.081	91	181029	18.99 ug/L	100
123) 1,3,5-trimethylbenzene	15.955	105	204596	19.18 ug/L	100
124) tert-butylbenzene	16.352	119	176677	18.77 ug/L	100
125) pentachloroethane	16.462	167	40964	18.97 ug/L	97
126) 1,2,4-trimethylbenzene	16.399	105	210270	19.21 ug/L	99
128) sec-butylbenzene	16.588	105	268438	19.76 ug/L	100
129) 1,3-dichlorobenzene	16.818	146	124302	18.85 ug/L	97
130) p-isopropyltoluene	16.713	119	227087	19.58 ug/L	99
131) 1,4-dichlorobenzene	16.907	146	123484	18.43 ug/L	100
132) benzyl chloride	17.037	91	122873	18.82 ug/L	99
133) 1,2-dichlorobenzene	17.351	146	116353	18.76 ug/L	98
135) n-butylbenzene	17.178	92	117871	19.83 ug/L	100
137) 1,2-dibromo-3-chloropr...	18.214	157	11949	19.26 ug/L	94
138) 1,3,5-trichlorobenzene	18.397	180	92141	18.66 ug/L	100
139) 1,2,4-trichlorobenzene	19.134	180	73725	18.74 ug/L	99
140) hexachlorobutadiene	19.243	225	44022	19.98 ug/L	99
141) naphthalene	19.458	128	142156	18.48 ug/L	99
143) 1,2,3-trichlorobenzene	19.735	180	59003	19.45 ug/L	98
144) hexachloroethane	17.628	201	41044	19.82 ug/L	99

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

7.6.7

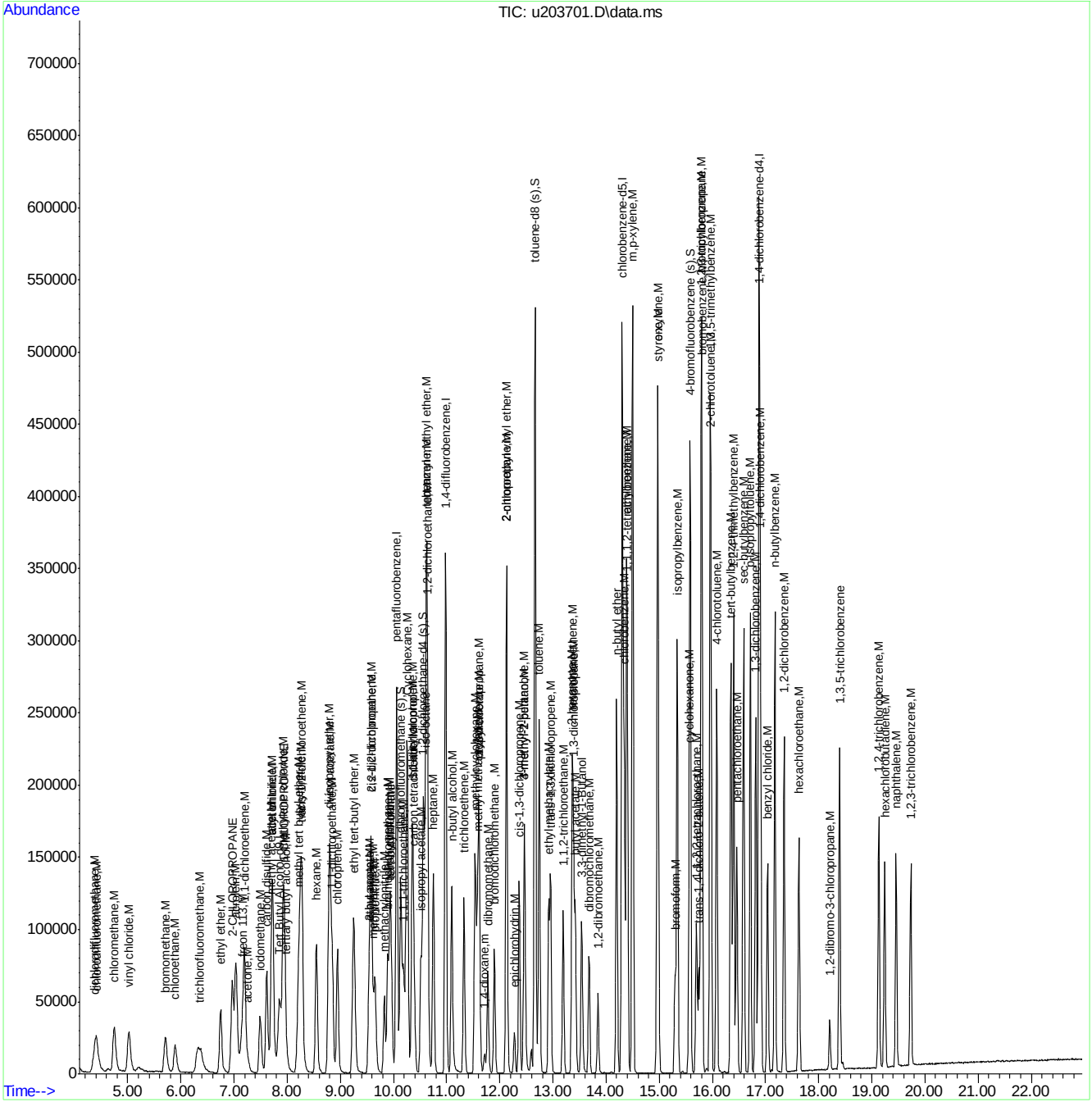
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203701.D
Acq On : 26 Feb 2016 2:06 pm
Operator : NicoleH1
Sample : ic9367-20
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 29 09:30:03 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203702.D
Acq On : 26 Feb 2016 2:35 pm
Operator : NicoleH1
Sample : icc9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 29 09:30:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	134498	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	256268	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	357544	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	329500	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	184877	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	104631	53.19	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.38%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	128690	53.77	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 107.54%			
88) toluene-d8 (s)	12.662	98	430222	45.13	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 90.26%			
114) 4-bromofluorobenzene (s)	15.579	95	166742	43.13	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 86.26%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.978	59	82270	272.85	ug/L	79
4) 1,4-dioxane	11.711	88	34209	1697.32	ug/L	98
11) chlorodifluoromethane	4.402	51	154558	60.52	ug/L	98
12) dichlorodifluoromethane	4.386	85	133352	59.02	ug/L	98
15) chloromethane	4.757	50	222697	58.81	ug/L	100
16) vinyl chloride	5.035	62	189109	61.72	ug/L	98
18) bromomethane	5.714	94	97359	57.41	ug/L	99
19) chloroethane	5.892	64	101915	61.06	ug/L	95
20) trichlorofluoromethane	6.315	101	179578	61.49	ug/L	95
23) ethyl ether	6.744	74	77203	63.51	ug/L	96
24) 2-CHLOROPROPANE	6.964	43	291417	62.23	ug/L	99
27) acrolein	7.032	56	310769	601.90	ug/L	100
28) 1,1-dichloroethene	7.194	96	111955	64.18	ug/L	98
29) acetone	7.251	58	12181	64.68	ug/L	96
30) allyl chloride	7.722	76	90086	63.65	ug/L	97
31) acetonitrile	7.711	40	145120	604.69	ug/L	94
32) iodomethane	7.492	142	209467	61.55	ug/L	100
33) carbon disulfide	7.612	76	421939	63.31	ug/L	100
34) 1-CHLOROPROPANE	7.941	63	12024	58.66	ug/L	92
35) methylene chloride	7.920	84	133976	60.71	ug/L	99
36) methyl acetate	7.696	43	122670	60.07	ug/L	99
37) methyl tert butyl ether	8.218	73	384803	59.98	ug/L	100
38) trans-1,2-dichloroethene	8.276	96	126141	61.53	ug/L	99
39) di-isopropyl ether	8.788	45	521820	60.15	ug/L	85
40) ethyl tert-butyl ether	9.254	59	447740	60.34	ug/L	100
41) 2-butanone	9.531	72	15658	62.15	ug/L	95
42) 1,1-dichloroethane	8.846	63	257030	61.89	ug/L	100
43) chloroprene	8.945	53	204197	59.75	ug/L	99
44) acrylonitrile	8.250	53	282503	308.12	ug/L	99
45) vinyl acetate	8.809	86	24595	60.46	ug/L	99
46) ethyl acetate	9.531	45	23978	65.71	ug/L	88
47) 2,2-dichloropropane	9.578	77	186762	61.36	ug/L	99
48) cis-1,2-dichloroethene	9.578	96	139439	60.96	ug/L	96

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203702.D
Acq On : 26 Feb 2016 2:35 pm
Operator : NicoleH1
Sample : icc9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 29 09:30:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.620	85	19444	61.02 ug/L	97
50) propionitrile	9.651	54	220915	626.66 ug/L	97
51) bromochloromethane	9.891	128	66044	62.96 ug/L	100
52) tetrahydrofuran	9.918	42	56452	63.65 ug/L	100
53) chloroform	9.938	83	221680	61.59 ug/L	98
54) tert-butyl Formate	9.959	59	121817	61.07 ug/L	99
55) iso-butyl alcohol	10.346	43	80228	694.08 ug/L	96
58) freon 113	7.162	151	79324	58.98 ug/L	99
59) methacrylonitrile	9.823	41	102790	60.08 ug/L	98
60) 1,1,1-trichloroethane	10.184	97	182723	60.69 ug/L	98
62) tert-amyl methyl ether	10.629	87	85685	59.87 ug/L	97
63) iso-octane	10.592	57	445010	57.29 ug/L	99
66) epichlorohydrin	12.275	57	76596	275.25 ug/L	98
67) n-butyl alcohol	11.094	56	241045	3271.95 ug/L	99
68) Cyclohexane	10.247	84	222609	56.44 ug/L	92
69) carbon tetrachloride	10.383	117	169037	52.99 ug/L	99
70) 1,1-dichloropropene	10.357	75	180402	53.42 ug/L	100
71) hexane	8.548	57	165165	46.27 ug/L	98
72) benzene	10.623	78	535263	50.27 ug/L	100
73) heptane	10.749	57	106383	50.32 ug/L	98
74) isopropyl acetate	10.514	43	295541	50.22 ug/L	99
75) 1,2-dichloroethane	10.644	62	178139	51.49 ug/L	98
78) trichloroethene	11.324	95	132674	53.47 ug/L	97
79) methylcyclohexane	11.538	83	203555	49.95 ug/L	99
80) 2-nitropropane	12.129	41	58319	51.78 ug/L	99
81) 2-chloroethyl vinyl ether	12.124	63	440453	264.18 ug/L	99
82) methyl methacrylate	11.580	100	33754	52.58 ug/L	94
83) 1,2-dichloropropane	11.606	63	151362	51.35 ug/L	99
84) propyl acetate	11.617	73	25708	53.10 ug/L	92
85) dibromomethane	11.773	93	78871	51.01 ug/L	99
86) bromodichloromethane	11.899	83	181125	53.55 ug/L	97
87) cis-1,3-dichloropropene	12.364	75	237278	52.43 ug/L	100
89) 4-methyl-2-pentanone	12.453	58	59420	52.18 ug/L	95
90) toluene	12.741	92	331746	51.33 ug/L	100
91) 3-methyl-1-butanol	12.464	55	155289	1228.03 ug/L	99
92) trans-1,3-dichloropropene	12.955	75	216094	53.28 ug/L	99
93) ethyl methacrylate	12.918	69	183349	52.62 ug/L	100
94) 1,1,2-trichloroethane	13.190	83	103724	51.88 ug/L	98
95) 2-hexanone	13.358	58	59929	53.14 ug/L	99
97) cyclohexanone	15.559	55	91207	869.18 ug/L	99
98) tetrachloroethene	13.363	164	116982	52.00 ug/L	99
99) 1,3-dichloropropane	13.389	76	208631	52.33 ug/L	100
100) butyl acetate	13.420	56	100090	53.05 ug/L	100
101) dibromochloromethane	13.676	129	142560	53.34 ug/L	100
102) 1,2-dibromoethane	13.849	107	120462	51.46 ug/L	98
103) 3,3-dimethyl-1-Butanol	13.541	57	174969	632.04 ug/L	99
104) n-butyl ether	14.199	57	699688	53.99 ug/L	100
105) chlorobenzene	14.340	112	366496	50.97 ug/L	100
106) 1,1,1,2-tetrachloroethane	14.403	131	135038	50.87 ug/L	98
107) ethylbenzene	14.387	91	639386	51.64 ug/L	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203702.D
Acq On : 26 Feb 2016 2:35 pm
Operator : NicoleH1
Sample : icc9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 29 09:30:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.497	106	488939	103.20 ug/L	99
109) o-xylene	14.968	106	240388	51.92 ug/L	98
110) styrene	14.978	104	419011	55.24 ug/L	98
111) bromoform	15.297	173	104450	52.04 ug/L	100
113) isopropylbenzene	15.339	105	640955	49.89 ug/L	100
115) bromobenzene	15.804	156	169563	48.92 ug/L	96
116) 1,1,2,2-tetrachloroethane	15.700	83	170366	49.57 ug/L	99
117) trans-1,4-dichloro-2-b...	15.742	53	53735	51.89 ug/L	99
118) 1,2,3-trichloropropane	15.789	110	42466	48.93 ug/L	99
119) n-propylbenzene	15.794	91	773312	50.07 ug/L	100
120) 2-chlorotoluene	15.972	126	156477	49.87 ug/L	98
121) 4-chlorotoluene	16.081	91	475881	48.96 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	543024	49.93 ug/L	100
124) tert-butylbenzene	16.348	119	470809	49.06 ug/L	97
125) pentachloroethane	16.463	167	110002	49.95 ug/L	100
126) 1,2,4-trimethylbenzene	16.400	105	557945	49.99 ug/L	100
128) sec-butylbenzene	16.588	105	713995	51.55 ug/L	99
129) 1,3-dichlorobenzene	16.818	146	332282	49.43 ug/L	99
130) p-isopropyltoluene	16.714	119	604286	51.10 ug/L	99
131) 1,4-dichlorobenzene	16.907	146	330759	48.42 ug/L	99
132) benzyl chloride	17.038	91	327917	49.27 ug/L	100
133) 1,2-dichlorobenzene	17.347	146	310511	49.09 ug/L	100
135) n-butylbenzene	17.174	92	320905	52.95 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.209	157	32138	50.80 ug/L	97
138) 1,3,5-trichlorobenzene	18.392	180	255021	50.65 ug/L	100
139) 1,2,4-trichlorobenzene	19.134	180	206641	51.52 ug/L	99
140) hexachlorobutadiene	19.244	225	119174	53.06 ug/L	99
141) naphthalene	19.459	128	390586	49.81 ug/L	100
143) 1,2,3-trichlorobenzene	19.736	180	165908	53.64 ug/L	99
144) hexachloroethane	17.629	201	112172	53.12 ug/L	99

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

7.6.8

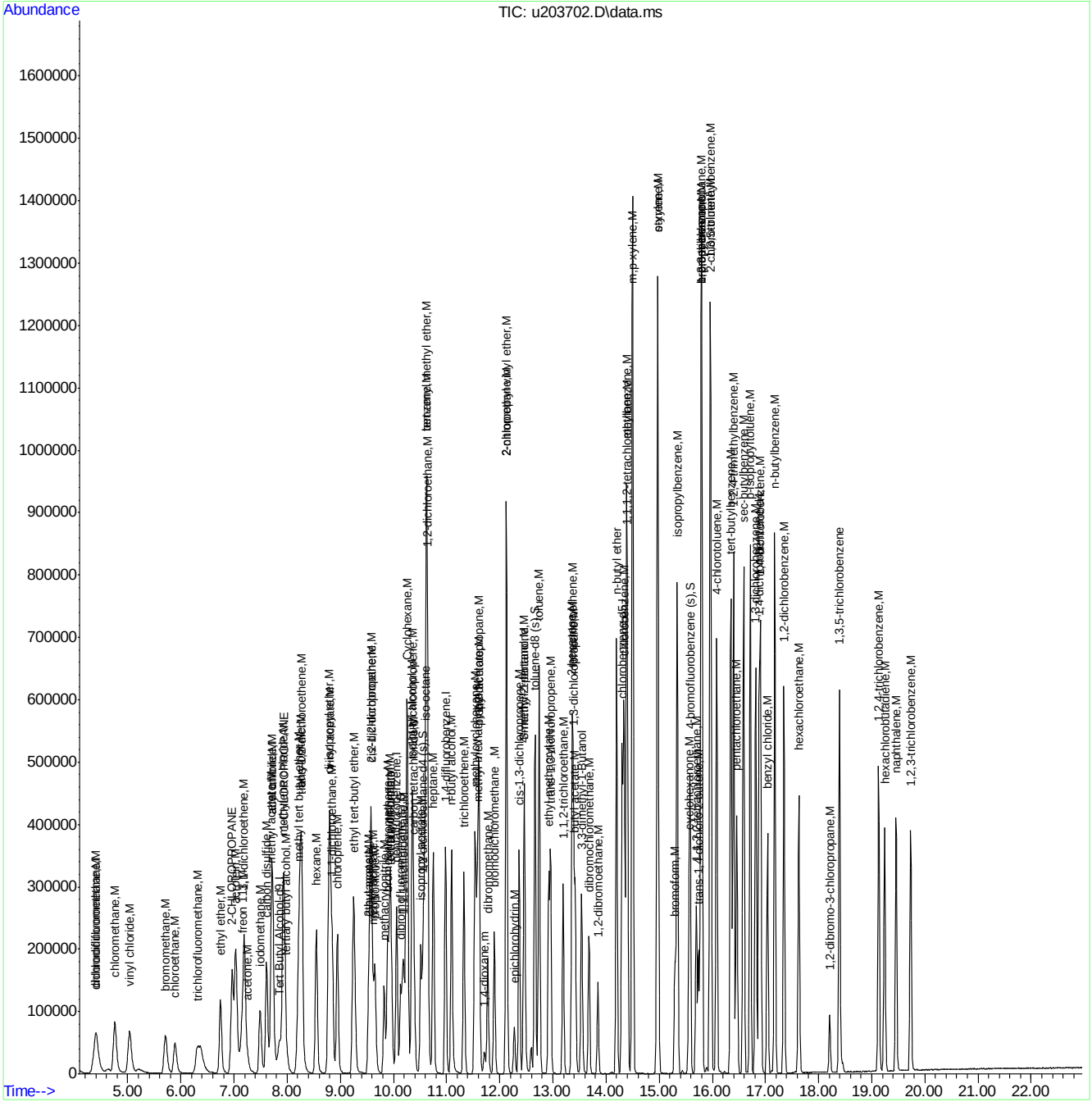
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203702.D
Acq On : 26 Feb 2016 2:35 pm
Operator : NicoleH1
Sample : icc9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 29 09:30:44 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203703.D
Acq On : 26 Feb 2016 3:05 pm
Operator : NicoleH1
Sample : ic9367-100
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 29 09:31:26 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	132422	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	260574	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	365395	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	330209	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	187670	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	105197	52.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.20%			
57) 1,2-dichloroethane-d4 (s)	10.561	65	130792	53.75	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 107.50%			
88) toluene-d8 (s)	12.663	98	434320	44.58	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 89.16%			
114) 4-bromofluorobenzene (s)	15.580	95	168757	43.01	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 86.02%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	158610	534.28	ug/L	81
4) 1,4-dioxane	11.711	88	67331	3393.09	ug/L	98
11) chlorodifluoromethane	4.407	51	301927	116.28	ug/L	94
12) dichlorodifluoromethane	4.376	85	256571	111.69	ug/L	99
15) chloromethane	4.763	50	410275	106.56	ug/L	99
16) vinyl chloride	5.045	62	346049	111.08	ug/L	100
18) bromomethane	5.709	94	174397	101.14	ug/L	99
19) chloroethane	5.887	64	186934	110.15	ug/L	96
20) trichlorofluoromethane	6.337	101	332852	112.10	ug/L	99
23) ethyl ether	6.744	74	153835	124.45	ug/L	99
24) 2-CHLOROPROPANE	6.964	43	557751	117.13	ug/L #	94
28) 1,1-dichloroethene	7.194	96	214462	120.91	ug/L	99
29) acetone	7.246	58	23668	123.59	ug/L	95
30) allyl chloride	7.722	76	174453	121.22	ug/L	98
31) acetonitrile	7.712	40	274763	1125.98	ug/L	95
32) iodomethane	7.492	142	406443	117.46	ug/L	99
33) carbon disulfide	7.612	76	808302	119.27	ug/L	100
34) 1-CHLOROPROPANE	7.947	63	23089	110.79	ug/L	96
35) methylene chloride	7.921	84	257337	114.68	ug/L	98
36) methyl acetate	7.696	43	239364	115.28	ug/L	100
37) methyl tert butyl ether	8.219	73	752598	115.38	ug/L	100
38) trans-1,2-dichloroethene	8.281	96	241618	115.92	ug/L	99
39) di-isopropyl ether	8.789	45	1015616	115.14	ug/L	87
40) ethyl tert-butyl ether	9.254	59	875123	115.98	ug/L	100
41) 2-butanone	9.531	72	31479	122.89	ug/L #	91
42) 1,1-dichloroethane	8.846	63	491760	116.46	ug/L	99
43) chloroprene	8.945	53	399117	114.86	ug/L	100
44) acrylonitrile	8.250	53	542005	581.39	ug/L	100
45) vinyl acetate	8.809	86	48812	118.02	ug/L	99
46) ethyl acetate	9.536	45	47587	128.25	ug/L	92
47) 2,2-dichloropropane	9.578	77	359344	116.11	ug/L	98
48) cis-1,2-dichloroethene	9.573	96	270243	116.20	ug/L	98
49) methyl acrylate	9.620	85	39112	120.72	ug/L	97

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203703.D
Acq On : 26 Feb 2016 3:05 pm
Operator : NicoleH1
Sample : ic9367-100
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 29 09:31:26 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) propionitrile	9.656	54	426535	1189.95	ug/L		96
51) bromochloromethane	9.892	128	129875	121.76	ug/L		98
52) tetrahydrofuran	9.918	42	109944	121.91	ug/L		99
53) chloroform	9.939	83	431783	117.98	ug/L		99
54) tert-butyl Formate	9.960	59	241161	118.90	ug/L		98
55) iso-butyl alcohol	10.352	43	156031	1327.56	ug/L		98
58) freon 113	7.157	151	159474	116.61	ug/L		99
59) methacrylonitrile	9.824	41	202827	116.58	ug/L		98
60) 1,1,1-trichloroethane	10.184	97	360881	117.89	ug/L		99
62) tert-amyl methyl ether	10.629	87	167877	115.36	ug/L		98
63) iso-octane	10.592	57	908271	114.99	ug/L		99
66) epichlorohydrin	12.276	57	149507	525.72	ug/L		98
67) n-butyl alcohol	11.094	56	462757	6146.52	ug/L		99
68) Cyclohexane	10.247	84	376369	93.37	ug/L		91
69) carbon tetrachloride	10.383	117	329026	100.93	ug/L		100
70) 1,1-dichloropropene	10.357	75	351030	101.70	ug/L		100
71) hexane	8.548	57	340155	93.24	ug/L		99
72) benzene	10.624	78	1027860	94.45	ug/L		99
73) heptane	10.749	57	226879	105.02	ug/L		99
74) isopropyl acetate	10.514	43	590799	98.23	ug/L		99
75) 1,2-dichloroethane	10.644	62	348565	98.58	ug/L		98
78) trichloroethene	11.324	95	260974	102.92	ug/L		99
79) methylcyclohexane	11.538	83	408887	98.17	ug/L		98
80) 2-nitropropane	12.129	41	115824	100.63	ug/L	#	91
81) 2-chloroethyl vinyl ether	12.124	63	878179	515.41	ug/L		100
82) methyl methacrylate	11.580	100	68508	104.43	ug/L		97
83) 1,2-dichloropropane	11.606	63	297774	98.85	ug/L		99
84) propyl acetate	11.612	73	50320	101.71	ug/L		92
85) dibromomethane	11.774	93	157976	99.98	ug/L		99
86) bromodichloromethane	11.899	83	360261	104.23	ug/L		99
87) cis-1,3-dichloropropene	12.365	75	472687	102.21	ug/L		100
89) 4-methyl-2-pentanone	12.453	58	116755	100.33	ug/L		98
90) toluene	12.741	92	652012	98.72	ug/L		99
91) 3-methyl-1-butanol	12.464	55	291904	2258.79	ug/L		99
92) trans-1,3-dichloropropene	12.955	75	429009	103.51	ug/L		99
93) ethyl methacrylate	12.919	69	370969	104.18	ug/L		99
94) 1,1,2-trichloroethane	13.191	83	205095	100.38	ug/L		100
95) 2-hexanone	13.358	58	118569	102.88	ug/L		99
97) cyclohexanone	15.559	55	167565	1593.42	ug/L		99
98) tetrachloroethene	13.363	164	229282	101.69	ug/L		100
99) 1,3-dichloropropane	13.389	76	410452	102.73	ug/L		99
100) butyl acetate	13.421	56	199379	105.45	ug/L		98
101) dibromochloromethane	13.682	129	284445	106.19	ug/L		100
102) 1,2-dibromoethane	13.849	107	240036	102.32	ug/L		99
103) 3,3-dimethyl-1-Butanol	13.541	57	330411	1190.97	ug/L		99
104) n-butyl ether	14.200	57	1375650	105.93	ug/L		100
105) chlorobenzene	14.341	112	710958	98.66	ug/L		99
106) 1,1,1,2-tetrachloroethane	14.403	131	264137	99.29	ug/L		98
107) ethylbenzene	14.388	91	1241836	100.08	ug/L		100
108) m,p-xylene	14.503	106	941546	198.31	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203703.D
Acq On : 26 Feb 2016 3:05 pm
Operator : NicoleH1
Sample : ic9367-100
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 29 09:31:26 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.968	106	471922	101.72 ug/L	99
110) styrene	14.979	104	817297	107.52 ug/L	98
111) bromoform	15.297	173	211725	105.26 ug/L	98
113) isopropylbenzene	15.339	105	1257858	96.46 ug/L	100
115) bromobenzene	15.805	156	333657	94.83 ug/L	96
116) 1,1,2,2-tetrachloroethane	15.700	83	335201	96.08 ug/L	99
117) trans-1,4-dichloro-2-b...	15.742	53	107737	102.50 ug/L	99
118) 1,2,3-trichloropropane	15.789	110	82571	93.73 ug/L	99
119) n-propylbenzene	15.794	91	1496831	95.46 ug/L	100
120) 2-chlorotoluene	15.972	126	307956	96.69 ug/L	97
121) 4-chlorotoluene	16.082	91	937646	95.03 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	1068272	96.77 ug/L	99
124) tert-butylbenzene	16.348	119	931409	95.61 ug/L	97
125) pentachloroethane	16.458	167	220650	98.70 ug/L	99
126) 1,2,4-trimethylbenzene	16.401	105	1096764	96.80 ug/L	99
128) sec-butylbenzene	16.589	105	1408852	100.21 ug/L	99
129) 1,3-dichlorobenzene	16.819	146	656243	96.17 ug/L	99
130) p-isopropyltoluene	16.714	119	1197983	99.80 ug/L	99
131) 1,4-dichlorobenzene	16.908	146	658723	94.99 ug/L	100
132) benzyl chloride	17.038	91	650021	96.21 ug/L	99
133) 1,2-dichlorobenzene	17.347	146	619766	96.52 ug/L	100
135) n-butylbenzene	17.174	92	634314	103.10 ug/L	99
137) 1,2-dibromo-3-chloropr...	18.209	157	65369	101.79 ug/L	95
138) 1,3,5-trichlorobenzene	18.398	180	511284	100.03 ug/L	100
139) 1,2,4-trichlorobenzene	19.130	180	420618	103.31 ug/L	99
140) hexachlorobutadiene	19.245	225	237524	104.17 ug/L	97
141) naphthalene	19.459	128	792883	99.61 ug/L	99
143) 1,2,3-trichlorobenzene	19.736	180	337893	107.62 ug/L	100
144) hexachloroethane	17.629	201	226645	105.74 ug/L	99

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

7.6.9

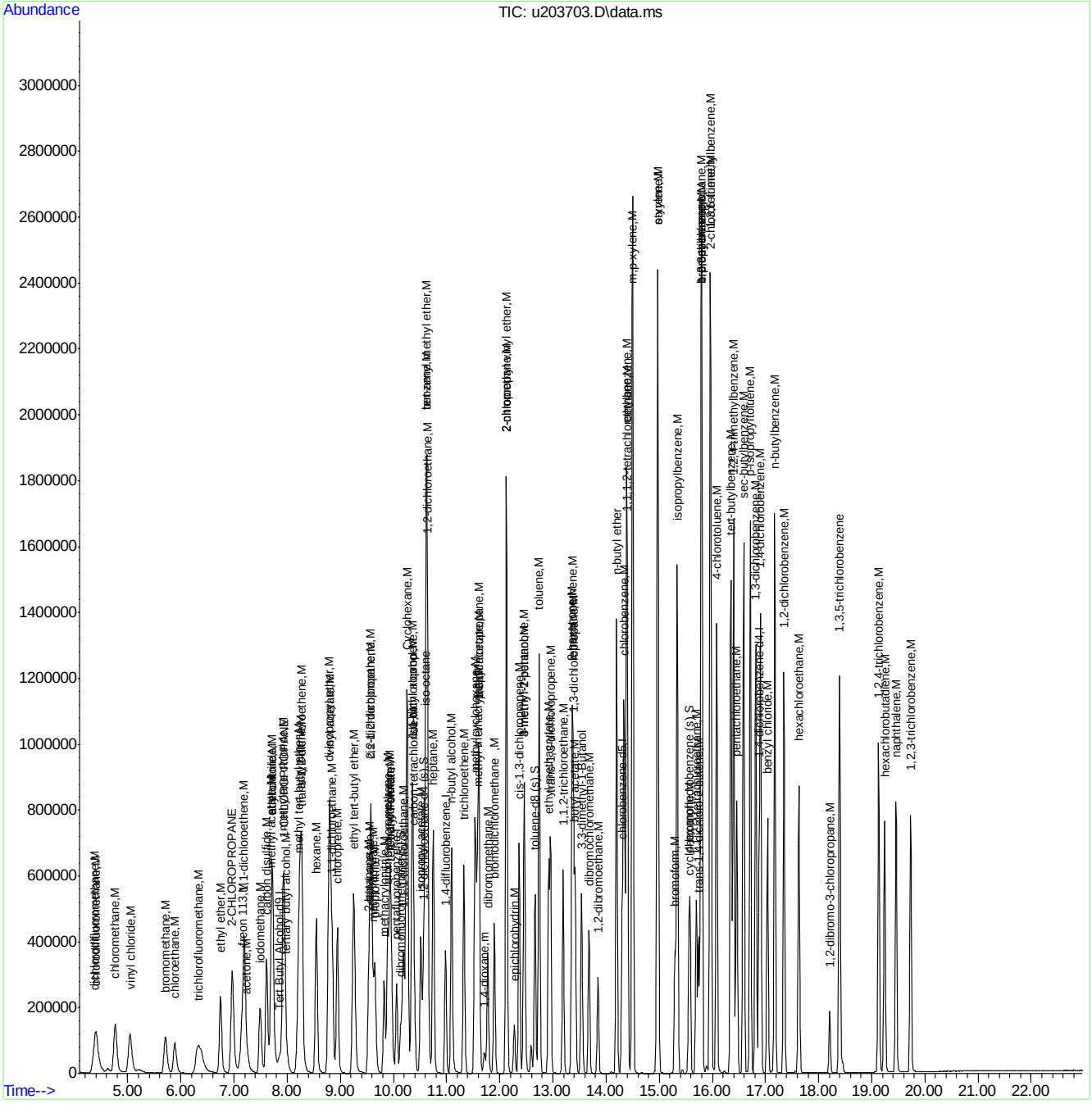
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203703.D
Acq On : 26 Feb 2016 3:05 pm
Operator : NicoleH1
Sample : ic9367-100
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 29 09:31:26 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203704.D
Acq On : 26 Feb 2016 3:34 pm
Operator : NicoleH1
Sample : ic9367-200
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 29 09:32:05 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.868	65	133591	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	263519	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	368594	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	343657	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	190608	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	107036	52.92	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.84%			
57) 1,2-dichloroethane-d4 (s)	10.561	65	132882	54.00	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 108.00%			
88) toluene-d8 (s)	12.668	98	446550	45.44	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 90.88%			
114) 4-bromofluorobenzene (s)	15.580	95	175084	43.93	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 87.86%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.983	59	293071	978.57	ug/L #	70
4) 1,4-dioxane	11.711	88	123884	6188.40	ug/L	98
11) chlorodifluoromethane	4.402	51	553918	210.95	ug/L	92
12) dichlorodifluoromethane	4.376	85	507293	218.36	ug/L	98
15) chloromethane	4.779	50	829769	213.11	ug/L	99
16) vinyl chloride	5.050	62	690620	219.21	ug/L	99
18) bromomethane	5.704	94	298629	171.25	ug/L	99
19) chloroethane	5.876	64	372536	217.05	ug/L	97
20) trichlorofluoromethane	6.352	101	671922	223.76	ug/L	97
23) ethyl ether	6.744	74	309140	247.29	ug/L	100
24) 2-CHLOROPROPANE	6.964	43	1123119	233.22	ug/L #	95
28) 1,1-dichloroethene	7.194	96	441438	246.10	ug/L	99
29) acetone	7.251	58	48686	251.39	ug/L	95
30) allyl chloride	7.722	76	354285	243.43	ug/L	98
31) acetonitrile	7.711	40	530756	2150.73	ug/L	94
32) iodomethane	7.492	142	845777	241.70	ug/L	99
33) carbon disulfide	7.612	76	1650801	240.86	ug/L	100
34) 1-CHLOROPROPANE	7.947	63	46348	219.91	ug/L	99
35) methylene chloride	7.921	84	528018	232.69	ug/L	99
36) methyl acetate	7.696	43	449983	214.29	ug/L	100
37) methyl tert butyl ether	8.219	73	1537929	233.14	ug/L	100
38) trans-1,2-dichloroethene	8.276	96	488773	231.87	ug/L	99
39) di-isopropyl ether	8.794	45	1937547	217.20	ug/L	98
40) ethyl tert-butyl ether	9.254	59	1699189	222.68	ug/L	99
41) 2-butanone	9.531	72	62970	243.08	ug/L #	83
42) 1,1-dichloroethane	8.846	63	990671	231.99	ug/L	99
43) chloroprene	8.945	53	754324	214.66	ug/L	99
44) acrylonitrile	8.250	53	1080026	1145.55	ug/L	100
45) vinyl acetate	8.815	86	91804	219.48	ug/L #	84
46) ethyl acetate	9.531	45	90445	241.02	ug/L	85
47) 2,2-dichloropropane	9.578	77	713737	228.05	ug/L	99
48) cis-1,2-dichloroethene	9.573	96	547400	232.74	ug/L	98
49) methyl acrylate	9.620	85	79298	242.01	ug/L	97

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203704.D
Acq On : 26 Feb 2016 3:34 pm
Operator : NicoleH1
Sample : ic9367-200
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 29 09:32:05 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) propionitrile	9.656	54	864017	2383.50 ug/L	97
51) bromochloromethane	9.892	128	266578	247.13 ug/L	98
52) tetrahydrofuran	9.918	42	221602	242.97 ug/L	99
53) chloroform	9.933	83	874701	236.32 ug/L	100
54) tert-butyl Formate	9.965	59	472707	230.46 ug/L	97
55) iso-butyl alcohol	10.352	43	287076	2415.24 ug/L	98
58) freon 113	7.157	151	296427	214.32 ug/L	96
59) methacrylonitrile	9.824	41	412860	234.66 ug/L	98
60) 1,1,1-trichloroethane	10.184	97	733973	237.09 ug/L	99
62) tert-amyl methyl ether	10.634	87	321517	218.46 ug/L	96
63) iso-octane	10.592	57	1606327	201.10 ug/L	98
66) epichlorohydrin	12.275	57	290795	1013.67 ug/L	98
67) n-butyl alcohol	11.099	56	840804	11070.95 ug/L	99
68) Cyclohexane	10.252	84	861198	211.79 ug/L	97
69) carbon tetrachloride	10.383	117	668407	203.25 ug/L	100
70) 1,1-dichloropropene	10.352	75	698793	200.71 ug/L	99
71) hexane	8.548	57	608212	165.27 ug/L	98
72) benzene	10.623	78	2019797	183.99 ug/L	99
73) heptane	10.749	57	414040	189.98 ug/L	100
74) isopropyl acetate	10.514	43	1127696	185.87 ug/L	100
75) 1,2-dichloroethane	10.644	62	696303	195.21 ug/L	98
78) trichloroethene	11.329	95	530304	207.32 ug/L	100
79) methylcyclohexane	11.538	83	760870	181.10 ug/L	100
80) 2-nitropropane	12.129	41	223739	192.70 ug/L	99
81) 2-chloroethyl vinyl ether	12.129	63	1615045	939.65 ug/L	98
82) methyl methacrylate	11.580	100	138359	209.07 ug/L	99
83) 1,2-dichloropropane	11.606	63	592040	194.83 ug/L	98
84) propyl acetate	11.612	73	94968	190.29 ug/L	90
85) dibromomethane	11.774	93	324159	203.37 ug/L	99
86) bromodichloromethane	11.899	83	744131	213.42 ug/L	99
87) cis-1,3-dichloropropene	12.364	75	950506	203.74 ug/L	99
89) 4-methyl-2-pentanone	12.453	58	232895	198.39 ug/L	96
90) toluene	12.741	92	1308854	196.46 ug/L	99
91) 3-methyl-1-butanol	12.464	55	517706	3971.31 ug/L	98
92) trans-1,3-dichloropropene	12.955	75	870150	208.13 ug/L	99
93) ethyl methacrylate	12.924	69	751352	209.18 ug/L	98
94) 1,1,2-trichloroethane	13.190	83	422081	204.78 ug/L	98
95) 2-hexanone	13.358	58	237666	204.42 ug/L	98
97) cyclohexanone	15.559	55	344396	3146.81 ug/L	98
98) tetrachloroethene	13.363	164	467219	199.11 ug/L	99
99) 1,3-dichloropropane	13.389	76	824877	198.38 ug/L	99
100) butyl acetate	13.420	56	377115	191.65 ug/L	100
101) dibromochloromethane	13.682	129	599839	215.18 ug/L	99
102) 1,2-dibromoethane	13.849	107	503465	206.22 ug/L	98
103) 3,3-dimethyl-1-Butanol	13.541	57	572179	1981.72 ug/L	99
104) n-butyl ether	14.199	57	2737073	202.51 ug/L	99
105) chlorobenzene	14.341	112	1455486	194.08 ug/L	99
106) 1,1,1,2-tetrachloroethane	14.403	131	546147	197.27 ug/L	99
107) ethylbenzene	14.388	91	2498986	193.51 ug/L	99
108) m,p-xylene	14.503	106	1883396	381.15 ug/L	98

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203704.D
Acq On : 26 Feb 2016 3:34 pm
Operator : NicoleH1
Sample : ic9367-200
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 29 09:32:05 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
109) o-xylene	14.968	106	956928	198.18 ug/L	99
110) styrene	14.984	104	1657778	209.56 ug/L	99
111) bromoform	15.297	173	452351	216.10 ug/L	100
113) isopropylbenzene	15.339	105	2548138	192.39 ug/L	99
115) bromobenzene	15.804	156	685784	191.91 ug/L	95
116) 1,1,2,2-tetrachloroethane	15.700	83	693928	195.83 ug/L	100
117) trans-1,4-dichloro-2-b...	15.742	53	226435	212.10 ug/L	100
118) 1,2,3-trichloropropane	15.789	110	167677	187.40 ug/L	100
119) n-propylbenzene	15.794	91	2939837	184.61 ug/L	99
120) 2-chlorotoluene	15.977	126	619970	191.65 ug/L	97
121) 4-chlorotoluene	16.081	91	1927919	192.38 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	2095986	186.94 ug/L	99
124) tert-butylbenzene	16.353	119	1843426	186.32 ug/L	98
125) pentachloroethane	16.463	167	452716	199.38 ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	2179432	189.39 ug/L	100
128) sec-butylbenzene	16.589	105	2763119	193.51 ug/L	98
129) 1,3-dichlorobenzene	16.819	146	1327453	191.54 ug/L	99
130) p-isopropyltoluene	16.719	119	2334727	191.50 ug/L	98
131) 1,4-dichlorobenzene	16.907	146	1329331	188.75 ug/L	99
132) benzyl chloride	17.038	91	1242339	181.05 ug/L	100
133) 1,2-dichlorobenzene	17.352	146	1239506	190.07 ug/L	99
135) n-butylbenzene	17.179	92	1225672	196.14 ug/L	97
137) 1,2-dibromo-3-chloropr...	18.209	157	138527	212.39 ug/L	97
138) 1,3,5-trichlorobenzene	18.397	180	1015399	195.59 ug/L	99
139) 1,2,4-trichlorobenzene	19.135	180	845853	204.55 ug/L	100
140) hexachlorobutadiene	19.244	225	458944	198.18 ug/L	98
141) naphthalene	19.459	128	1600966	198.03 ug/L	100
143) 1,2,3-trichlorobenzene	19.736	180	671843	210.68 ug/L	100
144) hexachloroethane	17.629	201	454587	208.81 ug/L	99

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

7.6.10

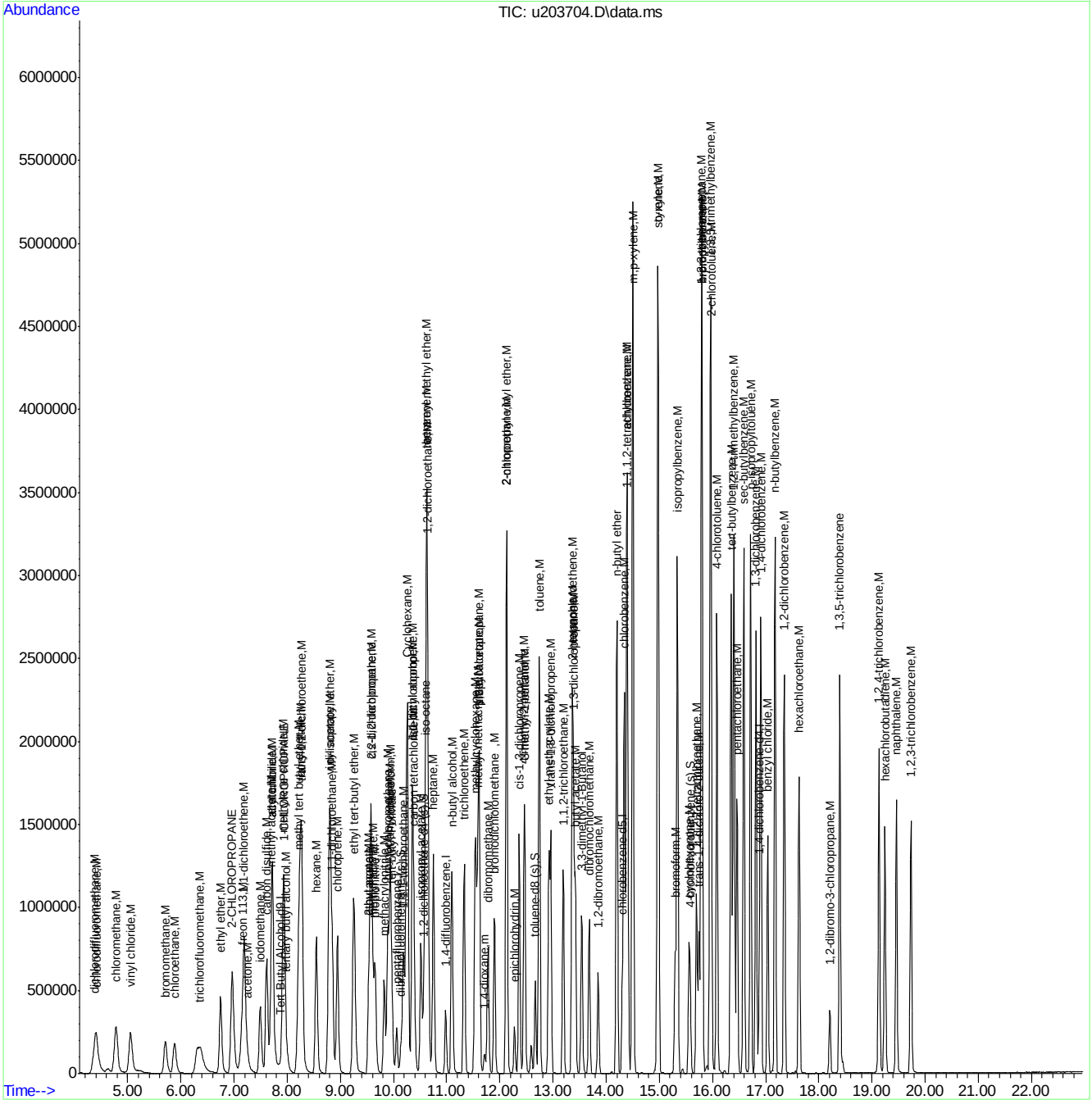
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203704.D
Acq On : 26 Feb 2016 3:34 pm
Operator : NicoleH1
Sample : ic9367-200
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 29 09:32:05 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:00:29 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203707.D
Acq On : 26 Feb 2016 5:02 pm
Operator : NicoleH1
Sample : icv9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 29 09:34:56 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.863	65	132439	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	255536	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	350375	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	324652	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	185650	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.137	113	101667	48.98	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.96%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	125693	49.72	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.44%			
88) toluene-d8 (s)	12.662	98	422415	50.20	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.40%			
114) 4-bromofluorobenzene (s)	15.579	95	165137	48.61	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.22%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.978	59	80427	272.52	ug/L	97
4) 1,4-dioxane	11.711	88	31319	1335.55	ug/L	98
11) chlorodifluoromethane	4.397	51	159421	57.01	ug/L	99
12) dichlorodifluoromethane	4.376	85	127790	51.54	ug/L	99
15) chloromethane	4.757	50	187244	43.10	ug/L	98
16) vinyl chloride	5.034	62	164573	44.96	ug/L	99
18) bromomethane	5.704	94	98049	55.56	ug/L	97
19) chloroethane	5.887	64	95077	48.37	ug/L	97
20) trichlorofluoromethane	6.320	101	165629	50.30	ug/L	99
23) ethyl ether	6.744	74	75009	53.93	ug/L	97
24) 2-CHLOROPROPANE	6.969	43	285967	54.02	ug/L	99
27) acrolein	7.037	56	321470	535.66	ug/L	100
28) 1,1-dichloroethene	7.194	96	108697	55.56	ug/L	98
29) acetone	7.246	58	12001	56.10	ug/L	98
30) allyl chloride	7.722	76	85023	53.83	ug/L	97
31) acetonitrile	7.716	40	138693	494.66	ug/L	88
32) iodomethane	7.492	142	201989	53.26	ug/L	99
33) carbon disulfide	7.612	76	412532	54.98	ug/L	100
34) 1-CHLOROPROPANE	7.946	63	11508	51.06	ug/L	99
35) methylene chloride	7.920	84	128020	51.40	ug/L	99
36) methyl acetate	7.695	43	118567	53.16	ug/L	100
37) methyl tert butyl ether	8.218	73	745947	106.48	ug/L	90
38) trans-1,2-dichloroethene	8.281	96	120140	52.18	ug/L	97
39) di-isopropyl ether	8.788	45	513388	53.04	ug/L	99
40) ethyl tert-butyl ether	9.253	59	445333	53.96	ug/L	99
41) 2-butanone	9.536	72	15551	53.27	ug/L	98
42) 1,1-dichloroethane	8.851	63	248345	53.89	ug/L	99
43) chloroprene	8.940	53	205162	56.18	ug/L	100
44) acrylonitrile	8.250	53	277559	268.87	ug/L	99
45) vinyl acetate	8.814	86	24092	55.14	ug/L #	80
46) ethyl acetate	9.530	45	23386	54.31	ug/L	93
47) 2,2-dichloropropane	9.578	77	182504	53.25	ug/L	100
48) cis-1,2-dichloroethene	9.572	96	132718	52.26	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203707.D
Acq On : 26 Feb 2016 5:02 pm
Operator : NicoleH1
Sample : icv9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 29 09:34:56 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) methyl acrylate	9.619	85	19565	54.19	ug/L	96
50) propionitrile	9.656	54	214530	524.66	ug/L	95
51) bromochloromethane	9.891	128	63621	53.36	ug/L	97
52) tetrahydrofuran	9.912	42	55078	53.67	ug/L	99
53) chloroform	9.933	83	217180	55.35	ug/L	98
54) tert-butyl Formate	9.959	59	103691	47.40	ug/L	99
55) iso-butyl alcohol	10.351	43	76279	547.74	ug/L	98
58) freon 113	7.157	151	86908	61.01	ug/L	99
59) methacrylonitrile	9.823	41	96968	53.45	ug/L	99
60) 1,1,1-trichloroethane	10.184	97	186036	56.35	ug/L	99
62) tert-amyl methyl ether	10.628	87	86243	56.21	ug/L	96
63) iso-octane	10.592	57	461657	53.96	ug/L	99
66) epichlorohydrin	12.275	57	75225	291.22	ug/L	99
67) n-butyl alcohol	11.094	56	230851	2883.68	ug/L	99
68) Cyclohexane	10.247	84	214380	55.99	ug/L	100
69) carbon tetrachloride	10.383	117	165799	55.53	ug/L	99
70) 1,1-dichloropropene	10.357	75	183741	57.68	ug/L	99
71) hexane	8.548	57	156295	51.07	ug/L	99
72) benzene	10.623	78	513497	53.13	ug/L	99
73) heptane	10.749	57	109401	56.35	ug/L	97
74) isopropyl acetate	10.513	43	310674	57.77	ug/L	99
75) 1,2-dichloroethane	10.644	62	171999	53.24	ug/L	100
78) trichloroethene	11.324	95	128078	54.50	ug/L	98
79) methylcyclohexane	11.538	83	211767	57.25	ug/L	99
80) 2-nitropropane	12.129	41	58077	56.61	ug/L #	90
81) 2-chloroethyl vinyl ether	12.124	63	447450	301.64	ug/L	99
82) methyl methacrylate	11.580	100	33653	56.45	ug/L #	92
83) 1,2-dichloropropane	11.601	63	146455	53.57	ug/L	100
84) propyl acetate	11.611	73	25730	57.58	ug/L	98
85) dibromomethane	11.773	93	75728	54.40	ug/L	100
86) bromodichloromethane	11.899	83	175489	55.92	ug/L	98
87) cis-1,3-dichloropropene	12.364	75	229245	54.52	ug/L	99
89) 4-methyl-2-pentanone	12.453	58	58954	56.31	ug/L	99
90) toluene	12.740	92	322567	55.29	ug/L	99
91) 3-methyl-1-butanol	12.463	55	154941	1210.31	ug/L	98
92) trans-1,3-dichloropropene	12.955	75	203820	54.58	ug/L	99
93) ethyl methacrylate	12.918	69	178830	55.73	ug/L	99
94) 1,1,2-trichloroethane	13.190	83	99960	54.46	ug/L	100
95) 2-hexanone	13.357	58	60212	54.75	ug/L	99
97) cyclohexanone	15.558	55	82244	495.35	ug/L	99
98) tetrachloroethene	13.363	164	115241	56.53	ug/L	98
99) 1,3-dichloropropane	13.389	76	199902	52.29	ug/L	98
100) butyl acetate	13.420	56	104694	59.58	ug/L	99
101) dibromochloromethane	13.682	129	137728	54.82	ug/L	99
102) 1,2-dibromoethane	13.849	107	116606	53.36	ug/L	98
103) 3,3-dimethyl-1-Butanol	13.540	57	175044	605.30	ug/L	100
104) n-butyl ether	14.199	57	687775	56.99	ug/L	100
105) chlorobenzene	14.340	112	359990	54.96	ug/L	100
106) 1,1,1,2-tetrachloroethane	14.403	131	129496	52.86	ug/L	98
107) ethylbenzene	14.382	91	625532	54.50	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203707.D
Acq On : 26 Feb 2016 5:02 pm
Operator : NicoleH1
Sample : icv9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 29 09:34:56 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.497	106	476984	111.08 ug/L	99
109) o-xylene	14.968	106	241112	57.13 ug/L	96
110) styrene	14.978	104	403922	56.82 ug/L	99
111) bromoform	15.297	173	103976	55.88 ug/L	98
113) isopropylbenzene	15.339	105	627037	54.19 ug/L	99
115) bromobenzene	15.804	156	167303	52.88 ug/L	98
116) 1,1,2,2-tetrachloroethane	15.700	83	165368	52.67 ug/L	99
117) trans-1,4-dichloro-2-b...	15.741	53	54472	54.34 ug/L	99
118) 1,2,3-trichloropropane	15.783	110	41282	53.02 ug/L	97
119) n-propylbenzene	15.794	91	777502	55.73 ug/L	100
120) 2-chlorotoluene	15.971	126	152985	52.36 ug/L	98
121) 4-chlorotoluene	16.081	91	472351	52.89 ug/L	100
123) 1,3,5-trimethylbenzene	15.956	105	538163	55.11 ug/L	100
124) tert-butylbenzene	16.348	119	472536	55.95 ug/L	99
125) pentachloroethane	16.458	167	110897	56.49 ug/L	99
126) 1,2,4-trimethylbenzene	16.400	105	562154	55.72 ug/L	100
128) sec-butylbenzene	16.588	105	706951	55.93 ug/L	100
129) 1,3-dichlorobenzene	16.818	146	329161	54.05 ug/L	99
130) p-isopropyltoluene	16.714	119	616783	57.72 ug/L	100
131) 1,4-dichlorobenzene	16.907	146	330492	53.13 ug/L	100
132) benzyl chloride	17.038	91	336288	55.47 ug/L	100
133) 1,2-dichlorobenzene	17.346	146	313228	55.04 ug/L	99
135) n-butylbenzene	17.174	92	320012	58.26 ug/L	100
137) 1,2-dibromo-3-chloropr...	18.209	157	32985	57.78 ug/L	99
138) 1,3,5-trichlorobenzene	18.397	180	253449	55.95 ug/L	99
139) 1,2,4-trichlorobenzene	19.129	180	210922	58.75 ug/L	99
140) hexachlorobutadiene	19.244	225	122577	57.20 ug/L	100
141) naphthalene	19.458	128	391193	56.74 ug/L	99
143) 1,2,3-trichlorobenzene	19.736	180	167626	57.97 ug/L	100
144) hexachloroethane	17.629	201	115633	57.74 ug/L	100

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

7.6.11

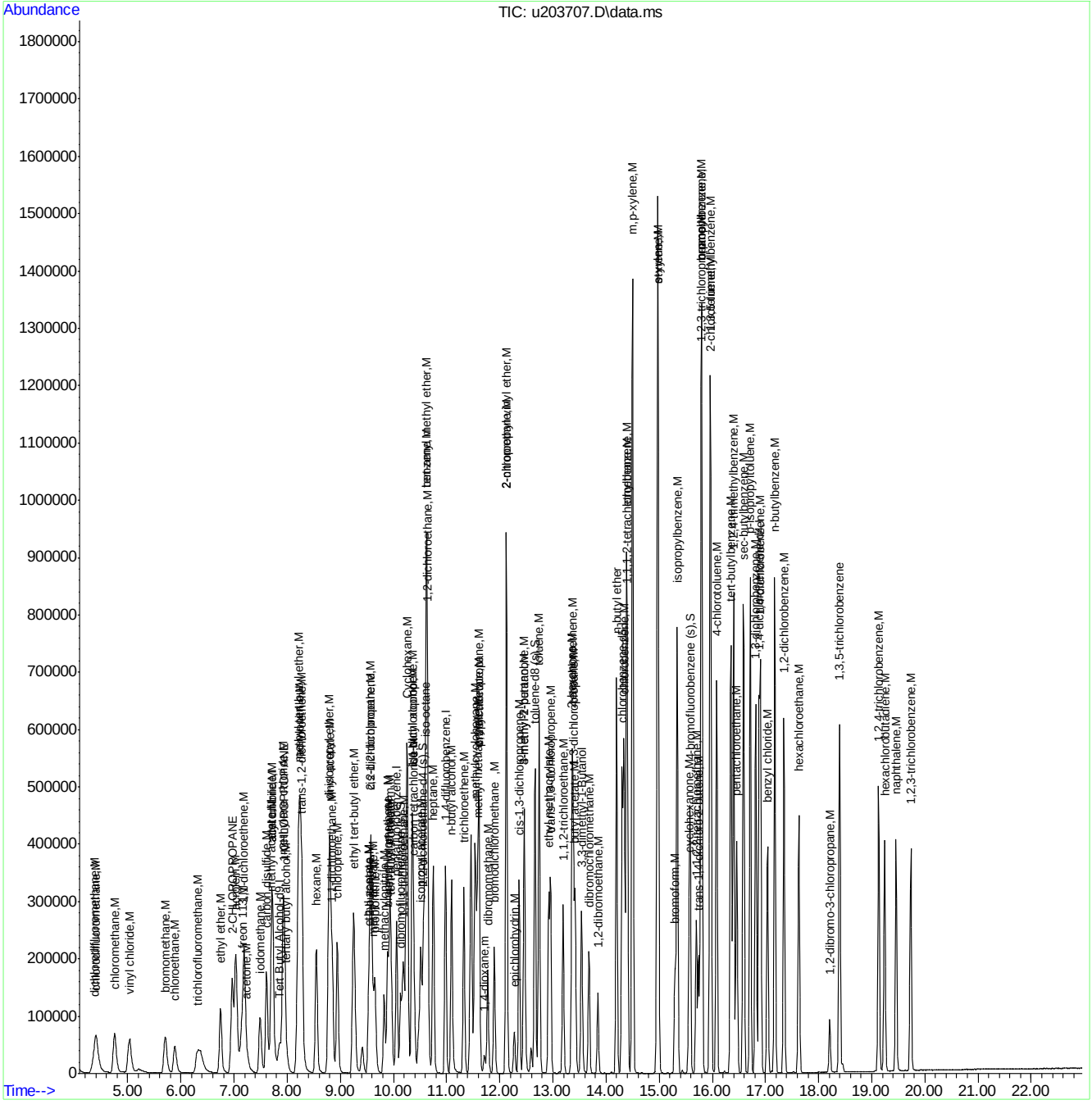
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\vu9361-9370\
Data File : u203707.D
Acq On : 26 Feb 2016 5:02 pm
Operator : NicoleH1
Sample : icv9367-50
Misc : ms98802,vu9367,5.0,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 29 09:34:56 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203989.D
Acq On : 8 Mar 2016 12:55 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:22:02 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.862	65	115510	500.00	ug/L	0.00
5) pentafluorobenzene	10.058	168	229697	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.978	114	330574	50.00	ug/L	0.00
96) chlorobenzene-d5	14.303	117	306513	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.875	152	172130	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.136	113	97497	52.25	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.50%			
57) 1,2-dichloroethane-d4 (s)	10.554	65	117608	51.75	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.50%			
88) toluene-d8 (s)	12.661	98	393970	49.62	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.24%			
114) 4-bromofluorobenzene (s)	15.578	95	152892	48.54	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.08%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.972	59	27295	106.04	ug/L #	58
4) 1,4-dioxane	11.715	88	9840	481.11	ug/L	96
11) chlorodifluoromethane	4.401	51	49425	19.66	ug/L	99
12) dichlorodifluoromethane	4.385	85	48553	21.78	ug/L	99
15) chloromethane	4.751	50	69827	17.88	ug/L	99
16) vinyl chloride	5.034	62	62002	18.84	ug/L	99
18) bromomethane	5.708	94	32032	20.19	ug/L	98
19) chloroethane	5.886	64	33299	18.84	ug/L	98
20) trichlorofluoromethane	6.320	101	62172	21.00	ug/L	97
23) ethyl ether	6.748	74	25660	20.53	ug/L	98
24) 2-CHLOROPROPANE	6.973	43	97996	20.60	ug/L	99
27) acrolein	7.041	56	105715	195.97	ug/L	99
28) 1,1-dichloroethene	7.198	96	38301	21.78	ug/L	97
29) acetone	7.255	58	3859	20.07	ug/L	92
30) allyl chloride	7.726	76	32669	23.01	ug/L	97
31) acetonitrile	7.716	40	48284	191.58	ug/L	92
32) iodomethane	7.491	142	71592	21.00	ug/L	99
33) carbon disulfide	7.616	76	137898	20.45	ug/L	99
34) 1-CHLOROPROPANE	7.951	63	4038	19.93	ug/L	99
35) methylene chloride	7.919	84	45756	20.44	ug/L	99
36) methyl acetate	7.700	43	42884	21.39	ug/L	99
37) methyl tert butyl ether	8.223	73	132851	21.10	ug/L	100
38) trans-1,2-dichloroethene	8.285	96	43328	20.93	ug/L	97
39) di-isopropyl ether	8.793	45	185477	21.32	ug/L	84
40) ethyl tert-butyl ether	9.253	59	157919	21.29	ug/L	99
41) 2-butanone	9.530	72	5643	21.50	ug/L #	91
42) 1,1-dichloroethane	8.845	63	88610	21.39	ug/L	98
43) chloroprene	8.944	53	73615	22.43	ug/L	98
44) acrylonitrile	8.254	53	93453	100.71	ug/L	98
45) vinyl acetate	8.813	86	8231	20.96	ug/L #	72
46) ethyl acetate	9.535	45	7403	19.13	ug/L	98
47) 2,2-dichloropropane	9.577	77	69340	22.51	ug/L	99
48) cis-1,2-dichloroethene	9.577	96	47905	20.98	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203989.D
Acq On : 8 Mar 2016 12:55 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:22:02 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.619	85	6235	19.21 ug/L	99
50) propionitrile	9.655	54	73262	199.33 ug/L	98
51) bromochloromethane	9.890	128	22431	20.93 ug/L	98
52) tetrahydrofuran	9.917	42	18785	20.36 ug/L	99
53) chloroform	9.932	83	76377	21.66 ug/L	99
54) tert-butyl Formate	9.964	59	41751	21.23 ug/L	98
55) iso-butyl alcohol	10.345	43	25872	206.68 ug/L	99
58) freon 113	7.161	151	31326	24.46 ug/L	99
59) methacrylonitrile	9.828	41	33913	20.80 ug/L	99
60) 1,1,1-trichloroethane	10.188	97	64321	21.67 ug/L	99
62) tert-amyl methyl ether	10.633	87	30571	22.17 ug/L	92
63) iso-octane	10.591	57	186044	24.19 ug/L	99
66) epichlorohydrin	12.274	57	24875	102.07 ug/L	98
67) n-butyl alcohol	11.098	56	78500	1039.32 ug/L	99
68) Cyclohexane	10.251	84	68603	18.99 ug/L	89
69) carbon tetrachloride	10.387	117	59499	21.12 ug/L	98
70) 1,1-dichloropropene	10.356	75	61678	20.52 ug/L	99
71) hexane	8.547	57	71299	24.69 ug/L	100
72) benzene	10.622	78	182662	20.03 ug/L	97
73) heptane	10.748	57	41893	22.87 ug/L	98
74) isopropyl acetate	10.513	43	100625	19.83 ug/L	99
75) 1,2-dichloroethane	10.643	62	60607	19.88 ug/L	100
78) trichloroethene	11.328	95	44559	20.10 ug/L	95
79) methylcyclohexane	11.537	83	79593	22.80 ug/L	99
80) 2-nitropropane	12.128	41	19609	20.26 ug/L	99
81) 2-chloroethyl vinyl ether	12.123	63	150002	107.18 ug/L	99
82) methyl methacrylate	11.579	100	11224	19.96 ug/L #	84
83) 1,2-dichloropropane	11.605	63	51540	19.98 ug/L	99
84) propyl acetate	11.616	73	8746	20.75 ug/L	88
85) dibromomethane	11.772	93	26723	20.35 ug/L	99
86) bromodichloromethane	11.898	83	60907	20.57 ug/L	99
87) cis-1,3-dichloropropene	12.363	75	80633	20.33 ug/L	99
89) 4-methyl-2-pentanone	12.452	58	19485	19.73 ug/L	96
90) toluene	12.740	92	112528	20.44 ug/L	98
91) 3-methyl-1-butanol	12.468	55	51043	422.60 ug/L	99
92) trans-1,3-dichloropropene	12.954	75	72445	20.56 ug/L	99
93) ethyl methacrylate	12.917	69	59467	19.64 ug/L	99
94) 1,1,2-trichloroethane	13.189	83	34767	20.08 ug/L	95
95) 2-hexanone	13.357	58	19580	18.87 ug/L	97
97) cyclohexanone	15.558	55	32295	206.02 ug/L	99
98) tetrachloroethene	13.362	164	40988	21.29 ug/L	98
99) 1,3-dichloropropane	13.388	76	70141	19.43 ug/L	99
100) butyl acetate	13.419	56	33948	20.46 ug/L	97
101) dibromochloromethane	13.675	129	48048	20.26 ug/L	100
102) 1,2-dibromoethane	13.848	107	40560	19.66 ug/L	98
103) 3,3-dimethyl-1-Butanol	13.540	57	56861	208.26 ug/L	99
104) n-butyl ether	14.198	57	234953	20.62 ug/L	100
105) chlorobenzene	14.339	112	126426	20.44 ug/L	97
106) 1,1,1,2-tetrachloroethane	14.402	131	47140	20.38 ug/L	96
107) ethylbenzene	14.386	91	220937	20.39 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203989.D
Acq On : 8 Mar 2016 12:55 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:22:02 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.496	106	168906	41.66 ug/L	98
109) o-xylene	14.967	106	83070	20.85 ug/L	98
110) styrene	14.977	104	140837	20.99 ug/L	99
111) bromoform	15.296	173	35164	20.02 ug/L	99
113) isopropylbenzene	15.338	105	223242	20.81 ug/L	100
115) bromobenzene	15.803	156	59137	20.16 ug/L	97
116) 1,1,2,2-tetrachloroethane	15.699	83	57288	19.68 ug/L	99
117) trans-1,4-dichloro-2-b...	15.741	53	17717	19.06 ug/L	95
118) 1,2,3-trichloropropane	15.788	110	14373	19.91 ug/L	97
119) n-propylbenzene	15.793	91	266179	20.58 ug/L	100
120) 2-chlorotoluene	15.971	126	54664	20.18 ug/L	99
121) 4-chlorotoluene	16.080	91	161998	19.56 ug/L	99
123) 1,3,5-trimethylbenzene	15.955	105	188630	20.83 ug/L	99
124) tert-butylbenzene	16.347	119	163358	20.86 ug/L	99
125) pentachloroethane	16.462	167	37362	20.53 ug/L	97
126) 1,2,4-trimethylbenzene	16.399	105	193292	20.66 ug/L	99
128) sec-butylbenzene	16.587	105	248620	21.22 ug/L	99
129) 1,3-dichlorobenzene	16.817	146	114000	20.19 ug/L	99
130) p-isopropyltoluene	16.713	119	211321	21.33 ug/L	99
131) 1,4-dichlorobenzene	16.906	146	113734	19.72 ug/L	99
132) benzyl chloride	17.037	91	121259	21.57 ug/L	100
133) 1,2-dichlorobenzene	17.346	146	108243	20.51 ug/L	99
135) n-butylbenzene	17.173	92	109598	21.52 ug/L	98
137) 1,2-dibromo-3-chloropr...	18.208	157	11153	21.07 ug/L	98
138) 1,3,5-trichlorobenzene	18.396	180	88981	21.19 ug/L	99
139) 1,2,4-trichlorobenzene	19.128	180	69587	20.91 ug/L	99
140) hexachlorobutadiene	19.243	225	43328	21.81 ug/L	98
141) naphthalene	19.458	128	127191	19.90 ug/L	99
143) 1,2,3-trichlorobenzene	19.735	180	56241	20.98 ug/L	97
144) hexachloroethane	17.628	201	38784	20.89 ug/L	99

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

7.6.12

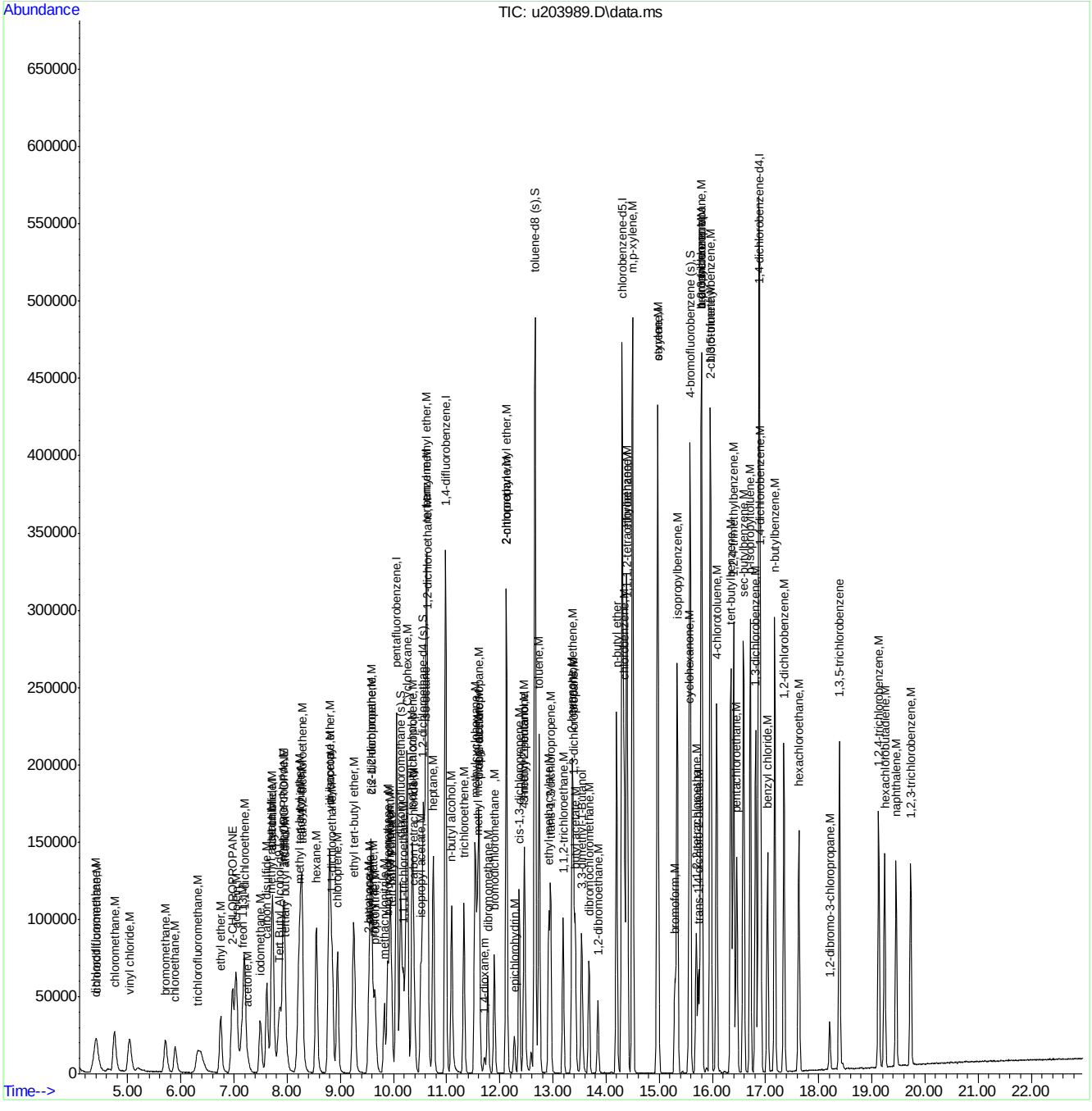
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203989.D
Acq On : 8 Mar 2016 12:55 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 10:22:02 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203990.D
Acq On : 8 Mar 2016 1:25 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 10:24:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	125654	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	234528	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	336856	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	310907	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.881	152	170100	50.00	ug/L	0.00

System Monitoring Compounds

56) dibromofluoromethane (s)	10.137	113	98262	51.58	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.16%			
57) 1,2-dichloroethane-d4 (s)	10.555	65	119353	51.44	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.88%			
88) toluene-d8 (s)	12.662	98	401418	49.62	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.24%			
114) 4-bromofluorobenzene (s)	15.579	95	155644	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.00%			

Target Compounds

						Qvalue
2) tertiary butyl alcohol	7.983	59	29958	106.99	ug/L	95
4) 1,4-dioxane	11.716	88	11348	510.05	ug/L	98
11) chlorodifluoromethane	4.407	51	49656	19.35	ug/L	100
12) dichlorodifluoromethane	4.376	85	47970	21.08	ug/L	99
15) chloromethane	4.747	50	70897	17.78	ug/L	99
16) vinyl chloride	5.029	62	62368	18.56	ug/L	99
18) bromomethane	5.709	94	32438	20.03	ug/L	99
19) chloroethane	5.887	64	33788	18.73	ug/L	98
20) trichlorofluoromethane	6.347	101	62432	20.66	ug/L	98
23) ethyl ether	6.744	74	26106	20.45	ug/L	97
24) 2-CHLOROPROPANE	6.974	43	101146	20.82	ug/L	99
27) acrolein	7.042	56	109604	198.99	ug/L	98
28) 1,1-dichloroethene	7.199	96	39625	22.07	ug/L	96
29) acetone	7.256	58	3986	20.30	ug/L	87
30) allyl chloride	7.727	76	31946	22.04	ug/L	96
31) acetonitrile	7.727	40	50984	198.13	ug/L #	80
32) iodomethane	7.497	142	73512	21.12	ug/L	99
33) carbon disulfide	7.617	76	143182	20.79	ug/L	100
34) 1-CHLOROPROPANE	7.952	63	4283	20.70	ug/L	99
35) methylene chloride	7.926	84	47184	20.64	ug/L	98
36) methyl acetate	7.701	43	45031	22.00	ug/L	98
37) methyl tert butyl ether	8.218	73	135199	21.03	ug/L	100
38) trans-1,2-dichloroethene	8.286	96	44703	21.15	ug/L	99
39) di-isopropyl ether	8.793	45	189537	21.33	ug/L	89
40) ethyl tert-butyl ether	9.259	59	162021	21.39	ug/L	99
41) 2-butanone	9.541	72	5926	22.12	ug/L #	90
42) 1,1-dichloroethane	8.851	63	90521	21.40	ug/L	97
43) chloroprene	8.945	53	76805	22.92	ug/L	99
44) acrylonitrile	8.255	53	97603	103.02	ug/L	99
45) vinyl acetate	8.814	86	8502	21.20	ug/L	97
46) ethyl acetate	9.536	45	7632	19.31	ug/L	98
47) 2,2-dichloropropane	9.578	77	70976	22.56	ug/L	99
48) cis-1,2-dichloroethene	9.578	96	49383	21.19	ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203990.D
Acq On : 8 Mar 2016 1:25 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 10:24:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.620	85	6696	20.21 ug/L #	82
50) propionitrile	9.656	54	76671	204.30 ug/L	97
51) bromochloromethane	9.891	128	23221	21.22 ug/L	98
52) tetrahydrofuran	9.923	42	19485	20.69 ug/L	98
53) chloroform	9.938	83	78457	21.79 ug/L	98
54) tert-butyl Formate	9.965	59	43042	21.44 ug/L	99
55) iso-butyl alcohol	10.351	43	30432	238.10 ug/L	98
58) freon 113	7.162	151	30264	23.15 ug/L	99
59) methacrylonitrile	9.829	41	35856	21.53 ug/L	99
60) 1,1,1-trichloroethane	10.184	97	65542	21.63 ug/L	99
62) tert-amyl methyl ether	10.629	87	31185	22.15 ug/L	96
63) iso-octane	10.592	57	187683	23.90 ug/L	99
66) epichlorohydrin	12.275	57	27073	109.01 ug/L	99
67) n-butyl alcohol	11.099	56	88139	1145.17 ug/L	99
68) Cyclohexane	10.247	84	69309	18.83 ug/L	92
69) carbon tetrachloride	10.383	117	60869	21.20 ug/L	99
70) 1,1-dichloropropene	10.357	75	63572	20.76 ug/L	99
71) hexane	8.553	57	72144	24.52 ug/L	99
72) benzene	10.623	78	189003	20.34 ug/L	100
73) heptane	10.749	57	43518	23.31 ug/L	96
74) isopropyl acetate	10.514	43	106002	20.50 ug/L	99
75) 1,2-dichloroethane	10.644	62	62779	20.21 ug/L	98
78) trichloroethene	11.329	95	46286	20.49 ug/L	97
79) methylcyclohexane	11.543	83	80383	22.60 ug/L	99
80) 2-nitropropane	12.134	41	20714	21.00 ug/L #	84
81) 2-chloroethyl vinyl ether	12.129	63	157565	110.48 ug/L	98
82) methyl methacrylate	11.580	100	11704	20.42 ug/L #	88
83) 1,2-dichloropropane	11.606	63	54092	20.58 ug/L	99
84) propyl acetate	11.617	73	9409	21.90 ug/L	91
85) dibromomethane	11.773	93	27641	20.65 ug/L	97
86) bromodichloromethane	11.899	83	62824	20.82 ug/L	98
87) cis-1,3-dichloropropene	12.364	75	83531	20.66 ug/L	100
89) 4-methyl-2-pentanone	12.453	58	20772	20.64 ug/L	98
90) toluene	12.741	92	116782	20.82 ug/L	99
91) 3-methyl-1-butanol	12.469	55	56192	456.56 ug/L	99
92) trans-1,3-dichloropropene	12.955	75	75852	21.13 ug/L	99
93) ethyl methacrylate	12.924	69	62250	20.18 ug/L	99
94) 1,1,2-trichloroethane	13.190	83	35688	20.22 ug/L	99
95) 2-hexanone	13.358	58	20609	19.49 ug/L	98
97) cyclohexanone	15.559	55	27641	173.84 ug/L	98
98) tetrachloroethene	13.368	164	42195	21.61 ug/L	96
99) 1,3-dichloropropane	13.389	76	72977	19.93 ug/L	99
100) butyl acetate	13.420	56	35596	21.15 ug/L	96
101) dibromochloromethane	13.682	129	49452	20.55 ug/L	99
102) 1,2-dibromoethane	13.849	107	41502	19.83 ug/L	98
103) 3,3-dimethyl-1-Butanol	13.541	57	61916	223.57 ug/L	99
104) n-butyl ether	14.199	57	245454	21.24 ug/L	100
105) chlorobenzene	14.340	112	129642	20.67 ug/L	97
106) 1,1,1,2-tetrachloroethane	14.403	131	48341	20.60 ug/L	95
107) ethylbenzene	14.387	91	226733	20.63 ug/L	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203990.D
Acq On : 8 Mar 2016 1:25 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 10:24:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.502	106	173223	42.12 ug/L	98
109) o-xylene	14.968	106	85706	21.21 ug/L	98
110) styrene	14.978	104	145442	21.37 ug/L	99
111) bromoform	15.297	173	36207	20.32 ug/L	99
113) isopropylbenzene	15.339	105	229833	21.68 ug/L	100
115) bromobenzene	15.804	156	60412	20.84 ug/L	100
116) 1,1,2,2-tetrachloroethane	15.694	83	58394	20.30 ug/L	99
117) trans-1,4-dichloro-2-b...	15.742	53	18251	19.87 ug/L	99
118) 1,2,3-trichloropropane	15.783	110	14995	21.02 ug/L	97
119) n-propylbenzene	15.794	91	275503	21.55 ug/L	100
120) 2-chlorotoluene	15.972	126	56596	21.14 ug/L	98
121) 4-chlorotoluene	16.081	91	167241	20.44 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	192914	21.56 ug/L	99
124) tert-butylbenzene	16.348	119	167426	21.63 ug/L	99
125) pentachloroethane	16.463	167	38697	21.52 ug/L	98
126) 1,2,4-trimethylbenzene	16.400	105	196980	21.31 ug/L	100
128) sec-butylbenzene	16.588	105	254414	21.97 ug/L	100
129) 1,3-dichlorobenzene	16.818	146	116299	20.84 ug/L	99
130) p-isopropyltoluene	16.714	119	215778	22.04 ug/L	99
131) 1,4-dichlorobenzene	16.907	146	115903	20.34 ug/L	99
132) benzyl chloride	17.038	91	120316	21.66 ug/L	100
133) 1,2-dichlorobenzene	17.352	146	109675	21.03 ug/L	99
135) n-butylbenzene	17.174	92	112796	22.41 ug/L	98
137) 1,2-dibromo-3-chloropr...	18.209	157	11613	22.20 ug/L	98
138) 1,3,5-trichlorobenzene	18.397	180	91050	21.94 ug/L	99
139) 1,2,4-trichlorobenzene	19.134	180	72253	21.97 ug/L	97
140) hexachlorobutadiene	19.244	225	45120	22.98 ug/L	98
141) naphthalene	19.459	128	135488	21.45 ug/L	99
143) 1,2,3-trichlorobenzene	19.736	180	59218	22.35 ug/L	99
144) hexachloroethane	17.629	201	39643	21.60 ug/L	100

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

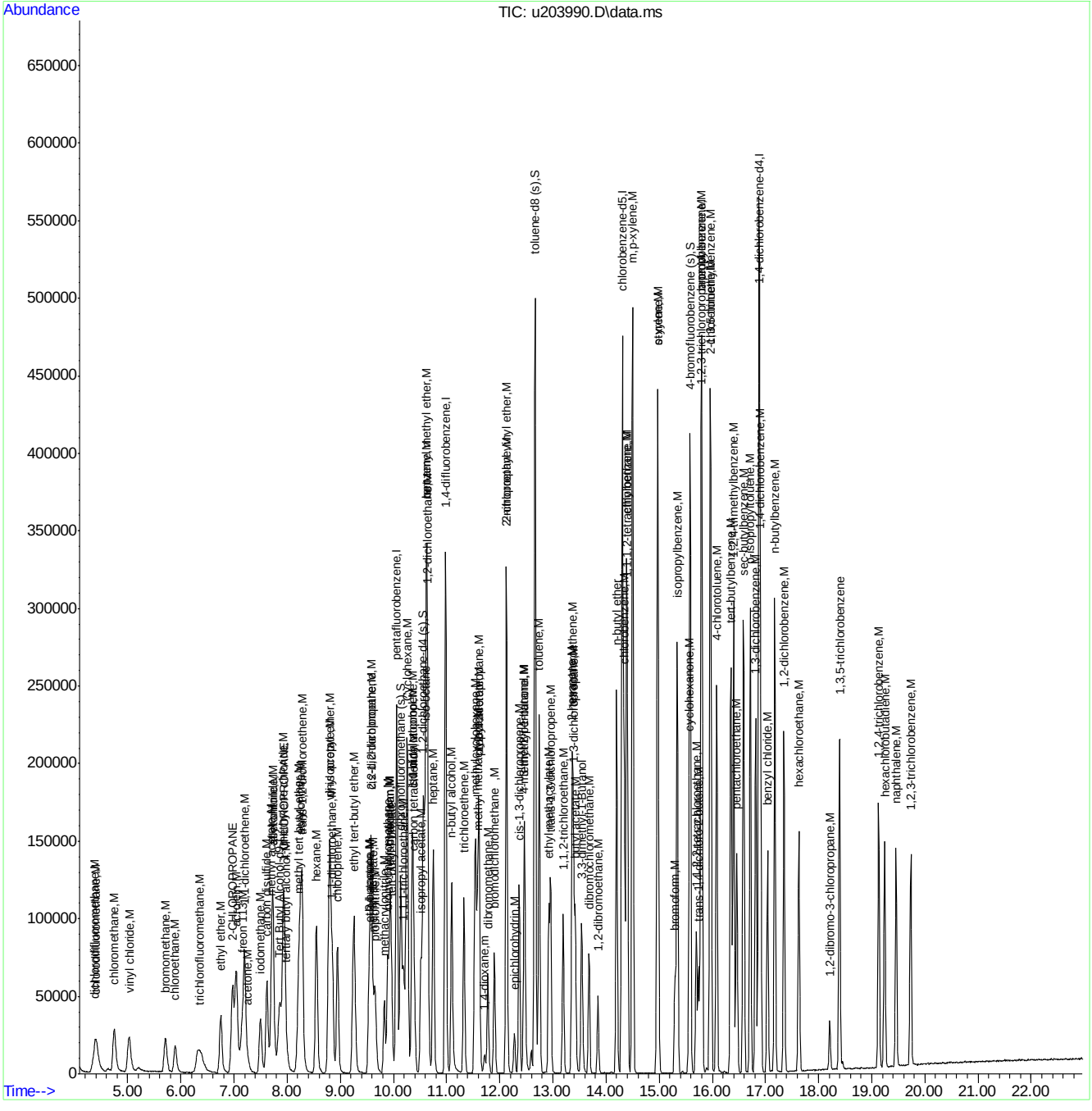
7.6.13

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\U-core\
Data File : u203990.D
Acq On : 8 Mar 2016 1:25 pm
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99238,vu9377,5.0,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 10:24:53 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204008.D
Acq On : 9 Mar 2016 8:53 am
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 13:07:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.858	65	115146	500.00	ug/L	0.00
5) pentafluorobenzene	10.059	168	222018	50.00	ug/L	0.00
64) 1,4-difluorobenzene	10.979	114	321256	50.00	ug/L	0.00
96) chlorobenzene-d5	14.304	117	298383	50.00	ug/L	0.00
112) 1,4-dichlorobenzene-d4	16.876	152	166632	50.00	ug/L	0.00

System Monitoring Compounds						
56) dibromofluoromethane (s)	10.132	113	94400	52.34	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.68%			
57) 1,2-dichloroethane-d4 (s)	10.556	65	115091	52.40	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 104.80%			
88) toluene-d8 (s)	12.663	98	384847	49.88	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.76%			
114) 4-bromofluorobenzene (s)	15.580	95	148968	48.85	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.70%			

Target Compounds						Qvalue
2) tertiary butyl alcohol	7.973	59	26786	104.39	ug/L	72
4) 1,4-dioxane	11.711	88	11260	552.28	ug/L	96
11) chlorodifluoromethane	4.402	51	49021	20.18	ug/L	98
12) dichlorodifluoromethane	4.382	85	43976	20.41	ug/L	99
15) chloromethane	4.753	50	67138	17.79	ug/L	100
16) vinyl chloride	5.030	62	60041	18.88	ug/L	99
18) bromomethane	5.704	94	28993	18.91	ug/L	99
19) chloroethane	5.887	64	31257	18.30	ug/L	95
20) trichlorofluoromethane	6.368	101	59178	20.68	ug/L	100
23) ethyl ether	6.750	74	24710	20.45	ug/L	97
24) 2-CHLOROPROPANE	6.964	43	97570	21.21	ug/L	99
27) acrolein	7.037	56	101804	195.24	ug/L	99
28) 1,1-dichloroethene	7.194	96	37533	22.08	ug/L	97
29) acetone	7.262	58	3897	20.97	ug/L	94
30) allyl chloride	7.722	76	28733	20.94	ug/L	96
31) acetonitrile	7.722	40	50414	206.95	ug/L	90
32) iodomethane	7.487	142	70210	21.31	ug/L	100
33) carbon disulfide	7.618	76	140495	21.55	ug/L	99
34) 1-CHLOROPROPANE	7.952	63	4076	20.81	ug/L	100
35) methylene chloride	7.921	84	45369	20.97	ug/L	99
36) methyl acetate	7.696	43	42300	21.83	ug/L	98
37) methyl tert butyl ether	8.219	73	129625	21.30	ug/L	100
38) trans-1,2-dichloroethene	8.282	96	42226	21.11	ug/L	97
39) di-isopropyl ether	8.789	45	181171	21.54	ug/L	97
40) ethyl tert-butyl ether	9.254	59	153836	21.45	ug/L	98
41) 2-butanone	9.531	72	5325	20.99	ug/L	100
42) 1,1-dichloroethane	8.846	63	86982	21.72	ug/L	99
43) chloroprene	8.940	53	72032	22.70	ug/L	99
44) acrylonitrile	8.250	53	93199	103.91	ug/L	99
45) vinyl acetate	8.815	86	7858	20.70	ug/L #	80
46) ethyl acetate	9.531	45	8054	21.53	ug/L	98
47) 2,2-dichloropropane	9.578	77	69600	23.37	ug/L	100
48) cis-1,2-dichloroethene	9.573	96	47330	21.45	ug/L	98

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204008.D
Acq On : 9 Mar 2016 8:53 am
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 13:07:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
49) methyl acrylate	9.620	85	6091	19.42 ug/L	99
50) propionitrile	9.651	54	72548	204.21 ug/L	99
51) bromochloromethane	9.887	128	21972	21.21 ug/L	98
52) tetrahydrofuran	9.918	42	18558	20.81 ug/L	98
53) chloroform	9.934	83	74529	21.86 ug/L	99
54) tert-butyl Formate	9.960	59	41776	21.98 ug/L	99
55) iso-butyl alcohol	10.352	43	26351	217.79 ug/L	97
58) freon 113	7.163	151	29292	23.67 ug/L	94
59) methacrylonitrile	9.824	41	33173	21.05 ug/L	97
60) 1,1,1-trichloroethane	10.185	97	63178	22.02 ug/L	97
62) tert-amyl methyl ether	10.629	87	29638	22.23 ug/L	93
63) iso-octane	10.592	57	172750	23.24 ug/L	99
66) epichlorohydrin	12.271	57	24776	104.61 ug/L	99
67) n-butyl alcohol	11.094	56	73456	1000.75 ug/L	99
68) Cyclohexane	10.253	84	66871	19.05 ug/L	87
69) carbon tetrachloride	10.378	117	57786	21.11 ug/L	99
70) 1,1-dichloropropene	10.352	75	60057	20.56 ug/L	98
71) hexane	8.548	57	64991	23.16 ug/L	98
72) benzene	10.624	78	179265	20.23 ug/L	99
73) heptane	10.749	57	38398	21.57 ug/L	98
74) isopropyl acetate	10.514	43	97971	19.87 ug/L	99
75) 1,2-dichloroethane	10.645	62	59582	20.11 ug/L	99
78) trichloroethene	11.324	95	43889	20.37 ug/L	98
79) methylcyclohexane	11.539	83	74862	22.07 ug/L	98
80) 2-nitropropane	12.124	41	19243	20.46 ug/L #	89
81) 2-chloroethyl vinyl ether	12.124	63	145025	106.63 ug/L	99
82) methyl methacrylate	11.581	100	10959	20.05 ug/L #	81
83) 1,2-dichloropropane	11.601	63	50579	20.18 ug/L	99
84) propyl acetate	11.612	73	8456	20.64 ug/L	93
85) dibromomethane	11.774	93	26394	20.68 ug/L	98
86) bromodichloromethane	11.894	83	59785	20.78 ug/L	99
87) cis-1,3-dichloropropene	12.365	75	78479	20.36 ug/L	99
89) 4-methyl-2-pentanone	12.454	58	18935	19.73 ug/L	97
90) toluene	12.741	92	110911	20.73 ug/L	100
91) 3-methyl-1-butanol	12.469	55	46038	392.22 ug/L	98
92) trans-1,3-dichloropropene	12.955	75	71542	20.90 ug/L	98
93) ethyl methacrylate	12.919	69	57125	19.41 ug/L	97
94) 1,1,2-trichloroethane	13.191	83	33545	19.93 ug/L	98
95) 2-hexanone	13.358	58	18484	18.33 ug/L	95
97) cyclohexanone	15.559	55	34997	229.34 ug/L	98
98) tetrachloroethene	13.363	164	39285	20.97 ug/L	98
99) 1,3-dichloropropane	13.389	76	69747	19.85 ug/L	99
100) butyl acetate	13.421	56	32555	20.16 ug/L	97
101) dibromochloromethane	13.677	129	46776	20.26 ug/L	100
102) 1,2-dibromoethane	13.849	107	39291	19.56 ug/L	96
103) 3,3-dimethyl-1-Butanol	13.541	57	48612	182.90 ug/L	99
104) n-butyl ether	14.200	57	230265	20.76 ug/L	99
105) chlorobenzene	14.336	112	122915	20.42 ug/L	100
106) 1,1,1,2-tetrachloroethane	14.404	131	45874	20.37 ug/L	96
107) ethylbenzene	14.383	91	215568	20.44 ug/L	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204008.D
Acq On : 9 Mar 2016 8:53 am
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 13:07:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
108) m,p-xylene	14.498	106	163038	41.31 ug/L	98
109) o-xylene	14.968	106	81635	21.05 ug/L	98
110) styrene	14.979	104	137454	21.04 ug/L	99
111) bromoform	15.298	173	33802	19.76 ug/L	100
113) isopropylbenzene	15.339	105	219056	21.09 ug/L	99
115) bromobenzene	15.805	156	56952	20.05 ug/L	98
116) 1,1,2,2-tetrachloroethane	15.700	83	56115	19.91 ug/L	98
117) trans-1,4-dichloro-2-b...	15.742	53	17909	19.91 ug/L	99
118) 1,2,3-trichloropropane	15.784	110	14047	20.10 ug/L	99
119) n-propylbenzene	15.794	91	263416	21.04 ug/L	99
120) 2-chlorotoluene	15.972	126	53373	20.35 ug/L	96
121) 4-chlorotoluene	16.082	91	158648	19.79 ug/L	99
123) 1,3,5-trimethylbenzene	15.956	105	186083	21.23 ug/L	99
124) tert-butylbenzene	16.348	119	162018	21.37 ug/L	98
125) pentachloroethane	16.458	167	36415	20.67 ug/L	96
126) 1,2,4-trimethylbenzene	16.401	105	189461	20.92 ug/L	99
128) sec-butylbenzene	16.589	105	244043	21.51 ug/L	100
129) 1,3-dichlorobenzene	16.814	146	111377	20.37 ug/L	99
130) p-isopropyltoluene	16.714	119	206983	21.58 ug/L	100
131) 1,4-dichlorobenzene	16.908	146	110929	19.87 ug/L	96
132) benzyl chloride	17.039	91	118553	21.79 ug/L	100
133) 1,2-dichlorobenzene	17.347	146	105667	20.69 ug/L	99
135) n-butylbenzene	17.174	92	108698	22.05 ug/L	100
137) 1,2-dibromo-3-chloropr...	18.204	157	10741	20.96 ug/L	96
138) 1,3,5-trichlorobenzene	18.393	180	87391	21.49 ug/L	100
139) 1,2,4-trichlorobenzene	19.130	180	68710	21.32 ug/L	100
140) hexachlorobutadiene	19.240	225	43009	22.36 ug/L	98
141) naphthalene	19.459	128	124790	20.17 ug/L	100
143) 1,2,3-trichlorobenzene	19.731	180	55761	21.49 ug/L	97
144) hexachloroethane	17.629	201	38296	21.30 ug/L	98

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

7.6.14

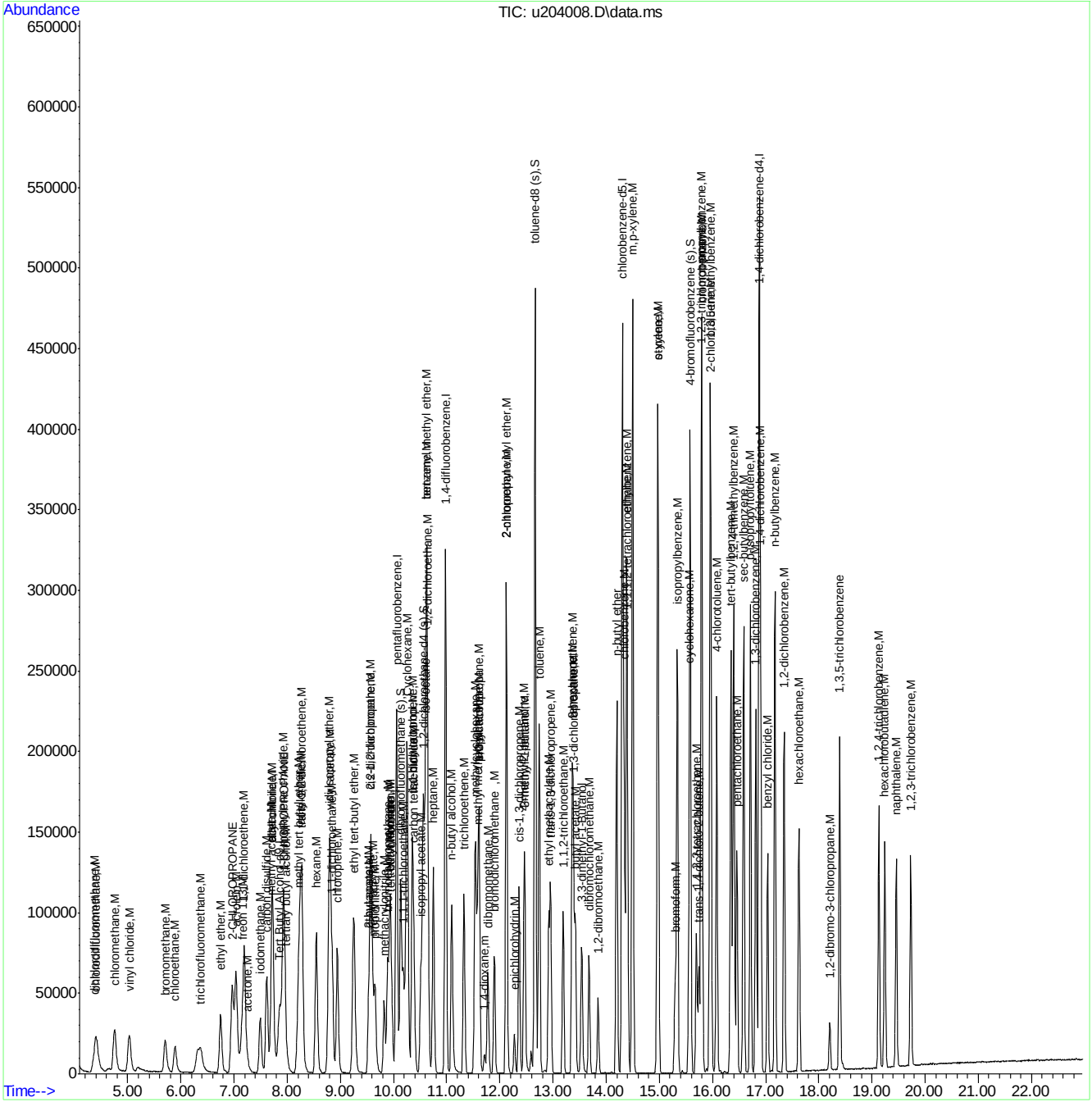
7

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : u204008.D
Acq On : 9 Mar 2016 8:53 am
Operator : NicoleH1
Sample : CC9367-20
Misc : ms99351,vu9378,5.0,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 13:07:06 2016
Quant Method : C:\msdchem\1\METHODS\MU9367.M
Quant Title : SW-846 8260C, ZB624 60m x 250um x 1.40um
QLast Update : Mon Feb 29 09:33:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VU9367

Print Analyst Name: Nicole Horvath

Analyst Signature: Nicole H

Columns: ZB624 (60m x 0.25mm x 1.4um)

Method V8260C

Initial Cal. Method MU9367

Date: 2/26/16

Standard Data

Lot #	Description	Conc.
V015258	108.77 Ext A	100ppm
V015284	07.4 Ext B	100ppm
V015284	03.4 Ext C	100ppm
V015258	141.5 Acrolein	1000ppm
V015258	139.4 Hexane	1000ppm

Standard Data

Lot #	Description	Conc.
V01522	109.43 Std A	100ppm
V01522	130.36 Std B	100ppm
V01522	146.5 Std C	100ppm
V01522	116.2 Acrolein	1000ppm
V015284	02 1/5	250/1000ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 2/29/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	~~Secondary~~ dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	4 203694	BFB					5		1x				ok	10:26AM	
	203695	IC9367-0.2	8260 initial	AQ			5		1x		✓		ok	2ul Std ABC ACR ⇒ 1000mL	
	203696	IC9367-0.5	✓	AQ			5		1x		✓		ok	5ul Std ABC, ACR ⇒ 1000mL	
	203697	IC9367-1	✓	AQ			5		1x		✓		ok	1ul Std ABC, 100ul ACR ⇒ 100mL	
	203698	IC9367-2	✓	AQ			5		1x		✓		ok	2ul Std ABC, 200ul ACR ⇒ ~~200~~ 100mL	
	203699	IC9367-5	✓	AQ			5		1x		✓		ok	5ul Std ABC, ACR ⇒ 100mL	
	203700	IC9367-10	✓	AQ			5		1x		✓		ok	10 ul Std ABC ACR ⇒ 100mL	
	203701	IC9367-20	✓	AQ			5		1x		✓		ok	20 Std ABC, ACR ⇒ 100mL	
	203702	IC9367-50	✓	AQ			5		1x		✓		ok	50 Std ABC, ACR ⇒ 100mL	
	203703	IC9367-100	✓	AQ			5		1x		✓		ok	100 Std ABC ⇒ 100mL	
	203704	IC9367-200	✓	AQ			5		1x		✓		ok	200 Std ABC ⇒ 100mL	
	203705	IB					5		1x						
	203706	IB					5		1x						
	203707	ICV9367-50	✓	AQ			5		1x		✓		ok	50 mL 25ul ext ABC Also hex	

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: OR001-9
Rev. Date: 2/14/2007

139

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VU9377

Print Analyst Name: Nicole Horvath

Analyst Signature: Nicole L

Columns: ZB624 160m x 0.25mm x 1.4um

Method V8260C

Initial Cal. Method MU9367

Date: 3/8/16

pH paper 216814 exp 6/15/17

Standard Data

Lot #	Description	Conc.
V0162284	31.2 Ext A	100ppm
V0162284	07.25 Ext B	100ppm
V0162284	21.8 Ext C	100ppm
V0162284	141.2 Acrolein	100ppm
V0162284	14.5 Hexane	100ppm

Standard Data

Lot #	Description	Conc.
V0152758	109.72 Std A	100ppm
V0152284	130.61 Std B	100ppm
V0162284	29.2 Std C	100ppm
V0162258	116.40 Acrolein	100ppm
V0152284	130 IS	250/200ppm

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: HA **Date:** 3/9/16

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
	U203988	BFB											OK	12:26pm	
	203989	CC9367-20									✓	✓	OK	10ul Std ABC ACR⇒50mL	
	203990	CC9367-20									✓	✓	OK		
	203991	IB									✓	✓			
	203992	MB									✓	✓	OK		
	203993	BS									✓	✓	OK	25ul Ext ABC, ACR Hex⇒50mL	
	203994	IB									✓	✓			
	203995	JC15518-5	99351 TCL20	GW	10		5		1X		✓	✓	OK		✓
	203996	JC15518-1	↓	GW	9		5		1X		✓	✓	OK		✓
	203997	JC15518-2	↓	GW	9		5		1X		✓	✓	RR	c/o	✓
	203998	JC15518-4	↓	GW	9		5		1X		✓	✓	OK		✓
	203999	JC15518-5ms	↓	GW	8		5		1X		✓	✓	OK	25ul Ext ABC, ACR Hex⇒50mL	✓
	204000	JC15518-5 ~~msd~~ msp	↓	GW	9		5		1X		✓	✓	OK		✓
	204001	IB					5		1X		✓	✓			✓
	204002	JC15518-6	↓	GW	9		5		1X		✓	✓	OK		✓
	204003	JC15518-7	↓	GW	9		5		1X		✓	✓	OK		✓
	204004	JC15518-8	↓	GW	9		5		1X		✓	✓	OK		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VU9377

Print Analyst Name: Nicole Horvath

Analyst Signature: Nicole L

Columns: ZB624 (60m x 0.25mm x 1.4um)

Method V8260C

Initial Cal. Method MU9367

Date: 3/9/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Pg 181	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] Date: 3/9/16

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
	4 204005	JC15518-9	99351 JCL20	W/B	4		5		1X		✓	✓	OK		✓
	204006	JC15518-3	✓	O/W	9		1.5/50 ~~1.0~~		50X ~~10X~~		✓	✓	OD RIX		✓
	204007	JC15518-3	✓	O/W	9		5		1X				~~OK~~	A.J. 3/9/16 Not loaded	
														NP 3/8	

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: OR001-9
Rev. Date: 2/14/2007

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: VU9378

Print Analyst Name: Nicole Horvath

Analyst Signature: Nicole H

Columns: ZB624 (60m x 0.25mm x 1.4um)

Method V8260C

Initial Cal. Method MU9367

Date: 3/9/16

pH paper 216814 exp 6/15/17

Standard Data

Lot #	Description	Conc.
V016 2284	31.6 Ext A	100ppm
V016 2284	077 Ext B	100ppm
V016 2284	211.0 Ext C	100ppm
V015 2258	141.6 Acrolein	1000ppm
V016 2284	14.9 Hexane	1000ppm

Standard Data

Lot #	Description	Conc.
V016 2284	33.3 Std A	100ppm
V015 2258	130.61 Std B	100ppm
V016 2284	29.2 Std C	100ppm
V015 2258	116.40 Acrolein	1000ppm
V016 2284	30 IS	25g/250ppm

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: HA Date: 3/10/16

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
	U204007	BFB											OK	8:22AM	
	204008	CC9367-20									✓	✓	OK	10ul Std ABC, ACR →50mL	
	204009	IB									✓	✓			
	204010	MB									✓	✓	OK		
	204011	BS									✓	✓	OK	25ul Ext ABC, ACR Hex→50mL	
	204012	IB									✓	✓			
	204013	JC15545-15	99376 TCL42+	SW	1		5		1X		✓	✓	OK		✓
R	204014	JC15518-2	99351 TCL20	SW	8		5		1X		✓	✓	OK		✓
	204015	JC15614-5	99379 TCL20+	SW	1		5		1X		✓	✓	OK/DL	FID	✓
	204016	JC15614-6	↓	SW	1		5		1X		✓	✓	OK/DL	FID	✓
	204017	JC15614-2	↓	SW	1		5		1X		✓	✓	OK		✓
	204018	JC15614-3	↓	SW	1		5		1X		✓	✓	OK		✓
R	204019	JC15518-3	99351 TCL20	SW	8		5		1X		✓	✓	OK	+ "U204006"	✓
FD	204019A	JC15614-6	99379 TCL20+	SW	1		5/50		10X		✓	✓	OK	+ "U204016"	✓
	204020	JC15614-6MS	↓	SW	2		5		1X		✓	✓	OK	25ul Ext ABC ACR →50mL	✓
	204021	JC15614-6MSD	↓	SW	3		5		1X		✓	✓	OK		✓
FD	204022	JC15614-5 ~~IB~~ 3/9	↓	SW	1		5/50		10X		✓	✓	OK ~~RR~~	3/9/16 CO + "U204015"	✓
	204023	JC15614-1	↓	SW	1		5		1X		✓	✓	RR	c/o 9.3 min %	✓

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: OR001-9
Rev. Date: 2/14/2007

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: VU9378

Print Analyst Name: Nicole Horvath

Analyst Signature: Nicole L

Columns: ZB624/60mx0.25mmx1.4um)

Method V8260C

Initial Cal. Method MU9367

Date: 3/9/16

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	See PG 188	
	5	

ually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest EQA044.

Supervisor Signature: HM Date: 3/10/16

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
U 204024	JC15614-9	99379 TCL20+	GW	1		5		1X		✓	✓	RR	c/o	✓
204025	JC15614-4	✓	GW	1		5		1X		✓	✓	RR	c/o	✓
204026	JC15614-12	✓	WTR	1		5		1X		✓	✓	RR	c/o	✓
204027	JC15614-7	✓	GW	1		5		1X		✓	✓	RR	c/o	✓
204028	JC15614-8	✓	GW	1		5		1X		✓	✓		7 13 pm	✓
204029	BFB2					5		1X					7:42pm	
204030	CC9367-X50					5		1X					25ul Std ABC, ACR ⇒50ml 29,137	
204031	IB					5		1X						
204032	MB2					5		1X		✓	✓	NG	c/o silanol-trimethyl (9.3 min)	
204033	JC15614-10	99379 TCL20+	GW	1		5		1X		✓	✓	RR	C/O 9.3 min	✓
204034	JC15614-11	✓	GW	2		5		1X		✓	✓	RR	9.3 min c/o Acetone hit	✓
204035	JC15605-7	99377 INJPTCL1+	WTR	2		5		1X		✓	✓	RR	EXQC 9.3 min c/o	✓
204036	JC15605-1	TBA ✓	GW	2		5		1X		✓	✓	RR	✓ acetone hit 9.3 min c/o	✓
204037	JC15605-2	✓	GW	2		5		1X		✓	✓	RR	✓ acetone hit 9.3 min c/o	✓
204038	JC15605-3	✓	GW	2		5		1X		✓	✓	RR	✓ acetone hit 9.3 min c/o	✓
													3/9	

X = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
ple Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
trike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer alculation; 4 = analyst's correction error

n: OR001-9
Date: 2/14/2007

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7.7.3

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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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MB1	P103212.D	1	03/09/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.93	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.87	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.4	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.31	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.29	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.24	ug/l	
98-86-2	Acetophenone	ND	2.0	0.28	ug/l	
120-12-7	Anthracene	ND	1.0	0.25	ug/l	
1912-24-9	Atrazine	ND	2.0	0.42	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.32	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.33	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.32	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.23	ug/l	
86-74-8	Carbazole	ND	1.0	0.29	ug/l	
105-60-2	Caprolactam	ND	2.0	0.43	ug/l	
218-01-9	Chrysene	ND	1.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.34	ug/l	

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MB1	P103212.D	1	03/09/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.28	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.26	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.53	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.72	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.31	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.77	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.23	ug/l	
86-73-7	Fluorene	ND	1.0	0.29	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	0.29	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.22	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.38	ug/l	
78-59-1	Isophorone	ND	2.0	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.29	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.21	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.24	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.28	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.31	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.29	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.23	ug/l	
129-00-0	Pyrene	ND	1.0	0.34	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.36	ug/l	

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MB1	P103212.D	1	03/09/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	14-88%
4165-62-2	Phenol-d5	37%	10-110%
118-79-6	2,4,6-Tribromophenol	85%	39-149%
4165-60-0	Nitrobenzene-d5	82%	32-128%
321-60-8	2-Fluorobiphenyl	87%	35-119%
1718-51-0	Terphenyl-d14	94%	10-126%

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

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884A-MB1	3M59948.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.013	ug/l	
123-91-1	1,4-Dioxane	ND	0.10	0.053	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	24-125%
321-60-8	2-Fluorobiphenyl	73%	19-127%
1718-51-0	Terphenyl-d14	88%	10-119%

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-BS1	P103236.D	1	03/10/16	LK	03/09/16	OP91884	EP4534

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	37.9	76	48-106
59-50-7	4-Chloro-3-methyl phenol	50	47.5	95	49-113
120-83-2	2,4-Dichlorophenol	50	43.6	87	49-111
105-67-9	2,4-Dimethylphenol	50	45.1	90	42-117
51-28-5	2,4-Dinitrophenol	100	84.4	84	37-132
534-52-1	4,6-Dinitro-o-cresol	50	43.8	88	49-119
95-48-7	2-Methylphenol	50	36.0	72	42-103
	3&4-Methylphenol	50	34.2	68	39-110
88-75-5	2-Nitrophenol	50	43.3	87	49-114
100-02-7	4-Nitrophenol	50	28.2	56	16-95
87-86-5	Pentachlorophenol	50	42.9	86	30-136
108-95-2	Phenol	50	20.4	41	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	47.4	95	47-118
95-95-4	2,4,5-Trichlorophenol	50	46.7	93	55-116
88-06-2	2,4,6-Trichlorophenol	50	45.6	91	56-115
83-32-9	Acenaphthene	50	41.4	83	54-112
208-96-8	Acenaphthylene	50	40.0	80	49-99
98-86-2	Acetophenone	50	39.4	79	52-111
120-12-7	Anthracene	50	45.4	91	58-112
1912-24-9	Atrazine	50	45.5	91	62-134
100-52-7	Benzaldehyde	50	34.9	70	40-129
56-55-3	Benzo(a)anthracene	50	48.9	98	44-120
50-32-8	Benzo(a)pyrene	50	48.4	97	41-127
205-99-2	Benzo(b)fluoranthene	50	47.3	95	41-129
191-24-2	Benzo(g,h,i)perylene	50	48.0	96	34-128
207-08-9	Benzo(k)fluoranthene	50	47.9	96	42-122
101-55-3	4-Bromophenyl phenyl ether	50	45.1	90	54-121
85-68-7	Butyl benzyl phthalate	50	50.7	101	20-143
92-52-4	1,1'-Biphenyl	50	37.6	75	51-106
91-58-7	2-Chloronaphthalene	50	37.3	75	48-104
106-47-8	4-Chloroaniline	50	35.7	71	10-110
86-74-8	Carbazole	50	48.2	96	56-110
105-60-2	Caprolactam	50	12.2	24	10-110
218-01-9	Chrysene	50	47.0	94	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	40.7	81	47-117
111-44-4	bis(2-Chloroethyl)ether	50	38.9	78	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-BS1	P103236.D	1	03/10/16	LK	03/09/16	OP91884	EP4534

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	24.9	50	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	40.6	81	50-117
121-14-2	2,4-Dinitrotoluene	50	42.3	85	57-122
606-20-2	2,6-Dinitrotoluene	50	49.2	98	58-122
91-94-1	3,3'-Dichlorobenzidine	100	69.9	70	10-110
123-91-1	1,4-Dioxane	50	17.2	34	10-110
53-70-3	Dibenzo(a,h)anthracene	50	50.3	101	36-130
132-64-9	Dibenzofuran	50	42.5	85	55-108
84-74-2	Di-n-butyl phthalate	50	50.3	101	45-123
117-84-0	Di-n-octyl phthalate	50	42.1	84	37-144
84-66-2	Diethyl phthalate	50	45.6	91	23-130
131-11-3	Dimethyl phthalate	50	43.8	88	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	45.9	92	36-138
206-44-0	Fluoranthene	50	48.3	97	58-116
86-73-7	Fluorene	50	43.4	87	57-113
118-74-1	Hexachlorobenzene	50	43.2	86	49-122
87-68-3	Hexachlorobutadiene	50	31.4	63	24-112
77-47-4	Hexachlorocyclopentadiene	100	59.0	59	14-119
67-72-1	Hexachloroethane	50	29.9	60	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	50.5	101	34-128
78-59-1	Isophorone	50	44.9	90	52-119
90-12-0	1-Methylnaphthalene	50	38.6	77	46-103
91-57-6	2-Methylnaphthalene	50	39.3	79	45-107
88-74-4	2-Nitroaniline	50	49.2	98	51-127
99-09-2	3-Nitroaniline	50	41.4	83	10-110
100-01-6	4-Nitroaniline	50	47.5	95	50-112
91-20-3	Naphthalene	50	37.7	75	40-102
98-95-3	Nitrobenzene	50	39.1	78	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	39.5	79	49-117
86-30-6	N-Nitrosodiphenylamine	50	44.2	88	51-113
85-01-8	Phenanthrene	50	45.0	90	56-111
129-00-0	Pyrene	50	48.0	96	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	33.0	66	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-BS1	P103236.D	1	03/10/16	LK	03/09/16	OP91884	EP4534

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	50%	14-88%
4165-62-2	Phenol-d5	35%	10-110%
118-79-6	2,4,6-Tribromophenol	93%	39-149%
4165-60-0	Nitrobenzene-d5	80%	32-128%
321-60-8	2-Fluorobiphenyl	78%	35-119%
1718-51-0	Terphenyl-d14	91%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884A-BS12	3M59949.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.519	52	40-119
123-91-1	1,4-Dioxane	1	0.314	31	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	55%	24-125%
321-60-8	2-Fluorobiphenyl	60%	19-127%
1718-51-0	Terphenyl-d14	75%	10-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MS	P103226.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
OP91884-MSD	P103227.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103214.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103228.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	JC15518-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		100	89.8	90	100	96.3	96	7	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		100	103	103	100	106	106	3	44-121/18
120-83-2	2,4-Dichlorophenol	ND		100	98.1	98	100	100	100	2	42-120/19
105-67-9	2,4-Dimethylphenol	ND		100	104	104	100	107	107	3	33-132/23
51-28-5	2,4-Dinitrophenol	ND		200	166	83	200	164	82	1	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		100	84.8	85	100	83.0	83	2	25-134/27
95-48-7	2-Methylphenol	ND		100	91.9	92	100	97.5	98	6	47-112/18
	3&4-Methylphenol	ND		100	92.1	92	100	97.0	97	5	44-113/19
88-75-5	2-Nitrophenol	ND		100	94.2	94	100	95.5	96	1	45-118/20
100-02-7	4-Nitrophenol	ND		100	84.7	85	100	88.1	88	4	23-144/28
87-86-5	Pentachlorophenol	ND		100	88.5	89	100	84.5	85	5	25-151/25
108-95-2	Phenol	ND		100	69.8	70	100	74.3	74	6	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		100	93.8	94	100	97.6	98	4	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		100	93.2	93	100	101	101	8	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		100	95.8	96	100	104	104	8	53-120/21
83-32-9	Acenaphthene	ND		100	87.9	88	100	97.9	98	11	52-120/23
208-96-8	Acenaphthylene	ND		100	86.2	86	100	94.1	94	9	50-101/22
98-86-2	Acetophenone	ND		100	87.3	87	100	91.3	91	4	31-141/23
120-12-7	Anthracene	ND		100	95.1	95	100	98.9	99	4	54-117/22
1912-24-9	Atrazine	ND		100	93.7	94	100	95.2	95	2	42-152/23
100-52-7	Benzaldehyde	ND		100	76.9	77	100	80.4	80	4	10-164/30
56-55-3	Benzo(a)anthracene	ND		100	99.3	99	100	104	104	5	40-123/24
50-32-8	Benzo(a)pyrene	ND		100	97.7	98	100	106	106	8	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		100	95.7	96	100	106	106	10	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		100	82.9	83	100	99.8	100	19	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		100	96.4	96	100	102	102	6	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		100	94.7	95	100	95.0	95	0	51-124/23
85-68-7	Butyl benzyl phthalate	ND		100	106	106	100	107	107	1	21-146/28
92-52-4	1,1'-Biphenyl	ND		100	84.1	84	100	90.8	91	8	27-142/23
91-58-7	2-Chloronaphthalene	ND		100	82.3	82	100	93.2	93	12	51-109/23
106-47-8	4-Chloroaniline	ND		100	77.3	77	100	76.8	77	1	10-110/55
86-74-8	Carbazole	ND		100	99.0	99	100	103	103	4	52-116/22
105-60-2	Caprolactam	ND		100	46.3	46	100	48.7	49	5	10-106/34
218-01-9	Chrysene	ND		100	92.6	93	100	99.0	99	7	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		100	87.8	88	100	93.4	93	6	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		100	87.7	88	100	90.4	90	3	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MS	P103226.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
OP91884-MSD	P103227.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103214.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103228.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	JC15518-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	58.8	59	100	61.2	61	4	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	85.9	86	100	94.4	94	9	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		100	83.0	83	100	92.0	92	10	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		100	95.9	96	100	104	104	8	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		200	151	76	200	152	76	1	10-107/47
123-91-1	1,4-Dioxane	358 [b]		100	486	128* [a]	100	468	110	4	10-119/31
53-70-3	Dibenzo(a,h)anthracene	ND		100	89.8	90	100	103	103	14	35-130/27
132-64-9	Dibenzofuran	ND		100	90.4	90	100	98.5	99	9	53-112/22
84-74-2	Di-n-butyl phthalate	ND		100	108	108	100	109	109	1	38-129/23
117-84-0	Di-n-octyl phthalate	ND		100	95.7	96	100	90.8	91	5	35-145/26
84-66-2	Diethyl phthalate	ND		100	91.5	92	100	101	101	10	16-136/30
131-11-3	Dimethyl phthalate	ND		100	90.9	91	100	98.7	99	8	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	90.2	90	100	88.2	88	2	34-141/28
206-44-0	Fluoranthene	ND		100	101	101	100	107	107	6	47-123/24
86-73-7	Fluorene	ND		100	90.6	91	100	101	101	11	56-117/22
118-74-1	Hexachlorobenzene	ND		100	87.3	87	100	89.3	89	2	46-125/24
87-68-3	Hexachlorobutadiene	ND		100	78.0	78	100	80.2	80	3	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		200	133	67	200	133	67	0	10-133/31
67-72-1	Hexachloroethane	ND		100	77.6	78	100	77.1	77	1	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	91.4	91	100	104	104	13	32-130/30
78-59-1	Isophorone	ND		100	97.3	97	100	103	103	6	47-126/23
90-12-0	1-Methylnaphthalene	ND		100	84.5	85	100	89.4	89	6	34-124/25
91-57-6	2-Methylnaphthalene	ND		100	86.2	86	100	89.4	89	4	34-123/24
88-74-4	2-Nitroaniline	ND		100	98.8	99	100	107	107	8	46-137/23
99-09-2	3-Nitroaniline	ND		100	86.6	87	100	90.1	90	4	10-110/50
100-01-6	4-Nitroaniline	ND		100	94.6	95	100	103	103	9	38-118/25
91-20-3	Naphthalene	ND		100	84.9	85	100	93.2	93	9	30-121/23
98-95-3	Nitrobenzene	ND		100	84.4	84	100	89.9	90	6	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		100	86.7	87	100	93.5	94	8	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		100	92.9	93	100	95.2	95	2	46-123/24
85-01-8	Phenanthrene	ND		100	93.4	93	100	99.1	99	6	48-121/23
129-00-0	Pyrene	ND		100	97.7	98	100	102	102	4	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	75.9	76	100	84.3	84	10	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884-MS	P103226.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
OP91884-MSD	P103227.D	1	03/10/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103214.D	1	03/09/16	LK	03/09/16	OP91884	EP4533
JC15518-1	P103228.D	10	03/10/16	LK	03/09/16	OP91884	EP4533

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Surrogate Recoveries	MS	MSD	JC15518-1	JC15518-1	Limits
367-12-4	2-Fluorophenol	72%	77%	45%	51%	14-88%
4165-62-2	Phenol-d5	64%	70%	35%	35%	10-110%
118-79-6	2,4,6-Tribromophenol	94%	97%	87%	78%	39-149%
4165-60-0	Nitrobenzene-d5	85%	90%	74%	76%	32-128%
321-60-8	2-Fluorobiphenyl	85%	95%	77%	86%	35-119%
1718-51-0	Terphenyl-d14	93%	95%	84%	91%	10-126%

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

8.3.1

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* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91884A-MS	3M59965.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
OP91884A-MSD	3M59966.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811
JC15518-2	3M59953.D	1	03/10/16	LK	03/09/16	OP91884A	E3M2811

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

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	JC15518-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND		2	1.28	64	2	1.54	77	18	23-140/36
123-91-1	1,4-Dioxane	1.47		2	2.89	71	2	3.26	90	12	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC15518-2	Limits
4165-60-0	Nitrobenzene-d5	63%	74%	59%	24-125%
321-60-8	2-Fluorobiphenyl	71%	81%	69%	19-127%
1718-51-0	Terphenyl-d14	79%	81%	83%	10-119%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2788-DFTPP
Lab File ID: 3M59637.D
Instrument ID: GCMS3M
Injection Date: 02/03/16
Injection Time: 12:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	371667	42.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	478418	55.1		Pass
70	Less than 2.0% of mass 69	1998	0.23	(0.42) [a]	Pass
127	40.0 - 60.0% of mass 198	474126	54.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	868256	100.0		Pass
199	5.0 - 9.0% of mass 198	59760	6.88		Pass
275	10.0 - 30.0% of mass 198	187720	21.6		Pass
365	1.0 - 100.0% of mass 198	19868	2.29		Pass
441	Present, but less than mass 443	92899	10.7	(85.8) [b]	Pass
442	40.0 - 100.0% of mass 198	559488	64.4		Pass
443	17.0 - 23.0% of mass 442	108309	12.5	(19.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2788-ICC2788	3M59638.D	02/03/16	12:55	00:42	Initial cal 1.0
E3M2788-IC2788	3M59639.D	02/03/16	13:27	01:14	Initial cal 0.5
E3M2788-IC2788	3M59640.D	02/03/16	13:59	01:46	Initial cal 0.2
E3M2788-IC2788	3M59641.D	02/03/16	14:30	02:17	Initial cal 0.1
E3M2788-IC2788	3M59642.D	02/03/16	15:02	02:49	Initial cal 0.05
E3M2788-IC2788	3M59643.D	02/03/16	15:34	03:21	Initial cal 0.02
E3M2788-IC2788	3M59644.D	02/03/16	16:06	03:53	Initial cal 0.01
E3M2788-IC2788	3M59645.D	02/03/16	16:37	04:24	Initial cal 5.0
E3M2788-IC2788	3M59646.D	02/03/16	17:12	04:59	Initial cal 2.5
E3M2788-ICV2788	3M59647.D	02/03/16	17:44	05:31	Initial cal verification 1.0
E3M2788-ICV2788	3M59648.D	02/03/16	18:15	06:02	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2789-DFTPP
Lab File ID: 3M59652.D
Instrument ID: GCMS3M
Injection Date: 02/04/16
Injection Time: 18:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	370523	42.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	487890	55.9		Pass
70	Less than 2.0% of mass 69	2920	0.33	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	467386	53.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	872256	100.0		Pass
199	5.0 - 9.0% of mass 198	58279	6.68		Pass
275	10.0 - 30.0% of mass 198	199680	22.9		Pass
365	1.0 - 100.0% of mass 198	22186	2.54		Pass
441	Present, but less than mass 443	92835	10.6	(81.4) [b]	Pass
442	40.0 - 100.0% of mass 198	591595	67.8		Pass
443	17.0 - 23.0% of mass 442	113997	13.1	(19.3) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2789-ICV2788	3M59653.D	02/04/16	18:35	00:12	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2811-DFTPP
Lab File ID: 3M59944.D
Instrument ID: GCMS3M
Injection Date: 03/10/16
Injection Time: 09:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	171816	43.4		Pass
68	Less than 2.0% of mass 69	999	0.25	(0.44) [a]	Pass
69	Mass 69 relative abundance	225866	57.0		Pass
70	Less than 2.0% of mass 69	416	0.11	(0.18) [a]	Pass
127	40.0 - 60.0% of mass 198	212432	53.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	395925	100.0		Pass
199	5.0 - 9.0% of mass 198	27544	6.96		Pass
275	10.0 - 30.0% of mass 198	85792	21.7		Pass
365	1.0 - 100.0% of mass 198	8809	2.22		Pass
441	Present, but less than mass 443	41421	10.5	(87.5) [b]	Pass
442	40.0 - 100.0% of mass 198	251781	63.6		Pass
443	17.0 - 23.0% of mass 442	47350	12.0	(18.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2811-CC2788	3M59945.D	03/10/16	09:15	00:12	Continuing cal .5
OP91930A-MB1	3M59946.D	03/10/16	09:46	00:43	Method Blank
OP91930A-BS12	3M59947.D	03/10/16	10:17	01:14	Blank Spike
OP91884A-MB1	3M59948.D	03/10/16	10:48	01:45	Method Blank
OP91884A-BS12	3M59949.D	03/10/16	11:19	02:16	Blank Spike
ZZZZZZ	3M59950.D	03/10/16	11:50	02:47	(unrelated sample)
JC15711-1	3M59951.D	03/10/16	12:21	03:18	(used for QC only; not part of job JC15518)
JC15518-1	3M59952.D	03/10/16	12:52	03:49	VP-2
JC15518-2	3M59953.D	03/10/16	13:23	04:20	VP-1
JC15518-3	3M59954.D	03/10/16	13:54	04:51	A-1R4
JC15518-4	3M59955.D	03/10/16	14:26	05:23	A-2R2
JC15518-5	3M59956.D	03/10/16	14:57	05:54	S-35
JC15518-6	3M59957.D	03/10/16	15:28	06:25	S-35D
JC15518-7	3M59958.D	03/10/16	15:59	06:56	S-34
JC15518-8	3M59959.D	03/10/16	16:31	07:28	S-33
ZZZZZZ	3M59960.D	03/10/16	17:02	07:59	(unrelated sample)
ZZZZZZ	3M59961.D	03/10/16	17:33	08:30	(unrelated sample)
ZZZZZZ	3M59962.D	03/10/16	18:04	09:01	(unrelated sample)
ZZZZZZ	3M59963.D	03/10/16	18:36	09:33	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2811-DFTPP
Lab File ID: 3M59944.D
Instrument ID: GCMS3M
Injection Date: 03/10/16
Injection Time: 09:03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	3M59964.D	03/10/16	19:07	10:04	(unrelated sample)
OP91884A-MS	3M59965.D	03/10/16	19:38	10:35	Matrix Spike
OP91884A-MSD	3M59966.D	03/10/16	20:10	11:07	Matrix Spike Duplicate
OP91930A-MS	3M59967.D	03/10/16	20:41	11:38	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4515-DFTPP
Lab File ID: P102802.D
Instrument ID: GCMSP
Injection Date: 02/24/16
Injection Time: 10:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22621	37.0		Pass
68	Less than 2.0% of mass 69	213	0.35	(0.76) [a]	Pass
69	Mass 69 relative abundance	27911	45.6		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	35722	58.4		Pass
197	Less than 1.0% of mass 198	290	0.47		Pass
198	Base peak, 100% relative abundance	61170	100.0		Pass
199	5.0 - 9.0% of mass 198	4302	7.03		Pass
275	10.0 - 30.0% of mass 198	12439	20.3		Pass
365	1.0 - 100.0% of mass 198	1669	2.73		Pass
441	Present, but less than mass 443	6795	11.1	(79.1) [b]	Pass
442	40.0 - 100.0% of mass 198	44310	72.4		Pass
443	17.0 - 23.0% of mass 442	8589	14.0	(19.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4515-IC4515	P102803.D	02/24/16	10:15	00:14	Initial cal 100
EP4515-IC4515	P102804.D	02/24/16	10:44	00:43	Initial cal 80
EP4515-ICC4515	P102805.D	02/24/16	11:13	01:12	Initial cal 50
EP4515-IC4515	P102806.D	02/24/16	11:43	01:42	Initial cal 25
EP4515-IC4515	P102807.D	02/24/16	12:12	02:11	Initial cal 10
EP4515-IC4515	P102808.D	02/24/16	12:42	02:41	Initial cal 5
EP4515-IC4515	P102809.D	02/24/16	13:11	03:10	Initial cal 2
EP4515-IC4515	P102810.D	02/24/16	13:41	03:40	Initial cal 1
EP4515-ICV4515	P102811.D	02/24/16	14:11	04:10	Initial cal verification 50
EP4515-ICV4515	P102812.D	02/24/16	14:41	04:40	Initial cal verification 50
EP4515-ICV4515	P102813.D	02/24/16	15:10	05:09	Initial cal verification 50
EP4515-ICV4515	P102814.D	02/24/16	15:40	05:39	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4516-DFTPP
Lab File ID: P102816.D
Instrument ID: GCMSP
Injection Date: 02/25/16
Injection Time: 10:08

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	27818	39.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	33630	47.6		Pass
70	Less than 2.0% of mass 69	118	0.17	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	40619	57.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	70698	100.0		Pass
199	5.0 - 9.0% of mass 198	4974	7.04		Pass
275	10.0 - 30.0% of mass 198	14362	20.3		Pass
365	1.0 - 100.0% of mass 198	1950	2.76		Pass
441	Present, but less than mass 443	8329	11.8	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	55242	78.1		Pass
443	17.0 - 23.0% of mass 442	9902	14.0	(17.9) [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
EP4516-IC4516	P102817.D	02/25/16	10:23	00:15	Initial cal 100
EP4516-IC4516	P102818.D	02/25/16	10:53	00:45	Initial cal 80
EP4516-ICC4516	P102819.D	02/25/16	11:22	01:14	Initial cal 50
EP4516-IC4516	P102820.D	02/25/16	11:52	01:44	Initial cal 25
EP4516-IC4516	P102821.D	02/25/16	12:21	02:13	Initial cal 10
EP4516-IC4516	P102822.D	02/25/16	12:51	02:43	Initial cal 5
EP4516-IC4516	P102823.D	02/25/16	13:20	03:12	Initial cal 2
EP4516-ICV4516	P102824.D	02/25/16	13:50	03:42	Initial cal verification 50
EP4516-ICV4516	P102825.D	02/25/16	14:20	04:12	Initial cal verification 50
EP4516-ICV4516	P102826.D	02/25/16	14:49	04:41	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29961	34.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	38523	44.2		Pass
70	Less than 2.0% of mass 69	119	0.14	(0.31) [a]	Pass
127	40.0 - 60.0% of mass 198	48031	55.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	87088	100.0		Pass
199	5.0 - 9.0% of mass 198	5993	6.88		Pass
275	10.0 - 30.0% of mass 198	19109	21.9		Pass
365	1.0 - 100.0% of mass 198	2328	2.67		Pass
441	Present, but less than mass 443	9869	11.3	(79.2) [b]	Pass
442	40.0 - 100.0% of mass 198	65456	75.2		Pass
443	17.0 - 23.0% of mass 442	12454	14.3	(19.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4524-IC4524	P103011.D	03/02/16	17:10	00:14	Initial cal 100
EP4524-IC4524	P103012.D	03/02/16	17:40	00:44	Initial cal 80
EP4524-IC4524	P103013.D	03/02/16	18:09	01:13	Initial cal 10
EP4524-IC4524	P103014.D	03/02/16	18:39	01:43	Initial cal 5
EP4524-IC4524	P103015.D	03/02/16	19:08	02:12	Initial cal 2
EP4524-IC4524	P103016.D	03/02/16	19:37	02:41	Initial cal 1
EP4524-ICC4524	P103017.D	03/02/16	20:06	03:10	Initial cal 50
EP4524-IC4524	P103018.D	03/02/16	20:36	03:40	Initial cal 25
EP4524-ICV4524	P103019.D	03/02/16	21:05	04:09	Initial cal verification 50
EP4524-ICV4524	P103020.D	03/02/16	21:34	04:38	Initial cal verification 50
EP4524-ICV4524	P103021.D	03/02/16	22:03	05:07	Initial cal verification 50
EP4524-ICV4524	P103022.D	03/02/16	22:32	05:36	Initial cal verification 50
EP4524-ICV4524	P103023.D	03/02/16	23:02	06:06	Initial cal verification 50
EP4524-ICV4524	P103024.D	03/02/16	23:31	06:35	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4533-DFTPP
Lab File ID: P103207.D
Instrument ID: GCMSP
Injection Date: 03/09/16
Injection Time: 16:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22204	38.3		Pass
68	Less than 2.0% of mass 69	407	0.70	(1.38) [a]	Pass
69	Mass 69 relative abundance	29431	50.7		Pass
70	Less than 2.0% of mass 69	135	0.23	(0.46) [a]	Pass
127	40.0 - 60.0% of mass 198	33231	57.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	58000	100.0		Pass
199	5.0 - 9.0% of mass 198	4009	6.91		Pass
275	10.0 - 30.0% of mass 198	11824	20.4		Pass
365	1.0 - 100.0% of mass 198	1742	3.00		Pass
441	Present, but less than mass 443	6575	11.3	(78.7) [b]	Pass
442	40.0 - 100.0% of mass 198	42224	72.8		Pass
443	17.0 - 23.0% of mass 442	8350	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
EP4533-CC4524	P103208.D	03/09/16	16:21	00:16	Continuing cal 50
EP4533-CC4514	P103209.D	03/09/16	16:57	00:52	Continuing cal 50
OP91884-MB1	P103212.D	03/09/16	18:25	02:20	Method Blank
JC15518-1	P103214.D	03/09/16	19:23	03:18	VP-2
JC15518-2	P103215.D	03/09/16	19:53	03:48	VP-1
JC15518-3	P103216.D	03/09/16	20:22	04:17	A-1R4
JC15518-4	P103217.D	03/09/16	20:51	04:46	A-2R2
JC15518-5	P103218.D	03/09/16	21:20	05:15	S-35
JC15518-6	P103219.D	03/09/16	21:50	05:45	S-35D
JC15518-7	P103220.D	03/09/16	22:19	06:14	S-34
JC15518-8	P103221.D	03/09/16	22:48	06:43	S-33
ZZZZZZ	P103222.D	03/09/16	23:17	07:12	(unrelated sample)
ZZZZZZ	P103223.D	03/09/16	23:46	07:41	(unrelated sample)
ZZZZZZ	P103224.D	03/10/16	00:15	08:10	(unrelated sample)
ZZZZZZ	P103225.D	03/10/16	00:44	08:39	(unrelated sample)
OP91884-MS	P103226.D	03/10/16	01:13	09:08	Matrix Spike
OP91884-MSD	P103227.D	03/10/16	01:42	09:37	Matrix Spike Duplicate
JC15518-1	P103228.D	03/10/16	02:11	10:06	VP-2
JC15518-5	P103229.D	03/10/16	02:40	10:35	S-35

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EP4533-DFTPP	**Injection Date:**	03/09/16
Lab File ID:	P103207.D	**Injection Time:**	16:05
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC15518-6	P103230.D	03/10/16	03:09	11:04	S-35D

Instrument Performance Check (DFTPP)

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4534-DFTPP
Lab File ID: P103231.D
Instrument ID: GCMSP
Injection Date: 03/10/16
Injection Time: 08:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32841	36.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	42267	47.5		Pass
70	Less than 2.0% of mass 69	282	0.32	(0.67) [a]	Pass
127	40.0 - 60.0% of mass 198	50881	57.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	89021	100.0		Pass
199	5.0 - 9.0% of mass 198	6324	7.10		Pass
275	10.0 - 30.0% of mass 198	19340	21.7		Pass
365	1.0 - 100.0% of mass 198	2659	2.99		Pass
441	Present, but less than mass 443	10270	11.5	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	68613	77.1		Pass
443	17.0 - 23.0% of mass 442	13334	15.0	(19.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4534-CC4524	P103232.D	03/10/16	09:02	00:14	Continuing cal 25
EP4534-CC4514	P103233.D	03/10/16	09:33	00:45	Continuing cal 25
EP4534-CC4515	P103234.D	03/10/16	10:02	01:14	Continuing cal 25
EP4534-CC4516	P103235.D	03/10/16	10:36	01:48	Continuing cal 25
OP91884-BS1	P103236.D	03/10/16	11:06	02:18	Blank Spike
OP91865-MB1	P103237.D	03/10/16	11:35	02:47	Method Blank
OP91865-BS14	P103238.D	03/10/16	12:04	03:16	Blank Spike
ZZZZZZ	P103239.D	03/10/16	12:34	03:46	(unrelated sample)
ZZZZZZ	P103240.D	03/10/16	13:03	04:15	(unrelated sample)
JC15339-4	P103241.D	03/10/16	13:32	04:44	(used for QC only; not part of job JC15518)
ZZZZZZ	P103242.D	03/10/16	14:01	05:13	(unrelated sample)
ZZZZZZ	P103245.D	03/10/16	14:30	05:42	(unrelated sample)
ZZZZZZ	P103246.D	03/10/16	14:59	06:11	(unrelated sample)
OP91865-MS	P103243.D	03/10/16	15:29	06:41	Matrix Spike
OP91865-MSD	P103244.D	03/10/16	15:58	07:10	Matrix Spike Duplicate

Semivolatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2811-CC2788	**Injection Date:**	03/10/16
Lab File ID:	3M59945.D	**Injection Time:**	09:15
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	335237	9.52	422596	12.50	667466	16.73	561071	21.35
Upper Limit [a]	670474	10.02	845192	13.00	1334932	17.23	1122142	21.85
Lower Limit [b]	167619	9.02	211298	12.00	333733	16.23	280536	20.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP91930A-MB1	335498	9.52	446176	12.50	671569	16.73	577833	21.35
OP91930A-BS12	350923	9.52	449813	12.50	698641	16.73	597856	21.35
OP91884A-MB1	347566	9.52	454981	12.50	707317	16.73	601752	21.35
OP91884A-BS12	362947	9.52	461116	12.50	729460	16.73	608951	21.35
ZZZZZZ	616420	9.56	823176	12.56	1249967	16.81	850309	21.37
JC15711-1	365434	9.52	465649	12.50	785025	16.73	653999	21.35
JC15518-1	405378	9.52	566214	12.50	887437	16.73	745409	21.35
JC15518-2	368808	9.52	500915	12.50	807027	16.73	656907	21.35
JC15518-3	407847	9.52	580581	12.52	950346	16.75	770160	21.37
JC15518-4	364965	9.52	541095	12.52	897943	16.73	749649	21.37
JC15518-5	342443	9.52	505099	12.52	837055	16.75	671218	21.37
JC15518-6	364115	9.52	533924	12.52	870522	16.73	695658	21.37
JC15518-7	372336	9.52	546724	12.52	892510	16.75	732082	21.37
JC15518-8	371171	9.52	569562	12.52	915794	16.75	727543	21.37
ZZZZZZ	315494	9.52	445789	12.52	759988	16.75	621813	21.37
ZZZZZZ	341221	9.52	470288	12.52	799701	16.73	655797	21.37
ZZZZZZ	330072	9.52	459018	12.52	775310	16.73	624204	21.37
ZZZZZZ	348958	9.52	491014	12.52	837690	16.73	668648	21.37
ZZZZZZ	318009	9.52	444177	12.52	742952	16.73	607910	21.37
OP91884A-MS	335186	9.52	474058	12.52	777719	16.73	610563	21.37
OP91884A-MSD	342483	9.52	484805	12.52	786905	16.73	616561	21.37
OP91930A-MS	320195	9.52	458769	12.50	721000	16.73	587767	21.37

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EP4533-CC4524	**Injection Date:**	03/09/16
Lab File ID:	P103208.D	**Injection Time:**	16:21
Instrument ID:	GCMSP	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	113234	4.25	412222	5.99	240424	8.71	353753	11.07	315942	15.77	281399	18.32
Upper Limit [a]	226468	4.75	824444	6.49	480848	9.21	707506	11.57	631884	16.27	562798	18.82
Lower Limit [b]	56617	3.75	206111	5.49	120212	8.21	176877	10.57	157971	15.27	140700	17.82

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
OP91884-MB1	75192	4.25	269736	5.99	150593	8.71	228653	11.07	200533	15.76	172540	18.32
JC15518-1	65070	4.25	248975	5.99	143357	8.71	219568	11.07	199833	15.76	182272	18.32
JC15518-2	94690	4.25	335491	5.99	184006	8.71	268581	11.07	227194	15.76	189858	18.32
JC15518-3	76626	4.25	283698	5.99	156925	8.71	243791	11.07	228458	15.76	199651	18.32
JC15518-4	90402	4.25	332789	5.99	194005	8.71	295124	11.07	274287	15.76	250947	18.32
JC15518-5	88431	4.25	312533	5.99	178310	8.71	267558	11.07	234167	15.76	199153	18.32
JC15518-6	98827	4.25	358543	5.99	201018	8.71	311553	11.07	276161	15.76	237641	18.32
JC15518-7	95857	4.25	340039	5.99	186116	8.71	273254	11.07	235455	15.76	197270	18.32
JC15518-8	106169	4.25	386706	5.99	220700	8.71	333151	11.07	297191	15.76	257262	18.32
ZZZZZZ	110272	4.25	385529	5.99	211988	8.71	321239	11.07	280869	15.76	255344	18.32
ZZZZZZ	95297	4.25	341591	5.99	189031	8.71	287790	11.07	253675	15.76	226910	18.32
ZZZZZZ	90901	4.25	289162	6.00	173311	8.72	274473	11.09	291924	15.77	267129	18.32
ZZZZZZ	103026	4.25	384459	5.99	228149	8.71	352987	11.07	323367	15.76	288043	18.32
OP91884-MS	96786	4.25	346433	5.99	204987	8.71	306706	11.07	279333	15.77	255879	18.32
OP91884-MSD	70305	4.25	254691	5.99	145709	8.71	231349	11.07	216908	15.76	205968	18.32
JC15518-1	98868	4.25	358154	5.99	207406	8.71	322156	11.07	286162	15.76	244873	18.32
JC15518-5	81663	4.25	304931	5.99	177090	8.71	274541	11.07	253688	15.76	219072	18.32
JC15518-6	93695	4.25	333553	5.99	196912	8.71	305347	11.07	280950	15.76	239111	18.32

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EP4534-CC4524	**Injection Date:**	03/10/16
Lab File ID:	P103232.D	**Injection Time:**	09:02
Instrument ID:	GCMSP	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	167099	4.24	594238	5.99	350184	8.71	533277	11.07	488566	15.77	462867	18.33
Upper Limit [a]	334198	4.74	1188476	6.49	700368	9.21	1066554	11.57	977132	16.27	925734	18.83
Lower Limit [b]	83550	3.74	297119	5.49	175092	8.21	266639	10.57	244283	15.27	231434	17.83

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
OP91884-BS1	149522	4.24	520453	5.99	304827	8.71	457423	11.07	413399	15.77	395814	18.33
OP91865-MB1	205229	4.24	710998	5.99	419741	8.71	637035	11.07	591818	15.76	539197	18.33
OP91865-BS14	178143	4.24	614441	5.99	358954	8.71	548303	11.06	507130	15.76	465937	18.32
ZZZZZZ	185635	4.24	651170	5.99	384313	8.71	592932	11.07	558370	15.76	509447	18.33
ZZZZZZ	173727	4.24	617368	5.99	358577	8.71	545659	11.07	517820	15.76	476510	18.33
JC15339-4	144498	4.24	520330	5.99	303890	8.71	466090	11.06	424818	15.76	389855	18.32
ZZZZZZ	205192	4.24	712829	5.99	420631	8.71	643971	11.07	597821	15.76	553996	18.33
ZZZZZZ	134661	4.25	456414	5.99	268990	8.71	351606	11.08	377301	15.79	347256	18.35
ZZZZZZ	145088	4.25	473798	5.99	286396	8.72	384380	11.08	410367	15.78	373293	18.35
OP91865-MS	171212	4.25	599666	5.99	352265	8.71	504465	11.07	439550	15.78	417163	18.33
OP91865-MSD	166364	4.25	579513	5.99	339218	8.71	486838	11.07	433842	15.77	410499	18.33

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: JC15518
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
JC15518-1	P103214.D	45	35	87	74	77	84
JC15518-1	P103228.D	51	35	78	76	86	91
JC15518-2	P103215.D	46	34	92	74	80	91
JC15518-3	P103216.D	47	36	89	76	83	77
JC15518-4	P103217.D	26	21	63	43	50	55
JC15518-5	P103229.D	41	31	68	62	73	82
JC15518-5	P103218.D	42	31	89	68	70	85
JC15518-6	P103230.D	50	35	66	79	86	88
JC15518-6	P103219.D	54	38	96	81	85	92
JC15518-7	P103220.D	49	35	92	79	84	88
JC15518-8	P103221.D	46	32	90	78	81	77
OP91884-BS1	P103236.D	50	35	93	80	78	91
OP91884-MB1	P103212.D	51	37	85	82	87	94
OP91884-MS	P103226.D	72	64	94	85	85	93
OP91884-MSD	P103227.D	77	70	97	90	95	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: JC15518
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
JC15518-1	3M59952.D	59	66	77
JC15518-2	3M59953.D	59	69	83
JC15518-3	3M59954.D	60	68	67
JC15518-4	3M59955.D	36	43	53
JC15518-5	3M59956.D	57	61	73
JC15518-6	3M59957.D	66	71	78
JC15518-7	3M59958.D	67	71	73
JC15518-8	3M59959.D	68	68	65
OP91884A-BS12	3M59949.D	55	60	75
OP91884A-MB1	3M59948.D	69	73	88
OP91884A-MS	3M59965.D	63	71	79
OP91884A-MSD	3M59966.D	74	81	81

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

Initial Calibration Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2788-ICC2788
Lab FileID: 3M59638.D

```
                        Response Factor Report  MS3M

Method       : C:\MSDCHEM\1\METHODS\M3M2788SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration

Calibration Files
2.5 =3m59646.D   1.0 =3m59638.D   0.5 =3m59639.D   0.2 =3m59640.D
0.1 =3m59641.D   0.05=3m59642.D   0.02=3m59643.D   0.01=3m59644.D
5   =3m59645.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
          0.255 0.239 0.287 0.347 0.269 0.286             0.238        0.275   13.78
3)  2-Fluorophenol
          0.571 0.580 0.609 0.726 0.586 0.563 0.576 0.567 0.507        0.587   10.02
4)  Phenol-d5
          0.933 0.955 1.018 1.212 0.977 0.924 0.934 0.925 0.853        0.970   10.43
5)  Phenol
          0.979 1.015 1.074 1.266 1.012 0.964 0.989       0.895        1.024   10.75
6)  bis(2-Chloroethyl)ether
          0.713 0.719 0.756 0.901 0.737 0.685 0.738 0.791 0.672        0.746    9.13
7)  Nitrobenzene-d5
          0.946 0.831 0.881 1.025 0.843 0.805             0.713        0.863   11.67
8)  Nitrobenzene
          0.925 0.929 0.963 1.111 0.890 0.831 0.864 0.980 0.822        0.924    9.62
9)  Naphthalene
          2.462 2.426 2.558 3.046 2.540 2.403 2.508 2.646 2.402        2.555    7.87
10)  Hexachlorobutadiene
          0.379 0.373 0.387 0.462 0.388 0.363 0.392 0.390 0.365        0.389    7.61
11)  2-Methylnaphthalene
          1.277 1.317 1.324 1.548 1.263 1.263 1.243 1.521 1.256        1.335    8.73
12)  1-Methylnaphthalene
          1.457 1.457 1.498 1.741 1.476 1.356 1.467 1.494 1.398        1.483    7.23
13)  Hexachlorocyclopentadiene
          0.465 0.418 0.394 0.436 0.325 0.277             0.486        0.400   18.80

14) I   Fluorene-d10          ----------------ISTD---------------------
15)  2-Fluorobiphenyl
          1.084 1.201 1.293 1.519 1.303 1.187 1.244 1.261              1.262    9.94
16)  Acenaphthylene
          1.613 1.662 1.687 1.903 1.573 1.440 1.485 1.557 1.478        1.600    8.83
17)  Acenaphthene
          1.009 1.049 1.083 1.220 1.068 0.988 1.030 1.053 0.920        1.047    7.78
18)  4,6-dinitro-2-methylphenol
          0.204 0.165 0.119 0.111 0.065                   0.204        0.145   38.58
           ---- Quadratic regression ----  Coefficient =  0.9987
             Response Ratio = -0.03498 + 0.20911 *A + 0.00020 *A^2

19)  Fluorene
          1.291 1.314 1.361 1.549 1.317 1.236 1.308 1.329 1.147        1.317    8.13
20)  2,4,6-Tribromophenol
          0.118 0.124 0.125 0.138 0.105                   0.106        0.119   10.44

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

8.7.1

8

Initial Calibration Summary

Job Number: JC15518 **Sample:** E3M2788-ICC2788
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M59638.D
Project: BMSMC, Building 5 Area, PR

```
22)  Hexachlorobenzene
           0.208 0.193 0.201 0.241 0.200 0.191 0.204 0.212 0.196        0.205    7.34
23)  Pentachlorophenol
           0.118 0.101 0.086 0.086 0.054 0.048             0.125        0.088   33.19
            ---- Quadratic regression ----  Coefficient =  0.9996
              Response Ratio = -0.00880 + 0.11046 *A + 0.00251 *A^2

24)  Phenanthrene
           1.149 1.096 1.105 1.292 1.096 1.020 1.056       1.079        1.111    7.36
25)  Anthracene
           1.168 1.066 1.051 1.194 0.968                   1.111        1.093    7.58
26)  Fluoranthene
           1.287 1.227 1.275 1.512 1.238 1.216             1.208        1.281    8.29
27)  Pyrene
           1.294 1.266 1.263 1.432 1.181                   1.250        1.281    6.48
28)  Terphenyl-d14
           0.619 0.650 0.662 0.783 0.651 0.602             0.553        0.646   11.05
29)  Benzo[a]anthracene
           1.122 1.167 1.163 1.323 1.124 1.064             1.104        1.152    7.19
30)  Chrysene
           1.164 1.146 1.146 1.313 1.092                   1.127        1.165    6.57

31) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
32)  Benzo[b]fluoranthene
           1.725 1.622 1.422 1.671 1.390                   1.655        1.581    8.83
33)  Benzo[k]fluoranthene
           1.006 1.032 1.314 1.548 1.299                   1.034        1.205   18.05
34)  Benzo[a]pyrene
           1.278 1.254 1.317 1.563 1.312 1.210             1.256        1.313    8.87
35)  Indeno[1,2,3-cd]pyrene
           1.467 1.470 1.520 1.832 1.581                   1.444        1.552    9.38
36)  Dibenz[a,h]anthracene
           1.166 1.167 1.182 1.412 1.201                   1.175        1.217    7.93
37)  Benzo[g,h,i]perylene
           1.308 1.295 1.343 1.609 1.389                   1.259        1.367    9.26
-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3M2788SIM.M        Thu Feb 04 16:44:52 2016   RPT1
```

8.7.1

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** E3M2788-ICV2788
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M59647.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2788\3m59647.D          Vial: 11
Acq On    :  3 Feb 2016   5:44 pm                    Operator: ashleyd
Sample    : icv2788-1.0                              Inst    : MS3M
Misc      : op90825a,e3m2788                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2788SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 16:25:17 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	143	0.00	9.54
6	t	bis(2-Chloroethyl)ether	0.746	0.694	7.0	138	-0.01	5.35
8	t	Nitrobenzene	0.924	0.807	12.7	124	0.00	6.73
9	t	Naphthalene	2.555	2.331	8.8	137	0.00	8.06
10	t	Hexachlorobutadiene	0.389	0.361	7.2	139	0.00	8.37
11	t	2-Methylnaphthalene	1.335	1.250	6.4	136	0.00	9.42
14	I	Fluorene-d10	1.000	1.000	0.0	142	0.00	12.50
16	t	Acenaphthylene	1.600	1.516	5.3	130	0.00	11.16
17	t	Acenaphthene	1.047	1.044	0.3	142	0.00	11.52
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.317	1.263	4.1	137	0.00	12.56
21	I	Fluoranthene-d10	1.000	1.000	0.0	133	0.00	16.72
22	t	Hexachlorobenzene	0.205	0.194	5.4	134	0.00	13.67
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	1.111	1.123	-1.1	137	-0.02	14.46
25	t	Anthracene	1.093	0.990	9.4	124	0.00	14.57
26	t	Fluoranthene	1.281	1.231	3.9	134	0.00	16.75
27	t	Pyrene	1.281	1.166	9.0	123	0.00	17.15
29	t	Benzo[a]anthracene	1.152	0.987	14.3	113	0.00	19.23
30	t	Chrysene	1.165	1.038	10.9	121	0.00	19.30
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	113	0.00	21.34
32	t	Benzo[b]fluoranthene	1.581	1.259	20.4	87	0.00	20.90
33	t	Benzo[k]fluoranthene	1.205	1.281	-6.3	140	0.00	20.95
34	t	Benzo[a]pyrene	1.313	1.205	8.2	108	0.00	21.35
35	t	Indeno[1,2,3-cd]pyrene	1.552	1.367	11.9	105	-0.02	22.82
36	t	Dibenz[a,h]anthracene	1.217	1.068	12.2	103	0.00	22.88
37	t	Benzo[g,h,i]perylene	1.367	1.252	8.4	109	0.00	23.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m59638.D M3M2788SIM.M Thu Feb 04 16:44:42 2016 RPT1

8.7.2 8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2788-ICV2788
Lab FileID: 3M59648.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2788\3m59648.D          Vial: 12
Acq On    :  3 Feb 2016   6:15 pm                    Operator: ashleyd
Sample    : icv2788-1.0                              Inst    : MS3M
Misc      : op90825a,e3m2788                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2788SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 16:25:17 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	102	-0.02	9.52
2	t	1,4-dioxane	0.275	0.273	0.7	117	0.00	2.10
12	t	1-Methylnaphthalene	1.483	1.368	7.8	96	0.00	9.60
13		Hexachlorocyclopentadiene	0.400	0.350	12.5	86	0.00	9.76

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m59638.D M3M2788SIM.M Thu Feb 04 16:44:44 2016 RPT1

8.7.3

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2789-ICV2788
Lab FileID: 3M59653.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2789\3m59653.D          Vial: 2
Acq On    :  4 Feb 2016   6:35 pm                    Operator: juliusj
Sample    : icv2788-1.0                              Inst    : MS3M
Misc      : op90825a,e3m2789                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2788SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 16:25:17 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	67	-0.04	9.50
5		Phenol	1.024	0.802	21.7	53	-0.02	5.23
14	I	Fluorene-d10	1.000	1.000	0.0	56	-0.02	12.49
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	3.615	27.7	42	-0.04	12.69
		----------	AvgRF	CCRF	% Dev	----------		
21	I	Fluoranthene-d10	1.000	1.000	0.0	56	-0.03	16.68
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	3.878	22.4	45	-0.03	14.07

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 3m59638.D  M3M2788SIM.M       Fri Feb 05 14:48:54 2016   RPT1
```

8.7.4

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** E3M2811-CC2788
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M59945.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2811\3m59945.D          Vial: 2
Acq On    : 10 Mar 2016   9:15 am                    Operator: linseyk
Sample    : cc2788-.5                                Inst    : MS3M
Misc      : op91858a,e3m2811                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2788SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue Mar 08 17:35:27 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	87	-0.06	9.52
2	t	1,4-dioxane	0.275	0.251	8.7	76	-0.03	2.12
3	S	2-Fluorophenol	0.587	0.511	12.9	73	-0.02	3.85
4	S	Phenol-d5	0.970	0.846	12.8	72	-0.02	5.24
5		Phenol	1.024	0.889	13.2	72	-0.02	5.25
6	t	bis(2-Chloroethyl)ether	0.746	0.627	16.0	72	-0.05	5.34
7	S	Nitrobenzene-d5	0.863	0.772	10.5	76	-0.05	6.69
8	t	Nitrobenzene	0.924	0.818	11.5	74	-0.06	6.73
9	t	Naphthalene	2.555	2.237	12.4	76	-0.05	8.05
10	t	Hexachlorobutadiene	0.389	0.343	11.8	77	-0.06	8.35
11	t	2-Methylnaphthalene	1.335	1.279	4.2	84	-0.06	9.40
12	t	1-Methylnaphthalene	1.483	1.329	10.4	77	-0.06	9.58
13		Hexachlorocyclopentadiene	0.400	0.255	36.3#	57	-0.06	9.74
14	I	Fluorene-d10	1.000	1.000	0.0	74	-0.08	12.50
15	S	2-Fluorobiphenyl	1.262	1.246	1.3	71	-0.08	10.18
16	t	Acenaphthylene	1.600	1.625	-1.6	71	-0.07	11.16
17	t	Acenaphthene	1.047	1.082	-3.3	74	-0.16	11.52
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	2.500	1.855	25.8#	62	-0.08	12.73
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.317	1.319	-0.2	72	-0.08	12.56
20	S	2,4,6-Tribromophenol	0.119	0.135	-13.4	80	-0.10	13.05
21	I	Fluoranthene-d10	1.000	1.000	0.0	70	-0.06	16.73
22	t	Hexachlorobenzene	0.205	0.212	-3.4	74	-0.06	13.67
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	2.500	2.498	0.1	80	-0.07	14.10
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	1.111	1.144	-3.0	73	-0.05	14.47
25	t	Anthracene	1.093	1.022	6.5	69	-0.07	14.57
26	t	Fluoranthene	1.281	1.289	-0.6	71	-0.06	16.76
27	t	Pyrene	1.281	1.243	3.0	69	-0.07	17.15
28	S	Terphenyl-d14	0.646	0.677	-4.8	72	-0.08	17.53
29	t	Benzo[a]anthracene	1.152	1.115	3.2	68	-0.07	19.25
30	t	Chrysene	1.165	1.138	2.3	70	-0.09	19.30
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	69	-0.05	21.35

Continuing Calibration Summary

Job Number: JC15518 **Sample:** E3M2811-CC2788
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M59945.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.581	1.565	1.0	76	-0.04	20.92
33	t	Benzo[k]fluoranthene	1.205	1.127	6.5	59	-0.05	20.96
34	t	Benzo[a]pyrene	1.313	1.289	1.8	68	-0.05	21.38
35	t	Indeno[1,2,3-cd]pyrene	1.552	1.381	11.0	63	-0.05	22.86
36	t	Dibenz[a,h]anthracene	1.217	1.138	6.5	67	-0.05	22.90
37	t	Benzo[g,h,i]perylene	1.367	1.207	11.7	62	-0.03	23.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m59639.D M3M2788SIM.M Thu Mar 10 11:52:32 2016 RPT1

8.7.5

8

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4514-ICC4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102794.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MSP

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

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

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

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

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

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

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

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

8.7.6

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102798A.D

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4514-ICV4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102799A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
159	I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	95	0.00	4.37
160		Benzaldehyde	1.202	1.156	3.8	103	0.00	3.84
161	I	Phenanthrene-d10b	1.000	1.000	0.0	94	0.00	11.22
162		Atrazine	0.204	0.201	1.5	94	0.00	10.88

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

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102800.D

Evaluate Continuing Calibration Report

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

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

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

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

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

8.7.9

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102801A.D

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4515-ICC4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102805.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP4515.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:59:22 2016
Response via : Initial Calibration

Calibration Files
2 =P102809.D 5 =P102808.D 25 =P102806.D 80 =P102804.D
100 =P102803.D 50 =P102805.D 10 =P102807.D 1 =P102810.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	----------ISTD----------									
103) 2-Picoline	1.969	1.836	1.698	1.533	1.556	1.616	1.666	1.839	1.714	8.97
104) Pentachloroe	0.613	0.618	0.588	0.535	0.523	0.563	0.583	0.565	0.573	5.89
105) Methyl metha	0.908	0.912	0.827	0.765	0.765	0.800	0.822	0.975	0.847	9.04
106) N-Nitrosodie	0.694	0.787	0.692	0.659	0.665	0.686	0.681	0.716	0.698	5.77
107) N-Nitrosomet	0.635	0.625	0.546	0.512	0.522	0.534	0.563	0.670	0.576	10.28
108) Ethyl methan	1.124	1.204	1.115	1.024	1.017	1.058	1.107	1.349	1.125	9.70
109) N-Nitrosopyr	0.366	0.453	0.382	0.384	0.387	0.389	0.402	0.446	0.401	7.85
110) N-Nitrosomor	0.834	0.720	0.622	0.492	0.489	0.535	0.665	0.758	0.639	20.00
111) o-Toluidine	2.381	2.346	1.946	1.663	1.624	1.774	2.091	2.541	2.046	17.11
112) I Naphthalene-d8A	----------ISTD----------									
113) O,O,O-Trieth	0.155	0.173	0.162	0.149	0.145	0.157	0.162	0.164	0.158	5.63
114) N-Nitrosopip	0.195	0.214	0.203	0.189	0.181	0.194	0.203	0.220	0.200	6.48
115) A,A-Dimethyl	0.658	0.730	0.713	0.793	0.787	0.748	0.664	0.648	0.718	7.96
116) Hexachloropr	0.188	0.227	0.215	0.205	0.193	0.209	0.212	0.201	0.206	6.11
117) N-Nitrosodi-	0.249	0.280	0.265	0.239	0.234	0.247	0.261	0.249	0.253	5.94
118) p-Phenylened	0.025	0.080	0.194	0.200	0.187	0.183	0.122	0.055	0.131	53.56
----- Quadratic regression ----- Coefficient = 0.9975										
Response Ratio = -0.01175 + 0.20739 *A + -0.00487 *A^2										
119) Safrole	0.277	0.285	0.270	0.246	0.240	0.260	0.263	0.258	0.262	5.70
120) Isosafrole	0.073	0.085	0.086	0.083	0.081	0.083	0.080	0.074	0.081	6.04
121) Acenaphthene-d10A	----------ISTD----------									
122) Thionazin	0.179	0.166	0.167	0.154	0.146	0.161	0.173	0.128	0.159	10.30
123) Tetraethyl d	0.110	0.148	0.148	0.140	0.133	0.144	0.148	0.101	0.134	13.88
124) Phorate	0.788	0.863	0.796	0.659	0.626	0.698	0.825	0.718	0.746	11.23
125) Phenacetin	0.580	0.715	0.697	0.626	0.601	0.650	0.695	0.521	0.636	10.53
126) 1,4-Naphthoq	0.249	0.286	0.321	0.299	0.280	0.309	0.305	0.223	0.284	11.62
127) m-Dinitroben	0.103	0.140	0.179	0.191	0.179	0.183	0.157	0.080	0.152	26.85
----- Quadratic regression ----- Coefficient = 0.9987										
Response Ratio = -0.00684 + 0.19927 *A + -0.00578 *A^2										
128) Pentachlorob	0.481	0.474	0.443	0.395	0.372	0.401	0.442	0.484	0.437	9.79
129) 2-Naphthylam	1.310	1.306	1.086	0.957	0.914	1.010	1.144	1.271	1.125	14.09
130) 1-Naphthylam	1.003	1.097	0.934	0.841	0.815	0.851	1.020	0.999	0.945	10.70
131) 5-Nitro-o-to	0.326	0.384	0.383	0.347	0.332	0.352	0.385	0.253	0.345	12.77
132) I Phenanthrene-d10A	----------ISTD----------									
133) Disulfoton	0.397	0.439	0.408	0.340	0.323	0.368	0.409	0.352	0.380	10.49
134) Dinoseb	0.044	0.080	0.150	0.170	0.157	0.165	0.113	0.025	0.113	50.52
----- Quadratic regression ----- Coefficient = 0.9977										
Response Ratio = -0.01099 + 0.18414 *A + -0.00772 *A^2										

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4515-ICC4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102805.D
Project: BMSMC, Building 5 Area, PR

```
135) Dimethoate   0.306 0.346 0.347 0.291 0.275 0.312 0.329 0.238 0.305  12.23
136) 4-Aminobiphe 0.838 0.875 0.777 0.649 0.601 0.716 0.776 0.756 0.748  12.16
137) Methyl parat 0.137 0.196 0.232 0.208 0.196 0.225 0.205       0.200  15.53
138) Parathion    0.120 0.175 0.179 0.151 0.140 0.167 0.168 0.097 0.149  19.49
139) Diphenylamin       1.347 1.156 0.939 0.891 1.034 1.219       1.098  15.90
140) Isodrin      0.124 0.137 0.133 0.116 0.110 0.123 0.130 0.141 0.127   8.25
141) Diallate     0.303 0.315 0.278 0.229 0.216 0.245 0.281 0.301 0.271  13.62
142) Pentachloron 0.034 0.038 0.035 0.031 0.030 0.033 0.038 0.026 0.033# 12.21
143) Pronamide    0.262 0.317 0.340 0.308 0.294 0.319 0.312 0.210 0.295  13.89
144) 4-Nitroquino 0.035 0.063 0.118 0.114 0.106 0.119 0.088       0.092  35.04
          ----- Quadratic regression -----                Coefficient =  0.9993
               Response Ratio = -0.03768 + 0.14299 *A + -0.00323 *A^2

145) Methapyrilin 0.243 0.349 0.343 0.257 0.223 0.302 0.350 0.228 0.287  19.43
146) sym-Trinitro 0.016 0.027 0.057 0.067 0.063 0.064 0.040 0.011 0.043# 52.94
          ----- Quadratic regression -----                Coefficient =  0.9978
               Response Ratio = -0.00432 + 0.06896 *A + -0.00113 *A^2


147) I   Chrysene-d12A         ----------------ISTD---------------------
148) Aramite      0.013 0.027 0.036 0.036 0.035 0.036 0.030       0.030# 28.22
          ----- Quadratic regression -----                Coefficient =  0.9997
               Response Ratio = -0.00367 + 0.04017 *A + -0.00086 *A^2

149) p-(Dimethyla 0.326 0.432 0.471 0.422 0.407 0.443 0.444 0.289 0.404  15.67
150) Kepone       0.077 0.082 0.059 0.043 0.037 0.048 0.070 0.064 0.060  27.13
          ----- Quadratic regression -----                Coefficient =  0.9981
               Response Ratio = 0.00930 + 0.06106 *A + -0.00165 *A^2

151) Famphur      0.457 0.517 0.356 0.192 0.155 0.256 0.451 0.412 0.350  38.30
          ----- Quadratic regression -----                Coefficient =  0.9943
               Response Ratio = 0.08833 + 0.36041 *A + -0.01429 *A^2

152) 2-Acetylamin 0.308 0.417 0.568 0.554 0.517 0.562 0.495       0.489  19.52
153) 3,3'-Dimethy 0.522 0.674 0.347 0.139 0.113 0.202 0.568 0.428 0.374  55.96
154) Chlorobenzil 0.267 0.332 0.341 0.325 0.304 0.331 0.311 0.201 0.302  15.50

155) I   Perylene-d12A         ----------------ISTD---------------------
156) 4,4-Methylen 0.124 0.145 0.141 0.105 0.097 0.124 0.135       0.125  14.42
157) Hexachloroph       0.012 0.047 0.087 0.083 0.073 0.023       0.054  58.79
          ----- Quadratic regression -----                Coefficient =  0.9946
               Response Ratio = -0.06822 + 0.07837 *A + 0.00102 *A^2

158) 3-Methylchol 0.162 0.207 0.243 0.236 0.222 0.242 0.217       0.218  12.90


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

           MP4513.M          Fri Feb 26 08:24:31 2016
```

8.7.11

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4515-ICV4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102811.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	107	0.00	4.37
103	M	2-Picoline	1.714	1.504	12.3	100	0.00	2.47
104		Pentachloroethane	0.573	0.425	25.8	81	0.00	4.03
106	M	N-Nitrosodiethylamine	0.698	0.660	5.4	103	0.00	3.16
107	M	N-Nitrosomethylethylamine	0.576	0.536	6.9	107	0.00	2.54
108	M	Ethyl methanesulfonate	1.125	1.017	9.6	103	0.00	3.46
109	M	N-Nitrosopyrrolidine	0.401	0.413	-3.0	114	0.00	4.85
110	M	N-Nitrosomorpholine	0.639	0.577	9.7	115	0.00	4.91
112	I	Naphthalene-d8A	1.000	1.000	0.0	106	0.00	6.13
113	M	O,O,O-Triethyl phosphorot	0.158	0.151	4.4	102	0.00	5.78
114	M	N-Nitrosopiperidine	0.200	0.194	3.0	106	0.00	5.32
115	M	A,A-Dimethylphenethylamin	0.718	0.765	-6.5	109	-0.34	6.17
116	M	Hexachloropropene	0.206	0.188	8.7	95	0.00	6.31
117	M	N-Nitrosodi-n-butylamine	0.253	0.245	3.2	105	0.00	6.81
		----------	True	Calc.	% Drift	----------		
118		p-Phenylenediamine	50.000	60.971	-21.9	136	0.00	6.79
		----------	AvgRF	CCRF	% Dev	----------		
119	M	Safrole	0.262	0.266	-1.5	109	0.00	7.12
121		Acenaphthene-d10A	1.000	1.000	0.0	105	0.00	8.86
122	M	Thionazin	0.159	0.160	-0.6	105	0.00	9.76
123	M	Tetraethyl dithiopyrophos	0.134	0.137	-2.2	100	0.00	10.29
124	M	Phorate	0.746	0.719	3.6	108	0.00	10.47
125	M	Phenacetin	0.636	0.630	0.9	102	0.00	10.51
126	M	1,4-Naphthoquinone	0.284	0.328	-15.5	112	0.00	8.26
128	M	Pentachlorobenzene	0.437	0.390	10.8	102	0.00	9.13
131	M	5-Nitro-o-toluidine	0.345	0.253	26.7	76	0.00	9.77
132	I	Phenanthrene-d10A	1.000	1.000	0.0	103	0.00	11.23
133	M	Disulfoton	0.380	0.409	-7.6	115	0.00	11.31
135	M	Dimethoate	0.305	0.304	0.3	101	0.00	10.71
137	M	Methyl parathion	0.200	0.185	7.5	85	0.00	11.92
138	M	Parathion	0.149	0.173	-16.1	107	0.00	12.61
140	M	Isodrin	0.127	0.127	0.0	106	0.00	13.03
141	M	Diallate	0.271	0.272	-0.4	115	0.00	10.46
142	M	Pentachloronitrobenzene	0.033	0.034	-0.03	106	0.00	10.97
143	M	Pronamide	0.295	0.342	-15.9	111	0.00	11.13

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4515-ICV4515
Lab FileID: P102811.D

```
            ----------------------- True    Calc.   % Drift  ------------
144 M   4-Nitroquinoline 1-oxide   50.000  38.127     23.7   68  -0.02   12.57

            ----------------------- AvgRF   CCRF     % Dev   -------------
145 M   Methapyriline               0.287   0.303     -5.6  104  -0.05   12.79


            ----------------------- AvgRF   CCRF     % Dev   -------------
147 I   Chrysene-d12A               1.000   1.000      0.0  106   0.00   15.95

            ----------------------- True    Calc.   % Drift  ------------
148     Aramite                   100.000 117.441    -17.4  125   0.00   14.25

            ----------------------- AvgRF   CCRF     % Dev   -------------
149 M   p-(Dimethylamine)azobenze   0.404   0.440     -8.9  105   0.00   14.33
152 M   2-Acetylaminofluorene       0.489   0.589    -20.4  111   0.00   15.42
154 M   Chlorobenzilate             0.302   0.296      2.0   95   0.00   14.45

155 I   Perylene-d12A               1.000   1.000      0.0  105   0.00   18.52
158     3-Methylcholanthrene        0.218   0.229     -5.0   99   0.00   19.02


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    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     P102805A.D MP4513.M         Fri Feb 26 08:24:13 2016
```

8.7.12

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4515-ICV4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102812.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4515\P102812.D          Vial: 11
Acq On    : 24 Feb 2016   2:41 pm                   Operator: linseyk
Sample    : icv4515-50                              Inst    : MSP
Misc      : op91338,ep4515                          Multiplr: 1.00
MS Integration Params: rteint.p

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	107	0.00	4.37
105	M	Methyl methanesulfonate	0.847	0.828	2.2	110	0.00	2.79
111	M	o-Toluidine	2.046	1.881	8.1	113	0.00	4.95
112	I	Naphthalene-d8A	1.000	1.000	0.0	105	0.00	6.13
120		Isosafrole	0.081	0.133	-64.2#	168	0.00	7.93
121		Acenaphthene-d10A	1.000	1.000	0.0	104	0.00	8.86
129	M	2-Naphthylamine	1.125	1.207	-7.3	124	0.00	9.44
130	M	1-Naphthylamine	0.945	1.202	-27.2	147	0.00	9.31
132	I	Phenanthrene-d10A	1.000	1.000	0.0	103	0.00	11.23
136	M	4-Aminobiphenyl	0.748	0.756	-1.1	108	0.00	10.97
		----------	True	Calc.	% Drift	----------		
146	M	sym-Trinitrobenzene	50.000	44.628	10.7	92	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
147	I	Chrysene-d12A	1.000	1.000	0.0	106	0.00	15.95
		----------	True	Calc.	% Drift	----------		
150		Kepone	50.000	41.275	17.5	126	0.00	14.96
151	M	Famphur	50.000	43.019	14.0	150	-0.02	14.90
		----------	AvgRF	CCRF	% Dev	----------		
153	M	3,3'-Dimethylbenzidine	0.374	0.679	-81.6#	356#	0.00	14.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Fri Feb 26 08:24:14 2016

8.7.13

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4515-ICV4515
Lab FileID: P102813.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4515\P102813.D          Vial: 12
Acq On    : 24 Feb 2016   3:10 pm                   Operator: linseyk
Sample    : icv4515-50                              Inst    : MSP
Misc      : op91338,ep4515                          Multiplr: 1.00
MS Integration Params: rteint.p

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

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

       Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
 ---------------------------------------------------------------------------



121     Acenaphthene-d10A          1.000   1.000      0.0  131   0.00    8.86

            ----------------------- True    Calc.   % Drift  ------------
127 M   m-Dinitrobenzene          50.000  56.623    -13.2  151  -0.11    8.39



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    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     P102805A.D MP4513.M         Fri Feb 26 08:24:15 2016
```

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4515-ICV4515
Lab FileID: P102814.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4515\P102814.D          Vial: 13
Acq On    : 24 Feb 2016   3:40 pm                   Operator: linseyk
Sample    : icv4515-50                              Inst    : MSP
Misc      : op91338,ep4515                          Multiplr: 1.00
MS Integration Params: rteint.p

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
132	I	Phenanthrene-d10A	1.000	1.000	0.0	119	0.00	11.22
139	M	Diphenylamine	1.098	0.783	28.7	91	0.00	9.97

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Fri Feb 26 08:24:16 2016

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4516-ICC4516
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102819.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MSP

  Method       : C:\MSDCHEM\1\METHODS\MP4516.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Fri Feb 26 13:04:42 2016
  Response via : Initial Calibration

  Calibration Files
  2   =P102823.D  5   =P102822.D  25  =P102820.D  80  =P102818.D
  100 =P102817.D  50  =P102819.D  10  =P102821.D  1   =

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



169) I   Naphthalene-d8       ----------------ISTD---------------------
170) Catechol                 0.351 0.408 0.382 0.383 0.242       0.353  18.51
171) 2-Chloroanil 0.480 0.543 0.540 0.488 0.468 0.501 0.522       0.506   5.84
172) 3-Chloroanil 0.432 0.488 0.497 0.451 0.429 0.461 0.487       0.464   5.99
173) 1-chloro-2-n 0.141 0.183 0.195 0.194 0.185 0.192 0.175       0.181  10.35

174) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
175) m-Toluidine  2.201 2.492 2.367 2.035 1.940 2.154 2.435       2.232   9.30


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

           MP4513AP9.M        Fri Feb 26 13:09:11 2016
```

8.7.16

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4516-ICV4516
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102824.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4516\P102824.D Vial: 9
Acq On : 25 Feb 2016 1:50 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:15:59 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
169 I	Naphthalene-d8c	1.000	1.000	0.0	96	0.00	6.13
171	2-Chloroaniline	0.506	0.420	17.0	80	0.00	5.53
172	3-Chloroaniline	0.464	0.365	21.3	76	0.00	6.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513AP9.M Fri Feb 26 13:18:49 2016

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4516-ICV4516
Lab FileID: P102825.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4516\P102825.D          Vial: 10
Acq On    : 25 Feb 2016   2:20 pm                   Operator: ashleyd
Sample    : icv4516-50                              Inst    : MSP
Misc      : op91338,ep4516                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Feb 26 13:15:59 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
169 I	Naphthalene-d8c	1.000	1.000	0.0	103	0.00	6.13
173	1-chloro-2-nitrobenzene	0.181	0.181	0.0	97	0.00	6.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513AP9.M Fri Feb 26 13:18:50 2016

8.7.18

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4516-ICV4516
Lab FileID: P102826.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4516\P102826.D          Vial: 11
Acq On    : 25 Feb 2016   2:49 pm                   Operator: ashleyd
Sample    : icv4516-50                              Inst    : MSP
Misc      : op91338,ep4516                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Feb 26 13:15:59 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
169 I	Naphthalene-d8c	1.000	1.000	0.0	87	0.00	6.13
170	Catechol	0.353	0.331	6.2	75	0.00	6.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513AP9.M Fri Feb 26 13:18:51 2016

8.7.19

8

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSP

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

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

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

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC15518 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

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

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


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

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

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

8.7.20

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103019.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	4.34
9	t	Phenol	1.753	1.661	5.2	106	0.00	3.98
12	t	2-Chlorophenol	1.328	1.289	2.9	108	0.00	4.11
19	t	2-Methylphenol	1.130	1.149	-1.7	111	-0.01	4.72
21	t	3&4-Methylphenol	1.233	1.212	1.7	105	0.00	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	6.10
29	t	2-Nitrophenol	0.191	0.202	-5.8	103	0.00	5.55
30	t	2,4-Dimethylphenol	0.324	0.361	-11.4	108	0.00	5.67
31	t	Benzoic acid	0.251	0.233	7.2	95	0.00	5.87
33	t	2,4-Dichlorophenol	0.283	0.281	0.7	100	0.00	5.95
34		2,6-Dichlorophenol	0.271	0.281	-3.7	107	0.00	6.25
43	t	4-Chloro-3-methylphenol	0.302	0.311	-3.0	97	-0.01	7.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	8.82
49	t	2,4,6-Trichlorophenol	0.313	0.326	-4.2	103	0.00	7.67
50	t	2,4,5-Trichlorophenol	0.326	0.319	2.1	94	0.00	7.77
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	39.374	21.3	76	0.00	8.96
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.167	-0.6	95	0.00	9.26
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.238	5.2	92	0.00	9.39
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	11.18
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	42.455	15.1	91	0.00	9.81
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	43.186	15.1	9 0	0.00	10.93

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

8.7.21

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103020.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	0.00	4.35
3	t	Pyridine	1.604	1.667	-3.9	128	0.08	2.05
10	t	Aniline	1.910	2.027	-6.1	137	0.01	3.96
16	t	Benzyl alcohol	0.790	0.848	-7.3	124	0.00	4.54
24	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00	6.10
39	t	4-Chloroaniline	0.422	0.362	14.2	107	0.00	6.24
44	t	2-Methylnaphthalene	0.550	0.517	6.0	120	0.00	7.19
47	I	Acenaphthene-d10	1.000	1.000	0.0	130	0.00	8.82
54	t	2-Nitroaniline	0.304	0.346	-13.8	121	0.00	8.14
58	t	3-Nitroaniline	0.305	0.330	-8.2	113	0.00	8.80
62	t	Dibenzofuran	1.470	1.515	-3.1	123	0.00	9.15
68	t	4-Nitroaniline	0.306	0.335	-9.5	120	0.00	9.77
69	I	Phenanthrene-d10	1.000	1.000	0.0	142	0.00	11.18
79	t	Carbazole	1.054	1.026	2.7	118	0.00	11.61
83	I	Chrysene-d12	1.000	1.000	0.0	134	0.00	15.90

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

8.7.22

8

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103021.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	0.00	4.34
5	S	2-Fluorophenol	1.392	1.384	0.6	104	0.00	2.97
8	S	Phenol-d5	1.699	1.713	-0.8	109	0.00	3.96
24	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	6.09
25	S	Nitrobenzene-d5	0.405	0.405	0.0	107	0.00	5.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00	8.82
51	S	2-Fluorobiphenyl	1.214	1.195	1.6	106	0.00	7.79
69	I	Phenanthrene-d10	1.000	1.000	0.0	114	0.00	11.18
73	S	2,4,6-Tribromophenol	0.094	0.089	5.3	89	0.00	10.09
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	15.90
85	S	Terphenyl-d14	0.788	0.797	-1.1	96	0.00	14.01

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

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103022.D

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	0.00	4.34
4	t	N-Nitrosodimethylamine	0.600	0.543	9.5	99	0.00	1.94
11	t	bis(2-Chloroethyl)ether	1.290	1.356	-5.1	120	0.00	4.02
14	t	1,3-Dichlorobenzene	1.488	1.444	3.0	109	0.00	4.28
15	t	1,4-Dichlorobenzene	1.429	1.376	3.7	107	0.00	4.36
17	t	1,2-Dichlorobenzene	1.356	1.367	-0.8	114	0.00	4.56
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.383	9.7	101	0.00	4.70
22		n-Nitroso-di-n-propylamin	0.903	0.894	1.0	108	0.00	4.88
23	t	Hexachloroethane	0.466	0.461	1.1	110	0.00	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	6.10
26	t	Nitrobenzene	0.389	0.376	3.3	104	0.00	5.10
28	t	Isophorone	0.659	0.702	-6.5	107	0.00	5.44
32	t	bis(2-Chloroethoxy)methan	0.416	0.418	-0.5	104	0.00	5.78
36	t	1,2,4-Trichlorobenzene	0.313	0.310	1.0	108	0.00	6.02
38	t	Naphthalene	0.992	0.988	0.4	106	0.00	6.13
42	t	Hexachlorobutadiene	0.156	0.162	-3.8	112	0.00	6.34
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00	8.82
52	t	2-Chloronaphthalene	1.051	1.078	-2.6	112	0.00	7.94
55	t	Dimethylphthalate	1.215	1.170	3.7	100	0.00	8.47
56	t	Acenaphthylene	1.678	1.583	5.7	99	0.00	8.59
57	t	2,6-Dinitrotoluene	0.259	0.255	1.5	92	0.00	8.54
59	t	Acenaphthene	1.043	1.017	2.5	102	0.00	8.87
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	50.000	43.762	12.5	97	0.00	9.17
		----------	AvgRF	CCRF	% Dev	----------		
65	t	Diethylphthalate	1.207	1.155	4.3	97	0.00	9.60
66	t	Fluorene	1.200	1.168	2.7	101	0.00	9.69
67	t	4-Chlorophenyl-phenylethe	0.539	0.506	6.1	100	0.00	9.74
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00	11.18
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.576	0.537	6.8	96	0.00	9.93
72	t	1,2-Diphenylhydrazine	0.789	0.743	5.8	98	0.00	9.98
74	t	4-Bromophenyl-phenylether	0.196	0.192	2.0	101	0.00	10.51
75	t	Hexachlorobenzene	0.212	0.189	10.8	98	0.00	10.58
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.026	0.983	4.2	102	0.00	11.22
78	t	Anthracene	1.029	0.974	5.3	98	0.00	11.30

Initial Calibration Verification

Job Number: JC15518 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103022.D
Project: BMSMC, Building 5 Area, PR

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

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

8.7.24

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103023.D

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	4.34
2	t	1,4-Dioxane	0.711	0.616	13.4	83	0.00	1.78
6	t	Indene	2.275	2.163	4.9	89	0.00	4.67
7	t	Cumene	3.287	3.030	7.8	89	0.00	3.43
13	t	Decane	1.057	0.961	9.1	91	0.00	4.16
18	t	Acetophenone	1.799	1.668	7.3	88	0.00	4.86
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	6.09
27	t	Quinoline	0.721	0.630	12.6	82	-0.01	6.63
40	t	2,3-Dichloroaniline	0.359	0.294	18.1	76	0.00	7.64
41	t	Caprolactam	0.133	0.121	9.0	80	-0.03	6.71
45	t	1-Methylnaphthalene	0.670	0.603	10.0	87	0.00	7.34
46	t	Dimethylnaphthalene	0.586	0.531	9.4	86	0.00	8.18
47	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00	8.82
48	t	Hexachlorocyclopentadiene	0.261	0.270	-3.4	84	0.00	7.46
53	t	Biphenyl	1.351	1.303	3.6	92	0.00	7.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00	11.18
82	t	Octadecane	0.403	0.414	-2.7	82	0.00	11.17
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	90	0.00	18.46
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.516	-7.1	79	0.00	17.84

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

8.7.25

8

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103024.D

Evaluate Continuing Calibration Report

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

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

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	125	-0.01	15.90
		True	Calc.	% Drift			
89 t	3,3'-Dichlorobenzidine	50.000	43.268	13.5	105	0.00	15.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:09:43 2016

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4533-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103208.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4533\P103208.D Vial: 2
Acq On : 9 Mar 2016 4:21 pm Operator: linseyk
Sample : cc4524-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.01	4.25
2	t	1,4-Dioxane	0.711	0.655	7.9	79	-0.03	1.71
3	t	Pyridine	1.604	1.556	3.0	82	-0.03	1.91
4	t	N-Nitrosodimethylamine	0.600	0.616	-2.7	86	-0.03	1.87
5	S	2-Fluorophenol	1.392	1.404	-0.9	81	0.00	2.88
6	t	Indene	2.275	2.233	1.8	82	0.00	4.57
7	t	Cumene	3.287	3.170	3.6	83	-0.02	3.34
8	S	Phenol-d5	1.699	1.706	-0.4	83	0.02	3.86
9	t	Phenol	1.753	1.767	-0.8	86	-0.02	3.88
10	t	Aniline	1.910	1.643	14.0	76	-0.01	3.85
11	t	bis(2-Chloroethyl)ether	1.290	1.232	4.5	84	-0.01	3.92
12	t	2-Chlorophenol	1.328	1.290	2.9	82	-0.02	4.01
13	t	Decane	1.057	1.078	-2.0	90	0.00	4.06
14	t	1,3-Dichlorobenzene	1.488	1.401	5.8	81	-0.01	4.18
15	t	1,4-Dichlorobenzene	1.429	1.372	4.0	82	-0.01	4.27
16	t	Benzyl alcohol	0.790	0.831	-5.2	83	0.00	4.43
17	t	1,2-Dichlorobenzene	1.356	1.271	6.3	81	0.00	4.46
18	t	Acetophenone	1.799	1.779	1.1	83	0.00	4.77
19	t	2-Methylphenol	1.130	1.112	1.6	81	-0.01	4.62
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.397	6.4	80	0.00	4.61
21	t	3&4-Methylphenol	1.233	1.242	-0.7	82	0.00	4.83
22		n-Nitroso-di-n-propylamin	0.903	0.910	-0.8	84	0.00	4.78
23	t	Hexachloroethane	0.466	0.451	3.2	82	0.00	4.90
24	I	Naphthalene-d8	1.000	1.000	0.0	94	-0.02	5.99
25	S	Nitrobenzene-d5	0.405	0.395	2.5	84	-0.03	4.97
26	t	Nitrobenzene	0.389	0.373	4.1	85	-0.03	5.00
27	t	Quinoline	0.721	0.669	7.2	79	0.00	6.53
28	t	Isophorone	0.659	0.663	-0.6	83	-0.03	5.33
29	t	2-Nitrophenol	0.191	0.196	-2.6	82	-0.02	5.45
30	t	2,4-Dimethylphenol	0.324	0.331	-2.2	81	-0.02	5.57
31	t	Benzoic acid	0.251	0.275	-9.6	91	-0.03	5.76
32	t	bis(2-Chloroethoxy)methan	0.416	0.406	2.4	83	-0.02	5.68
33	t	2,4-Dichlorophenol	0.283	0.279	1.4	81	-0.02	5.84
34		2,6-Dichlorophenol	0.271	0.257	5.2	80	-0.02	6.15
35		1,3,5-Trichlorobenzene	0.317	0.290	8.5	81	-0.02	5.46
36	t	1,2,4-Trichlorobenzene	0.313	0.290	7.3	82	-0.02	5.92
37		1,2,3-Trichlorobenzene	0.288	0.262	9.0	82	-0.01	6.25
38	t	Naphthalene	0.992	0.925	6.8	81	-0.02	6.02
39	t	4-Chloroaniline	0.422	0.387	8.3	77	0.00	6.14
40	t	2,3-Dichloroaniline	0.359	0.340	5.3	80	0.00	7.54
41	t	Caprolactam	0.133	0.144	-8.3	86	-0.01	6.63

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4533-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103208.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.156	0.142	9.0	81	-0.01	6.24
43	t	4-Chloro-3-methylphenol	0.302	0.317	-5.0	81	-0.01	6.96
44	t	2-Methylnaphthalene	0.550	0.516	6.2	81	0.00	7.08
45	t	1-Methylnaphthalene	0.670	0.624	6.9	81	0.00	7.23
46	t	Dimethylnaphthalene	0.586	0.556	5.1	81	0.00	8.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	95	-0.02	8.71
48	t	Hexachlorocyclopentadiene	0.261	0.288	-10.3	84	-0.03	7.35
49	t	2,4,6-Trichlorophenol	0.313	0.315	-0.6	81	-0.03	7.56
50	t	2,4,5-Trichlorophenol	0.326	0.333	-2.1	80	-0.04	7.65
51	S	2-Fluorobiphenyl	1.214	1.115	8.2	82	-0.02	7.69
52	t	2-Chloronaphthalene	1.051	0.950	9.6	81	-0.03	7.84
53	t	Biphenyl	1.351	1.225	9.3	82	-0.02	7.83
54	t	2-Nitroaniline	0.304	0.326	-7.2	83	-0.02	8.03
55	t	Dimethylphthalate	1.215	1.156	4.9	81	-0.01	8.36
56	t	Acenaphthylene	1.678	1.559	7.1	80	-0.02	8.48
57	t	2,6-Dinitrotoluene	0.259	0.266	-2.7	79	-0.02	8.43
58	t	3-Nitroaniline	0.305	0.314	-3.0	78	-0.01	8.69
59	t	Acenaphthene	1.043	0.978	6.2	81	-0.02	8.76
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	90.219	9.8	81	0.00	8.86
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.173	-4.2	81	-0.04	9.12
62	t	Dibenzofuran	1.470	1.369	6.9	81	-0.01	9.04
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	50.000	44.813	10.4	82	0.00	9.06
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.250	0.4	79	0.00	9.28
65	t	Diethylphthalate	1.207	1.170	3.1	81	0.00	9.50
66	t	Fluorene	1.200	1.133	5.6	80	0.00	9.59
67	t	4-Chlorophenyl-phenylethe	0.539	0.492	8.7	79	0.00	9.62
68	t	4-Nitroaniline	0.306	0.291	4.9	76	0.00	9.67
69	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.02	11.07
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	45.532	8.9	79	-0.02	9.71
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.576	0.570	1.0	80	-0.03	9.82
72	t	1,2-Diphenylhydrazine	0.789	0.812	-2.9	84	-0.03	9.87
73	S	2,4,6-Tribromophenol	0.094	0.098	-4.3	80	-0.03	9.98
74	t	4-Bromophenyl-phenylether	0.196	0.191	2.6	79	-0.02	10.40
75	t	Hexachlorobenzene	0.212	0.193	9.0	78	-0.02	10.47
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	91.726	8.3	81	-0.02	10.82
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.026	0.970	5.5	79	-0.02	11.11
78	t	Anthracene	1.029	0.987	4.1	78	-0.02	11.19
79	t	Carbazole	1.054	1.016	3.6	77	-0.02	11.49
80	t	Di-n-butylphthalate	1.228	1.347	-9.7	82	-0.01	12.18
81	t	Fluoranthene	1.104	1.063	3.7	77	-0.01	13.12
82	t	Octadecane	0.403	0.435	-7.9	83	-0.01	11.07

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4533-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103208.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	90	-0.03	15.77
84	t	Pyrene	1.273	1.260	1.0	79	-0.04	13.50
85	S	Terphenyl-d14	0.788	0.770	2.3	77	-0.03	13.88
86	t	Butylbenzylphthalate	0.619	0.678	-9.5	80	-0.03	14.87
		----------	True	Calc.	% Drift	----------		
87		Butyl stearate	50.000	50.884	-1.8	88	-0.03	15.10
		----------	AvgRF	CCRF	% Dev	----------		
88	t	Benzo[a]anthracene	1.044	1.034	1.0	77	-0.03	15.75
		----------	True	Calc.	% Drift	----------		
89	t	3,3'-Dichlorobenzidine	50.000	44.000	12.0	77	-0.03	15.78
		----------	AvgRF	CCRF	% Dev	----------		
90	t	Chrysene	1.033	0.970	6.1	76	-0.03	15.82
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	50.000	47.697	4.6	83	-0.02	16.05
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	86	-0.04	18.32
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	51.999	-4.0	82	-0.03	17.25
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.138	1.154	-1.4	73	-0.04	17.69
95	t	Benzo[k]fluoranthene	1.096	1.092	0.4	75	-0.04	17.74
96	t	Benzo[a]pyrene	1.004	1.026	-2.2	72	-0.04	18.23
97	t	Indeno[1,2,3-cd]pyrene	0.886	0.908	-2.5	70	-0.03	19.95
98	t	Dibenz(a,h)acridine	0.844	0.862	-2.1	70	-0.03	19.64
99	t	Dibenz[a,h]anthracene	0.955	0.981	-2.7	72	-0.02	20.00
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.511	-6.0	74	-0.04	17.71
101	t	Benzo[g,h,i]perylene	1.015	0.962	5.2	68	-0.04	20.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 10 09:02:35 2016

8.7.27

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4533-CC4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103209.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4533\P103209.D          Vial: 3
Acq On    :  9 Mar 2016   4:57 pm                   Operator: linseyk
Sample    : cc4514-50                               Inst    : MSP
Misc      : op91801,ep4533                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	70	-0.01	4.25
103		Benzaldehyde	1.202	0.995	17.2	65	-0.02	3.72
104	I	Phenanthrene-d10b	1.000	1.000	0.0	79	-0.02	11.07
105		Atrazine	0.204	0.186	8.8	73	-0.02	10.73
106	I	Chrysene-d12b	1.000	1.000	0.0	87	-0.04	15.76
107		Benzidine	0.704	0.435	38.2#	61	-0.04	13.42
108	I	Naphthalene-d8b	1.000	1.000	0.0	74	-0.02	5.99
109		Hydroquinone	0.367	0.370	-0.8	70	0.07	6.75
110	I	Acenaphthene-d10b	1.000	1.000	0.0	80	-0.02	8.71
111		1,2,4,5-Tetrachlorobenzen	0.549	0.424	22.8#	68	-0.04	7.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 10 09:02:36 2016

8.7.28

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103232.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4534\P103232.D Vial: 2
Acq On : 10 Mar 2016 9:02 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	134	-0.02	4.24
2	t	1,4-Dioxane	0.711	0.683	3.9	127	-0.03	1.71
3	t	Pyridine	1.604	1.600	0.2	123	-0.03	1.90
4	t	N-Nitrosodimethylamine	0.600	0.605	-0.8	127	-0.03	1.87
5	S	2-Fluorophenol	1.392	1.394	-0.1	121	-0.01	2.87
6	t	Indene	2.275	2.313	-1.7	124	0.00	4.57
7	t	Cumene	3.287	3.170	3.6	117	-0.02	3.34
8	S	Phenol-d5	1.699	1.724	-1.5	124	0.00	3.85
9	t	Phenol	1.753	1.796	-2.5	127	-0.03	3.87
10	t	Aniline	1.910	1.767	7.5	110	-0.01	3.85
11	t	bis(2-Chloroethyl)ether	1.290	1.266	1.9	128	-0.02	3.92
12	t	2-Chlorophenol	1.328	1.341	-1.0	125	-0.02	4.00
13	t	Decane	1.057	1.091	-3.2	130	0.00	4.06
14	t	1,3-Dichlorobenzene	1.488	1.441	3.2	121	-0.01	4.18
15	t	1,4-Dichlorobenzene	1.429	1.395	2.4	120	-0.02	4.26
16	t	Benzyl alcohol	0.790	0.845	-7.0	128	-0.01	4.43
17	t	1,2-Dichlorobenzene	1.356	1.297	4.4	119	0.00	4.46
18	t	Acetophenone	1.799	1.832	-1.8	124	0.00	4.76
19	t	2-Methylphenol	1.130	1.145	-1.3	123	-0.02	4.61
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.401	5.4	119	0.00	4.61
21	t	3&4-Methylphenol	1.233	1.297	-5.2	127	-0.01	4.82
22		n-Nitroso-di-n-propylamin	0.903	0.984	-9.0	133	0.00	4.78
23	t	Hexachloroethane	0.466	0.444	4.7	119	0.00	4.90
24	I	Naphthalene-d8	1.000	1.000	0.0	134	-0.02	5.99
25	S	Nitrobenzene-d5	0.405	0.424	-4.7	130	-0.03	4.97
26	t	Nitrobenzene	0.389	0.398	-2.3	129	-0.03	4.99
27	t	Quinoline	0.721	0.721	0.0	123	-0.02	6.52
28	t	Isophorone	0.659	0.701	-6.4	127	-0.03	5.33
29	t	2-Nitrophenol	0.191	0.198	-3.7	121	-0.03	5.44
30	t	2,4-Dimethylphenol	0.324	0.322	0.6	120	-0.03	5.56
31	t	Benzoic acid	0.251	0.261	-4.0	146	-0.05	5.75
32	t	bis(2-Chloroethoxy)methan	0.416	0.435	-4.6	128	-0.02	5.67
33	t	2,4-Dichlorophenol	0.283	0.292	-3.2	121	-0.03	5.83
34		2,6-Dichlorophenol	0.271	0.270	0.4	120	-0.02	6.14
35		1,3,5-Trichlorobenzene	0.317	0.305	3.8	120	-0.02	5.46
36	t	1,2,4-Trichlorobenzene	0.313	0.297	5.1	120	-0.02	5.92
37		1,2,3-Trichlorobenzene	0.288	0.274	4.9	122	-0.02	6.24
38	t	Naphthalene	0.992	0.980	1.2	121	-0.02	6.02
39	t	4-Chloroaniline	0.422	0.434	-2.8	123	-0.01	6.13
40	t	2,3-Dichloroaniline	0.359	0.361	-0.6	123	0.00	7.53
41	t	Caprolactam	0.133	0.155	-16.5	140	-0.02	6.62

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103232.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.156	0.146	6.4	118	-0.02	6.24
43	t	4-Chloro-3-methylphenol	0.302	0.335	-10.9	128	-0.02	6.96
44	t	2-Methylnaphthalene	0.550	0.544	1.1	121	-0.01	7.08
45	t	1-Methylnaphthalene	0.670	0.668	0.3	122	0.00	7.23
46	t	Dimethylnaphthalene	0.586	0.588	-0.3	122	0.00	8.06
47	I	Acenaphthene-d10	1.000	1.000	0.0	135	-0.02	8.71
48	t	Hexachlorocyclopentadiene	0.261	0.281	-7.7	124	-0.04	7.34
49	t	2,4,6-Trichlorophenol	0.313	0.321	-2.6	121	-0.03	7.56
50	t	2,4,5-Trichlorophenol	0.326	0.357	-9.5	133	-0.05	7.64
51	S	2-Fluorobiphenyl	1.214	1.188	2.1	124	-0.03	7.68
52	t	2-Chloronaphthalene	1.051	1.034	1.6	124	-0.03	7.83
53	t	Biphenyl	1.351	1.326	1.9	124	-0.03	7.82
54	t	2-Nitroaniline	0.304	0.353	-16.1	136	-0.03	8.02
55	t	Dimethylphthalate	1.215	1.224	-0.7	125	-0.02	8.35
56	t	Acenaphthylene	1.678	1.644	2.0	119	-0.03	8.47
57	t	2,6-Dinitrotoluene	0.259	0.276	-6.6	127	-0.02	8.42
58	t	3-Nitroaniline	0.305	0.337	-10.5	127	-0.02	8.68
59	t	Acenaphthene	1.043	1.018	2.4	120	-0.02	8.75
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	46.810	6.4	141	-0.01	8.85
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.180	-8.4	135	-0.05	9.11
62	t	Dibenzofuran	1.470	1.460	0.7	121	-0.02	9.04
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	25.000	23.468	6.1	129	-0.01	9.06
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.256	-2.0	125	-0.01	9.27
65	t	Diethylphthalate	1.207	1.243	-3.0	127	0.00	9.50
66	t	Fluorene	1.200	1.217	-1.4	125	-0.01	9.58
67	t	4-Chlorophenyl-phenylethe	0.539	0.520	3.5	120	-0.01	9.62
68	t	4-Nitroaniline	0.306	0.321	-4.9	128	-0.02	9.66
69	I	Phenanthrene-d10	1.000	1.000	0.0	136	-0.02	11.07
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	23.927	4.3	136	-0.03	9.70
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.576	0.592	-2.8	125	-0.03	9.82
72	t	1,2-Diphenylhydrazine	0.789	0.841	-6.6	129	-0.03	9.87
73	S	2,4,6-Tribromophenol	0.094	0.095	-1.1	125	-0.04	9.97
74	t	4-Bromophenyl-phenylether	0.196	0.193	1.5	125	-0.03	10.39
75	t	Hexachlorobenzene	0.212	0.200	5.7	123	-0.03	10.46
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	47.165	5.7	137	-0.03	10.81
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.026	1.026	0.0	122	-0.03	11.10
78	t	Anthracene	1.029	1.052	-2.2	123	-0.03	11.18
79	t	Carbazole	1.054	1.090	-3.4	123	-0.02	11.48
80	t	Di-n-butylphthalate	1.228	1.350	-9.9	125	-0.02	12.17
81	t	Fluoranthene	1.104	1.127	-2.1	123	-0.02	13.11
82	t	Octadecane	0.403	0.426	-5.7	127	-0.02	11.06

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103232.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	137	-0.03	15.77
84	t	Pyrene	1.273	1.294	-1.6	123	-0.05	13.50
85	S	Terphenyl-d14	0.788	0.777	1.4	123	-0.04	13.88
86	t	Butylbenzylphthalate	0.619	0.676	-9.2	131	-0.03	14.87
		----------	True	Calc.	% Drift	----------		
87		Butyl stearate	25.000	24.194	3.2	140	-0.03	15.10
		----------	AvgRF	CCRF	% Dev	----------		
88	t	Benzo[a]anthracene	1.044	1.049	-0.5	124	-0.03	15.75
		----------	True	Calc.	% Drift	----------		
89	t	3,3'-Dichlorobenzidine	25.000	22.870	8.5	129	-0.03	15.78
		----------	AvgRF	CCRF	% Dev	----------		
90	t	Chrysene	1.033	1.032	0.1	124	-0.04	15.81
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	25.000	22.946	8.2	133	-0.02	16.04
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	140	-0.03	18.33
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	22.390	10.4	134	-0.03	17.25
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.138	1.162	-2.1	128	-0.04	17.69
95	t	Benzo[k]fluoranthene	1.096	1.126	-2.7	126	-0.05	17.74
96	t	Benzo[a]pyrene	1.004	1.045	-4.1	124	-0.04	18.23
97	t	Indeno[1,2,3-cd]pyrene	0.886	0.944	-6.5	128	-0.03	19.95
98	t	Dibenz(a,h)acridine	0.844	0.882	-4.5	129	-0.03	19.64
99	t	Dibenz[a,h]anthracene	0.955	1.039	-8.8	133	-0.03	19.99
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.495	-2.7	124	-0.05	17.70
101	t	Benzo[g,h,i]perylene	1.015	1.051	-3.5	130	-0.04	20.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524.M Thu Mar 10 11:20:06 2016

8.7.29

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103233.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4534\P103233.D          Vial: 3
Acq On    : 10 Mar 2016   9:33 am                   Operator: linseyk
Sample    : cc4514-25                               Inst    : MSP
Misc      : op91884,ep4534                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	120	-0.02	4.24
103		Benzaldehyde	1.202	1.144	4.8	117	-0.02	3.72
104	I	Phenanthrene-d10b	1.000	1.000	0.0	127	-0.02	11.07
105		Atrazine	0.204	0.229	-12.3	142	-0.02	10.73
106	I	Chrysene-d12b	1.000	1.000	0.0	136	-0.04	15.76
107		Benzidine	0.704	0.701	0.4	129	-0.04	13.42
108	I	Naphthalene-d8b	1.000	1.000	0.0	123	-0.02	5.99
109		Hydroquinone	0.367	0.442	-20.4#	138	0.07	6.75
110	I	Acenaphthene-d10b	1.000	1.000	0.0	133	-0.02	8.71
111		1,2,4,5-Tetrachlorobenzen	0.549	0.525	4.4	130	-0.04	7.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524.M Thu Mar 10 11:20:07 2016

8.7.30

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103234.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D          Vial: 4
Acq On    : 10 Mar 2016  10:02 am                   Operator: linseyk
Sample    : cc4515-25                               Inst    : MSP
Misc      : op91884,ep4534                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	104	-0.05	4.24
103	M	2-Picoline	1.714	1.769	-3.2	108	-0.06	2.38
104		Pentachloroethane	0.573	0.588	-2.6	104	-0.05	3.90
105	M	Methyl methanesulfonate	0.847	0.856	-1.1	107	-0.05	2.69
106	M	N-Nitrosodiethylamine	0.698	0.729	-4.4	109	-0.05	3.05
107	M	N-Nitrosomethylethylamine	0.576	0.646	-12.2	123	-0.06	2.44
108	M	Ethyl methanesulfonate	1.125	1.221	-8.5	113	-0.05	3.35
109	M	N-Nitrosopyrrolidine	0.401	0.475	-18.5	129	-0.04	4.73
110	M	N-Nitrosomorpholine	0.639	0.748	-17.1	125	-0.04	4.78
111	M	o-Toluidine	2.046	2.032	0.7	108	-0.04	4.82
112	I	Naphthalene-d8A	1.000	1.000	0.0	103	-0.05	5.99
113	M	O,O,O-Triethyl phosphorot	0.158	0.163	-3.2	104	-0.06	5.64
114	M	N-Nitrosopiperidine	0.200	0.234	-17.0	118	-0.06	5.20
115	M	A,A-Dimethylphenethylamin	0.718	0.704	1.9	102	-0.41	6.00
116	M	Hexachloropropene	0.206	0.221	-7.3	106	-0.06	6.16
117	M	N-Nitrosodi-n-butylamine	0.253	0.285	-12.6	111	-0.05	6.67
		----------	True	Calc.	% Drift	----------		
118		p-Phenylenediamine	25.000	25.467	-1.9	100	-0.03	6.66
		----------	AvgRF	CCRF	% Dev	----------		
119	M	Safrole	0.262	0.281	-7.3	107	-0.05	6.97
120		Isosafrole	0.081	0.084	-3.7	101	-0.03	7.79
121		Acenaphthene-d10A	1.000	1.000	0.0	106	-0.05	8.71
122	M	Thionazin	0.159	0.170	-6.9	107	-0.04	9.61
123	M	Tetraethyl dithiopyrophos	0.134	0.150	-11.9	107	-0.04	10.14
124	M	Phorate	0.746	0.841	-12.7	112	-0.05	10.31
125	M	Phenacetin	0.636	0.685	-7.7	104	-0.04	10.36
126	M	1,4-Naphthoquinone	0.284	0.268	5.6	88	-0.05	8.11
		----------	True	Calc.	% Drift	----------		
127	M	m-Dinitrobenzene	25.000	27.818	-11.3	122	-0.05	8.36
		----------	AvgRF	CCRF	% Dev	----------		
128	M	Pentachlorobenzene	0.437	0.434	0.7	104	-0.05	8.98
129	M	2-Naphthylamine	1.125	1.032	8.3	100	-0.05	9.29
130	M	1-Naphthylamine	0.945	0.900	4.8	102	-0.05	9.16
131	M	5-Nitro-o-toluidine	0.345	0.378	-9.6	104	-0.04	9.63
132	I	Phenanthrene-d10A	1.000	1.000	0.0	102	-0.05	11.07

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4515
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103234.D
Project: BMSMC, Building 5 Area, PR

133 M	Disulfoton	0.380	0.442	-16.3	111	-0.05	11.15
	----------	True	Calc.	% Drift	----------		
134 M	Dinoseb	25.000	23.655	5.4	104	-0.05	11.14
	----------	AvgRF	CCRF	% Dev	----------		
135 M	Dimethoate	0.305	0.379	-24.3#	112	-0.05	10.56
136 M	4-Aminobiphenyl	0.748	0.746	0.3	98	-0.05	10.81
137 M	Methyl parathion	0.200	0.247	-23.5#	109	-0.05	11.76
138 M	Parathion	0.149	0.190	-27.5#	108	-0.05	12.44
139 M	Diphenylamine	1.098	1.233	-12.3	109	-0.05	9.82
140 M	Isodrin	0.127	0.134	-5.5	103	-0.06	12.85
141 M	Diallate	0.271	0.306	-12.9	113	-0.06	10.30
142 M	Pentachloronitrobenzene	0.033	0.036#	-9.1	105	-0.06	10.81
143 M	Pronamide	0.295	0.343	-16.3	103	-0.04	10.98
	----------	True	Calc.	% Drift	----------		
144 M	4-Nitroquinoline 1-oxide	100.000	78.891	21.1#	80	-0.05	12.42
	----------	AvgRF	CCRF	% Dev	----------		
145 M	Methapyriline	0.287	0.410	-42.9#	122	-0.10	12.62
	----------	True	Calc.	% Drift	----------		
146 M	sym-Trinitrobenzene	25.000	24.848	0.6	109	-0.02	10.29
	----------	AvgRF	CCRF	% Dev	----------		
147 I	Chrysene-d12A	1.000	1.000	0.0	104	-0.06	15.76
	----------	True	Calc.	% Drift	----------		
148	Aramite	50.000	49.538	0.9	103	-0.18	14.07
	----------	AvgRF	CCRF	% Dev	----------		
149 M	p-(Dimethylamine)azobenze	0.404	0.452	-11.9	99	-0.18	14.15
	----------	True	Calc.	% Drift	----------		
150	Kepone	150.000	85.974	42.7#	62	-0.20	14.76
151 M	Famphur	150.000	171.618	-14.4	106	-0.19	14.73
	----------	AvgRF	CCRF	% Dev	----------		
152 M	2-Acetylaminofluorene	0.489	0.558	-14.1	102	-0.18	15.24
153 M	3,3'-Dimethylbenzidine	0.374	0.306	18.2	91	0.00	14.79
154 M	Chlorobenzilate	0.302	0.355	-17.5	108	-0.18	14.27
155 I	Perylene-d12A	1.000	1.000	0.0	97	-0.06	18.32
156 M	4,4-Methylene-bis-(2-chlo	0.125	0.140	-12.0	95	-0.07	15.80
	----------	True	Calc.	% Drift	----------		
157	Hexachlorophene		----------NA----------				
	----------	AvgRF	CCRF	% Dev	----------		
158	3-Methylcholanthrene	0.218	0.262	-20.2#	104	-0.07	18.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524AP9.M Fri Mar 11 12:35:46 2016

8.7.31

8

Continuing Calibration Summary

Job Number: JC15518 **Sample:** EP4534-CC4516
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103235.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4534\P103235.D          Vial: 5
Acq On    : 10 Mar 2016  10:36 am                   Operator: linseyk
Sample    : cc4516-25                               Inst    : MSP
Misc      : op91884,ep4534                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
169	I	Naphthalene-d8c	1.000	1.000	0.0	104	-0.05	5.99
170		Catechol	0.353	0.355	-0.6	105	0.08	6.07
171		2-Chloroaniline	0.506	0.515	-1.8	99	-0.06	5.39
172		3-Chloroaniline	0.464	0.479	-3.2	100	-0.04	6.10
173		1-chloro-2-nitrobenzene	0.181	0.248	-37.0#	132	-0.05	6.53
174	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	94	-0.05	4.24
175		m-Toluidine	2.232	2.693	-20.7#	107	-0.04	4.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524AP9.M Fri Mar 11 12:35:47 2016

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103214.D Vial: 8
Acq On : 9 Mar 2016 7:23 pm Operator: linseyk
Sample : jc15518-1 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 19:46:09 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	65070	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	248975	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	143357	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	219568	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	199833	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	182272	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	65070	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	219568	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	199833	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	248975	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	143357	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	50833	22.44	ppm	0.00
Spiked Amount 50.000			Recovery = 44.88%			
8) Phenol-d5	3.86	99	47927	17.34	ppm	0.02
Spiked Amount 50.000			Recovery = 34.68%			
25) Nitrobenzene-d5	4.97	82	93105	36.94	ppm	-0.03
Spiked Amount 50.000			Recovery = 73.88%			
51) 2-Fluorobiphenyl	7.68	172	168048	38.64	ppm	-0.03
Spiked Amount 50.000			Recovery = 77.28%			
73) 2,4,6-Tribromophenol	9.97	330	22367	43.57	ppm	-0.04
Spiked Amount 50.000			Recovery = 87.14%			
85) Terphenyl-d14	13.88	244	166098	42.21	ppm	-0.04
Spiked Amount 50.000			Recovery = 84.42%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.70	88	333020	288.05	ppm	98

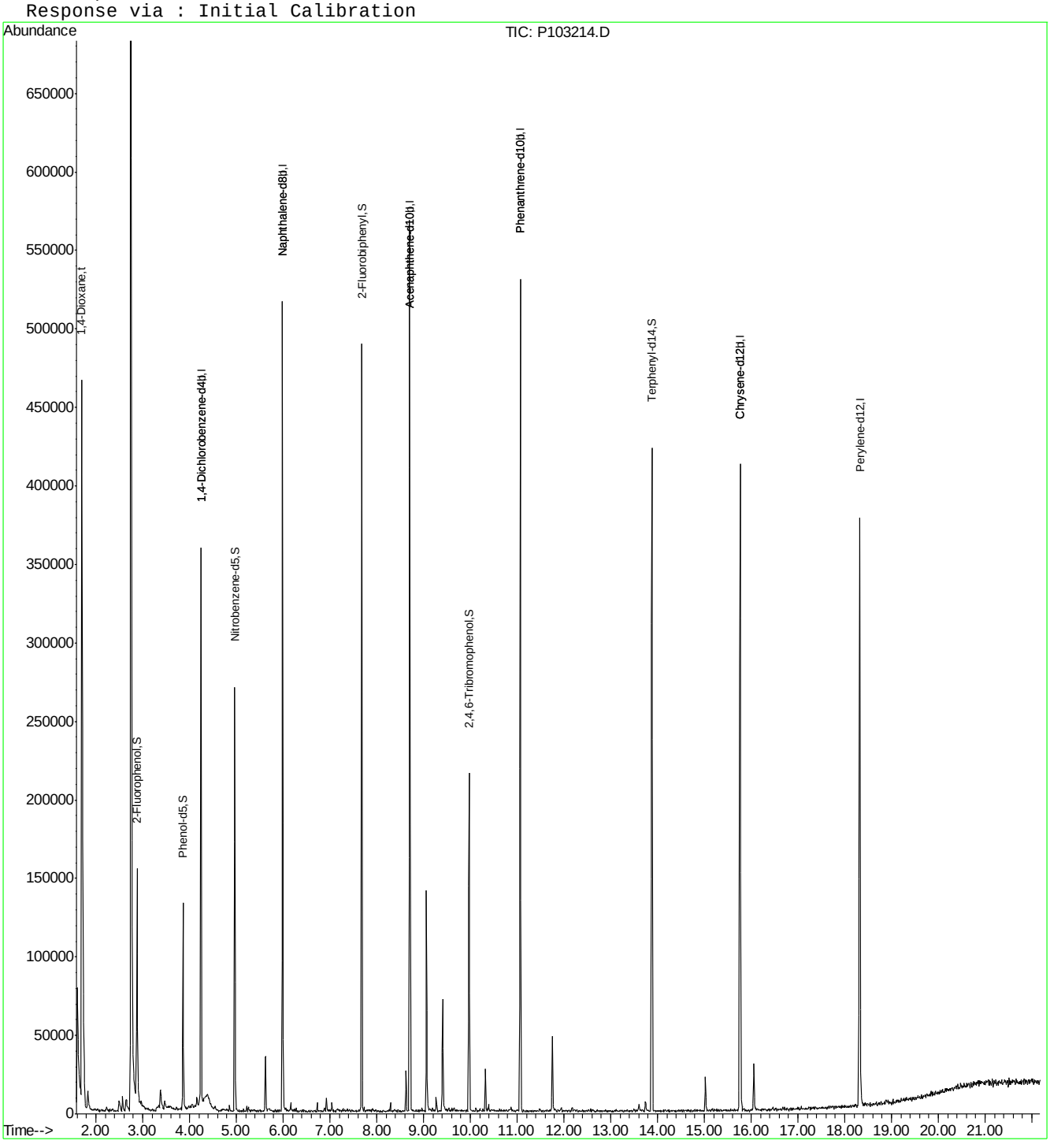
(#) = qualifier out of range (m) = manual integration (+) = signals summed

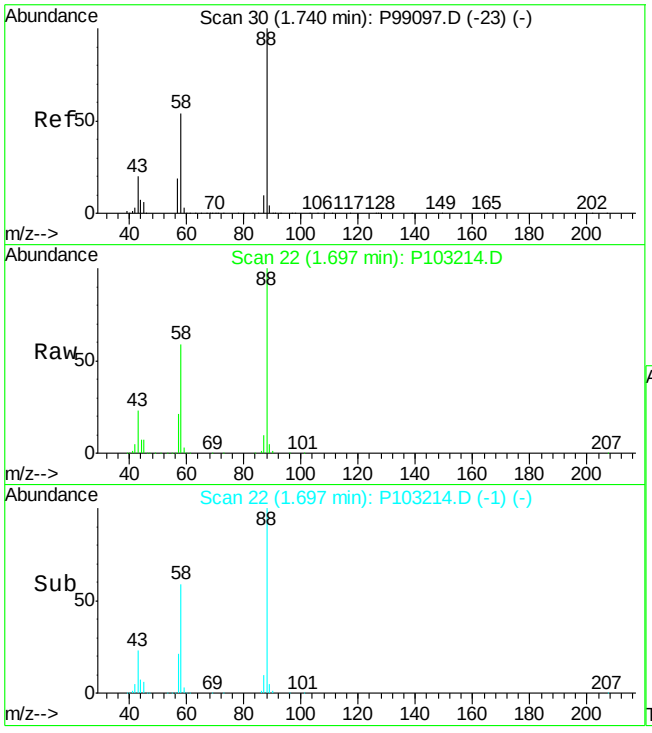
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103214.D Vial: 8
Acq On : 9 Mar 2016 7:23 pm Operator: linseyk
Sample : jc15518-1 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 9:18 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

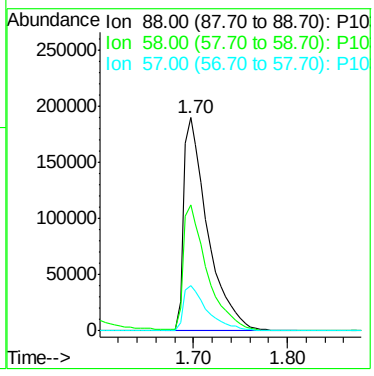




#2
1,4-Dioxane
Concen: 288.05 ppm
RT: 1.70 min Scan# 22
Delta R.T. -0.04 min
Lab File: P103214.D
Acq: 9 Mar 2016 7:23 pm

Tgt Ion: 88 Resp: 333020

Ion	Ratio	Lower	Upper
88	100		
58	58.6	31.0	91.0
57	20.9	0.0	51.2



9.1.1

9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103228.D Vial: 22
Acq On : 10 Mar 2016 2:11 am Operator: linseyk
Sample : jc15518-1 Inst : MSP
Misc : op91884,ep4533,1000,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 02:33:59 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	98868	40.00 ppm	-0.01
24) Naphthalene-d8	5.99	136	358154	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	207406	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	322156	40.00 ppm	-0.02
83) Chrysene-d12	15.76	240	286162	40.00 ppm	-0.04
92) Perylene-d12	18.32	264	244873	40.00 ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	98868	40.00 ppm	-0.01
104) Phenanthrene-d10b	11.07	188	322156	40.00 ppm	-0.02
106) Chrysene-d12b	15.76	240	286162	40.00 ppm	-0.04
108) Naphthalene-d8b	5.99	136	358154	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	207406	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	2.88	112	8704	2.53 ppm	0.00
Spiked Amount 50.000			Recovery = 5.06%		
8) Phenol-d5	3.86	99	7439	1.77 ppm	0.02
Spiked Amount 50.000			Recovery = 3.54%		
25) Nitrobenzene-d5	4.97	82	13827	3.81 ppm	-0.03
Spiked Amount 50.000			Recovery = 7.62%		
51) 2-Fluorobiphenyl	7.68	172	27144	4.31 ppm	-0.03
Spiked Amount 50.000			Recovery = 8.62%		
73) 2,4,6-Tribromophenol	9.98	330	2929	3.89 ppm	-0.03
Spiked Amount 50.000			Recovery = 7.78%		
85) Terphenyl-d14	13.88	244	25662	4.55 ppm	-0.04
Spiked Amount 50.000			Recovery = 9.10%		

Target Compounds					Qvalue
2) 1,4-Dioxane	1.71	88	62863	35.79 ppm	98

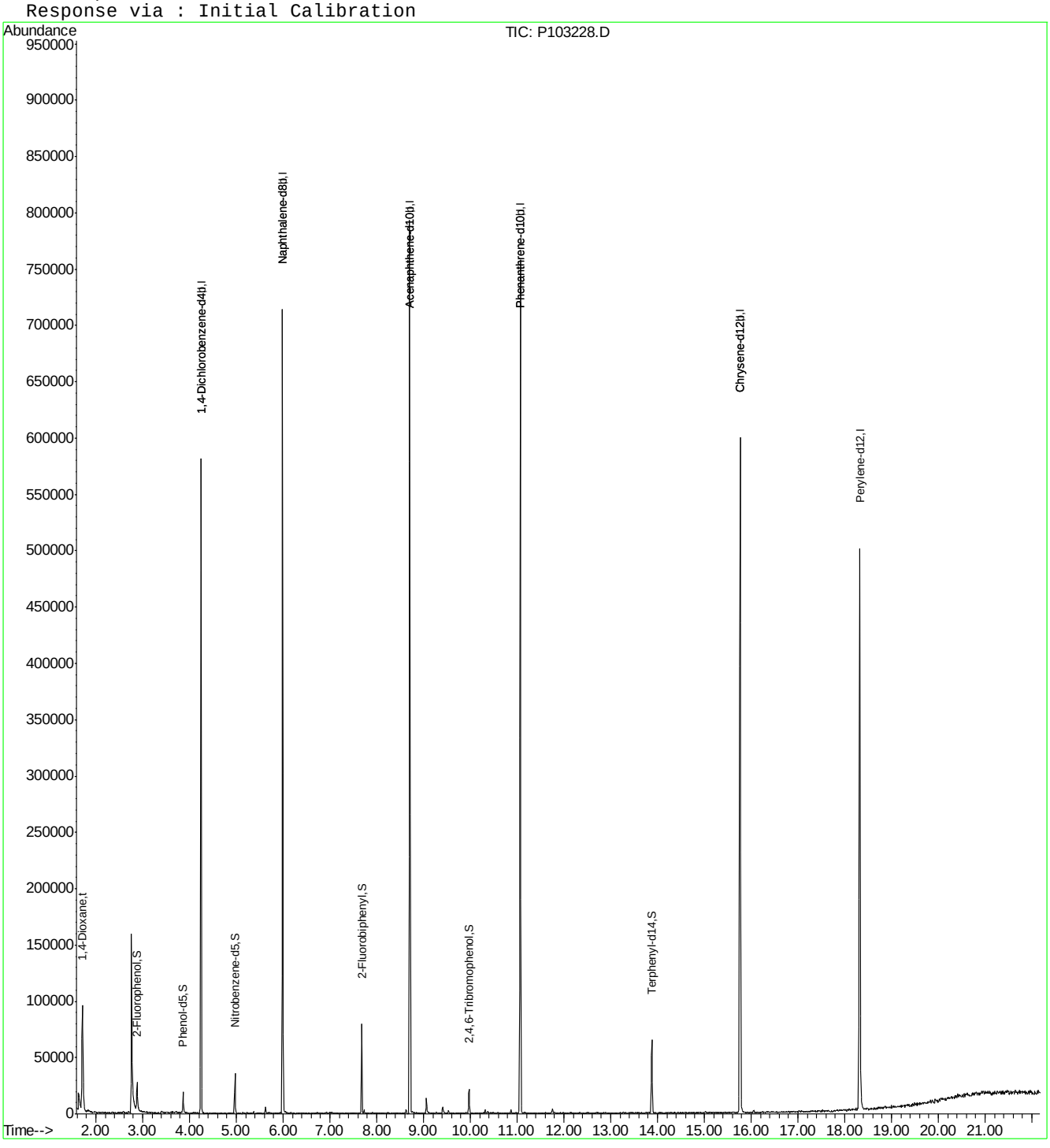
(#) = qualifier out of range (m) = manual integration (+) = signals summed

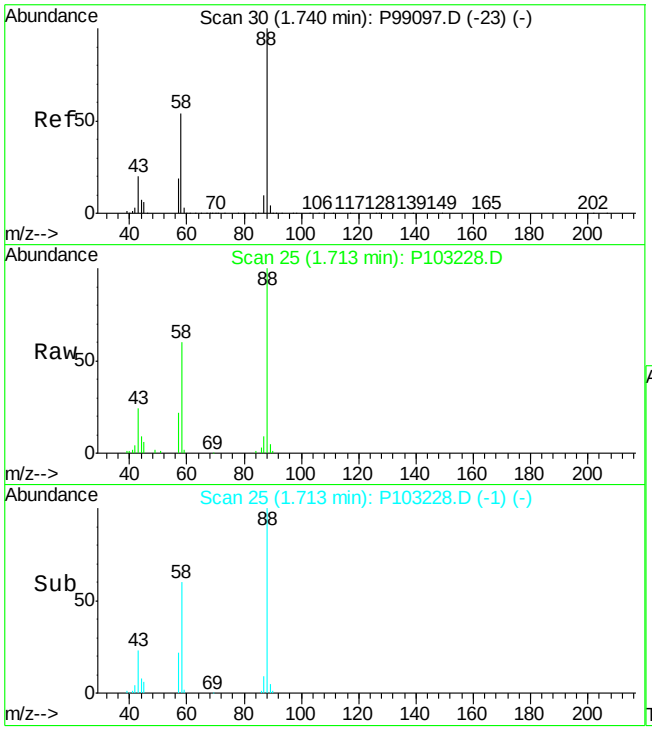
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103228.D Vial: 22
Acq On : 10 Mar 2016 2:11 am Operator: linseyk
Sample : jc15518-1 Inst : MSP
Misc : op91884,ep4533,1000,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:47 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

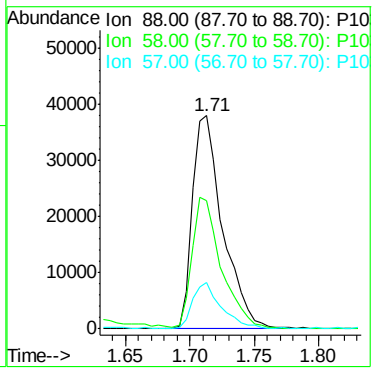




#2
1,4-Dioxane
Concen: 35.79 ppm
RT: 1.71 min Scan# 25
Delta R.T. -0.03 min
Lab File: P103228.D
Acq: 10 Mar 2016 2:11 am

Tgt Ion: 88 Resp: 62863

Ion	Ratio	Lower	Upper
88	100		
58	59.4	31.0	91.0
57	21.7	0.0	51.2



9.1.2

9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103215.D Vial: 9
Acq On : 9 Mar 2016 7:53 pm Operator: linseyk
Sample : jc15518-2 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 20:15:30 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	94690	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	335491	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	184006	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	268581	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	227194	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	189858	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	94690	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	268581	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	227194	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	335491	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	184006	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	76521	23.22	ppm	0.00
Spiked Amount 50.000			Recovery = 46.44%			
8) Phenol-d5	3.86	99	68469	17.03	ppm	0.02
Spiked Amount 50.000			Recovery = 34.06%			
25) Nitrobenzene-d5	4.97	82	125365	36.91	ppm	-0.03
Spiked Amount 50.000			Recovery = 73.82%			
51) 2-Fluorobiphenyl	7.68	172	223923	40.11	ppm	-0.03
Spiked Amount 50.000			Recovery = 80.22%			
73) 2,4,6-Tribromophenol	9.97	330	28752	45.79	ppm	-0.04
Spiked Amount 50.000			Recovery = 91.58%			
85) Terphenyl-d14	13.88	244	202600	45.29	ppm	-0.03
Spiked Amount 50.000			Recovery = 90.58%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	2835	1.69	ppm	66
78) Anthracene	11.18	178	18557	2.69	ppm	97
91) bis(2-Ethylhexyl)phthalate	16.05	149	22003	5.59	ppm	94

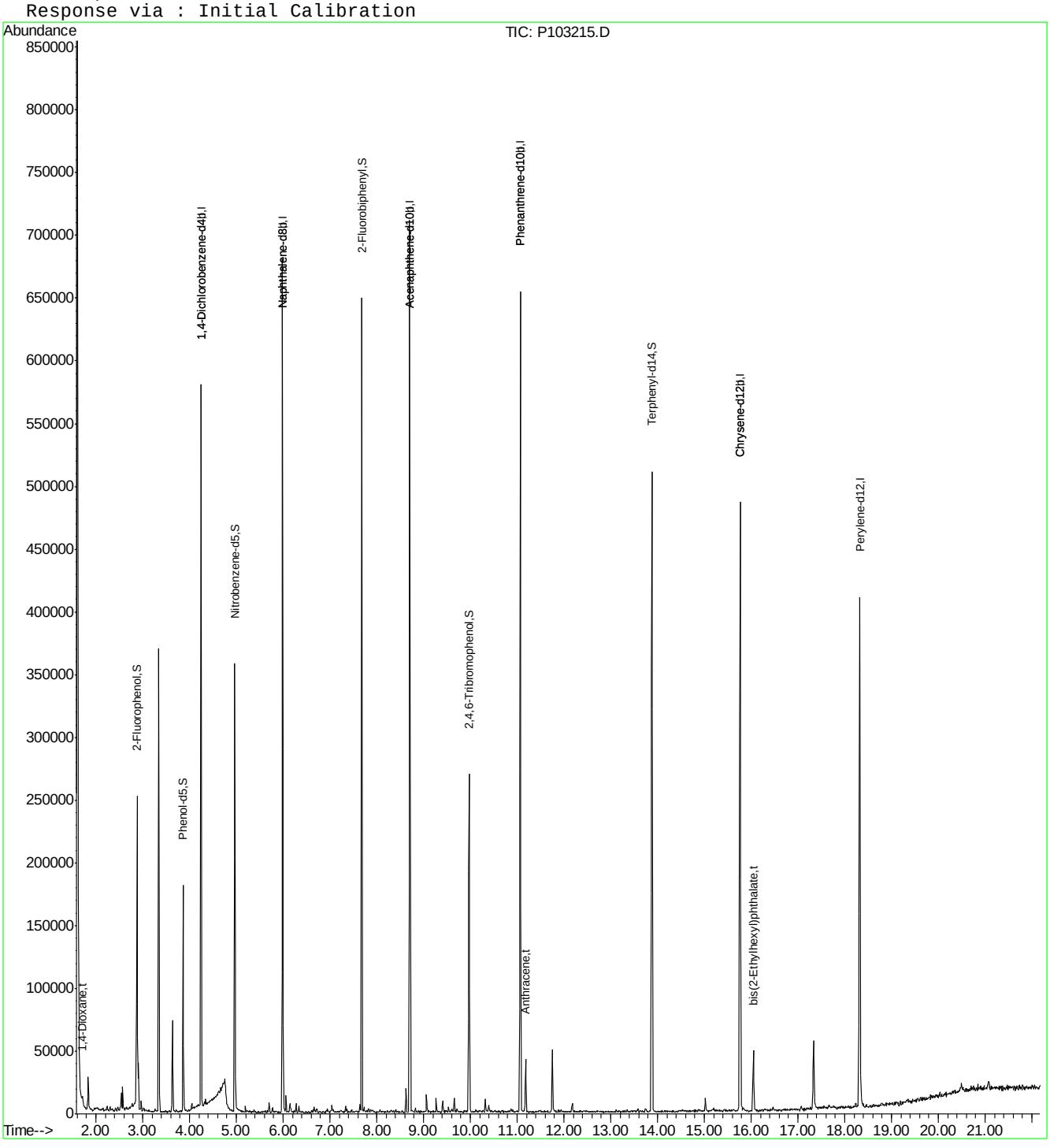
(#) = qualifier out of range (m) = manual integration (+) = signals summed

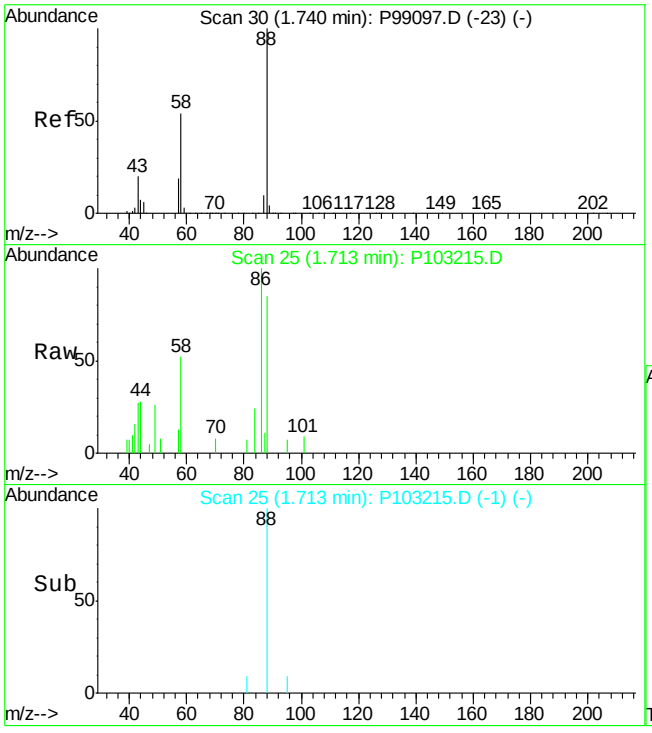
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103215.D Vial: 9
Acq On : 9 Mar 2016 7:53 pm Operator: linseyk
Sample : jc15518-2 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:33 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

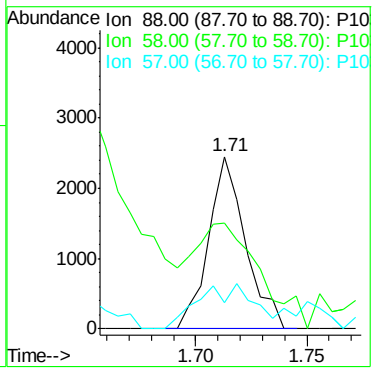


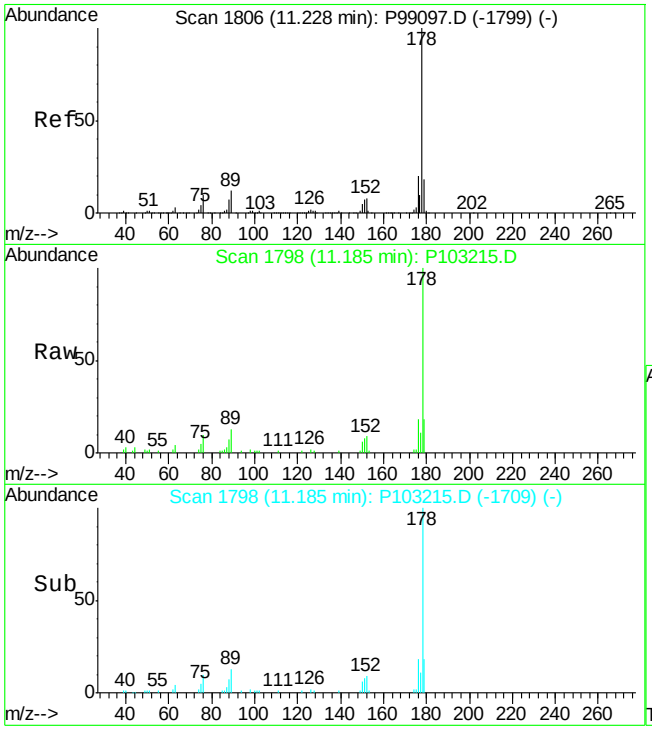


#2
1,4-Dioxane
Concen: 1.69 ppm
RT: 1.71 min Scan# 25
Delta R.T. -0.03 min
Lab File: P103215.D
Acq: 9 Mar 2016 7:53 pm

Tgt Ion: 88 Resp: 2835

Ion	Ratio	Lower	Upper
88	100		
58	31.9	31.0	91.0
57	11.5	0.0	51.2

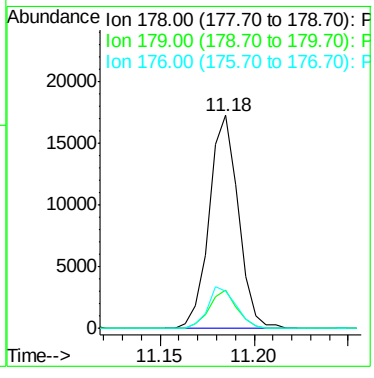


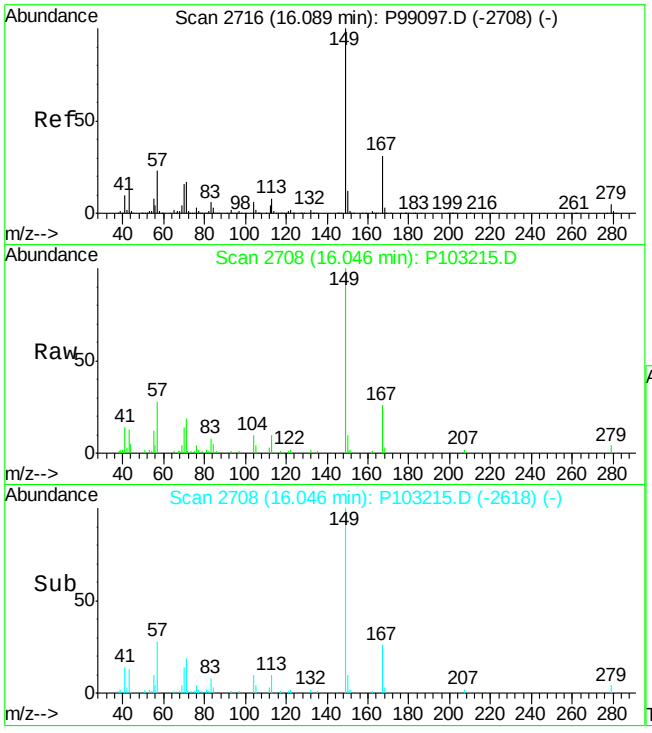


#78
Anthracene
Concen: 2.69 ppm
RT: 11.18 min Scan# 1798
Delta R.T. -0.03 min
Lab File: P103215.D
Acq: 9 Mar 2016 7:53 pm

Tgt Ion:178 Resp: 18557

Ion	Ratio	Lower	Upper
178	100		
179	17.8	0.0	46.0
176	17.6	0.0	48.9

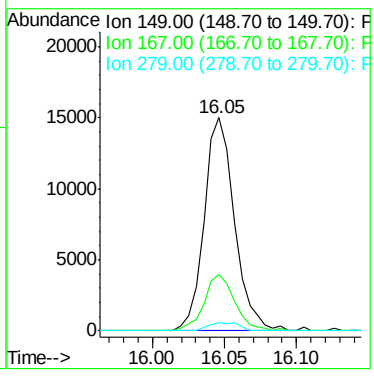




#91
bis(2-Ethylhexyl)phthalate
Concen: 5.59 ppm
RT: 16.05 min Scan# 2708
Delta R.T. -0.02 min
Lab File: P103215.D
Acq: 9 Mar 2016 7:53 pm

Tgt Ion:149 Resp: 22003

Ion	Ratio	Lower	Upper
149	100		
167	26.4	0.0	59.8
279	3.7	0.0	34.8



SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 03/19/16 10:16

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103216.D Vial: 10
Acq On : 9 Mar 2016 8:22 pm Operator: linseyk
Sample : jc15518-3 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 20:44:44 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	76626	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	283698	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	156925	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	243791	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	228458	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	199651	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	76626	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	243791	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	228458	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	283698	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	156925	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	2.89	112	62707	23.51	ppm	0.00
Spiked Amount 50.000			Recovery = 47.02%			
8) Phenol-d5	3.88	99	58654	18.02	ppm	0.03
Spiked Amount 50.000			Recovery = 36.04%			
25) Nitrobenzene-d5	4.97	82	109823	38.24	ppm	-0.03
Spiked Amount 50.000			Recovery = 76.48%			
51) 2-Fluorobiphenyl	7.68	172	198131	41.62	ppm	-0.03
Spiked Amount 50.000			Recovery = 83.24%			
73) 2,4,6-Tribromophenol	9.98	330	25371	44.51	ppm	-0.03
Spiked Amount 50.000			Recovery = 89.02%			
85) Terphenyl-d14	13.88	244	172687	38.39	ppm	-0.03
Spiked Amount 50.000			Recovery = 76.78%			

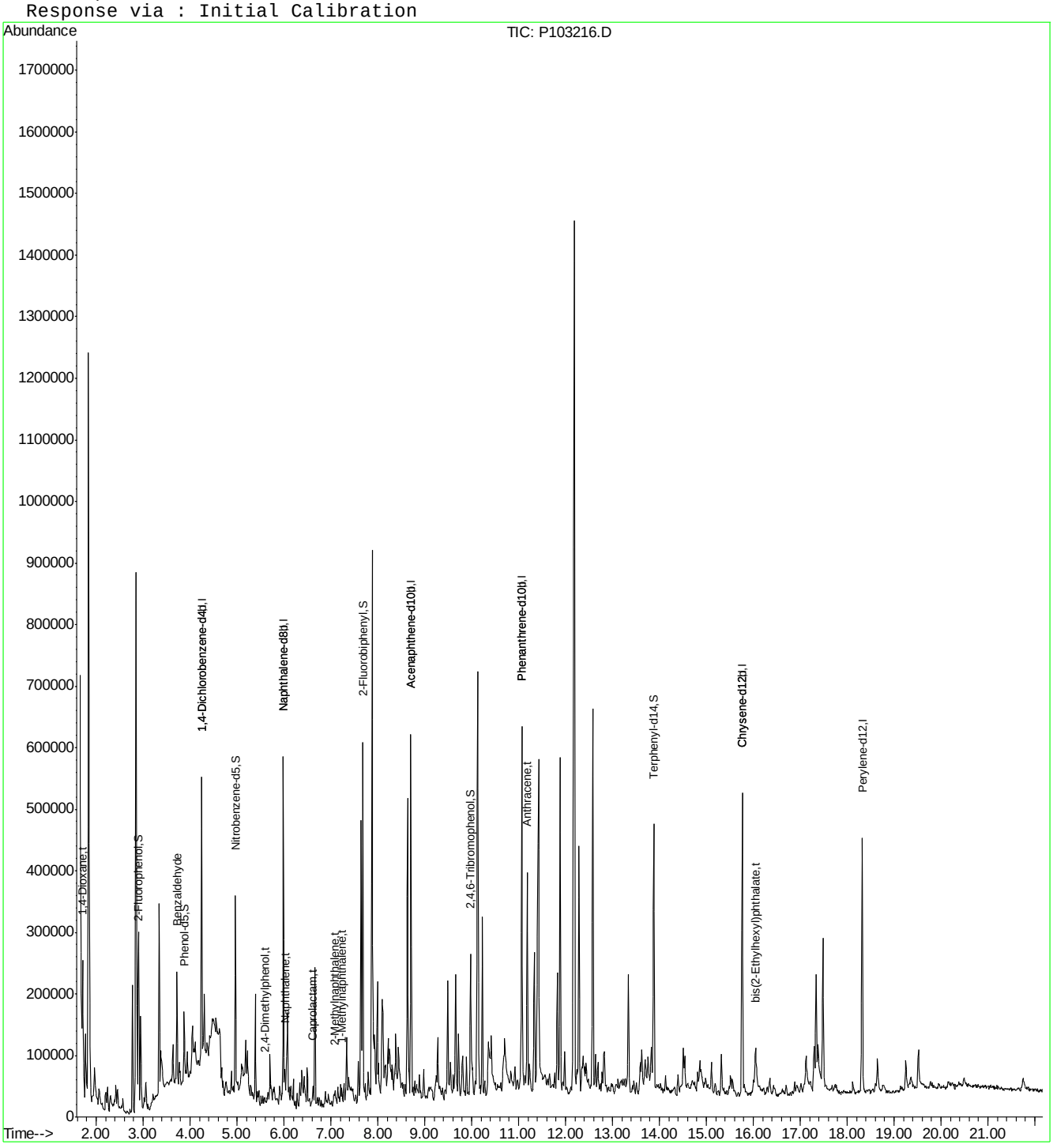
Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	113584	83.43	ppm	90
30) 2,4-Dimethylphenol	5.58	107	4050	1.76	ppm #	44
38) Naphthalene	6.02	128	6299	0.90	ppm	90
41) Caprolactam	6.62	55	4636	4.92	ppm	89
44) 2-Methylnaphthalene	7.08	141	2426	0.62	ppm	83
45) 1-Methylnaphthalene	7.23	142	2311m	0.49	ppm	
78) Anthracene	11.18	178	155637	24.83	ppm	98
91) bis(2-Ethylhexyl)phthalate	16.05	149	29472	6.75	ppm	98
103) Benzaldehyde	3.72	105	41092	17.84	ppm	97

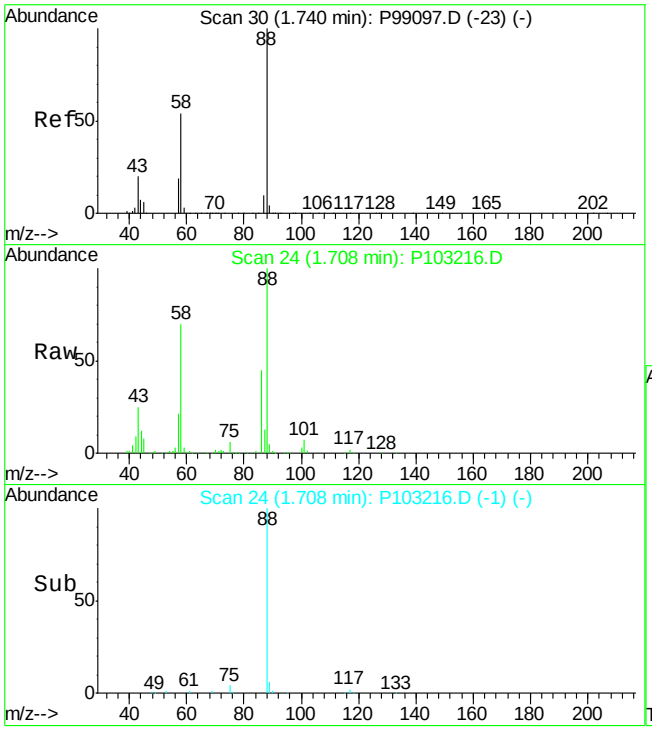
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103216.D Vial: 10
Acq On : 9 Mar 2016 8:22 pm Operator: linseyk
Sample : jc15518-3 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 9:59 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 18 14:46:17 2016
Response via : Initial Calibration

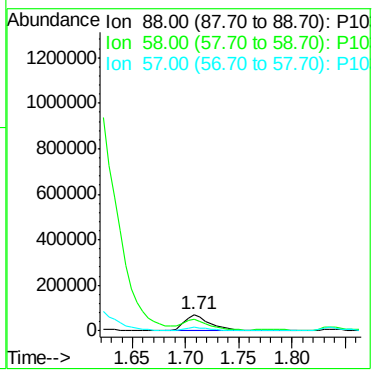


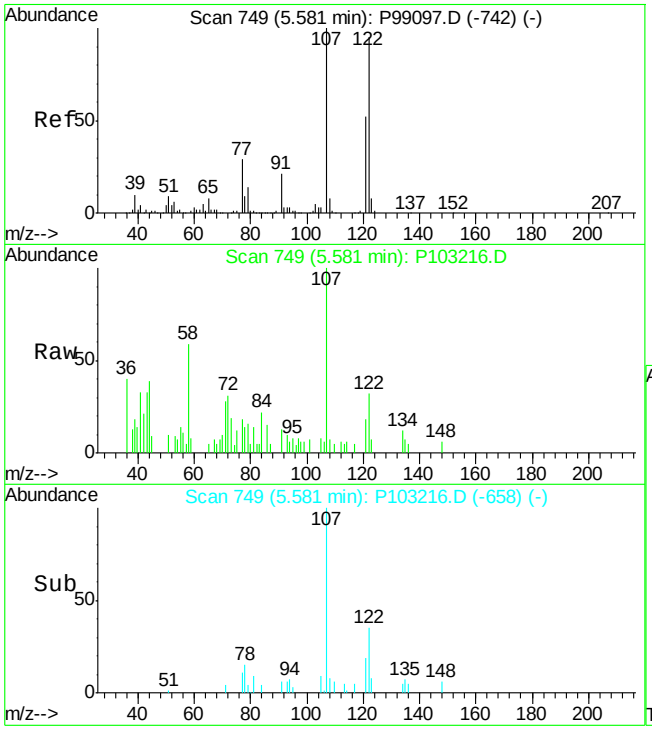


#2
1,4-Dioxane
Concen: 83.43 ppm
RT: 1.71 min Scan# 24
Delta R.T. -0.03 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion: 88 Resp: 113584

Ion	Ratio	Lower	Upper
88	100		
58	51.7	31.0	91.0
57	19.1	0.0	51.2

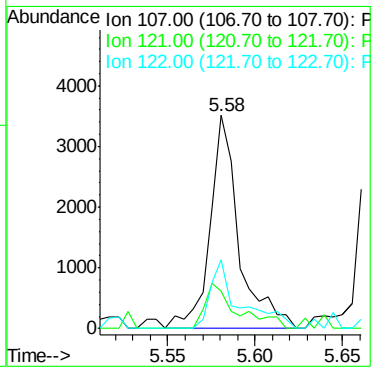


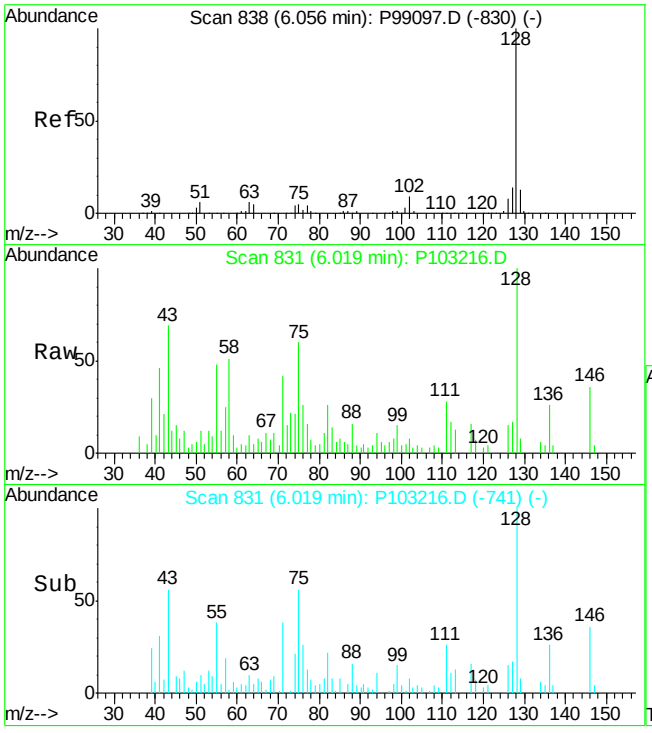


#30
2,4-Dimethylphenol
Concen: 1.76 ppm
RT: 5.58 min Scan# 749
Delta R.T. -0.01 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:107 Resp: 4050

Ion	Ratio	Lower	Upper
107	100		
121	17.7	18.4	78.4#
122	32.5	61.4	121.4#

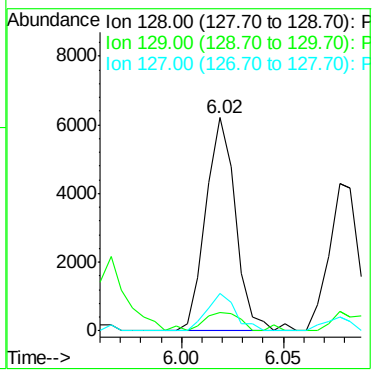


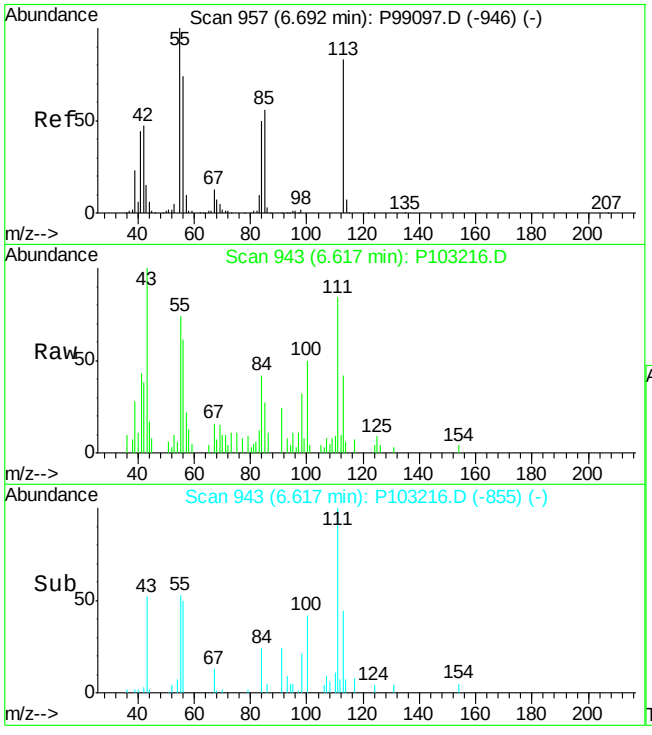


#38
Naphthalene
Concen: 0.90 ppm
RT: 6.02 min Scan# 831
Delta R.T. -0.02 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:128 Resp: 6299

Ion	Ratio	Lower	Upper
128	100		
129	8.4	0.0	42.4
127	17.4	0.0	43.8

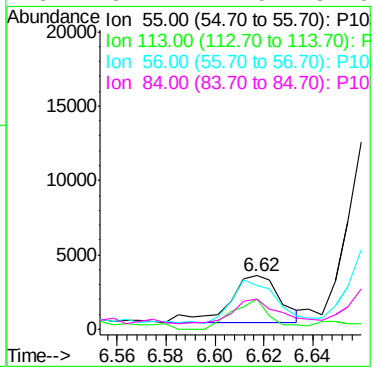


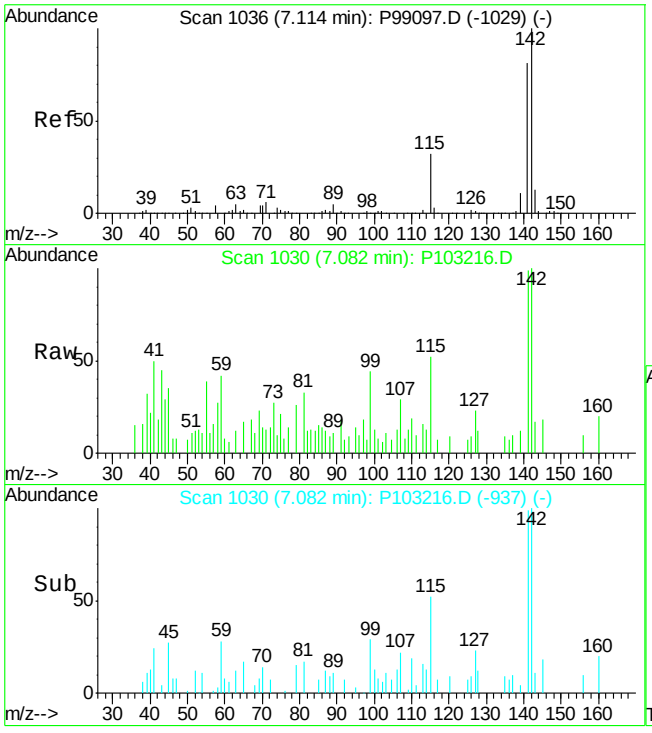


#41
Caprolactam
Concen: 4.92 ppm
RT: 6.62 min Scan# 943
Delta R.T. -0.03 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion: 55 Resp: 4636

Ion	Ratio	Lower	Upper
55	100		
113	62.6	56.2	116.2
56	80.7	52.4	112.4
84	51.7	24.0	84.0

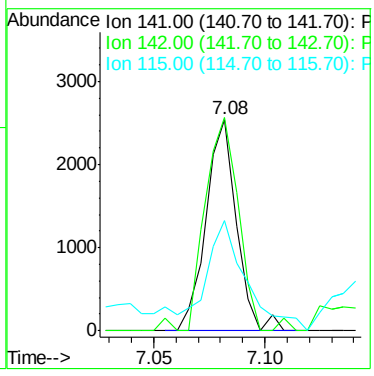


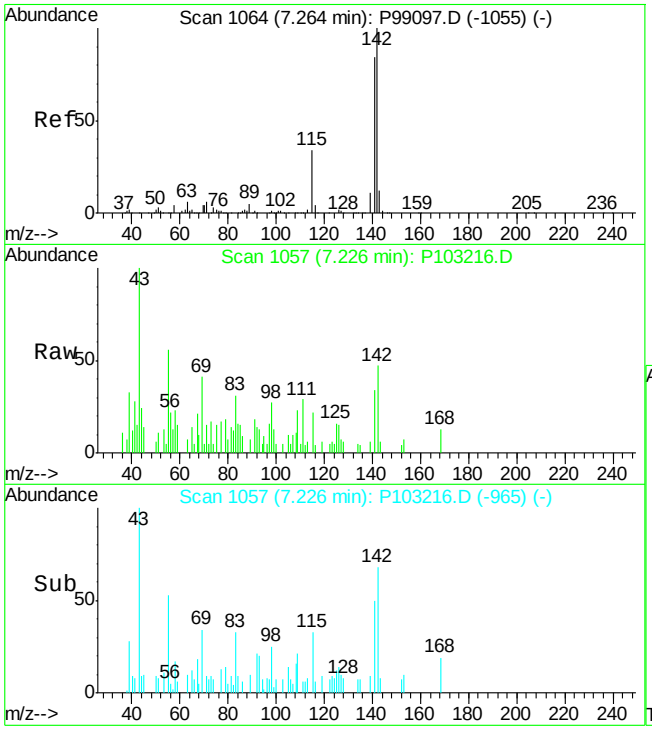


#44
2-Methylnaphthalene
Concen: 0.62 ppm
RT: 7.08 min Scan# 1030
Delta R.T. -0.01 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:141 Resp: 2426

Ion	Ratio	Lower	Upper
141	100		
142	97.7	93.9	153.9
115	43.5	13.4	73.4

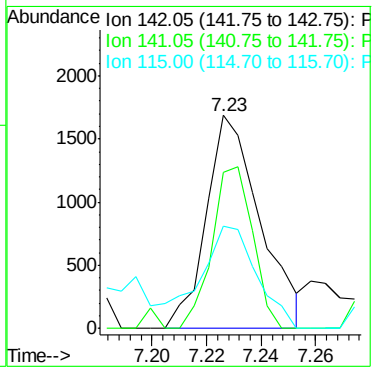


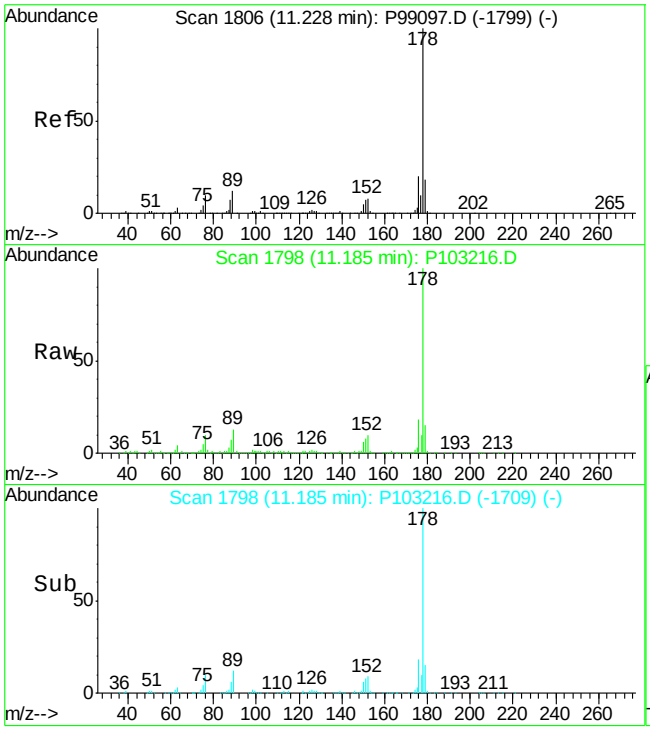


#45
1-Methylnaphthalene
Concen: 0.49 ppm m
RT: 7.23 min Scan# 1057
Delta R.T. -0.01 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:142 Resp: 2311

Ion	Ratio	Lower	Upper
142	100		
141	73.2	54.8	114.8
115	47.7	8.0	68.0

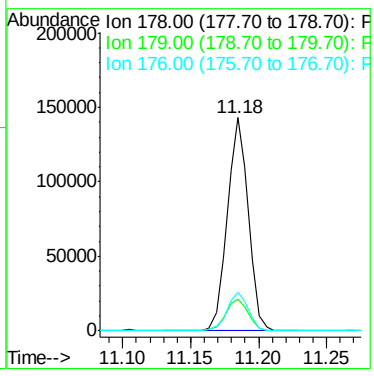


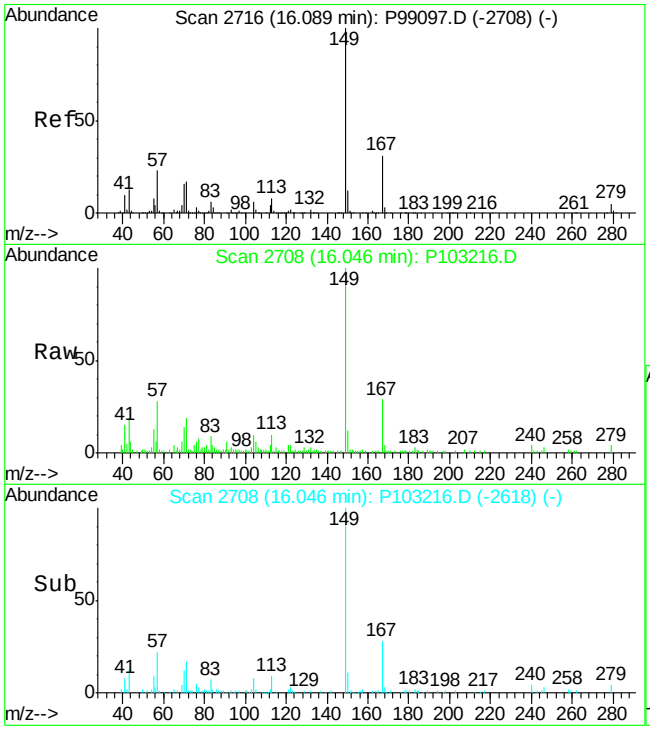


#78
Anthracene
Concen: 24.83 ppm
RT: 11.18 min Scan# 1798
Delta R.T. -0.03 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:178 Resp: 155637

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	46.0
176	18.1	0.0	48.9

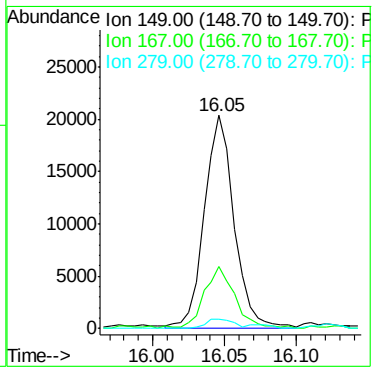




#91
bis(2-Ethylhexyl)phthalate
Concen: 6.75 ppm
RT: 16.05 min Scan# 2708
Delta R.T. -0.02 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

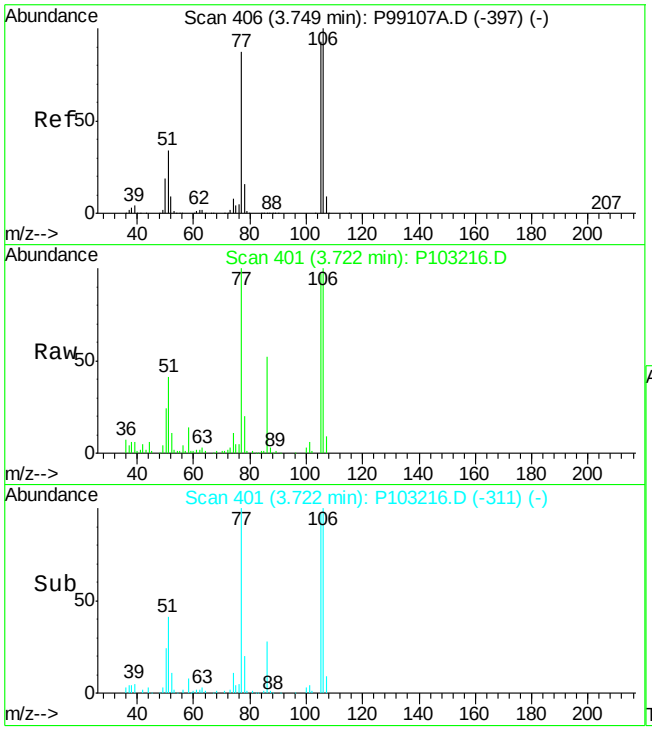
Tgt Ion:149 Resp: 29472

Ion	Ratio	Lower	Upper
149	100		
167	28.7	0.0	59.8
279	4.4	0.0	34.8



9.1.4

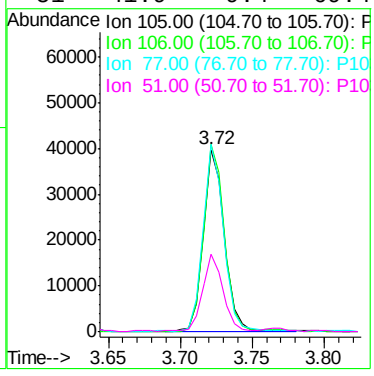
9



#103
Benzaldehyde
Concen: 17.84 ppm
RT: 3.72 min Scan# 401
Delta R.T. -0.02 min
Lab File: P103216.D
Acq: 9 Mar 2016 8:22 pm

Tgt Ion:105 Resp: 41092

Ion	Ratio	Lower	Upper
105	100		
106	102.9	74.8	134.8
77	102.5	68.0	128.0
51	41.9	9.4	69.4



9.1.4

9

Manual Integration Approval Summary

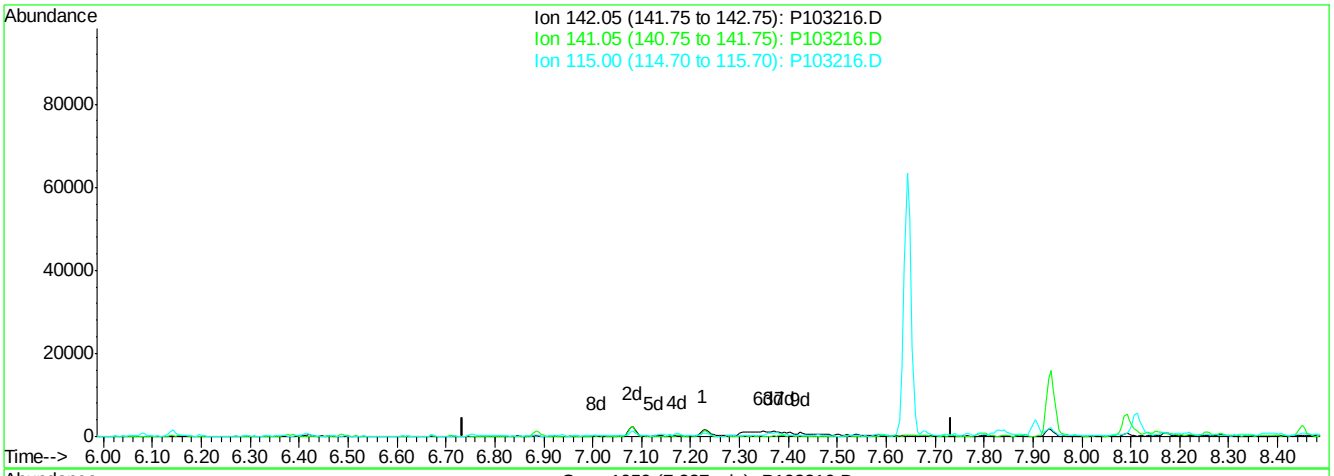
Sample Number:	JC15518-3	**Method:**	SW846 8270D
Lab FileID:	P103216.D	**Analyst approved:**	03/19/16 10:03 Kristi Schollenberger
Injection Time:	03/09/16 20:22	**Supervisor approved:**	03/19/16 10:16 Kristi Schollenberger

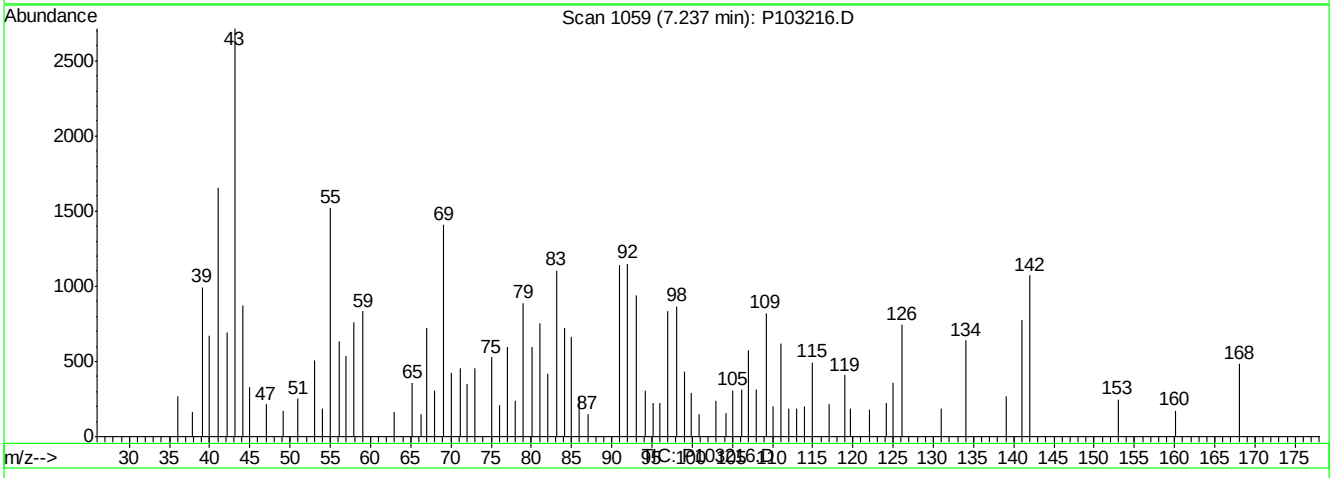
Parameter	CAS	Sig#	R.T. (min.)	Reason
1-Methylnaphthalene	90-12-0		7.23	Poor instrument integration

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103216.D Vial: 10
Acq On : 9 Mar 2016 8:22 pm Operator: linseyk
Sample : jc15518-3 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:36 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 18 14:46:17 2016
Response via : Multiple Level Calibration





(45) 1-Methylnaphthalene (t)

7.23min 0.00ppm d

response 0

Ion	Exp%	Act%
142.05	100	0.00
141.05	84.80	0.00
115.00	38.00	0.00
0.00	0.00	0.00

P103216.D MP4524.M Sat Mar 19 09:58:54 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103217.D Vial: 11
Acq On : 9 Mar 2016 8:51 pm Operator: linseyk
Sample : jc15518-4 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 21:13:58 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	90402	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	332789	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	194005	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	295124	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	274287	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	250947	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	90402	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	295124	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	274287	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	332789	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	194005	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	41593	13.22	ppm	0.00
Spiked Amount 50.000			Recovery = 26.44%			
8) Phenol-d5	3.87	99	39866	10.38	ppm	0.02
Spiked Amount 50.000			Recovery = 20.76%			
25) Nitrobenzene-d5	4.97	82	72838	21.62	ppm	-0.03
Spiked Amount 50.000			Recovery = 43.24%			
51) 2-Fluorobiphenyl	7.68	172	146406	24.87	ppm	-0.03
Spiked Amount 50.000			Recovery = 49.74%			
73) 2,4,6-Tribromophenol	9.98	330	21606	31.31	ppm	-0.03
Spiked Amount 50.000			Recovery = 62.62%			
85) Terphenyl-d14	13.88	244	148280	27.46	ppm	-0.03
Spiked Amount 50.000			Recovery = 54.92%			

Target Compounds						Qvalue
91) bis(2-Ethylhexyl)phthalate	16.05	149	12753	3.80	ppm	92

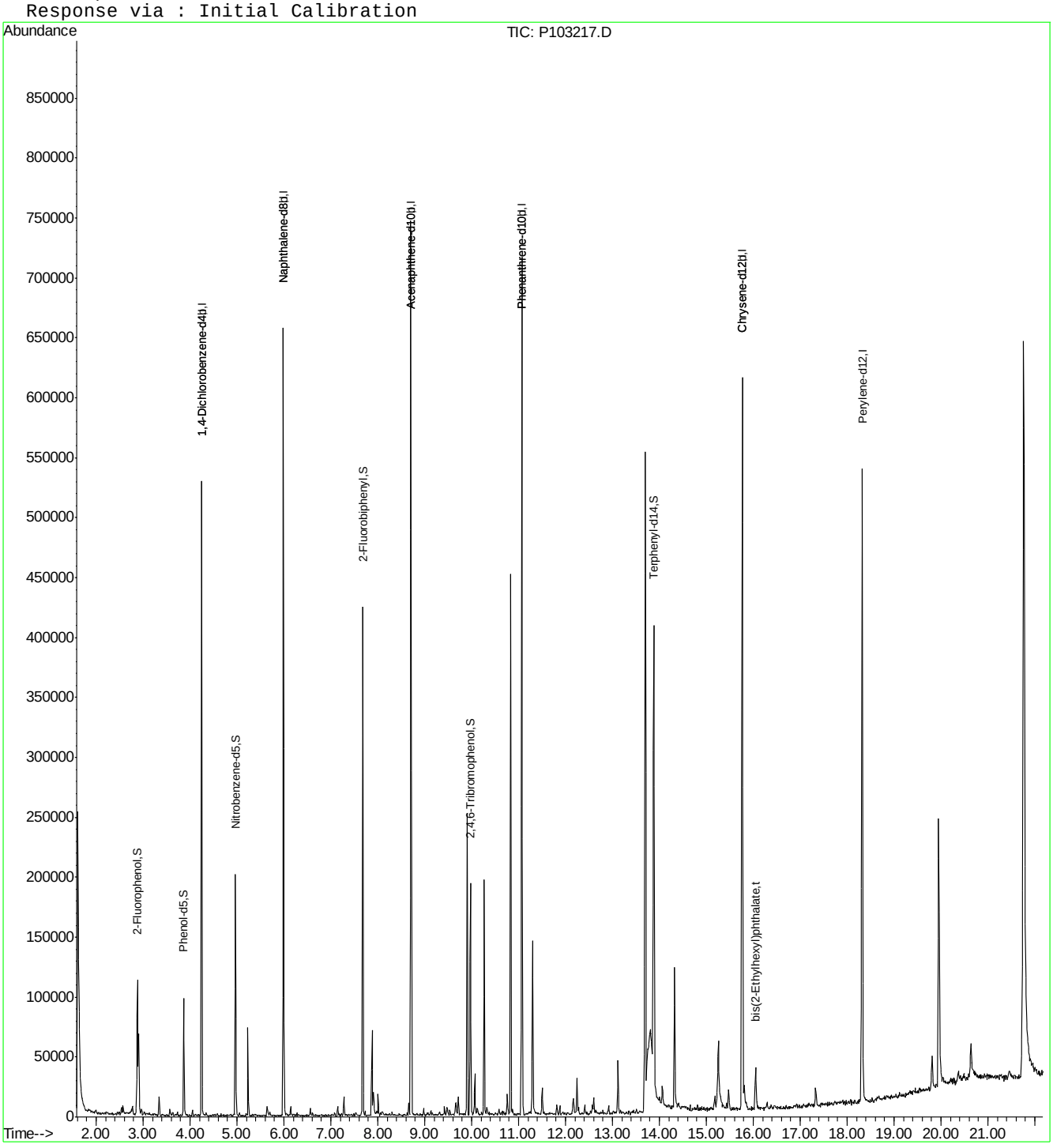
(#) = qualifier out of range (m) = manual integration (+) = signals summed

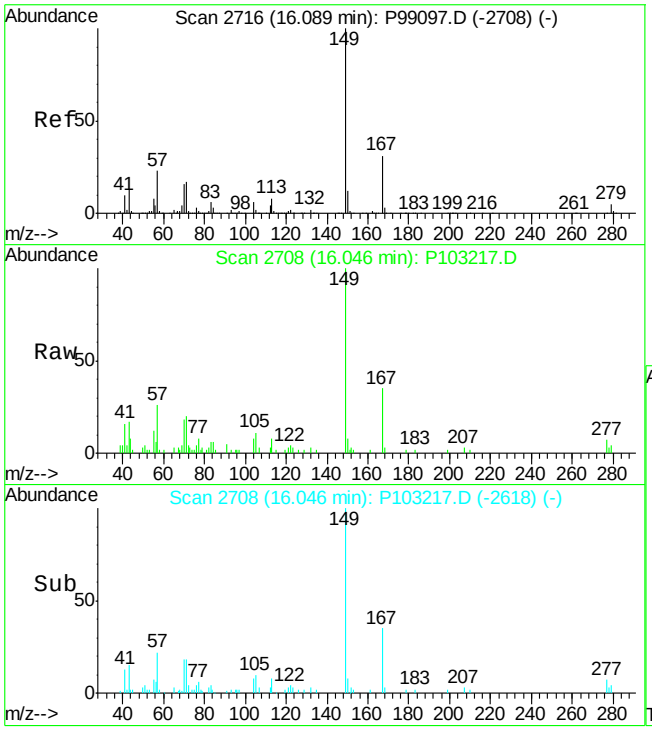
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103217.D Vial: 11
Acq On : 9 Mar 2016 8:51 pm Operator: linseyk
Sample : jc15518-4 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 19 10:24 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 18 14:46:17 2016
Response via : Initial Calibration

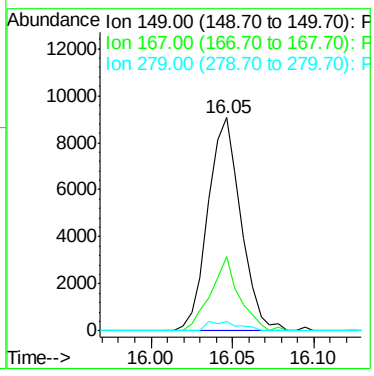




#91
bis(2-Ethylhexyl)phthalate
Concen: 3.80 ppm
RT: 16.05 min Scan# 2708
Delta R.T. -0.02 min
Lab File: P103217.D
Acq: 9 Mar 2016 8:51 pm

Tgt Ion:149 Resp: 12753

Ion	Ratio	Lower	Upper
149	100		
167	34.9	0.0	59.8
279	4.2	0.0	34.8



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103218.D Vial: 12
Acq On : 9 Mar 2016 9:20 pm Operator: linseyk
Sample : jc15518-5 Inst : MSP
Misc : op91884,ep4533,980 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 21:43:08 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	88431	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	312533	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	178310	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	267558	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	234167	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	199153	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	88431	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	267558	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	234167	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	312533	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	178310	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	65293	21.21	ppm	0.00
Spiked Amount 50.000			Recovery = 42.42%			
8) Phenol-d5	3.87	99	57974	15.44	ppm	0.02
Spiked Amount 50.000			Recovery = 30.88%			
25) Nitrobenzene-d5	4.97	82	108220	34.20	ppm	-0.03
Spiked Amount 50.000			Recovery = 68.40%			
51) 2-Fluorobiphenyl	7.68	172	188592	34.86	ppm	-0.03
Spiked Amount 50.000			Recovery = 69.72%			
73) 2,4,6-Tribromophenol	9.97	330	27943	44.67	ppm	-0.04
Spiked Amount 50.000			Recovery = 89.34%			
85) Terphenyl-d14	13.88	244	196692	42.66	ppm	-0.04
Spiked Amount 50.000			Recovery = 85.32%			

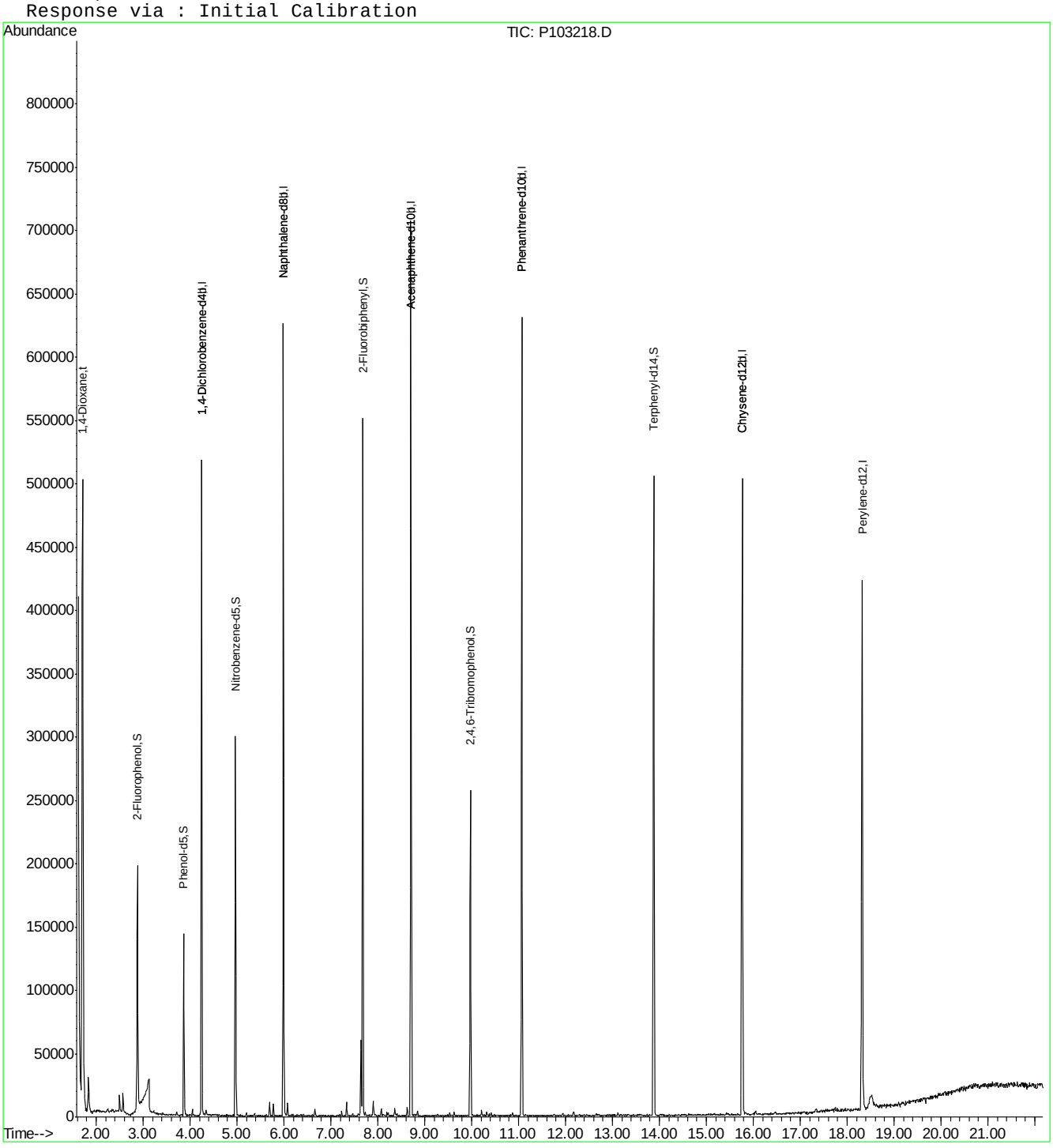
Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	322946	205.55	ppm	99

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

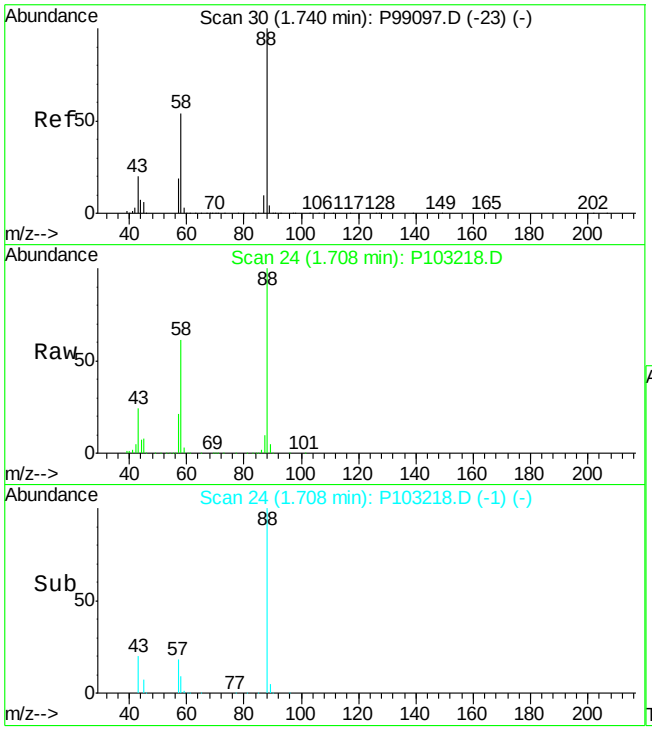
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103218.D Vial: 12
Acq On : 9 Mar 2016 9:20 pm Operator: linseyk
Sample : jc15518-5 Inst : MSP
Misc : op91884,ep4533,980 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:24 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



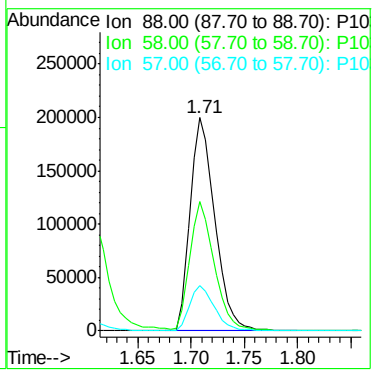
P103218.D MP4524.M Thu Mar 10 11:24:38 2016 Page 2



#2
1,4-Dioxane
Concen: 205.55 ppm
RT: 1.71 min Scan# 24
Delta R.T. -0.03 min
Lab File: P103218.D
Acq: 9 Mar 2016 9:20 pm

Tgt Ion: 88 Resp: 322946

Ion	Ratio	Lower	Upper
88	100		
58	60.2	31.0	91.0
57	21.3	0.0	51.2



9.1.6

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SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103229.D Vial: 23
Acq On : 10 Mar 2016 2:40 am Operator: linseyk
Sample : jc15518-5 Inst : MSP
Misc : op91884,ep4533,980,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 03:02:52 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	81663	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	304931	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	177090	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	274541	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	253688	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	219072	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	81663	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	274541	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	253688	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	304931	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	177090	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	5846	2.06	ppm	0.00
Spiked Amount 50.000			Recovery = 4.12%			
8) Phenol-d5	3.87	99	5415	1.56	ppm	0.02
Spiked Amount 50.000			Recovery = 3.12%			
25) Nitrobenzene-d5	4.97	82	9589	3.11	ppm	-0.03
Spiked Amount 50.000			Recovery = 6.22%			
51) 2-Fluorobiphenyl	7.68	172	19556	3.64	ppm	-0.03
Spiked Amount 50.000			Recovery = 7.28%			
73) 2,4,6-Tribromophenol	9.98	330	2181	3.40	ppm	-0.03
Spiked Amount 50.000			Recovery = 6.80%			
85) Terphenyl-d14	13.88	244	20450	4.09	ppm	-0.04
Spiked Amount 50.000			Recovery = 8.18%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	36305	25.02	ppm	95

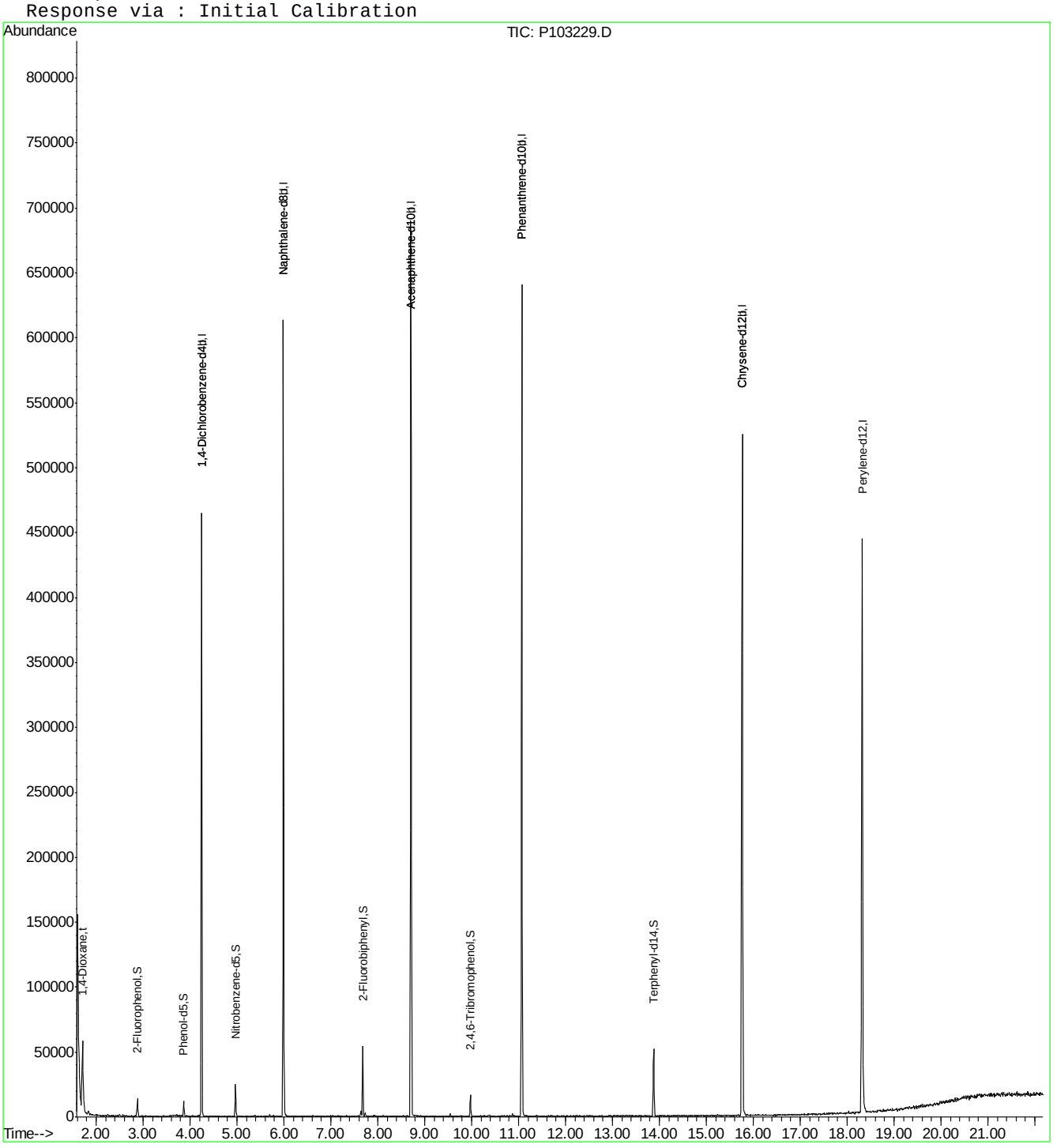
(#) = qualifier out of range (m) = manual integration (+) = signals summed

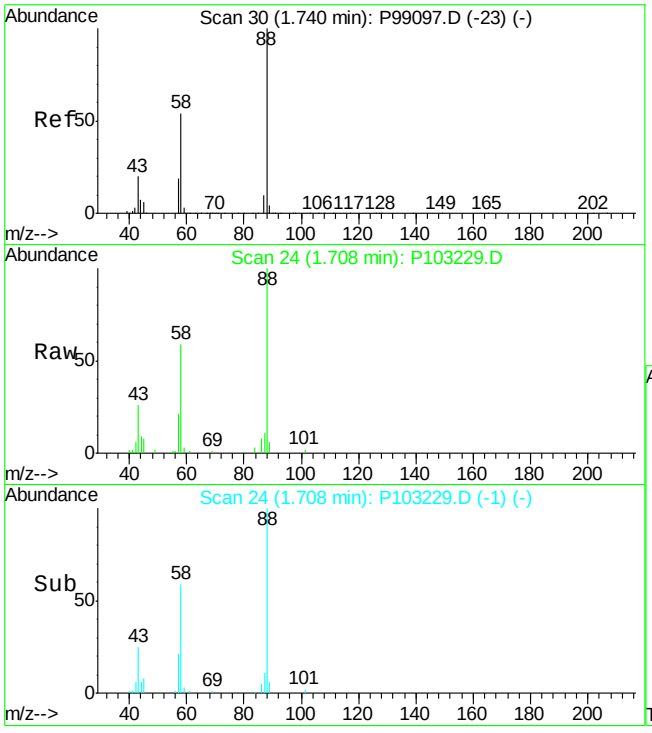
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103229.D Vial: 23
Acq On : 10 Mar 2016 2:40 am Operator: linseyk
Sample : jc15518-5 Inst : MSP
Misc : op91884,ep4533,980,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:47 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

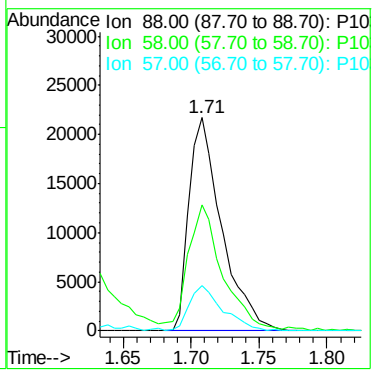




#2
1,4-Dioxane
Concen: 25.02 ppm
RT: 1.71 min Scan# 24
Delta R.T. -0.03 min
Lab File: P103229.D
Acq: 10 Mar 2016 2:40 am

Tgt Ion: 88 Resp: 36305

Ion	Ratio	Lower	Upper
88	100		
58	56.2	31.0	91.0
57	21.0	0.0	51.2



9.1.7

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103219.D Vial: 13
Acq On : 9 Mar 2016 9:50 pm Operator: linseyk
Sample : jc15518-6 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 22:12:15 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	98827	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	358543	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	201018	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	311553	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	276161	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	237641	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	98827	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	311553	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	276161	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	358543	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	201018	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	92076	26.77	ppm	0.00
Spiked Amount 50.000			Recovery = 53.54%			
8) Phenol-d5	3.87	99	80274	19.13	ppm	0.02
Spiked Amount 50.000			Recovery = 38.26%			
25) Nitrobenzene-d5	4.97	82	146299	40.31	ppm	-0.03
Spiked Amount 50.000			Recovery = 80.62%			
51) 2-Fluorobiphenyl	7.68	172	258242	42.34	ppm	-0.03
Spiked Amount 50.000			Recovery = 84.68%			
73) 2,4,6-Tribromophenol	9.97	330	35100	48.19	ppm	-0.04
Spiked Amount 50.000			Recovery = 96.38%			
85) Terphenyl-d14	13.88	244	249994	45.97	ppm	-0.04
Spiked Amount 50.000			Recovery = 91.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	409604	233.28	ppm	94

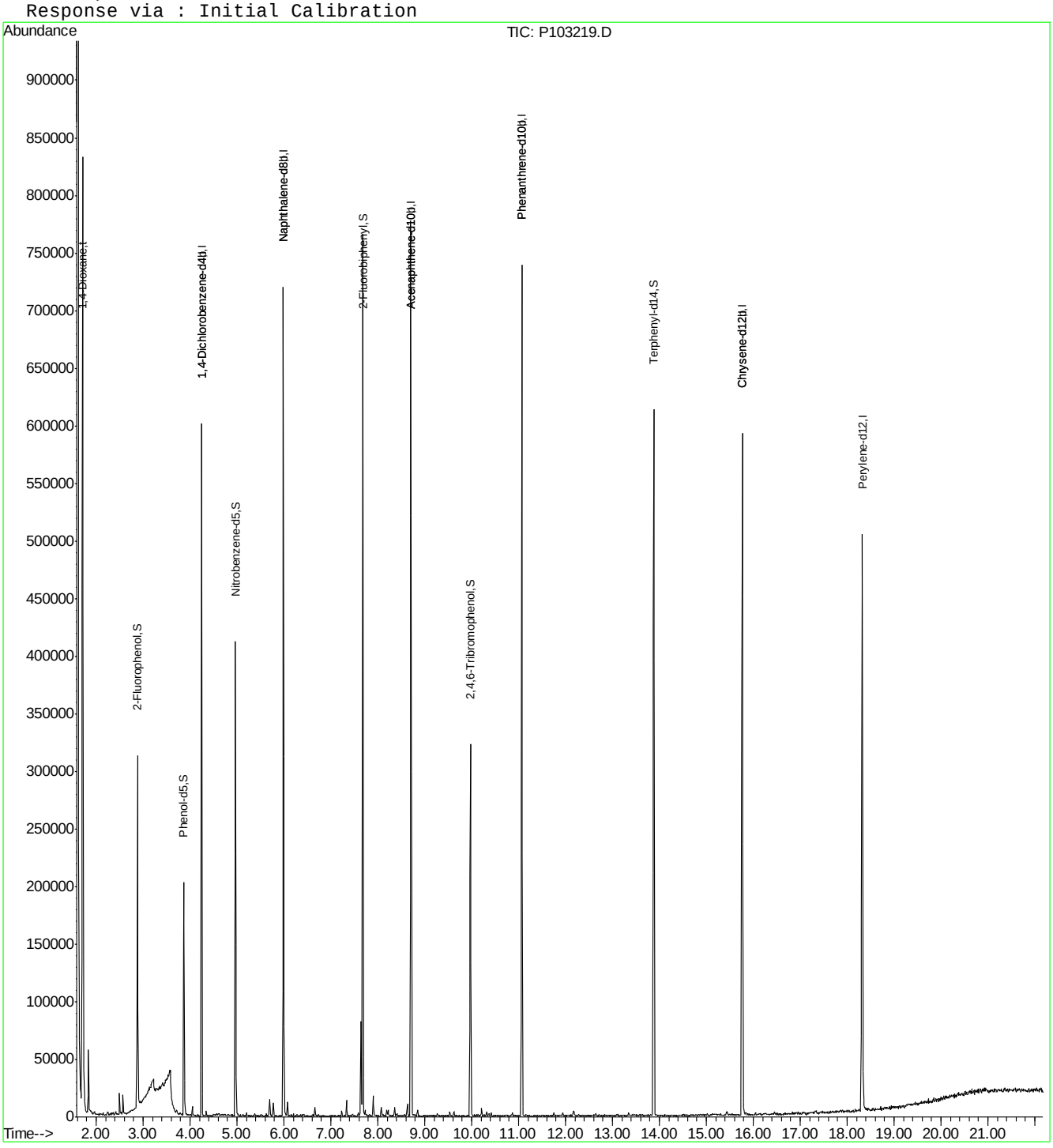
(#) = qualifier out of range (m) = manual integration (+) = signals summed

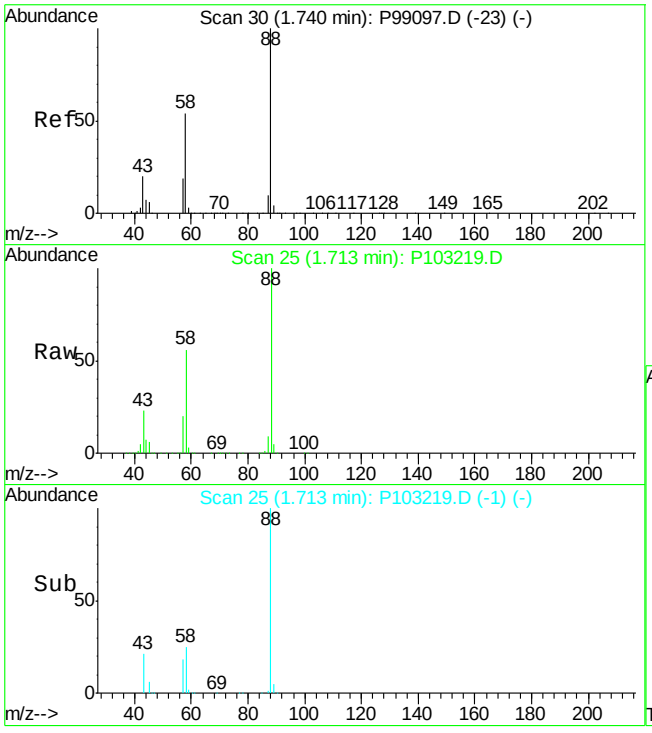
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103219.D Vial: 13
Acq On : 9 Mar 2016 9:50 pm Operator: linseyk
Sample : jc15518-6 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:25 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

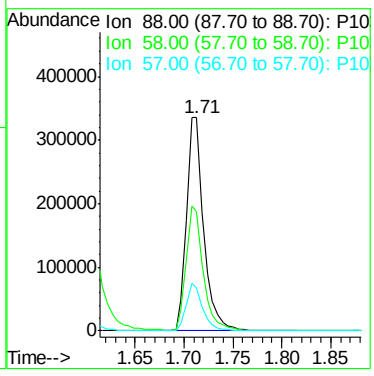




#2
1,4-Dioxane
Concen: 233.28 ppm
RT: 1.71 min Scan# 25
Delta R.T. -0.03 min
Lab File: P103219.D
Acq: 9 Mar 2016 9:50 pm

Tgt Ion: 88 Resp: 409604

Ion	Ratio	Lower	Upper
88	100		
58	55.6	31.0	91.0
57	20.3	0.0	51.2



9.1.8

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103230.D Vial: 24
Acq On : 10 Mar 2016 3:09 am Operator: linseyk
Sample : jc15518-6 Inst : MSP
Misc : op91884,ep4533,990,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 03:31:41 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	93695	40.00 ppm	-0.01
24) Naphthalene-d8	5.99	136	333553	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	196912	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	305347	40.00 ppm	-0.02
83) Chrysene-d12	15.76	240	280950	40.00 ppm	-0.04
92) Perylene-d12	18.32	264	239111	40.00 ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	93695	40.00 ppm	-0.01
104) Phenanthrene-d10b	11.07	188	305347	40.00 ppm	-0.02
106) Chrysene-d12b	15.76	240	280950	40.00 ppm	-0.04
108) Naphthalene-d8b	5.99	136	333553	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	196912	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	2.88	112	8122	2.49 ppm	0.00
Spiked Amount 50.000			Recovery = 4.98%		
8) Phenol-d5	3.87	99	7030	1.77 ppm	0.02
Spiked Amount 50.000			Recovery = 3.54%		
25) Nitrobenzene-d5	4.97	82	13342	3.95 ppm	-0.03
Spiked Amount 50.000			Recovery = 7.90%		
51) 2-Fluorobiphenyl	7.68	172	25729	4.31 ppm	-0.03
Spiked Amount 50.000			Recovery = 8.62%		
73) 2,4,6-Tribromophenol	9.98	330	2348	3.29 ppm	-0.03
Spiked Amount 50.000			Recovery = 6.58%		
85) Terphenyl-d14	13.88	244	24363	4.40 ppm	-0.04
Spiked Amount 50.000			Recovery = 8.80%		

Target Compounds					Qvalue
2) 1,4-Dioxane	1.70	88	46953	28.21 ppm	93

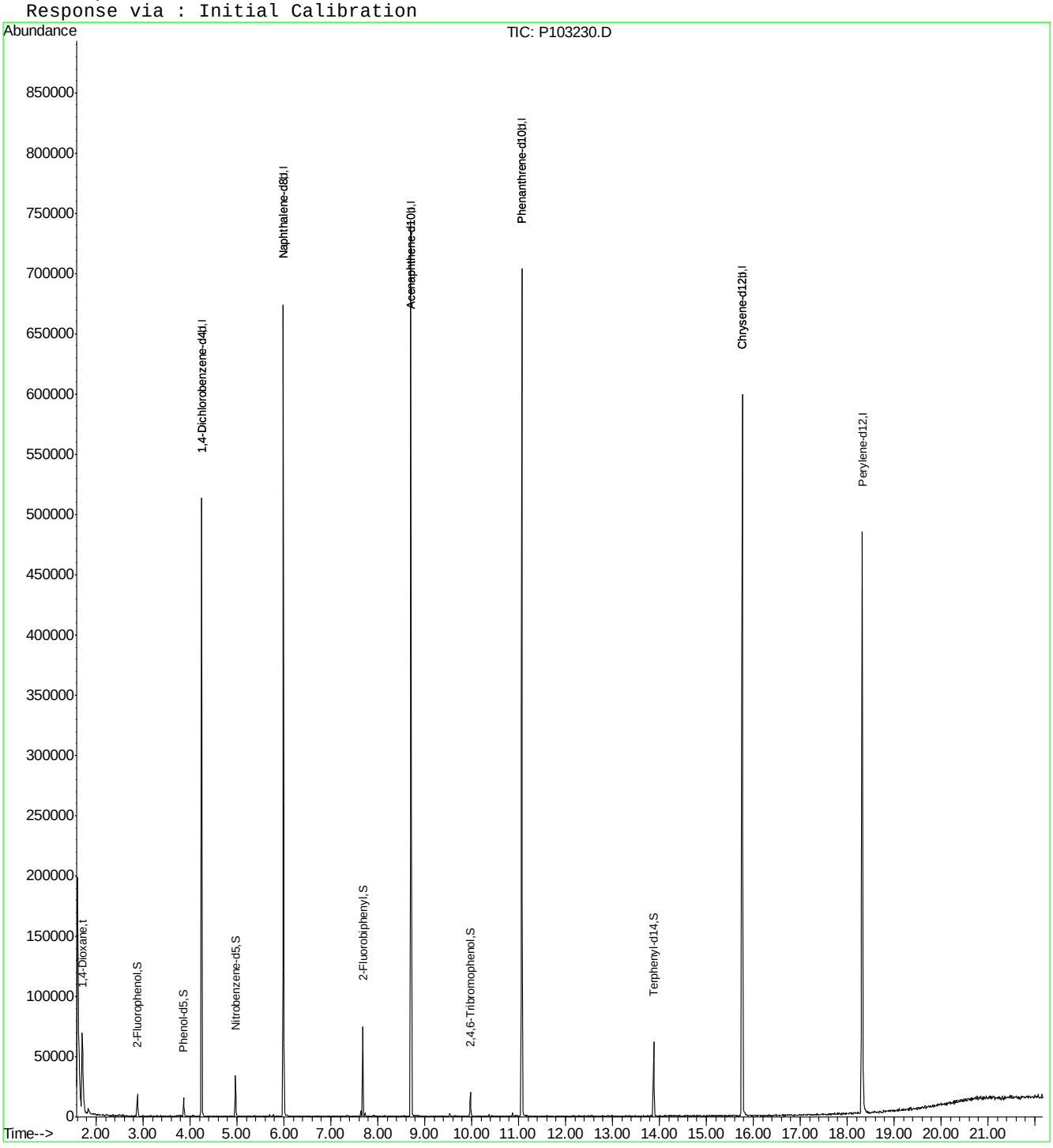
(#) = qualifier out of range (m) = manual integration (+) = signals summed

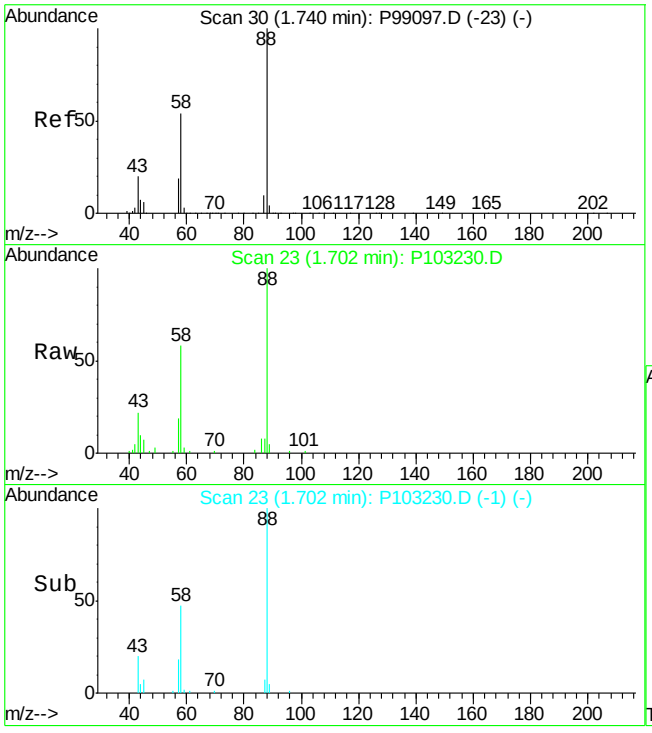
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103230.D Vial: 24
Acq On : 10 Mar 2016 3:09 am Operator: linseyk
Sample : jc15518-6 Inst : MSP
Misc : op91884,ep4533,990,,,1,10 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:48 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

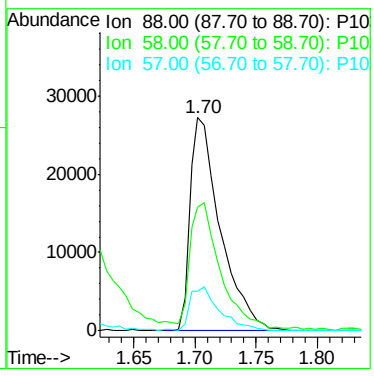




#2
1,4-Dioxane
Concen: 28.21 ppm
RT: 1.70 min Scan# 23
Delta R.T. -0.04 min
Lab File: P103230.D
Acq: 10 Mar 2016 3:09 am

Tgt Ion: 88 Resp: 46953

Ion	Ratio	Lower	Upper
88	100		
58	55.3	31.0	91.0
57	18.4	0.0	51.2



9.1.9

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103220.D Vial: 14
Acq On : 9 Mar 2016 10:19 pm Operator: linseyk
Sample : jc15518-7 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 22:41:26 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	95857	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	340039	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	186116	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	273254	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	235455	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	197270	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	95857	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	273254	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	235455	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	340039	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	186116	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	81021	24.28	ppm	0.00
Spiked Amount 50.000			Recovery = 48.56%			
8) Phenol-d5	3.87	99	70493	17.32	ppm	0.02
Spiked Amount 50.000			Recovery = 34.64%			
25) Nitrobenzene-d5	4.97	82	135336	39.31	ppm	-0.03
Spiked Amount 50.000			Recovery = 78.62%			
51) 2-Fluorobiphenyl	7.68	172	237305	42.03	ppm	-0.03
Spiked Amount 50.000			Recovery = 84.06%			
73) 2,4,6-Tribromophenol	9.98	330	29319	45.89	ppm	-0.03
Spiked Amount 50.000			Recovery = 91.78%			
85) Terphenyl-d14	13.88	244	203919	43.98	ppm	-0.04
Spiked Amount 50.000			Recovery = 87.96%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	27734	16.28	ppm	88

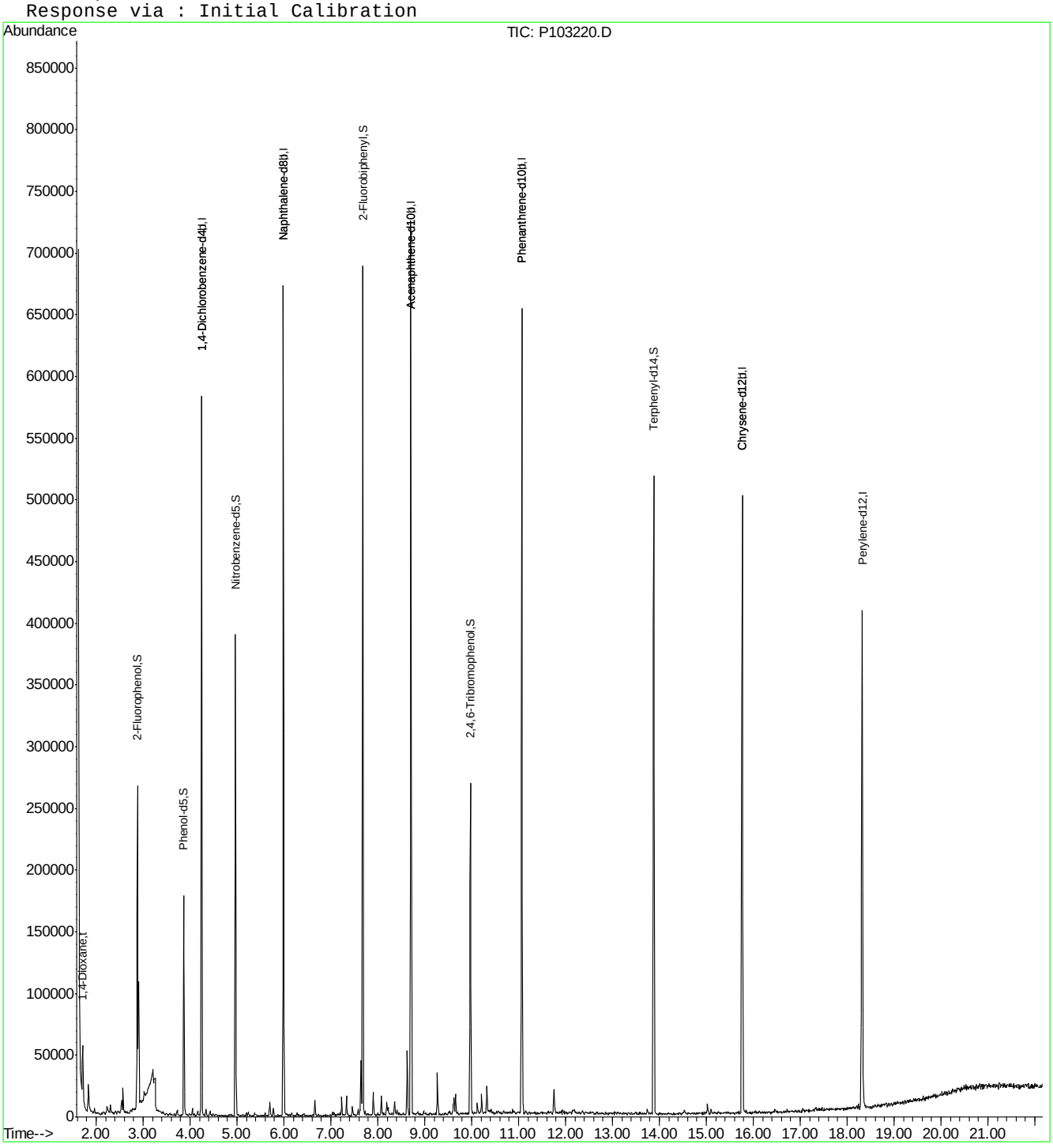
(#) = qualifier out of range (m) = manual integration (+) = signals summed

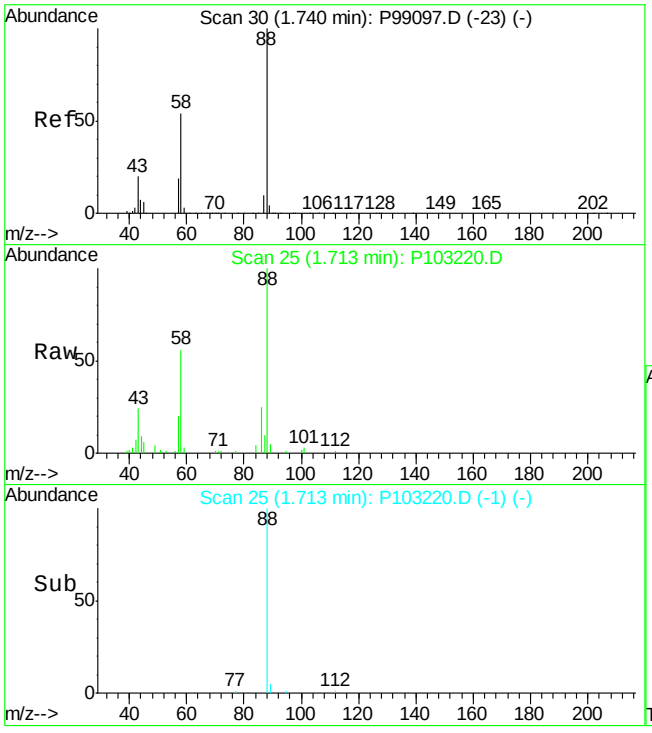
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103220.D Vial: 14
Acq On : 9 Mar 2016 10:19 pm Operator: linseyk
Sample : jc15518-7 Inst : MSP
Misc : op91884,ep4533,990 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:26 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration

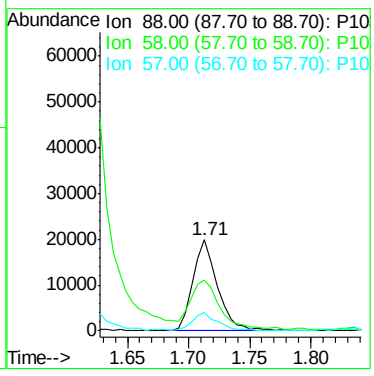




#2
1,4-Dioxane
Concen: 16.28 ppm
RT: 1.71 min Scan# 25
Delta R.T. -0.03 min
Lab File: P103220.D
Acq: 9 Mar 2016 10:19 pm

Tgt Ion: 88 Resp: 27734

Ion	Ratio	Lower	Upper
88	100		
58	49.2	31.0	91.0
57	19.5	0.0	51.2



9.1.10

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103221.D Vial: 15
Acq On : 9 Mar 2016 10:48 pm Operator: linseyk
Sample : jc15518-8 Inst : MSP
Misc : op91884,ep4533,900 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:28:04 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	106169	40.00 ppm	-0.01
24) Naphthalene-d8	5.99	136	386706	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	220700	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	333151	40.00 ppm	-0.02
83) Chrysene-d12	15.76	240	297191	40.00 ppm	-0.04
92) Perylene-d12	18.32	264	257262	40.00 ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	106169	40.00 ppm	-0.01
104) Phenanthrene-d10b	11.07	188	333151	40.00 ppm	-0.02
106) Chrysene-d12b	15.76	240	297191	40.00 ppm	-0.04
108) Naphthalene-d8b	5.99	136	386706	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	220700	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	2.88	112	84223	22.79 ppm	0.00
Spiked Amount 50.000			Recovery = 45.58%		
8) Phenol-d5	3.87	99	71598	15.88 ppm	0.02
Spiked Amount 50.000			Recovery = 31.76%		
25) Nitrobenzene-d5	4.97	82	153312	39.16 ppm	-0.03
Spiked Amount 50.000			Recovery = 78.32%		
51) 2-Fluorobiphenyl	7.68	172	270094	40.34 ppm	-0.03
Spiked Amount 50.000			Recovery = 80.68%		
73) 2,4,6-Tribromophenol	9.98	330	35089	45.05 ppm	-0.03
Spiked Amount 50.000			Recovery = 90.10%		
85) Terphenyl-d14	13.88	244	226180	38.65 ppm	-0.03
Spiked Amount 50.000			Recovery = 77.30%		

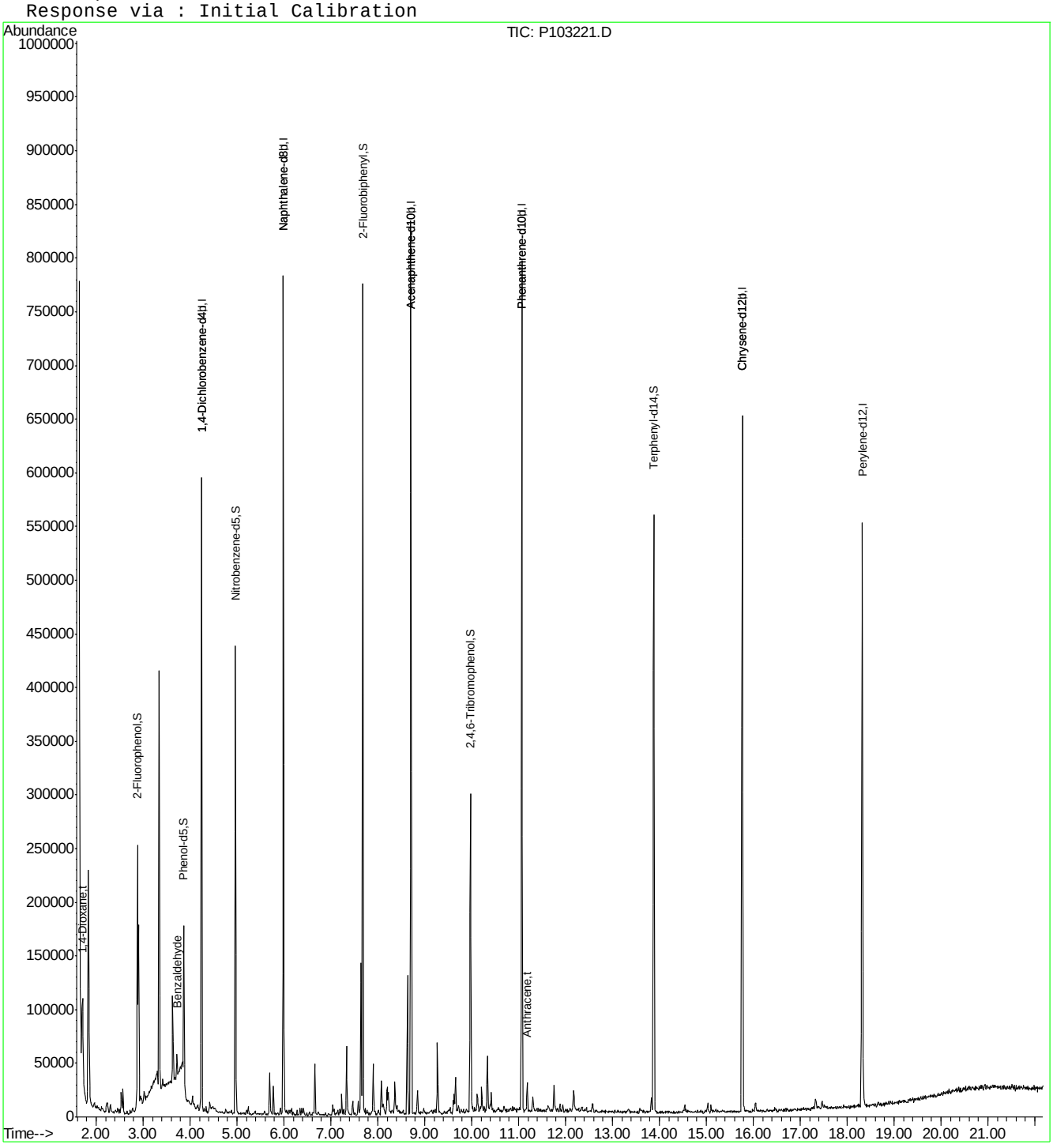
Target Compounds					Qvalue
2) 1,4-Dioxane	1.71	88	55216	29.27 ppm	86
78) Anthracene	11.18	178	12204	1.42 ppm	96
103) Benzaldehyde	3.72	105	4582	1.44 ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P103221.D MP4524.M Thu Mar 10 11:29:16 2016

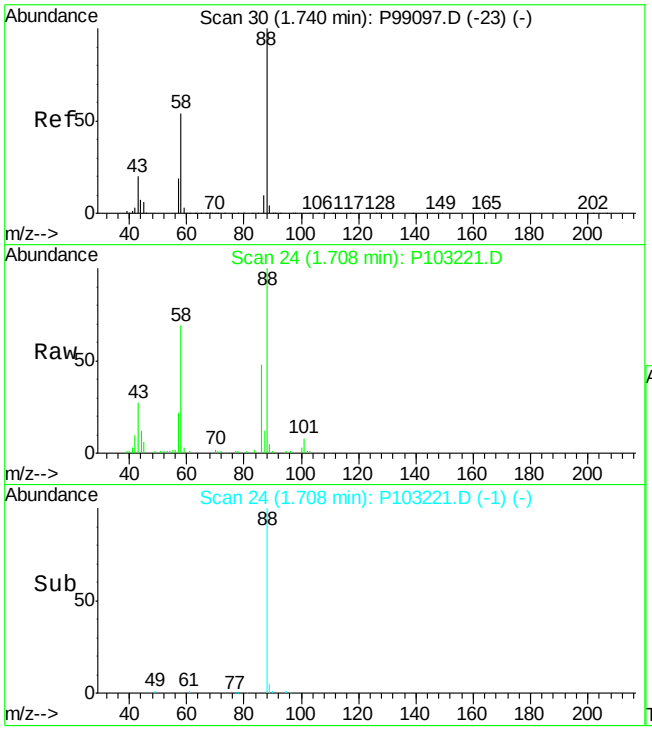
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103221.D Vial: 15
Acq On : 9 Mar 2016 10:48 pm Operator: linseyk
Sample : jc15518-8 Inst : MSP
Misc : op91884,ep4533,900 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:29 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



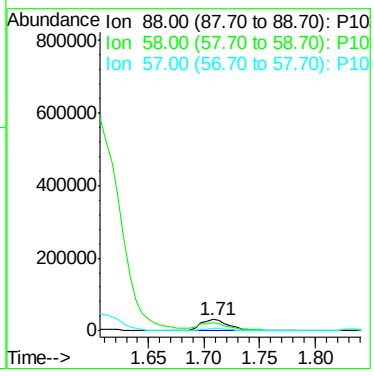
P103221.D MP4524.M Thu Mar 10 11:29:16 2016 Page 2

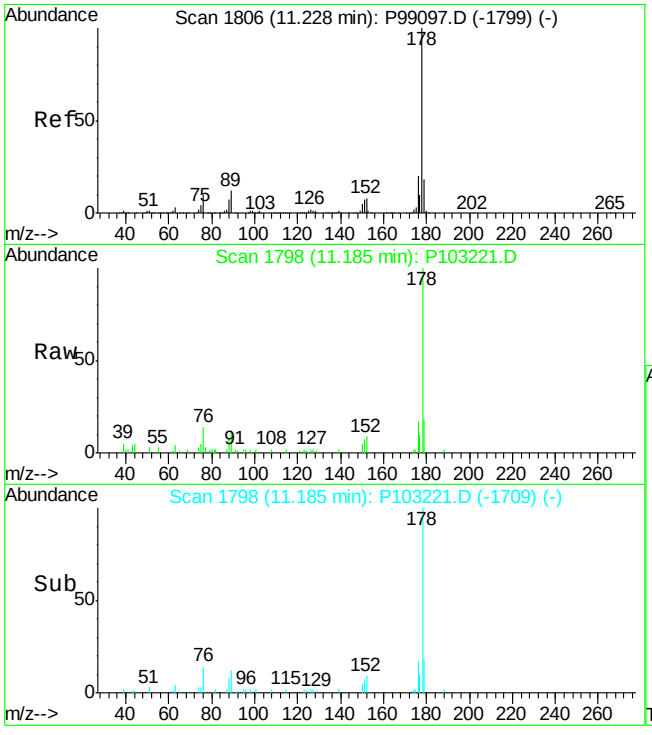


#2
1,4-Dioxane
Concen: 29.27 ppm
RT: 1.71 min Scan# 24
Delta R.T. -0.03 min
Lab File: P103221.D
Acq: 9 Mar 2016 10:48 pm

Tgt Ion: 88 Resp: 55216

Ion	Ratio	Lower	Upper
88	100		
58	46.5	31.0	91.0
57	20.7	0.0	51.2

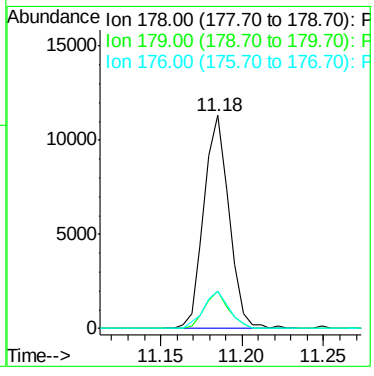


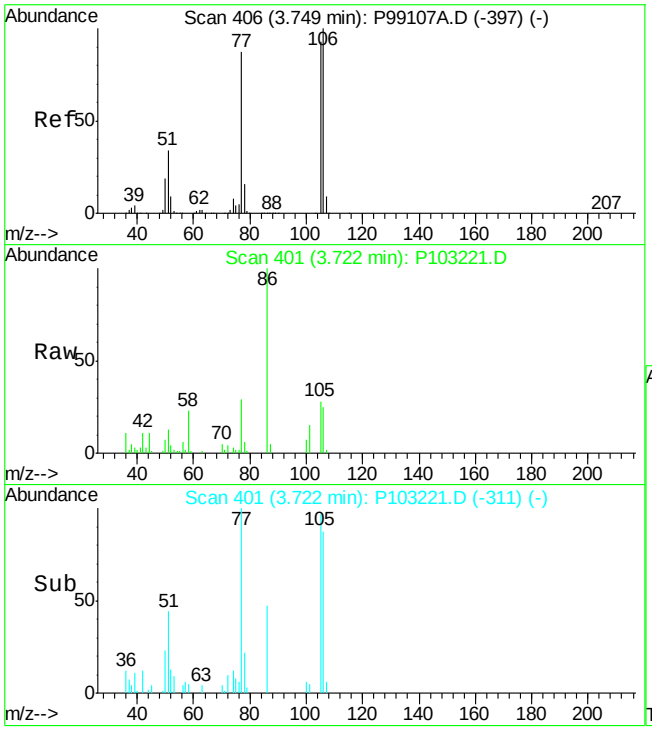


#78
Anthracene
Concen: 1.42 ppm
RT: 11.18 min Scan# 1798
Delta R.T. -0.03 min
Lab File: P103221.D
Acq: 9 Mar 2016 10:48 pm

Tgt Ion:178 Resp: 12204

Ion	Ratio	Lower	Upper
178	100		
179	17.6	0.0	46.0
176	17.3	0.0	48.9

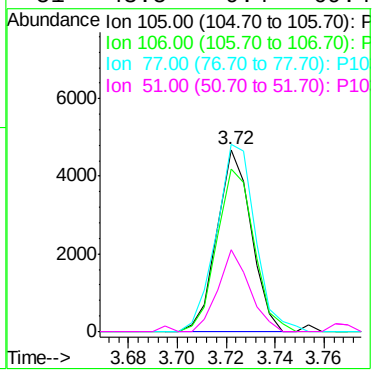




#103
Benzaldehyde
Concen: 1.44 ppm
RT: 3.72 min Scan# 401
Delta R.T. -0.02 min
Lab File: P103221.D
Acq: 9 Mar 2016 10:48 pm

Tgt Ion:105 Resp: 4582

Ion	Ratio	Lower	Upper
105	100		
106	89.5	74.8	134.8
77	101.2	68.0	128.0
51	43.5	9.4	69.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59952.D
Acq On : 10 Mar 2016 12:52 pm
Operator : linseyk
Sample : jc15518-1
Misc : op91884a,e3m2811,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 11 11:10:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	405378	4.00	ppm	-0.06
14) Fluorene-d10	12.505	176	566214	4.00	ppm	-0.08
21) Fluoranthene-d10	16.731	212	887437	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.351	264	745409	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1121400	18.84	ppm	0.01
Spiked Amount 50.000			Recovery = 37.68%			
4) Phenol-d5	5.251	99	1313893	13.36	ppm	-0.01
Spiked Amount 50.000			Recovery = 26.72%			
7) Nitrobenzene-d5	6.690	82	2595786	29.66	ppm	-0.05
Spiked Amount 50.000			Recovery = 59.32%			
15) 2-Fluorobiphenyl	10.191	172	5897401	33.02	ppm	-0.06
Spiked Amount 50.000			Recovery = 66.04%			
20) 2,4,6-Tribromophenol	13.070	330	745761	44.16	ppm	-0.08
Spiked Amount 50.000			Recovery = 88.32%			
28) Terphenyl-d14	17.550	244	5533104	38.63	ppm	-0.07
Spiked Amount 50.000			Recovery = 77.26%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	7148580	256.84	ppm #	16

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

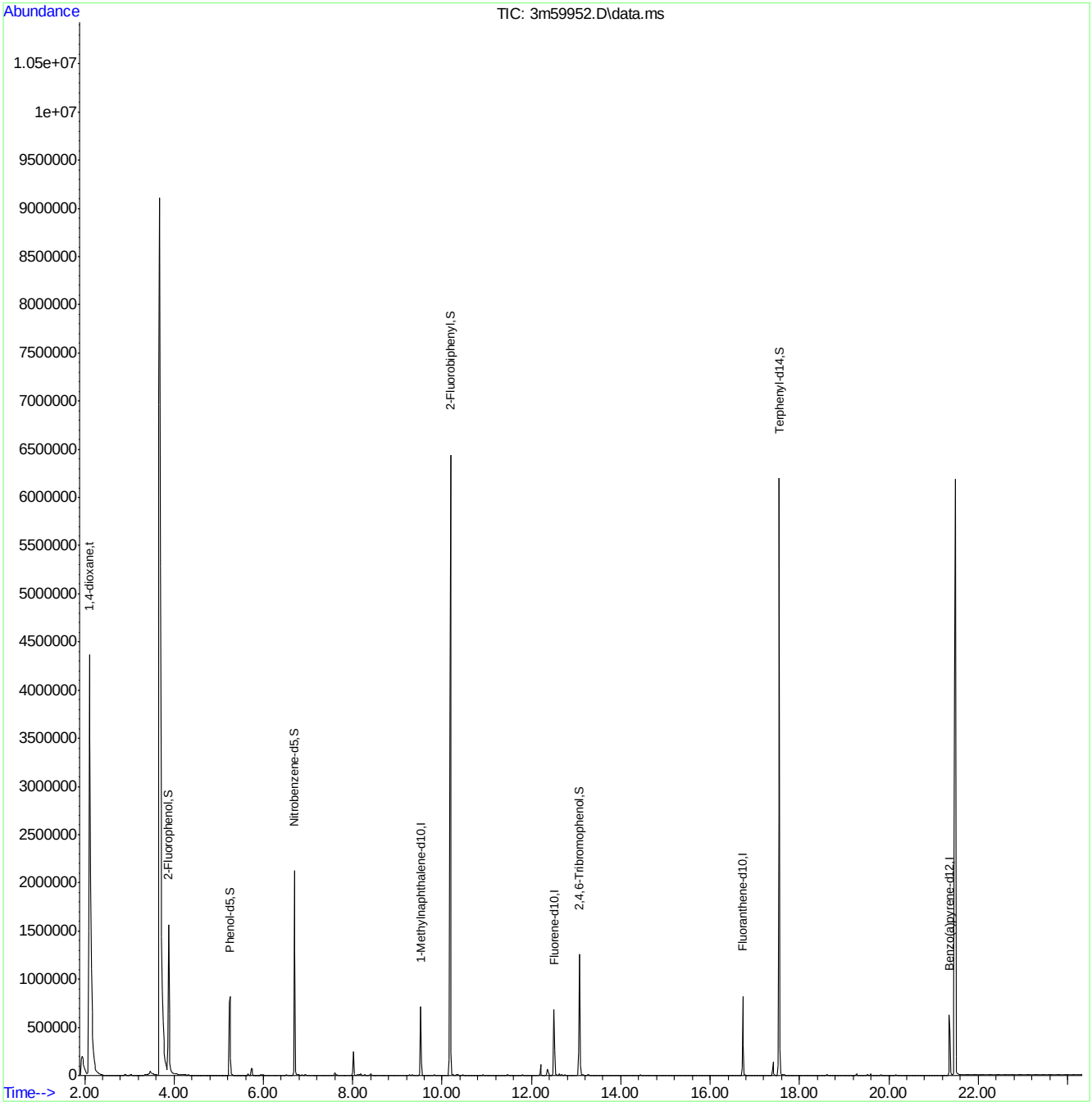
9.1.12

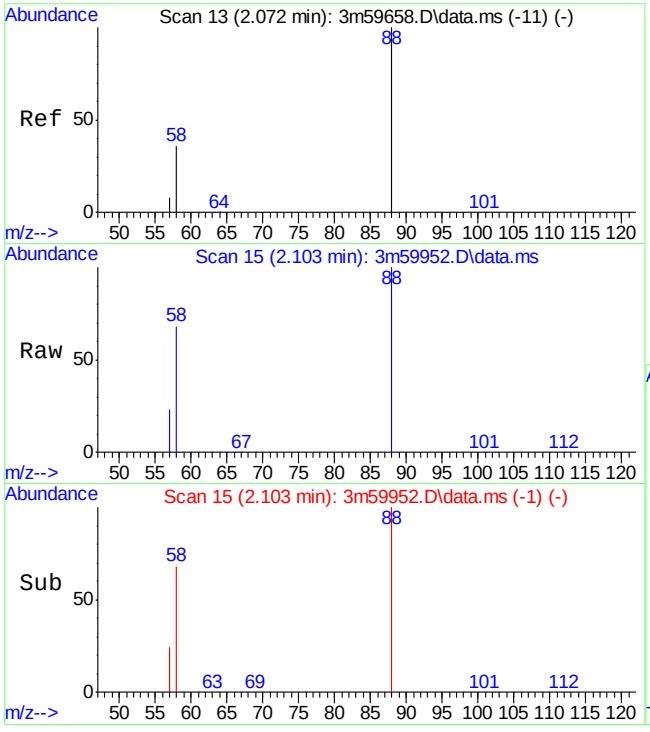
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59952.D
Acq On : 10 Mar 2016 12:52 pm
Operator : linseyk
Sample : jc15518-1
Misc : op91884a,e3m2811,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 11 11:10:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

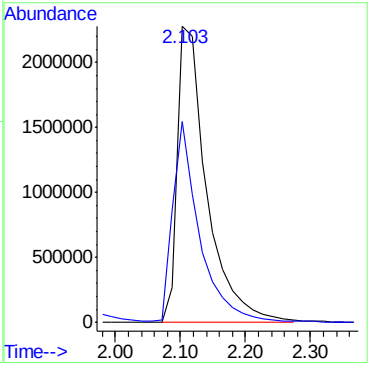




#2
1,4-dioxane
Concen: 256.84 ppm
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59952.D
Acq: 10 Mar 2016 12:52 pm

Tgt Ion: 88 Resp: 7148580

Ion	Ratio	Lower	Upper
88	100		
58	67.4	5.2	45.2#



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/11/16 16:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59953.D
Acq On : 10 Mar 2016 1:23 pm
Operator : linseyk
Sample : jc15518-2
Misc : op91884a,e3m2811,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 11 11:11:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	368808	4.00	ppm	-0.06
14) Fluorene-d10	12.505	176	500915	4.00	ppm	-0.08
21) Fluoranthene-d10	16.731	212	807027	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.351	264	656907	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	1092681	20.18	ppm	0.00
Spiked Amount 50.000			Recovery = 40.36%			
4) Phenol-d5	5.251	99	1251065	13.99	ppm	-0.01
Spiked Amount 50.000			Recovery = 27.98%			
7) Nitrobenzene-d5	6.690	82	2359350	29.64	ppm	-0.05
Spiked Amount 50.000			Recovery = 59.28%			
15) 2-Fluorobiphenyl	10.191	172	5479469	34.68	ppm	-0.06
Spiked Amount 50.000			Recovery = 69.36%			
20) 2,4,6-Tribromophenol	13.070	330	704481	47.16	ppm	-0.08
Spiked Amount 50.000			Recovery = 94.32%			
28) Terphenyl-d14	17.550	244	5406365	41.50	ppm	-0.07
Spiked Amount 50.000			Recovery = 83.00%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.119	88	37197	1.47	ppm #	50
25) Anthracene	14.583	178	543719	2.47	ppm	98
29) Benzo[a]anthracene	19.281	228	32201	0.14	ppm	72
34) Benzo[a]pyrene	21.382	252	11560m	0.05	ppm	

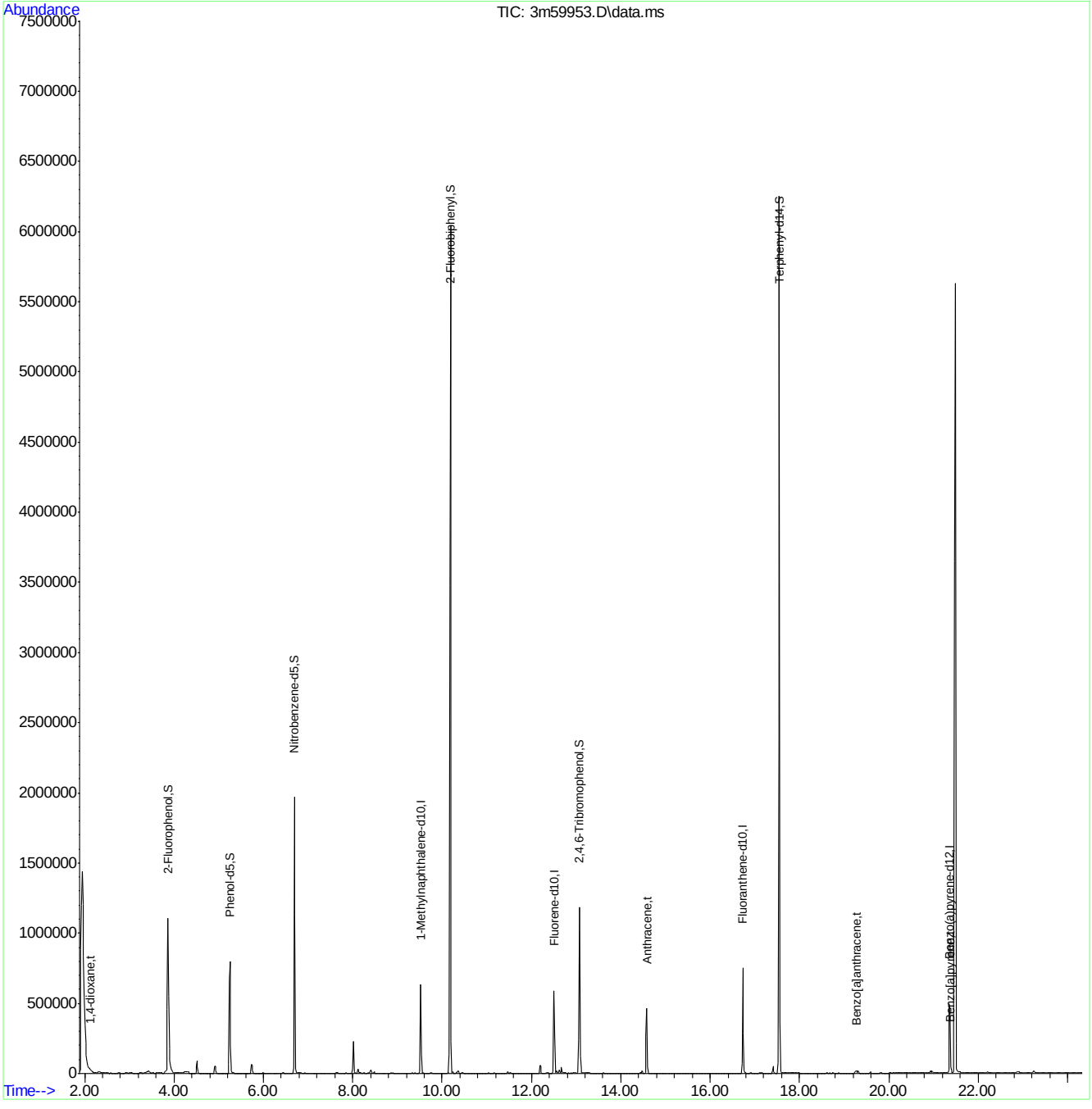
(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.13
9

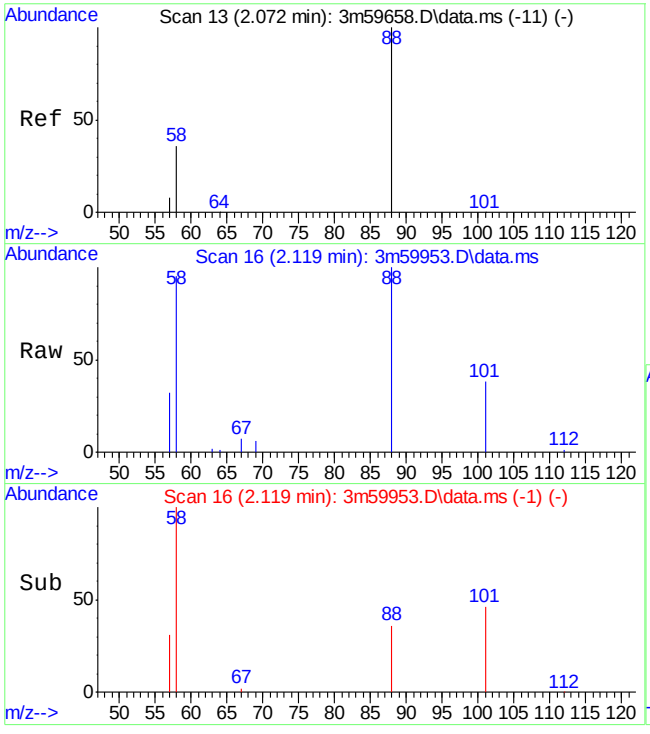
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59953.D
Acq On : 10 Mar 2016 1:23 pm
Operator : linseyk
Sample : jc15518-2
Misc : op91884a,e3m2811,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 11 11:11:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



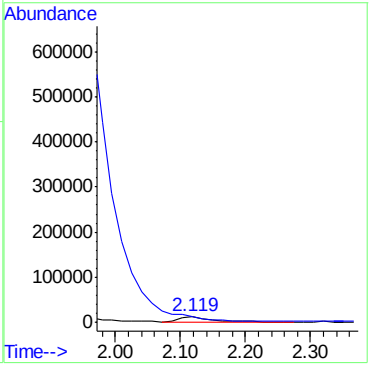
M3M2788SIM.M Fri Mar 11 11:12:30 2016 RPT1 Page: 2

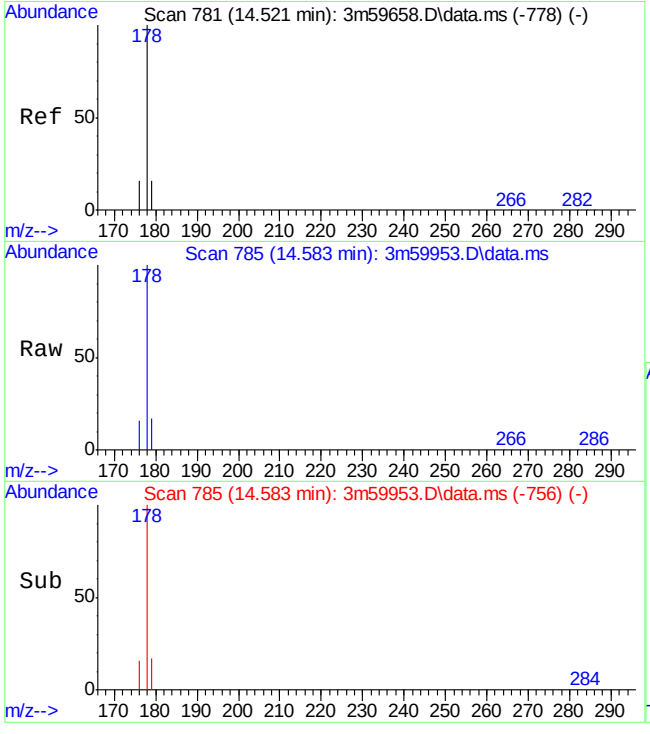


#2
1,4-dioxane
Concen: 1.47 ppm
RT: 2.119 min Scan# 16
Delta R.T. -0.030 min
Lab File: 3m59953.D
Acq: 10 Mar 2016 1:23 pm

Tgt Ion: 88 Resp: 37197

Ion	Ratio	Lower	Upper
88	100		
58	0.0	5.2	45.2#

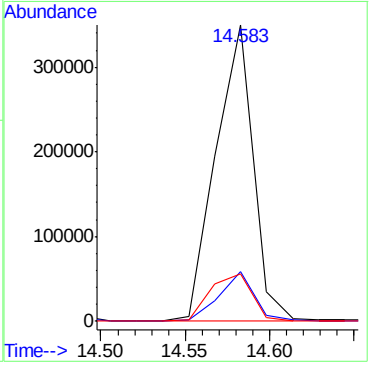


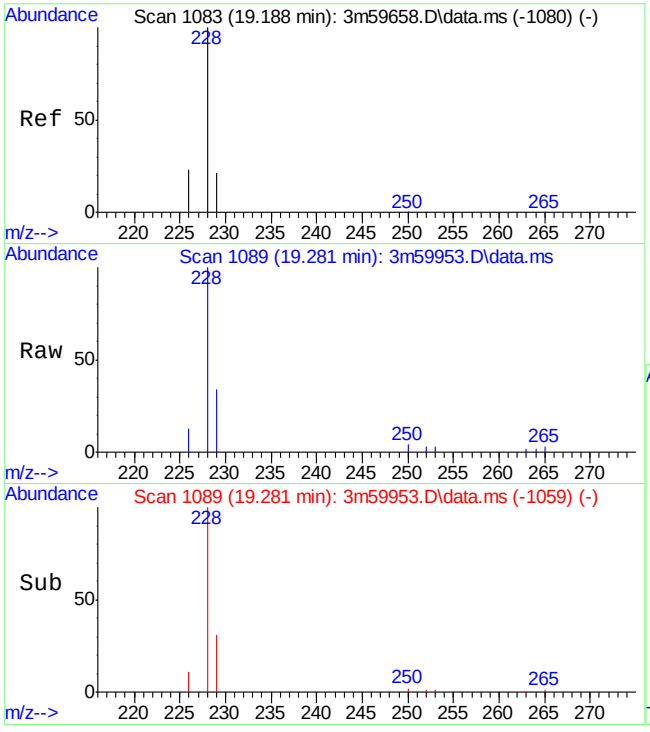


#25
Anthracene
Concen: 2.47 ppm
RT: 14.583 min Scan# 785
Delta R.T. -0.054 min
Lab File: 3m59953.D
Acq: 10 Mar 2016 1:23 pm

Tgt Ion:178 Resp: 543719

Ion	Ratio	Lower	Upper
178	100		
179	16.6	0.0	45.5
176	15.8	0.0	46.8

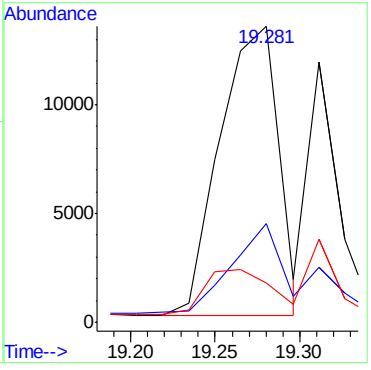


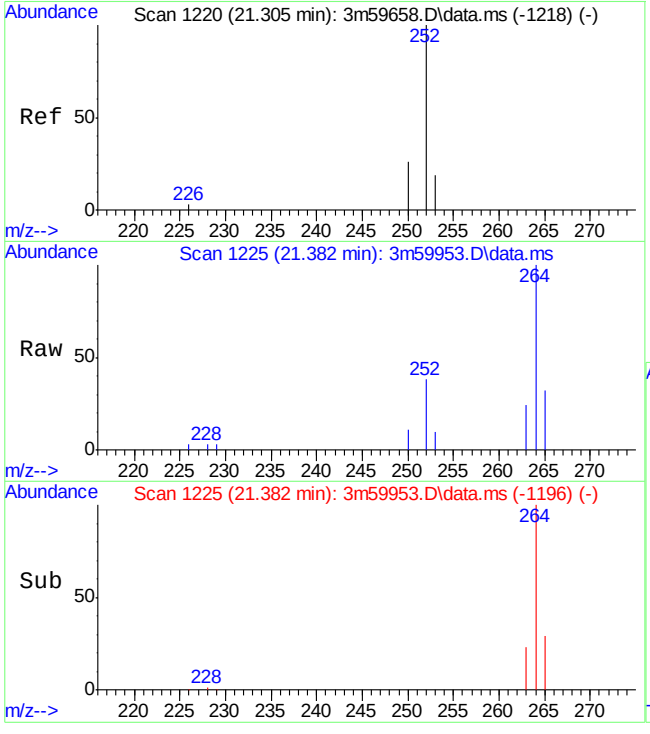


#29
Benzo[a]anthracene
Concen: 0.14 ppm
RT: 19.281 min Scan# 1089
Delta R.T. -0.043 min
Lab File: 3m59953.D
Acq: 10 Mar 2016 1:23 pm

Tgt Ion:228 Resp: 32201

Ion	Ratio	Lower	Upper
228	100		
229	30.1	0.0	49.4
226	9.6	0.0	55.5

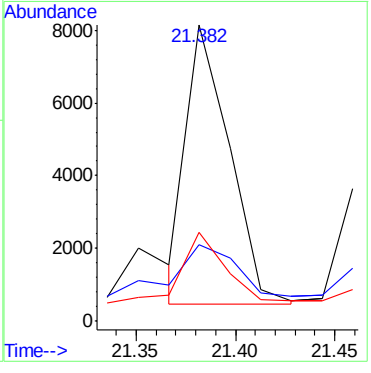




#34
Benzo[a]pyrene
Concen: 0.05 ppm m
RT: 21.382 min Scan# 1225
Delta R.T. -0.046 min
Lab File: 3m59953.D
Acq: 10 Mar 2016 1:23 pm

Tgt Ion:252 Resp: 11560

Ion	Ratio	Lower	Upper
252	100		
253	25.9	0.0	54.1
250	29.8	0.0	57.8



SGS ACCUTEST JC15518

Manual Integration Approval Summary

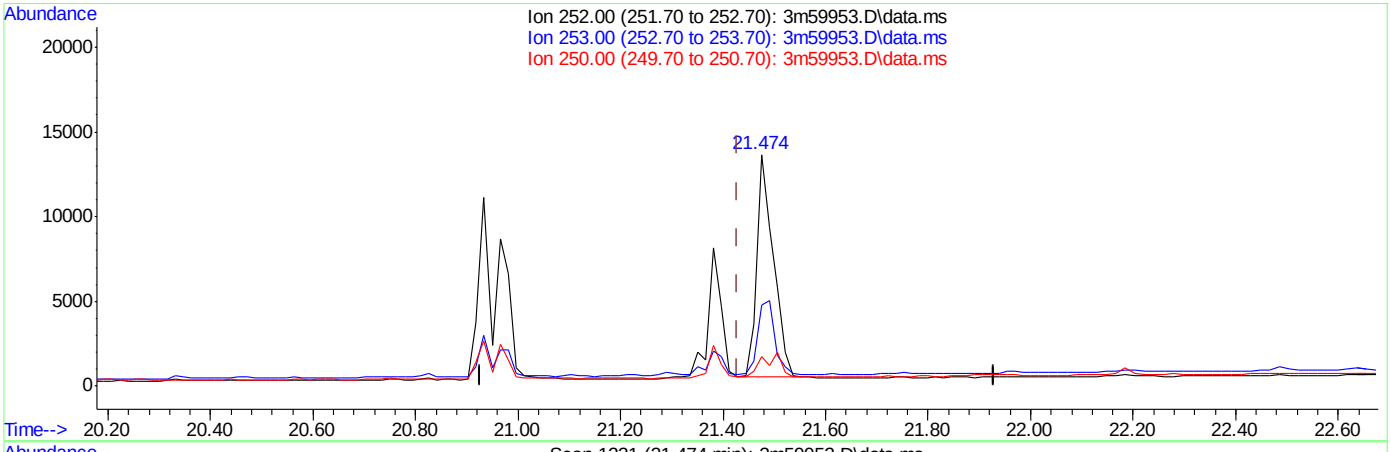
Sample Number:	JC15518-2	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M59953.D	**Analyst approved:**	03/11/16 11:24 Linsey Kirschmann
Injection Time:	03/10/16 13:23	**Supervisor approved:**	03/11/16 16:23 Nina Pandya

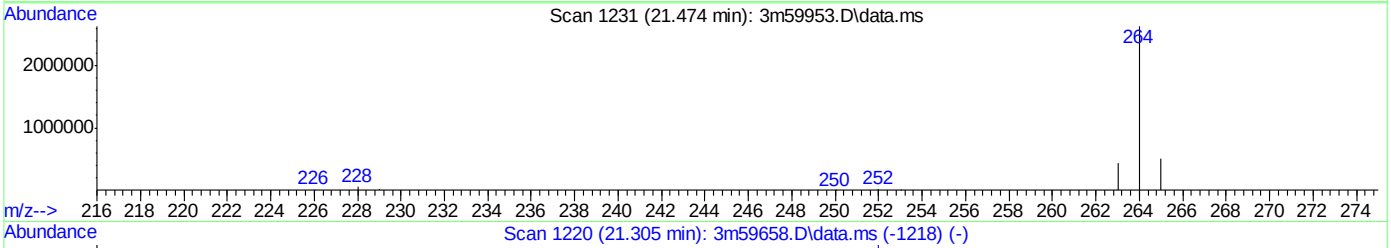
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(a)pyrene	50-32-8		21.38	Poor instrument integration

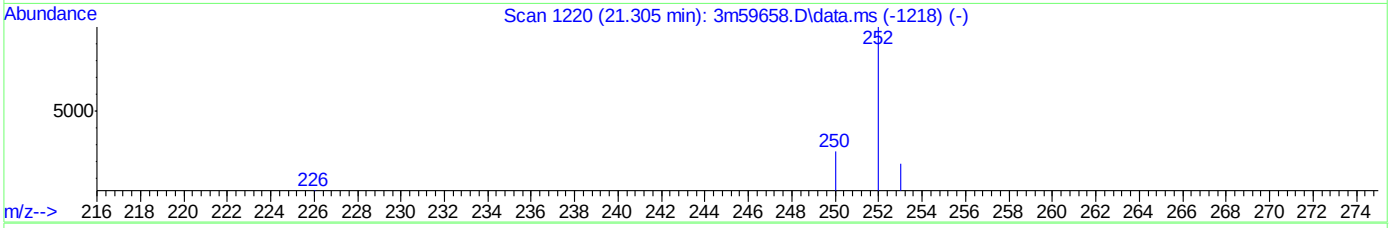
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59953.D
Acq On : 10 Mar 2016 1:23 pm
Operator : linseyk
Sample : jc15518-2
Misc : op91884a,e3m2811,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 10 13:46:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration







TIC: 3m59953.D\data.ms

(34) Benzo[a]pyrene (t)

21.474min (+0.046) 0.14ppm

response 29413

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	31.18
250.00	27.80	9.02
0.00	0.00	0.00

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59954.D
Acq On : 10 Mar 2016 1:54 pm
Operator : linseyk
Sample : jc15518-3
Misc : op91884a,e3m2811,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 11 11:13:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	407847	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	580581	4.00	ppm	-0.06
21) Fluoranthene-d10	16.747	212	950346	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	21.366	264	770160	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.911	112	1172584	19.58	ppm	0.04
Spiked Amount 50.000			Recovery = 39.16%			
4) Phenol-d5	5.287	99	1333306	13.48	ppm	0.03
Spiked Amount 50.000			Recovery = 26.96%			
7) Nitrobenzene-d5	6.690	82	2625959	29.83	ppm	-0.05
Spiked Amount 50.000			Recovery = 59.66%			
15) 2-Fluorobiphenyl	10.191	172	6261412	34.20	ppm	-0.06
Spiked Amount 50.000			Recovery = 68.40%			
20) 2,4,6-Tribromophenol	13.089	330	695058	40.14	ppm	-0.06
Spiked Amount 50.000			Recovery = 80.28%			
28) Terphenyl-d14	17.550	244	5154133	33.60	ppm	-0.07
Spiked Amount 50.000			Recovery = 67.20%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.119	88	2261896	80.78	ppm	94
9) Naphthalene	8.046	128	159249	0.61	ppm	91
25) Anthracene	14.583	178	5274834	20.31	ppm	95

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

9.1.14

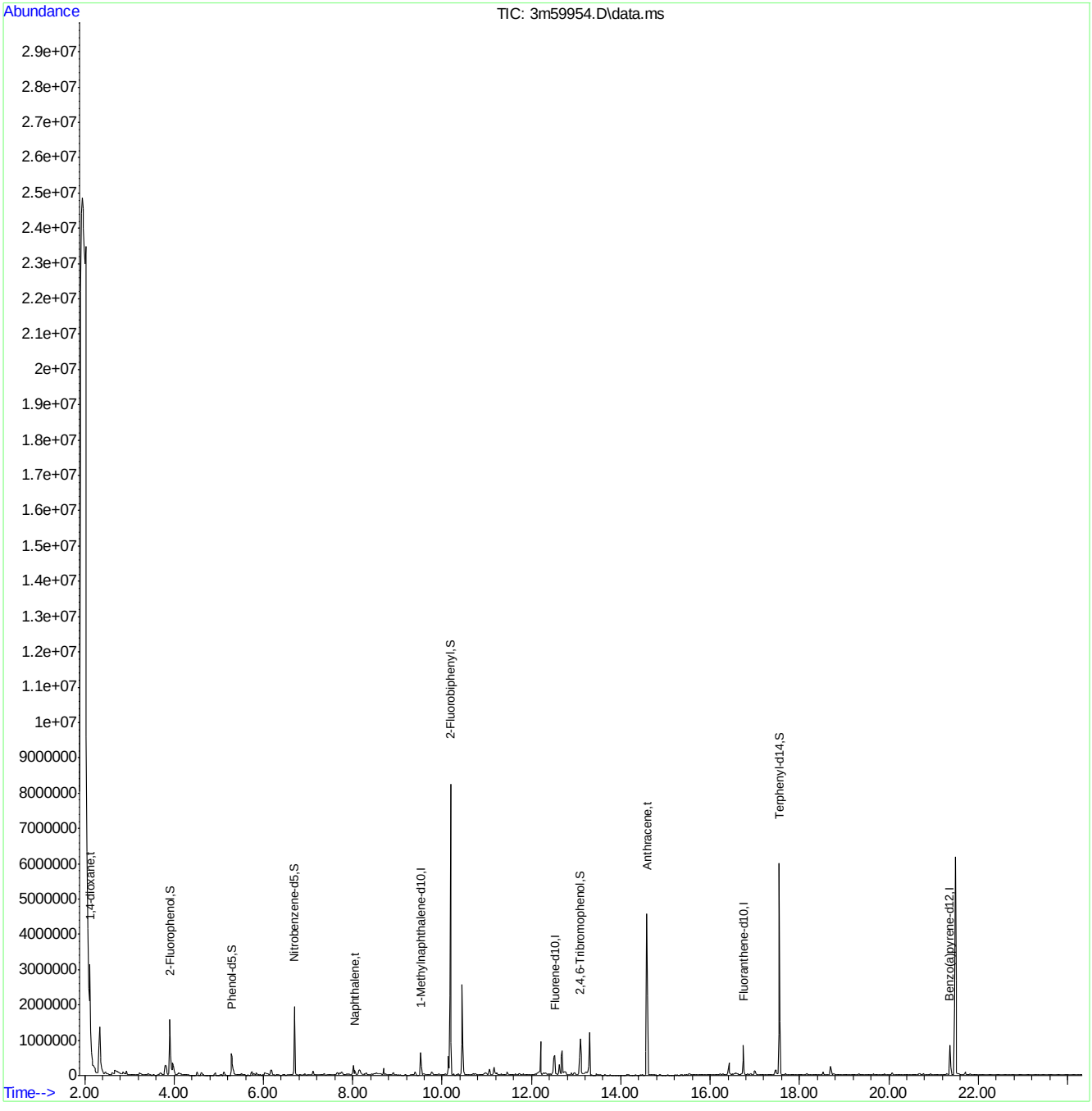
9

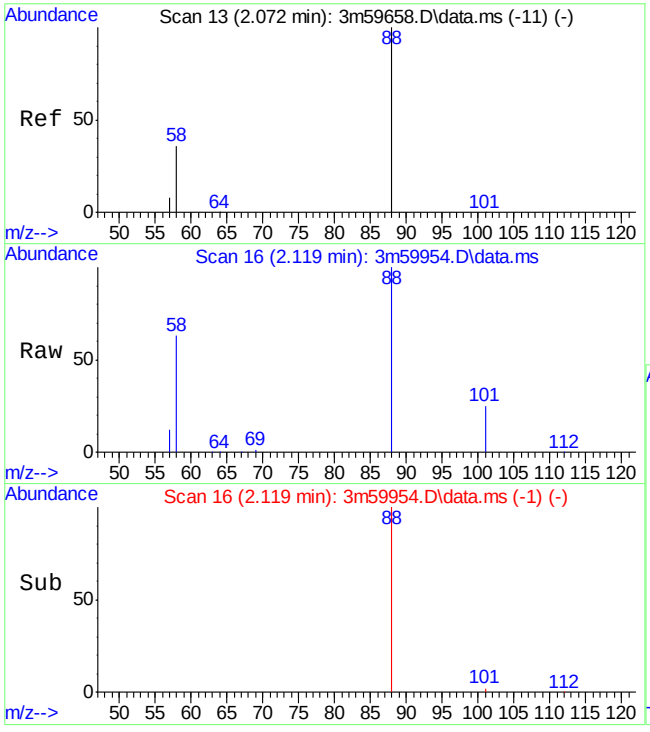
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59954.D
Acq On : 10 Mar 2016 1:54 pm
Operator : linseyk
Sample : jc15518-3
Misc : op91884a,e3m2811,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 11 11:13:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

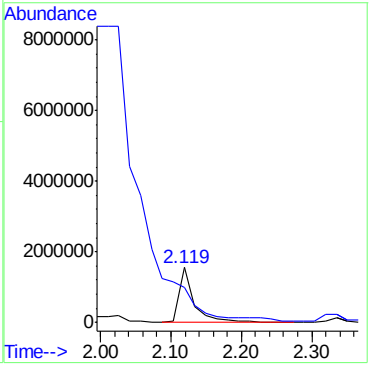


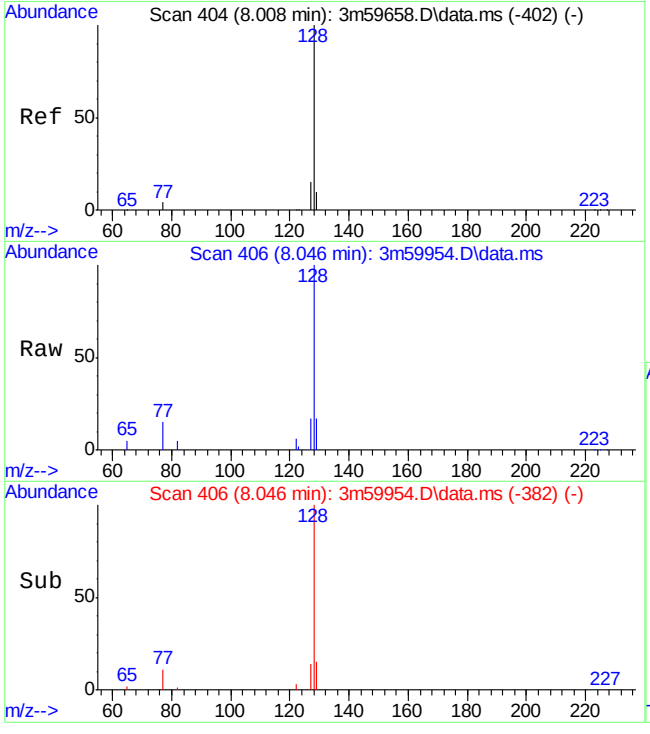


#2
1,4-dioxane
Concen: 80.78 ppm
RT: 2.119 min Scan# 16
Delta R.T. -0.030 min
Lab File: 3m59954.D
Acq: 10 Mar 2016 1:54 pm

Tgt Ion: 88 Resp: 2261896

Ion	Ratio	Lower	Upper
88	100		
58	22.4	5.2	45.2

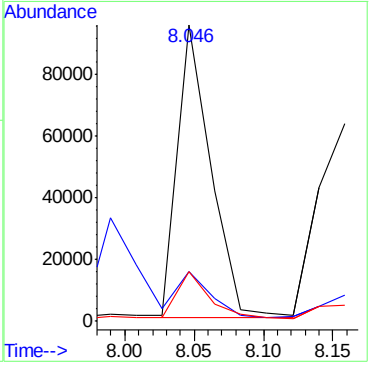


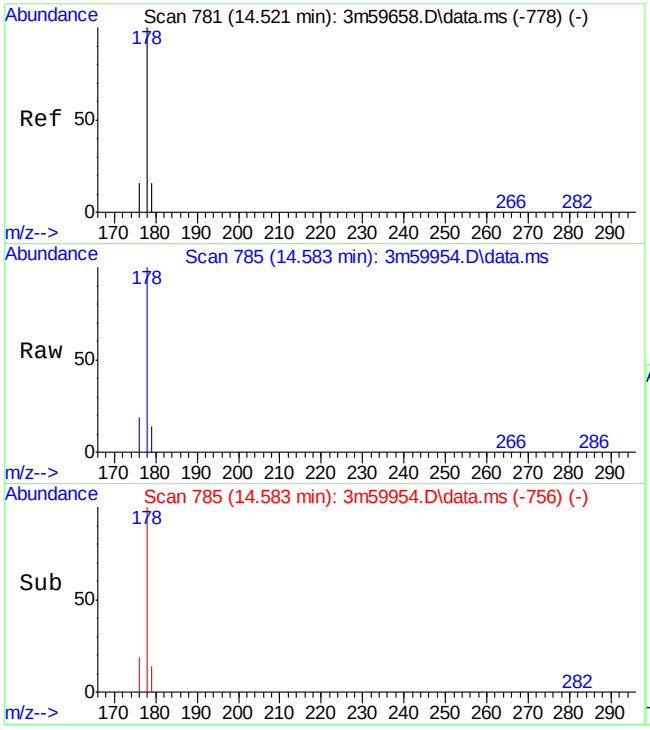


#9
Naphthalene
Concen: 0.61 ppm
RT: 8.046 min Scan# 406
Delta R.T. -0.054 min
Lab File: 3m59954.D
Acq: 10 Mar 2016 1:54 pm

Tgt Ion:128 Resp: 159249

Ion	Ratio	Lower	Upper
128	100		
129	14.1	0.0	41.9
127	16.0	0.0	41.5

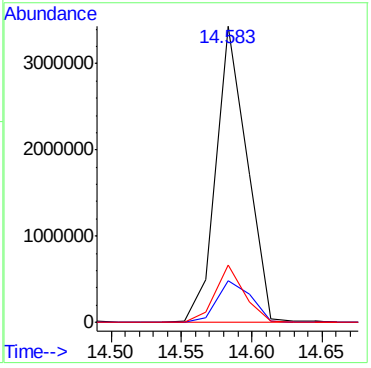




#25
Anthracene
Concen: 20.31 ppm
RT: 14.583 min Scan# 785
Delta R.T. -0.054 min
Lab File: 3m59954.D
Acq: 10 Mar 2016 1:54 pm

Tgt Ion:178 Resp: 5274834

Ion	Ratio	Lower	Upper
178	100		
179	13.9	0.0	45.5
176	19.3	0.0	46.8



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/11/16 16:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59955.D
Acq On : 10 Mar 2016 2:26 pm
Operator : linseyk
Sample : jc15518-4
Misc : op91884a,e3m2811,990
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 11:20:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	364965	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	541095	4.00	ppm	-0.06
21) Fluoranthene-d10	16.731	212	897943	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.366	264	749649	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	652037	12.17	ppm	0.00
Spiked Amount 50.000			Recovery = 24.34%			
4) Phenol-d5	5.263	99	782154	8.84	ppm	0.00
Spiked Amount 50.000			Recovery = 17.68%			
7) Nitrobenzene-d5	6.690	82	1426214	18.10	ppm	-0.05
Spiked Amount 50.000			Recovery = 36.20%			
15) 2-Fluorobiphenyl	10.191	172	3670471	21.51	ppm	-0.06
Spiked Amount 50.000			Recovery = 43.02%			
20) 2,4,6-Tribromophenol	13.070	330	479328	29.70	ppm	-0.08
Spiked Amount 50.000			Recovery = 59.40%			
28) Terphenyl-d14	17.550	244	3818685	26.35	ppm	-0.07
Spiked Amount 50.000			Recovery = 52.70%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	6972m	0.28	ppm	

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

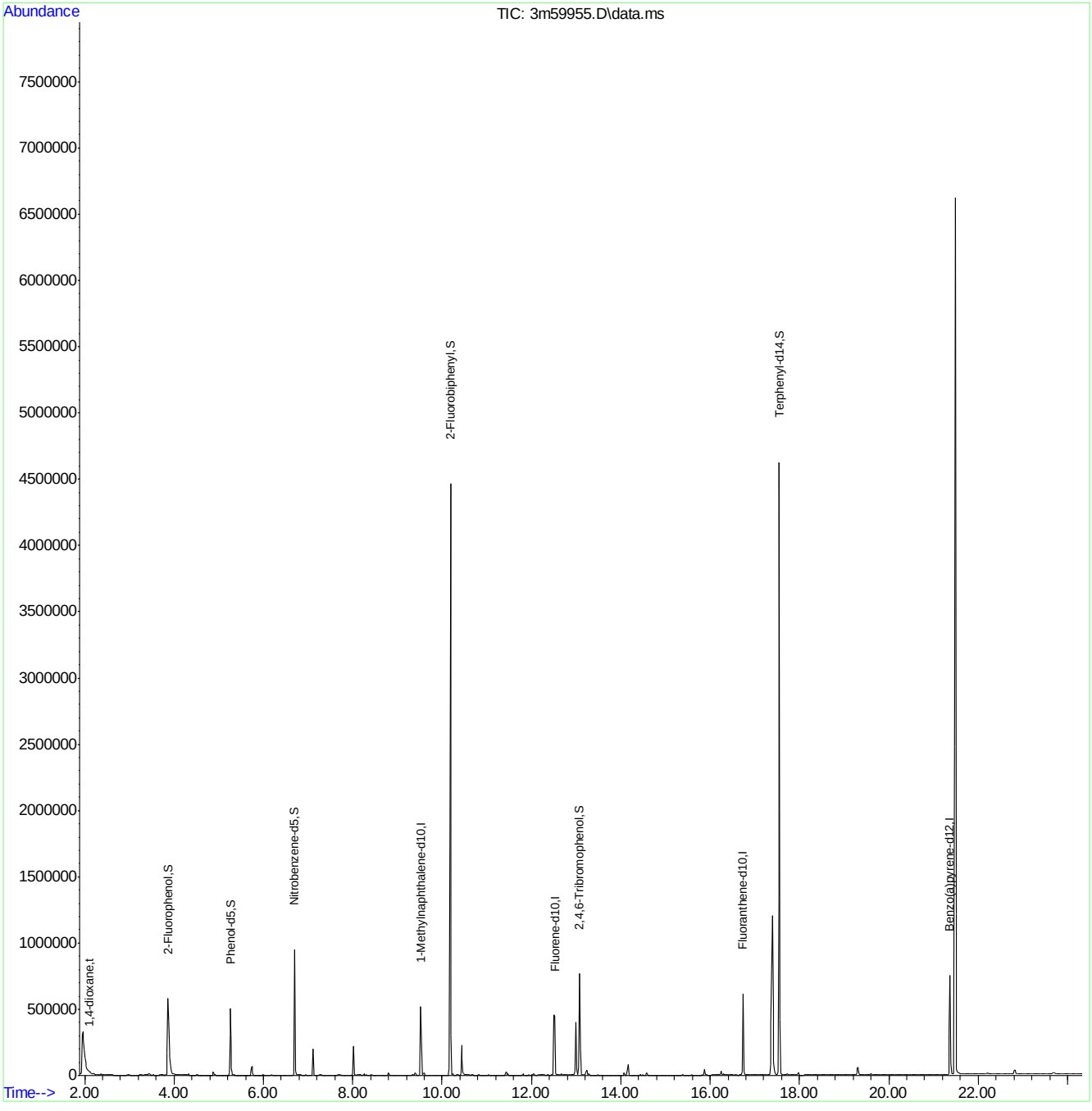
9.1.15

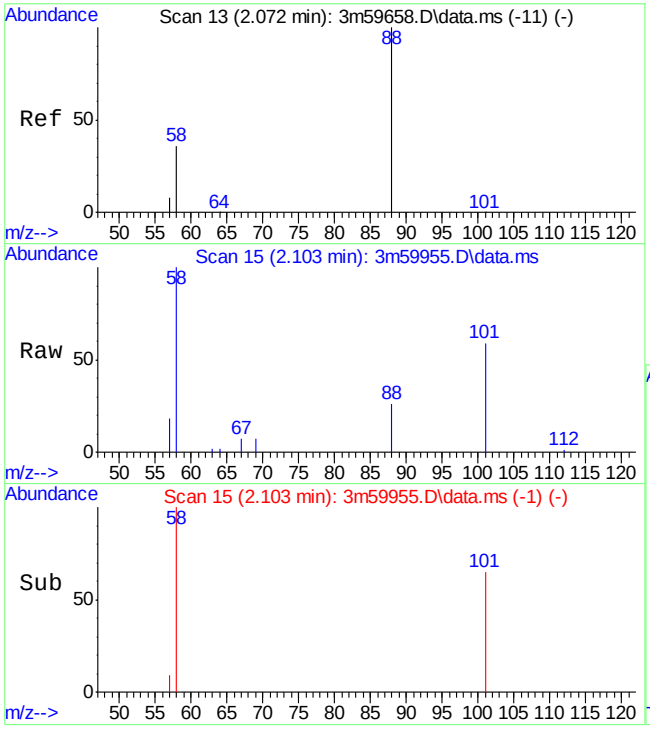
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59955.D
Acq On : 10 Mar 2016 2:26 pm
Operator : linseyk
Sample : jc15518-4
Misc : op91884a,e3m2811,990
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 11:20:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

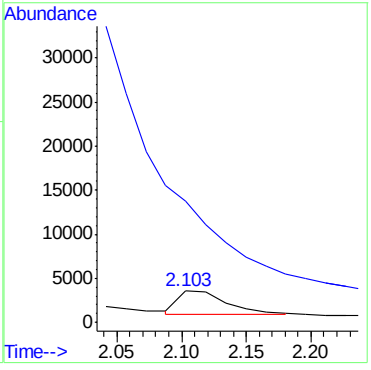




#2
1,4-dioxane
Concen: 0.28 ppm m
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59955.D
Acq: 10 Mar 2016 2:26 pm

Tgt Ion: 88 Resp: 6972

Ion	Ratio	Lower	Upper
88	100		
58	389.3	5.2	45.2#



9.1.15

9

Manual Integration Approval Summary

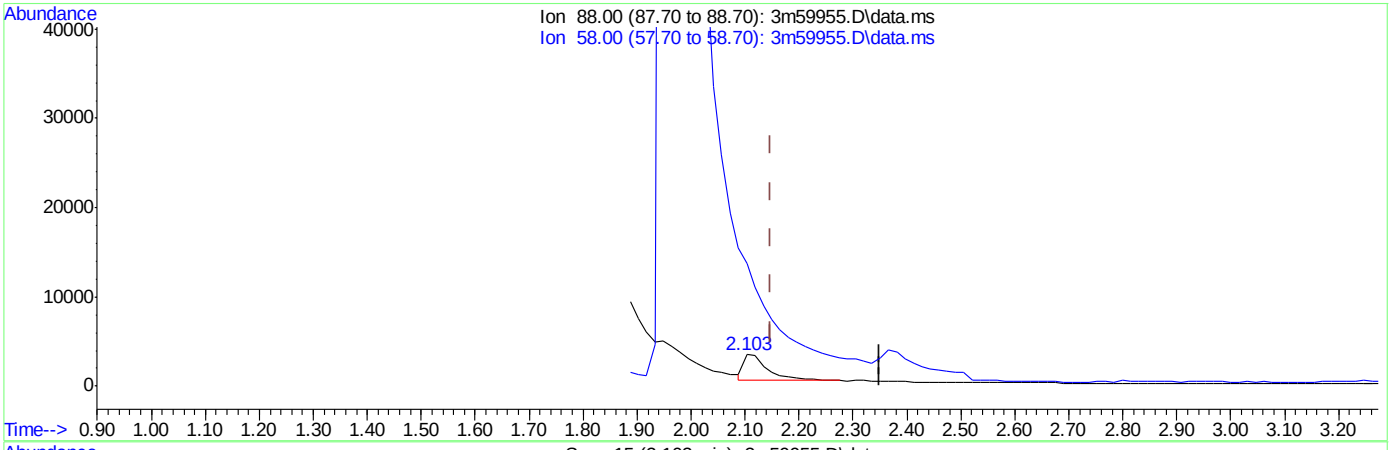
Sample Number:	JC15518-4	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M59955.D	**Analyst approved:**	03/11/16 11:24 Linsey Kirschmann
Injection Time:	03/10/16 14:26	**Supervisor approved:**	03/11/16 16:23 Nina Pandya

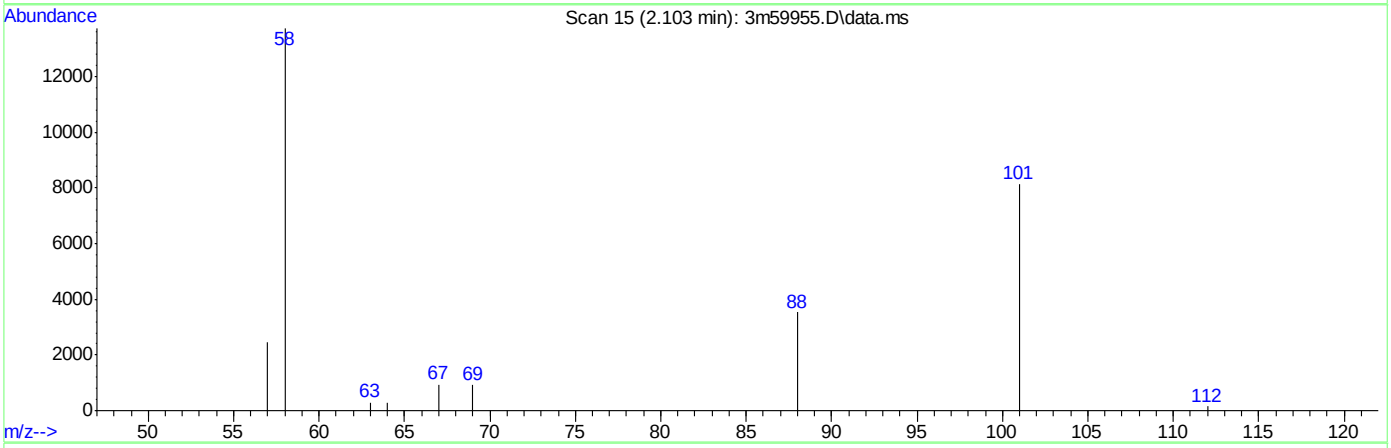
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.10	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59955.D
Acq On : 10 Mar 2016 2:26 pm
Operator : linseyk
Sample : jc15518-4
Misc : op91884a,e3m2811,990
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 11 11:14:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration





TIC: 3m59955.D\data.ms

(2) 1,4-dioxane (t)

2.103min (-0.046) 0.36ppm

response 9072

Ion	Exp%	Act%
88.00	100	100
58.00	25.20	171.28#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59956.D
Acq On : 10 Mar 2016 2:57 pm
Operator : linseyk
Sample : jc15518-5
Misc : op91884a,e3m2811,980
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 11:15:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	9.519	150	342443	4.00 ppm	-0.06
14) Fluorene-d10	12.524	176	505099	4.00 ppm	-0.06
21) Fluoranthene-d10	16.747	212	837055	4.00 ppm	-0.05
31) Benzo(a)pyrene-d12	21.366	264	671218	4.00 ppm	-0.03
System Monitoring Compounds					
3) 2-Fluorophenol	3.880	112	1021152	20.31 ppm	0.01
Spiked Amount 50.000			Recovery	= 40.62%	
4) Phenol-d5	5.263	99	1157553	13.94 ppm	0.00
Spiked Amount 50.000			Recovery	= 27.88%	
7) Nitrobenzene-d5	6.690	82	2117684	28.65 ppm	-0.05
Spiked Amount 50.000			Recovery	= 57.30%	
15) 2-Fluorobiphenyl	10.191	172	4887776	30.68 ppm	-0.06
Spiked Amount 50.000			Recovery	= 61.36%	
20) 2,4,6-Tribromophenol	13.070	330	632830	42.01 ppm	-0.08
Spiked Amount 50.000			Recovery	= 84.02%	
28) Terphenyl-d14	17.550	244	4924179	36.45 ppm	-0.07
Spiked Amount 50.000			Recovery	= 72.90%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.103	88	5504904	234.14 ppm	# 33

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

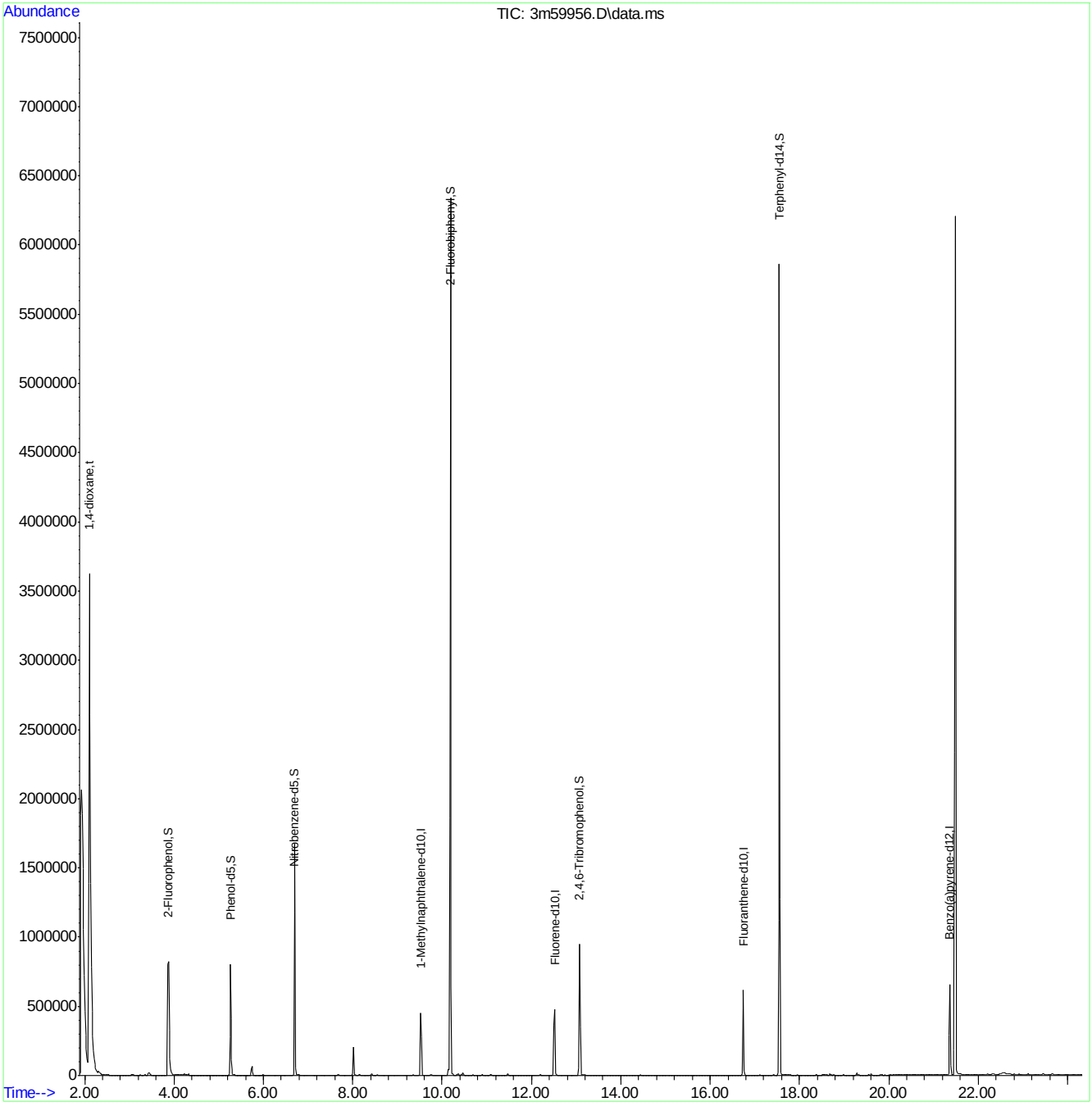
9.1.16

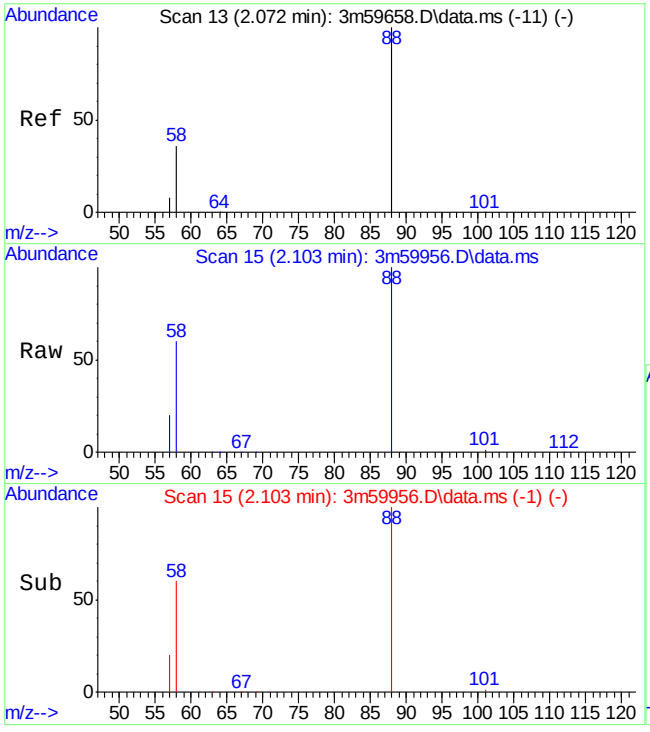
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59956.D
Acq On : 10 Mar 2016 2:57 pm
Operator : linseyk
Sample : jc15518-5
Misc : op91884a,e3m2811,980
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 11 11:15:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

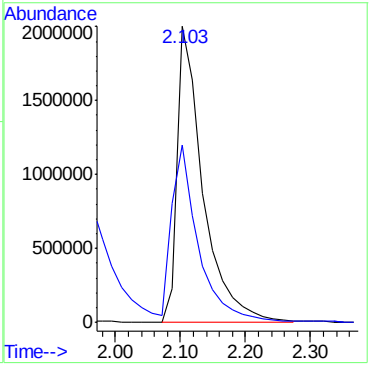




#2
1,4-dioxane
Concen: 234.14 ppm
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59956.D
Acq: 10 Mar 2016 2:57 pm

Tgt Ion: 88 Resp: 5504904

Ion	Ratio	Lower	Upper
88	100		
58	58.7	5.2	45.2#



9.1.16

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59957.D
Acq On : 10 Mar 2016 3:28 pm
Operator : linseyk
Sample : jc15518-6
Misc : op91884a,e3m2811,990
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 11:15:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	364115	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	533924	4.00	ppm	-0.06
21) Fluoranthene-d10	16.731	212	870522	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.366	264	695658	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1284562	24.03	ppm	0.01
Spiked Amount 50.000			Recovery = 48.06%			
4) Phenol-d5	5.263	99	1441457	16.32	ppm	0.00
Spiked Amount 50.000			Recovery = 32.64%			
7) Nitrobenzene-d5	6.690	82	2587461	32.92	ppm	-0.05
Spiked Amount 50.000			Recovery = 65.84%			
15) 2-Fluorobiphenyl	10.191	172	5978938	35.51	ppm	-0.06
Spiked Amount 50.000			Recovery = 71.02%			
20) 2,4,6-Tribromophenol	13.070	330	698506	43.87	ppm	-0.08
Spiked Amount 50.000			Recovery = 87.74%			
28) Terphenyl-d14	17.550	244	5463041	38.88	ppm	-0.07
Spiked Amount 50.000			Recovery = 77.76%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	6273746	250.96	ppm #	25

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

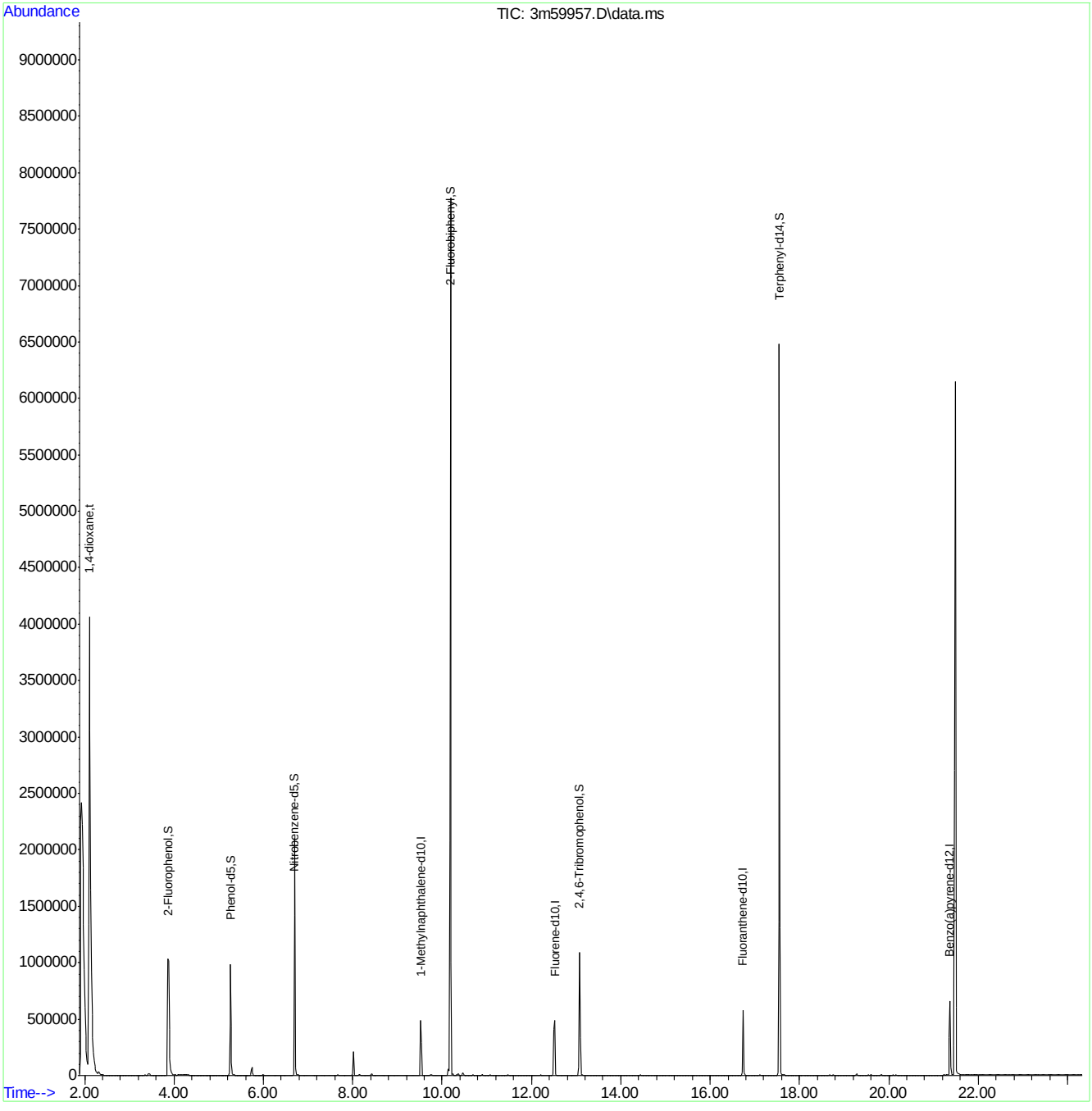
9.1.17

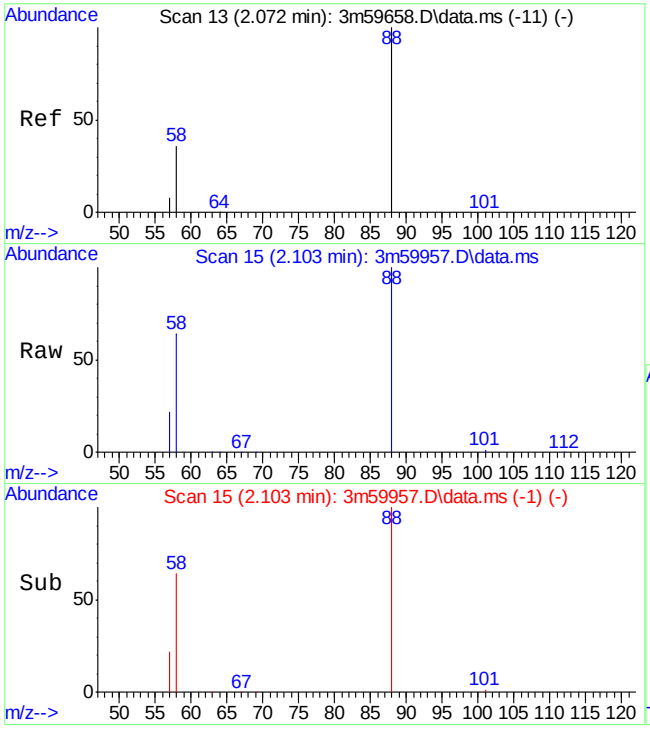
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59957.D
Acq On : 10 Mar 2016 3:28 pm
Operator : linseyk
Sample : jc15518-6
Misc : op91884a,e3m2811,990
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 11:15:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

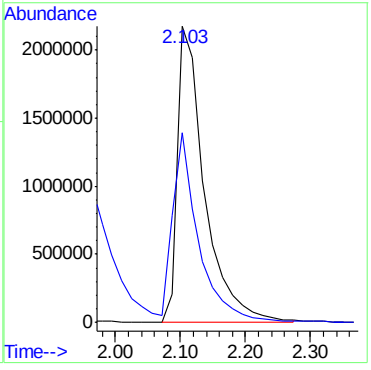




#2
1,4-dioxane
Concen: 250.96 ppm
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59957.D
Acq: 10 Mar 2016 3:28 pm

Tgt Ion: 88 Resp: 6273746

Ion	Ratio	Lower	Upper
88	100		
58	63.1	5.2	45.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59958.D
Acq On : 10 Mar 2016 3:59 pm
Operator : linseyk
Sample : jc15518-7
Misc : op91884a,e3m2811,990
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 11 11:16:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	372336	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	546724	4.00	ppm	-0.06
21) Fluoranthene-d10	16.747	212	892510	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	21.366	264	732082	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1288004	23.56	ppm	0.01
Spiked Amount 50.000			Recovery = 47.12%			
4) Phenol-d5	5.263	99	1415443	15.67	ppm	0.00
Spiked Amount 50.000			Recovery = 31.34%			
7) Nitrobenzene-d5	6.690	82	2674245	33.27	ppm	-0.05
Spiked Amount 50.000			Recovery = 66.54%			
15) 2-Fluorobiphenyl	10.191	172	6099608	35.37	ppm	-0.06
Spiked Amount 50.000			Recovery = 70.74%			
20) 2,4,6-Tribromophenol	13.070	330	693616	42.54	ppm	-0.08
Spiked Amount 50.000			Recovery = 85.08%			
28) Terphenyl-d14	17.550	244	5272222	36.60	ppm	-0.07
Spiked Amount 50.000			Recovery = 73.20%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	424075	16.59	ppm #	54

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

9.1.18

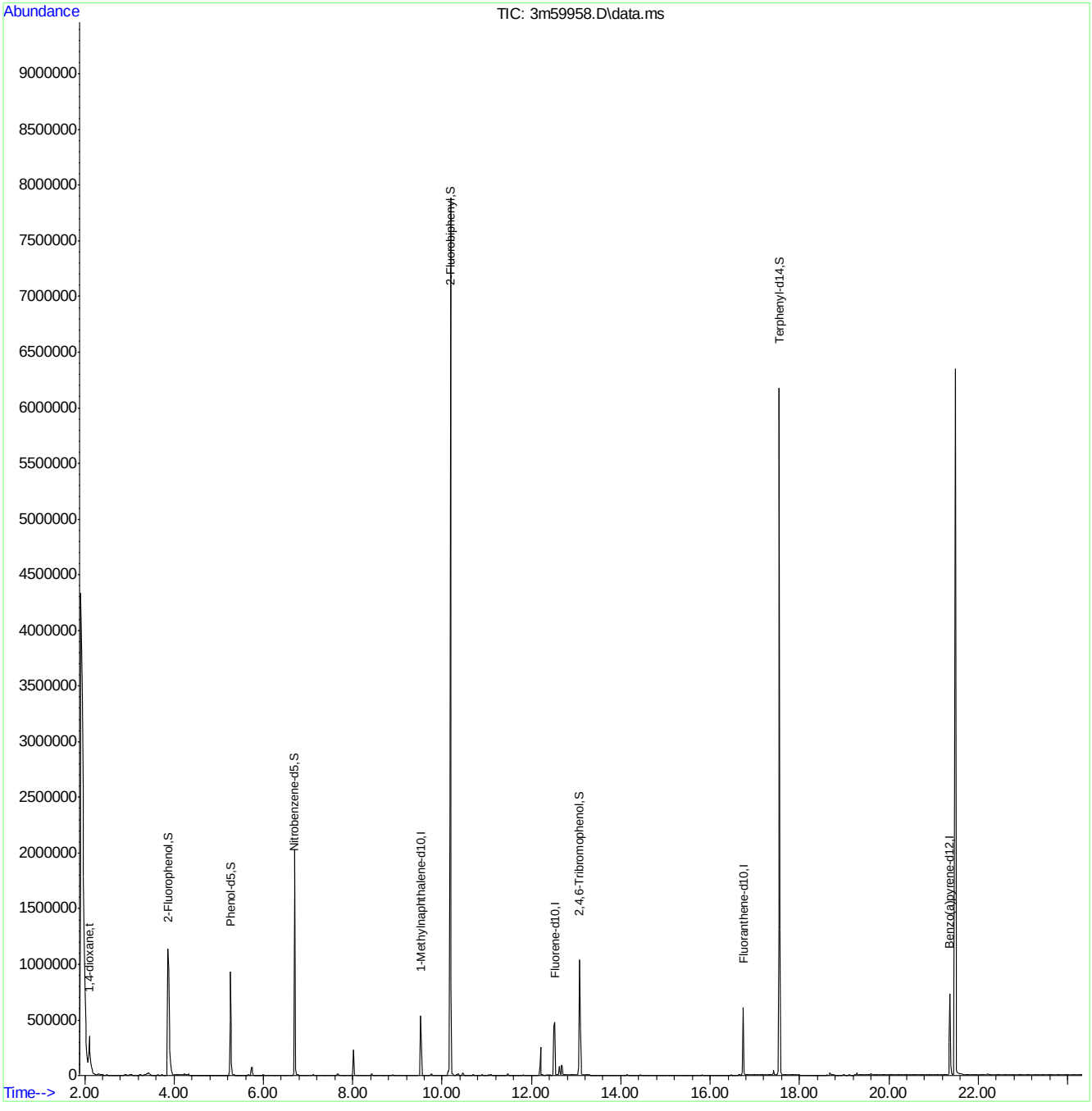
9

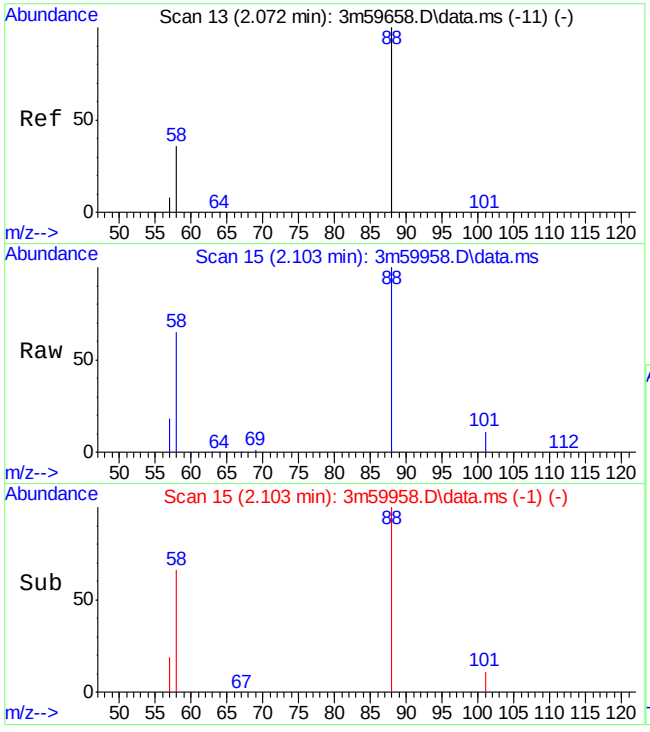
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59958.D
Acq On : 10 Mar 2016 3:59 pm
Operator : linseyk
Sample : jc15518-7
Misc : op91884a,e3m2811,990
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 11 11:16:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

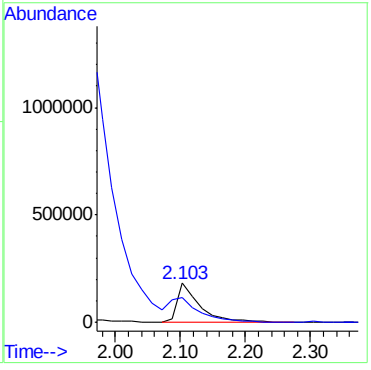




#2
1,4-dioxane
Concen: 16.59 ppm
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59958.D
Acq: 10 Mar 2016 3:59 pm

Tgt Ion: 88 Resp: 424075

Ion	Ratio	Lower	Upper
88	100		
58	48.2	5.2	45.2#



9.1.18

9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59959.D
Acq On : 10 Mar 2016 4:31 pm
Operator : linseyk
Sample : jc15518-8
Misc : op91884a,e3m2811,900
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 11 11:16:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	371171	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	569562	4.00	ppm	-0.06
21) Fluoranthene-d10	16.747	212	915794	4.00	ppm	-0.05
31) Benzo(a)pyrene-d12	21.366	264	727543	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1214384	22.28	ppm	0.01
Spiked Amount 50.000			Recovery = 44.56%			
4) Phenol-d5	5.263	99	1317093	14.63	ppm	0.00
Spiked Amount 50.000			Recovery = 29.26%			
7) Nitrobenzene-d5	6.709	82	2725698	34.02	ppm	-0.03
Spiked Amount 50.000			Recovery = 68.04%			
15) 2-Fluorobiphenyl	10.191	172	6064365	33.76	ppm	-0.06
Spiked Amount 50.000			Recovery = 67.52%			
20) 2,4,6-Tribromophenol	13.070	330	634831	37.37	ppm	-0.08
Spiked Amount 50.000			Recovery = 74.74%			
28) Terphenyl-d14	17.550	244	4820973	32.61	ppm	-0.07
Spiked Amount 50.000			Recovery = 65.22%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	824203	32.34	ppm #	50
25) Anthracene	14.583	178	297737	1.19	ppm	98

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

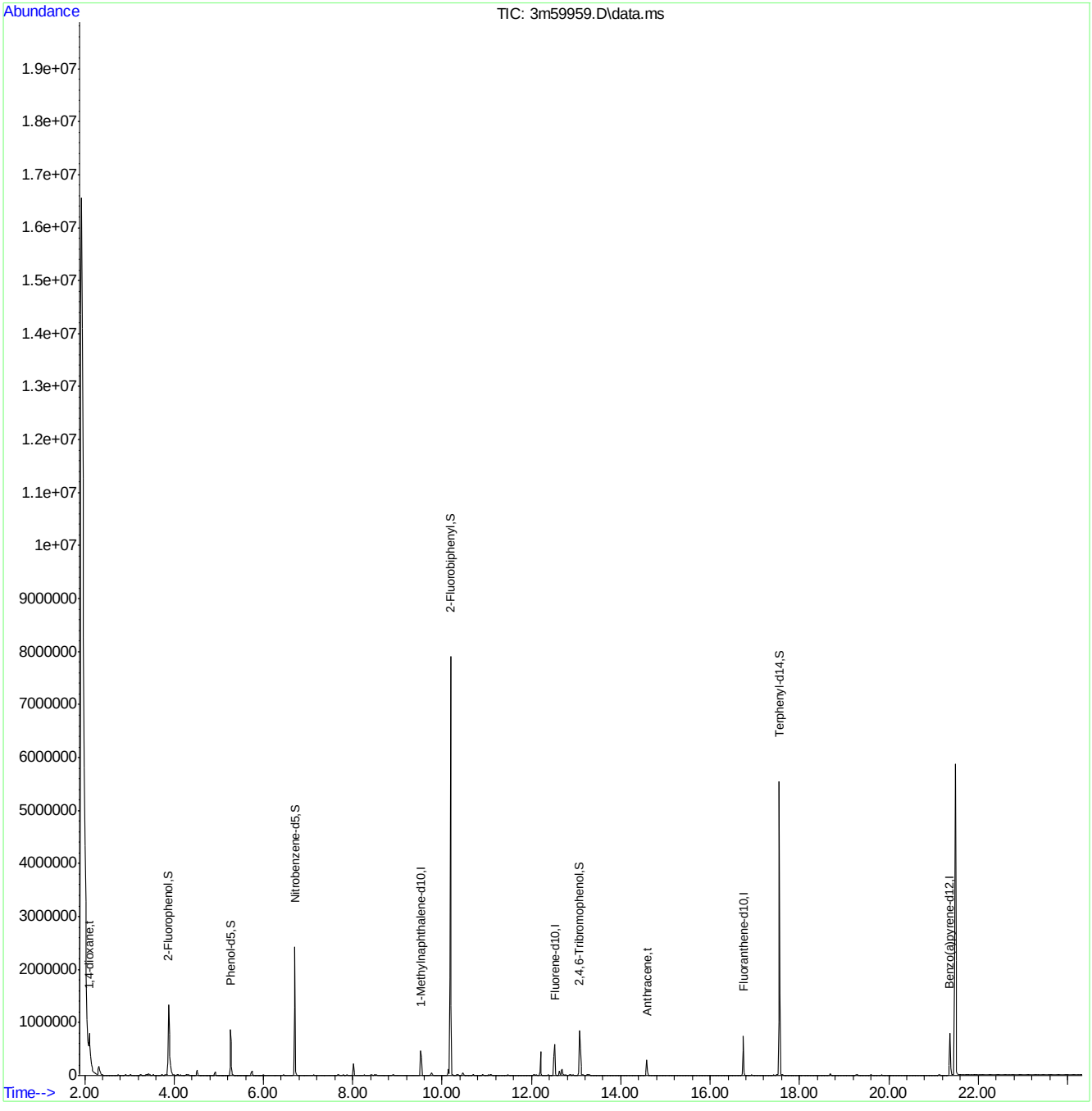
9.1.19

9

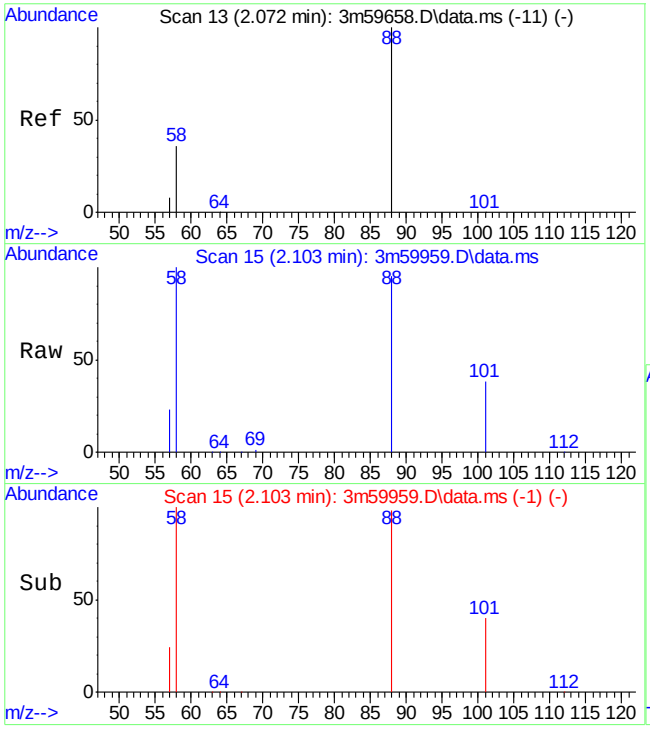
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59959.D
Acq On : 10 Mar 2016 4:31 pm
Operator : linseyk
Sample : jc15518-8
Misc : op91884a,e3m2811,900
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 11 11:16:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



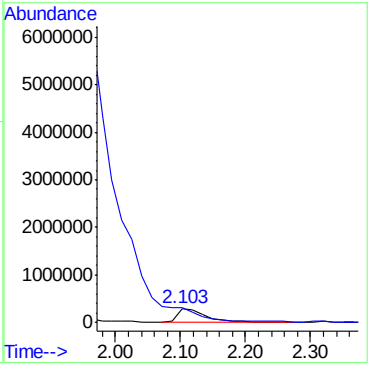
M3M2788SIM.M Fri Mar 11 11:16:55 2016 RPT1 Page: 2

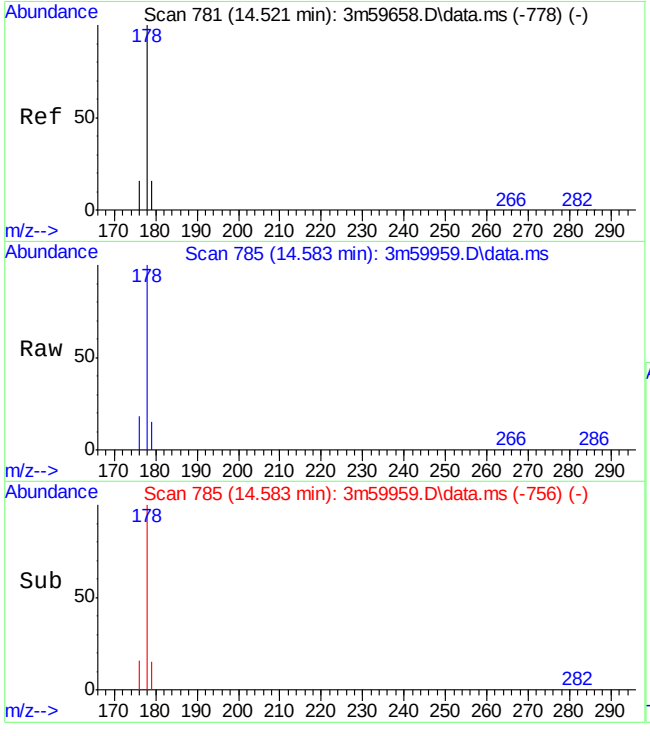


#2
1,4-dioxane
Concen: 32.34 ppm
RT: 2.103 min Scan# 15
Delta R.T. -0.046 min
Lab File: 3m59959.D
Acq: 10 Mar 2016 4:31 pm

Tgt Ion: 88 Resp: 824203

Ion	Ratio	Lower	Upper
88	100		
58	50.4	5.2	45.2#

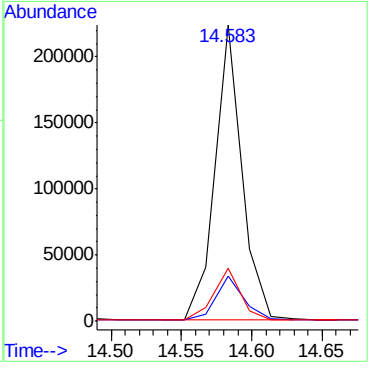




#25
Anthracene
Concen: 1.19 ppm
RT: 14.583 min Scan# 785
Delta R.T. -0.054 min
Lab File: 3m59959.D
Acq: 10 Mar 2016 4:31 pm

Tgt Ion:178 Resp: 297737

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.5
176	17.5	0.0	46.8



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103212.D Vial: 6
Acq On : 9 Mar 2016 6:25 pm Operator: linseyk
Sample : op91884-mb1 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 18:47:27 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	75192	40.00 ppm	-0.01
24) Naphthalene-d8	5.99	136	269736	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	150593	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	228653	40.00 ppm	-0.02
83) Chrysene-d12	15.76	240	200533	40.00 ppm	-0.04
92) Perylene-d12	18.32	264	172540	40.00 ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	75192	40.00 ppm	-0.01
104) Phenanthrene-d10b	11.07	188	228653	40.00 ppm	-0.02
106) Chrysene-d12b	15.76	240	200533	40.00 ppm	-0.04
108) Naphthalene-d8b	5.99	136	269736	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	150593	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	2.87	112	67097	25.64 ppm	-0.01
Spiked Amount 50.000			Recovery = 51.28%		
8) Phenol-d5	3.86	99	58630	18.36 ppm	0.02
Spiked Amount 50.000			Recovery = 36.72%		
25) Nitrobenzene-d5	4.97	82	112163	41.08 ppm	-0.03
Spiked Amount 50.000			Recovery = 82.16%		
51) 2-Fluorobiphenyl	7.68	172	199384	43.64 ppm	-0.03
Spiked Amount 50.000			Recovery = 87.28%		
73) 2,4,6-Tribromophenol	9.98	330	22758	42.57 ppm	-0.03
Spiked Amount 50.000			Recovery = 85.14%		
85) Terphenyl-d14	13.88	244	186076	47.13 ppm	-0.04
Spiked Amount 50.000			Recovery = 94.26%		

Target Compounds Qvalue

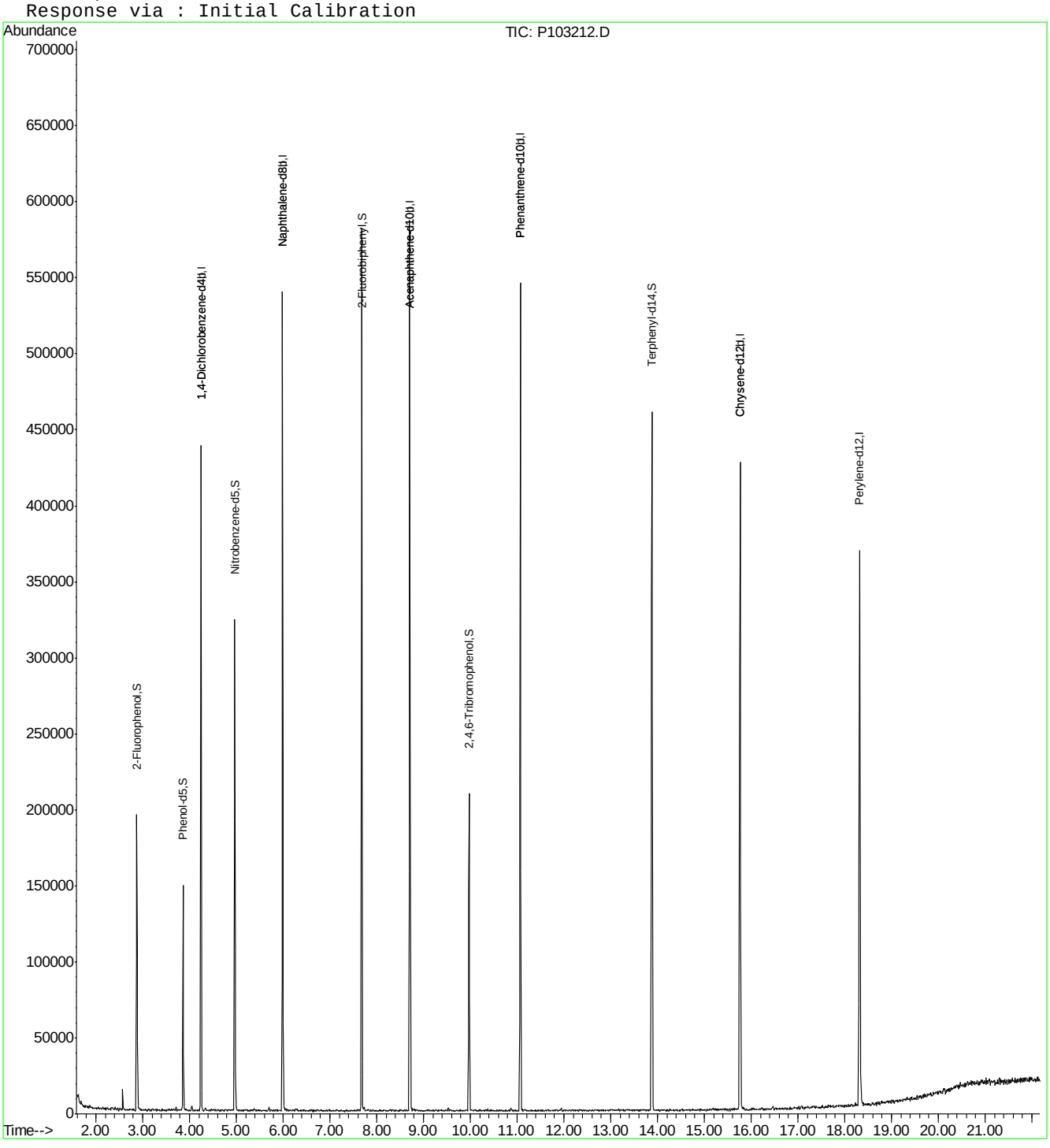
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103212.D Vial: 6
Acq On : 9 Mar 2016 6:25 pm Operator: linseyk
Sample : op91884-mb1 Inst : MSP
Misc : op91884,ep4533,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 9:07 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



P103212.D MP4524.M Thu Mar 10 09:07:25 2016 Page 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59948.D
Acq On : 10 Mar 2016 10:48 am
Operator : linseyk
Sample : op91884a-mb1
Misc : op91884a,e3m2811,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 10 11:54:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	347566	4.00	ppm	-0.06
14) Fluorene-d10	12.505	176	454981	4.00	ppm	-0.08
21) Fluoranthene-d10	16.731	212	707317	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.351	264	601752	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	1065363	20.88	ppm	0.00
Spiked Amount 50.000			Recovery = 41.76%			
4) Phenol-d5	5.238	99	1190559	14.12	ppm	-0.02
Spiked Amount 50.000			Recovery = 28.24%			
7) Nitrobenzene-d5	6.690	82	2597383	34.62	ppm	-0.05
Spiked Amount 50.000			Recovery = 69.24%			
15) 2-Fluorobiphenyl	10.191	172	5246219	36.56	ppm	-0.06
Spiked Amount 50.000			Recovery = 73.12%			
20) 2,4,6-Tribromophenol	13.070	330	574083	42.31	ppm	-0.08
Spiked Amount 50.000			Recovery = 84.62%			
28) Terphenyl-d14	17.550	244	5005780	43.85	ppm	-0.07
Spiked Amount 50.000			Recovery = 87.70%			

Target Compounds Qvalue

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

9.2.2

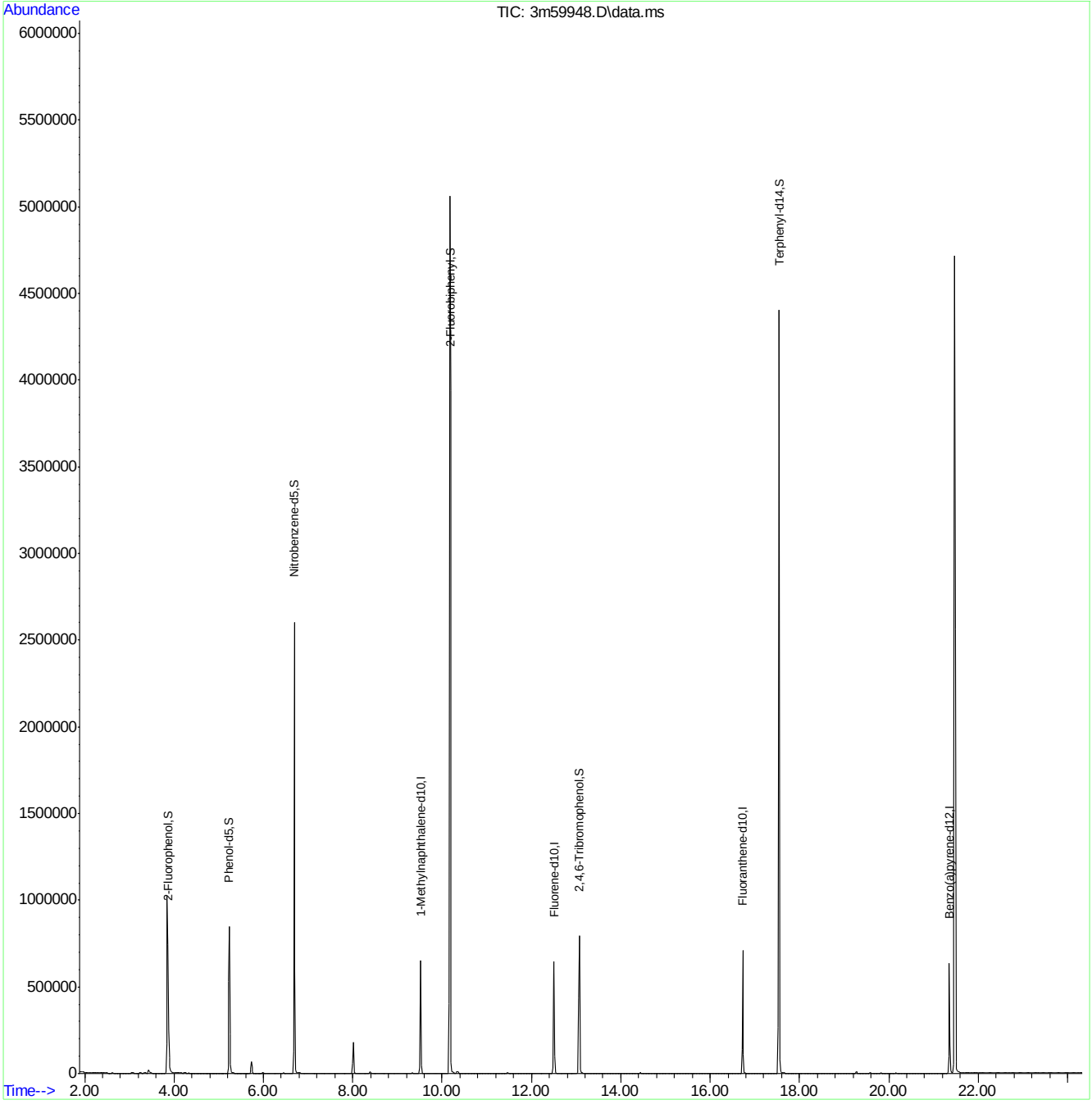
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59948.D
Acq On : 10 Mar 2016 10:48 am
Operator : linseyk
Sample : op91884a-mb1
Misc : op91884a,e3m2811,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 10 11:54:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103236.D Vial: 6
Acq On : 10 Mar 2016 11:06 am Operator: linseyk
Sample : op91884-bs1 Inst : MSP
Misc : op91884,ep4534,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:29:02 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.24	152	149522	40.00 ppm	-0.02
24) Naphthalene-d8	5.99	136	520453	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	304827	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	457423	40.00 ppm	-0.02
83) Chrysene-d12	15.77	240	413399	40.00 ppm	-0.03
92) Perylene-d12	18.33	264	395814	40.00 ppm	-0.03
102) 1,4-Dichlorobenzene-d4b	4.24	152	149522	40.00 ppm	-0.02
104) Phenanthrene-d10b	11.07	188	457423	40.00 ppm	-0.02
106) Chrysene-d12b	15.77	240	413399	40.00 ppm	-0.03
108) Naphthalene-d8b	5.99	136	520453	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	304827	40.00 ppm	-0.02
System Monitoring Compounds					
5) 2-Fluorophenol	2.87	112	130948	25.16 ppm	-0.01
Spiked Amount 50.000			Recovery = 50.32%		
8) Phenol-d5	3.85	99	111141	17.50 ppm	0.00
Spiked Amount 50.000			Recovery = 35.00%		
25) Nitrobenzene-d5	4.97	82	209811	39.82 ppm	-0.03
Spiked Amount 50.000			Recovery = 79.64%		
51) 2-Fluorobiphenyl	7.68	172	362876	39.24 ppm	-0.03
Spiked Amount 50.000			Recovery = 78.48%		
73) 2,4,6-Tribromophenol	9.97	330	49746	46.51 ppm	-0.03
Spiked Amount 50.000			Recovery = 93.02%		
85) Terphenyl-d14	13.88	244	370354	45.50 ppm	-0.04
Spiked Amount 50.000			Recovery = 91.00%		
Target Compounds					Qvalue
2) 1,4-Dioxane	1.71	88	45582	17.16 ppm	90
3) Pyridine	1.90	79	96658	16.12 ppm	98
4) N-Nitrosodimethylamine	1.87	42	50830	22.67 ppm	94
6) Indene	4.57	116	317387	37.32 ppm	99
7) Cumene	3.34	105	397486	32.35 ppm	99
9) Phenol	3.87	94	133935	20.44 ppm	82
10) Aniline	3.84	93	226457	31.72 ppm	81
11) bis(2-Chloroethyl)ether	3.92	93	187721	38.94 ppm	96
12) 2-Chlorophenol	4.00	128	188404	37.95 ppm	99
13) Decane	4.06	43	115469	29.23 ppm	99
14) 1,3-Dichlorobenzene	4.17	146	169373	30.45 ppm	100
15) 1,4-Dichlorobenzene	4.26	146	168825	31.60 ppm	98
16) Benzyl alcohol	4.43	108	108012	36.59 ppm	95
17) 1,2-Dichlorobenzene	4.45	146	166347	32.82 ppm	97
18) Acetophenone	4.76	105	264950	39.40 ppm	99
19) 2-Methylphenol	4.61	108	151959	35.98 ppm	98
20) 2,2'-oxybis(1-Chloropropan	4.60	121	39443	24.88 ppm	88
21) 3&4-Methylphenol	4.82	108	157432	34.17 ppm	99
22) n-Nitroso-di-n-propylamine	4.78	70	133203	39.48 ppm	98
23) Hexachloroethane	4.90	201	52056	29.90 ppm	93
26) Nitrobenzene	4.99	77	197545	39.08 ppm	99
27) Quinoline	6.52	129	388909	41.47 ppm	98
28) Isophorone	5.33	82	384499	44.85 ppm	97

(#) = qualifier out of range (m) = manual integration
P103236.D MP4524.M Thu Mar 10 11:30:30 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103236.D Vial: 6
Acq On : 10 Mar 2016 11:06 am Operator: linseyk
Sample : op91884-bs1 Inst : MSP
Misc : op91884,ep4534,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:29:02 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	5.44	139	107361	43.29 ppm	97
30) 2,4-Dimethylphenol	5.56	107	189893	45.09 ppm	99
31) Benzoic acid	5.72	105	41861	12.80 ppm	93
32) bis(2-Chloroethoxy)methane	5.67	93	220068	40.65 ppm	98
33) 2,4-Dichlorophenol	5.83	162	160417	43.59 ppm	96
34) 2,6-Dichlorophenol	6.14	162	147476	41.76 ppm	98
36) 1,2,4-Trichlorobenzene	5.92	180	137797	33.80 ppm	97
38) Naphthalene	6.02	128	486086	37.66 ppm	100
39) 4-Chloroaniline	6.13	127	195665	35.65 ppm	99
40) 2,3-Dichloroaniline	7.53	161	189670	40.57 ppm	99
41) Caprolactam	6.62	55	21107	12.20 ppm	95
42) Hexachlorobutadiene	6.24	225	63593	31.38 ppm	98
43) 4-Chloro-3-methylphenol	6.95	107	186918	47.55 ppm	98
44) 2-Methylnaphthalene	7.08	141	280740	39.26 ppm	98
45) 1-Methylnaphthalene	7.23	142	336624	38.59 ppm	99
46) Dimethylnaphthalene	8.07	156	296586	38.87 ppm	100
48) Hexachlorocyclopentadiene	7.34	237	117150	59.00 ppm	100
49) 2,4,6-Trichlorophenol	7.56	196	108959	45.63 ppm	98
50) 2,4,5-Trichlorophenol	7.64	196	116149	46.74 ppm	99
52) 2-Chloronaphthalene	7.83	162	298359	37.26 ppm	99
53) Biphenyl	7.82	154	387526	37.64 ppm	98
54) 2-Nitroaniline	8.03	65	113943	49.21 ppm	95
55) Dimethylphthalate	8.35	163	405816	43.85 ppm	100
56) Acenaphthylene	8.48	152	512100	40.04 ppm	99
57) 2,6-Dinitrotoluene	8.43	165	97173	49.22 ppm	99
58) 3-Nitroaniline	8.68	138	96104	41.35 ppm	96
59) Acenaphthene	8.76	153	329021	41.39 ppm	99
60) 2,4-Dinitrophenol	8.85	184	98110	84.41 ppm	94
61) 4-Nitrophenol	9.11	109	35718	28.24 ppm	94
62) Dibenzofuran	9.04	168	476054	42.50 ppm	97
63) 2,4-Dinitrotoluene	9.06	165	128656	42.34 ppm	94
64) 2,3,4,6-Tetrachlorophenol	9.27	232	90496	47.40 ppm	94
65) Diethylphthalate	9.50	149	419441	45.60 ppm	100
66) Fluorene	9.58	166	396964	43.40 ppm	99
67) 4-Chlorophenyl-phenylether	9.62	204	166723	40.62 ppm	98
68) 4-Nitroaniline	9.66	138	110894	47.50 ppm	97
70) 4,6-Dinitro-2-methylphenol	9.71	198	73622	43.85 ppm	96
71) n-Nitrosodiphenylamine	9.82	169	291385	44.24 ppm	98
72) 1,2-Diphenylhydrazine	9.87	77	418318	46.35 ppm	98
74) 4-Bromophenyl-phenylether	10.39	248	100858	45.07 ppm	98
75) Hexachlorobenzene	10.46	284	105081	43.25 ppm	99
76) Pentachlorophenol	10.81	266	61358	42.93 ppm	98
77) Phenanthrene	11.10	178	527514	44.96 ppm	100
78) Anthracene	11.18	178	534001	45.40 ppm	99
79) Carbazole	11.49	167	580176	48.15 ppm	99
80) Di-n-butylphthalate	12.17	149	707029	50.34 ppm	99
81) Fluoranthene	13.11	202	610221	48.33 ppm	97
82) Octadecane	11.06	57	204740	44.45 ppm	99
84) Pyrene	13.50	202	632041	48.04 ppm	97

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103236.D Vial: 6
Acq On : 10 Mar 2016 11:06 am Operator: linseyk
Sample : op91884-bs1 Inst : MSP
Misc : op91884,ep4534,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:29:02 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86)	Butylbenzylphthalate	14.87	149	324556	50.73 ppm	100
88)	Benzo[a]anthracene	15.75	228	527427	48.89 ppm	99
89)	3,3'-Dichlorobenzidine	15.78	252	305753	69.94 ppm	99
90)	Chrysene	15.82	228	501394	46.96 ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.05	149	458838	45.91 ppm	99
93)	Di-n-octylphthalate	17.25	149	726382	42.06 ppm	99
94)	Benzo[b]fluoranthene	17.70	252	532874	47.33 ppm	98
95)	Benzo[k]fluoranthene	17.75	252	519322	47.89 ppm	98
96)	Benzo[a]pyrene	18.23	252	480727	48.41 ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.96	276	443180	50.55 ppm	99
99)	Dibenz[a,h]anthracene	20.00	278	475149	50.30 ppm	99
100)	7,12-Dimethylbenz(a)anthra	17.71	256	210222	44.10 ppm	97
101)	Benzo[g,h,i]perylene	20.32	276	482207	48.03 ppm	98
103)	Benzaldehyde	3.72	105	156647	34.85 ppm	96
105)	Atrazine	10.73	200	106305	45.54 ppm	92
107)	Benzidine	13.42	184	137639	18.91 ppm	98
111)	1,2,4,5-Tetrachlorobenzene	7.34	216	137878	32.96 ppm	97

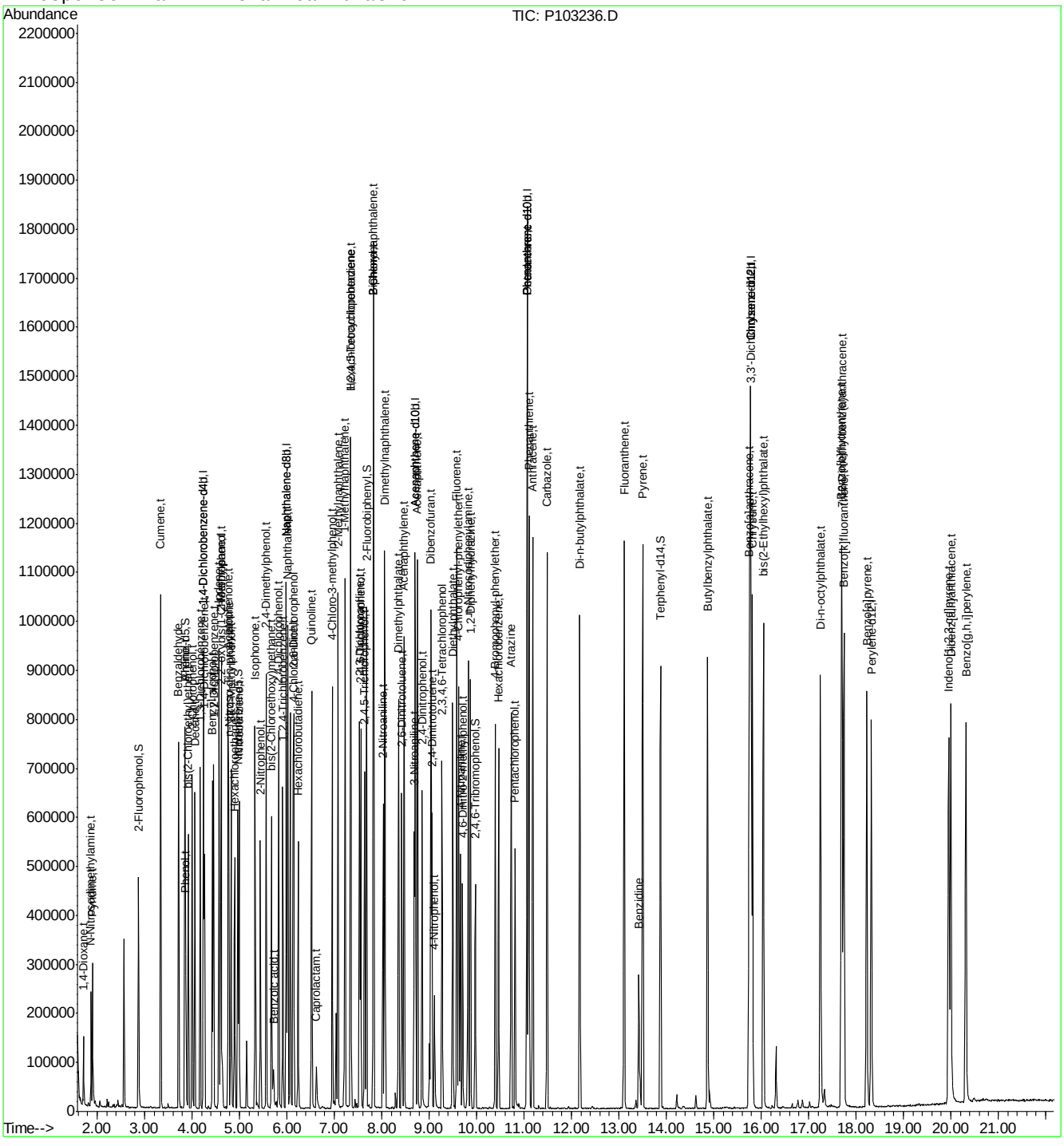
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103236.D Vial: 6
Acq On : 10 Mar 2016 11:06 am Operator: linseyk
Sample : op91884-bs1 Inst : MSP
Misc : op91884,ep4534,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:30 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59949.D
Acq On : 10 Mar 2016 11:19 am
Operator : linseyk
Sample : op91884a-bs12
Misc : op91884a,e3m2811,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 10 11:54:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

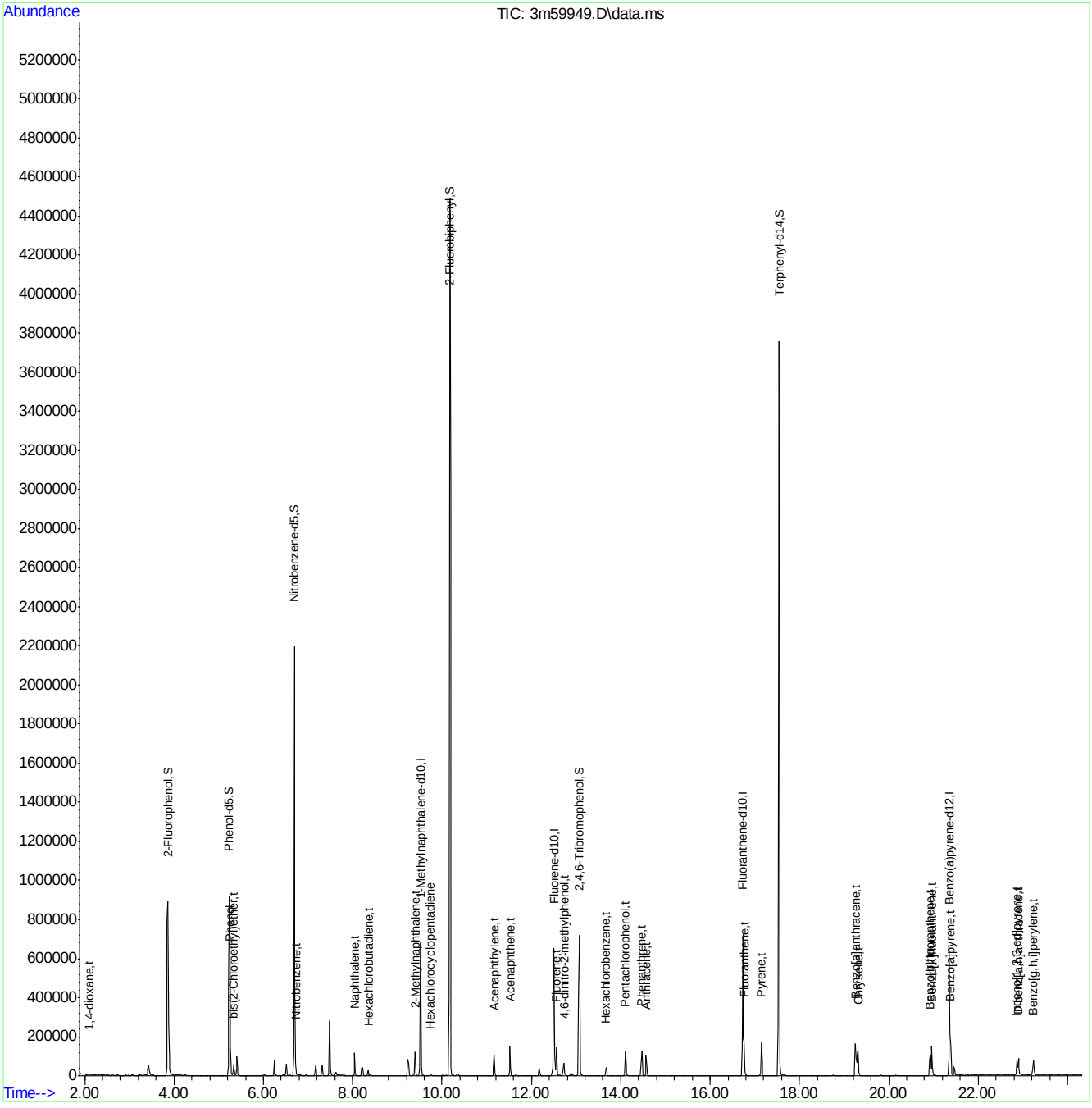
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	362947	4.00	ppm	-0.06
14) Fluorene-d10	12.505	176	461116	4.00	ppm	-0.08
21) Fluoranthene-d10	16.731	212	729460	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.351	264	608951	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	948773	17.80	ppm	0.00
Spiked Amount 50.000			Recovery = 35.60%			
4) Phenol-d5	5.238	99	1095315	12.44	ppm	-0.02
Spiked Amount 50.000			Recovery = 24.88%			
7) Nitrobenzene-d5	6.690	82	2167091	27.66	ppm	-0.05
Spiked Amount 50.000			Recovery = 55.32%			
15) 2-Fluorobiphenyl	10.176	172	4369960	30.05	ppm	-0.08
Spiked Amount 50.000			Recovery = 60.10%			
20) 2,4,6-Tribromophenol	13.070	330	548189	39.86	ppm	-0.08
Spiked Amount 50.000			Recovery = 79.72%			
28) Terphenyl-d14	17.550	244	4435377	37.67	ppm	-0.07
Spiked Amount 50.000			Recovery = 75.34%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	7817	0.31	ppm #	19
5) Phenol	5.251	94	159396	1.72	ppm #	32
6) bis(2-Chloroethyl)ether	5.335	93	36186	0.53	ppm	87
8) Nitrobenzene	6.728	77	49706	0.59	ppm	89
9) Naphthalene	8.046	128	120338	0.52	ppm	97
10) Hexachlorobutadiene	8.347	225	15221	0.43	ppm	94
11) 2-Methylnaphthalene	9.396	141	66921	0.55	ppm	78
13) Hexachlorocyclopentadiene	9.745	237	8426	0.23	ppm	84
16) Acenaphthylene	11.165	152	110356	0.60	ppm	93
17) Acenaphthene	11.520	153	76970	0.64	ppm	87
18) 4,6-dinitro-2-methylph...	12.731	198	67188	3.45	ppm	89
19) Fluorene	12.561	166	99157	0.65	ppm	92
22) Hexachlorobenzene	13.671	284	24248	0.65	ppm	98
23) Pentachlorophenol	14.104	266	80951	4.24	ppm	94
24) Phenanthrene	14.475	178	145409	0.72	ppm	93
25) Anthracene	14.567	178	130579	0.66	ppm	94
26) Fluoranthene	16.762	202	176982	0.76	ppm	97
27) Pyrene	17.148	202	176428	0.76	ppm	97
29) Benzo[a]anthracene	19.250	228	145637	0.69	ppm	99
30) Chrysene	19.311	228	145506	0.69	ppm	99
32) Benzo[b]fluoranthene	20.934	252	143533	0.60	ppm	85
33) Benzo[k]fluoranthene	20.965	252	123332	0.67	ppm	93
34) Benzo[a]pyrene	21.382	252	128809	0.64	ppm	92
35) Indeno[1,2,3-cd]pyrene	22.862	276	119401	0.51	ppm	92
36) Dibenz[a,h]anthracene	22.899	278	94500	0.51	ppm	98
37) Benzo[g,h,i]perylene	23.238	276	103621	0.50	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59949.D
Acq On : 10 Mar 2016 11:19 am
Operator : linseyk
Sample : op91884a-bs12
Misc : op91884a,e3m2811,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 10 11:54:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 03/16/16 11:30

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 01:36:08 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	96786	40.00 ppm	-0.01
24) Naphthalene-d8	5.99	136	346433	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	204987	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	306706	40.00 ppm	-0.02
83) Chrysene-d12	15.77	240	279333	40.00 ppm	-0.03
92) Perylene-d12	18.32	264	255879	40.00 ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	96786	40.00 ppm	-0.01
104) Phenanthrene-d10b	11.07	188	306706	40.00 ppm	-0.02
106) Chrysene-d12b	15.77	240	279333	40.00 ppm	-0.03
108) Naphthalene-d8b	5.99	136	346433	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	204987	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	2.88	112	120930	35.90 ppm	0.00
Spiked Amount 50.000			Recovery = 71.80%		
8) Phenol-d5	3.86	99	130895	31.84 ppm	0.02
Spiked Amount 50.000			Recovery = 63.68%		
25) Nitrobenzene-d5	4.97	82	149088	42.51 ppm	-0.03
Spiked Amount 50.000			Recovery = 85.02%		
51) 2-Fluorobiphenyl	7.68	172	265510	42.69 ppm	-0.03
Spiked Amount 50.000			Recovery = 85.38%		
73) 2,4,6-Tribromophenol	9.98	330	33657	46.93 ppm	-0.03
Spiked Amount 50.000			Recovery = 93.86%		
85) Terphenyl-d14	13.88	244	255191	46.40 ppm	-0.04
Spiked Amount 50.000			Recovery = 92.80%		

Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	418220	243.21 ppm		95
3) Pyridine	1.90	79	108638	27.98 ppm		99
4) N-Nitrosodimethylamine	1.87	42	49836	34.33 ppm		83
6) Indene	4.57	116	234450	42.59 ppm		97
7) Cumene	3.34	105	303770	38.20 ppm		99
9) Phenol	3.87	94	147956	34.88 ppm		88
10) Aniline	3.85	93	175923	38.07 ppm		80
11) bis(2-Chloroethyl)ether	3.92	93	136776	43.83 ppm		98
12) 2-Chlorophenol	4.01	128	144279	44.89 ppm		100
13) Decane	4.06	43	96129	37.59 ppm		96
14) 1,3-Dichlorobenzene	4.18	146	135741	37.70 ppm		99
15) 1,4-Dichlorobenzene	4.27	146	133414	38.58 ppm		100
16) Benzyl alcohol	4.43	108	90572	47.40 ppm		95
17) 1,2-Dichlorobenzene	4.46	146	129574	39.49 ppm		98
18) Acetophenone	4.77	105	189993	43.65 ppm		98
19) 2-Methylphenol	4.62	108	125562	45.93 ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.61	121	30180	29.41 ppm	#	93
21) 3&4-Methylphenol	4.83	108	137415	46.07 ppm		97
22) n-Nitroso-di-n-propylamine	4.78	70	94705	43.36 ppm		93
23) Hexachloroethane	4.90	201	43723	38.80 ppm		98
26) Nitrobenzene	4.99	77	141953	42.19 ppm		97
27) Quinoline	6.52	129	269986	43.25 ppm		100
28) Isophorone	5.34	82	277673	48.66 ppm		98

(#) = qualifier out of range (m) = manual integration
P103226.D MP4524.M Thu Mar 10 11:45:40 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 01:36:08 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29)	2-Nitrophenol	5.45	139	77762	47.11	ppm	96
30)	2,4-Dimethylphenol	5.57	107	146061	52.10	ppm	98
31)	Benzoic acid	5.71	105	21484m	9.87	ppm	
32)	bis(2-Chloroethoxy)methane	5.68	93	158130	43.88	ppm	99
33)	2,4-Dichlorophenol	5.83	162	120101	49.03	ppm	98
34)	2,6-Dichlorophenol	6.15	162	109468	46.57	ppm	99
36)	1,2,4-Trichlorobenzene	5.92	180	107795	39.72	ppm	99
38)	Naphthalene	6.02	128	364630	42.44	ppm	99
39)	4-Chloroaniline	6.13	127	141220	38.66	ppm	99
40)	2,3-Dichloroaniline	7.54	161	137116	44.06	ppm	98
41)	Caprolactam	6.63	55	26641	23.13	ppm	91
42)	Hexachlorobutadiene	6.24	225	52625	39.02	ppm	96
43)	4-Chloro-3-methylphenol	6.96	107	135348	51.72	ppm	100
44)	2-Methylnaphthalene	7.08	141	205226	43.12	ppm	98
45)	1-Methylnaphthalene	7.23	142	245217	42.23	ppm	98
46)	Dimethylnaphthalene	8.06	156	226454	44.59	ppm	98
48)	Hexachlorocyclopentadiene	7.35	237	88685	66.41	ppm	99
49)	2,4,6-Trichlorophenol	7.56	196	76931	47.90	ppm	97
50)	2,4,5-Trichlorophenol	7.64	196	77835	46.58	ppm	98
52)	2-Chloronaphthalene	7.83	162	221579	41.15	ppm	98
53)	Biphenyl	7.82	154	291223	42.07	ppm	100
54)	2-Nitroaniline	8.03	65	76947	49.42	ppm	96
55)	Dimethylphthalate	8.36	163	282742	45.43	ppm	97
56)	Acenaphthylene	8.48	152	370803	43.11	ppm	99
57)	2,6-Dinitrotoluene	8.43	165	63626	47.93	ppm	98
58)	3-Nitroaniline	8.68	138	67670	43.30	ppm	99
59)	Acenaphthene	8.76	153	234992	43.96	ppm	98
60)	2,4-Dinitrophenol	8.86	184	64951	83.22	ppm	93
61)	4-Nitrophenol	9.12	109	36033	42.37	ppm	92
62)	Dibenzofuran	9.04	168	340468	45.20	ppm	99
63)	2,4-Dinitrotoluene	9.06	165	84897	41.48	ppm	94
64)	2,3,4,6-Tetrachlorophenol	9.28	232	60203	46.89	ppm	95
65)	Diethylphthalate	9.50	149	283045	45.75	ppm	99
66)	Fluorene	9.58	166	278653	45.30	ppm	99
67)	4-Chlorophenyl-phenylether	9.62	204	118503	42.94	ppm	99
68)	4-Nitroaniline	9.66	138	74283	47.32	ppm	95
70)	4,6-Dinitro-2-methylphenol	9.71	198	47643	42.42	ppm	95
71)	n-Nitrosodiphenylamine	9.82	169	205107	46.44	ppm	99
72)	1,2-Diphenylhydrazine	9.87	77	292995	48.42	ppm	99
74)	4-Bromophenyl-phenylether	10.40	248	71023	47.33	ppm	95
75)	Hexachlorobenzene	10.46	284	71144	43.67	ppm	99
76)	Pentachlorophenol	10.81	266	42527	44.23	ppm	97
77)	Phenanthrene	11.10	178	367301	46.69	ppm	99
78)	Anthracene	11.18	178	374870	47.53	ppm	99
79)	Carbazole	11.49	167	399713	49.48	ppm	100
80)	Di-n-butylphthalate	12.18	149	506913	53.83	ppm	100
81)	Fluoranthene	13.11	202	427266	50.47	ppm	97
82)	Octadecane	11.07	57	143469	46.45	ppm	99
84)	Pyrene	13.50	202	434203	48.84	ppm	98

(#) = qualifier out of range (m) = manual integration
P103226.D MP4524.M Thu Mar 10 11:45:40 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 01:36:08 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	14.87	149	229742	53.15	ppm	99
88)	Benzo[a]anthracene	15.75	228	361794	49.64	ppm	98
89)	3,3'-Dichlorobenzidine	15.78	252	220461	75.26	ppm	98
90)	Chrysene	15.82	228	333926	46.29	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.05	149	304988	45.10	ppm	99
93)	Di-n-octylphthalate	17.25	149	524461	47.83	ppm	99
94)	Benzo[b]fluoranthene	17.69	252	348286	47.86	ppm	97
95)	Benzo[k]fluoranthene	17.75	252	337920	48.20	ppm	98
96)	Benzo[a]pyrene	18.23	252	313658	48.86	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.95	276	258923	45.68	ppm	97
99)	Dibenz[a,h]anthracene	19.99	278	274211	44.91	ppm	98
100)	7,12-Dimethylbenz(a)anthra	17.71	256	132968	43.15	ppm	98
101)	Benzo[g,h,i]perylene	20.31	276	269174	41.47	ppm	97
103)	Benzaldehyde	3.72	105	111872	38.45	ppm	98
105)	Atrazine	10.73	200	73319	46.85	ppm	87
107)	Benzidine	13.43	184	247250	50.28	ppm	98
111)	1,2,4,5-Tetrachlorobenzene	7.35	216	106824	37.97	ppm	97

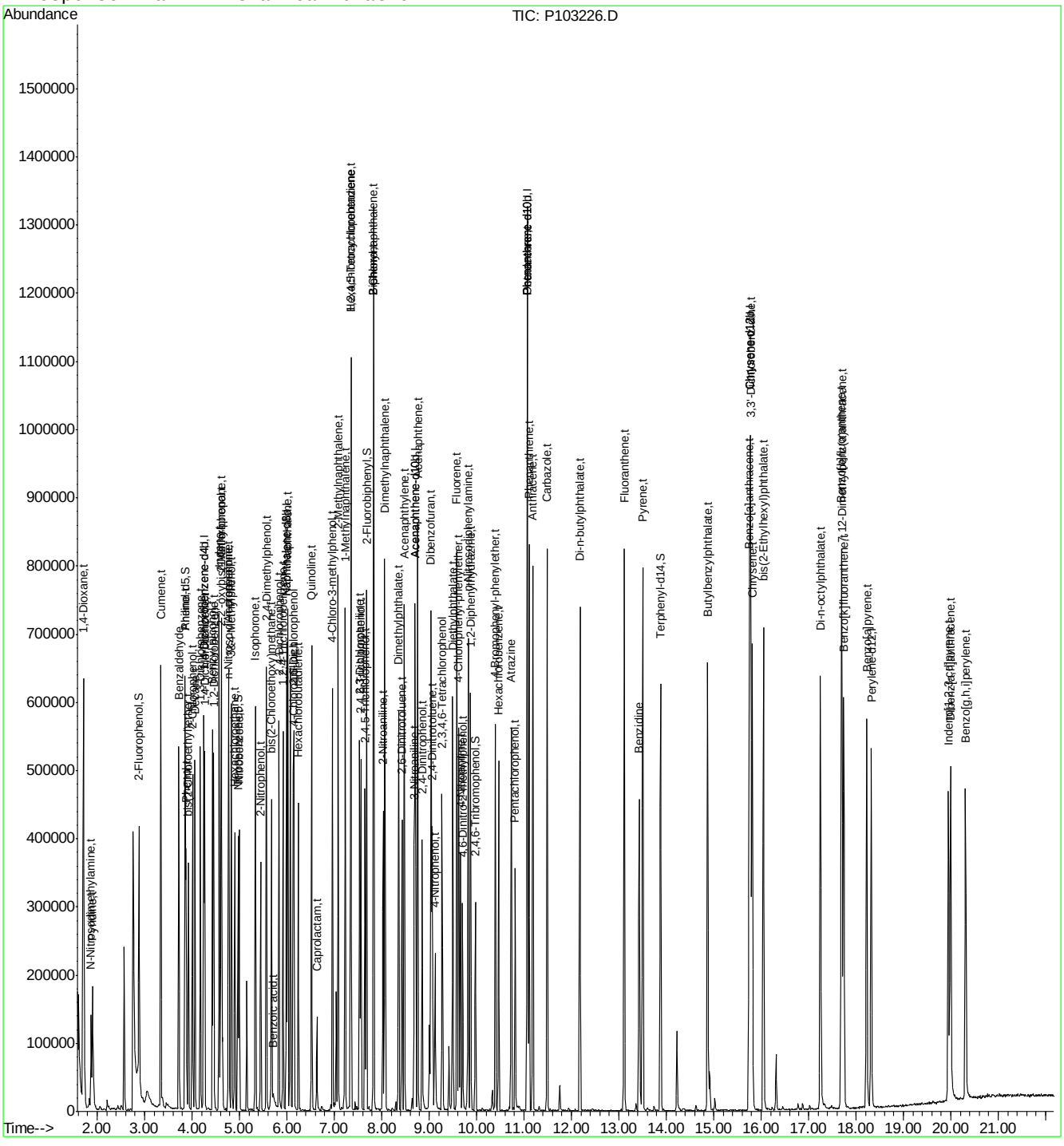
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:45 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

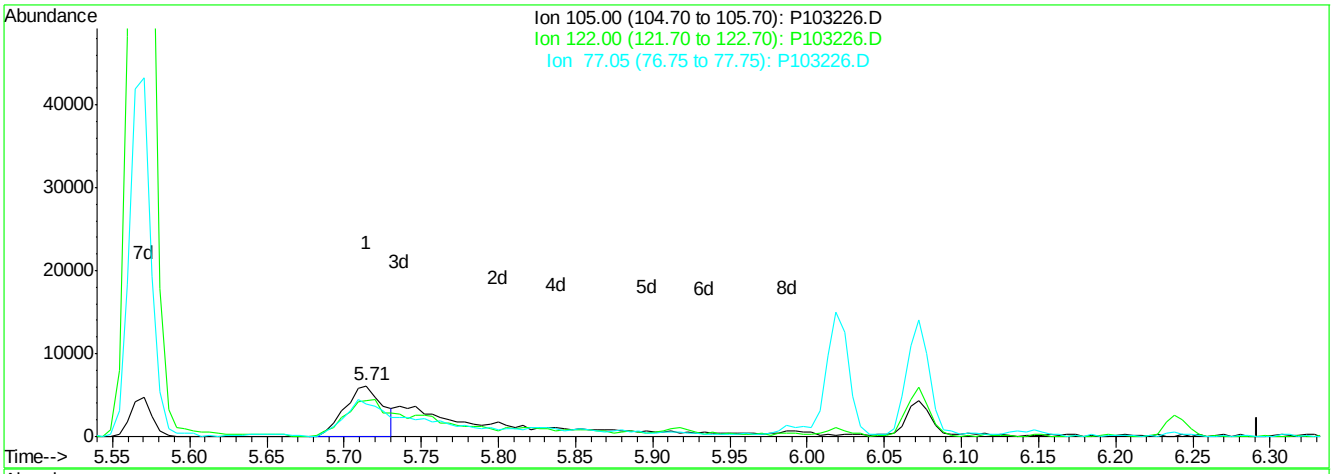
Sample Number:	OP91884-MS	**Method:**	SW846 8270D
Lab FileID:	P103226.D	**Analyst approved:**	03/10/16 11:48 Linsey Kirschmann
Injection Time:	03/10/16 01:13	**Supervisor approved:**	03/16/16 11:30 Kristi Schollenberger

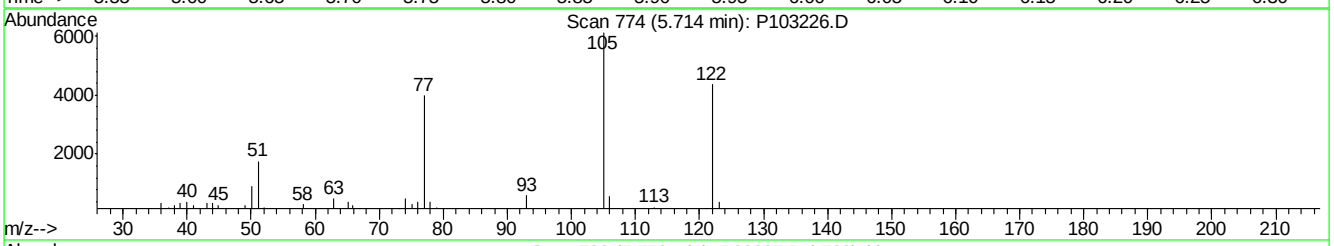
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.71	Split peak

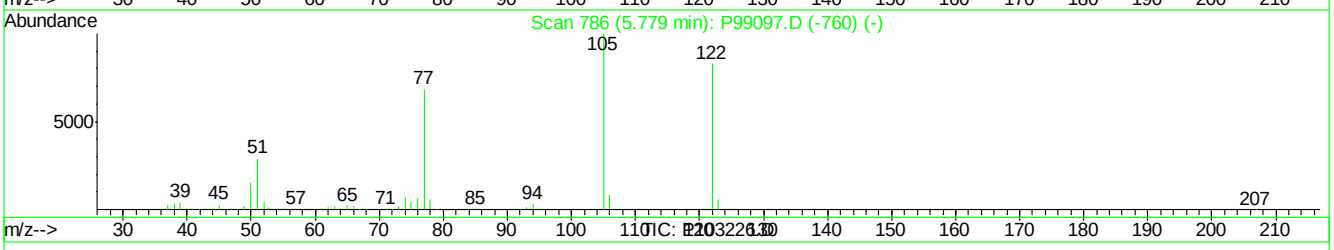
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 1:36 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.71min 4.88ppm

response 10624

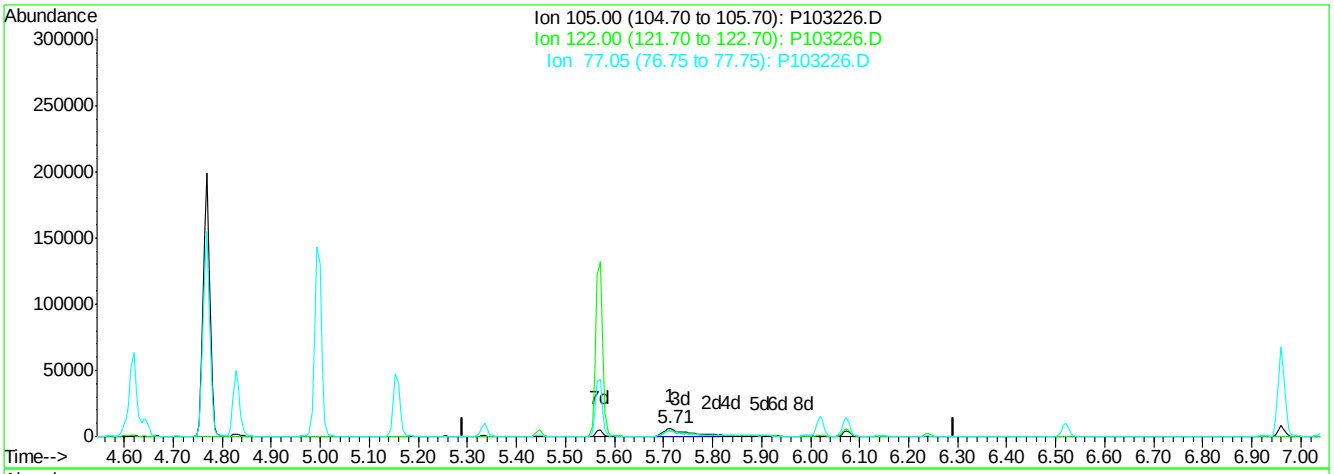
Ion	Exp%	Act%
105.00	100	100
122.00	78.00	66.04
77.05	71.90	64.21
0.00	0.00	0.00

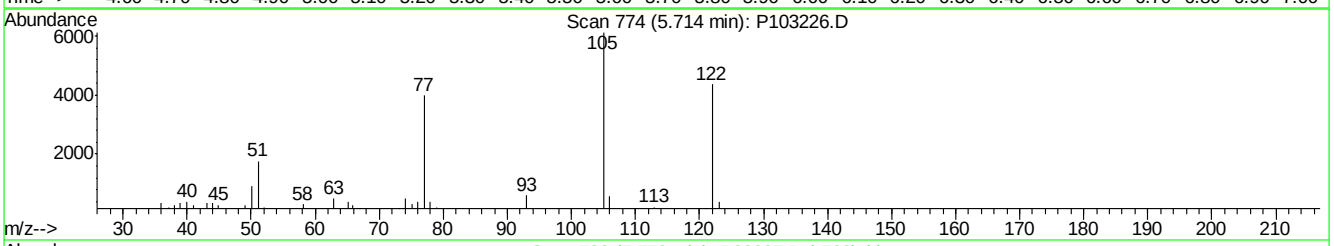
P103226.D MP4524.M Thu Mar 10 11:44:56 2016

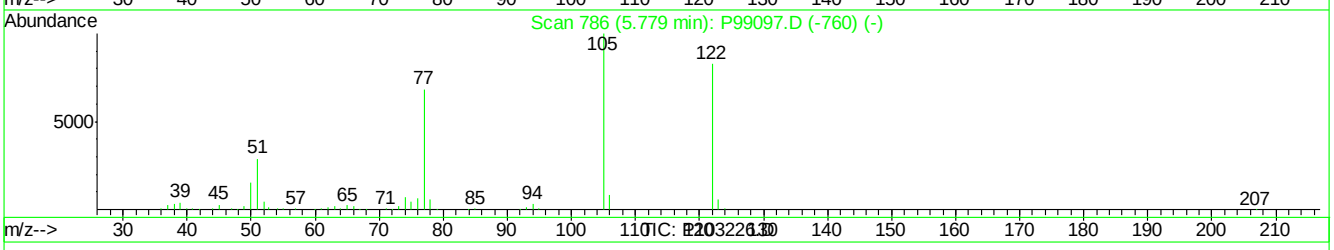
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103226.D Vial: 20
Acq On : 10 Mar 2016 1:13 am Operator: linseyk
Sample : op91884-ms Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.71min 9.87ppm m

response 21484

Ion	Exp%	Act%
105.00	100	100
122.00	78.00	71.21
77.05	71.90	65.13
0.00	0.00	0.00

P103226.D MP4524.M Thu Mar 10 11:45:05 2016

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 03/16/16 11:30

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 02:05:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	70305	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	254691	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	145709	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	231349	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	216908	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	205968	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	70305	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	231349	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	216908	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	254691	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	145709	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	93781	38.32	ppm	0.00
Spiked Amount 50.000			Recovery = 76.64%			
8) Phenol-d5	3.86	99	104721	35.07	ppm	0.02
Spiked Amount 50.000			Recovery = 70.14%			
25) Nitrobenzene-d5	4.97	82	116654	45.24	ppm	-0.03
Spiked Amount 50.000			Recovery = 90.48%			
51) 2-Fluorobiphenyl	7.68	172	209972	47.50	ppm	-0.03
Spiked Amount 50.000			Recovery = 95.00%			
73) 2,4,6-Tribromophenol	9.98	330	26217	48.47	ppm	-0.03
Spiked Amount 50.000			Recovery = 96.94%			
85) Terphenyl-d14	13.88	244	202200	47.34	ppm	-0.04
Spiked Amount 50.000			Recovery = 94.68%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.70	88	292016	233.78	ppm	96
3) Pyridine	1.89	79	80582	28.58	ppm	96
4) N-Nitrosodimethylamine	1.86	42	36142	34.28	ppm	88
6) Indene	4.57	116	173440	43.37	ppm	99
7) Cumene	3.34	105	215271	37.27	ppm	98
9) Phenol	3.87	94	114428	37.14	ppm	86
10) Aniline	3.85	93	125904	37.51	ppm	80
11) bis(2-Chloroethyl)ether	3.92	93	102457	45.20	ppm	97
12) 2-Chlorophenol	4.01	128	112428	48.16	ppm	97
13) Decane	4.06	43	68949	37.12	ppm	94
14) 1,3-Dichlorobenzene	4.18	146	98958	37.83	ppm	98
15) 1,4-Dichlorobenzene	4.27	146	100750	40.11	ppm	97
16) Benzyl alcohol	4.43	108	68265	49.18	ppm	96
17) 1,2-Dichlorobenzene	4.46	146	97735	41.01	ppm	98
18) Acetophenone	4.77	105	144388	45.67	ppm	98
19) 2-Methylphenol	4.62	108	96753	48.73	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.60	121	22814	30.60	ppm	92
21) 3&4-Methylphenol	4.83	108	105057	48.49	ppm	98
22) n-Nitroso-di-n-propylamine	4.78	70	74155	46.74	ppm	94
23) Hexachloroethane	4.90	201	31539	38.53	ppm	98
26) Nitrobenzene	4.99	77	111138	44.93	ppm	99
27) Quinoline	6.52	129	210511	45.87	ppm	98
28) Isophorone	5.34	82	216125	51.52	ppm	98

(#) = qualifier out of range (m) = manual integration
P103227.D MP4524.M Thu Mar 10 11:46:40 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 02:05:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	5.45	139	57925	47.73 ppm	96
30) 2,4-Dimethylphenol	5.57	107	110589	53.66 ppm	97
31) Benzoic acid	5.70	105	13866m	8.66 ppm	
32) bis(2-Chloroethoxy)methane	5.68	93	123694	46.69 ppm	99
33) 2,4-Dichlorophenol	5.83	162	90247	50.12 ppm	98
34) 2,6-Dichlorophenol	6.15	162	82685	47.84 ppm	99
36) 1,2,4-Trichlorobenzene	5.92	180	82607	41.40 ppm	96
38) Naphthalene	6.02	128	294363	46.60 ppm	98
39) 4-Chloroaniline	6.13	127	103095	38.39 ppm	98
40) 2,3-Dichloroaniline	7.54	161	103799	45.36 ppm	98
41) Caprolactam	6.62	55	20631	24.37 ppm	93
42) Hexachlorobutadiene	6.24	225	39767	40.10 ppm	99
43) 4-Chloro-3-methylphenol	6.96	107	102036	53.04 ppm	99
44) 2-Methylnaphthalene	7.08	141	156383	44.69 ppm	97
45) 1-Methylnaphthalene	7.23	142	190713	44.68 ppm	98
46) Dimethylnaphthalene	8.06	156	170969	45.79 ppm	96
48) Hexachlorocyclopentadiene	7.35	237	63141	66.52 ppm	98
49) 2,4,6-Trichlorophenol	7.56	196	59308	51.95 ppm	98
50) 2,4,5-Trichlorophenol	7.64	196	59729	50.29 ppm	99
52) 2-Chloronaphthalene	7.83	162	178371	46.60 ppm	98
53) Biphenyl	7.82	154	223506	45.42 ppm	98
54) 2-Nitroaniline	8.03	65	59211	53.50 ppm	97
55) Dimethylphthalate	8.35	163	218287	49.34 ppm	98
56) Acenaphthylene	8.48	152	287744	47.06 ppm	99
57) 2,6-Dinitrotoluene	8.42	165	49104	52.04 ppm	92
58) 3-Nitroaniline	8.68	138	50031	45.04 ppm	98
59) Acenaphthene	8.76	153	185962	48.94 ppm	100
60) 2,4-Dinitrophenol	8.85	184	45351	81.88 ppm	93
61) 4-Nitrophenol	9.12	109	26618	44.03 ppm	90
62) Dibenzofuran	9.04	168	263701	49.25 ppm	99
63) 2,4-Dinitrotoluene	9.06	165	66370	46.02 ppm	99
64) 2,3,4,6-Tetrachlorophenol	9.27	232	44521	48.78 ppm	97
65) Diethylphthalate	9.50	149	221923	50.47 ppm	99
66) Fluorene	9.58	166	220713	50.48 ppm	100
67) 4-Chlorophenyl-phenylether	9.62	204	92642	47.22 ppm	97
68) 4-Nitroaniline	9.66	138	57211	51.27 ppm	96
70) 4,6-Dinitro-2-methylphenol	9.70	198	35077	41.48 ppm	95
71) n-Nitrosodiphenylamine	9.82	169	158507	47.58 ppm	98
72) 1,2-Diphenylhydrazine	9.87	77	223582	48.98 ppm	99
74) 4-Bromophenyl-phenylether	10.39	248	53747	47.48 ppm	98
75) Hexachlorobenzene	10.46	284	54901	44.67 ppm	98
76) Pentachlorophenol	10.81	266	30493	42.26 ppm	97
77) Phenanthrene	11.10	178	294142	49.57 ppm	99
78) Anthracene	11.18	178	294289	49.47 ppm	99
79) Carbazole	11.49	167	314624	51.63 ppm	98
80) Di-n-butylphthalate	12.18	149	388626	54.71 ppm	98
81) Fluoranthene	13.11	202	342073	53.57 ppm	99
82) Octadecane	11.07	57	111782	47.98 ppm	98
84) Pyrene	13.50	202	353387	51.19 ppm	99

(#) = qualifier out of range (m) = manual integration
P103227.D MP4524.M Thu Mar 10 11:46:40 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 02:05:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	14.87	149	180227	53.69	ppm	100
88)	Benzo[a]anthracene	15.75	228	295333	52.18	ppm	99
89)	3,3'-Dichlorobenzidine	15.78	252	172880	76.11	ppm	99
90)	Chrysene	15.81	228	277337	49.51	ppm	97
91)	bis(2-Ethylhexyl)phthalate	16.05	149	231997	44.11	ppm	98
93)	Di-n-octylphthalate	17.25	149	403746	45.38	ppm	97
94)	Benzo[b]fluoranthene	17.69	252	311767	53.22	ppm	99
95)	Benzo[k]fluoranthene	17.74	252	288547	51.13	ppm	98
96)	Benzo[a]pyrene	18.23	252	274641	53.15	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.95	276	236981	51.94	ppm	95
99)	Dibenz[a,h]anthracene	19.99	278	253174	51.51	ppm	98
100)	7,12-Dimethylbenz(a)anthra	17.70	256	117616	47.42	ppm	98
101)	Benzo[g,h,i]perylene	20.31	276	260613	49.89	ppm	98
103)	Benzaldehyde	3.72	105	84910	40.18	ppm	96
105)	Atrazine	10.73	200	56218	47.62	ppm	92
107)	Benzidine	13.42	184	224017	58.67	ppm	100
111)	1,2,4,5-Tetrachlorobenzene	7.35	216	84267	42.14	ppm	97

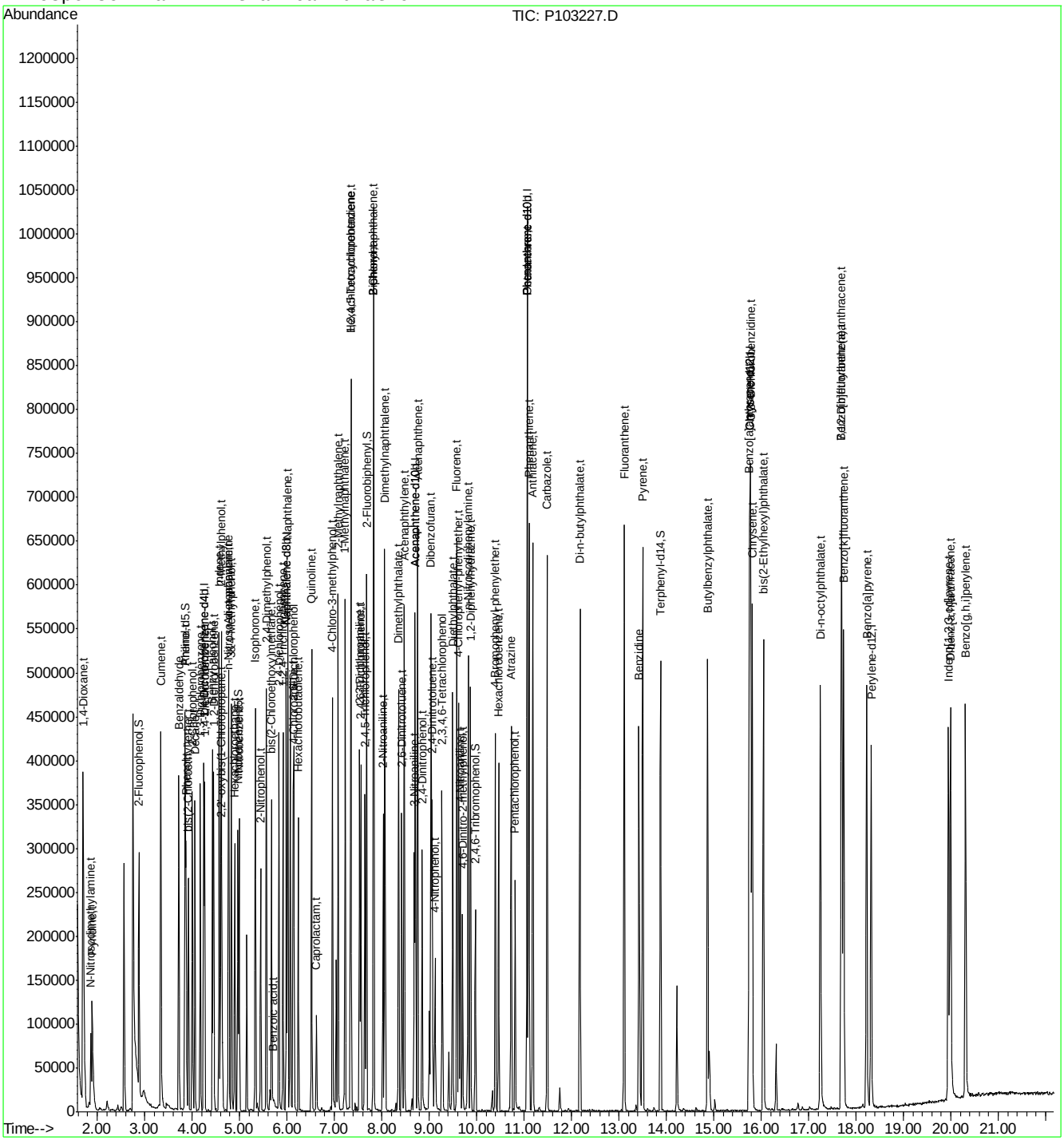
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:46 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



Manual Integration Approval Summary

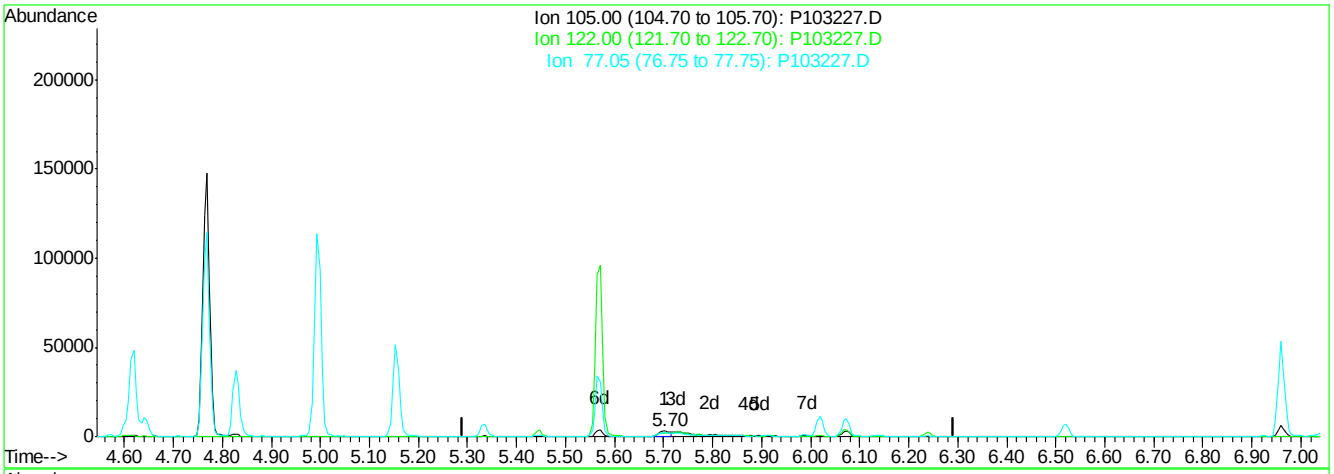
Sample Number:	OP91884-MSD	**Method:**	SW846 8270D
Lab FileID:	P103227.D	**Analyst approved:**	03/10/16 11:48 Linsey Kirschmann
Injection Time:	03/10/16 01:42	**Supervisor approved:**	03/16/16 11:30 Kristi Schollenberger

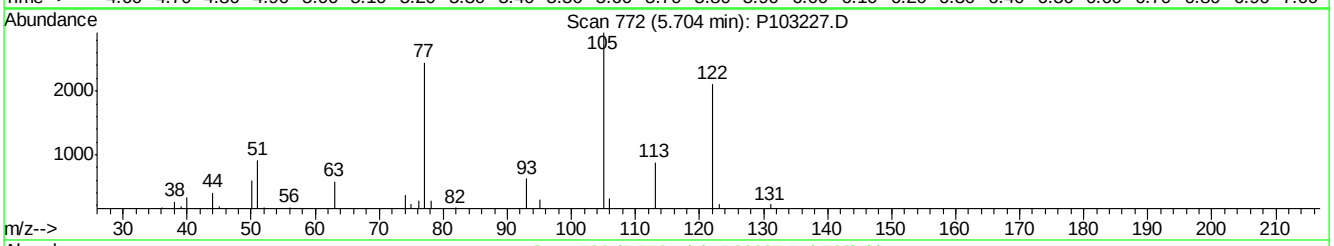
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.70	Split peak

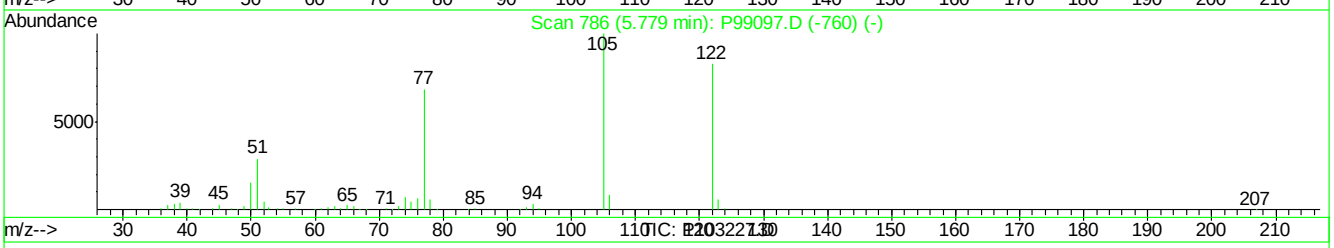
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 2:05 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.70min 3.04ppm

response 4874

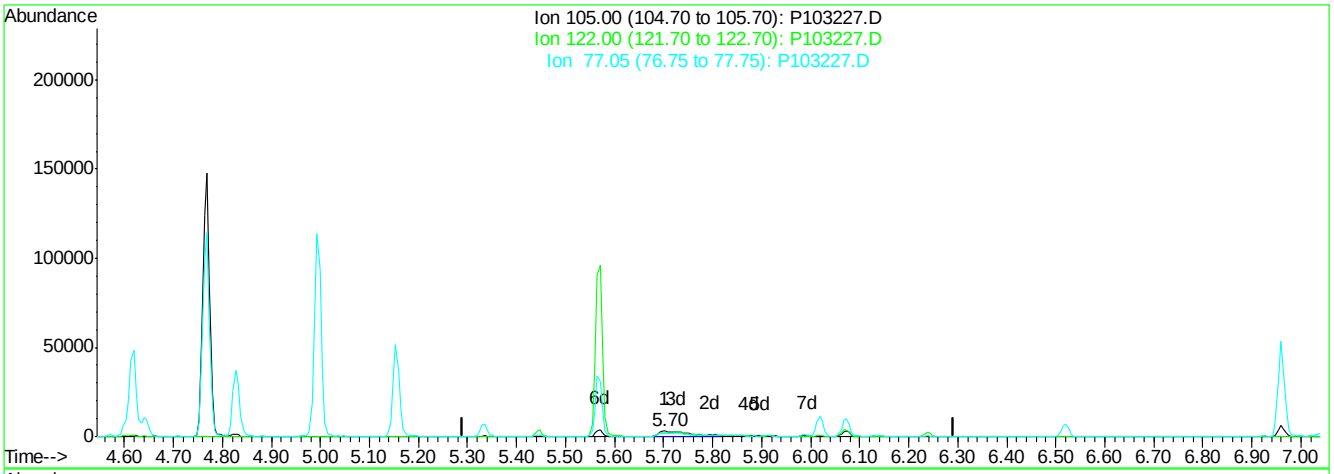
Ion	Exp%	Act%
105.00	100	100
122.00	78.00	67.22
77.05	71.90	93.94
0.00	0.00	0.00

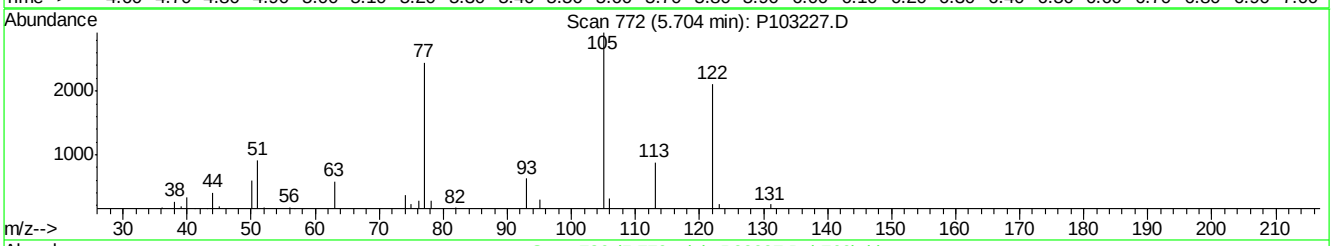
P103227.D MP4524.M Thu Mar 10 11:46:01 2016

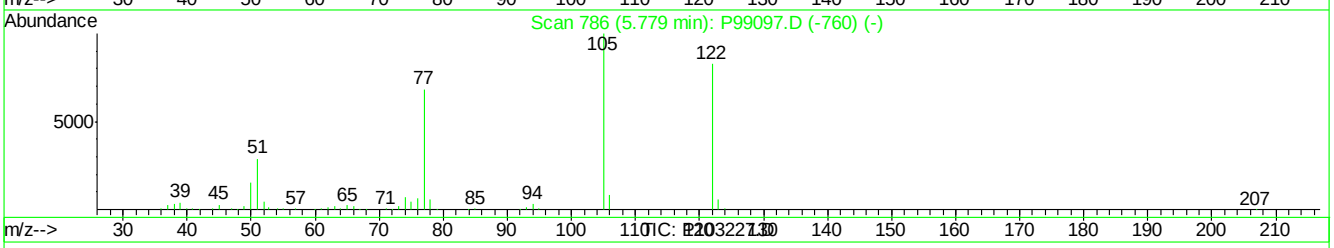
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103227.D Vial: 21
Acq On : 10 Mar 2016 1:42 am Operator: linseyk
Sample : op91884-msd Inst : MSP
Misc : op91884,ep4533,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:46 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.70min 8.66ppm m

response 13866

Ion	Exp%	Act%
105.00	100	100
122.00	78.00	72.25
77.05	71.90	83.93
0.00	0.00	0.00

P103227.D MP4524.M Thu Mar 10 11:46:05 2016

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59965.D
Acq On : 10 Mar 2016 7:38 pm
Operator : linseyk
Sample : op91884a-ms
Misc : op91884a,e3m2811,500
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 11 11:32:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

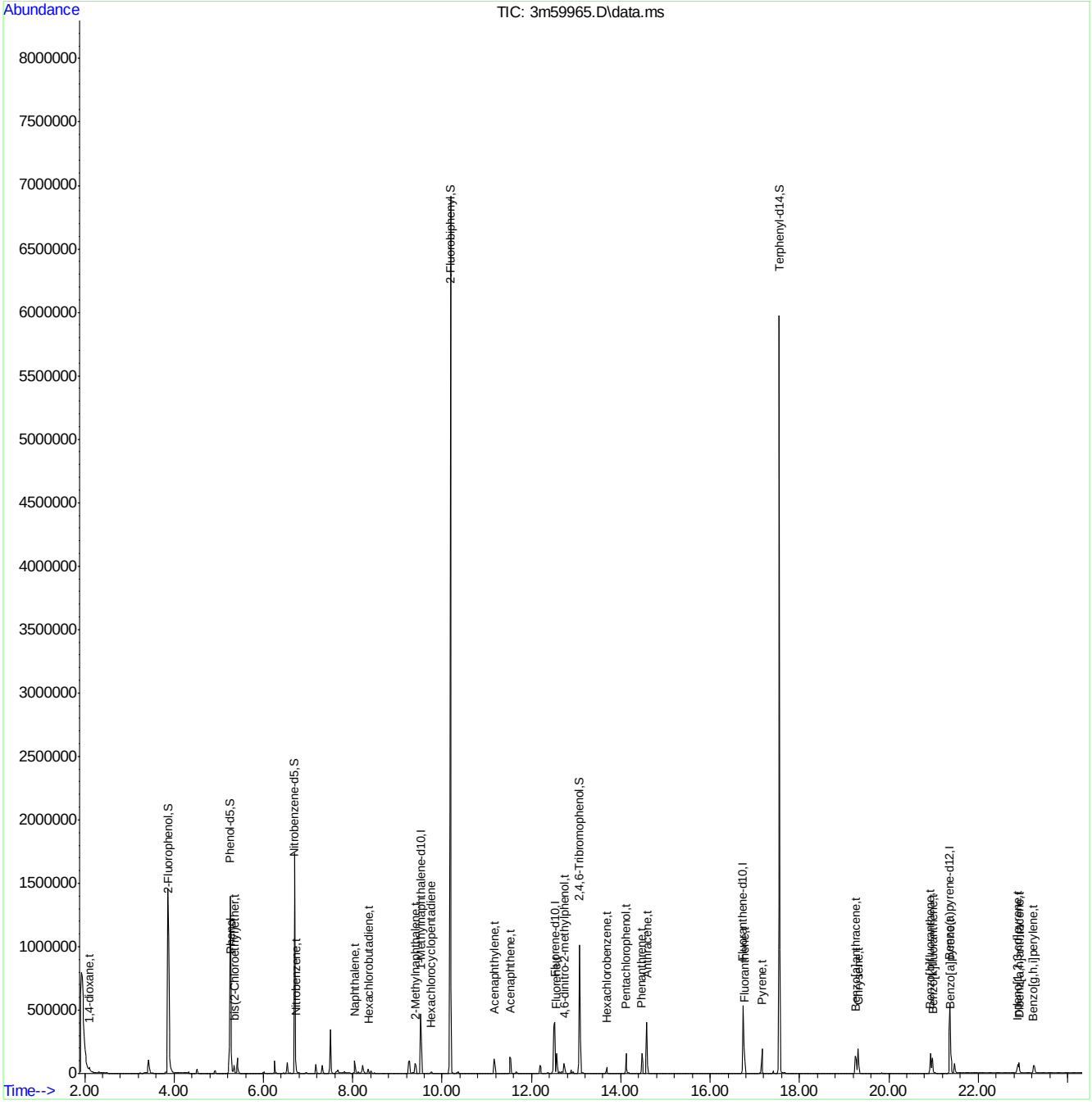
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	335186	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	474058	4.00	ppm	-0.06
21) Fluoranthene-d10	16.731	212	777719	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.366	264	610563	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1441968	29.30	ppm	0.01
Spiked Amount 50.000			Recovery = 58.60%			
4) Phenol-d5	5.251	99	2047473	25.19	ppm	-0.01
Spiked Amount 50.000			Recovery = 50.38%			
7) Nitrobenzene-d5	6.690	82	2288271	31.63	ppm	-0.05
Spiked Amount 50.000			Recovery = 63.26%			
15) 2-Fluorobiphenyl	10.191	172	5317523	35.57	ppm	-0.06
Spiked Amount 50.000			Recovery = 71.14%			
20) 2,4,6-Tribromophenol	13.070	330	630897	44.62	ppm	-0.08
Spiked Amount 50.000			Recovery = 89.24%			
28) Terphenyl-d14	17.550	244	4954020	39.46	ppm	-0.07
Spiked Amount 50.000			Recovery = 78.92%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	33294	1.45	ppm #	30
5) Phenol	5.275	94	291749	3.40	ppm #	74
6) bis(2-Chloroethyl)ether	5.347	93	42170	0.67	ppm #	62
8) Nitrobenzene	6.728	77	50693	0.65	ppm	86
9) Naphthalene	8.046	128	137242	0.64	ppm	91
10) Hexachlorobutadiene	8.347	225	20368	0.63	ppm	80
11) 2-Methylnaphthalene	9.396	141	71395	0.64	ppm #	60
13) Hexachlorocyclopentadiene	9.765	237	8198	0.24	ppm	87
16) Acenaphthylene	11.165	152	138557	0.73	ppm	100
17) Acenaphthene	11.520	153	95316	0.77	ppm	74
18) 4,6-dinitro-2-methylph...	12.731	198	77231	3.78	ppm #	1
19) Fluorene	12.561	166	117527	0.75	ppm	91
22) Hexachlorobenzene	13.686	284	29405	0.74	ppm	83
23) Pentachlorophenol	14.119	266	99415	4.82	ppm	96
24) Phenanthrene	14.475	178	179101	0.83	ppm	99
25) Anthracene	14.583	178	417055	1.96	ppm	100
26) Fluoranthene	16.762	202	203542	0.82	ppm	97
27) Pyrene	17.164	202	210565	0.85	ppm	90
29) Benzo[a]anthracene	19.250	228	166623	0.74	ppm	91
30) Chrysene	19.311	228	171203	0.76	ppm	92
32) Benzo[b]fluoranthene	20.934	252	139210	0.58	ppm	97
33) Benzo[k]fluoranthene	20.980	252	136429	0.74	ppm	99
34) Benzo[a]pyrene	21.382	252	122985	0.61	ppm	93
35) Indeno[1,2,3-cd]pyrene	22.881	276	112766	0.48	ppm	98
36) Dibenz[a,h]anthracene	22.918	278	93558	0.50	ppm	93
37) Benzo[g,h,i]perylene	23.238	276	93985	0.45	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59965.D
Acq On : 10 Mar 2016 7:38 pm
Operator : linseyk
Sample : op91884a-ms
Misc : op91884a,e3m2811,500
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 11 11:32:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59966.D
Acq On : 10 Mar 2016 8:10 pm
Operator : linseyk
Sample : op91884a-msd
Misc : op91884a,e3m2811,500
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Mar 11 11:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	342483	4.00	ppm	-0.06
14) Fluorene-d10	12.524	176	484805	4.00	ppm	-0.06
21) Fluoranthene-d10	16.731	212	786905	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.366	264	616561	4.00	ppm	-0.03
System Monitoring Compounds						
3) 2-Fluorophenol	3.880	112	1645491	32.72	ppm	0.01
Spiked Amount 50.000			Recovery = 65.44%			
4) Phenol-d5	5.250	99	2240415	26.97	ppm	-0.01
Spiked Amount 50.000			Recovery = 53.94%			
7) Nitrobenzene-d5	6.690	82	2752593	37.23	ppm	-0.05
Spiked Amount 50.000			Recovery = 74.46%			
15) 2-Fluorobiphenyl	10.191	172	6215345	40.65	ppm	-0.06
Spiked Amount 50.000			Recovery = 81.30%			
20) 2,4,6-Tribromophenol	13.070	330	666304	46.08	ppm	-0.08
Spiked Amount 50.000			Recovery = 92.16%			
28) Terphenyl-d14	17.550	244	5167494	40.68	ppm	-0.07
Spiked Amount 50.000			Recovery = 81.36%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	38321	1.63	ppm	76
5) Phenol	5.275	94	326156	3.72	ppm #	80
6) bis(2-Chloroethyl)ether	5.347	93	51218	0.80	ppm #	58
8) Nitrobenzene	6.728	77	62783	0.79	ppm	86
9) Naphthalene	8.046	128	168573	0.77	ppm	93
10) Hexachlorobutadiene	8.347	225	25186	0.76	ppm	81
11) 2-Methylnaphthalene	9.396	141	86276	0.75	ppm #	61
13) Hexachlorocyclopentadiene	9.765	237	10776	0.31	ppm	85
16) Acenaphthylene	11.165	152	163556	0.84	ppm	99
17) Acenaphthene	11.520	153	111811	0.88	ppm	74
18) 4,6-dinitro-2-methylph...	12.731	198	89089	4.18	ppm #	1
19) Fluorene	12.561	166	135993	0.85	ppm	94
22) Hexachlorobenzene	13.686	284	33403	0.83	ppm	79
23) Pentachlorophenol	14.119	266	116429	5.50	ppm	99
24) Phenanthrene	14.475	178	196199	0.90	ppm	98
25) Anthracene	14.583	178	466055	2.17	ppm	99
26) Fluoranthene	16.762	202	219558	0.87	ppm	97
27) Pyrene	17.164	202	229949	0.91	ppm	90
29) Benzo[a]anthracene	19.250	228	190336	0.84	ppm	92
30) Chrysene	19.311	228	195444	0.85	ppm	93
32) Benzo[b]fluoranthene	20.934	252	177459	0.73	ppm	97
33) Benzo[k]fluoranthene	20.980	252	174889	0.94	ppm	100
34) Benzo[a]pyrene	21.382	252	163580	0.81	ppm	93
35) Indeno[1,2,3-cd]pyrene	22.880	276	173768	0.73	ppm	98
36) Dibenz[a,h]anthracene	22.918	278	137688	0.73	ppm	96
37) Benzo[g,h,i]perylene	23.238	276	145855	0.69	ppm	99

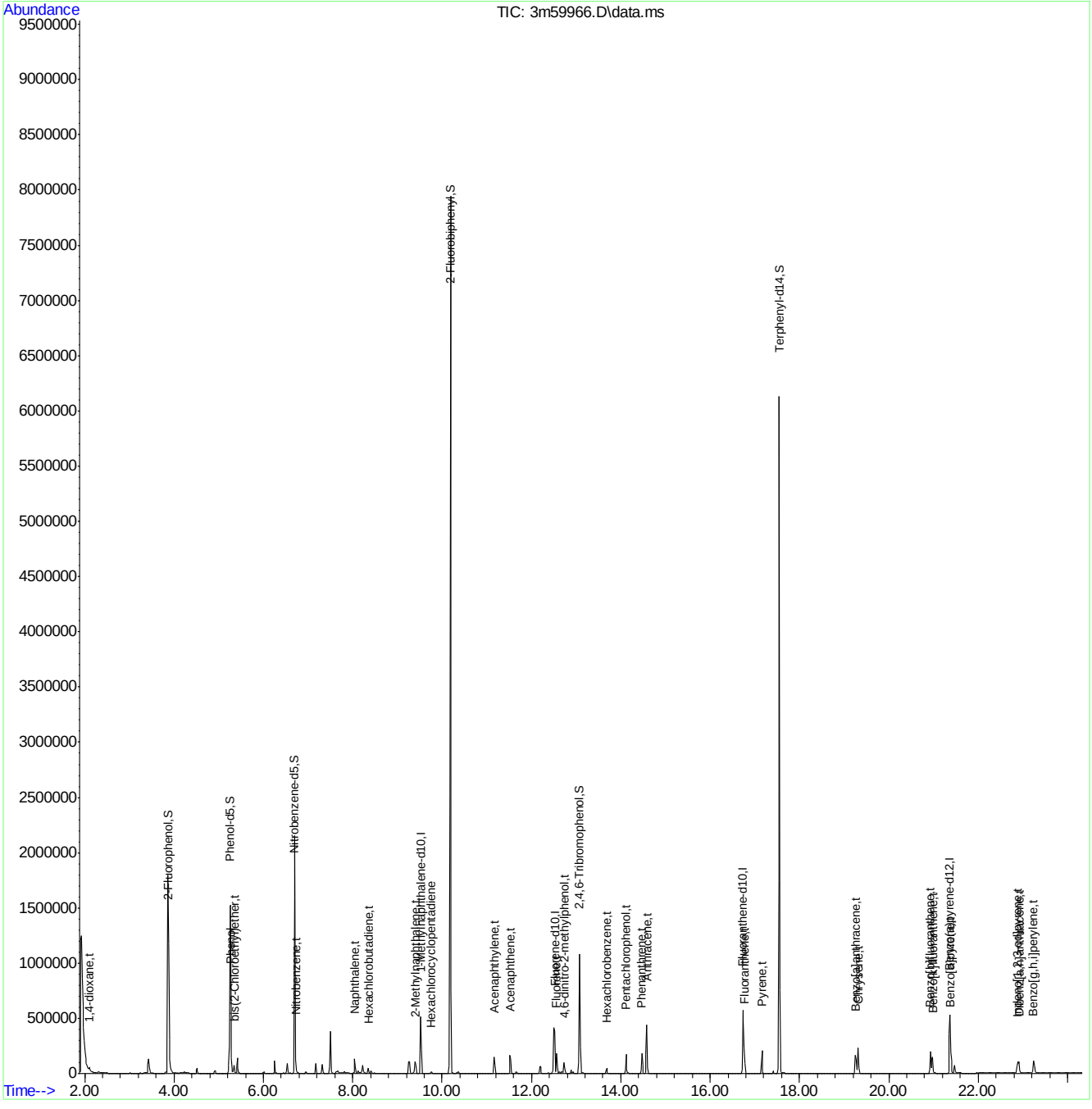
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59966.D
Acq On : 10 Mar 2016 8:10 pm
Operator : linseyk
Sample : op91884a-msd
Misc : op91884a,e3m2811,500
ALS Vial : 23 Sample Multiplier: 1

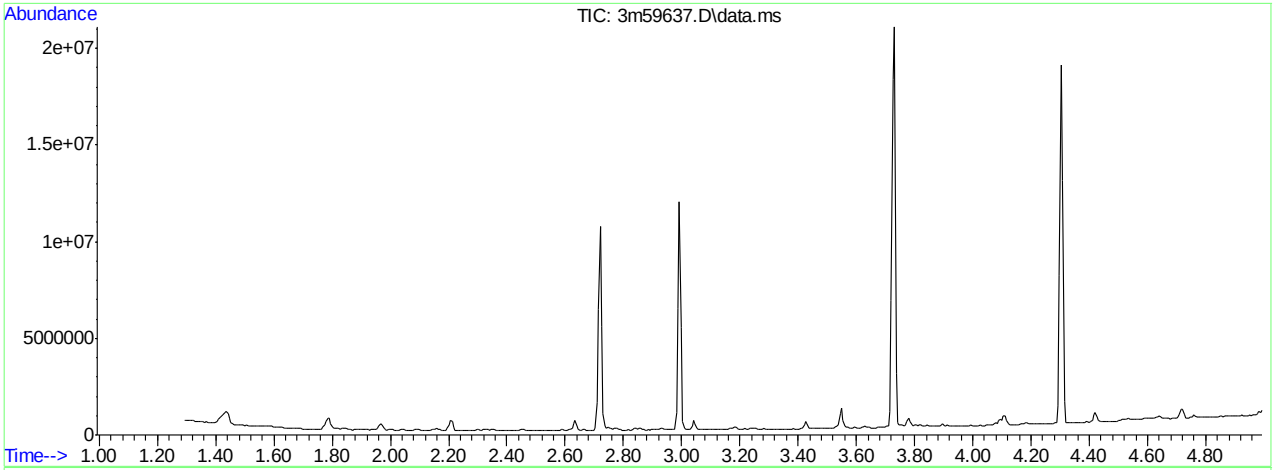
Quant Time: Mar 11 11:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

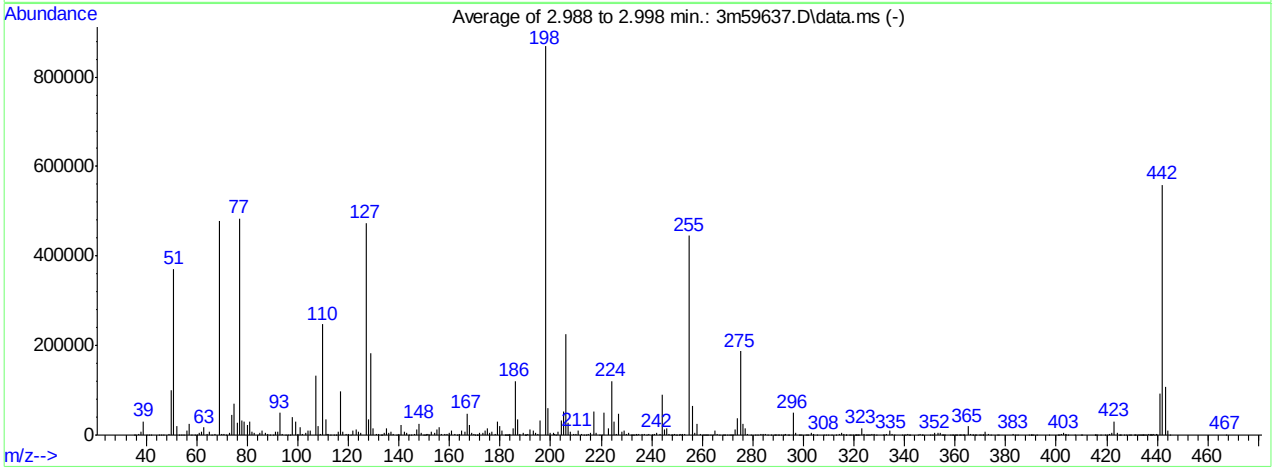


DFTPP

Data File : C:\msdchem\1\DATA\E3M2788\3m59637.D Vial: 1
Acq On : 3 Feb 2016 12:13 pm Operator: ashleyd
Sample : dftpp Inst : MS3M
Misc : op90825a,e3m2788 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 318, 319, 320; Background Corrected with Scan 312

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.8	371667	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.1	478418	PASS
70	69	0.00	2	0.4	1998	PASS
127	198	40	60	54.6	474126	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	868256	PASS
199	198	5	9	6.9	59760	PASS
275	198	10	30	21.6	187720	PASS
365	198	1	100	2.3	19868	PASS
441	443	0.10	100	85.8	92899	PASS
442	198	40	100	64.4	559488	PASS
443	442	17	23	19.4	108309	PASS

3m59637.D DFTPP3M.M Thu Feb 04 15:48:06 2016 RPT1

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	466	49.00	3722	59.95	114	71.85	642
35.85	889	50.00	100982	60.95	5969	73.10	4777
37.00	1704	50.95	371667	62.00	6504	74.00	44137
38.00	6443	52.00	19520	63.00	17002	75.00	70969
39.00	31249	53.05	216	64.00	2877	76.10	26693
40.00	1222	53.95	92	65.00	8629	76.95	484606
40.95	267	55.00	78	65.95	803	78.00	33767
42.05	175	55.95	10242	67.20	1501	78.95	31098
44.95	64	57.00	23911	69.00	478418	79.95	22774
45.95	203	58.00	1137	70.00	1998	81.05	31056
46.85	405	59.05	543	70.90	2447	82.00	7361

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.95	5382	93.95	3700	105.00	9217	116.05	7148
83.90	907	95.05	804	107.00	133663	117.00	98983
85.10	5840	96.05	849	108.00	19616	117.95	6621
85.95	9222	97.05	294	109.05	2335	118.95	1429
87.00	3858	98.00	40260	110.00	246891	120.05	1657
87.95	2385	99.00	29703	111.00	34321	121.00	706
88.85	1251	100.10	2045	111.80	1410	122.00	9637
90.10	34	100.95	16932	112.00	2877	122.95	11759
91.00	7084	101.95	1794	113.10	1204	124.00	6458
91.95	7834	103.00	5469	114.20	674	125.00	6361
92.95	49203	104.00	10336	115.00	973	126.95	474126

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.95	34176	137.95	2308	149.00	4666	156.95	3790
128.95	181780	138.90	808	149.85	452	157.95	3579
129.95	14657	140.05	2273	150.10	1282	159.00	3379
130.90	3686	141.00	22217	150.80	791	159.90	5900
132.00	2062	142.00	8239	151.05	2567	161.00	10109
132.80	622	142.95	4587	151.70	1653	162.00	3096
133.20	682	144.00	908	152.10	951	162.90	704
134.00	5781	144.95	1261	152.95	7013	163.95	2235
135.00	14160	146.00	3570	153.95	5361	164.95	9278
136.05	5240	147.00	11633	155.05	11842	166.00	7768
136.95	7177	148.00	25453	156.00	16755	167.00	47728

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.00	22018	176.90	7697	184.05	2769	193.05	10062
168.90	4268	178.05	2898	185.00	16042	194.10	4525
169.85	1546	179.00	30974	186.00	121232	195.00	2786
170.10	493	180.00	20753	187.00	34248	196.00	32041
171.00	533	180.95	10709	188.00	3556	198.00	868256
171.15	1334	181.90	262	189.00	5734	198.95	59760
171.95	4694	182.20	829	189.85	572	200.00	4611
173.05	5962	182.60	522	190.00	392	201.25	4007
173.95	8920	182.90	503	190.20	290	201.70	3729
175.00	15713	183.10	195	191.05	3168	202.00	643
176.00	6043	183.30	294	192.00	11589	202.95	6398

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.05	32400	215.00	3197	226.95	47065	234.95	3527
205.00	53528	216.00	4194	228.00	8490	236.05	2792
206.00	226018	216.95	52501	229.00	10686	236.95	3375
206.95	28201	218.05	6197	230.05	1577	238.15	1184

208.00	6372	219.25	1308	231.00	4441	238.95	2359
209.10	2441	220.05	1113	231.90	605	240.00	856
210.00	1463	221.00	50273	232.30	48	240.20	487
210.90	9645	223.00	15079	232.80	544	241.05	2704
212.10	1808	224.00	121071	233.05	695	242.05	5666
213.00	529	225.05	29861	233.90	858	243.10	1423
213.80	133	226.00	2243	234.05	2564	244.00	90692

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.05	11988	251.80	587	261.60	112	270.05	663
246.00	16060	252.20	1582	261.80	142	270.70	215
247.00	2898	253.15	3327	262.20	193	271.00	237
247.80	41	255.00	444693	263.15	481	271.45	949
248.05	984	256.00	64635	263.90	1331	271.90	331
248.30	180	257.10	5854	265.00	9221	273.05	13634
248.95	3096	258.00	24367	266.00	1439	274.05	38126
249.70	284	259.15	3365	266.95	227	275.00	187720
250.05	690	260.00	999	268.10	205	276.05	25783
250.80	307	260.50	127	268.40	104	277.00	14838
251.05	1402	261.05	747	269.05	431	277.95	2615

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.05	822	289.90	222	298.70	96	311.10	177
280.85	1002	290.10	659	299.10	145	313.05	753
282.05	550	291.00	442	300.85	585	314.05	2966
283.05	2053	292.00	717	301.20	400	315.05	5945
284.00	1558	292.30	295	301.95	1019	316.05	2577
285.00	2973	293.05	3755	303.05	5738	316.90	446
286.05	542	293.70	281	304.05	1815	317.10	95
287.00	241	294.05	1028	305.25	250	318.10	114
288.30	100	296.00	49173	308.05	857	318.60	355
288.90	273	297.00	6009	308.85	242	319.60	154
289.15	756	298.05	681	310.00	758	320.30	367

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
320.70	602	327.05	2900	340.60	307	353.05	4135
321.00	1161	328.05	1731	341.10	1914	354.00	4819
321.20	873	328.95	314	341.90	117	354.80	967
321.60	137	331.40	79	342.15	466	355.00	81
321.80	595	332.05	1190	345.10	160	355.40	150
323.05	15403	333.05	1684	346.05	2956	356.05	207
324.00	2866	334.05	10356	346.85	502	358.05	342
324.95	295	334.95	2619	347.20	121	358.80	258
325.20	106	336.00	384	350.00	367	359.00	187
325.80	87	339.00	361	351.00	432	360.00	92
326.20	150	339.90	210	352.00	4430	360.50	77

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
361.00	252	367.90	161	383.05	2680	401.05	516
361.45	221	368.40	92	383.90	709	402.10	3104
361.90	81	369.70	232	384.90	137	403.00	4028
362.30	131	370.05	637	389.20	232	403.70	149
363.00	162	370.90	742	390.00	980	403.95	1712
363.40	157	371.10	391	390.20	395	404.85	321
363.60	379	372.05	7989	390.70	191	407.20	86
365.00	19868	373.05	2200	390.90	792	409.90	87
366.05	2665	374.10	251	392.05	732	410.20	103
366.80	81	376.70	200	397.10	106	415.10	151
367.10	250	377.30	88	400.50	95	415.40	124

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
415.80	159	425.50	111	433.00	494	437.65	1517
416.10	108	426.70	327	433.30	429	438.10	316
417.65	305	427.70	458	433.75	630	438.55	2945
419.20	159	428.65	183	434.25	494	439.00	257
420.20	202	429.10	159	434.60	293	439.55	3712
420.95	3628	429.55	400	434.80	649	439.80	662
422.15	4614	430.70	612	435.20	731	441.10	92899
423.00	31071	431.20	339	435.90	1144	442.05	559488
424.00	6226	431.50	287	436.60	1698	443.05	108309
425.00	276	432.10	835	437.00	754	444.05	10137
425.20	434	432.50	296	437.40	859	445.00	659

Average of 2.988 to 2.998 min.: 3m59637.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
467.00	90						

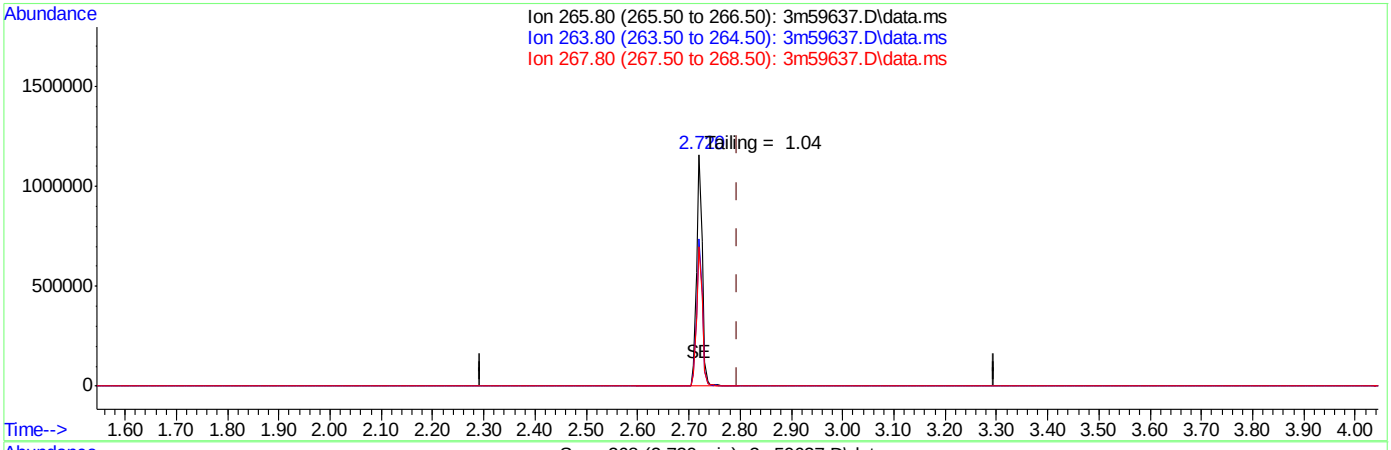
9.5.1

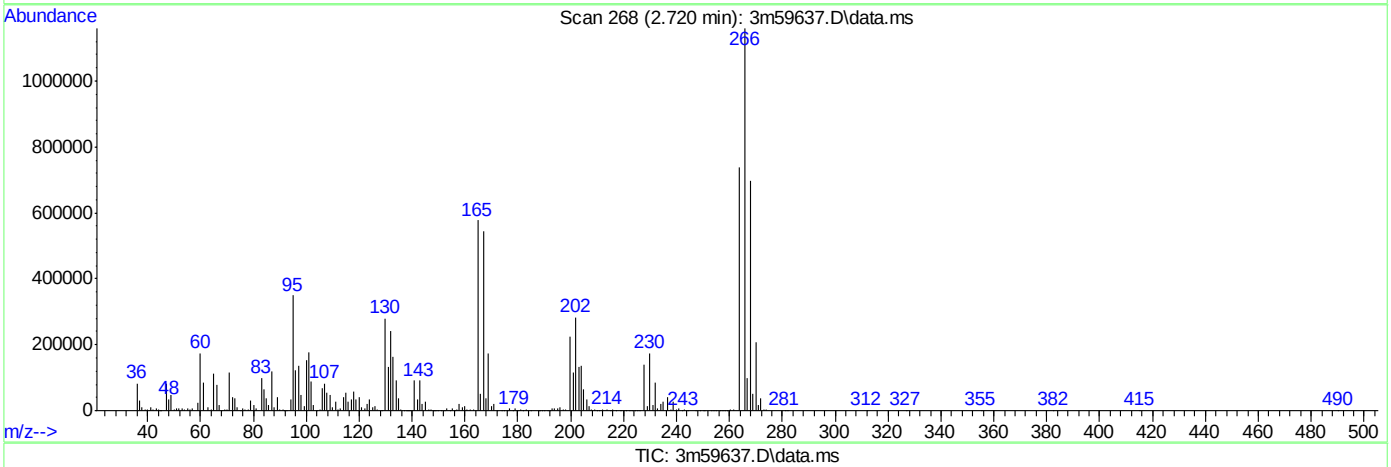
9

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59637.D
Acq On    :  3 Feb 2016  12:13 pm
Operator  : ashleyd
Sample    : dftpp
Misc      : op90825a,e3m2788
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Feb 03 12:17:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title  : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration
```





(1) Pentachlorophenol (t)

2.720min (-0.075) 237.93ppb m

response 877559

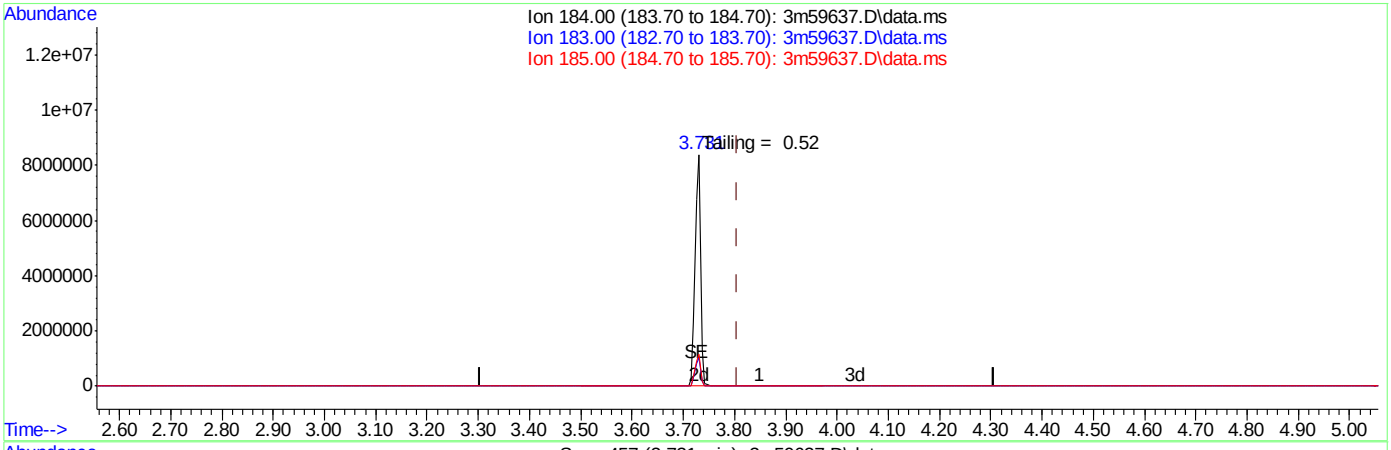
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.66
267.80	64.10	60.04
0.00	0.00	0.00

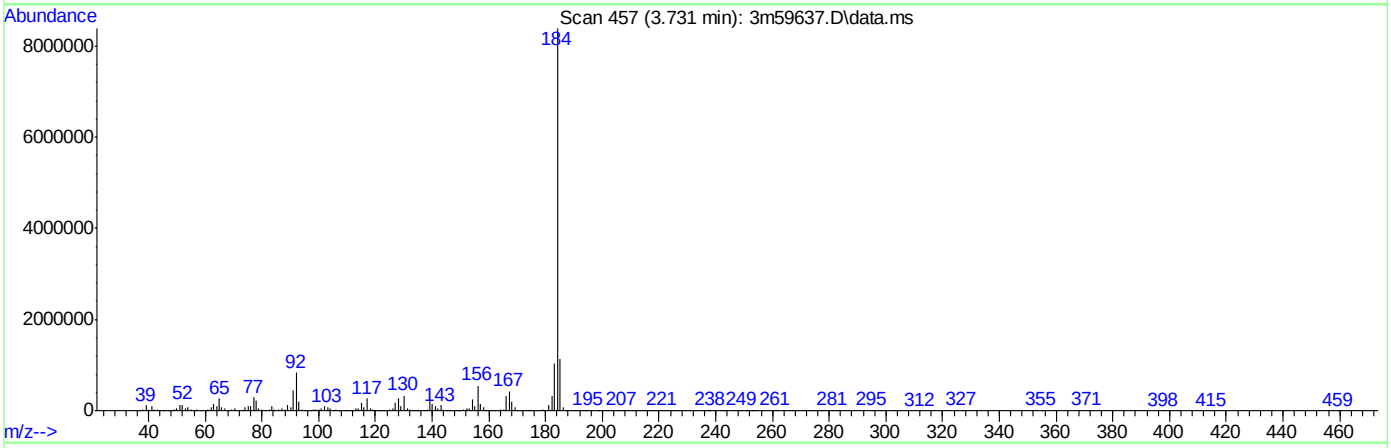
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59637.D
Acq On : 3 Feb 2016 12:13 pm
Operator : ashleyd
Sample : dftpp
Misc : op90825a,e3m2788
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 03 12:17:22 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: 3m59637.D\data.ms

(2) Benzidine (t)

3.731min (-0.075) 342.52ppb m

response 6232776

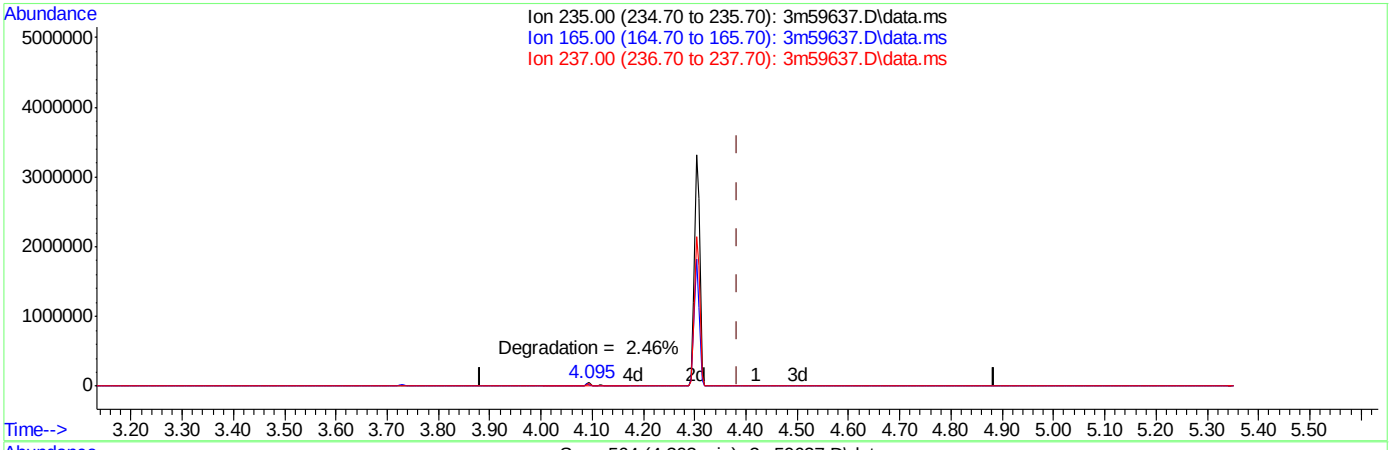
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.22
185.00	14.40	13.61
0.00	0.00	0.00

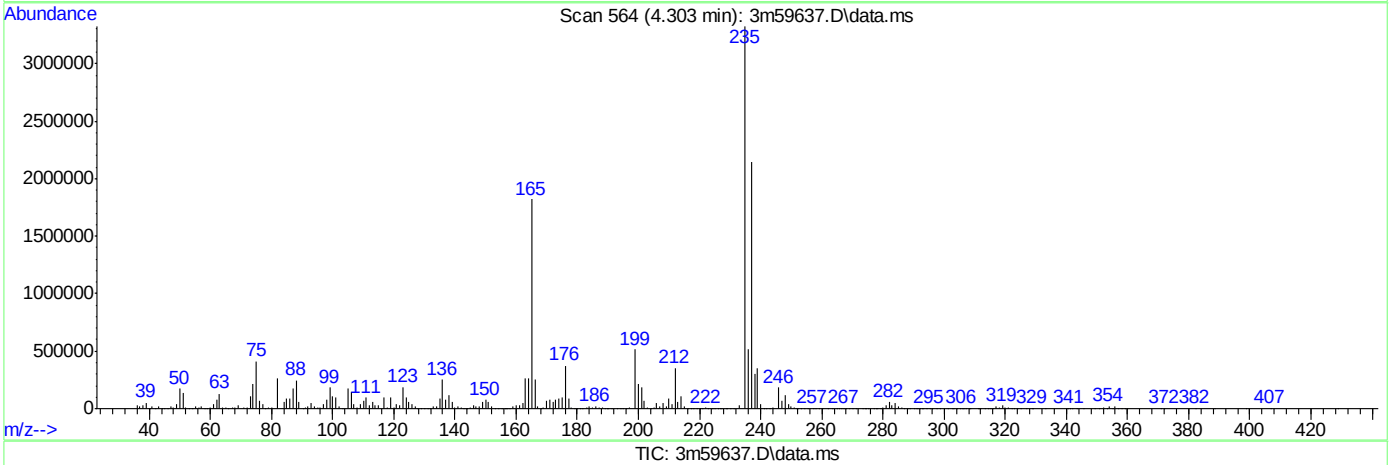
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59637.D
Acq On : 3 Feb 2016 12:13 pm
Operator : ashleyd
Sample : dftpp
Misc : op90825a,e3m2788
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 03 12:17:22 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: 3m59637.D\data.ms

(3) PP-DDT (t)

4.303min (-0.080) 329.68ppb m

response 2455673

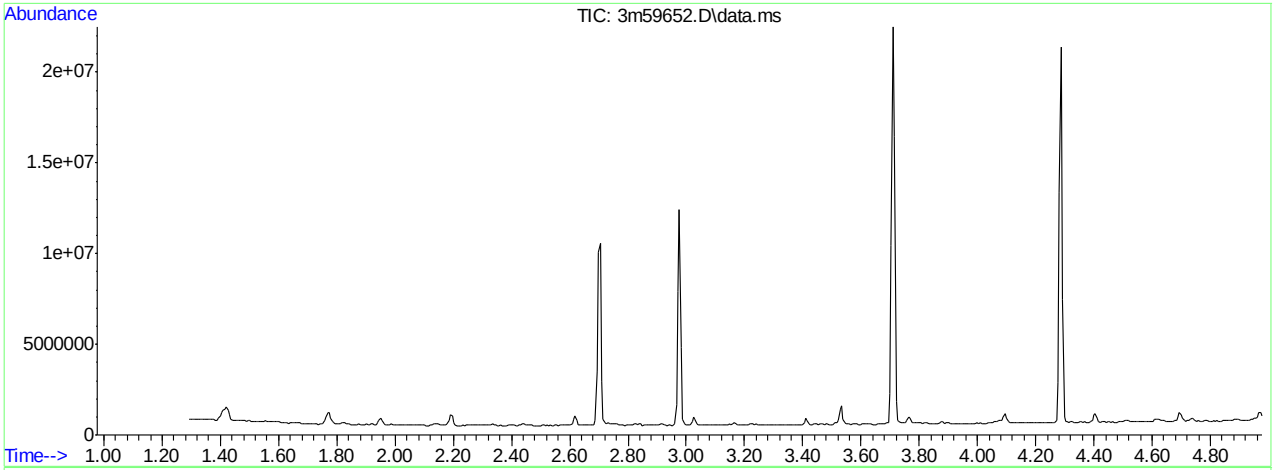
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	0.00
237.00	0.00	0.07#
0.00	0.00	0.00

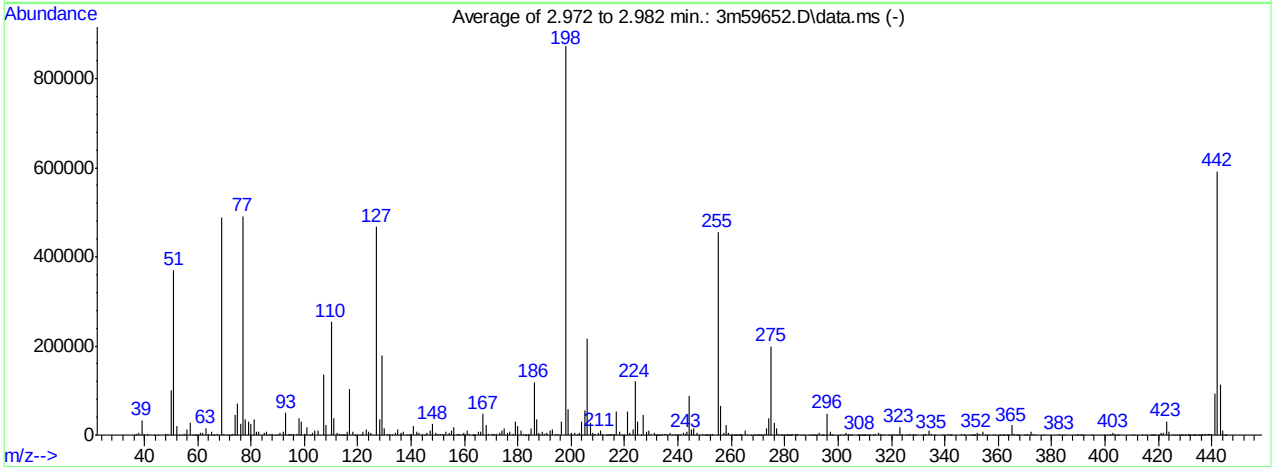
SGS ACCUTEST JC15518

DFTPP

Data File : C:\msdchem\1\DATA\E3M2789\3m59652.D Vial: 1
Acq On : 4 Feb 2016 6:23 pm Operator: juliusj
Sample : dftpp Inst : MS3M
Misc : op90825a,e3m2789 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 315, 316, 317; Background Corrected with Scan 308

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.5	370523	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.9	487890	PASS
70	69	0.00	2	0.6	2920	PASS
127	198	40	60	53.6	467386	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	872256	PASS
199	198	5	9	6.7	58279	PASS
275	198	10	30	22.9	199680	PASS
365	198	1	100	2.5	22186	PASS
441	443	0.10	100	81.4	92835	PASS
442	198	40	100	67.8	591595	PASS
443	442	17	23	19.3	113997	PASS

3m59652.D DFTPP3M.M Fri Feb 05 08:39:21 2016 RPT1

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	889	51.00	370523	61.00	5281	72.20	787
36.90	2128	52.00	19060	62.00	6088	73.00	3667
38.00	4913	53.00	712	63.00	16126	74.00	45955
39.00	33512	54.20	356	63.95	2831	75.00	71242
40.15	2519	55.00	2613	65.00	7443	76.10	26086
41.05	1964	56.00	12794	65.90	654	76.95	490848
43.80	523	57.00	27891	66.10	189	77.95	34664
44.95	434	58.00	1082	67.15	2233	79.00	30928
48.00	1863	58.85	3	69.00	487890	80.00	24769
49.00	3040	59.20	372	69.90	2920	81.00	34260
49.95	101243	59.95	620	71.10	391	82.00	7755

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	6662	94.25	120	103.95	10846	114.90	93
84.95	5661	95.05	3795	105.00	9387	115.10	462
85.90	7608	95.95	1584	107.00	135400	116.05	8326
86.90	3700	97.00	1370	107.95	21505	116.95	102061
87.95	1989	98.00	38835	110.00	253418	117.95	7409
89.10	731	99.00	29248	111.00	36969	118.80	674
89.80	80	99.90	1396	112.05	4309	119.10	750
91.00	5379	100.10	1740	112.95	1802	120.00	1314
92.00	7762	101.00	18150	113.70	85	120.95	931
93.00	50200	102.00	496	114.05	441	122.00	8706
94.05	3697	102.95	5782	114.40	96	123.00	13057

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.95	6786	135.80	390	144.95	608	155.00	10764
124.95	5576	136.05	4940	146.00	4218	156.00	17626
127.00	467386	137.05	7332	146.95	11422	157.05	3427
128.00	34198	138.10	714	148.00	24709	157.80	723
129.00	179177	139.05	1160	149.05	4663	158.05	3588
130.00	15735	139.40	164	150.00	1865	159.10	2894
131.05	3037	139.90	2551	151.10	2719	159.90	5359
132.15	1946	140.95	20775	151.85	2003	160.20	803
132.85	656	141.95	8089	152.10	560	161.00	10376
133.95	5449	142.95	4193	153.00	6653	161.90	2643
134.95	12630	144.10	1549	154.05	5650	162.90	382

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
163.15	739	171.95	3618	182.80	477	192.00	9085
163.60	423	173.05	4938	182.90	275	193.00	11634
164.10	452	174.05	9101	183.00	305	194.10	3174
165.00	7417	175.00	16431	183.95	3066	195.00	1731
166.00	7207	175.90	5837	185.05	15614	196.10	29529
167.00	46743	177.00	7884	186.00	119372	198.00	872256
168.00	21751	178.00	2647	187.00	34406	198.95	58279
169.00	3854	179.00	31210	188.00	4122	200.05	5136
170.10	1381	180.00	20095	188.95	6692	201.45	5917
170.70	322	181.05	9908	190.05	1905	202.20	951
171.00	2070	182.00	2085	191.00	4050	203.00	5815

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.00	30531	214.00	308	221.85	5347	232.00	149
205.05	55915	214.20	185	223.00	13796	232.50	230
206.00	217438	214.80	444	224.00	120764	232.80	423
207.00	28704	215.05	1772	225.00	29683	233.15	972

208.00	6375	215.90	1272	226.00	909	234.00	3374
209.05	1552	216.05	3831	227.00	46587	235.00	3517
210.20	4226	216.95	53893	228.00	7692	235.95	2720
210.95	8965	218.00	8091	229.00	9984	237.05	4019
211.75	2621	219.15	1178	230.05	1925	238.00	1168
213.05	1076	219.90	579	231.00	5192	239.00	1926
213.65	189	221.00	52344	231.75	645	240.10	1332

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.95	2828	250.50	377	259.70	203	265.00	9688
242.05	6321	250.95	1212	259.95	903	265.90	924
242.90	2655	251.50	166	260.20	95	267.10	223
243.15	7535	252.00	1556	260.80	692	268.50	196
244.05	89140	252.50	372	261.20	190	269.10	371
245.05	13443	253.05	3715	261.80	90	269.60	476
245.95	15744	255.00	456448	262.10	196	269.90	387
247.00	4004	256.00	65688	262.70	524	270.20	460
247.95	970	257.05	5983	262.90	193	270.80	943
249.00	2798	258.00	23616	263.20	57	271.15	488
249.90	978	259.05	3996	264.00	1541	272.15	1992

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.00	14666	280.90	216	289.10	1075	297.00	7019
274.05	38523	281.10	97	289.95	606	297.70	450
275.00	199680	281.70	105	290.30	105	298.05	465
276.00	28043	281.90	602	290.60	171	300.95	864
277.00	15390	282.30	292	291.05	446	302.05	800
277.95	3119	282.95	2326	292.05	955	303.05	5609
278.60	147	284.05	1768	293.00	4055	303.90	1398
279.05	821	284.30	285	293.70	205	304.20	371
279.80	106	285.00	2434	294.15	914	304.80	111
280.00	213	286.05	702	294.60	591	305.20	148
280.50	95	287.20	82	296.00	48291	307.00	131

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
307.80	280	312.85	594	324.05	3636	335.10	2941
308.10	599	314.00	2703	325.20	263	336.10	464
308.60	426	315.05	5634	326.00	704	338.90	477
308.80	264	316.10	3131	327.05	3298	339.85	400
309.20	199	316.90	573	328.05	1497	341.10	2221
309.70	311	318.95	201	328.60	193	341.85	246
310.10	409	319.70	78	329.10	276	342.20	148
310.30	82	321.05	1878	331.80	377	342.40	147
311.10	113	321.70	281	332.05	1212	346.05	3460
311.50	149	322.20	795	333.00	2431	346.95	763
311.80	126	323.05	18082	334.05	10332	347.20	129

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
349.10	154	358.85	371	367.10	85	385.00	196
350.10	109	360.50	240	367.85	220	388.70	249
350.60	108	360.80	74	369.80	118	389.70	131
350.90	581	361.70	93	370.05	585	390.05	1275
351.20	92	362.40	93	371.10	1430	390.60	231
352.05	5409	362.90	318	372.10	7467	391.15	852
353.05	3335	363.40	76	373.10	2022	392.00	759
354.05	6493	363.95	826	374.15	250	394.80	120
354.95	1193	365.00	22186	377.10	416	399.70	139
356.30	442	365.95	3295	383.00	2294	400.90	534
358.20	242	366.90	224	384.10	851	402.05	3091

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.05	5090	418.60	133	428.55	329	433.30	295
404.00	1730	419.10	83	428.90	95	433.60	206
404.70	79	420.10	78	429.15	391	433.80	647
405.20	365	421.05	4856	429.70	122	434.20	468
410.20	80	422.05	4427	430.15	448	434.90	1230
411.10	120	423.05	30990	430.90	330	435.45	623
413.70	83	424.05	6634	431.30	292	435.70	464
415.15	387	425.10	791	431.60	325	436.00	727
417.10	186	426.05	191	431.80	153	436.40	1559
417.60	147	426.85	244	432.10	540	437.00	689
418.10	131	427.80	264	432.60	558	437.50	699

Average of 2.972 to 2.982 min.: 3m59652.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
437.80	2196						
438.50	1987						
439.10	1490						
439.50	654						
439.80	2658						
441.05	92835						
442.10	591595						
443.10	113997						
444.00	10494						
444.95	449						
445.20	295						

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2789\
Data File : 3m59652.D
Acq On    :  4 Feb 2016   6:23 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op90825a,e3m2789
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Feb 04 18:27:20 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
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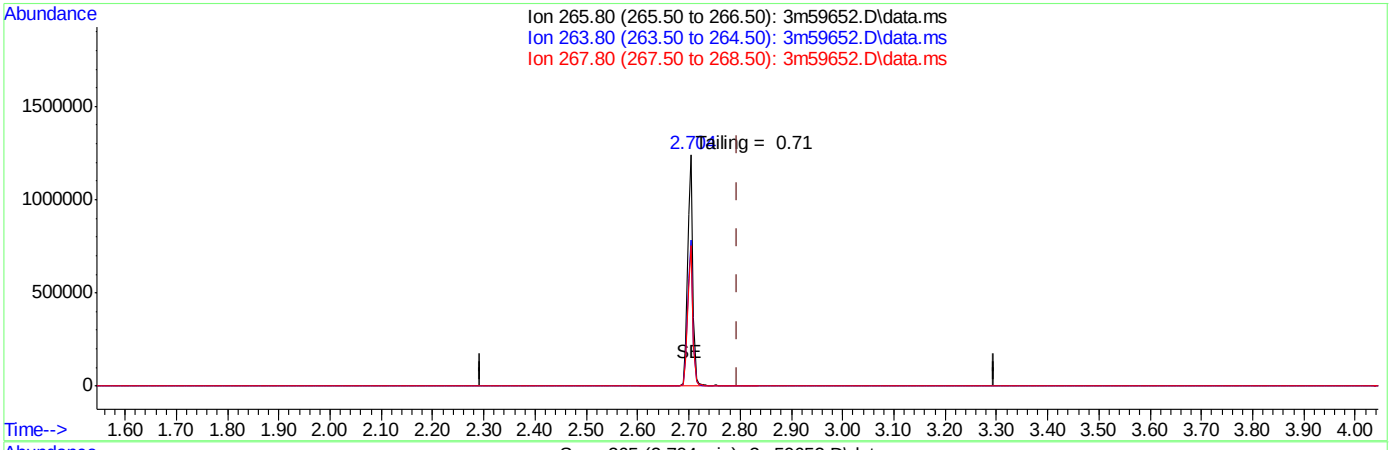
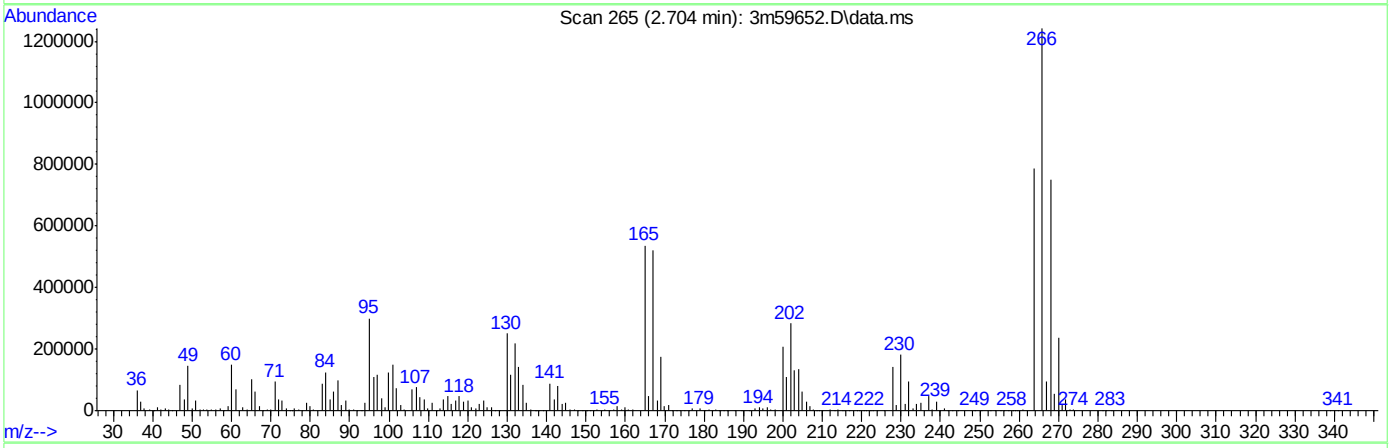




(1) Pentachlorophenol (t)

2.704min (-0.091) 249.22ppb

response 919188

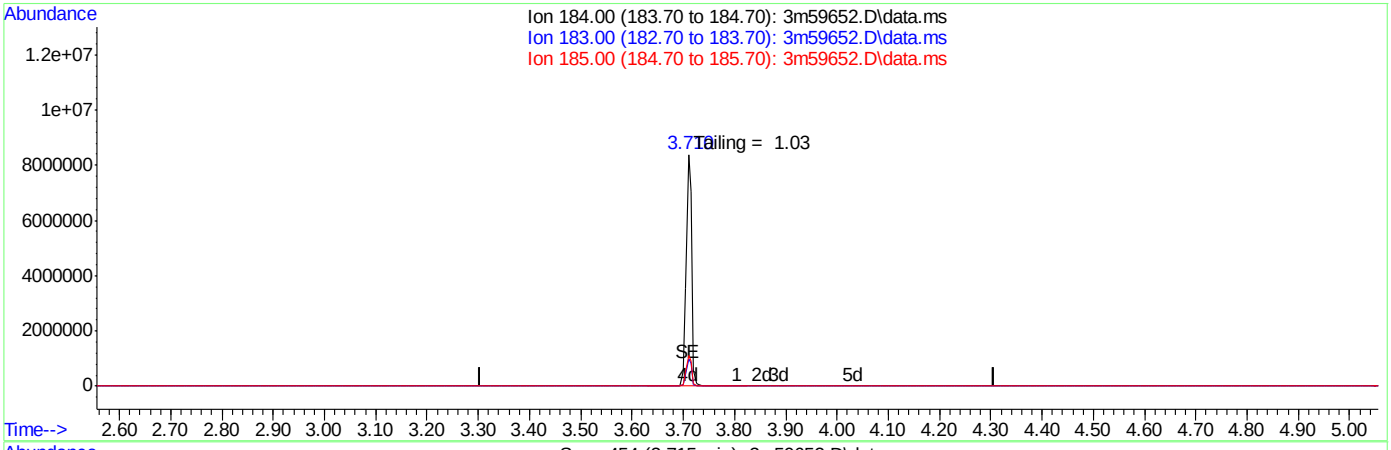
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.20
267.80	64.10	60.46
0.00	0.00	0.00

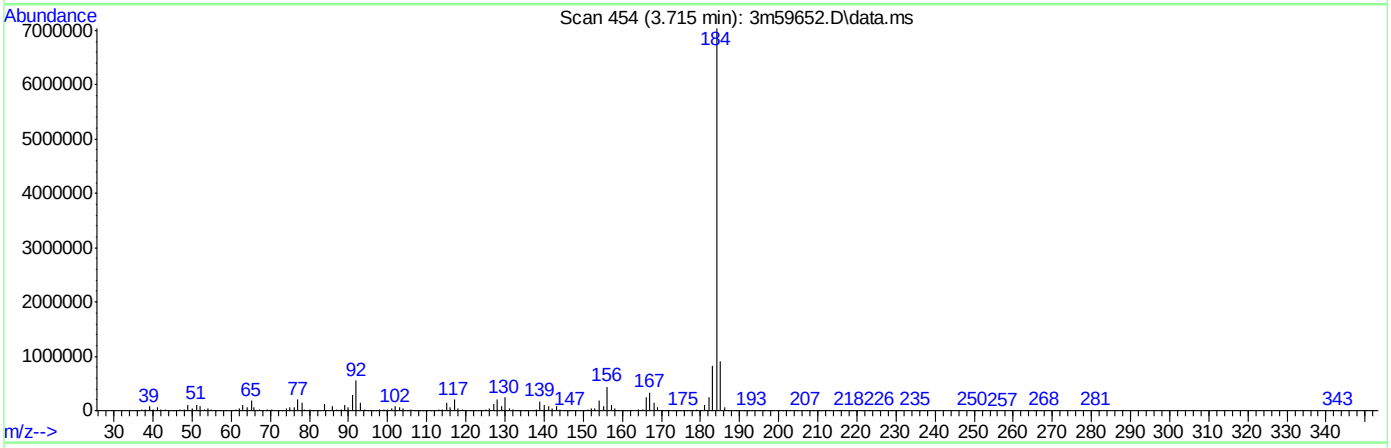
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2789\
Data File : 3m59652.D
Acq On    :  4 Feb 2016   6:23 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op90825a,e3m2789
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Feb 04 18:27:20 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: 3m59652.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

9.5.2.2

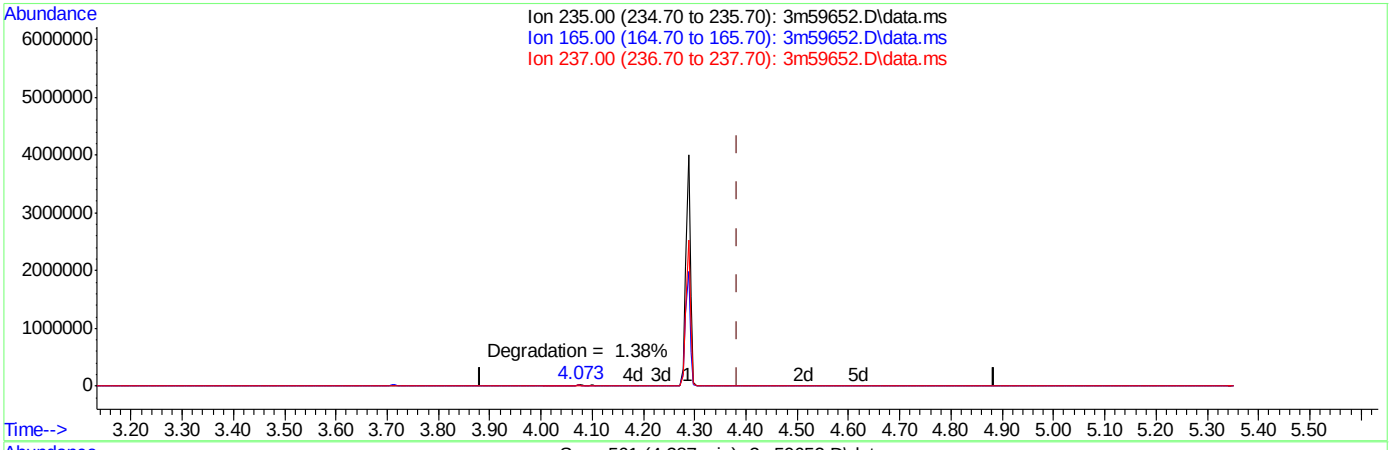
9

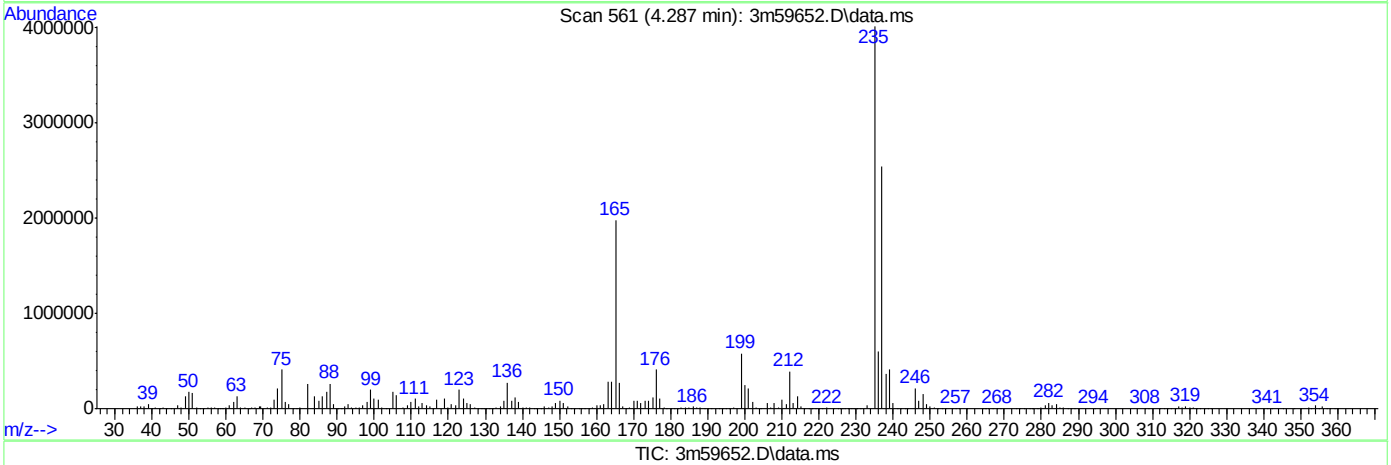
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2789\
Data File : 3m59652.D
Acq On    :  4 Feb 2016   6:23 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op90825a,e3m2789
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Feb 04 18:27:20 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: 3m59652.D\data.ms

(3) PP-DDT (t)

4.287min (-0.096) 344.93ppb

response 2569308

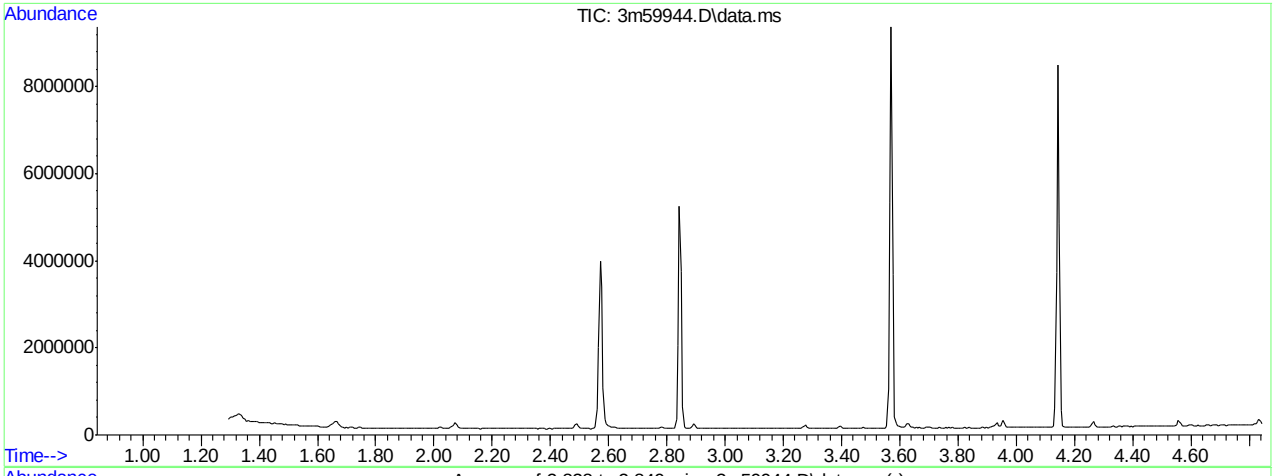
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	51.18#
237.00	0.00	63.39#
0.00	0.00	0.00

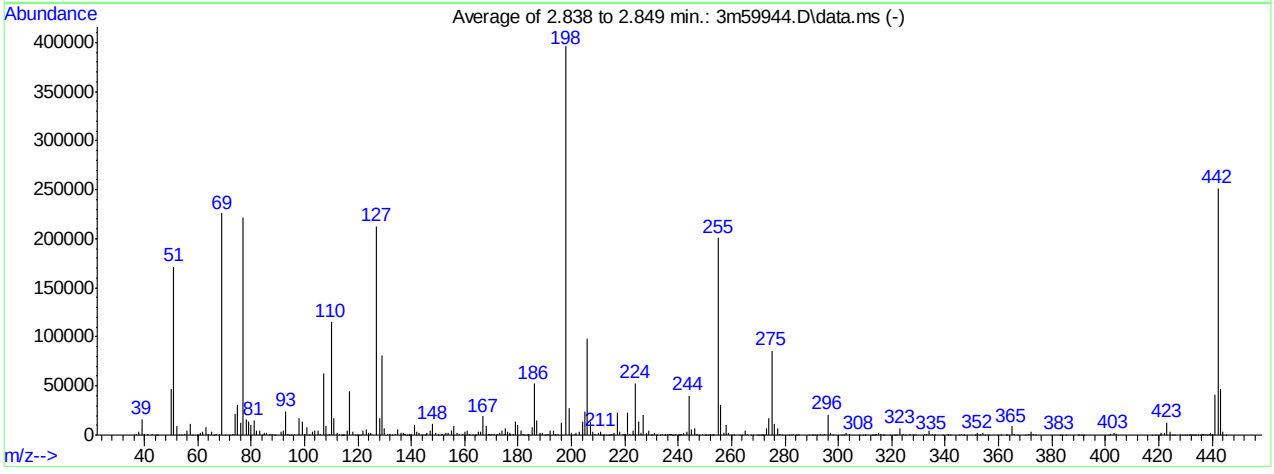
SGS ACCUTEST JC15518

DFTPP

Data File : C:\msdchem\1\DATA\E3M2811\3m59944.D Vial: 1
Acq On : 10 Mar 2016 9:03 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op91858a,e3m2811 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 290, 291, 292; Background Corrected with Scan 286

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.4	171816	PASS
68	69	0.00	2	0.4	999	PASS
69	198	0.00	100	57.0	225866	PASS
70	69	0.00	2	0.2	416	PASS
127	198	40	60	53.7	212432	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	395925	PASS
199	198	5	9	7.0	27544	PASS
275	198	10	30	21.7	85792	PASS
365	198	1	100	2.2	8809	PASS
441	443	0.10	100	87.5	41421	PASS
442	198	40	100	63.6	251781	PASS
443	442	17	23	18.8	47350	PASS

3m59944.D DFTPP3M.M Thu Mar 10 11:51:26 2016 RPT1

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	56	51.00	171816	62.00	3048	74.00	22119
36.90	1302	51.95	9247	63.00	7730	74.95	31439
38.05	3146	53.10	316	64.10	1302	76.20	12896
39.00	16272	53.95	249	65.00	3368	76.95	221623
39.90	627	55.00	785	66.05	499	78.05	15882
41.05	1242	56.00	5153	66.80	684	79.00	14228
42.90	798	57.00	12015	67.90	999	80.00	10587
44.00	419	58.05	342	69.00	225866	81.00	15085
44.80	178	59.70	137	70.00	416	82.05	4247
44.95	78	59.95	285	72.00	44	83.05	5180
50.00	47434	61.05	2653	73.05	1539	83.90	267

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.00	2034	95.05	388	107.00	62636	116.05	4212
85.90	2763	96.05	926	108.00	9306	117.00	44213
86.90	1380	98.00	16677	109.10	959	118.00	3477
87.90	752	99.00	13647	110.00	115024	119.00	362
88.85	384	100.00	909	111.00	17164	119.90	516
89.10	174	101.00	7597	112.00	2658	120.20	411
91.05	3557	101.80	482	112.95	704	121.20	209
92.00	4106	103.00	3061	113.75	288	122.05	4459
93.00	24126	103.95	4709	114.10	131	122.95	5766
93.90	685	105.00	4259	114.40	129	124.05	2533
94.10	551	105.90	1634	114.90	463	124.95	2274

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.00	212432	137.00	1988	144.00	258	152.20	435
128.05	17083	137.20	1010	144.80	576	152.95	2625
129.00	81128	137.85	767	145.20	138	153.95	2005
130.00	6716	138.10	215	146.00	2249	155.05	4631
130.90	1593	138.90	510	146.95	4331	156.05	8786
132.05	857	139.20	75	148.00	10985	157.10	2060
132.90	217	139.95	1278	148.95	2059	157.95	1722
133.90	1287	141.00	10358	149.85	464	159.05	1543
134.10	1360	142.00	3791	150.10	271	160.05	3089
135.05	6064	143.00	2581	151.05	1626	160.95	4812
135.95	2572	143.80	323	151.75	1183	161.70	174

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.85	1190	170.05	864	177.05	2208	186.05	52363
162.95	433	170.95	754	178.05	1450	187.00	15219
163.90	393	171.90	252	179.00	13444	188.05	1943
164.20	473	172.05	1417	180.00	9810	188.90	633
164.95	3330	172.95	2247	181.05	4703	189.05	2384
166.00	3298	174.05	4070	181.90	778	189.90	574
167.00	19079	174.90	1256	182.20	348	190.30	193
168.05	9120	175.05	6425	183.15	502	191.00	1190
168.90	647	175.95	2983	183.50	222	192.00	4673
169.10	783	176.80	478	184.10	1167	193.05	5041
169.50	156	176.90	1145	185.10	7485	193.70	230

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
194.05	1392	206.05	98603	214.30	136	222.90	900
194.95	1292	207.00	13187	214.80	219	223.10	5096
196.05	13151	208.05	3532	214.95	826	224.05	52899
198.00	395925	208.90	1008	216.00	2428	225.05	13479

199.00	27544	210.15	2019	217.00	23324	226.05	1913
200.05	2183	210.80	578	218.05	3594	227.00	20464
201.00	246	211.00	3779	219.15	678	228.00	2670
201.55	2519	211.60	574	219.70	184	229.05	4473
203.00	2901	212.10	590	220.10	610	229.90	117
204.05	13465	212.90	279	221.00	23300	230.05	450
205.05	23718	213.90	83	221.90	725	230.95	1831

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.90	125	238.20	131	247.00	1425	256.00	30629
232.05	390	238.90	801	248.00	542	256.95	2413
233.05	452	239.80	302	249.05	1628	258.05	10166
234.00	1466	240.15	604	249.95	264	258.95	1790
234.80	288	240.80	114	250.20	130	260.00	149
235.05	1323	241.05	1379	251.05	568	261.00	337
236.00	930	242.05	2726	251.85	668	263.00	125
236.85	890	243.05	3205	252.40	287	263.85	246
237.00	841	244.05	40125	252.80	227	265.00	4757
237.20	783	245.05	5442	253.15	1584	265.95	875
237.90	195	246.00	6815	255.00	200752	267.35	347

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.90	384	277.05	6907	290.40	110	303.00	2369
269.50	133	278.10	1067	291.10	77	304.15	937
270.20	153	278.90	208	292.10	255	307.85	451
270.95	496	281.30	175	293.05	1429	309.10	231
271.40	326	282.30	93	293.95	519	309.90	173
271.80	128	283.05	1003	294.85	815	310.10	132
272.10	372	283.90	326	296.00	20896	312.30	76
273.05	6328	284.20	255	297.00	2751	312.90	227
274.05	17580	285.10	1377	297.85	272	313.25	323
275.05	85792	289.05	453	301.05	438	313.90	139
276.10	11158	290.10	483	302.05	529	314.05	1041

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.95	2617	326.95	1330	340.90	124	353.10	1599
316.05	1222	327.90	236	341.05	950	354.10	2029
316.90	182	328.10	423	342.10	425	354.95	551
317.10	140	328.90	87	345.10	88	356.20	80
319.30	83	332.10	675	345.95	1675	359.45	211
321.00	289	333.05	915	346.90	173	360.70	91
321.20	275	334.00	4438	347.10	239	362.70	84
321.80	536	335.10	1016	351.00	111	363.10	223
323.05	7295	335.90	89	351.80	136	365.00	8809
324.10	1399	336.20	125	352.10	2154	365.95	1360
325.20	204	339.10	83	352.80	162	367.00	78

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.00	298	390.95	358	423.10	12695	432.70	186
371.15	796	392.05	191	424.05	2933	433.20	175
372.10	3900	401.05	262	425.00	349	433.60	289
373.15	913	402.10	1133	425.80	84	434.00	283
373.90	94	403.05	2053	428.00	91	434.55	364
382.90	531	404.00	684	428.70	127	435.45	531
383.10	422	417.65	181	429.50	88	436.00	83
384.00	373	418.80	85	430.50	149	436.40	712
385.10	86	420.60	80	431.30	116	437.00	876
389.80	138	421.05	2034	431.90	196	437.60	626
390.15	399	422.05	2412	432.30	112	438.10	552

Average of 2.838 to 2.849 min.: 3m59944.D\data.ms

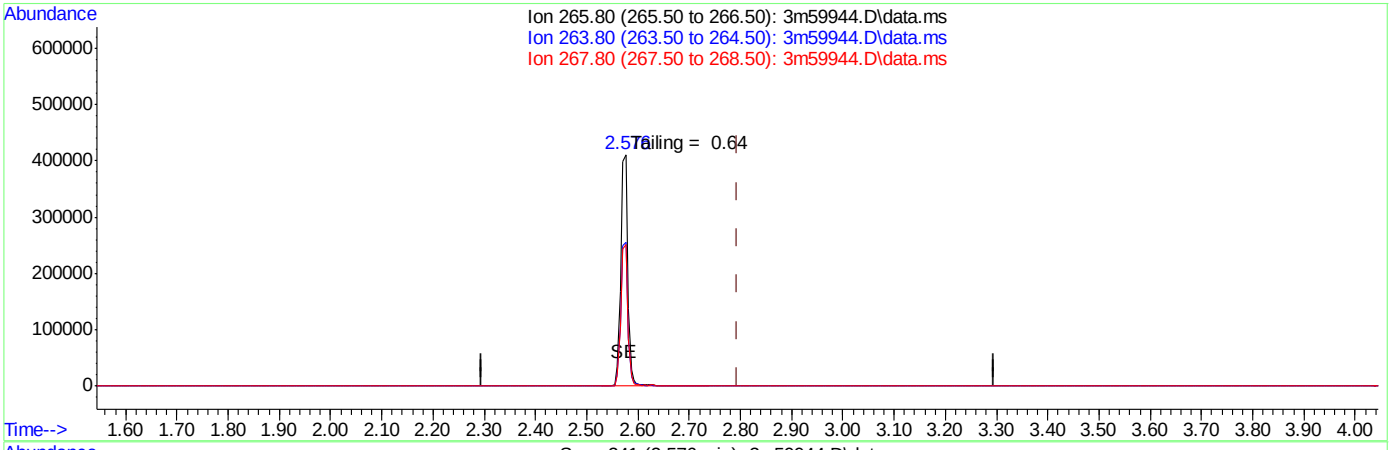
dftpp
Modified:subtracted

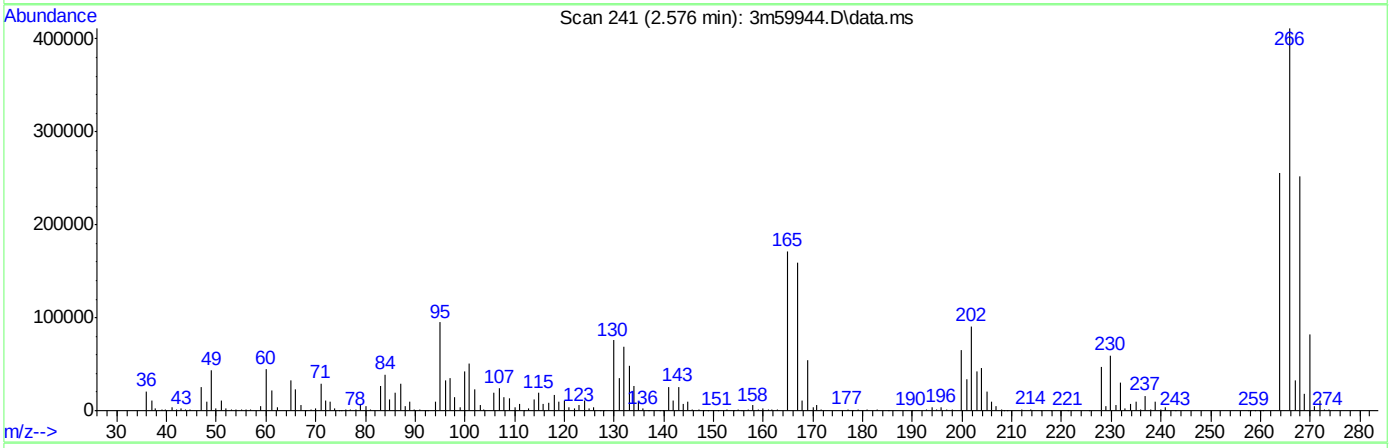
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.85	1297						
439.30	191						
439.50	1890						
440.00	920						
441.05	41421						
442.10	251781						
443.10	47350						
444.00	3614						
445.00	278						

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59944.D
Acq On    : 10 Mar 2016   9:03 am
Operator  : linseyk
Sample    : dftpp
Misc      : op91858a,e3m2811
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Mar 10 09:07:43 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: 3m59944.D\data.ms

(1) Pentachlorophenol (t)

2.576min (-0.219) 106.23ppb

response 391807

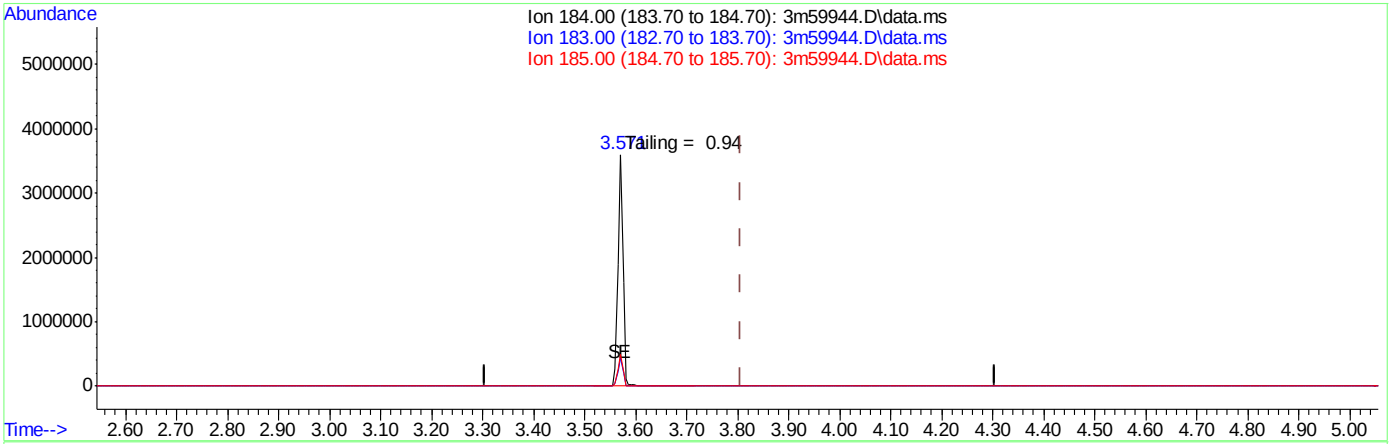
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	62.06
267.80	64.10	61.30
0.00	0.00	0.00

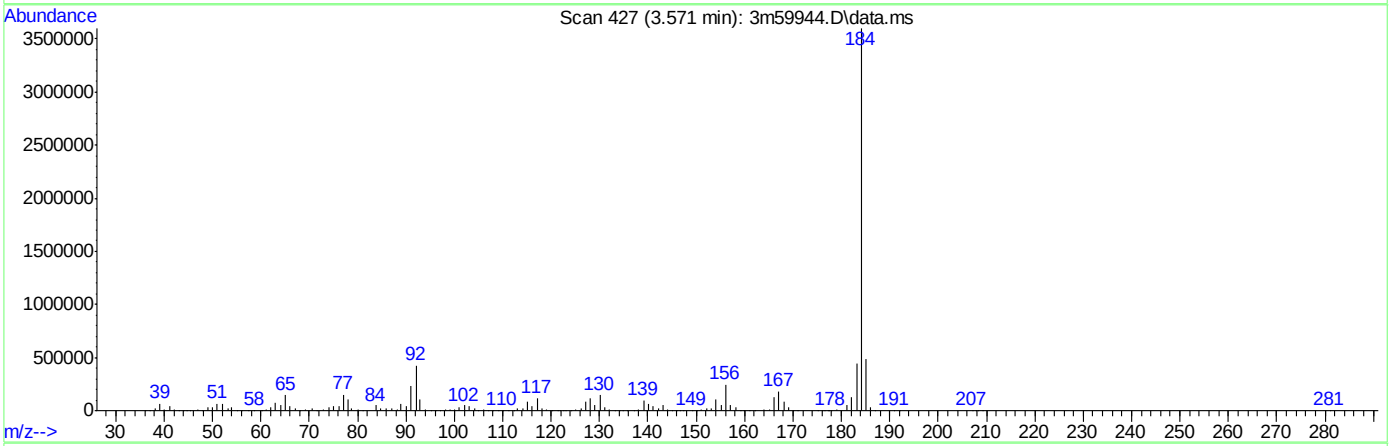
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59944.D
Acq On    : 10 Mar 2016   9:03 am
Operator  : linseyk
Sample    : dftpp
Misc      : op91858a,e3m2811
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Mar 10 09:07:43 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: 3m59944.D\data.ms

(2) Benzidine (t)

3.571min (-0.235) 134.70ppb

response 2451102

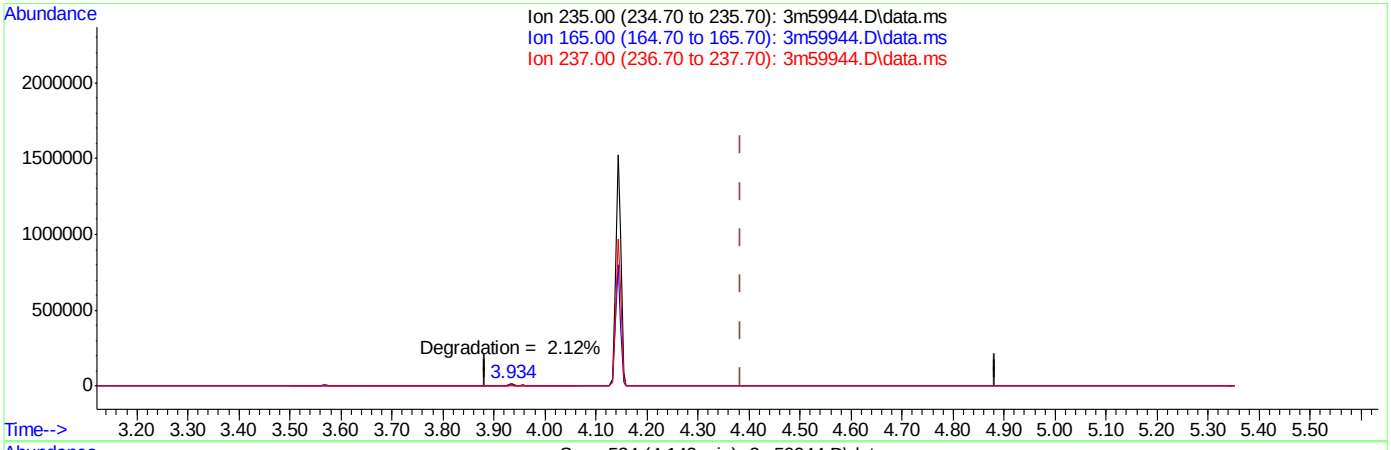
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.37
185.00	14.40	13.55
0.00	0.00	0.00

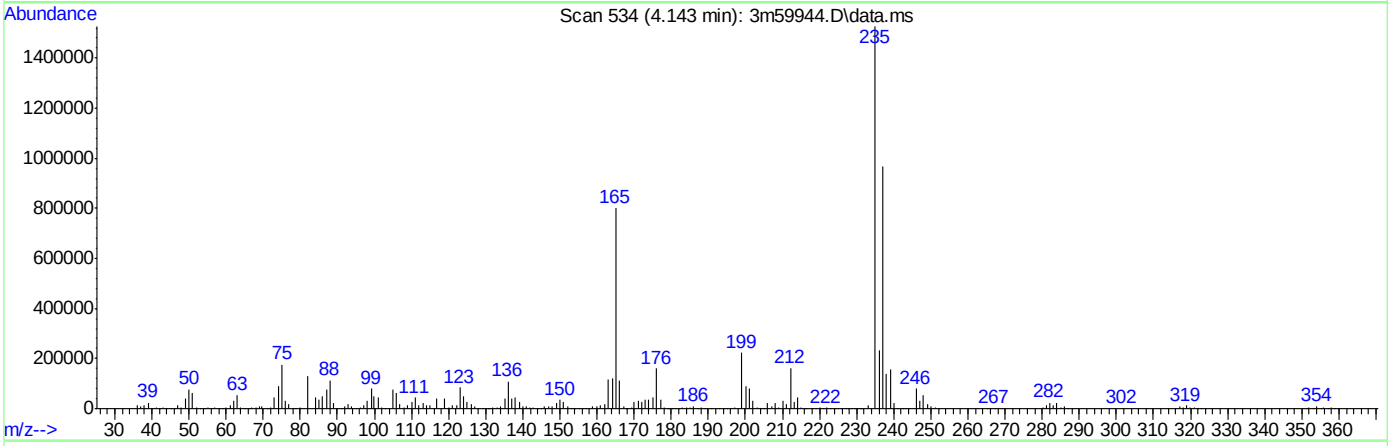
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59944.D
Acq On : 10 Mar 2016 9:03 am
Operator : linseyk
Sample : dftpp
Misc : op91858a,e3m2811
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 10 09:07:43 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: 3m59944.D\data.ms

(3) PP-DDT (t)

4.143min (-0.241) 140.47ppb

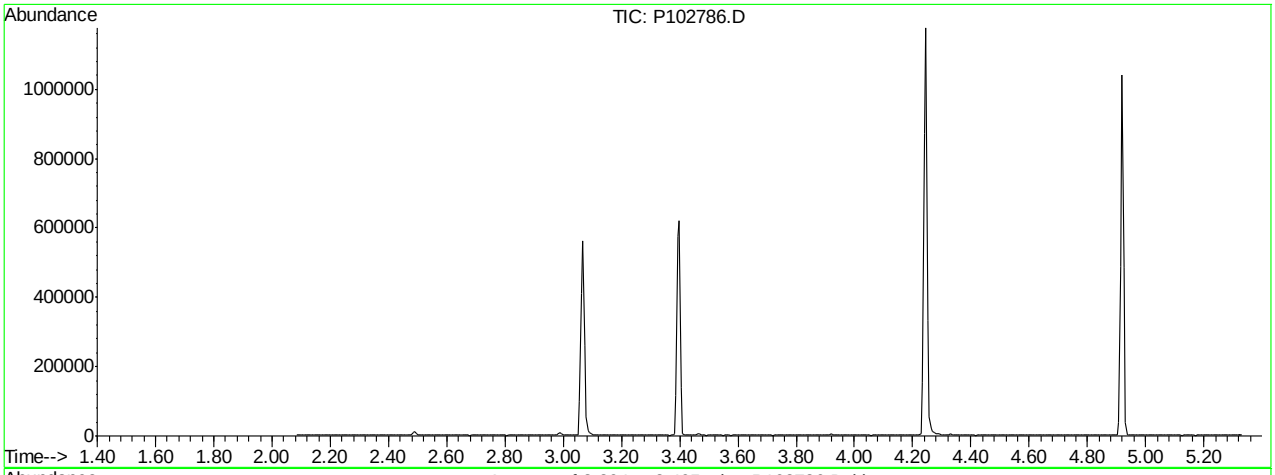
response 1046297

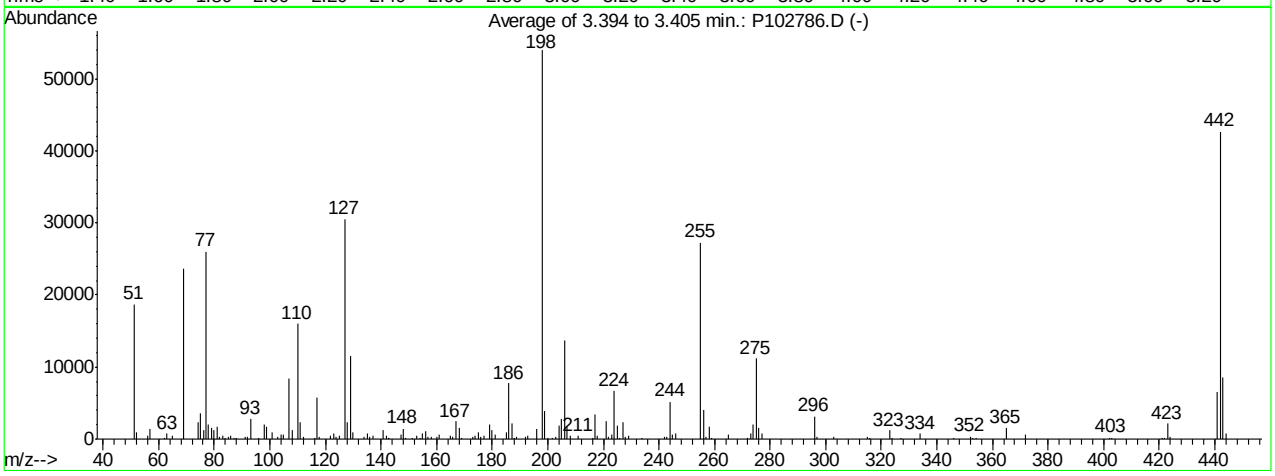
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	49.91#
237.00	0.00	63.79#
0.00	0.00	0.00

SGS ACCUTEST JC15518

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 230, 231, 232; Background Corrected with Scan 225

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.6	18668	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	23706	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	56.7	30563	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53930	PASS
199	198	5	9	7.3	3929	PASS
275	198	10	30	20.6	11130	PASS
365	198	1	100	2.8	1487	PASS
441	443	0.10	100	77.6	6594	PASS
442	198	40	100	79.1	42661	PASS
443	442	17	23	19.9	8492	PASS

P102786.D DFTPPP.M Wed Feb 24 09:01:28 2016

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
51.00	18668	77.00	25986	87.80	123	107.00	8385
52.00	1008	78.00	1975	90.95	354	107.95	1240
56.00	521	79.00	1614	91.90	370	110.00	16002
57.00	1408	80.00	1188	93.00	2756	110.95	2304
61.90	150	80.90	1772	96.00	127	111.90	295
63.00	732	81.90	308	98.00	1975	116.00	174
65.00	509	83.00	507	98.90	1792	116.95	5691
68.90	23706	83.90	130	101.00	991	117.85	289
74.00	2320	84.95	350	102.90	352	121.95	447
75.00	3660	85.90	529	103.95	575	123.00	744
76.05	1258	87.00	131	105.00	557	123.90	378

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.95	433	142.70	123	157.95	265	175.95	329
127.00	30563	142.90	119	159.90	357	176.95	496
128.00	2341	147.00	667	160.95	653	178.90	2001
129.00	11491	147.95	1469	164.90	515	179.95	1291
129.95	900	149.00	167	165.90	372	180.90	568
133.90	306	151.10	132	166.95	2444	185.00	906
134.90	787	153.00	403	168.00	1599	186.00	7768
135.95	393	154.00	208	169.00	150	186.95	2228
136.95	401	155.00	718	172.85	274	187.90	150
140.90	1203	156.00	1028	173.95	530	188.90	327
141.95	404	156.95	276	174.95	962	191.90	381

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
192.95	536	207.90	435	226.90	2401	256.95	321
196.00	1467	210.95	444	227.90	291	257.90	1713
197.90	53930	216.00	185	228.90	425	259.00	122
198.90	3929	216.90	3425	233.90	128	264.90	553
199.90	136	217.90	476	241.95	361	271.90	125
201.50	165	220.95	2531	242.95	355	272.90	792
203.00	341	221.90	280	244.00	5140	273.90	1999
204.00	1911	222.90	679	244.95	621	274.90	11130
205.00	2868	224.00	6671	245.90	848	275.95	1583
206.00	13678	224.95	1834	254.90	27247	276.90	804
207.00	1679	225.90	119	255.90	4037	295.90	3150

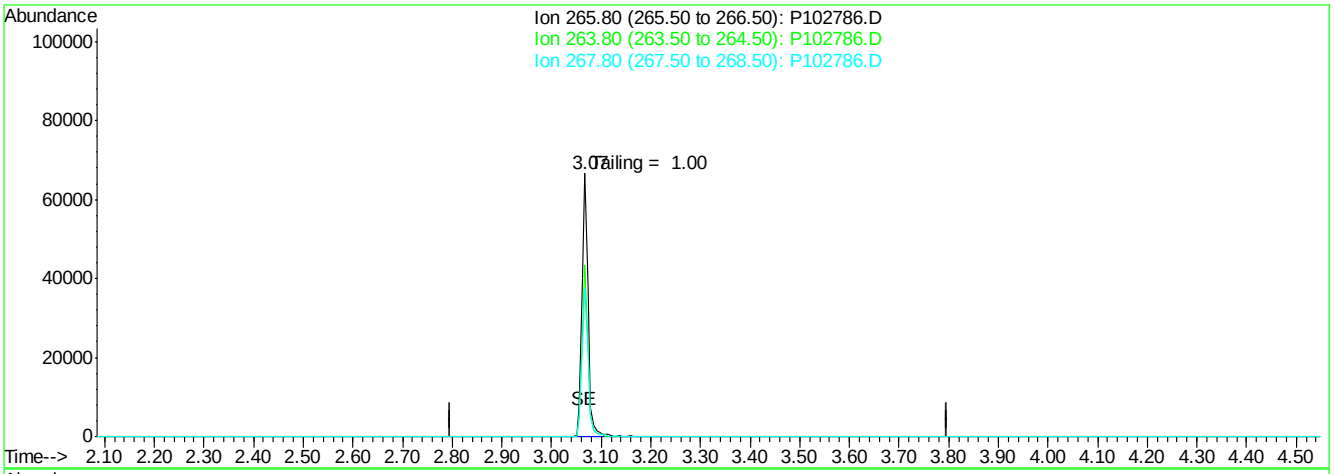
Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

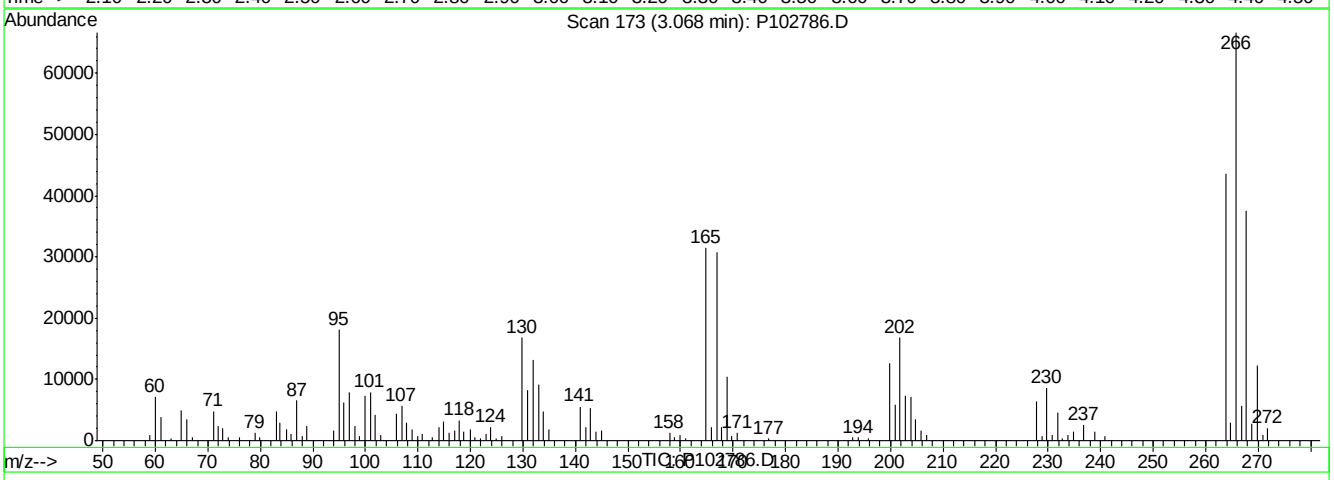
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.80	367	353.90	213	442.90	8492		
302.90	248	364.90	1487	443.90	828		
314.85	382	371.85	664				
315.90	135	401.90	176				
323.00	1207	402.90	188				
323.80	122	420.90	148				
326.90	153	422.00	160				
333.95	711	422.95	2166				
345.90	161	423.90	241				
352.00	322	440.95	6594				
353.00	153	441.90	42661				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 2:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.07min 208.02ppb

response 57519

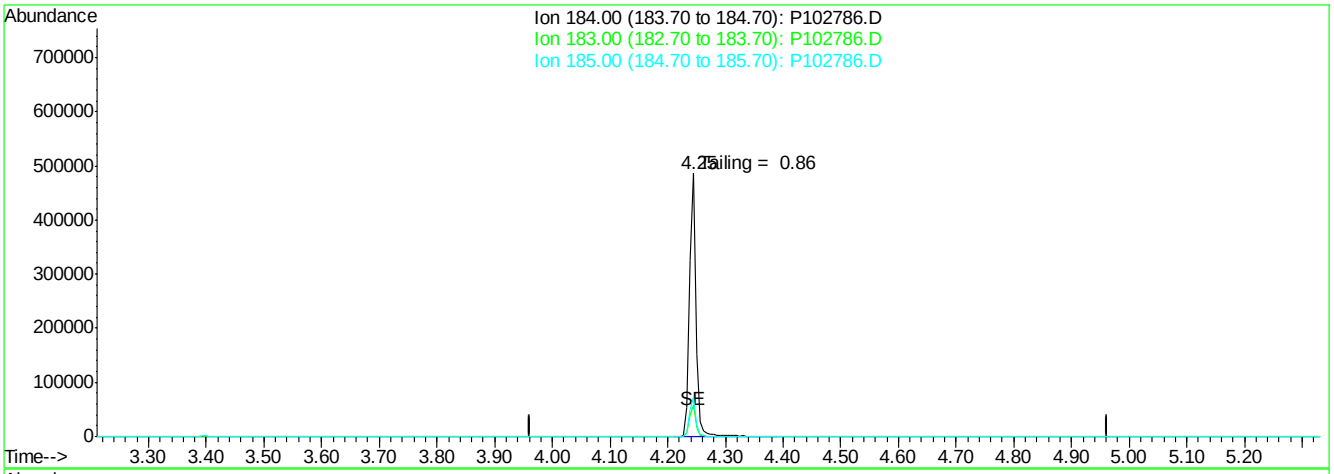
Ion	Exp%	Act%
265.80	100	100
263.80	63.10	65.27
267.80	63.20	55.97
0.00	0.00	0.00

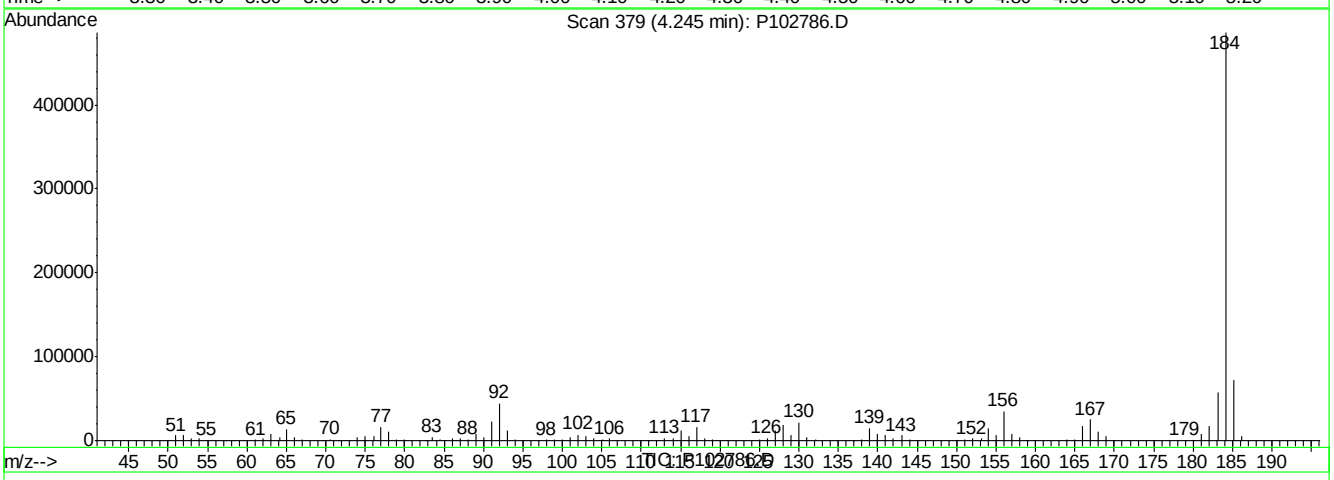
P102786.D DFTPPP.M Wed Feb 24 09:01:35 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 2:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.25min 132.10ppb

response 375509

Ion	Exp%	Act%
184.00	100	100
183.00	0.00	11.47
185.00	0.00	14.61
0.00	0.00	0.00

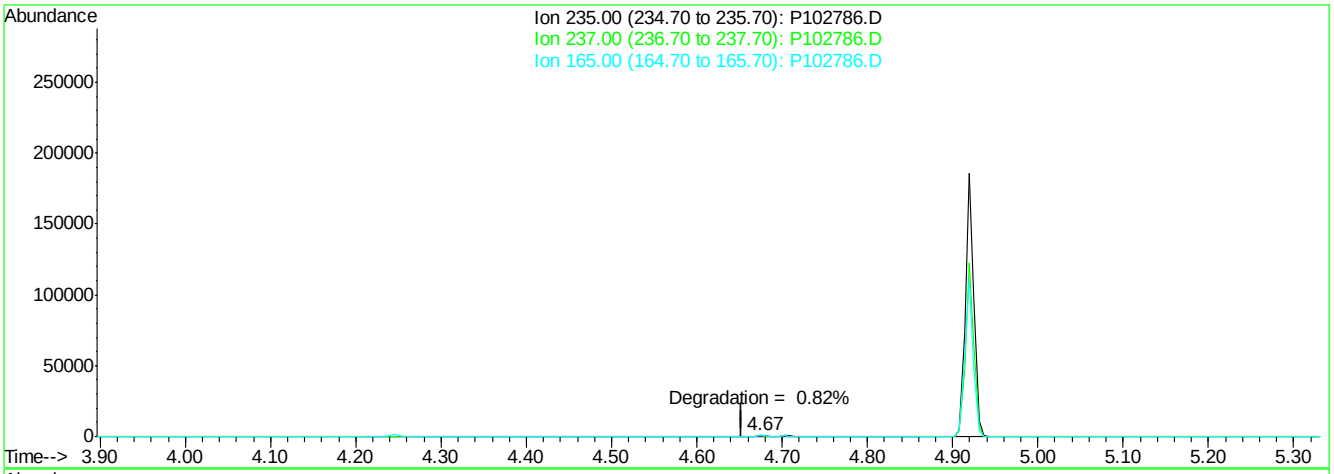
P102786.D DFTPPP.M Wed Feb 24 09:01:39 2016

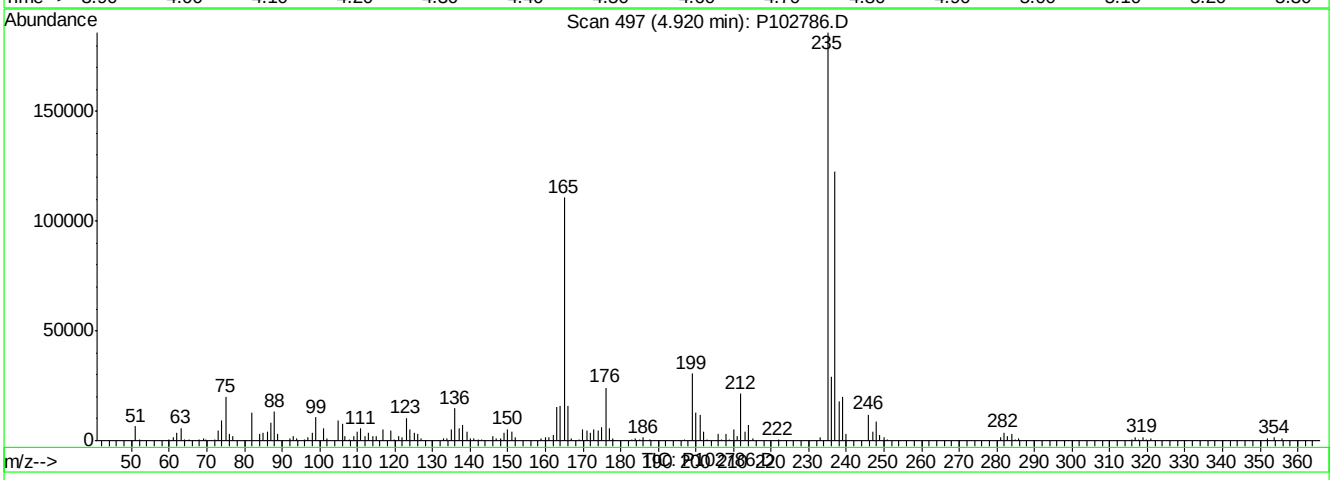
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 2:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

4.92min 98.65ppb

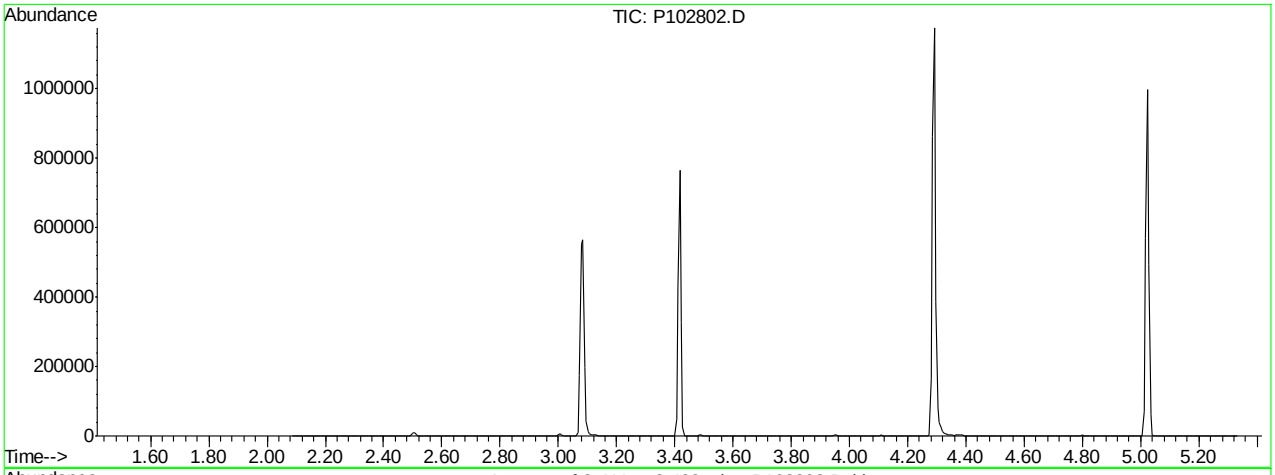
response 128279

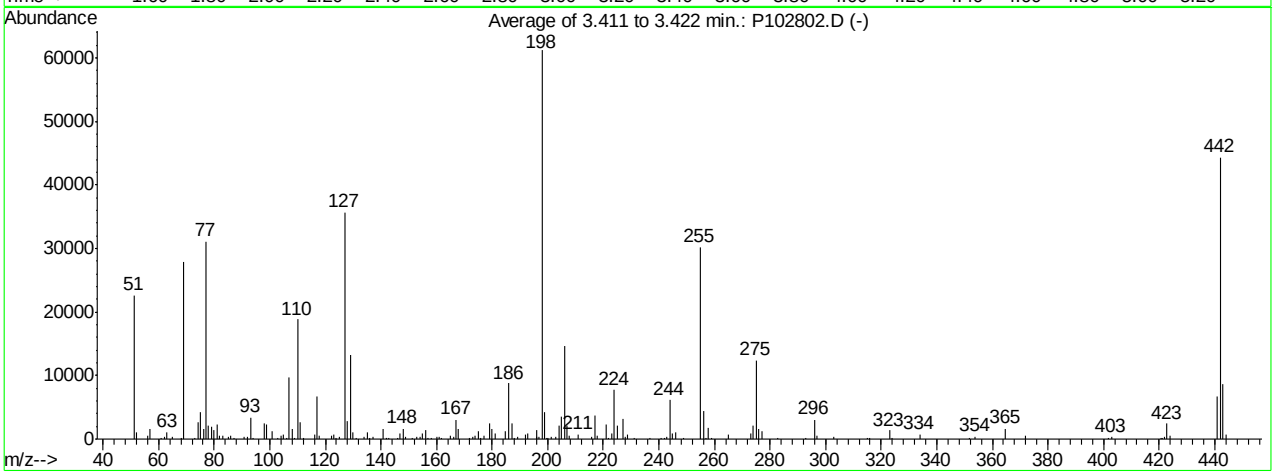
Ion	Exp%	Act%
235.00	100	100
237.00	65.40	66.06
165.00	55.50	60.08
0.00	0.00	0.00

P102786.D DFTPPP.M Wed Feb 24 09:01:46 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4515\P102802.D Vial: 1
Acq On : 24 Feb 2016 10:01 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 233, 234, 235; 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	37.0	22621	PASS
68	69	0.00	2	0.8	213	PASS
69	198	0.00	100	45.6	27911	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	58.4	35722	PASS
197	198	0.00	1	0.5	290	PASS
198	198	100	100	100.0	61170	PASS
199	198	5	9	7.0	4302	PASS
275	198	10	30	20.3	12439	PASS
365	198	1	100	2.7	1669	PASS
441	443	0.10	100	79.1	6795	PASS
442	198	40	100	72.4	44310	PASS
443	442	17	23	19.4	8589	PASS

P102802.D DFTPPP.M Fri Feb 26 08:23:00 2016

Average of 3.411 to 3.422 min.: P102802.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
51.00	22621	74.00	2727	85.95	523	104.90	638
52.00	1143	75.00	4305	87.00	143	106.00	123
55.95	589	76.05	1536	90.90	356	107.00	9741
56.95	1598	77.00	31139	91.95	414	107.95	1569
61.00	146	78.00	2126	93.00	3411	108.80	151
61.95	331	79.00	2012	94.00	258	110.00	18820
63.00	1123	80.00	1505	98.00	2468	111.00	2591
64.90	347	80.95	2274	98.95	2289	112.00	235
68.00	213	81.95	593	100.95	1226	116.00	631
68.90	27911	82.95	470	102.90	169	117.00	6768
73.00	129	85.00	420	103.90	619	117.95	569

Average of 3.411 to 3.422 min.: P102802.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
122.00	458	135.90	170	152.90	371	167.00	3062
122.95	789	137.00	429	153.95	390	167.95	1672
124.00	232	140.90	1593	155.00	884	171.90	124
125.00	343	141.80	157	156.00	1421	172.95	340
127.00	35722	142.00	268	156.90	119	173.95	581
128.00	2825	142.90	145	158.00	173	174.95	1314
129.00	13155	146.00	143	159.95	353	176.00	229
130.00	1120	146.90	908	160.85	415	176.90	585
130.90	142	147.95	1645	161.90	171	178.90	2400
133.90	374	148.95	386	164.95	456	179.95	1672
135.00	999	151.10	119	166.05	298	180.95	841

Average of 3.411 to 3.422 min.: P102802.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.90	1321	198.90	4302	215.95	301	231.00	194
186.00	8743	199.80	137	216.90	3728	236.80	124
187.00	2398	200.00	196	217.95	497	240.90	132
187.90	155	201.45	313	221.00	2386	241.90	236
188.95	408	202.90	307	221.70	211	242.90	296
191.90	730	203.95	2207	222.90	805	244.00	6106
192.90	839	204.95	3532	224.00	7745	245.00	854
195.90	1423	206.00	14693	225.00	2037	245.85	1023
196.10	353	207.00	2068	226.90	3178	248.90	123
196.70	290	207.90	609	227.95	364	254.90	30264
197.90	61170	210.95	721	228.85	686	255.95	4344

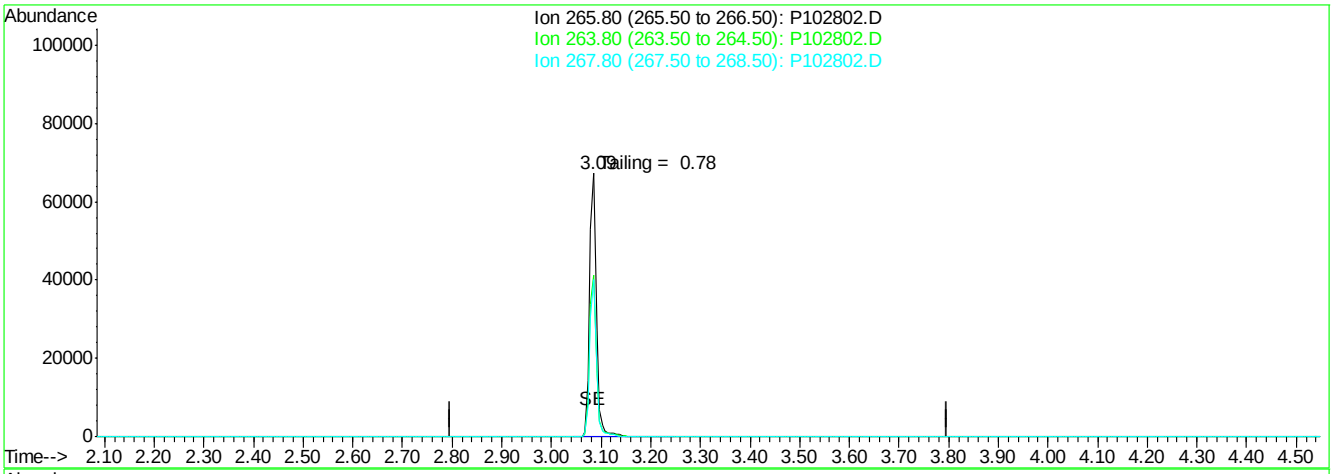
Average of 3.411 to 3.422 min.: P102802.D
dftpp
Modified:subtracted

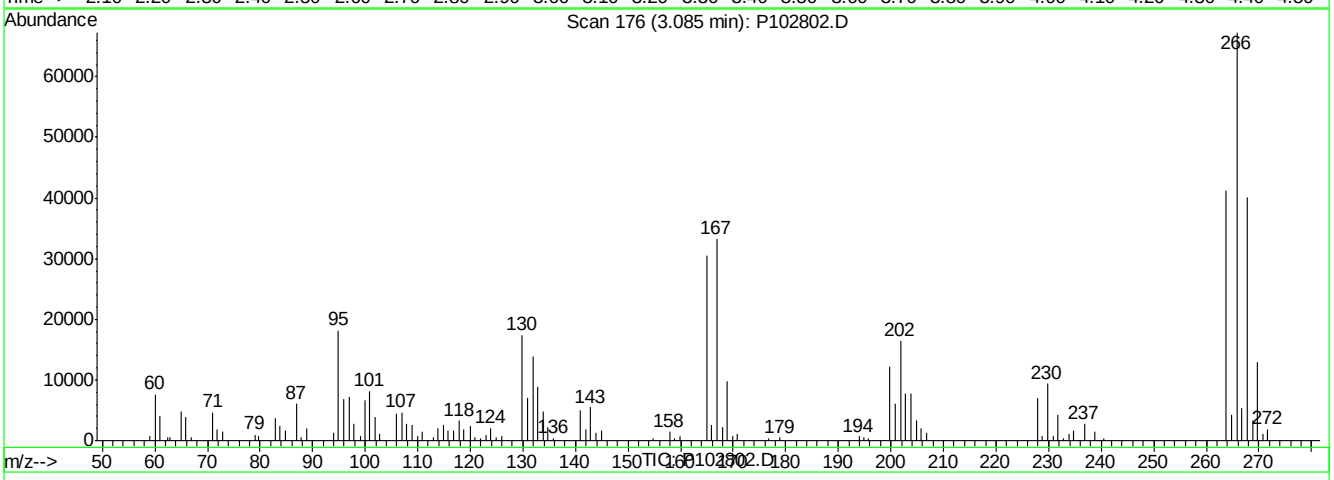
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
257.10	175	295.95	3041	371.90	528	443.95	774
257.90	1814	296.95	517	401.90	165		
258.90	174	303.00	348	402.90	319		
264.95	659	314.80	227	420.70	169		
272.90	905	315.90	142	420.90	180		
273.95	2134	322.95	1332	421.90	294		
274.90	12439	324.00	156	422.90	2448		
275.95	1554	333.95	725	423.95	473		
276.90	1234	351.80	223	440.95	6795		
282.80	127	353.90	354	441.90	44310		
292.90	189	364.80	1669	442.90	8589		

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102802.D Vial: 1
Acq On : 24 Feb 2016 10:01 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 10:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.09min 221.42ppb

response 61224

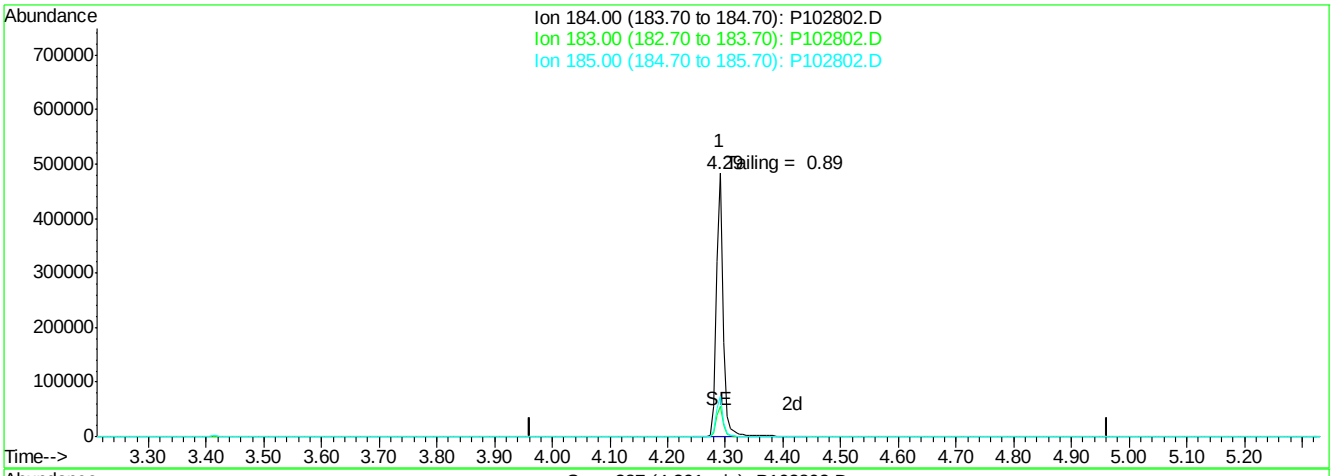
Ion	Exp%	Act%
265.80	100	100
263.80	63.10	61.39
267.80	63.20	59.69
0.00	0.00	0.00

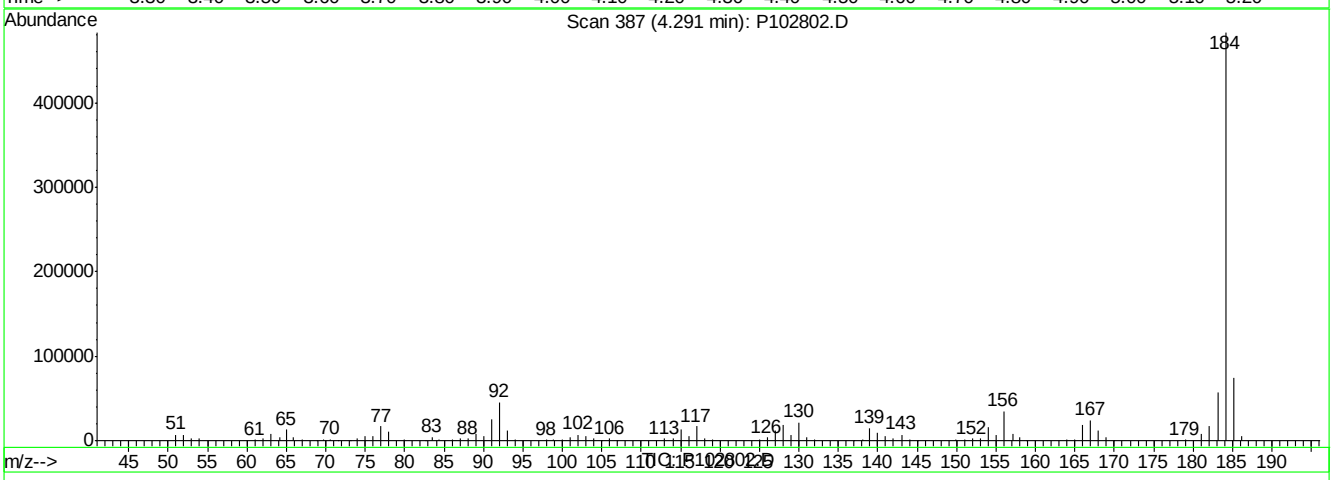
P102802.D DFTPPP.M Fri Feb 26 08:22:38 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102802.D Vial: 1
Acq On : 24 Feb 2016 10:01 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 10:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.29min 136.73ppb

response 388658

Ion	Exp%	Act%
184.00	100	100
183.00	0.00	11.66
185.00	0.00	15.47
0.00	0.00	0.00

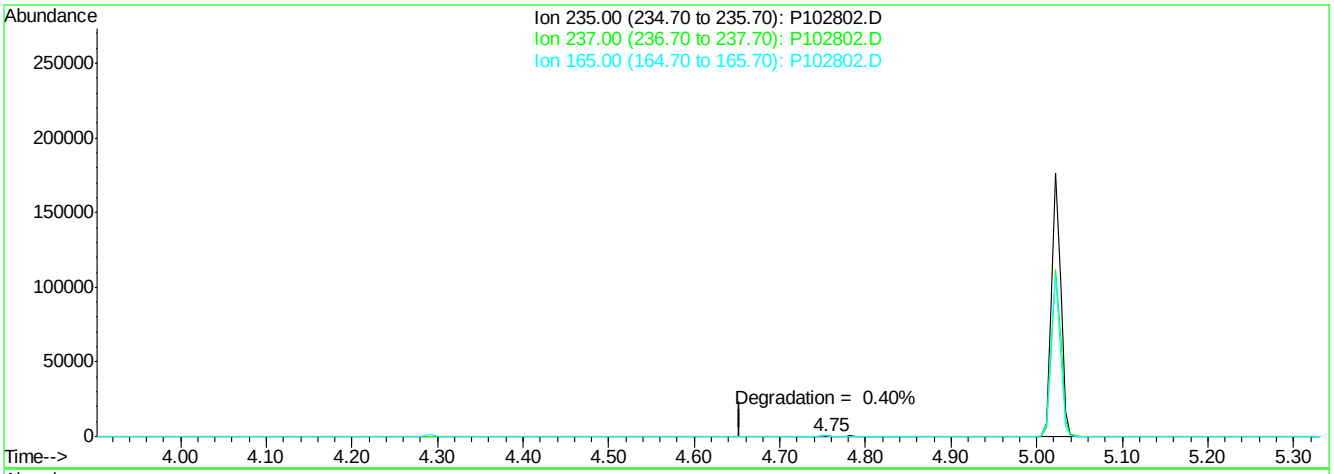
P102802.D DFTPPP.M Fri Feb 26 08:22:45 2016

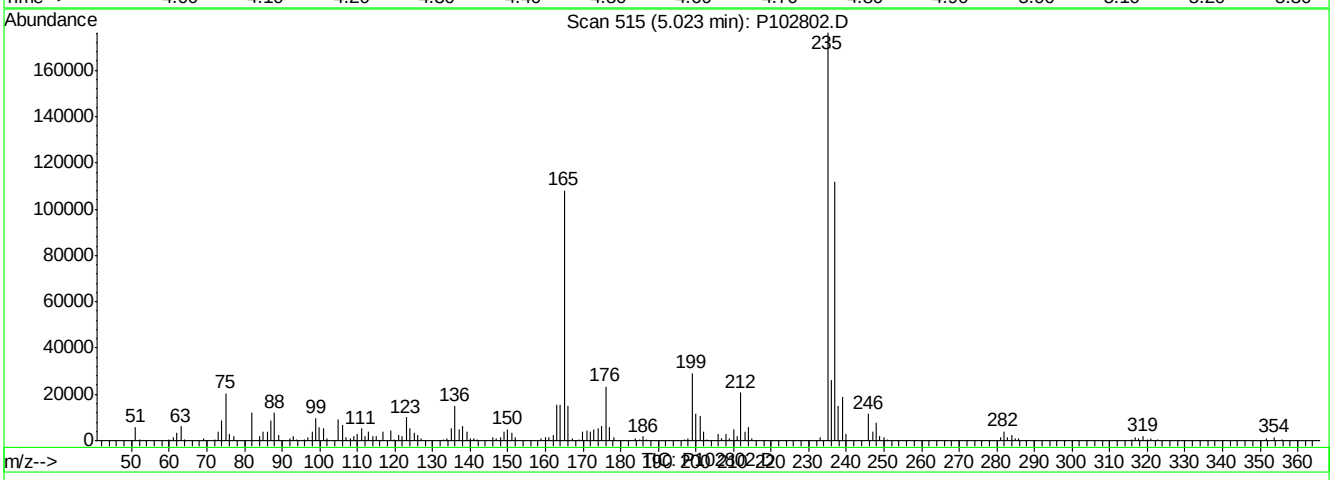
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102802.D Vial: 1
Acq On : 24 Feb 2016 10:01 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 10:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.02min 102.92ppb

response 133827

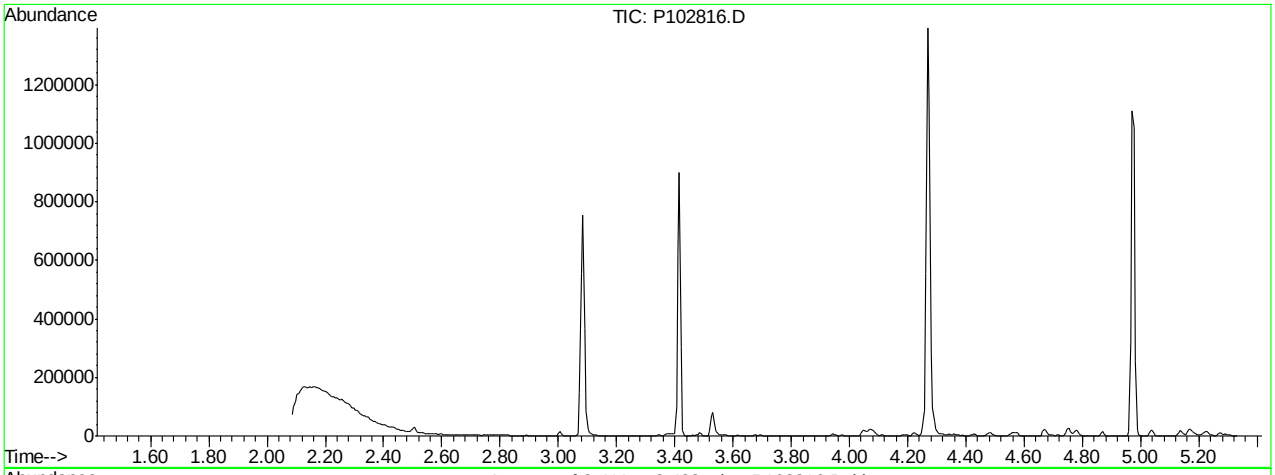
Ion	Exp%	Act%
235.00	100	100
237.00	65.40	63.96
165.00	55.50	61.54
0.00	0.00	0.00

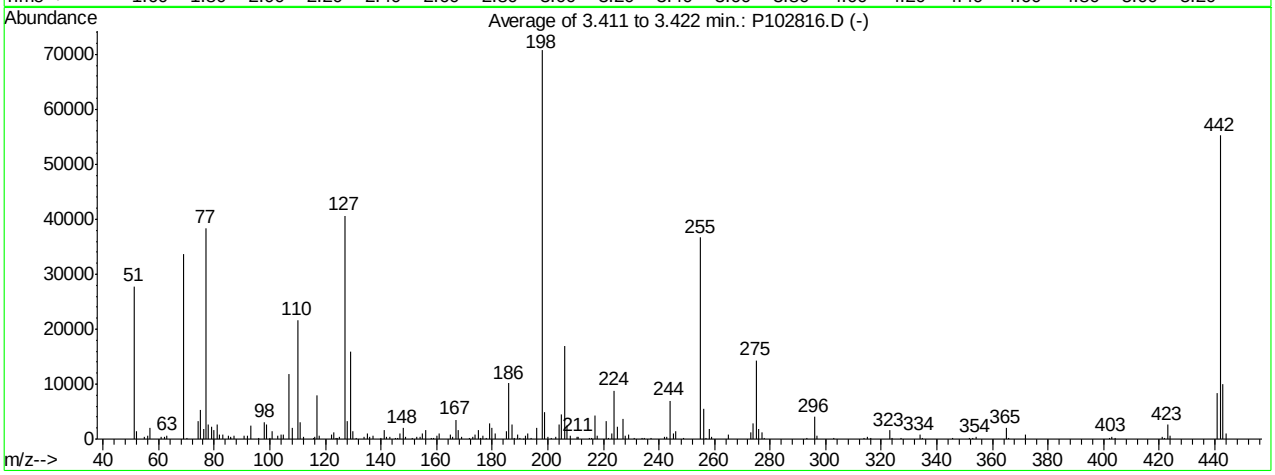
P102802.D DFTPPP.M Fri Feb 26 08:22:53 2016

SGS ACCUTEST JC15518

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4516\P102816.D Vial: 1
Acq On : 25 Feb 2016 10:08 am Operator: ashleyd
Sample : dftpp Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 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	39.3	27818	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	33630	PASS
70	69	0.00	2	0.4	118	PASS
127	198	40	60	57.5	40619	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	70698	PASS
199	198	5	9	7.0	4974	PASS
275	198	10	30	20.3	14362	PASS
365	198	1	100	2.8	1950	PASS
441	443	0.10	100	84.1	8329	PASS
442	198	40	100	78.1	55242	PASS
443	442	17	23	17.9	9902	PASS

P102816.D DFTPPP.M Fri Feb 26 08:52:48 2016

Average of 3.411 to 3.422 min.: P102816.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
51.00	27818	75.00	5333	86.00	333	103.90	751
52.00	1507	76.05	1928	86.95	558	104.95	844
54.95	331	77.00	38358	90.90	527	106.95	11799
56.00	687	78.00	2635	91.90	524	107.90	1992
56.95	2112	79.00	2318	92.95	2483	109.95	21657
60.90	407	79.90	1664	95.95	256	110.95	3135
61.95	416	81.00	2592	98.00	3115	111.95	376
63.00	694	81.95	769	98.95	2601	115.80	235
68.90	33630	83.00	762	99.95	236	116.00	349
70.00	118	84.90	622	100.95	1340	116.95	7887
74.00	3351	85.80	234	102.95	602	117.90	540

Average of 3.411 to 3.422 min.: P102816.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
122.00	803	134.95	1109	148.95	497	165.90	499
122.90	1237	135.95	345	151.10	119	166.95	3542
123.80	223	137.00	684	152.85	427	167.95	1711
124.00	279	139.90	150	153.95	467	168.95	377
124.90	438	140.95	1713	154.95	1082	171.90	284
127.00	40619	141.95	408	156.00	1611	172.90	417
128.00	3256	143.00	401	158.10	174	173.90	772
128.95	15825	145.00	122	158.80	118	174.95	1552
129.90	1381	146.00	292	160.00	546	175.90	227
130.95	310	146.90	1021	160.95	971	176.80	547
133.90	445	147.95	1965	164.95	785	178.00	121

Average of 3.411 to 3.422 min.: P102816.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
178.90	2879	192.95	950	207.00	2511	224.00	8808
179.95	1999	193.90	148	207.95	596	225.00	2271
180.95	929	195.95	2040	210.35	359	226.90	3733
185.00	1346	197.90	70698	211.00	507	227.90	640
186.00	10148	198.90	4974	215.00	126	228.90	784
186.95	2659	199.90	420	215.90	169	231.00	199
188.00	203	201.40	278	216.90	4191	233.90	126
188.95	777	203.00	445	217.90	528	234.80	154
189.80	118	204.00	2568	220.90	3228	237.00	120
191.00	73	205.00	4417	221.80	181	242.00	384
191.90	676	206.00	16834	222.95	1062	242.95	377

Average of 3.411 to 3.422 min.: P102816.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
243.95	7001	273.90	2770	316.00	135	365.80	168
245.00	1035	274.90	14362	322.90	1542	371.90	845
245.90	1421	276.00	1770	323.90	260	401.90	153
248.90	138	276.95	1208	326.90	117	402.85	409
254.90	36685	277.90	136	333.90	773	404.00	133
255.90	5428	293.00	183	334.90	136	421.00	353
256.90	219	295.90	4074	345.80	207	421.95	314
257.90	1905	296.80	558	351.80	216	422.95	2649
258.90	348	302.90	242	352.90	274	423.90	577
264.95	823	313.90	140	353.90	348	440.90	8329
272.90	1171	314.85	373	364.90	1950	441.90	55242

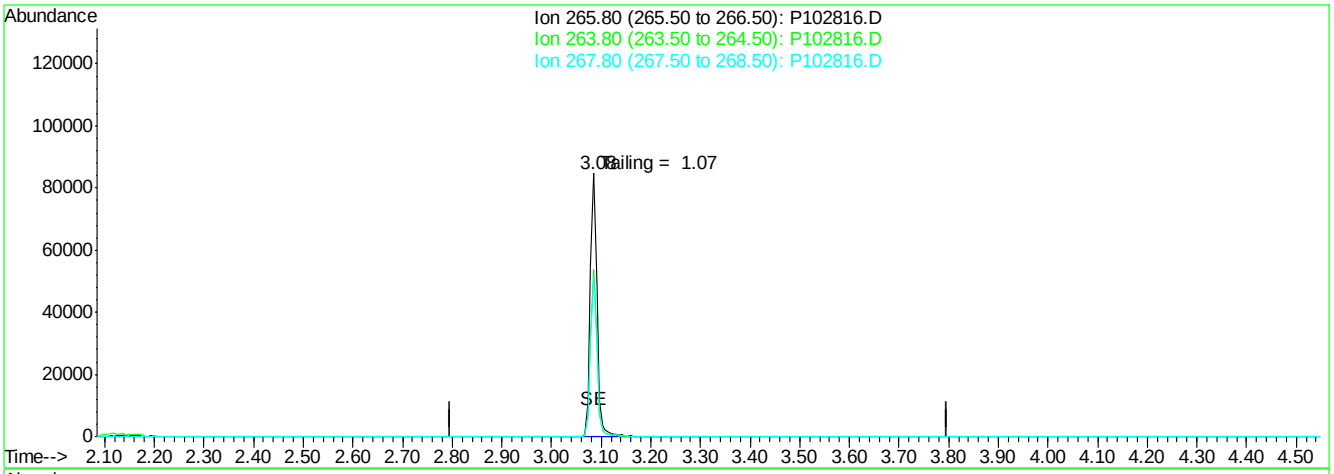
Average of 3.411 to 3.422 min.: P102816.D
dftpp
Modified:subtracted

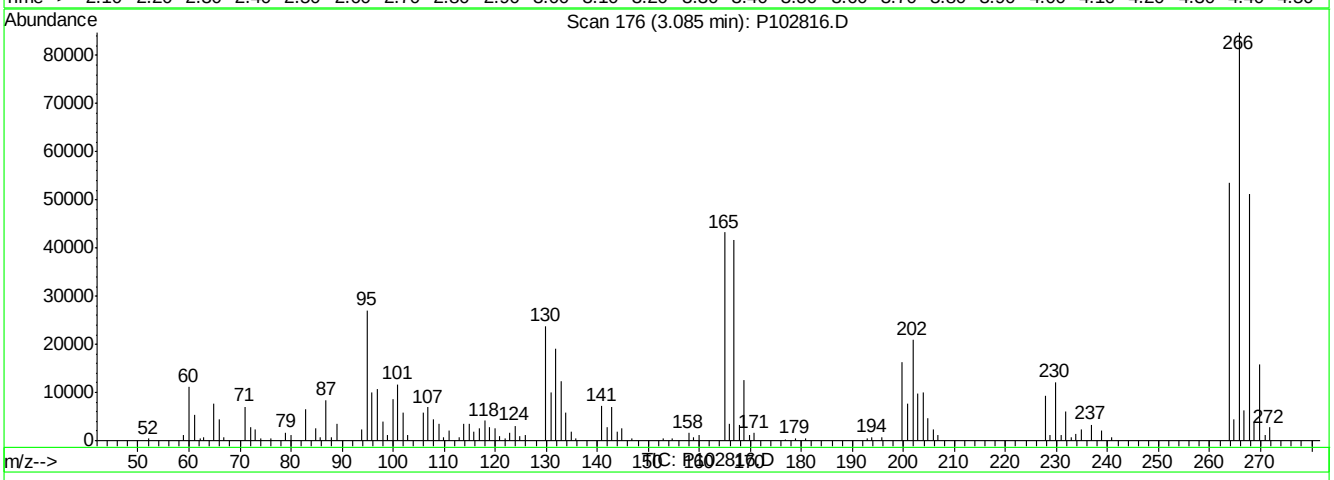
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.90	9902						
443.90	986						

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102816.D Vial: 1
Acq On : 25 Feb 2016 10:08 am Operator: ashleyd
Sample : dftpp Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 25 10:13 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.08min 275.34ppb

response 76135

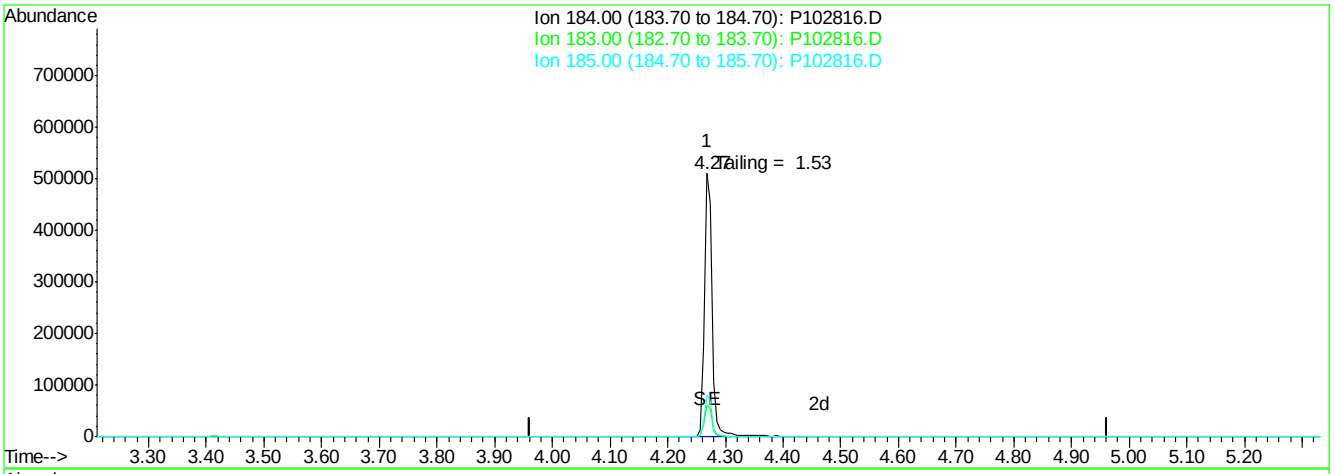
Ion	Exp%	Act%
265.80	100	100
263.80	63.10	63.27
267.80	63.20	60.42
0.00	0.00	0.00

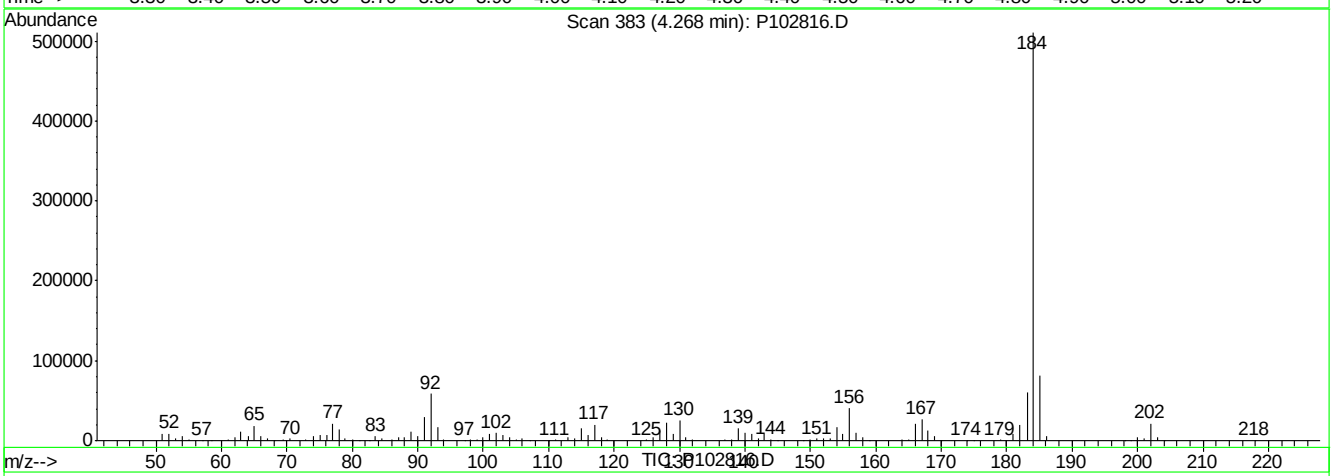
P102816.D DFTPPP.M Fri Feb 26 08:52:56 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102816.D Vial: 1
Acq On : 25 Feb 2016 10:08 am Operator: ashleyd
Sample : dftpp Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 25 10:13 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.27min 162.74ppb

response 462597

Ion	Exp%	Act%
184.00	100	100
183.00	0.00	11.66
185.00	0.00	15.68
0.00	0.00	0.00

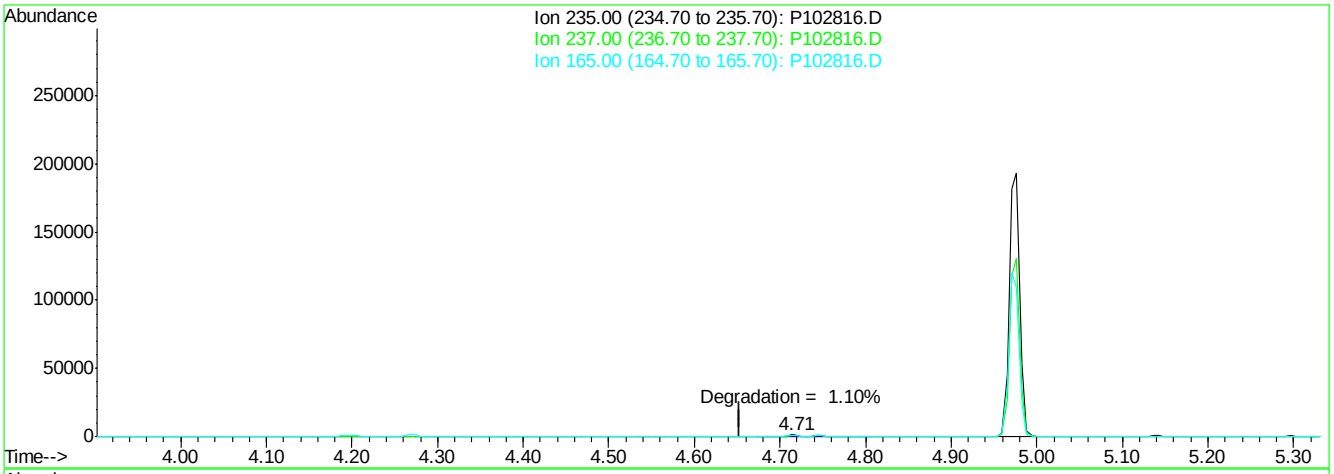
P102816.D DFTPPP.M Fri Feb 26 08:53:02 2016

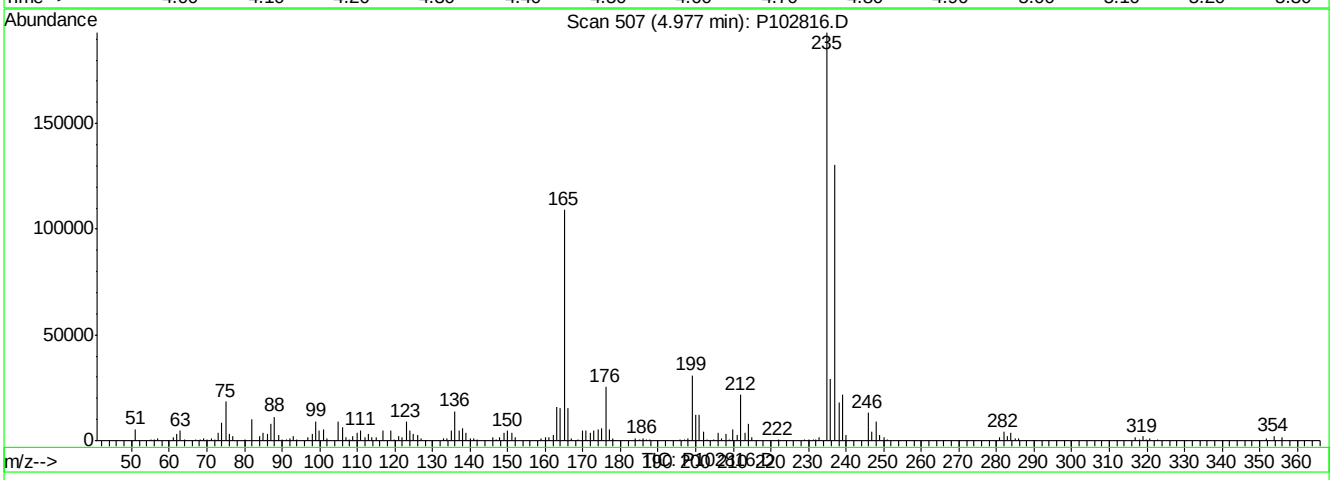
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102816.D Vial: 1
Acq On : 25 Feb 2016 10:08 am Operator: ashleyd
Sample : dftpp Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 25 10:13 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

4.98min 126.78ppb

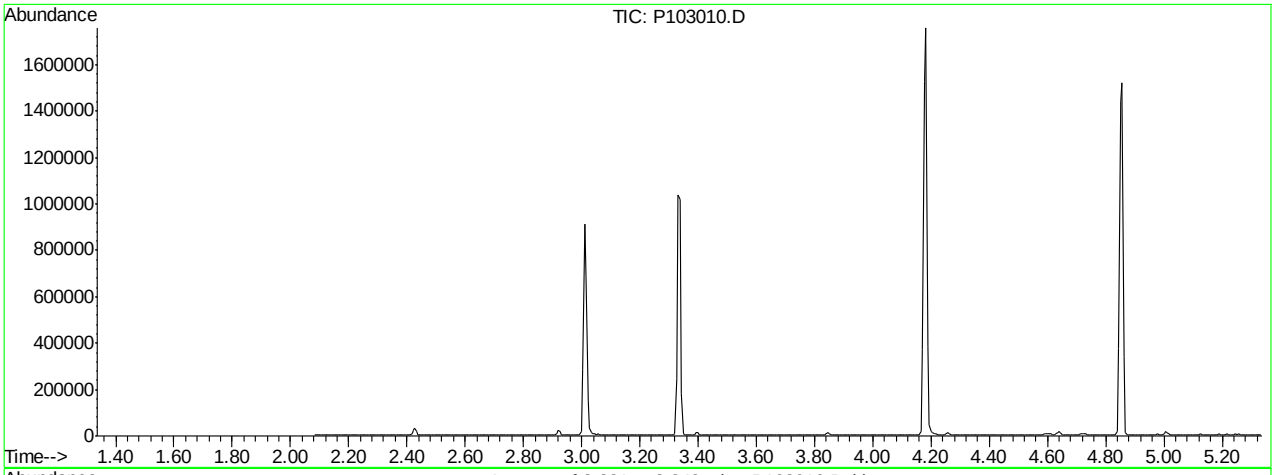
response 164851

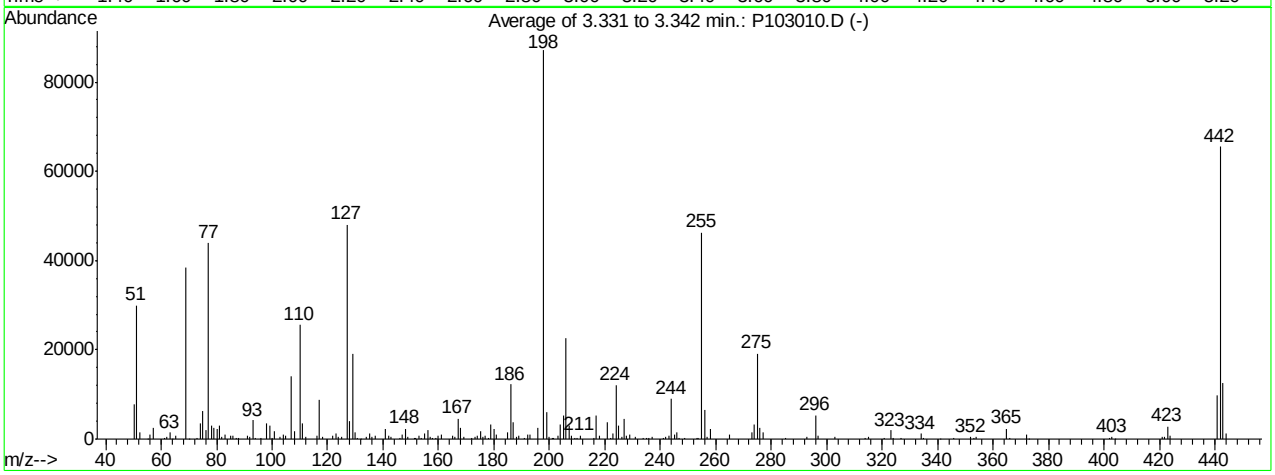
Ion	Exp%	Act%
235.00	100	100
237.00	65.40	65.83
165.00	55.50	61.41
0.00	0.00	0.00

P102816.D DFTPPP.M Fri Feb 26 08:53:12 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 219, 220, 221; Background Corrected with Scan 214

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.4	29961	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.2	38523	PASS
70	69	0.00	2	0.3	119	PASS
127	198	40	60	55.2	48031	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	87088	PASS
199	198	5	9	6.9	5993	PASS
275	198	10	30	21.9	19109	PASS
365	198	1	100	2.7	2328	PASS
441	443	0.10	100	79.2	9869	PASS
442	198	40	100	75.2	65456	PASS
443	442	17	23	19.0	12454	PASS

P103010.D DFTPPP.M Thu Mar 03 08:55:28 2016

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	7918	69.00	38523	81.95	617	98.00	3529
51.05	29961	69.90	119	83.05	909	99.00	3032
52.10	1568	72.95	325	85.00	779	100.05	324
55.10	127	74.05	3401	85.90	815	101.00	1657
56.00	892	75.00	6289	86.95	355	103.00	508
57.00	2405	76.10	2020	87.95	273	104.00	895
61.05	310	77.10	43879	91.00	685	105.00	849
62.00	456	78.10	3069	92.00	603	107.00	13956
63.05	1416	79.00	2571	93.05	4266	108.00	1737
64.10	118	80.00	2196	94.00	348	110.00	25592
65.05	756	81.00	3087	96.00	138	111.00	3642

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
112.05	454	130.00	1463	147.00	1042	158.95	278
116.05	636	130.90	139	148.00	2369	160.00	700
117.00	8823	132.10	117	148.90	462	161.00	1024
118.05	627	133.95	525	151.20	143	165.00	714
122.00	747	135.00	1252	151.80	156	166.00	615
123.00	1240	136.00	598	152.95	661	167.00	4618
124.00	545	137.05	797	153.90	358	168.00	2478
125.00	611	141.00	2341	155.00	1349	169.00	395
127.00	48031	142.05	647	156.00	1990	171.90	385
128.00	3925	143.00	527	157.05	465	173.00	482
129.00	19067	146.00	259	157.90	357	174.00	866

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.00	1760	189.00	759	204.00	3341	221.00	3814
175.95	453	190.95	343	205.00	5296	222.00	340
177.00	741	192.00	902	206.00	22535	222.90	1343
177.95	327	193.00	1098	207.00	3106	224.00	12115
179.00	3264	196.00	2527	207.95	672	225.00	3045
180.00	2227	198.00	87088	209.00	158	226.05	412
181.00	920	198.95	5993	210.00	192	226.95	4563
185.00	1582	199.90	427	211.00	835	227.95	656
186.00	12226	200.90	140	216.00	188	228.90	1024
187.00	3749	201.55	345	217.00	5332	230.95	445
188.00	408	203.00	695	217.95	791	234.00	200

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.90	221	253.10	230	276.95	1590	326.95	281
235.95	278	253.80	143	285.00	328	334.00	1172
237.00	449	255.00	46267	293.00	409	334.90	175
240.95	294	256.00	6608	295.95	5356	340.90	123
242.00	605	256.85	522	296.90	724	345.90	375
243.00	751	257.90	2386	302.95	595	351.95	489
244.00	8992	265.00	902	314.00	173	353.00	341
245.00	1094	273.00	1566	314.95	552	353.95	426
246.00	1451	273.95	3350	320.80	136	364.90	2328
246.95	335	275.00	19109	323.00	1903	365.95	354
248.90	172	276.00	2456	324.05	306	371.95	941

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

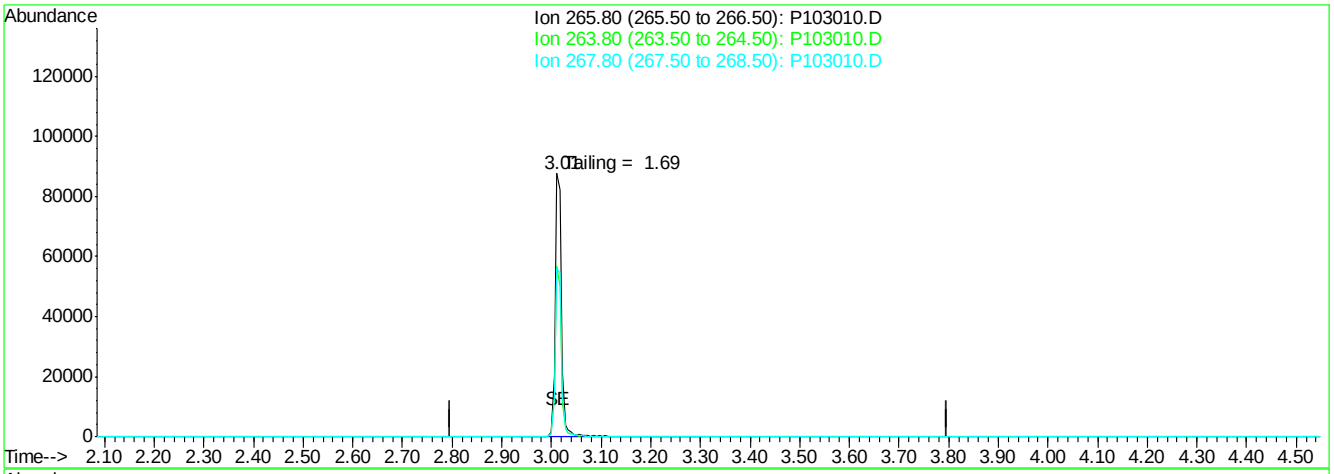
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.00	123	443.90	1215				
401.95	295						
402.95	437						
404.00	120						

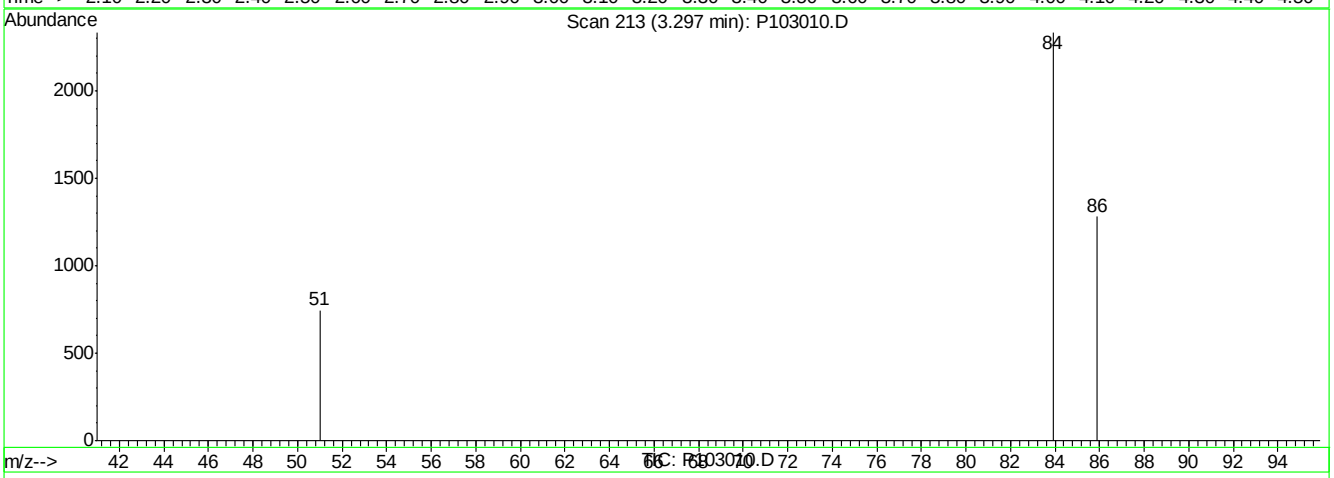
420.95	490
421.95	391
422.95	2864
423.90	772
441.00	9869
442.00	65456
443.00	12454

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

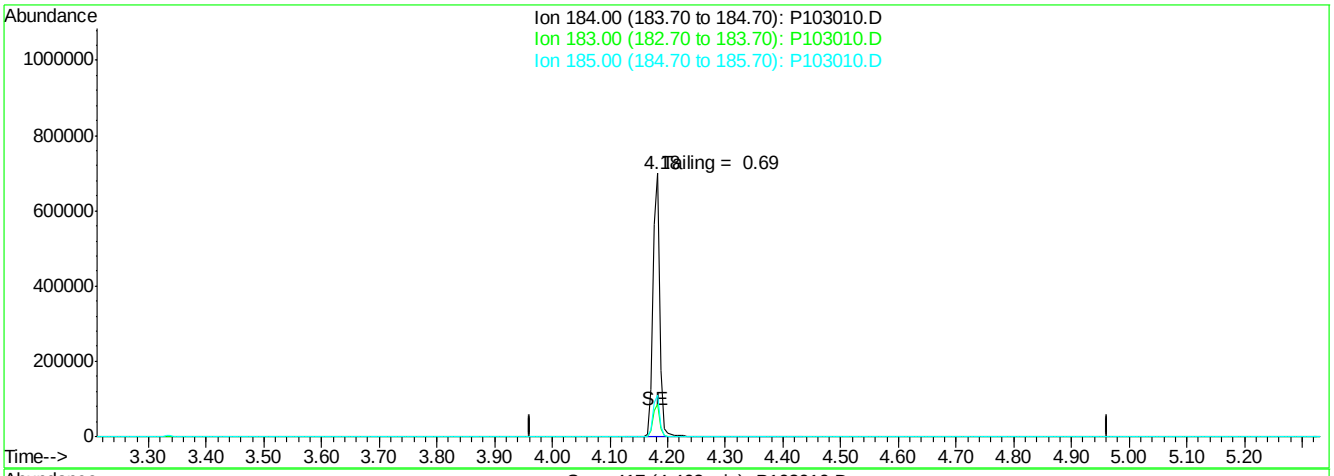
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

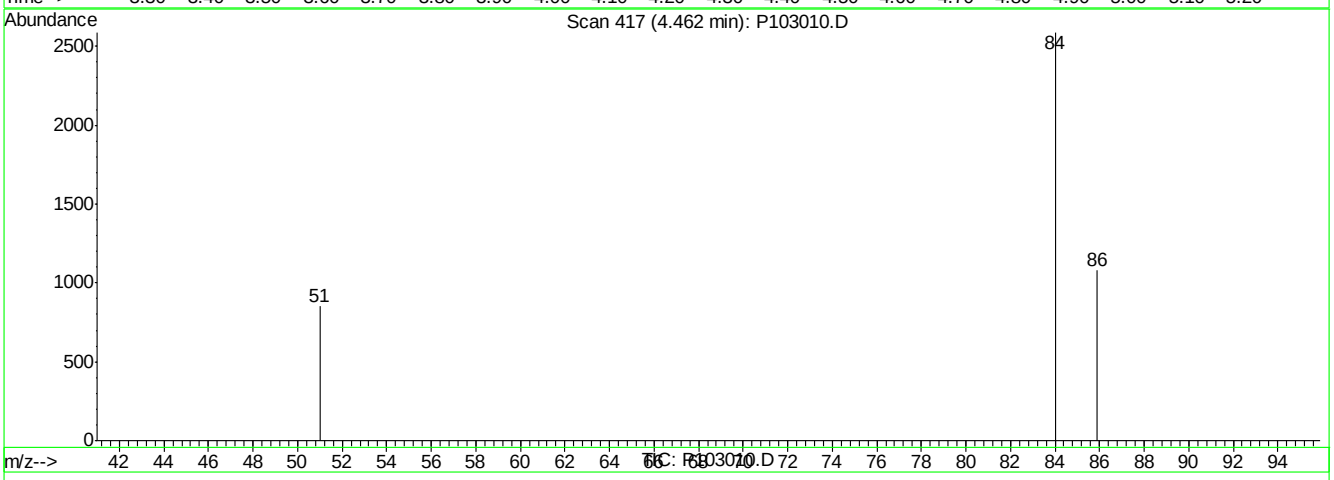
P103010.D DFTPPP.M Wed Mar 02 17:02:42 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

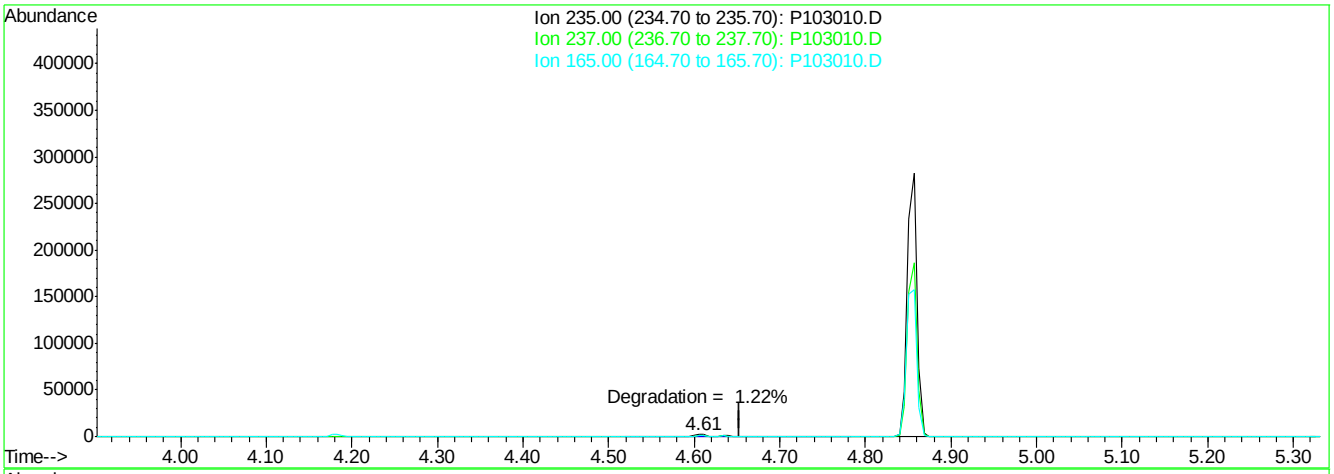
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

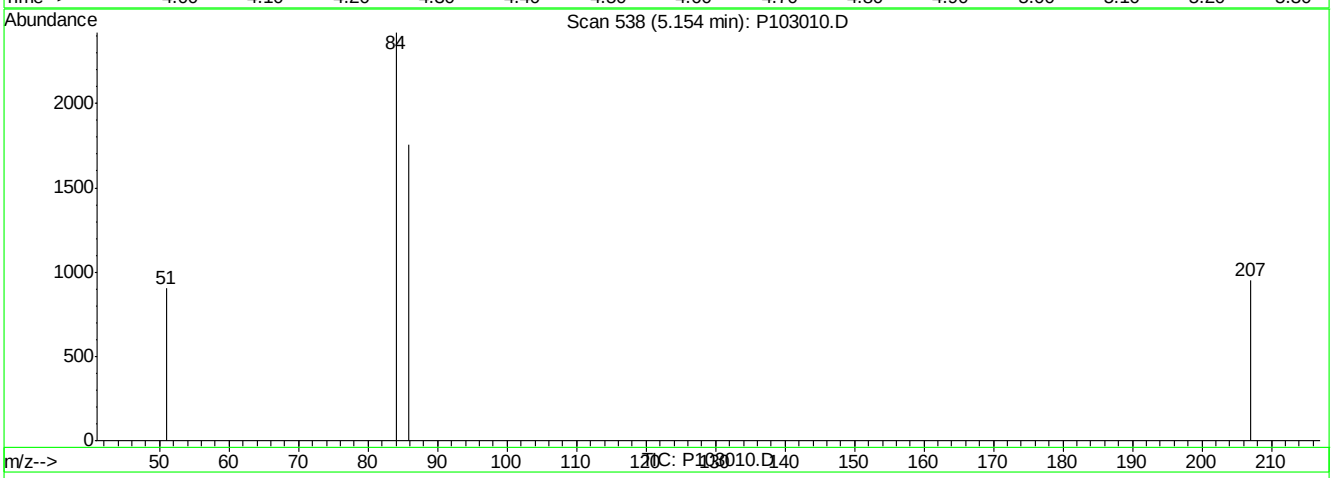
P103010.D DFTPPP.M Wed Mar 02 17:02:49 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

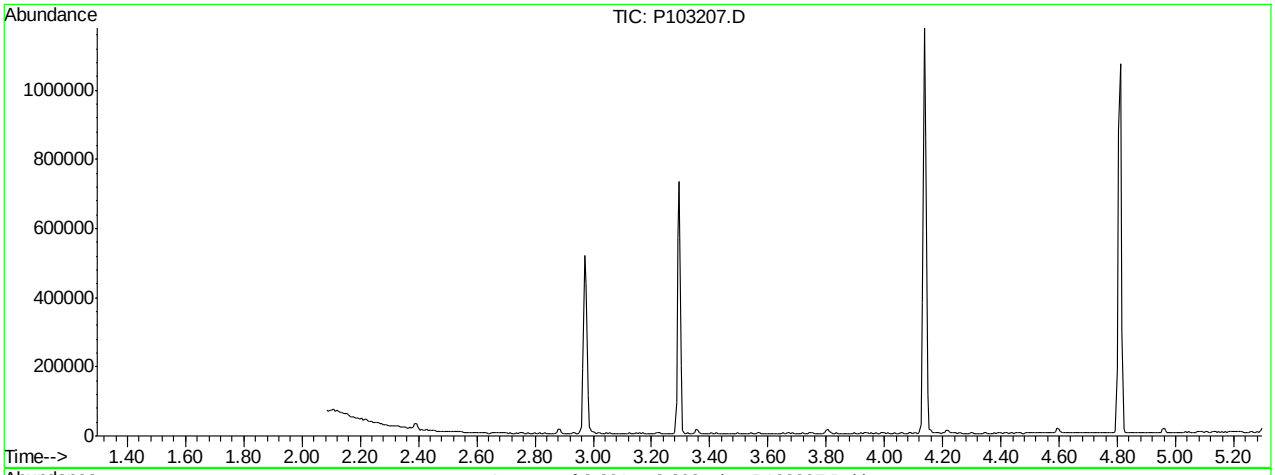
response 0

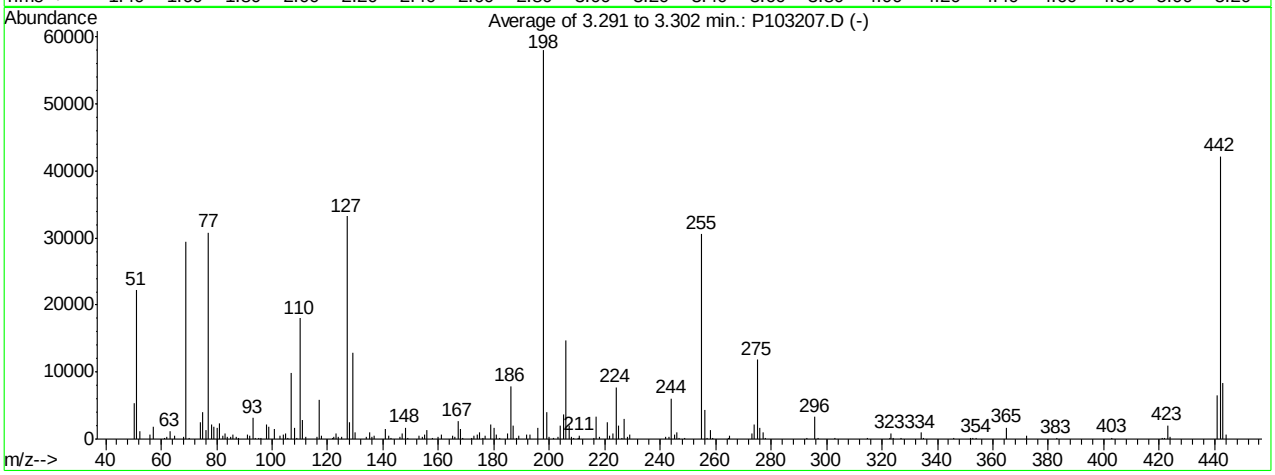
Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P103010.D DFTPPP.M Wed Mar 02 17:02:56 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4533\P103207.D Vial: 1
Acq On : 9 Mar 2016 4:05 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 212, 213, 214; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	22204	PASS
68	69	0.00	2	1.4	407	PASS
69	198	0.00	100	50.7	29431	PASS
70	69	0.00	2	0.5	135	PASS
127	198	40	60	57.3	33231	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	58000	PASS
199	198	5	9	6.9	4009	PASS
275	198	10	30	20.4	11824	PASS
365	198	1	100	3.0	1742	PASS
441	443	0.10	100	78.7	6575	PASS
442	198	40	100	72.8	42224	PASS
443	442	17	23	19.8	8350	PASS

P103207.D DFTPPP.M Thu Mar 10 09:00:49 2016

Average of 3.291 to 3.302 min.: P103207.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	5283	70.00	135	83.90	266	98.00	2200
51.05	22204	74.05	2514	84.95	342	99.00	1907
52.10	1110	75.00	3964	86.00	693	100.95	1493
56.00	731	76.10	1385	87.05	302	102.95	451
57.00	1883	77.10	30809	87.90	158	104.00	633
61.00	193	78.05	2193	91.00	639	105.00	871
62.00	344	79.00	1923	92.00	559	105.80	123
63.05	1188	80.00	1597	93.00	3128	107.00	9933
65.00	585	81.00	2369	94.00	133	108.00	1632
67.95	407	82.05	519	95.10	135	109.00	184
69.00	29431	83.00	808	96.00	129	110.00	18020

Average of 3.291 to 3.302 min.: P103207.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.00	2836	128.00	2509	147.00	838	165.90	335
111.95	321	129.00	12846	147.95	1747	167.00	2732
116.00	410	130.00	1031	149.00	150	168.00	1447
117.00	5932	134.05	384	153.00	443	168.80	143
118.00	443	135.00	1079	154.00	351	172.00	124
121.90	237	136.00	302	155.05	692	172.95	443
122.10	267	137.00	519	156.00	1312	174.00	691
123.00	768	141.00	1480	157.90	131	175.00	1067
124.00	300	142.05	455	160.05	359	176.00	128
124.95	342	143.00	198	161.00	668	177.00	444
127.00	33231	145.95	287	164.95	488	179.00	2208

Average of 3.291 to 3.302 min.: P103207.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
180.00	1648	198.00	58000	208.90	124	225.00	1964
181.00	699	198.95	4009	210.20	162	226.00	129
182.10	132	199.90	298	210.80	153	227.00	3082
185.00	840	201.50	150	211.00	569	228.00	370
186.00	7932	201.70	148	216.10	202	229.00	664
187.00	2068	203.05	316	217.00	3330	242.00	281
188.00	143	203.95	1932	218.00	294	242.95	393
189.00	468	205.00	3705	221.00	2448	244.00	6073
191.95	664	206.00	14651	221.75	500	245.00	737
193.00	673	207.00	1958	223.00	838	245.95	1003
195.90	1602	207.95	390	224.00	7754	246.80	144

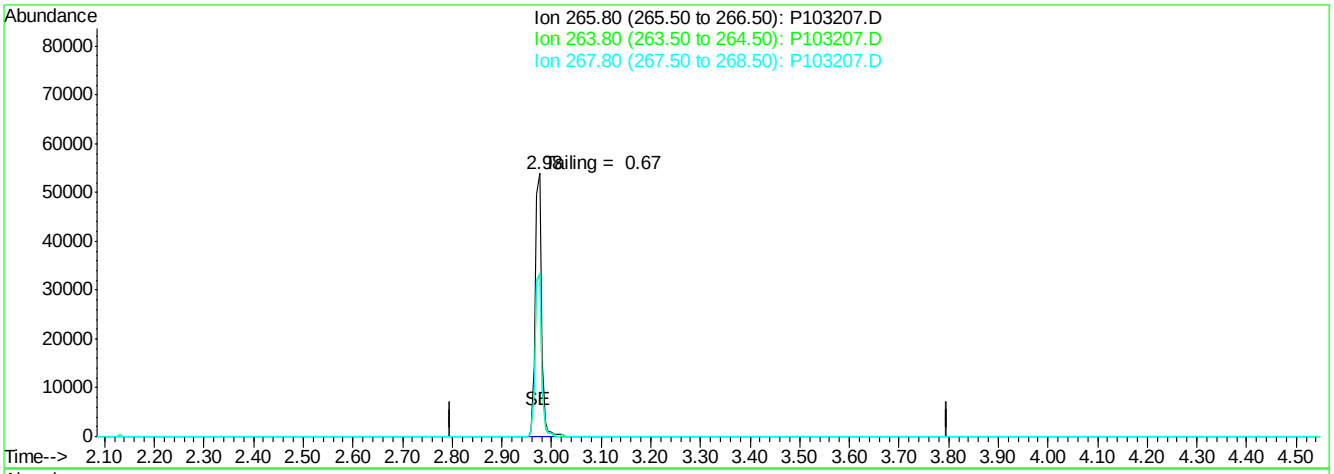
Average of 3.291 to 3.302 min.: P103207.D
dftpp
Modified:subtracted

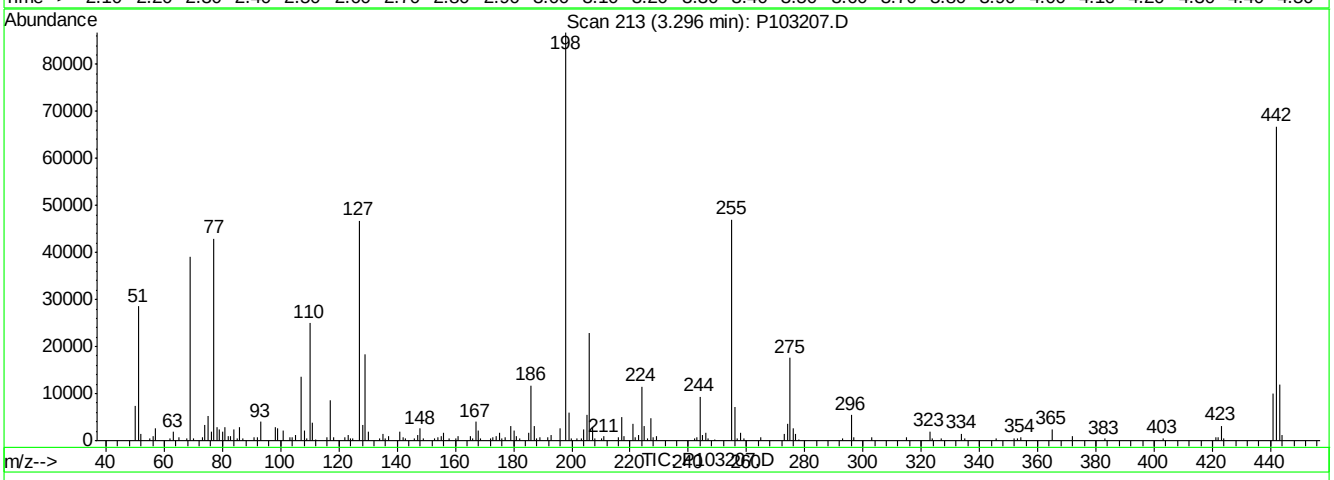
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.90	120	275.95	1671	327.00	153	421.00	207
255.00	30613	276.95	931	333.95	950	421.90	216
256.00	4385	278.00	116	334.90	135	422.95	2093
256.90	147	292.90	151	345.90	140	424.05	340
257.95	1355	295.90	3273	351.90	174	440.95	6575
258.90	154	297.00	242	352.90	124	442.00	42224
264.70	117	303.00	235	354.00	245	442.95	8350
265.00	453	314.90	202	364.95	1742	443.95	748
272.95	895	322.80	238	372.00	554		
274.00	2249	323.05	867	382.90	127		
275.00	11824	323.90	123	402.90	194		

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103207.D Vial: 1
Acq On : 9 Mar 2016 4:05 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 9 16:11 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

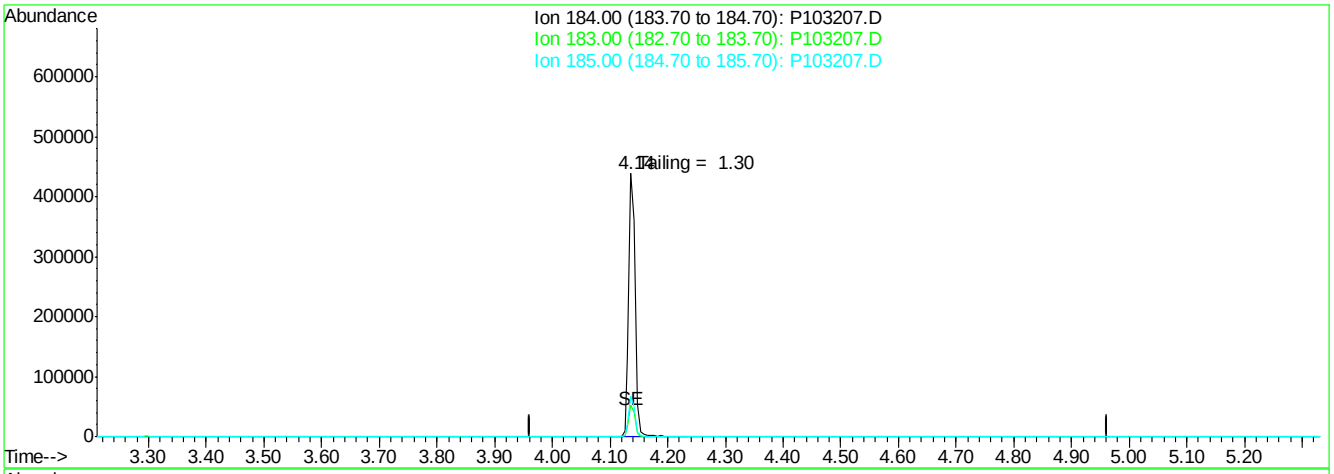
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

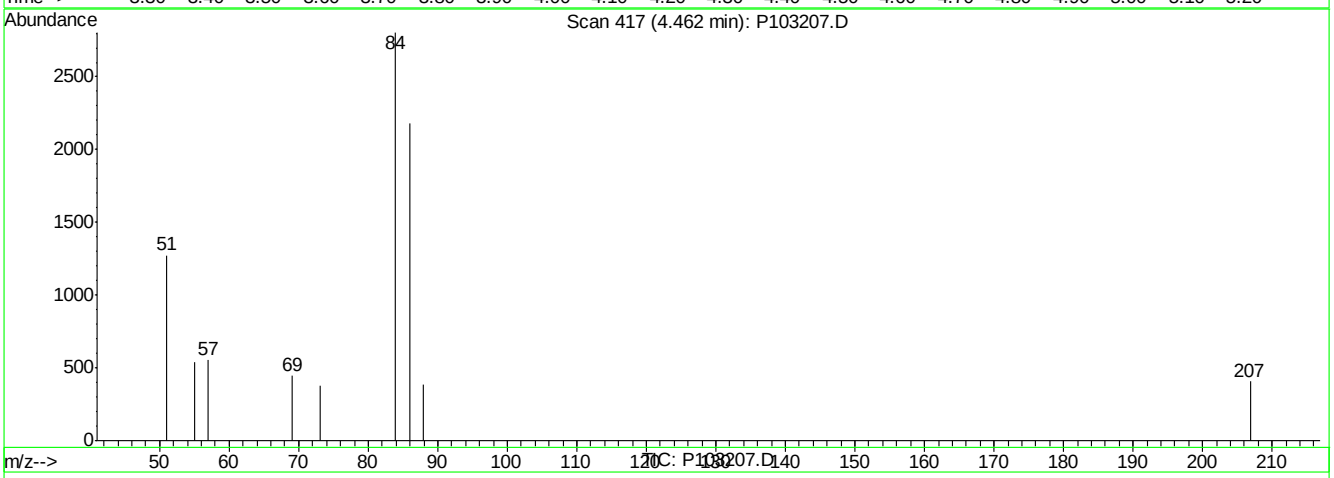
P103207.D DFTPPP.M Thu Mar 10 09:00:57 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103207.D Vial: 1
Acq On : 9 Mar 2016 4:05 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 9 16:11 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

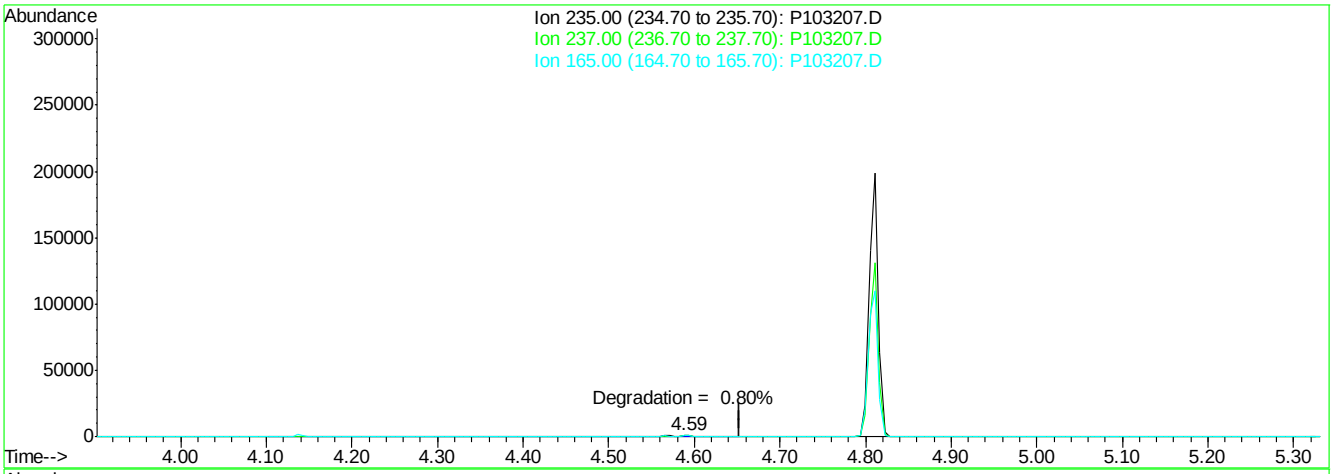
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

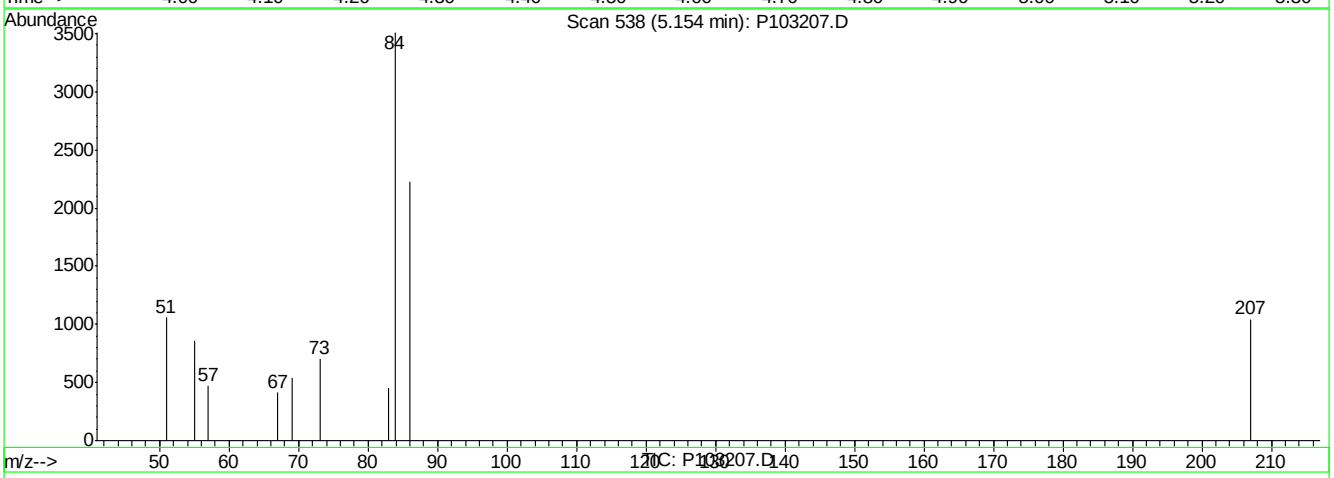
P103207.D DFTPPP.M Thu Mar 10 09:01:02 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103207.D Vial: 1
Acq On : 9 Mar 2016 4:05 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 9 16:11 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

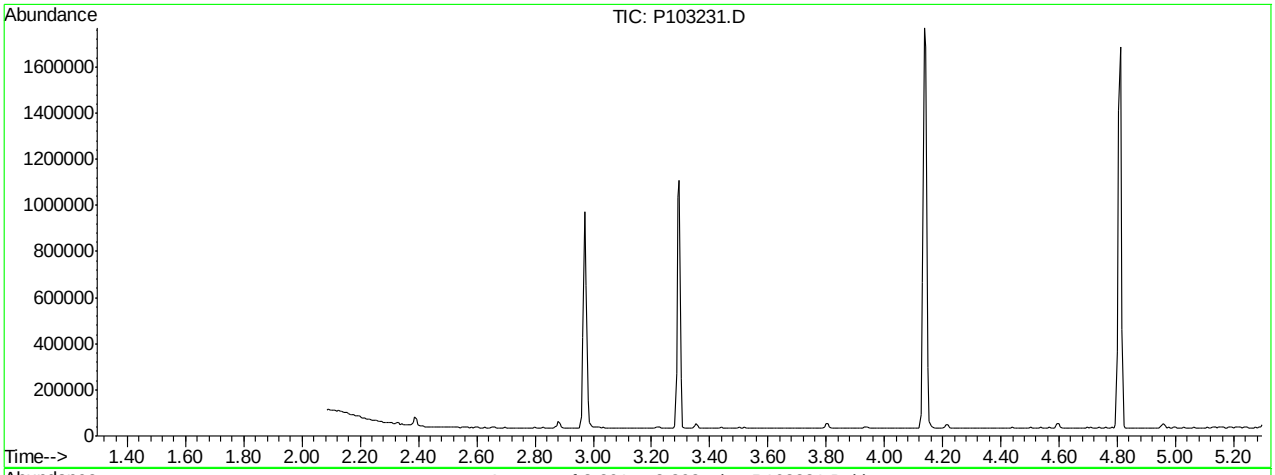
response 0

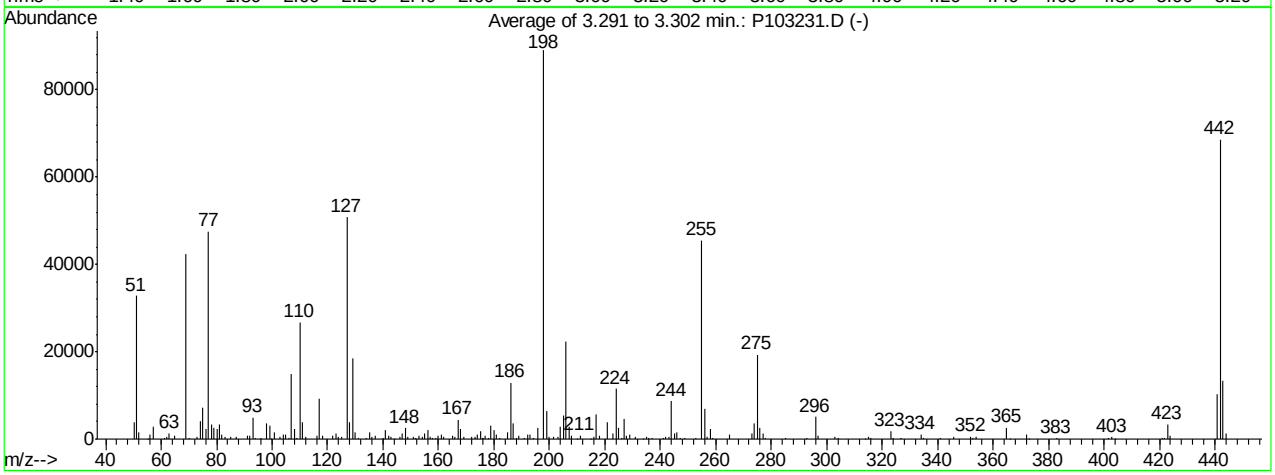
Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P103207.D DFTPPP.M Thu Mar 10 09:01:09 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4534\P103231.D Vial: 1
Acq On : 10 Mar 2016 8:48 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 212, 213, 214; Background Corrected with Scan 207

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.9	32841	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.5	42267	PASS
70	69	0.00	2	0.7	282	PASS
127	198	40	60	57.2	50881	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	89021	PASS
199	198	5	9	7.1	6324	PASS
275	198	10	30	21.7	19340	PASS
365	198	1	100	3.0	2659	PASS
441	443	0.10	100	77.0	10270	PASS
442	198	40	100	77.1	68613	PASS
443	442	17	23	19.4	13334	PASS

P103231.D DFTPPP.M Thu Mar 10 11:18:56 2016

Average of 3.291 to 3.302 min.: P103231.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	3763	70.00	282	83.00	491	101.00	1601
51.05	32841	73.10	421	84.90	518	103.00	501
52.05	1588	74.00	4109	86.95	590	104.00	1060
55.00	16	75.00	7097	90.95	788	105.00	991
56.00	1025	76.05	2253	92.00	804	106.10	215
57.00	2954	77.10	47598	93.00	5008	107.00	14822
61.05	374	78.10	3461	94.00	284	108.00	2432
62.10	474	79.00	2657	96.05	343	109.00	260
63.00	1391	80.00	2227	98.00	3665	110.00	26819
65.00	856	81.00	3298	99.00	3068	111.00	3819
69.00	42267	82.00	1007	99.80	126	112.00	473

Average of 3.291 to 3.302 min.: P103231.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.00	720	130.95	297	147.00	1173	158.95	309
117.00	9382	133.95	385	148.00	2519	160.00	688
118.00	775	135.00	1524	149.00	567	161.00	1037
121.95	832	136.00	565	151.00	407	162.00	407
123.00	1189	137.00	683	151.80	141	164.90	672
123.95	573	140.00	141	152.95	750	165.90	579
125.05	573	141.00	2061	154.00	514	167.00	4486
127.00	50881	142.00	745	155.00	1284	168.00	2210
128.00	3858	143.00	485	156.00	1988	168.95	413
129.00	18405	144.00	122	157.00	441	171.95	410
130.00	1427	146.00	407	157.95	348	173.00	465

Average of 3.291 to 3.302 min.: P103231.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.00	930	186.00	12927	199.95	498	215.95	398
175.00	1750	187.00	3693	201.35	419	216.90	5578
175.85	369	188.05	290	203.00	574	217.95	740
176.10	149	189.00	654	204.00	2928	221.00	3918
177.00	679	190.95	318	205.00	5453	222.95	1330
177.95	312	192.00	1055	206.00	22263	224.00	11472
178.95	3068	193.00	1037	207.00	2879	225.00	2666
180.00	2178	194.10	145	208.00	801	226.00	182
180.95	973	196.00	2604	210.00	128	227.00	4642
182.00	142	197.95	89021	211.00	872	227.95	672
185.00	1653	199.00	6324	214.80	116	228.95	1016

Average of 3.291 to 3.302 min.: P103231.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.00	488	247.00	292	275.00	19340	314.95	571
234.00	123	248.95	389	276.00	2661	315.95	387
234.95	439	252.90	279	276.90	1419	323.00	1866
236.00	149	255.00	45477	277.90	177	324.10	228
236.90	323	256.00	6964	285.00	311	326.90	145
241.00	329	257.00	515	293.00	254	334.00	1089
242.00	549	257.95	2327	295.90	5057	334.90	160
243.00	576	259.00	286	297.00	834	341.00	152
244.00	8716	264.90	996	302.90	439	345.90	400
245.00	1268	272.90	1352	304.00	184	352.00	646
245.95	1655	273.95	3655	313.90	135	352.85	345

Average of 3.291 to 3.302 min.: P103231.D
dftpp
Modified:subtracted

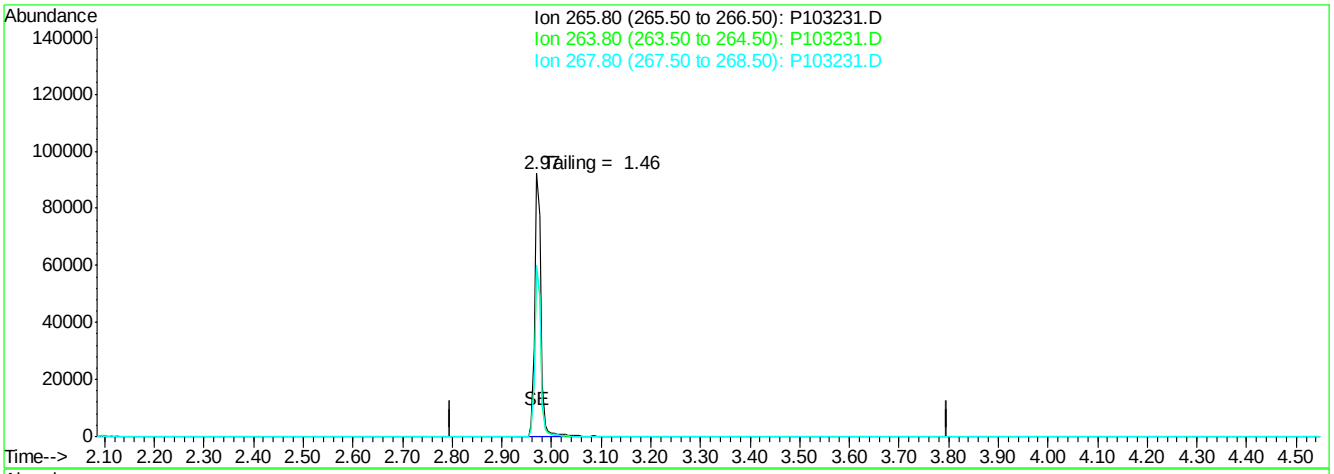
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.95	618	422.95	3427				
364.90	2659	424.00	786				
365.90	132	440.95	10270				
372.00	1016	442.00	68613				

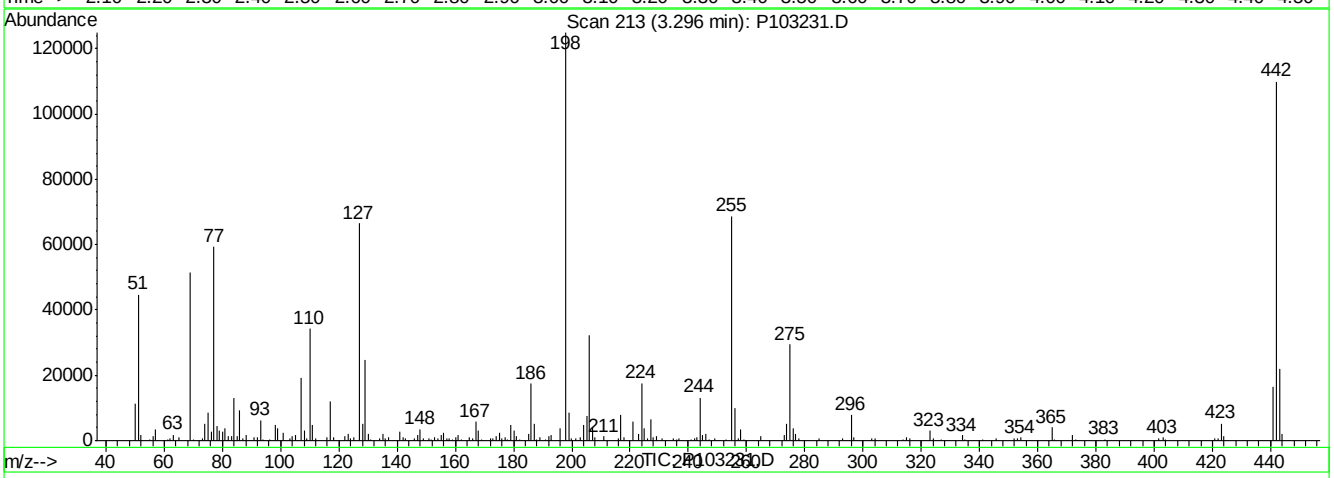
373.00	134	443.00	13334
382.95	243	443.90	1361
401.80	376		
402.85	489		
403.90	120		
420.90	235		
421.95	385		

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103231.D Vial: 1
Acq On : 10 Mar 2016 8:48 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 8:53 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

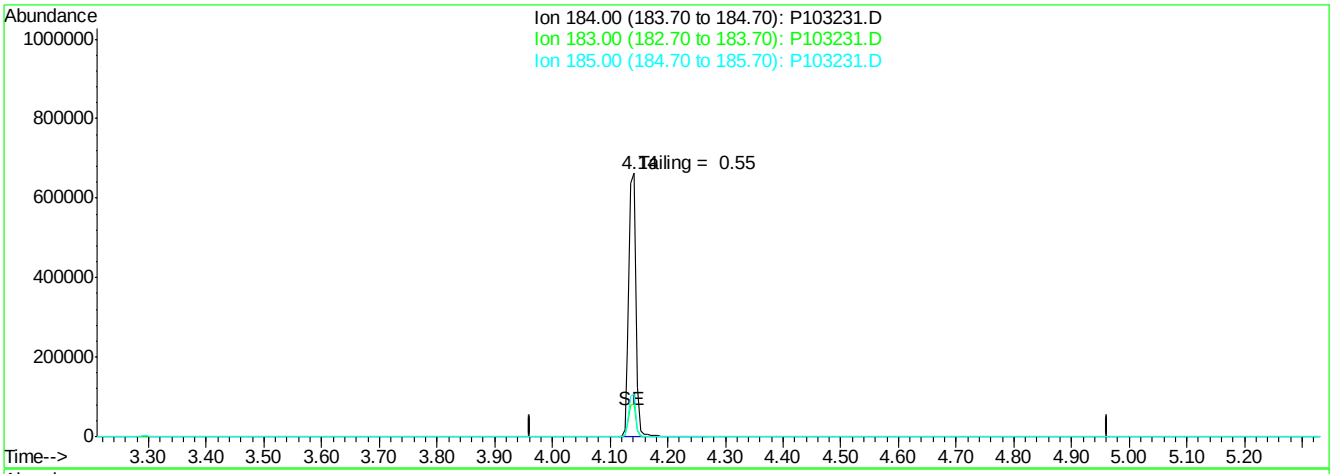
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

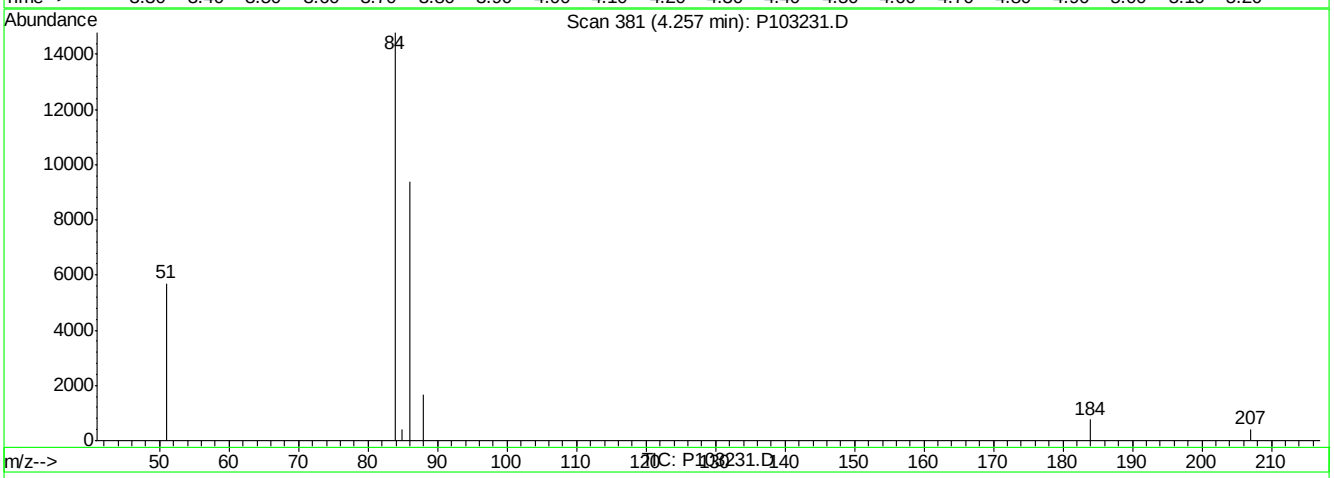
P103231.D DFTPPP.M Thu Mar 10 11:19:05 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103231.D Vial: 1
Acq On : 10 Mar 2016 8:48 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 8:53 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.26min 0.40ppb

response 1132

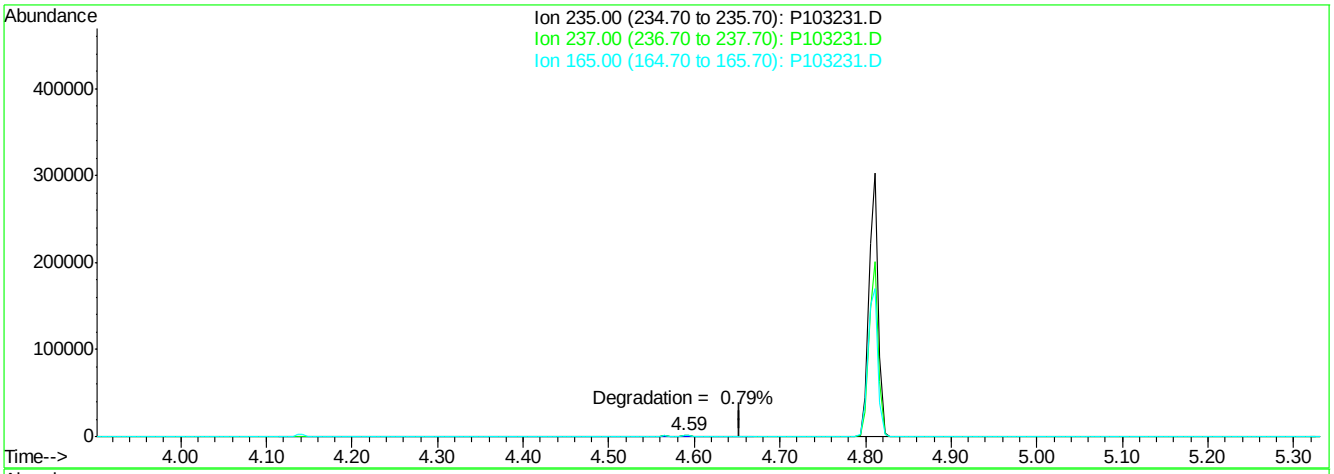
Ion	Exp%	Act%
184.00	100	100
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

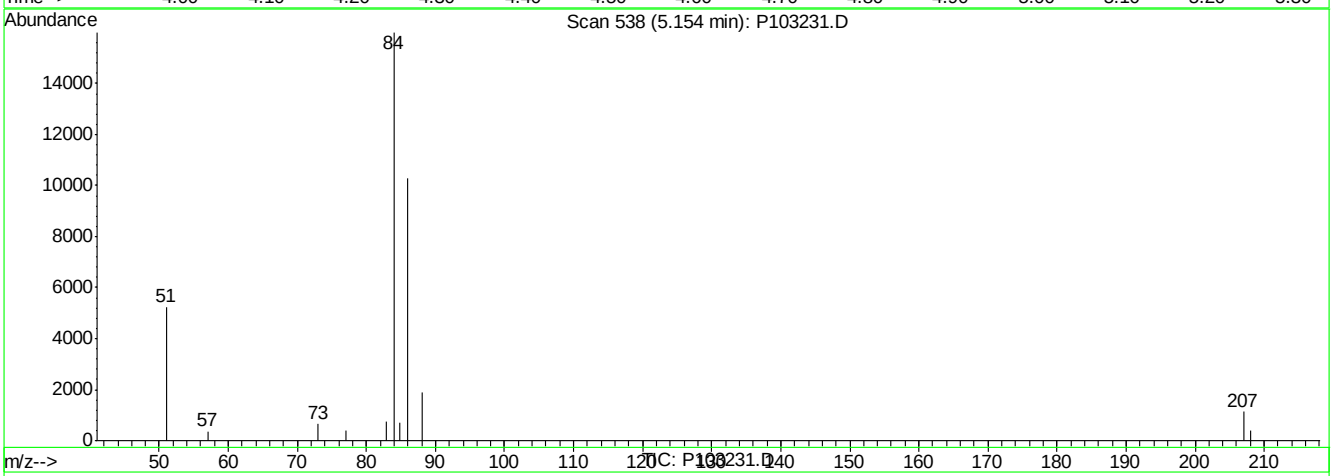
P103231.D DFTPPP.M Thu Mar 10 11:19:10 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103231.D Vial: 1
Acq On : 10 Mar 2016 8:48 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 8:53 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P103231.D DFTPPP.M Thu Mar 10 11:19:24 2016

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59638.D
Acq On : 3 Feb 2016 12:55 pm
Operator : ashleyd
Sample : icc2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 16:01:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:01:03 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.539	150	410956	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	600086	4.00	ppm	0.00
21) Fluoranthene-d10	16.731	212	993459	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.335	264	863921	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.849	112	1192159	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
4) Phenol-d5	5.238	99	1961457	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
7) Nitrobenzene-d5	6.709	82	1707175	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
15) 2-Fluorobiphenyl	10.191	172	3604521	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
20) 2,4,6-Tribromophenol	13.070	330	372214	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
28) Terphenyl-d14	17.535	244	3229852	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	24542	1.00	ppm	100
5) Phenol	5.263	94	521462	5.00	ppm	100
6) bis(2-Chloroethyl)ether	5.347	93	73908	1.00	ppm	100
8) Nitrobenzene	6.728	77	95439	1.00	ppm	100
9) Naphthalene	8.065	128	249216	1.00	ppm	100
10) Hexachlorobutadiene	8.366	225	38335	1.00	ppm	100
11) 2-Methylnaphthalene	9.416	141	135265	1.00	ppm	100
12) 1-Methylnaphthalene	9.601	141	149718	1.00	ppm	100
13) Hexachlorocyclopentadiene	9.765	237	85980	2.00	ppm	100
16) Acenaphthylene	11.165	152	249272	1.00	ppm	100
17) Acenaphthene	11.520	153	157365	1.00	ppm	100
18) 4,6-dinitro-2-methylph...	12.731	198	123829	5.00	ppm	100
19) Fluorene	12.561	166	197146	1.00	ppm	100
22) Hexachlorobenzene	13.671	284	47827	1.00	ppm	100
23) Pentachlorophenol	14.103	266	125595	5.00	ppm	100
24) Phenanthrene	14.475	178	272204	1.00	ppm	100
25) Anthracene	14.567	178	264761	1.00	ppm	100
26) Fluoranthene	16.747	202	304855	1.00	ppm	100
27) Pyrene	17.148	202	314472	1.00	ppm	100
29) Benzo[a]anthracene	19.234	228	289771	1.00	ppm	100
30) Chrysene	19.296	228	284648	1.00	ppm	100
32) Benzo[b]fluoranthene	20.903	252	350213	1.00	ppm	100
33) Benzo[k]fluoranthene	20.949	252	222991	1.00	ppm	100
34) Benzo[a]pyrene	21.366	252	270837	1.00	ppm	100
35) Indeno[1,2,3-cd]pyrene	22.843	276	317493	1.00	ppm	100
36) Dibenz[a,h]anthracene	22.880	278	252074	1.00	ppm	100
37) Benzo[g,h,i]perylene	23.200	276	279626	1.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59638.D
Acq On : 3 Feb 2016 12:55 pm
Operator : ashleyd
Sample : icc2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 16:01:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:01:03 2016
Response via : Initial Calibration

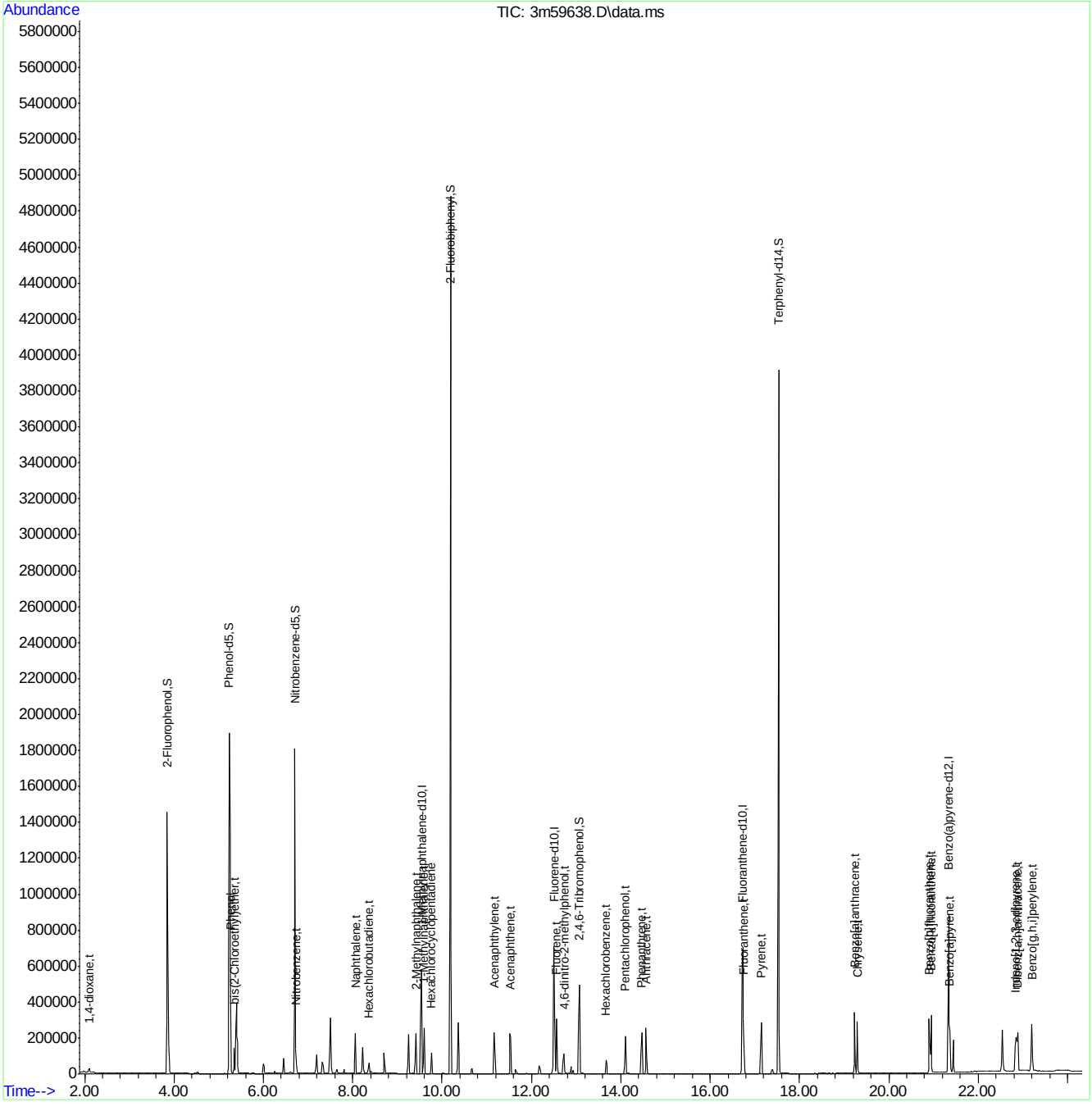
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59638.D
Acq On : 3 Feb 2016 12:55 pm
Operator : ashleyd
Sample : icc2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 04 16:01:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:01:03 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59639.D
Acq On : 3 Feb 2016 1:27 pm
Operator : ashleyd
Sample : ic2788-0.5
Misc : op90825a,e3m2788
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 04 16:03:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.539	150	384651	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	569653	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	947020	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	21.335	264	809770	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	585350	10.49	ppm	0.02
Spiked Amount 50.000			Recovery = 20.98%			
4) Phenol-d5	5.238	99	979012	10.67	ppm	0.00
Spiked Amount 50.000			Recovery = 21.34%			
7) Nitrobenzene-d5	6.709	82	846948	10.60	ppm	0.00
Spiked Amount 50.000			Recovery = 21.20%			
15) 2-Fluorobiphenyl	10.191	172	1841818	10.77	ppm	0.00
Spiked Amount 50.000			Recovery = 21.54%			
20) 2,4,6-Tribromophenol	13.051	330	178230	10.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.18%			
28) Terphenyl-d14	17.535	244	1566527	10.18	ppm	0.00
Spiked Amount 50.000			Recovery = 20.36%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	13812	0.60	ppm	69
5) Phenol	5.263	94	258277	2.65	ppm	97
6) bis(2-Chloroethyl)ether	5.347	93	36343	0.53	ppm	91
8) Nitrobenzene	6.728	77	46298	0.52	ppm	99
9) Naphthalene	8.065	128	123009	0.53	ppm	100
10) Hexachlorobutadiene	8.366	225	18617	0.52	ppm	98
11) 2-Methylnaphthalene	9.416	141	63662	0.50	ppm	96
12) 1-Methylnaphthalene	9.601	141	72034	0.51	ppm	96
13) Hexachlorocyclopentadiene	9.765	237	37841	0.94	ppm	97
16) Acenaphthylene	11.165	152	120109	0.51	ppm	98
17) Acenaphthene	11.520	153	77126	0.52	ppm	95
18) 4,6-dinitro-2-methylph...	12.731	198	42346	1.80	ppm	98
19) Fluorene	12.561	166	96902	0.52	ppm	97
22) Hexachlorobenzene	13.671	284	23799	0.52	ppm	95
23) Pentachlorophenol	14.103	266	50818	2.12	ppm	93
24) Phenanthrene	14.459	178	130771	0.50	ppm	89
25) Anthracene	14.567	178	124395	0.49	ppm	98
26) Fluoranthene	16.747	202	150973	0.52	ppm	98
27) Pyrene	17.148	202	149462	0.50	ppm	98
29) Benzo[a]anthracene	19.234	228	137624	0.50	ppm	96
30) Chrysene	19.281	228	135635	0.50	ppm	84
32) Benzo[b]fluoranthene	20.903	252	143964	0.44	ppm	98
33) Benzo[k]fluoranthene	20.949	252	133002	0.64	ppm	98
34) Benzo[a]pyrene	21.351	252	133313	0.53	ppm	86
35) Indeno[1,2,3-cd]pyrene	22.824	276	153872	0.52	ppm	88
36) Dibenz[a,h]anthracene	22.862	278	119650	0.51	ppm	98
37) Benzo[g,h,i]perylene	23.200	276	135916	0.52	ppm	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59639.D
Acq On : 3 Feb 2016 1:27 pm
Operator : ashleyd
Sample : ic2788-0.5
Misc : op90825a,e3m2788
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 04 16:03:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:00 2016
Response via : Initial Calibration

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

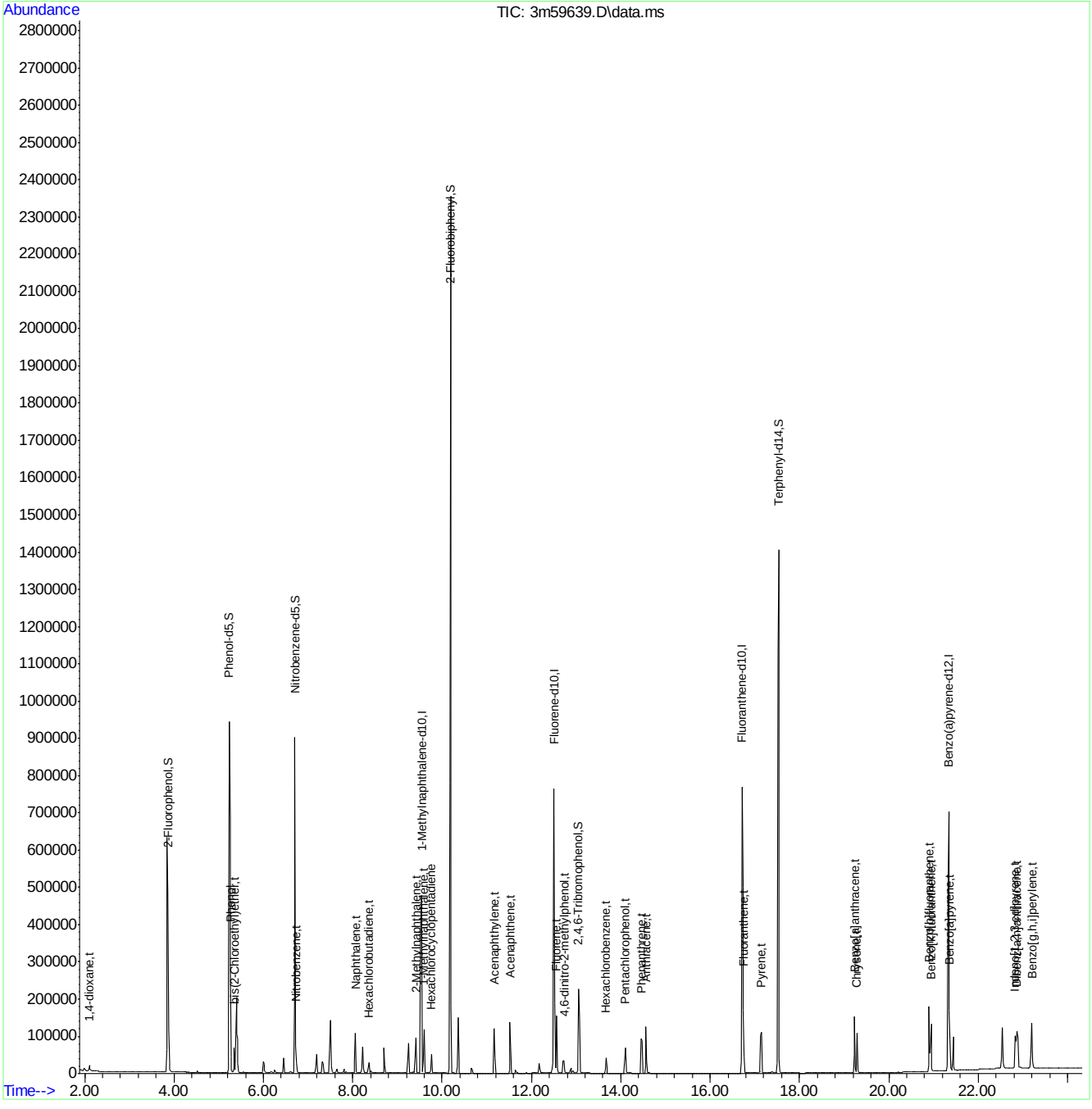
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59639.D
Acq On : 3 Feb 2016 1:27 pm
Operator : ashleyd
Sample : ic2788-0.5
Misc : op90825a,e3m2788
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 04 16:03:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59640.D
Acq On : 3 Feb 2016 1:59 pm
Operator : ashleyd
Sample : ic2788-0.2
Misc : op90825a,e3m2788
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 16:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:33 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.540	150	437354	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	655360	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1047008	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	879176	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	317713	4.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.78%	
4) Phenol-d5	5.239	99	530259	4.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.84%	
7) Nitrobenzene-d5	6.709	82	448422	4.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.58%	
15) 2-Fluorobiphenyl	10.191	172	995538	4.87	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.74%	
20) 2,4,6-Tribromophenol	13.051	330	90198	4.42	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.84%	
28) Terphenyl-d14	17.519	244	820111	4.78	ppm	-0.02
Spiked Amount 50.000			Recovery	=	9.56%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	7598	0.26	ppm	74
5) Phenol	5.251	94	138422	1.21	ppm #	39
6) bis(2-Chloroethyl)ether	5.347	93	19694	0.24	ppm	95
8) Nitrobenzene	6.728	77	24286	0.23	ppm	99
9) Naphthalene	8.065	128	66608	0.24	ppm	99
10) Hexachlorobutadiene	8.366	225	10107	0.24	ppm	97
11) 2-Methylnaphthalene	9.416	141	33845	0.23	ppm	93
12) 1-Methylnaphthalene	9.601	141	38080	0.24	ppm	95
13) Hexachlorocyclopentadiene	9.765	237	19067	0.43	ppm	94
16) Acenaphthylene	11.165	152	62351	0.23	ppm	97
17) Acenaphthene	11.520	153	39978	0.23	ppm	93
18) 4,6-dinitro-2-methylph...	12.731	198	18182	0.78	ppm	99
19) Fluorene	12.561	166	50744	0.23	ppm	94
22) Hexachlorobenzene	13.671	284	12598	0.24	ppm	93
23) Pentachlorophenol	14.104	266	22632	0.92	ppm	92
24) Phenanthrene	14.459	178	67611	0.23	ppm	90
25) Anthracene	14.567	178	62528	0.23	ppm	97
26) Fluoranthene	16.747	202	79139	0.24	ppm	96
27) Pyrene	17.133	202	74972	0.23	ppm	88
29) Benzo[a]anthracene	19.234	228	69247	0.23	ppm	95
30) Chrysene	19.281	228	68725	0.23	ppm	87
32) Benzo[b]fluoranthene	20.903	252	73436	0.22	ppm	98
33) Benzo[k]fluoranthene	20.949	252	68030	0.26	ppm	99
34) Benzo[a]pyrene	21.351	252	68729	0.24	ppm	86
35) Indeno[1,2,3-cd]pyrene	22.824	276	80550	0.25	ppm	88
36) Dibenz[a,h]anthracene	22.862	278	62090	0.24	ppm	98
37) Benzo[g,h,i]perylene	23.200	276	70744	0.24	ppm	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59640.D
Acq On : 3 Feb 2016 1:59 pm
Operator : ashleyd
Sample : ic2788-0.2
Misc : op90825a,e3m2788
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 16:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:33 2016
Response via : Initial Calibration

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

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

9.6.3

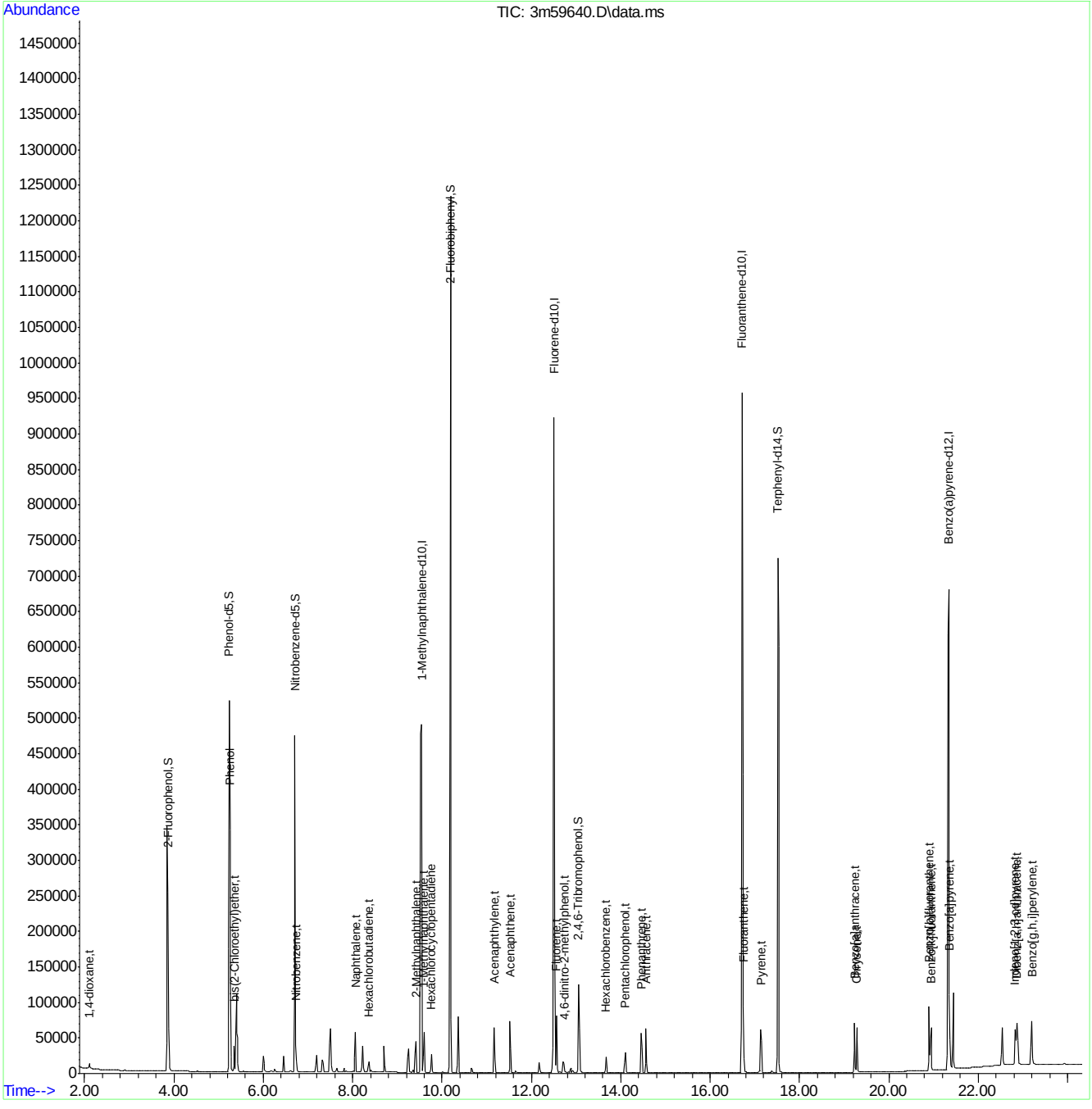
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59640.D
Acq On : 3 Feb 2016 1:59 pm
Operator : ashleyd
Sample : ic2788-0.2
Misc : op90825a,e3m2788
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 16:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:03:33 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59641.D
Acq On : 3 Feb 2016 2:30 pm
Operator : ashleyd
Sample : ic2788-0.1
Misc : op90825a,e3m2788
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 16:04:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.539	150	457990	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	650579	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1070826	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.335	264	884457	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	134099	1.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.66%	
4) Phenol-d5	5.238	99	223686	1.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.68%	
7) Nitrobenzene-d5	6.709	82	193153	1.85	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.70%	
15) 2-Fluorobiphenyl	10.191	172	423800	1.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.90%	
20) 2,4,6-Tribromophenol	13.051	330	34257	1.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.26%	
28) Terphenyl-d14	17.535	244	348366	1.86	ppm	0.02
Spiked Amount 50.000			Recovery	=	3.72%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	3077	0.09	ppm #	42
5) Phenol	5.250	94	57916	0.45	ppm #	35
6) bis(2-Chloroethyl)ether	5.347	93	8443	0.09	ppm	82
8) Nitrobenzene	6.728	77	10191	0.09	ppm	96
9) Naphthalene	8.065	128	29088	0.09	ppm	100
10) Hexachlorobutadiene	8.366	225	4448	0.10	ppm	99
11) 2-Methylnaphthalene	9.416	141	14463	0.09	ppm	98
12) 1-Methylnaphthalene	9.601	141	16902	0.09	ppm	98
13) Hexachlorocyclopentadiene	9.765	237	7437	0.16	ppm	100
16) Acenaphthylene	11.165	152	25583	0.09	ppm	98
17) Acenaphthene	11.520	153	17372	0.10	ppm	95
18) 4,6-dinitro-2-methylph...	12.731	198	5313	0.25	ppm	91
19) Fluorene	12.561	166	21419	0.09	ppm	97
22) Hexachlorobenzene	13.671	284	5356	0.09	ppm	96
23) Pentachlorophenol	14.103	266	7271	0.30	ppm	97
24) Phenanthrene	14.475	178	29351	0.09	ppm	99
25) Anthracene	14.567	178	25914	0.09	ppm	98
26) Fluoranthene	16.747	202	33150	0.09	ppm	98
27) Pyrene	17.148	202	31625	0.09	ppm	97
29) Benzo[a]anthracene	19.234	228	30084	0.09	ppm	97
30) Chrysene	19.280	228	29239	0.09	ppm	84
32) Benzo[b]fluoranthene	20.903	252	30742	0.09	ppm	98
33) Benzo[k]fluoranthene	20.949	252	28720	0.10	ppm	97
34) Benzo[a]pyrene	21.351	252	29001	0.10	ppm	85
35) Indeno[1,2,3-cd]pyrene	22.824	276	34948	0.10	ppm	87
36) Dibenz[a,h]anthracene	22.862	278	26559	0.10	ppm	99
37) Benzo[g,h,i]perylene	23.200	276	30720	0.10	ppm	99

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59641.D
Acq On : 3 Feb 2016 2:30 pm
Operator : ashleyd
Sample : ic2788-0.1
Misc : op90825a,e3m2788
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 16:04:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration

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

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

9.6.4

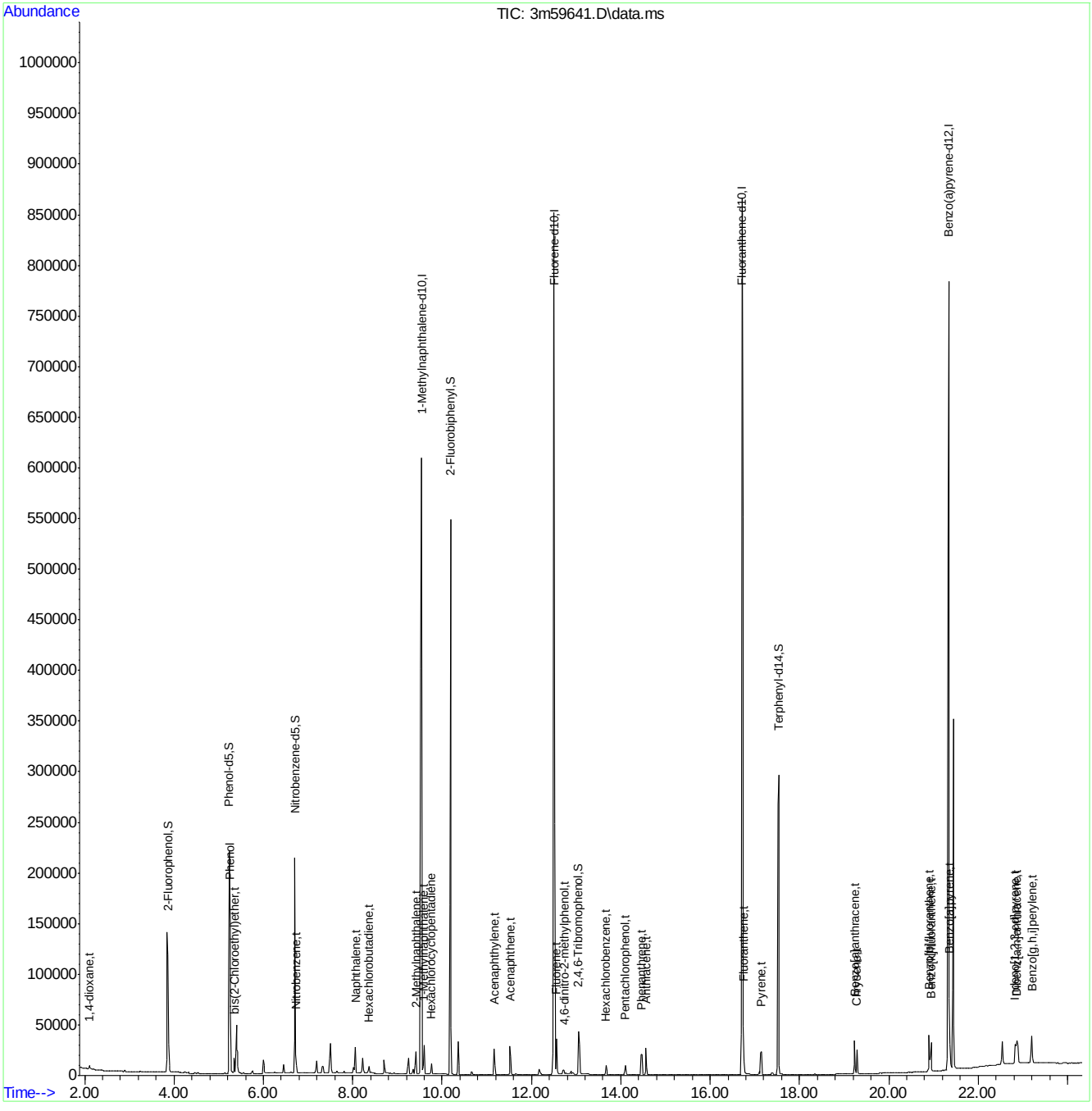
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59641.D
Acq On : 3 Feb 2016 2:30 pm
Operator : ashleyd
Sample : ic2788-0.1
Misc : op90825a,e3m2788
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 04 16:04:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59642.D
Acq On : 3 Feb 2016 3:02 pm
Operator : ashleyd
Sample : ic2788-0.05
Misc : op90825a,e3m2788
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 16:04:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.540	150	449927	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	670398	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1060882	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	898753	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	63286	0.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.76%	
4) Phenol-d5	5.239	99	103882	0.87	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.74%	
7) Nitrobenzene-d5	6.709	82	90563	0.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.76%	
15) 2-Fluorobiphenyl	10.191	172	199001	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
20) 2,4,6-Tribromophenol	13.051	330	15421	0.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.42%	
28) Terphenyl-d14	17.519	244	159676	0.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.72%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	1610	0.05	ppm #	45
5) Phenol	5.251	94	27119	0.22	ppm #	42
6) bis(2-Chloroethyl)ether	5.347	93	3854	0.04	ppm	88
8) Nitrobenzene	6.728	77	4674	0.04	ppm	96
9) Naphthalene	8.065	128	13516	0.04	ppm	100
10) Hexachlorobutadiene	8.366	225	2040	0.04	ppm	96
11) 2-Methylnaphthalene	9.416	141	7101	0.05	ppm	96
12) 1-Methylnaphthalene	9.601	141	7628	0.04	ppm	96
13) Hexachlorocyclopentadiene	9.765	237	3121	0.07	ppm	98
16) Acenaphthylene	11.165	152	12064	0.04	ppm	97
17) Acenaphthene	11.520	153	8276	0.04	ppm	95
18) 4,6-dinitro-2-methylph...	12.731	198	2263	0.10	ppm	90
19) Fluorene	12.561	166	10361	0.04	ppm	94
22) Hexachlorobenzene	13.671	284	2527	0.05	ppm	91
23) Pentachlorophenol	14.104	266	3163	0.13	ppm	96
24) Phenanthrene	14.459	178	13524	0.04	ppm	89
25) Anthracene	14.567	178	11976	0.04	ppm	96
26) Fluoranthene	16.747	202	16121	0.05	ppm	97
27) Pyrene	17.133	202	15003	0.04	ppm	88
29) Benzo[a]anthracene	19.234	228	14112	0.04	ppm	96
30) Chrysene	19.281	228	13679	0.04	ppm	86
32) Benzo[b]fluoranthene	20.903	252	14725	0.04	ppm	99
33) Benzo[k]fluoranthene	20.949	252	13560	0.05	ppm	98
34) Benzo[a]pyrene	21.351	252	13594	0.04	ppm	84
35) Indeno[1,2,3-cd]pyrene	22.824	276	16636	0.05	ppm	89
36) Dibenz[a,h]anthracene	22.862	278	12401	0.04	ppm	99
37) Benzo[g,h,i]perylene	23.200	276	14339	0.05	ppm	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59642.D
Acq On : 3 Feb 2016 3:02 pm
Operator : ashleyd
Sample : ic2788-0.05
Misc : op90825a,e3m2788
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 16:04:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration

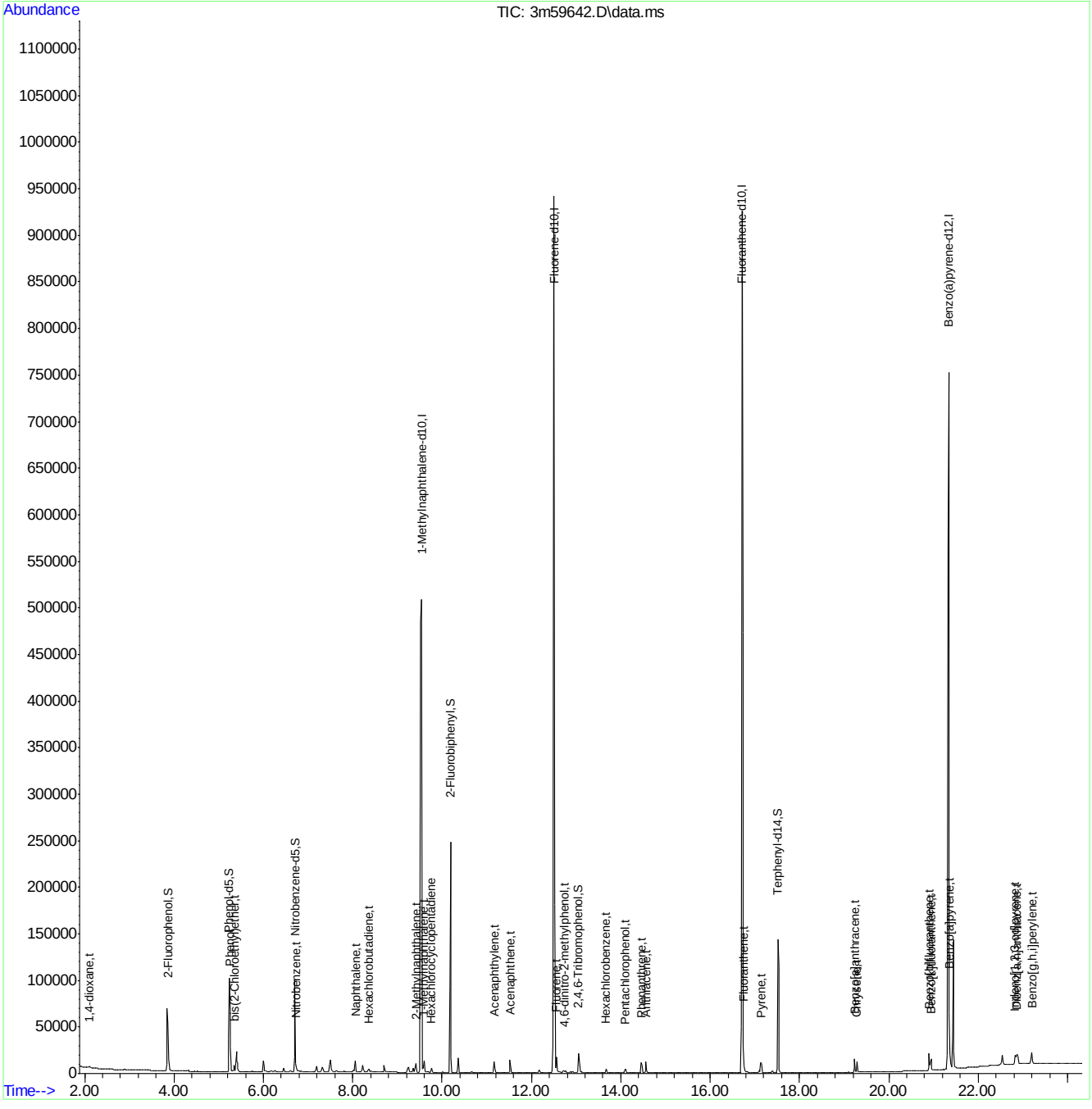
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59642.D
Acq On : 3 Feb 2016 3:02 pm
Operator : ashleyd
Sample : ic2788-0.05
Misc : op90825a,e3m2788
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 16:04:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:04:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59643.D
Acq On : 3 Feb 2016 3:34 pm
Operator : ashleyd
Sample : ic2788-0.02
Misc : op90825a,e3m2788
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 04 16:23:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:05:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.540	150	430812	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	630869	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1015392	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	833764	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	24821	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
4) Phenol-d5	5.239	99	40254	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
7) Nitrobenzene-d5	6.709	82	35041	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
15) 2-Fluorobiphenyl	10.191	172	78503	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
20) 2,4,6-Tribromophenol	13.051	330	5577	0.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.58%	
28) Terphenyl-d14	17.519	244	61153	0.36	ppm	-0.02
Spiked Amount 50.000			Recovery	=	0.72%	
Target Compounds						Qvalue
5) Phenol	5.251	94	10647	0.09	ppm #	46
6) bis(2-Chloroethyl)ether	5.347	93	1589	0.02	ppm	87
8) Nitrobenzene	6.728	77	1861	0.02	ppm	92
9) Naphthalene	8.065	128	5402	0.02	ppm	99
10) Hexachlorobutadiene	8.366	225	845	0.02	ppm	97
11) 2-Methylnaphthalene	9.416	141	2678	0.02	ppm	97
12) 1-Methylnaphthalene	9.601	141	3161	0.02	ppm	94
13) Hexachlorocyclopentadiene	9.765	237	1132	0.03	ppm	95
16) Acenaphthylene	11.165	152	4685	0.02	ppm	97
17) Acenaphthene	11.520	153	3249	0.02	ppm	94
18) 4,6-dinitro-2-methylph...	12.731	198	841	0.05	ppm	87
19) Fluorene	12.561	166	4126	0.02	ppm	96
22) Hexachlorobenzene	13.671	284	1037	0.02	ppm	92
23) Pentachlorophenol	14.104	266	1252	0.07	ppm	95
24) Phenanthrene	14.459	178	5360	0.02	ppm	89
25) Anthracene	14.567	178	4753	0.02	ppm	96
26) Fluoranthene	16.747	202	6849	0.02	ppm	93
27) Pyrene	17.133	202	6121	0.02	ppm	88
29) Benzo[a]anthracene	19.234	228	5663	0.02	ppm	97
30) Chrysene	19.281	228	5521	0.02	ppm	82
32) Benzo[b]fluoranthene	20.903	252	6270	0.02	ppm	99
33) Benzo[k]fluoranthene	20.949	252	5585	0.02	ppm	96
34) Benzo[a]pyrene	21.351	252	8662	0.03	ppm	88
35) Indeno[1,2,3-cd]pyrene	22.824	276	6880	0.02	ppm	88
36) Dibenz[a,h]anthracene	22.862	278	4990	0.02	ppm	98
37) Benzo[g,h,i]perylene	23.200	276	5985	0.02	ppm	100

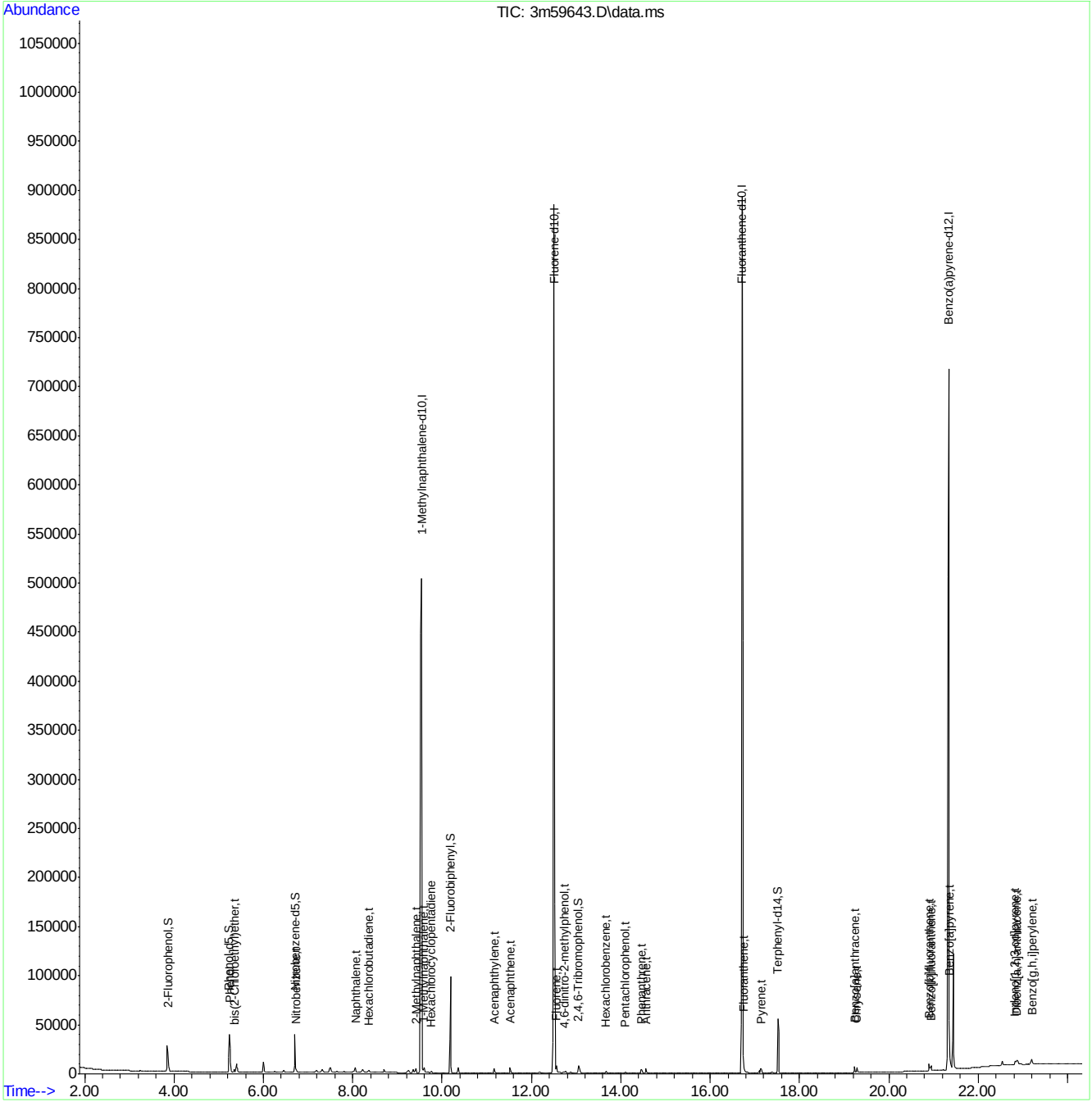
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59643.D
Acq On : 3 Feb 2016 3:34 pm
Operator : ashleyd
Sample : ic2788-0.02
Misc : op90825a,e3m2788
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 04 16:23:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:05:07 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59644.D
Acq On : 3 Feb 2016 4:06 pm
Operator : ashleyd
Sample : ic2788-0.01
Misc : op90825a,e3m2788
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 04 16:23:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:23:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	9.539	150	449681	4.00 ppm	0.00
14) Fluorene-d10	12.505	176	649267	4.00 ppm	0.00
21) Fluoranthene-d10	16.716	212	1046768	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	21.335	264	868009	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	3.865	112	12755	0.19 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.38%	
4) Phenol-d5	5.238	99	20797	0.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.36%	
7) Nitrobenzene-d5	6.709	82	18465	0.19 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.38%	
15) 2-Fluorobiphenyl	10.191	172	40921	0.20 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.40%	
20) 2,4,6-Tribromophenol	13.051	330	2942	0.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.30%	
28) Terphenyl-d14	17.519	244	33180	0.19 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.38%	
Target Compounds					Qvalue
5) Phenol	5.250	94	5491	0.05 ppm #	42
6) bis(2-Chloroethyl)ether	5.347	93	889	0.01 ppm	82
8) Nitrobenzene	6.728	77	1102	0.01 ppm	92
9) Naphthalene	8.065	128	2975	0.01 ppm	99
10) Hexachlorobutadiene	8.366	225	438	0.01 ppm	96
11) 2-Methylnaphthalene	9.416	141	1710	0.01 ppm	97
12) 1-Methylnaphthalene	9.601	141	1679	0.01 ppm	96
13) Hexachlorocyclopentadiene	9.765	237	500	0.01 ppm	96
16) Acenaphthylene	11.165	152	2527	0.01 ppm	96
17) Acenaphthene	11.520	153	1709	0.01 ppm	94
18) 4,6-dinitro-2-methylph...	12.731	198	492	0.03 ppm	80
19) Fluorene	12.561	166	2157	0.01 ppm	97
22) Hexachlorobenzene	13.671	284	555	0.01 ppm	95
23) Pentachlorophenol	14.103	266	697	0.04 ppm	97
24) Phenanthrene	14.459	178	2933	0.01 ppm	88
25) Anthracene	14.567	178	2588	0.01 ppm	97
26) Fluoranthene	16.747	202	3601	0.01 ppm	94
27) Pyrene	17.133	202	3444	0.01 ppm	88
29) Benzo[a]anthracene	19.234	228	3381	0.01 ppm	96
30) Chrysene	19.280	228	3197	0.01 ppm	84
32) Benzo[b]fluoranthene	20.903	252	3694	0.01 ppm	99
33) Benzo[k]fluoranthene	20.949	252	3214	0.01 ppm	98
34) Benzo[a]pyrene	21.351	252	6156	0.02 ppm	88
35) Indeno[1,2,3-cd]pyrene	22.824	276	4011	0.01 ppm	85
36) Dibenz[a,h]anthracene	22.880	278	2925	0.01 ppm	98
37) Benzo[g,h,i]perylene	23.200	276	3531	0.01 ppm	98

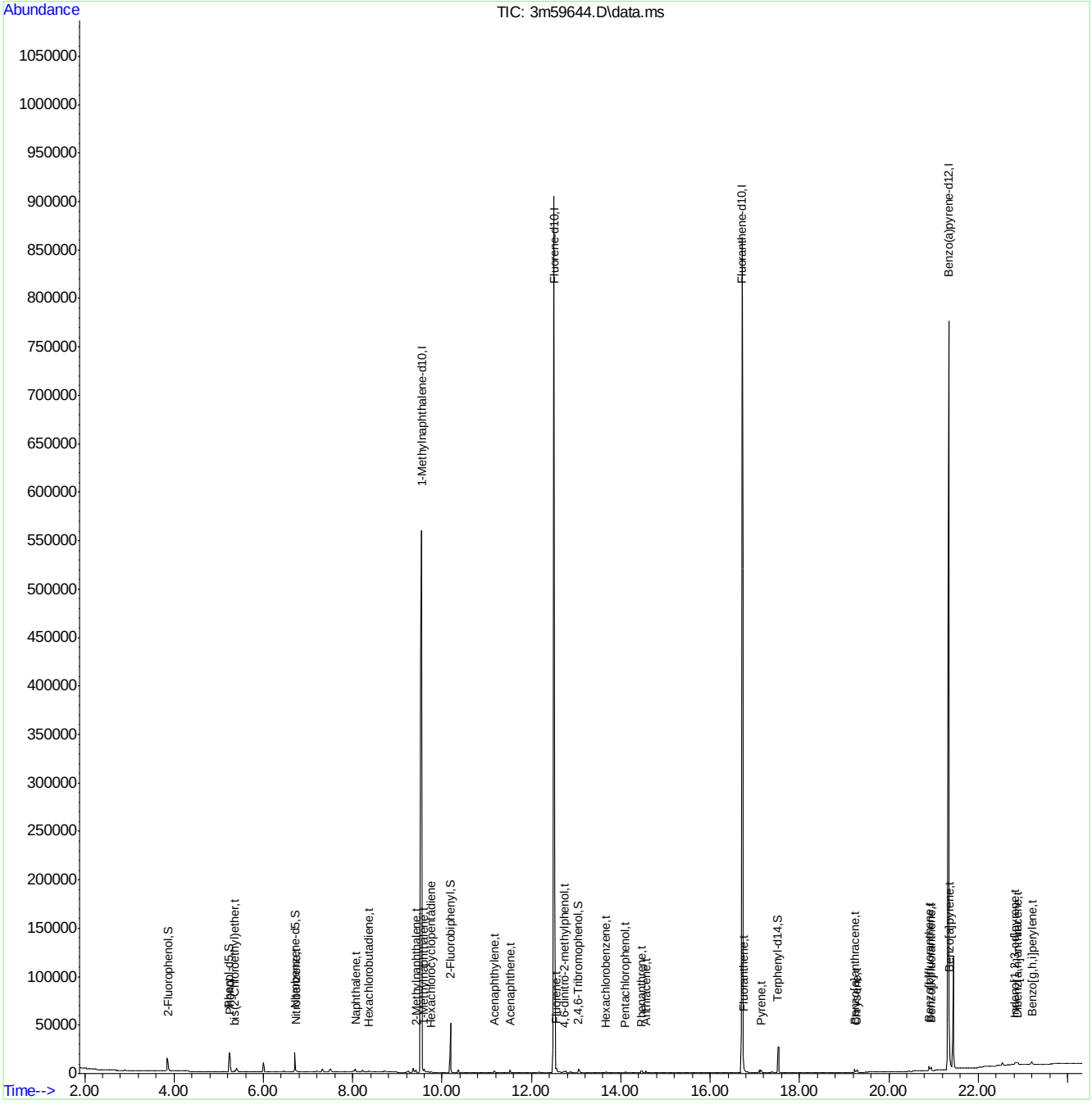
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59644.D
Acq On : 3 Feb 2016 4:06 pm
Operator : ashleyd
Sample : ic2788-0.01
Misc : op90825a,e3m2788
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 04 16:23:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:23:48 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59645.D
Acq On : 3 Feb 2016 4:37 pm
Operator : ashleyd
Sample : ic2788-5.0
Misc : op90825a,e3m2788
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 04 16:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.540	150	519938	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	856676	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1233342	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	1007632	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.865	112	6591613	84.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	168.76%	
4) Phenol-d5	5.251	99	11086438	85.97	ppm	0.01
Spiked Amount 50.000			Recovery	=	171.94%	
7) Nitrobenzene-d5	6.709	82	9264141	81.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.52%	
15) 2-Fluorobiphenyl	10.191	172	16486743	59.81	ppm	0.00
Spiked Amount 50.000			Recovery	=	119.62%	
20) 2,4,6-Tribromophenol	13.070	330	2263086	85.88	ppm	0.02
Spiked Amount 50.000			Recovery	=	171.76%	
28) Terphenyl-d14	17.535	244	17039791	82.54	ppm	0.02
Spiked Amount 50.000			Recovery	=	165.08%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	154911	4.17	ppm	82
5) Phenol	5.263	94	2907003	21.23	ppm #	37
6) bis(2-Chloroethyl)ether	5.360	93	436609	4.41	ppm	95
8) Nitrobenzene	6.747	77	534468	4.38	ppm #	29
9) Naphthalene	8.065	128	1561247	4.64	ppm	100
10) Hexachlorobutadiene	8.366	225	237105	4.63	ppm	100
11) 2-Methylnaphthalene	9.417	141	816527	4.64	ppm	95
12) 1-Methylnaphthalene	9.601	141	908510	4.66	ppm	96
13) Hexachlorocyclopentadiene	9.765	237	631351	13.13	ppm	99
16) Acenaphthylene	11.165	152	1582494	4.57	ppm	99
17) Acenaphthene	11.521	153	985486	4.30	ppm	96
18) 4,6-dinitro-2-methylph...	12.731	198	1093279	44.36	ppm	83
19) Fluorene	12.562	166	1228666	4.27	ppm	99
22) Hexachlorobenzene	13.671	284	302575	4.77	ppm	97
23) Pentachlorophenol	14.104	266	960006	41.46	ppm	94
24) Phenanthrene	14.475	178	1662993	4.86	ppm	99
25) Anthracene	14.568	178	1712571	5.19	ppm	99
26) Fluoranthene	16.747	202	1862532	4.67	ppm	98
27) Pyrene	17.149	202	1927011	4.86	ppm	98
29) Benzo[a]anthracene	19.234	228	1701770	4.73	ppm	97
30) Chrysene	19.296	228	1738115	4.80	ppm	97
32) Benzo[b]fluoranthene	20.903	252	2084191	5.42	ppm	97
33) Benzo[k]fluoranthene	20.949	252	1302643	3.98	ppm	99
34) Benzo[a]pyrene	21.351	252	1581834	4.72	ppm	84
35) Indeno[1,2,3-cd]pyrene	22.843	276	1819016	4.51	ppm	100
36) Dibenz[a,h]anthracene	22.881	278	1479882	4.73	ppm	99
37) Benzo[g,h,i]perylene	23.201	276	1586108	4.47	ppm	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59645.D
Acq On : 3 Feb 2016 4:37 pm
Operator : ashleyd
Sample : ic2788-5.0
Misc : op90825a,e3m2788
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 04 16:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:15 2016
Response via : Initial Calibration

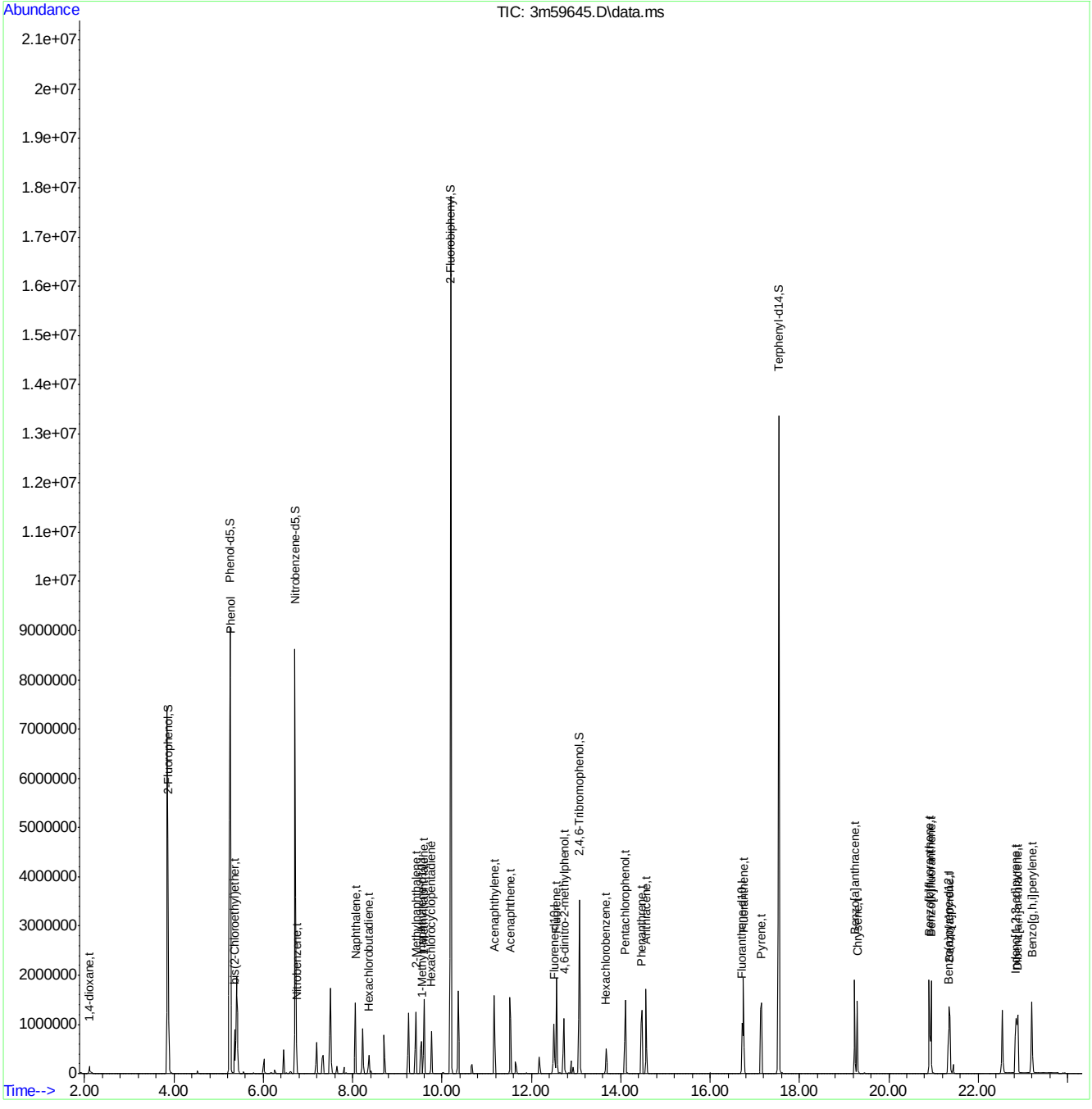
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59645.D
Acq On : 3 Feb 2016 4:37 pm
Operator : ashleyd
Sample : ic2788-5.0
Misc : op90825a,e3m2788
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 04 16:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59646.D
Acq On : 3 Feb 2016 5:12 pm
Operator : ashleyd
Sample : ic2788-2.5
Misc : op90825a,e3m2788
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 04 16:25:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.540	150	466999	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	715541	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1068923	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	891231	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.849	112	3335395	48.48	ppm	-0.02
Spiked Amount 50.000			Recovery = 96.96%			
4) Phenol-d5	5.239	99	5448475	47.88	ppm	-0.01
Spiked Amount 50.000			Recovery = 95.76%			
7) Nitrobenzene-d5	6.709	82	5521534	55.66	ppm	0.00
Spiked Amount 50.000			Recovery = 111.32%			
15) 2-Fluorobiphenyl	10.191	172	9691826	42.10	ppm	0.00
Spiked Amount 50.000			Recovery = 84.20%			
20) 2,4,6-Tribromophenol	13.070	330	1054843	49.32	ppm	0.00
Spiked Amount 50.000			Recovery = 98.64%			
28) Terphenyl-d14	17.535	244	8269648	47.60	ppm	0.00
Spiked Amount 50.000			Recovery = 95.20%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.103	88	74562	2.30	ppm	90
5) Phenol	5.251	94	1428850	11.87	ppm #	22
6) bis(2-Chloroethyl)ether	5.359	93	208223	2.38	ppm #	51
8) Nitrobenzene	6.728	77	270115	2.50	ppm	96
9) Naphthalene	8.065	128	718622	2.40	ppm	100
10) Hexachlorobutadiene	8.366	225	110503	2.43	ppm	99
11) 2-Methylnaphthalene	9.416	141	372738	2.38	ppm	96
12) 1-Methylnaphthalene	9.601	141	425290	2.45	ppm	97
13) Hexachlorocyclopentadiene	9.765	237	271534	5.97	ppm	100
16) Acenaphthylene	11.165	152	721215	2.52	ppm	99
17) Acenaphthene	11.520	153	451147	2.40	ppm	96
18) 4,6-dinitro-2-methylph...	12.731	198	456678	19.21	ppm	95
19) Fluorene	12.561	166	577380	2.44	ppm	97
22) Hexachlorobenzene	13.671	284	139198	2.54	ppm	97
23) Pentachlorophenol	14.104	266	392532	17.63	ppm	92
24) Phenanthrene	14.475	178	767407	2.60	ppm	99
25) Anthracene	14.567	178	780209	2.71	ppm	99
26) Fluoranthene	16.747	202	859917	2.52	ppm	98
27) Pyrene	17.148	202	864624	2.53	ppm	97
29) Benzo[a]anthracene	19.234	228	749822	2.42	ppm	98
30) Chrysene	19.296	228	777638	2.50	ppm	97
32) Benzo[b]fluoranthene	20.903	252	961006	2.78	ppm	96
33) Benzo[k]fluoranthene	20.949	252	560131	2.02	ppm	98
34) Benzo[a]pyrene	21.351	252	711790	2.42	ppm	83
35) Indeno[1,2,3-cd]pyrene	22.843	276	817393	2.34	ppm	99
36) Dibenz[a,h]anthracene	22.881	278	649209	2.37	ppm	98
37) Benzo[g,h,i]perylene	23.200	276	728449	2.37	ppm	100

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59646.D
Acq On : 3 Feb 2016 5:12 pm
Operator : ashleyd
Sample : ic2788-2.5
Misc : op90825a,e3m2788
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 04 16:25:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:52 2016
Response via : Initial Calibration

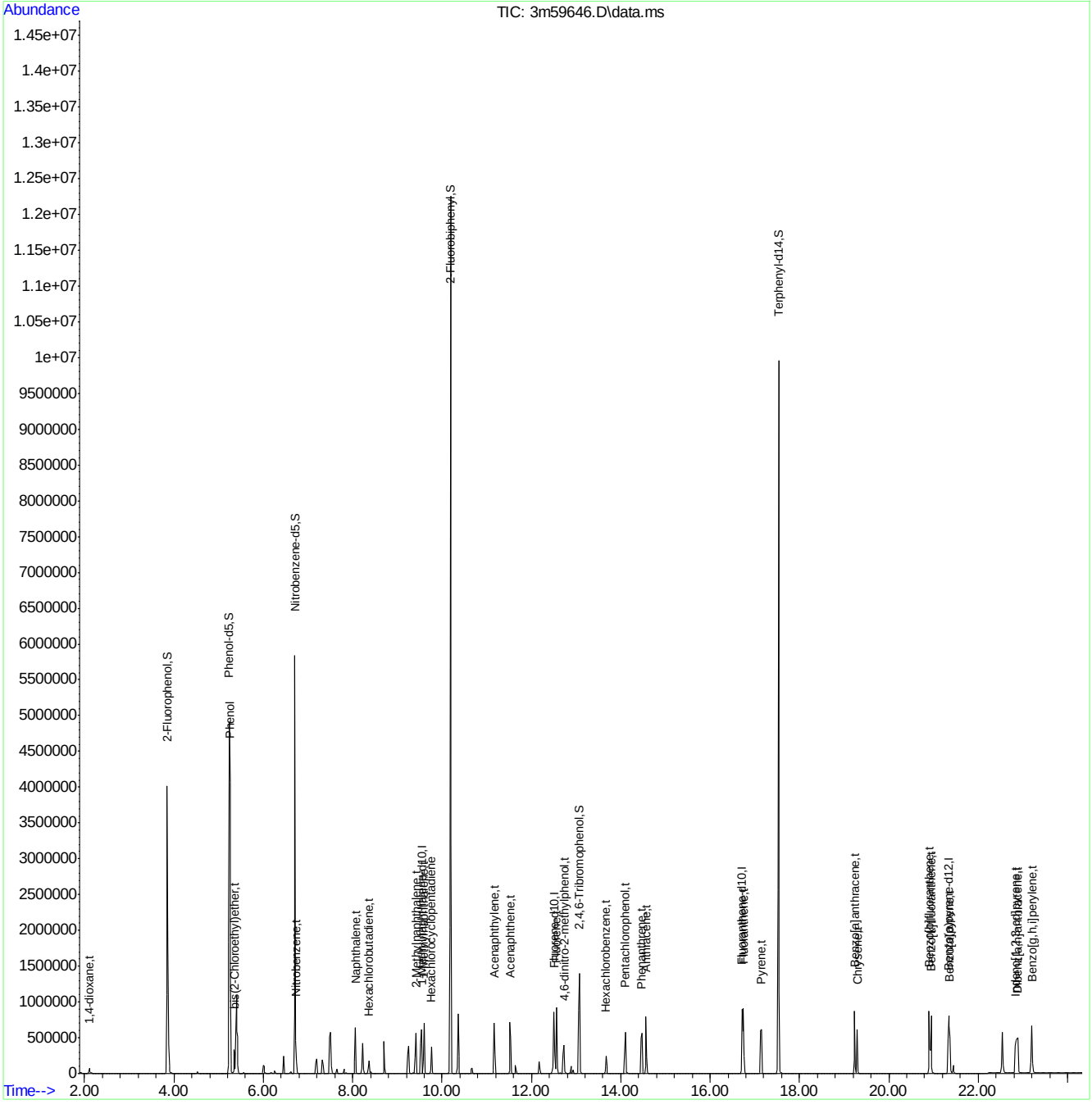
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59646.D
Acq On : 3 Feb 2016 5:12 pm
Operator : ashleyd
Sample : ic2788-2.5
Misc : op90825a,e3m2788
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 04 16:25:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:24:52 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59647.D
Acq On : 3 Feb 2016 5:44 pm
Operator : ashleyd
Sample : icv2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 04 16:26:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.539	150	588103	4.00	ppm	0.00
14) Fluorene-d10	12.505	176	854422	4.00	ppm	0.00
21) Fluoranthene-d10	16.716	212	1325023	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	21.336	264	972771	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
4) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
6) bis(2-Chloroethyl)ether	5.347	93	102093	0.93	ppm	83
8) Nitrobenzene	6.728	77	118620	0.87	ppm	99
9) Naphthalene	8.065	128	342668	0.91	ppm	99
10) Hexachlorobutadiene	8.366	225	53123	0.93	ppm	97
11) 2-Methylnaphthalene	9.416	141	183764	0.94	ppm	93
16) Acenaphthylene	11.165	152	323778	0.95	ppm	98
17) Acenaphthene	11.520	153	223048	1.00	ppm	94
19) Fluorene	12.561	166	269754	0.96	ppm	95
22) Hexachlorobenzene	13.671	284	64252	0.95	ppm	95
24) Phenanthrene	14.459	178	371856	1.01	ppm	89
25) Anthracene	14.567	178	327978	0.91	ppm	98
26) Fluoranthene	16.747	202	407695	0.96	ppm	98
27) Pyrene	17.148	202	386348	0.91	ppm	99
29) Benzo[a]anthracene	19.234	228	326874	0.86	ppm	99
30) Chrysene	19.296	228	343847	0.89	ppm	97
32) Benzo[b]fluoranthene	20.903	252	306119	0.80	ppm	97
33) Benzo[k]fluoranthene	20.949	252	311533	1.06	ppm	98
34) Benzo[a]pyrene	21.351	252	293049	0.92	ppm	84
35) Indeno[1,2,3-cd]pyrene	22.824	276	332491	0.88	ppm	87
36) Dibenz[a,h]anthracene	22.881	278	259773	0.88	ppm	98
37) Benzo[g,h,i]perylene	23.200	276	304371	0.92	ppm	99

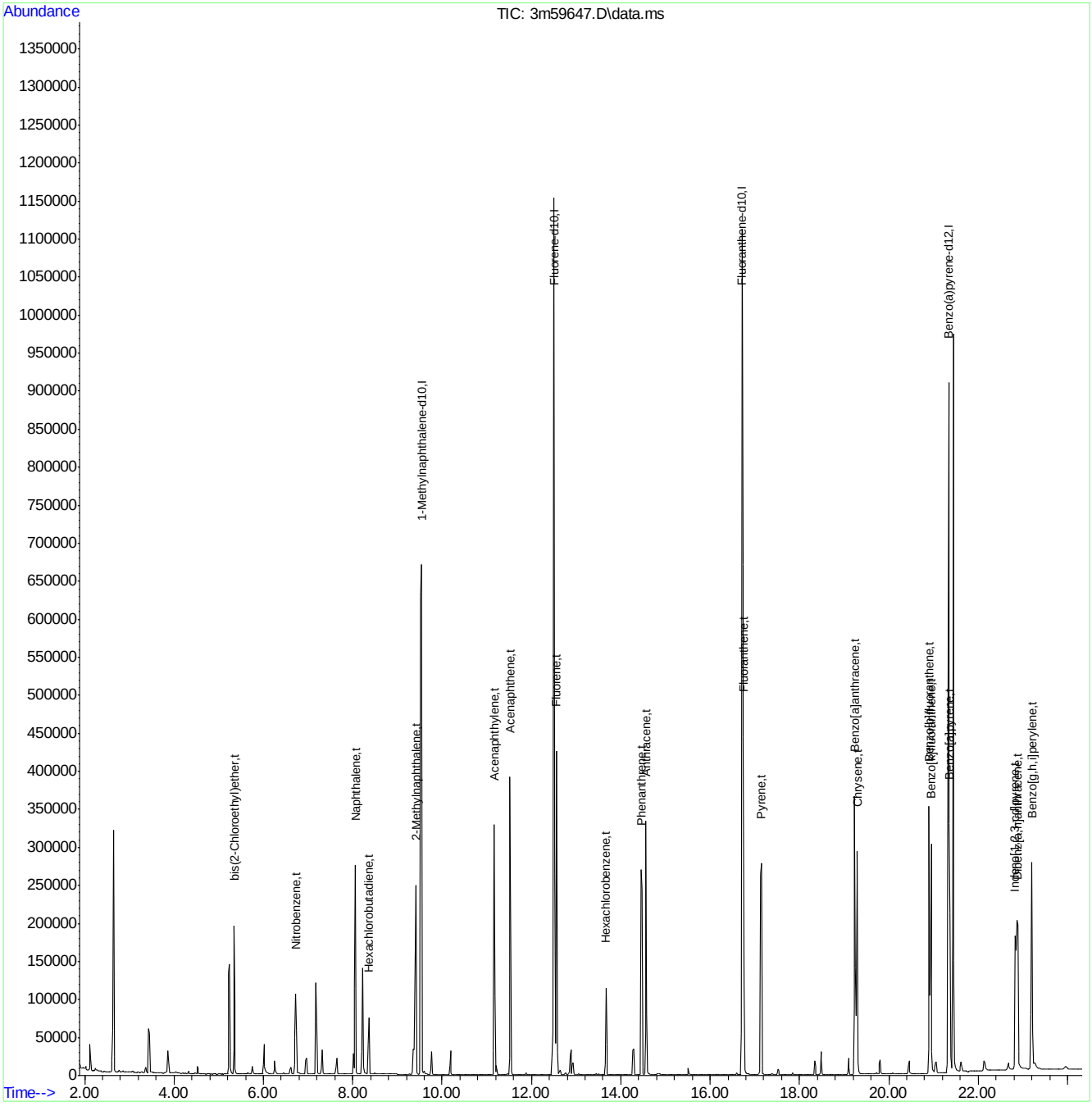
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59647.D
Acq On : 3 Feb 2016 5:44 pm
Operator : ashleyd
Sample : icv2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 04 16:26:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration



M3M2788SIM.M Thu Feb 04 16:27:05 2016 RPT1 Page: 2

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59648.D
Acq On : 3 Feb 2016 6:15 pm
Operator : ashleyd
Sample : icv2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 04 16:27:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	9.519	150	418546	4.00 ppm	-0.02
14) Fluorene-d10	12.505	176	613211	4.00 ppm	0.00
21) Fluoranthene-d10	16.716	212	930265	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	21.335	264	760068	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.103	88	28592	0.99 ppm	86
12) 1-Methylnaphthalene	9.601	141	143127	0.92 ppm	93
13) Hexachlorocyclopentadiene	9.765	237	36663	0.88 ppm	96

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

9.6.11

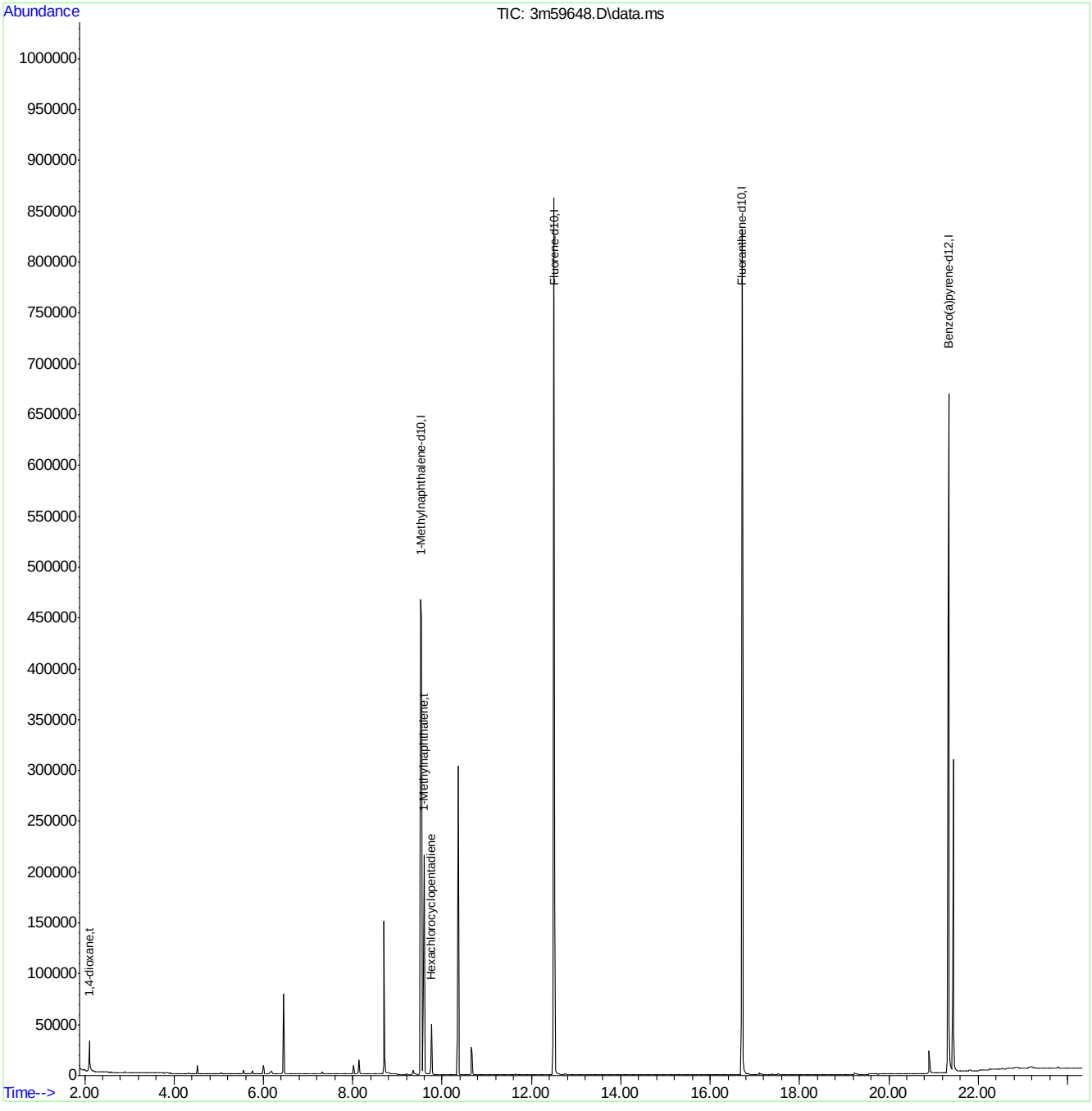
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2788\
Data File : 3m59648.D
Acq On : 3 Feb 2016 6:15 pm
Operator : ashleyd
Sample : icv2788-1.0
Misc : op90825a,e3m2788
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 04 16:27:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration



M3M2788SIM.M Thu Feb 04 16:32:01 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2789\
Data File : 3m59653.D
Acq On : 4 Feb 2016 6:35 pm
Operator : juliusj
Sample : icv2788-1.0
Misc : op90825a,e3m2789
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 08:39:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	9.498	150	275034	4.00 ppm	-0.04
14) Fluorene-d10	12.486	176	333717	4.00 ppm	-0.02
21) Fluoranthene-d10	16.685	212	560309	4.00 ppm	-0.03
31) Benzo(a)pyrene-d12	21.305	264	468950	4.00 ppm	-0.03
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	5.226	94	275661	3.91 ppm	# 65
18) 4,6-dinitro-2-methylph...	12.693	198	51451	3.62 ppm	76
23) Pentachlorophenol	14.073	266	56388	3.88 ppm	89

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

9.6.12

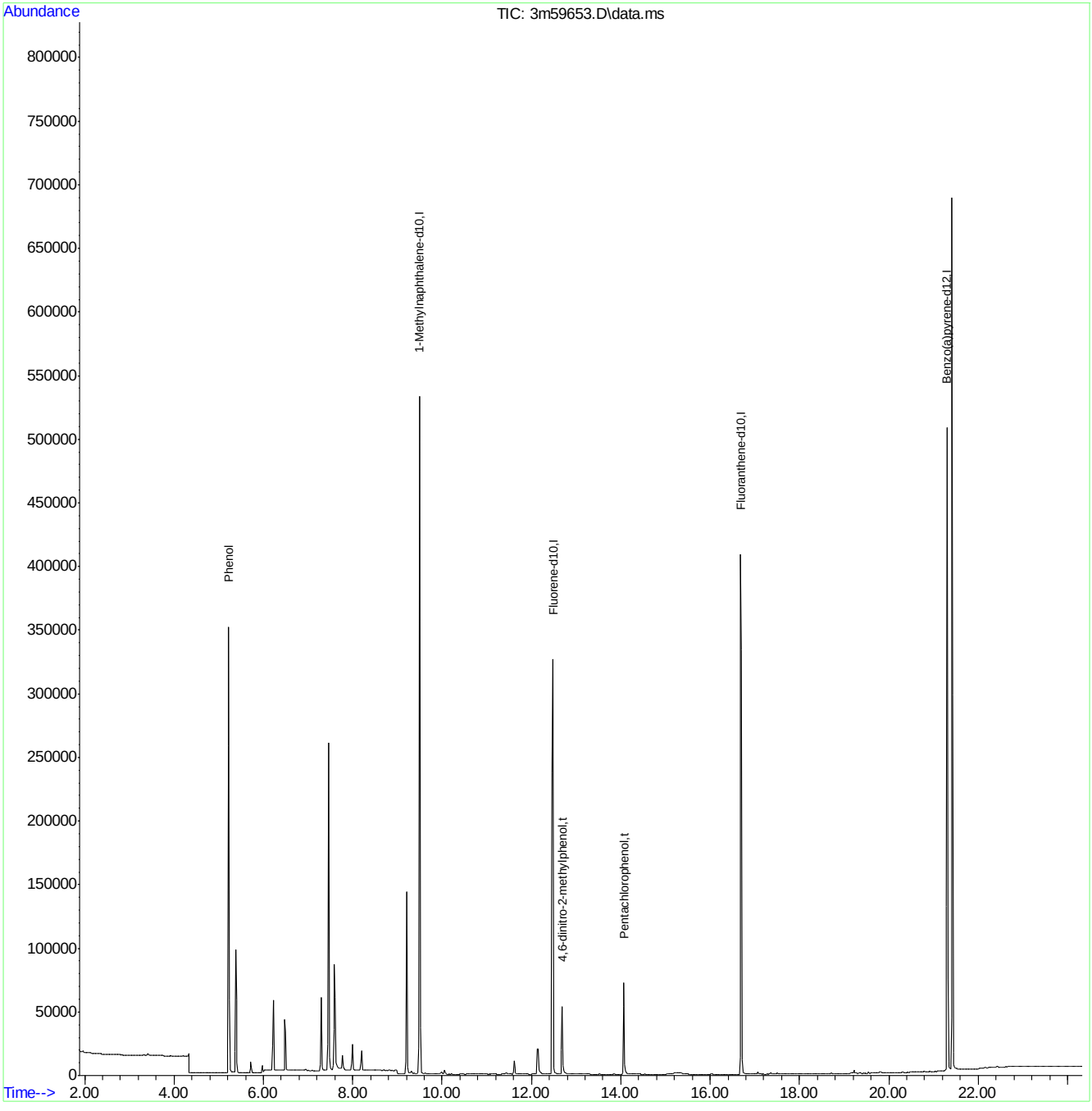
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2789\
Data File : 3m59653.D
Acq On : 4 Feb 2016 6:35 pm
Operator : juliusj
Sample : icv2788-1.0
Misc : op90825a,e3m2789
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 05 08:39:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Feb 04 16:25:17 2016
Response via : Initial Calibration



M3M2788SIM.M Fri Feb 05 14:49:40 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59945.D
Acq On : 10 Mar 2016 9:15 am
Operator : linseyk
Sample : cc2788-.5
Misc : op91858a,e3m2811
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 10 09:38:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.519	150	335237	4.00	ppm	-0.06
14) Fluorene-d10	12.505	176	422596	4.00	ppm	-0.08
21) Fluoranthene-d10	16.731	212	667466	4.00	ppm	-0.06
31) Benzo(a)pyrene-d12	21.351	264	561071	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	3.849	112	428524	8.71	ppm	-0.02
Spiked Amount 50.000			Recovery	=	17.42%	
4) Phenol-d5	5.238	99	708735	8.72	ppm	-0.02
Spiked Amount 50.000			Recovery	=	17.44%	
7) Nitrobenzene-d5	6.690	82	646958	8.94	ppm	-0.05
Spiked Amount 50.000			Recovery	=	17.88%	
15) 2-Fluorobiphenyl	10.176	172	1316301	9.88	ppm	-0.08
Spiked Amount 50.000			Recovery	=	19.76%	
20) 2,4,6-Tribromophenol	13.051	330	142764	11.33	ppm	-0.10
Spiked Amount 50.000			Recovery	=	22.66%	
28) Terphenyl-d14	17.535	244	1128874	10.48	ppm	-0.08
Spiked Amount 50.000			Recovery	=	20.96%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.119	88	10503	0.46	ppm #	57
5) Phenol	5.251	94	186170	2.17	ppm #	57
6) bis(2-Chloroethyl)ether	5.335	93	26269	0.42	ppm	84
8) Nitrobenzene	6.728	77	34295	0.44	ppm	92
9) Naphthalene	8.046	128	93720	0.44	ppm	96
10) Hexachlorobutadiene	8.347	225	14385	0.44	ppm	94
11) 2-Methylnaphthalene	9.396	141	53591	0.48	ppm	77
12) 1-Methylnaphthalene	9.580	141	55685	0.45	ppm	78
13) Hexachlorocyclopentadiene	9.745	237	21384	0.64	ppm	85
16) Acenaphthylene	11.165	152	85821	0.51	ppm	93
17) Acenaphthene	11.520	153	57159	0.52	ppm	88
18) 4,6-dinitro-2-methylph...	12.731	198	26206	1.85	ppm	87
19) Fluorene	12.561	166	69662	0.50	ppm	91
22) Hexachlorobenzene	13.671	284	17717	0.52	ppm	97
23) Pentachlorophenol	14.103	266	40826	2.50	ppm	93
24) Phenanthrene	14.475	178	95470	0.51	ppm	93
25) Anthracene	14.567	178	85270	0.47	ppm	94
26) Fluoranthene	16.762	202	107537	0.50	ppm	96
27) Pyrene	17.148	202	103718	0.49	ppm	97
29) Benzo[a]anthracene	19.250	228	93012	0.48	ppm	96
30) Chrysene	19.296	228	94982	0.49	ppm	87
32) Benzo[b]fluoranthene	20.918	252	109745	0.49	ppm	98
33) Benzo[k]fluoranthene	20.965	252	79047	0.47	ppm	96
34) Benzo[a]pyrene	21.382	252	90408	0.49	ppm	92
35) Indeno[1,2,3-cd]pyrene	22.862	276	96889	0.44	ppm	93
36) Dibenz[a,h]anthracene	22.899	278	79789	0.47	ppm	81
37) Benzo[g,h,i]perylene	23.238	276	84673	0.44	ppm	98

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59945.D
Acq On : 10 Mar 2016 9:15 am
Operator : linseyk
Sample : cc2788-.5
Misc : op91858a,e3m2811
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 10 09:38:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration

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

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

9.6.13

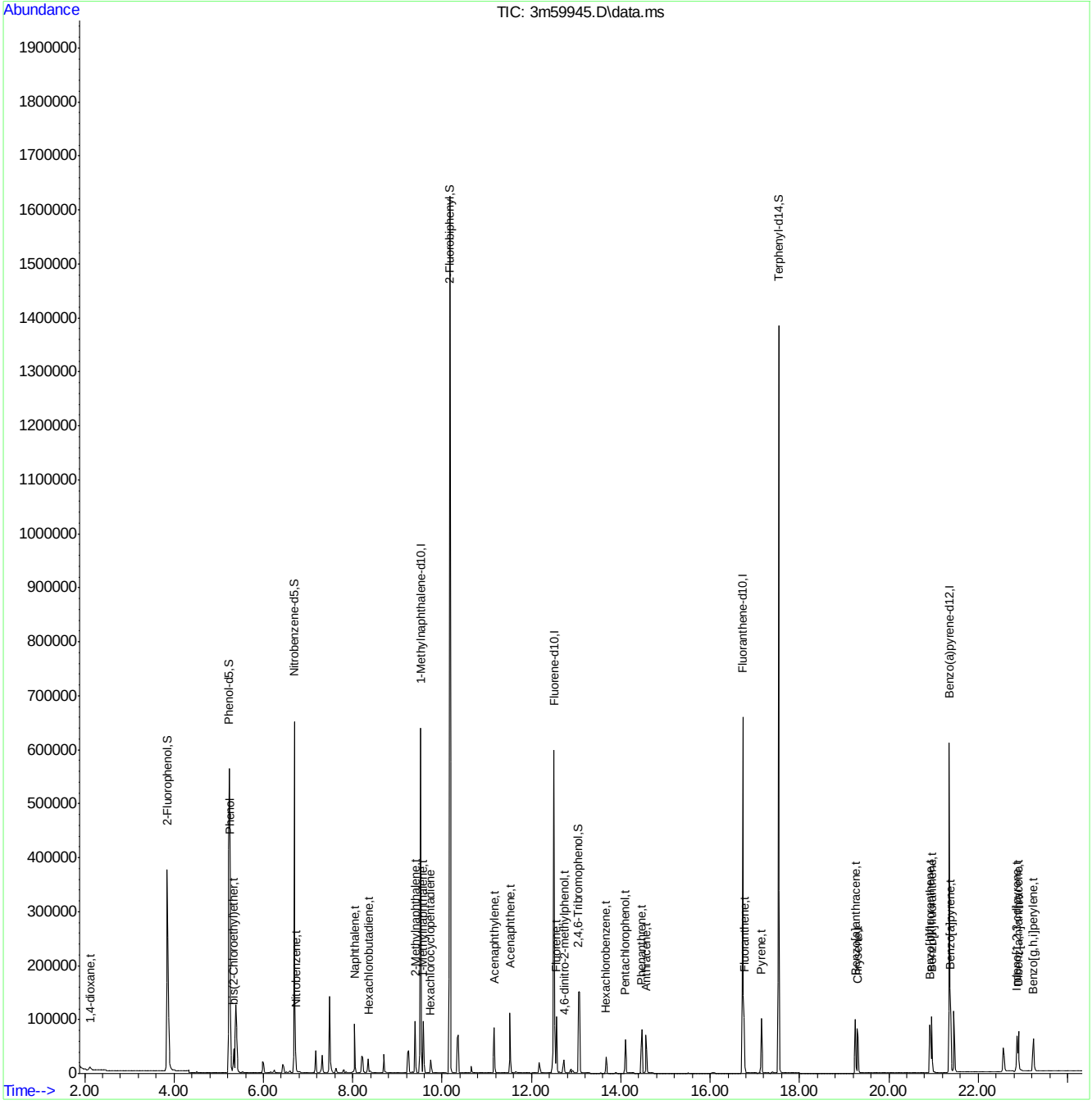
9

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2811\
Data File : 3m59945.D
Acq On : 10 Mar 2016 9:15 am
Operator : linseyk
Sample : cc2788-.5
Misc : op91858a,e3m2811
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 10 09:38:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2788SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 08 17:35:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102787.D Vial: 10
Acq On : 24 Feb 2016 2:07 am Operator: sarad
Sample : ic4514-100 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:43 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	126755	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	450907	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	254484	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	412235	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	351857	40.00	ppm	0.00
92) Perylene-d12	18.52	264	355480	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	126755	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	450907	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	254484	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	412235	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	351857	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	355480	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	126755	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	412235	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	351857	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	450907	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	254484	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	450907	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	126755	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	351857	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	351857	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	450907	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

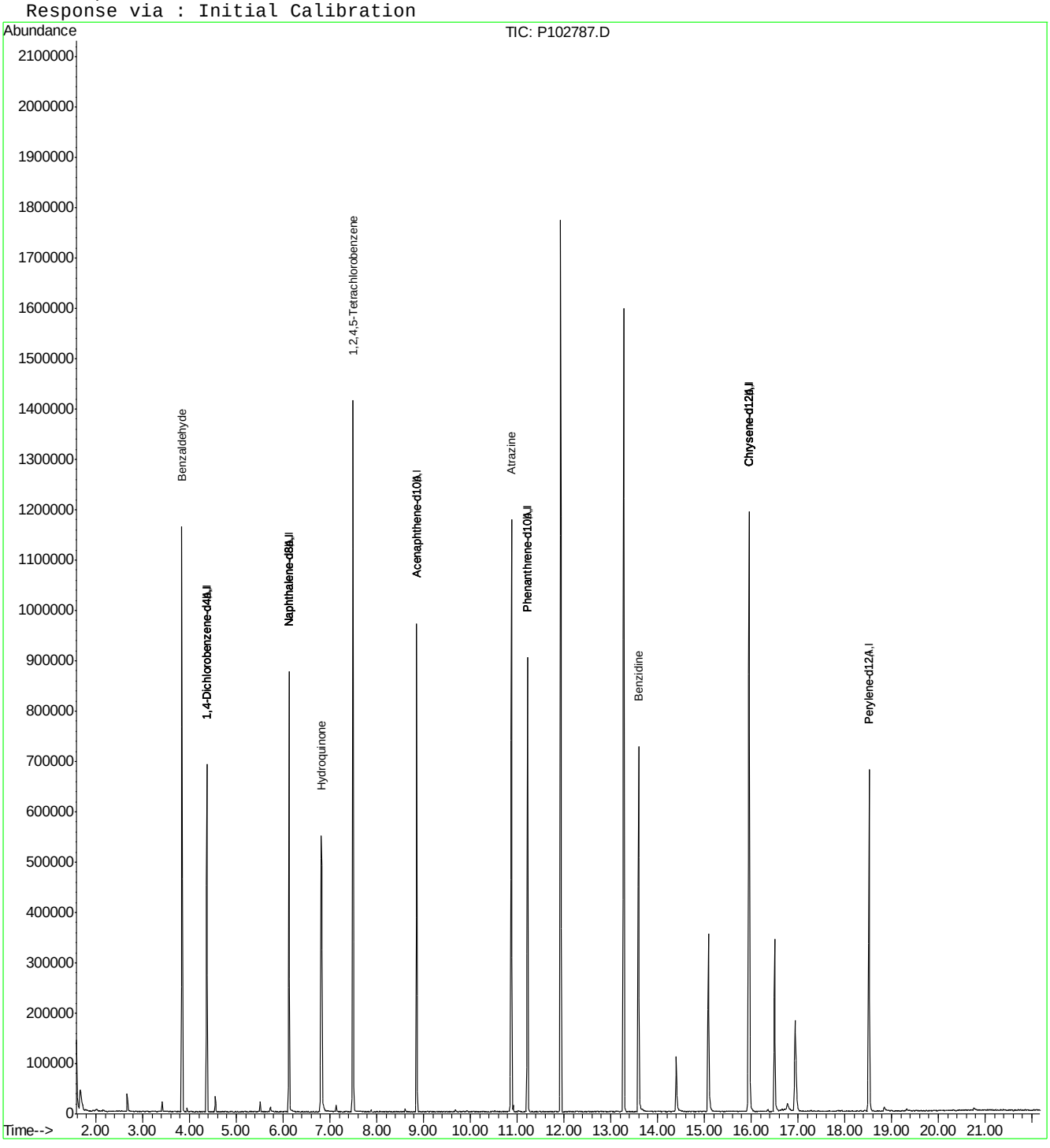
Target Compounds						Qvalue
160) Benzaldehyde	3.84	105	272885	71.62	ppm	99
162) Atrazine	10.88	200	197090	93.69	ppm	93
164) Benzidine	13.59	184	399210	67.45	ppm	99
166) Hydroquinone	6.81	110	439864	106.41	ppm	97
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	279294	79.97	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102787.D MP4513.M Wed Feb 24 14:34:21 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102787.D Vial: 10
Acq On : 24 Feb 2016 2:07 am Operator: sarad
Sample : ic4514-100 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:34 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102788.D Vial: 11
Acq On : 24 Feb 2016 2:36 am Operator: sarad
Sample : ic4514-80 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:07 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	119957	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	428470	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	236592	40.00 ppm	0.00
69) Phenanthrene-d10	11.23	188	390766	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	333749	40.00 ppm	0.00
92) Perylene-d12	18.52	264	337313	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	119957	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	428470	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	236592	40.00 ppm	0.00
132) Phenanthrene-d10A	11.23	188	390766	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	333749	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	337313	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	119957	40.00 ppm	0.00
161) Phenanthrene-d10b	11.23	188	390766	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	333749	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	428470	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	236592	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	428470	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	119957	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	333749	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	333749	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	428470	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

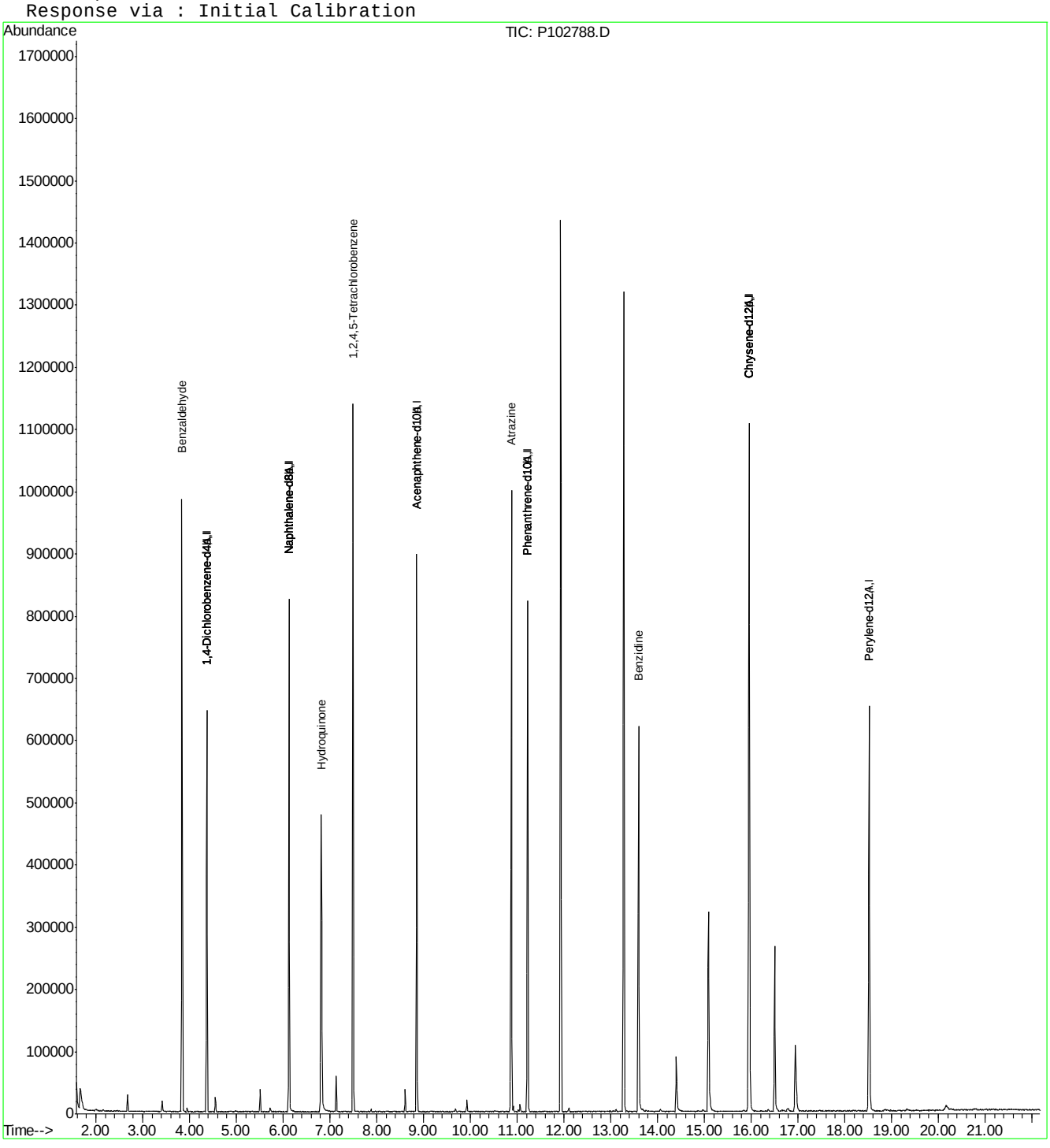
Target Compounds					Qvalue
160) Benzaldehyde	3.84	105	232196	64.39 ppm	99
162) Atrazine	10.88	200	152338	76.39 ppm	97
164) Benzidine	13.59	184	323040	57.54 ppm	99
166) Hydroquinone	6.81	110	341882	87.04 ppm	98
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	220907	68.03 ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102788.D MP4513.M Wed Feb 24 14:35:08 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102788.D Vial: 11
Acq On : 24 Feb 2016 2:36 am Operator: sarad
Sample : ic4514-80 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:34 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102789.D Vial: 12
Acq On : 24 Feb 2016 3:06 am Operator: sarad
Sample : ic4514-10 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:10 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	136729	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	481198	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	270846	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	430378	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	374718	40.00 ppm	0.00
92) Perylene-d12	18.52	264	368292	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	136729	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	481198	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	270846	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	430378	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	374718	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	368292	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	136729	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	430378	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	374718	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	481198	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	270846	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	481198	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	136729	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	374718	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	374718	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	481198	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

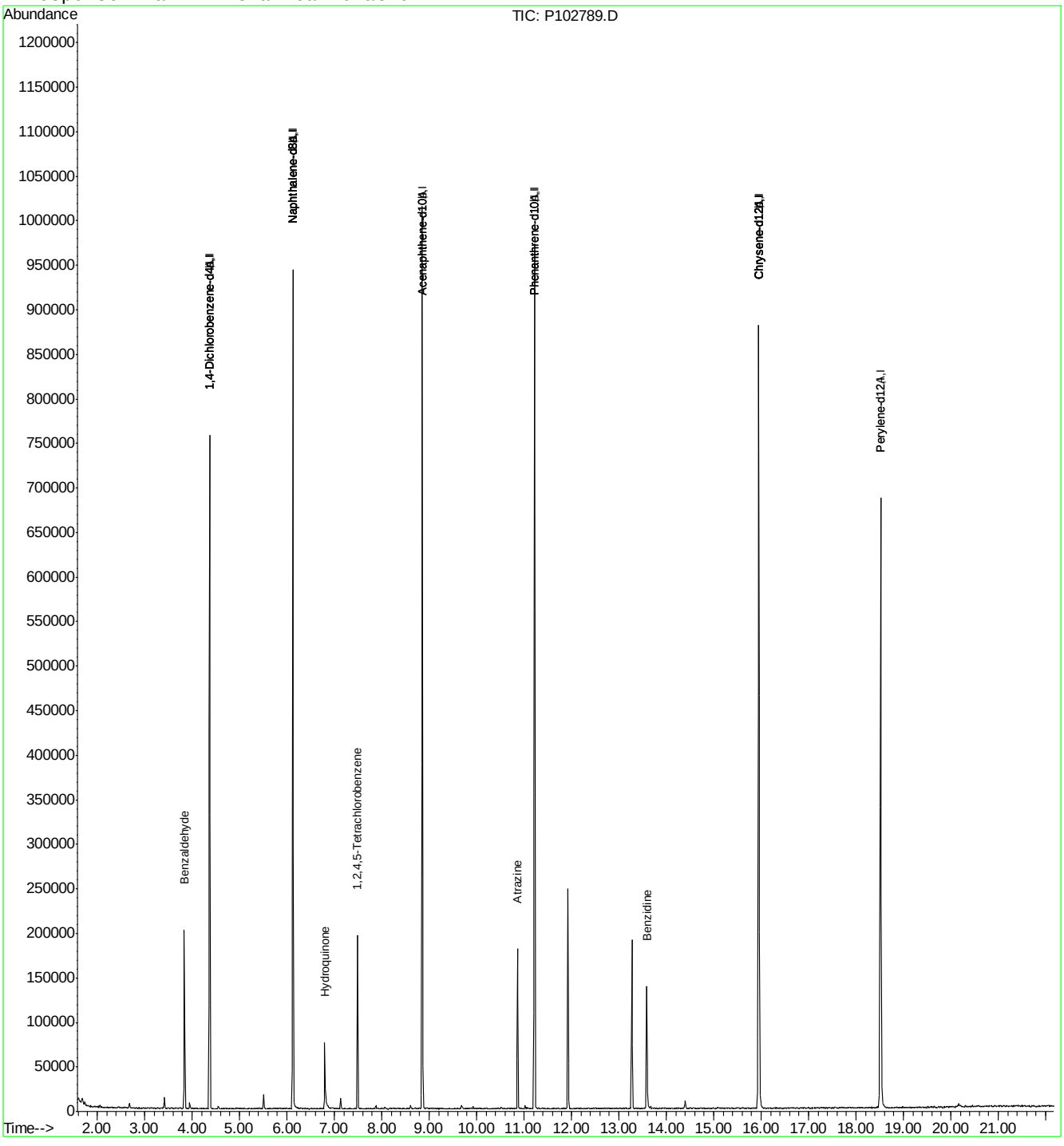
Target Compounds					Qvalue
160) Benzaldehyde	3.84	105	43208	10.51 ppm	98
162) Atrazine	10.86	200	22196	10.11 ppm	90
164) Benzidine	13.59	184	76244	12.10 ppm	99
166) Hydroquinone	6.80	110	41650	9.44 ppm	98
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	37002	9.95 ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102789.D MP4513.M Wed Feb 24 14:35:39 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102789.D Vial: 12
Acq On : 24 Feb 2016 3:06 am Operator: sarad
Sample : ic4514-10 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:35 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102790.D Vial: 13
Acq On : 24 Feb 2016 3:35 am Operator: sarad
Sample : ic4514-5 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:14 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	164954	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	563561	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	313072	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	511186	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	452088	40.00	ppm	0.00
92) Perylene-d12	18.52	264	443331	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	164954	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	563561	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	313072	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	511186	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	452088	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	443331	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	164954	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	511186	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	452088	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	563561	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	313072	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	563561	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	164954	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	452088	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	452088	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	563561	40.00	ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

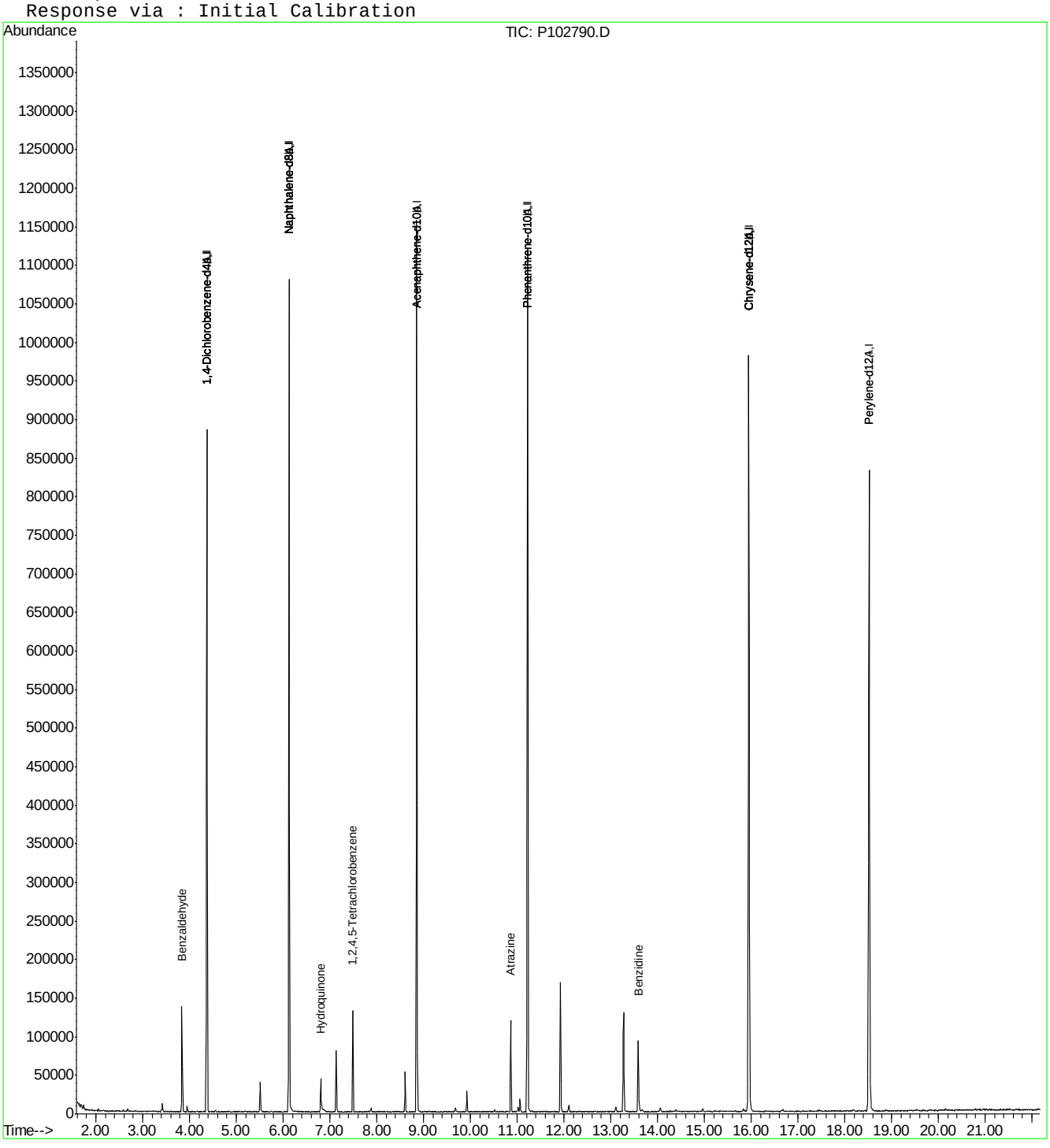
						Qvalue
160) Benzaldehyde	3.84	105	29655	5.98	ppm	99
162) Atrazine	10.86	200	14635	5.61	ppm	98
164) Benzidine	13.59	184	52465	6.90	ppm	98
166) Hydroquinone	6.80	110	26007	5.03	ppm	94
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	25271	5.88	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102790.D MP4513.M Wed Feb 24 14:36:07 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102790.D Vial: 13
Acq On : 24 Feb 2016 3:35 am Operator: sarad
Sample : ic4514-5 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:35 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102791.D Vial: 14
Acq On : 24 Feb 2016 4:05 am Operator: sarad
Sample : ic4514-2 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:19 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	157400	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	549331	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	307207	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	486864	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	411356	40.00 ppm	0.00
92) Perylene-d12	18.52	264	397949	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	157400	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	549331	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	307207	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	486864	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	411356	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	397949	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	157400	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	486864	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	411356	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	549331	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	307207	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	549331	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	157400	40.00 ppm	-0.09
176) Chrysene-d12c	15.95	240	411356	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	411356	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	549331	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

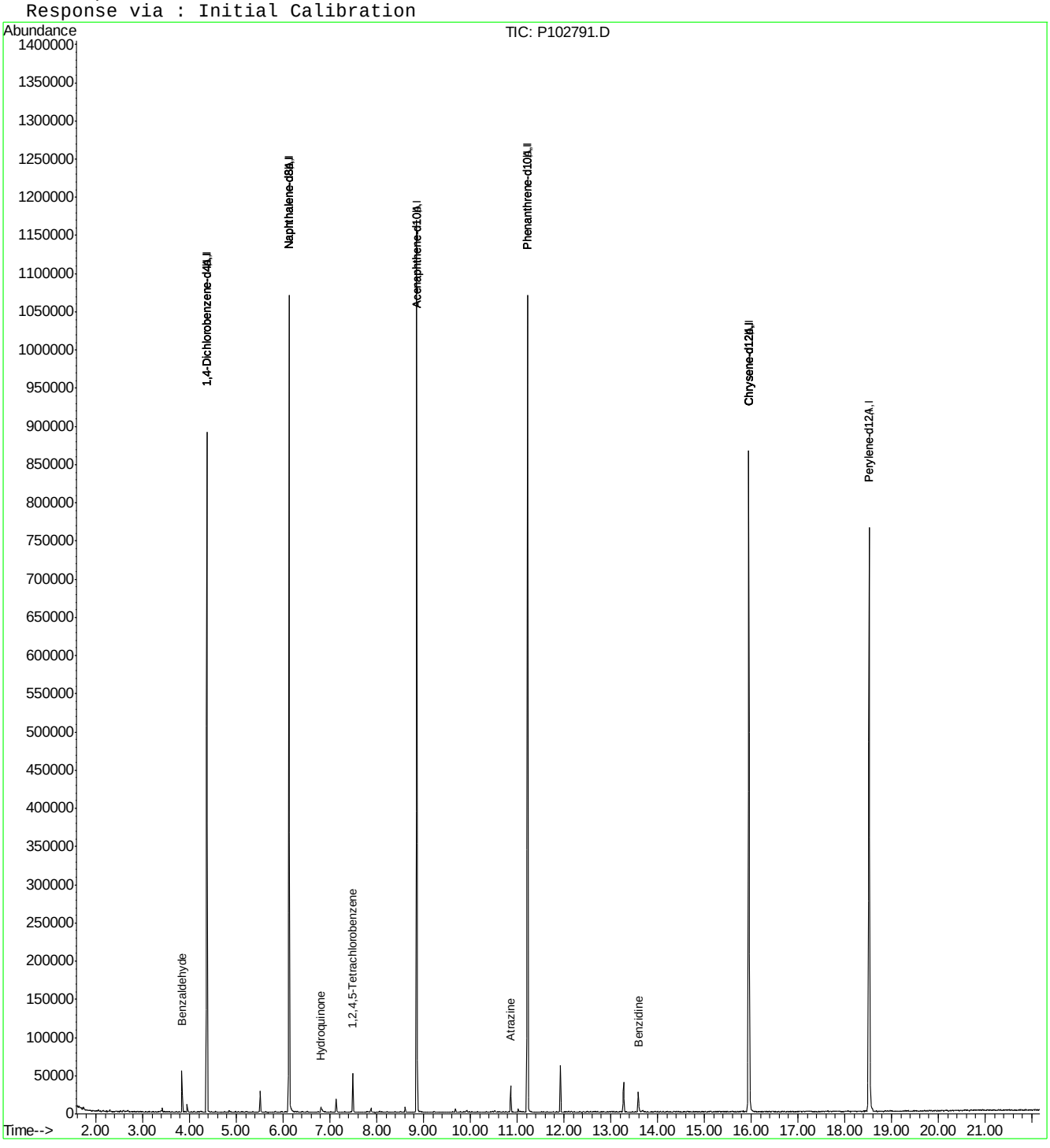
Target Compounds					Qvalue
160) Benzaldehyde	3.84	105	11747	2.48 ppm	96
162) Atrazine	10.86	200	4998	2.01 ppm	93
164) Benzidine	13.59	184	16474	2.38 ppm	99
166) Hydroquinone	6.81	110	7600	1.51 ppm	92
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	9946	2.36 ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102791.D MP4513.M Wed Feb 24 14:36:37 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102791.D Vial: 14
Acq On : 24 Feb 2016 4:05 am Operator: sarad
Sample : ic4514-2 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:36 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



P102791.D MP4513.M Wed Feb 24 14:36:37 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102792.D Vial: 15
Acq On : 24 Feb 2016 4:34 am Operator: sarad
Sample : ic4514-1 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:21 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	135191	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	472196	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	264454	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	432389	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	378494	40.00	ppm	0.00
92) Perylene-d12	18.52	264	356091	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	135191	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	472196	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	264454	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	432389	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	378494	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	356091	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	135191	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	432389	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	378494	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	472196	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	264454	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	472196	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	135191	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	378441	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	378441	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	472196	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

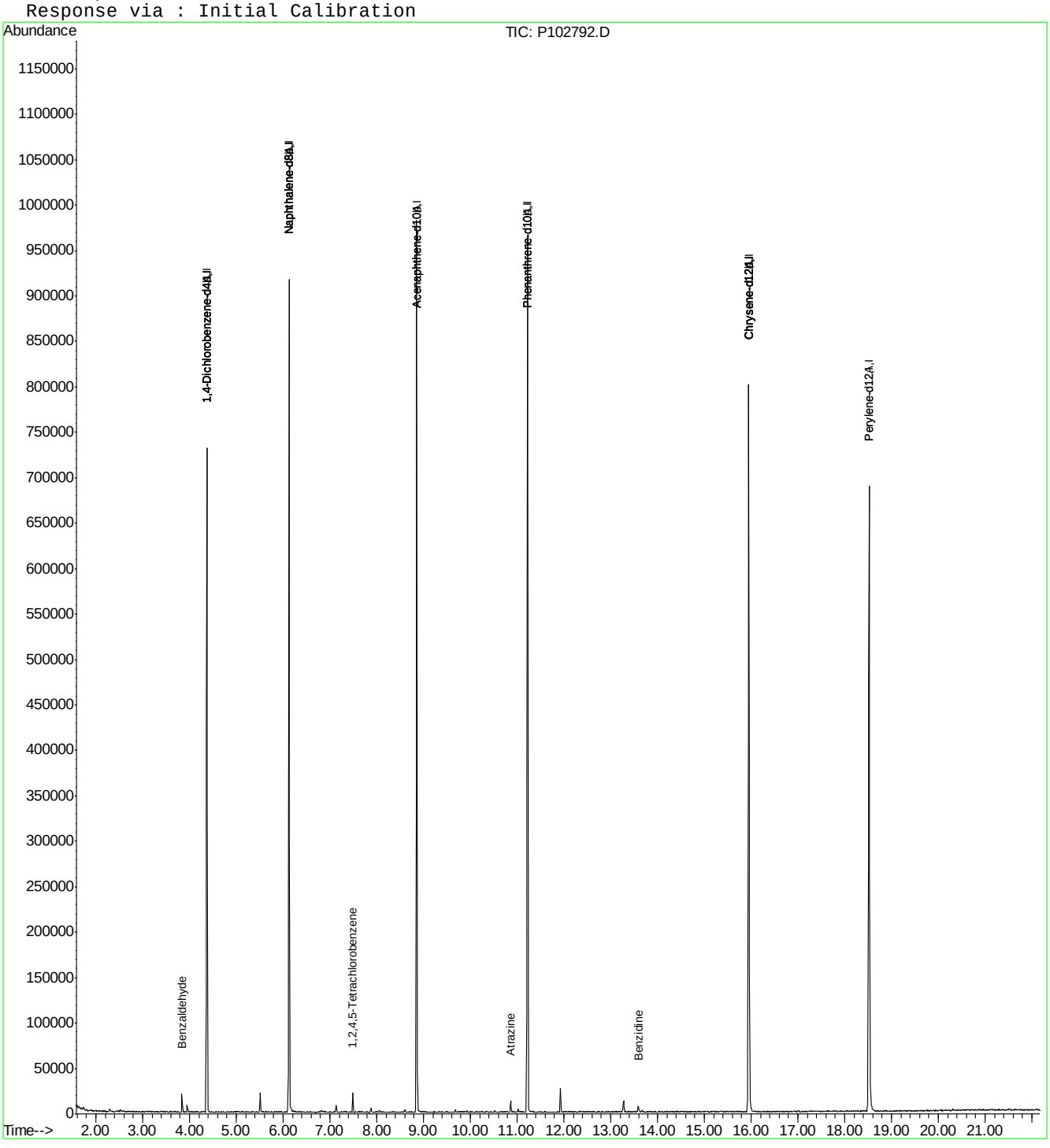
Target Compounds							Qvalue
160) Benzaldehyde	3.84	105	4552	1.12	ppm		97
162) Atrazine	10.86	200	2144	0.97	ppm		82
164) Benzidine	13.59	184	5187	0.81	ppm	#	66
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	4065	1.12	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102792.D MP4513.M Wed Feb 24 14:37:07 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102792.D Vial: 15
Acq On : 24 Feb 2016 4:34 am Operator: sarad
Sample : ic4514-1 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



P102792.D MP4513.M Wed Feb 24 14:37:08 2016 Page 2

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102793.D Vial: 16
Acq On : 24 Feb 2016 5:04 am Operator: sarad
Sample : ic4514-25 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:28 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	124747	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	436946	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	242658	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	388953	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	333803	40.00 ppm	0.00
92) Perylene-d12	18.51	264	324604	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	124747	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	436946	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	242658	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	388953	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	333803	40.00 ppm	0.00
155) Perylene-d12A	18.51	264	324604	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	124747	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	388953	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	333803	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	436946	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	242658	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	436946	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	124747	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	333803	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	333803	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	436946	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

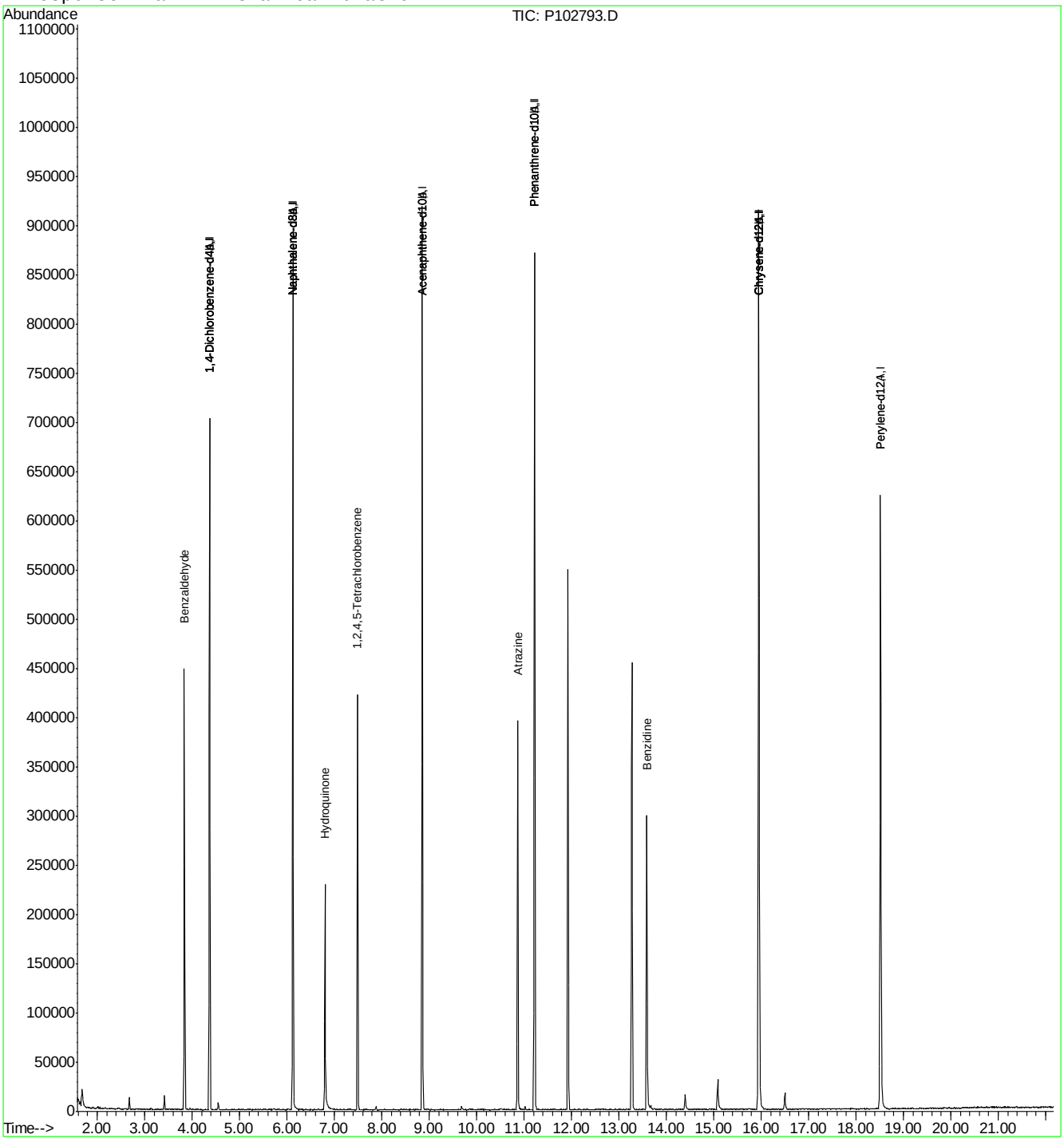
Target Compounds					Qvalue
160) Benzaldehyde	3.84	105	91859	24.50 ppm	96
162) Atrazine	10.87	200	50010	25.20 ppm	97
164) Benzidine	13.59	184	153732	27.38 ppm	99
166) Hydroquinone	6.80	110	108014	26.96 ppm	99
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	81204	24.38 ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102793.D MP4513.M Wed Feb 24 14:37:38 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102793.D Vial: 16
Acq On : 24 Feb 2016 5:04 am Operator: sarad
Sample : ic4514-25 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



9.6.20
9
SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102794.D Vial: 17
Acq On : 24 Feb 2016 5:33 am Operator: sarad
Sample : icc4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:33 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	123738	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	444756	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	244838	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	386844	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	326980	40.00	ppm	0.00
92) Perylene-d12	18.52	264	322241	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	123738	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	444756	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	244838	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	386844	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	326980	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	322241	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	123738	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	386844	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	326980	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	444756	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	244838	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	444756	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	123738	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	326980	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	326980	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	444756	40.00	ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

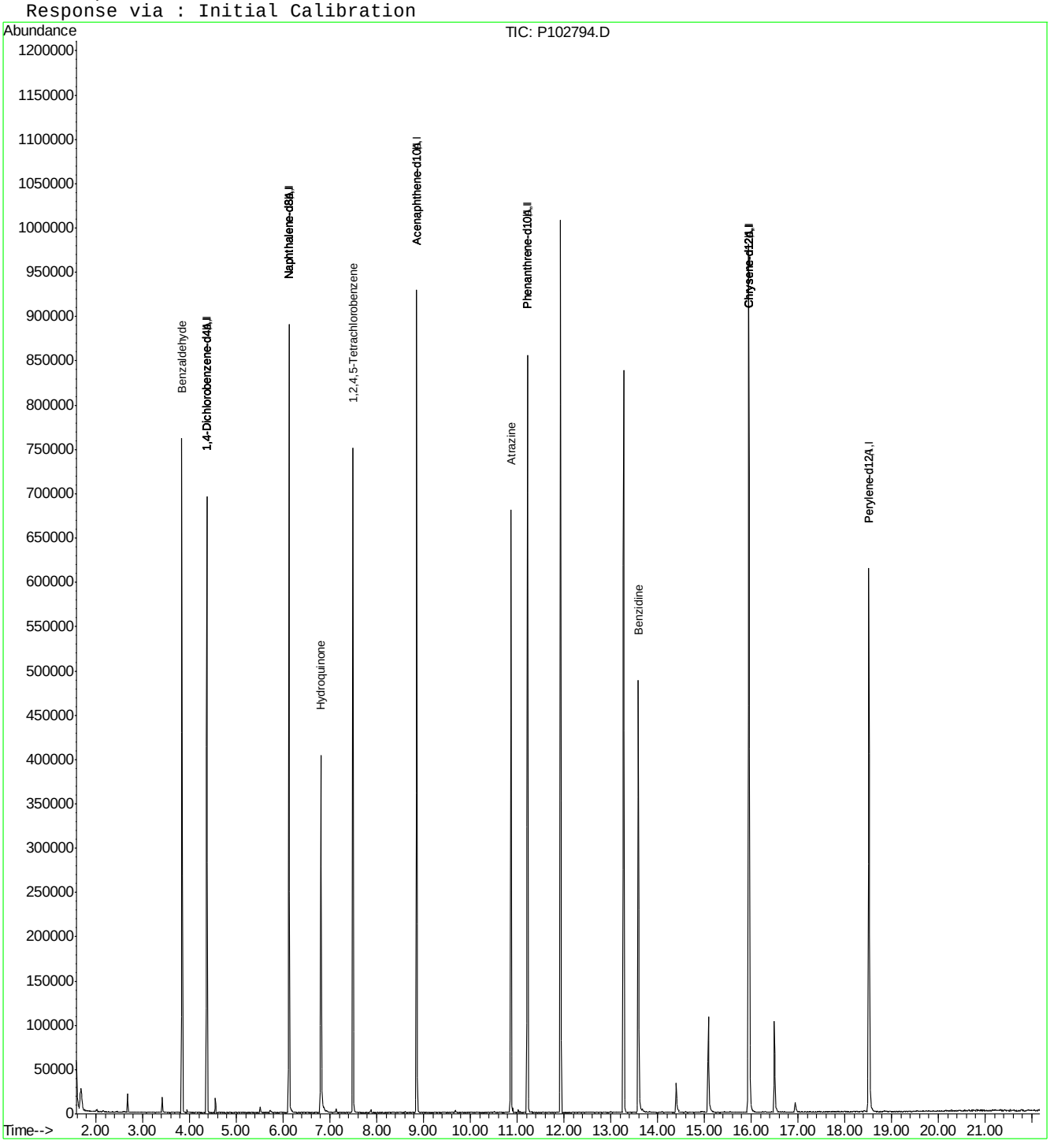
Target Compounds						Qvalue
160) Benzaldehyde	3.84	105	165508	44.50	ppm	100
162) Atrazine	10.88	200	97727	49.51	ppm	100
164) Benzidine	13.59	184	251988	45.82	ppm	100
166) Hydroquinone	6.81	110	216907	53.20	ppm	100
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	151776	45.17	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102794.D MP4513.M Wed Feb 24 14:38:12 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102794.D Vial: 17
Acq On : 24 Feb 2016 5:33 am Operator: sarad
Sample : icc4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102798A.D Vial: 21
Acq On : 24 Feb 2016 7:31 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 12:54:33 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	117275	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	407577	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	231457	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	379681	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	296388	40.00	ppm	0.00
92) Perylene-d12	18.52	264	300664	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	117275	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	407577	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	231457	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	379681	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	296388	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	300664	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	117275	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	379681	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	296388	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	407577	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	231457	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	407577	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	117275	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	296388	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	296388	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	407577	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	147147	46.32	ppm	100

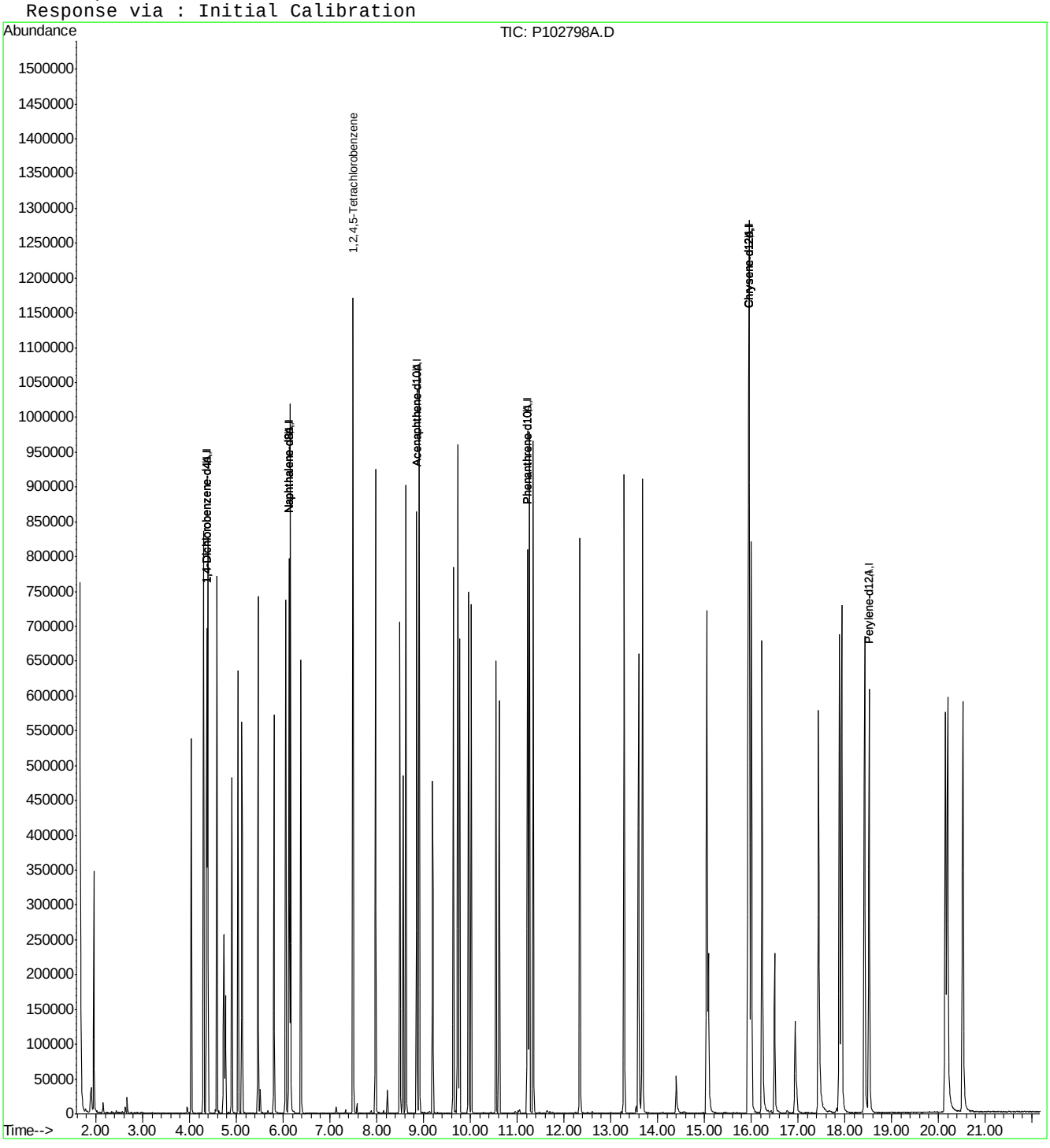
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102798A.D Vial: 21
Acq On : 24 Feb 2016 7:31 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:19 2016 Quant Results File: MP4513.RES

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



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102799A.D Vial: 22
Acq On : 24 Feb 2016 8:00 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 12:59:11 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	117905	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	432668	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	239323	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	363483	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	338502	40.00	ppm	0.00
92) Perylene-d12	18.51	264	316787	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	117905	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	432668	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	239323	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	363483	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	338502	40.00	ppm	0.00
155) Perylene-d12A	18.51	264	316787	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	117905	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	363483	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	338502	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	432668	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	239323	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	432668	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	117905	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	338502	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	338502	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	432668	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

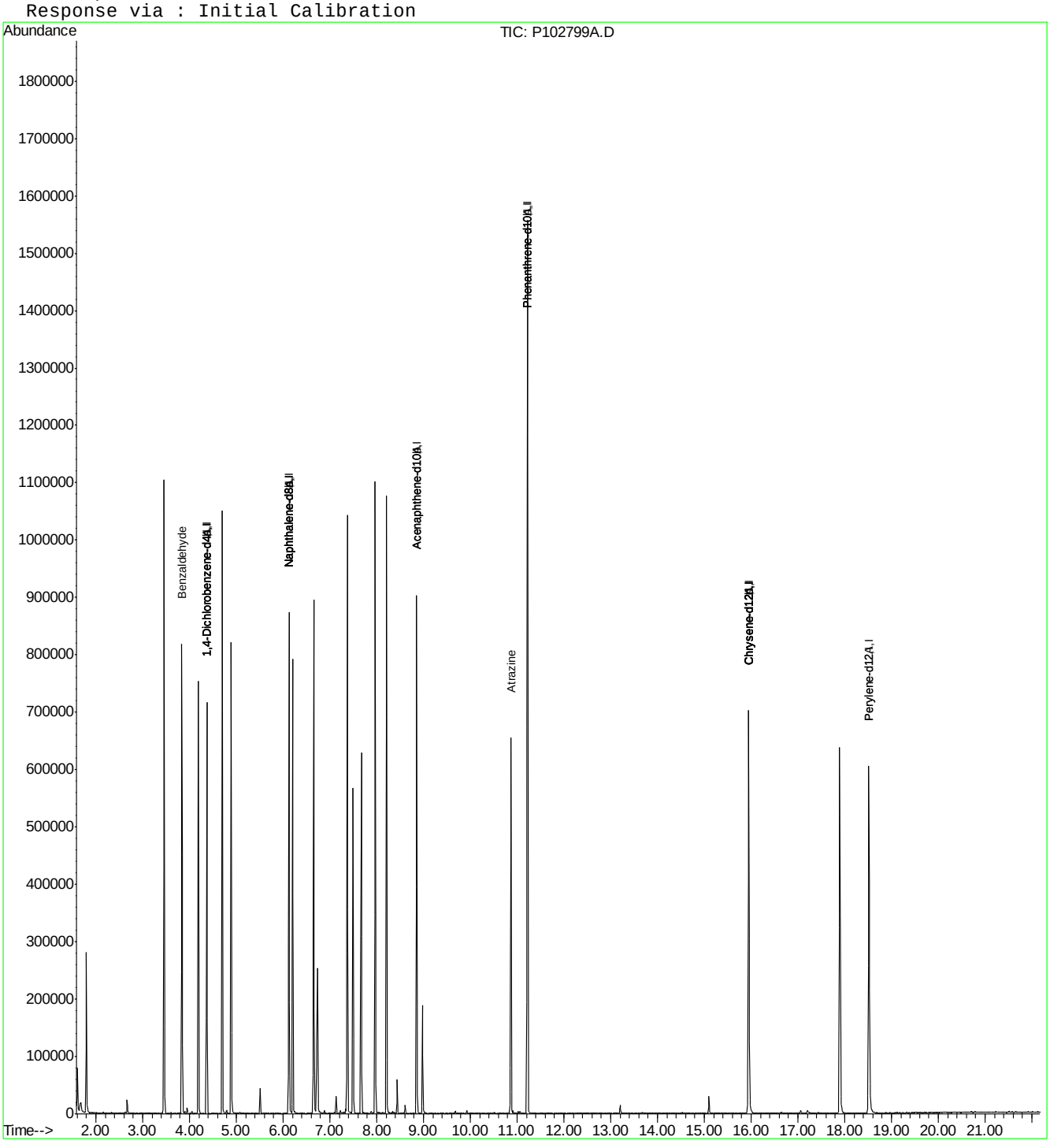
Target Compounds						Qvalue
160) Benzaldehyde	3.84	105	170305	48.05	ppm	97
162) Atrazine	10.88	200	91512	49.34	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102799A.D MP4513.M Thu Feb 25 16:21:13 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102799A.D Vial: 22
Acq On : 24 Feb 2016 8:00 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:20 2016 Quant Results File: MP4513.RES

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



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102800.D Vial: 23
Acq On : 24 Feb 2016 8:29 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:00:48 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	131165	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	459959	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	224297	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	391280	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	349495	40.00	ppm	0.00
92) Perylene-d12	18.52	264	345730	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	131165	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	459959	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	224297	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	391280	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	349495	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	345730	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	131165	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	391280	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	349495	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	459959	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	224297	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	459959	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	131165	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	349495	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	349495	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	459959	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

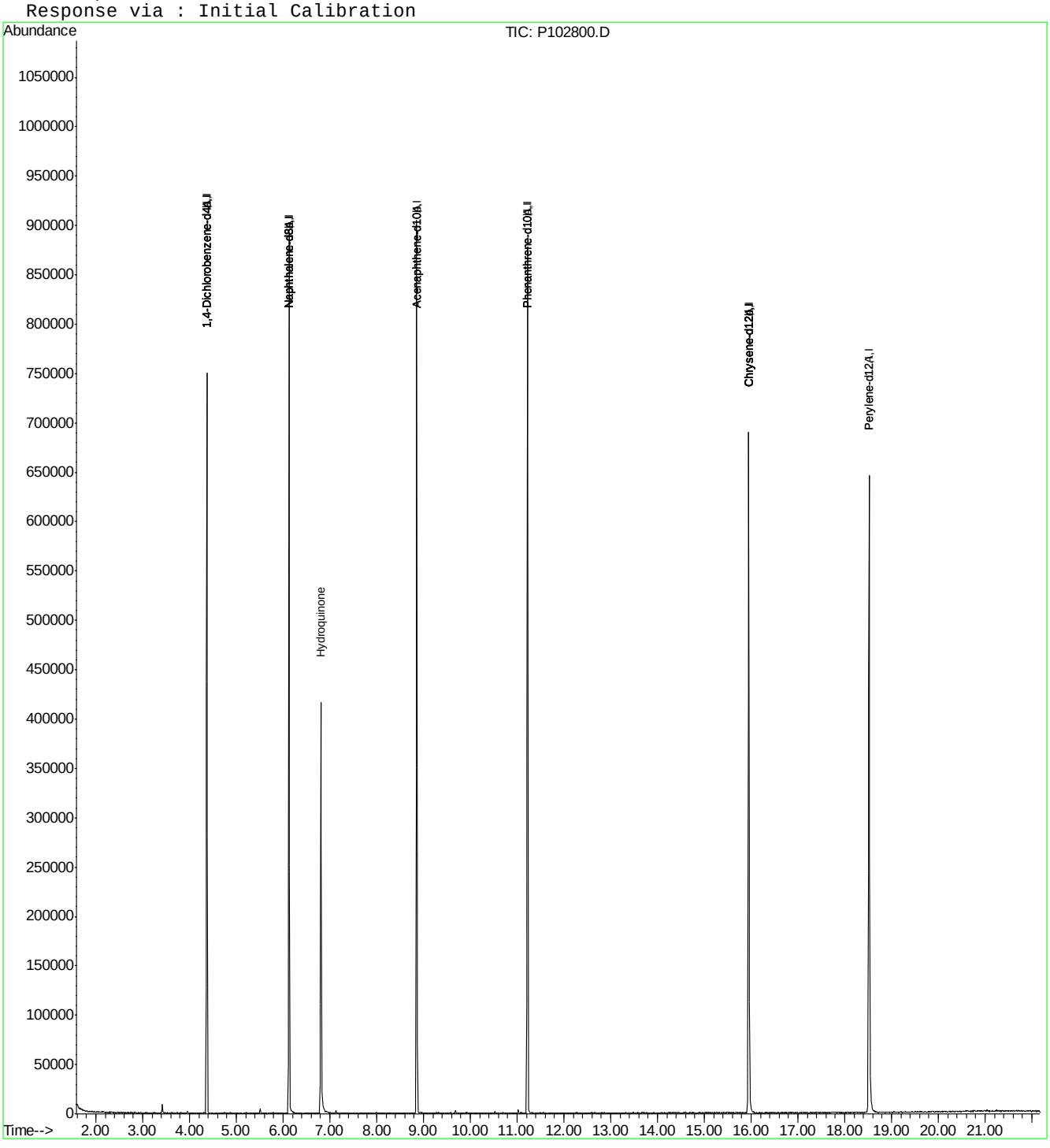
Target Compounds						Qvalue
166) Hydroquinone	6.81	110	221965	52.64	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102800.D MP4513.M Wed Feb 24 13:01:22 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102800.D Vial: 23
Acq On : 24 Feb 2016 8:29 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:01 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration



P102800.D MP4513.M Wed Feb 24 13:01:22 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102801A.D Vial: 24
Acq On : 24 Feb 2016 8:58 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:01:35 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	151289	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	527124	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	254350	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	443644	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	368888	40.00	ppm	0.00
92) Perylene-d12	18.52	264	382458	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	151289	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	527124	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	254350	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	443644	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	368888	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	382458	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	151289	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	443644	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	368888	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	527124	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	254350	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	527124	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	151289	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	368888	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	368888	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	527124	40.00	ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
164) Benzidine	13.59	184	502401	77.37	ppm	99

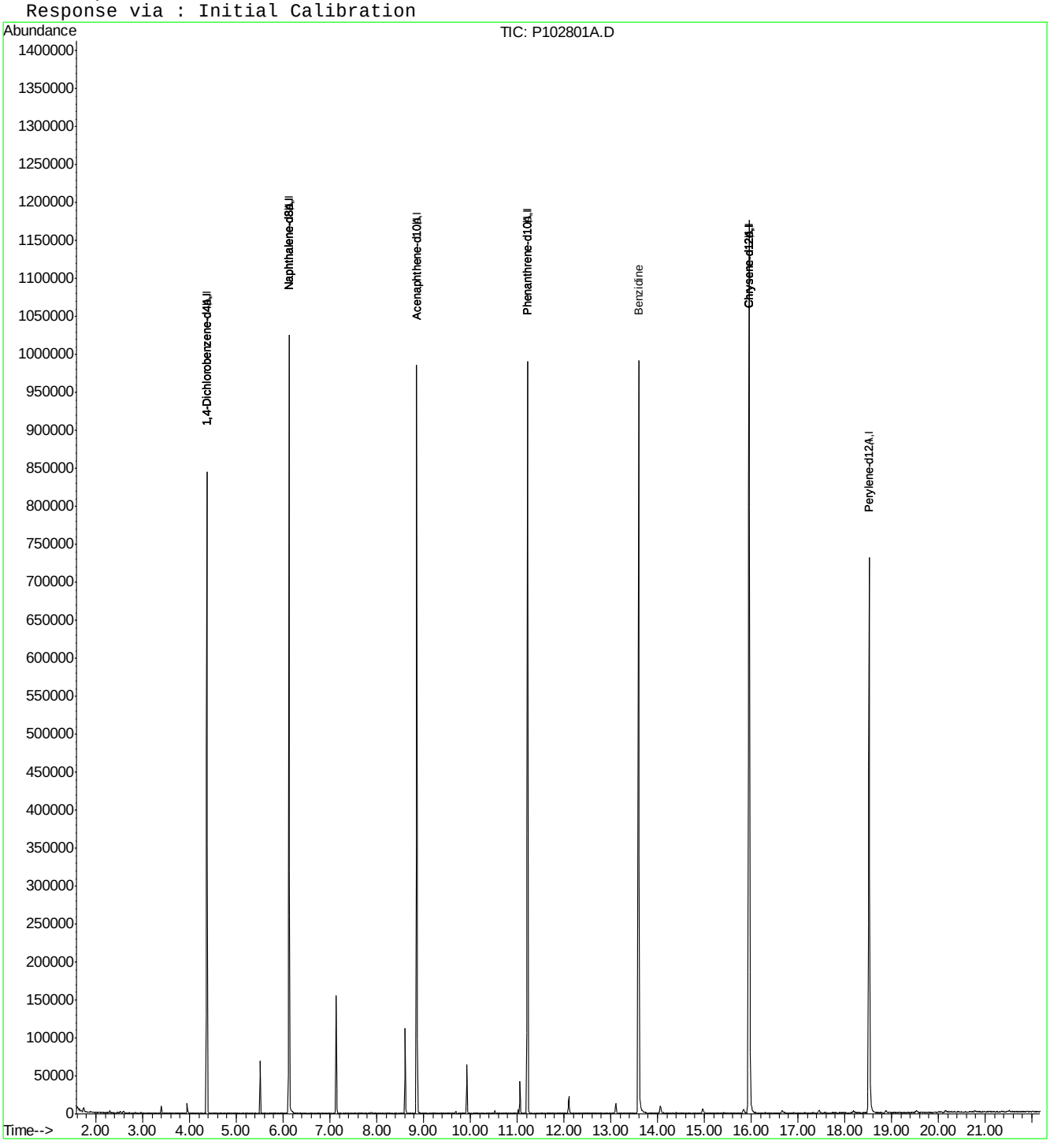
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102801A.D Vial: 24
Acq On : 24 Feb 2016 8:58 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:21 2016 Quant Results File: MP4513.RES

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



P102801A.D MP4513.M Thu Feb 25 16:22:00 2016 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:37:10 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	116750	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	416496	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	248090	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	396621	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	341673	40.00	ppm	0.00
92) Perylene-d12	18.53	264	325278	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4A	4.37	152	116750	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	416496	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	248090	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	396621	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	341673	40.00	ppm	0.00
155) Perylene-d12A	18.53	264	325278	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	116750	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	396621	40.00	ppm	0.01
163) Chrysene-d12b	15.96	240	341673	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	416496	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	248090	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	416496	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	116750	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	341673	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	341673	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	416496	40.00	ppm	0.17

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

							Qvalue
103) 2-Picoline	2.48	93	454085	100.00	ppm		99
104) Pentachloroethane	4.03	167	152640	100.00	ppm		80
105) Methyl methanesulfonate	2.80	80	223199	100.00	ppm		79
106) N-Nitrosodiethylamine	3.17	102	194100	100.00	ppm		95
107) N-Nitrosomethylethylamine	2.55	42	152430	100.00	ppm		82
108) Ethyl methanesulfonate	3.47	79	296942	100.00	ppm		98
109) N-Nitrosopyrrolidine	4.88	41	112862	100.00	ppm		92
110) N-Nitrosomorpholine	4.92	56	142859	100.00	ppm		87
111) o-Toluidine	4.96	106	474056	99.75	ppm	#	22
113) O,O,O-Triethyl phosphoroth	5.78	198	150776	100.00	ppm		94
114) N-Nitrosopiperidine	5.34	42	188858	188.76	ppm		91
115) A,A-Dimethylphenethylamine	6.63	58	819642m	99.96	ppm		

(#) = qualifier out of range (m) = manual integration
P102803.D MP4513.M Wed Feb 24 15:47:49 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:37:10 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	201124	100.00	ppm		98
117)	N-Nitrosodi-n-butylamine	6.81	84	243273	100.00	ppm		93
118)	p-Phenylenediamine	6.79	108	195109m	100.20	ppm		
119)	Safrole	7.12	162	249704	100.00	ppm		87
120)	Isosafrole	7.94	162	84709	100.00	ppm	#	48
122)	Thionazin	9.77	143	90463	100.00	ppm		98
123)	Tetraethyl dithiopyrophosp	10.30	322	82458	100.00	ppm		100
124)	Phorate	10.48	75	388339	100.00	ppm		100
125)	Phenacetin	10.53	108	372583	100.00	ppm		99
126)	1,4-Naphthoquinone	8.26	158	173864	100.00	ppm		95
127)	m-Dinitrobenzene	8.51	168	111217	100.00	ppm		85
128)	Pentachlorobenzene	9.14	250	230995	100.00	ppm		97
129)	2-Naphthylamine	9.45	143	566878	100.00	ppm		91
130)	1-Naphthylamine	9.32	143	505272	100.00	ppm		95
131)	5-Nitro-o-toluidine	9.79	152	206115	100.00	ppm		97
133)	Disulfoton	11.32	88	320318	100.00	ppm		95
134)	Dinoseb	11.31	211	155924	100.00	ppm		96
135)	Dimethoate	10.73	87	272430	100.00	ppm		76
136)	4-Aminobiphenyl	10.98	169	596338	100.00	ppm		97
137)	Methyl parathion	11.93	125	193893	100.00	ppm		85
138)	Parathion	12.62	109	138493	100.00	ppm		94
139)	Diphenylamine	9.98	169	883019	100.00	ppm		98
140)	Isodrin	13.04	193	109215	100.00	ppm		86
141)	Diallate	10.47	86	214111	100.00	ppm		79
142)	Pentachloronitrobenzene	10.99	295	58950	200.00	ppm		85
143)	Pronamide	11.14	173	291956	100.00	ppm		97
144)	4-Nitroquinoline 1-oxide	12.61	190	420849	400.00	ppm	#	65
145)	Methapyriline	12.88	58	220827	100.00	ppm		86
146)	sym-Trinitrobenzene	10.42	213	62649	100.00	ppm	#	28
148)	Aramite	14.26	185	59704	200.00	ppm		94
149)	p-(Dimethylamine)azobenzen	14.34	120	347425	100.00	ppm		92
150)	Kepone	14.97	272	187811m	1550.68	ppm		
151)	Famphur	14.93	218	793706	600.00	ppm		93
152)	2-Acetylaminofluorene	15.44	181	441605	100.00	ppm		95
153)	3,3'-Dimethylbenzidine	14.98	212	96460	100.00	ppm		98
154)	Chlorobenzilate	14.46	251	259931	100.00	ppm		97
156)	4,4-Methylene-bis-(2-chlor	16.00	266	79201	100.00	ppm		98
157)	Hexachlorophene	18.31	196	339206	500.00	ppm	#	97
158)	3-Methylcholanthrene	19.04	252	180596	100.00	ppm	#	77

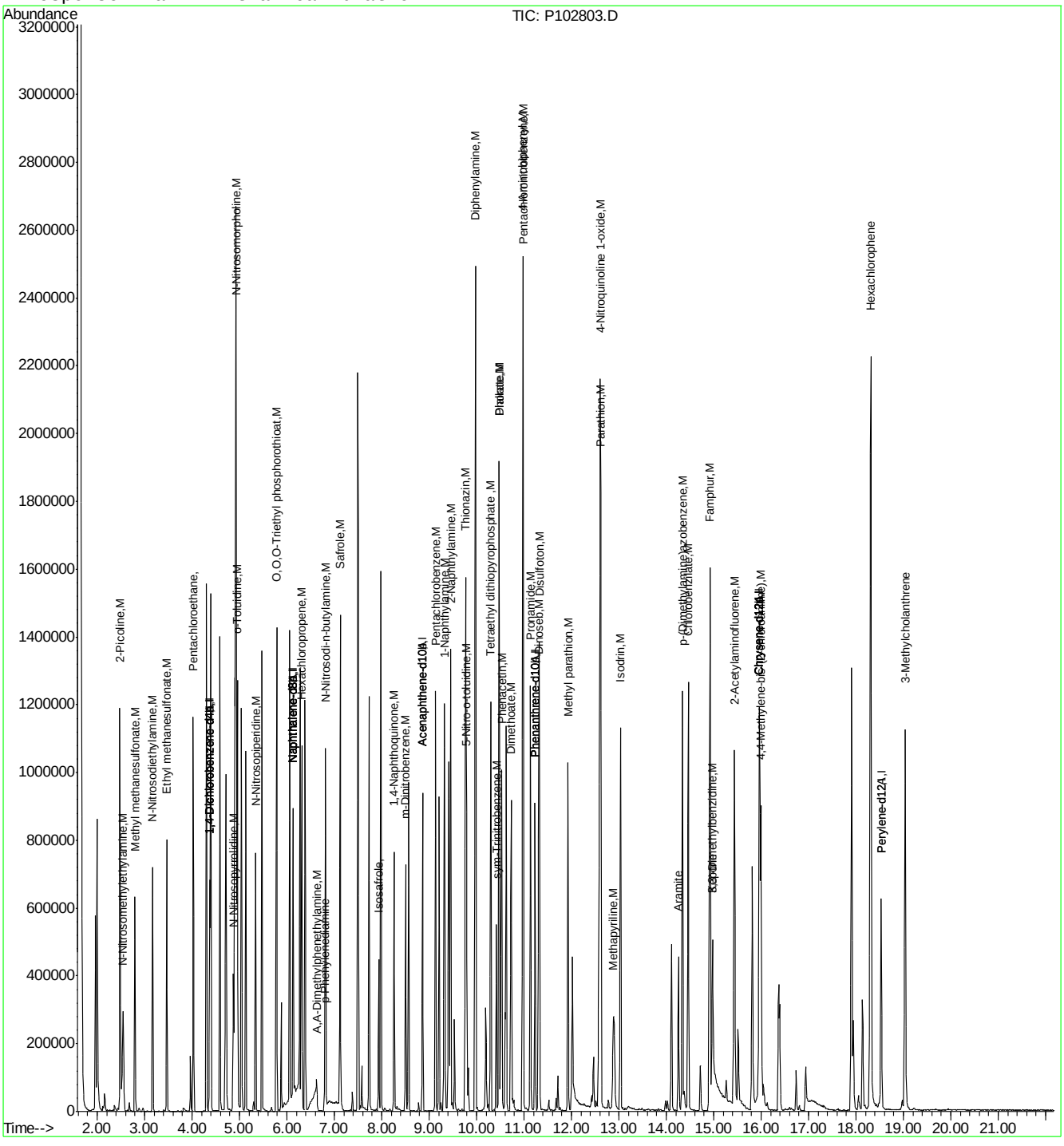
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:47 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

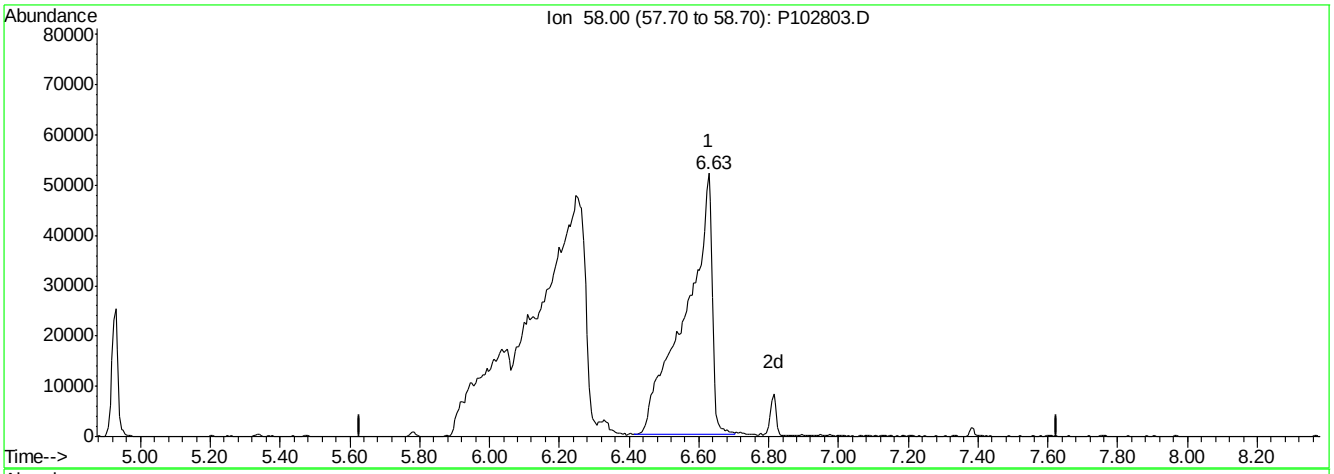
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102803.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 10:15	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

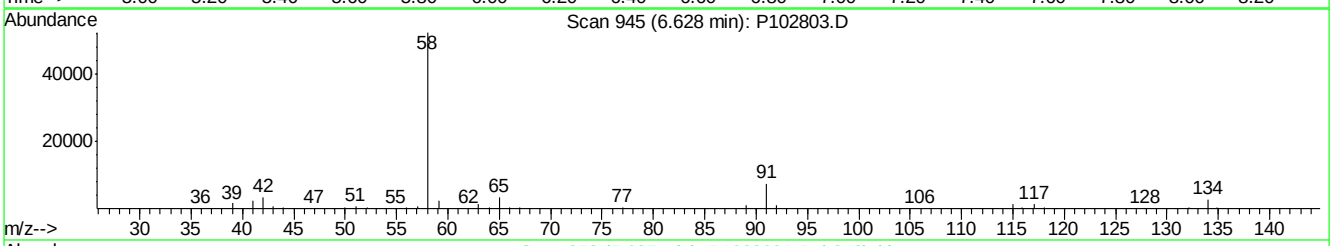
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.63	Split peak
p-Phenylenediamine	106-50-3		6.79	Split peak
Kepone	143-50-0		14.97	Split peak

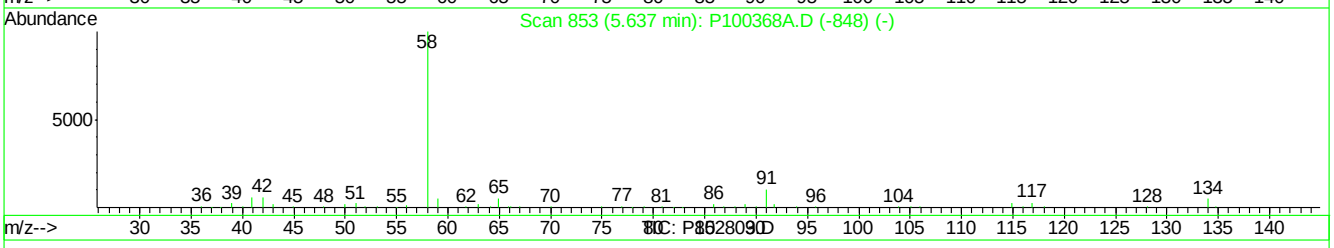
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:37 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.63min 33.20ppm

response 272205

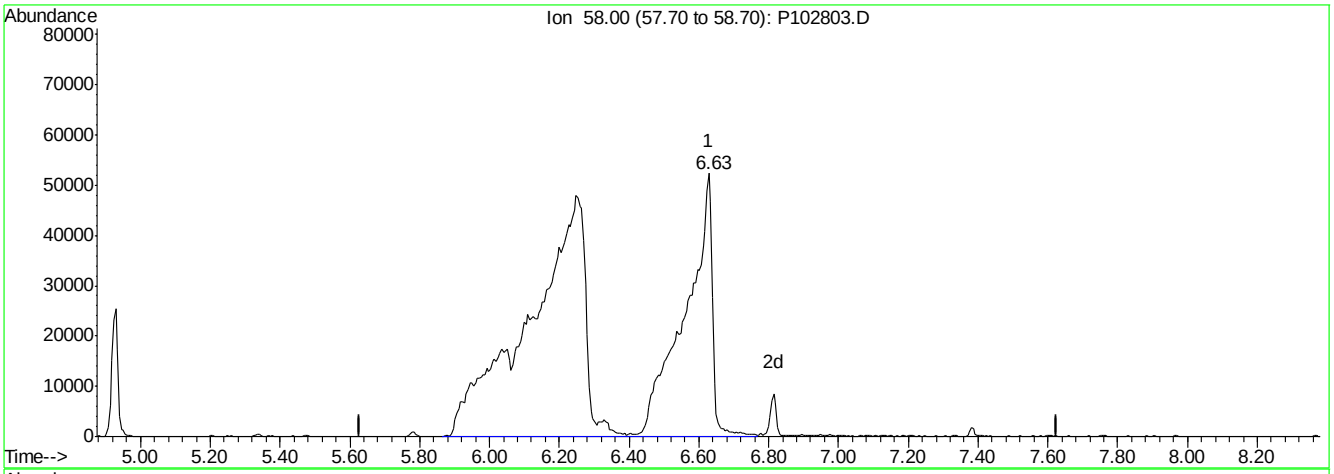
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

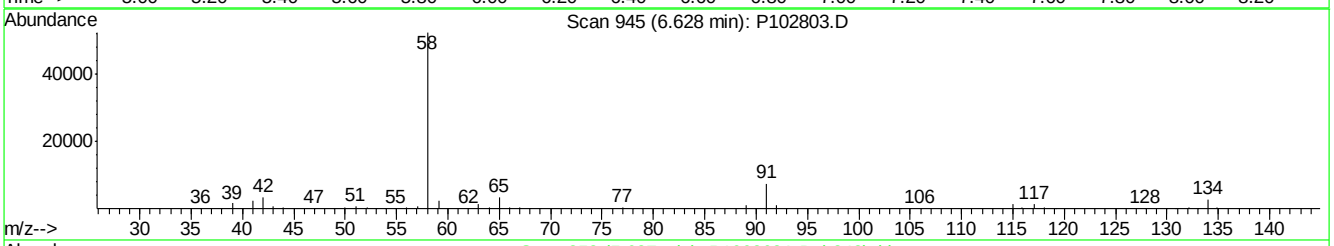
P102803.D MP4513.M Wed Feb 24 15:38:05 2016

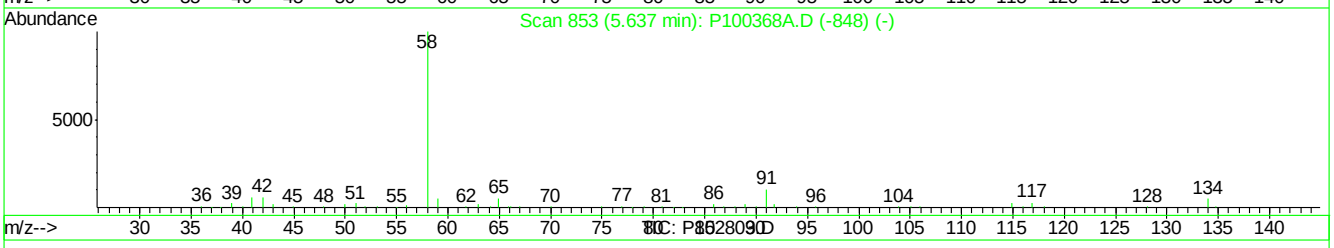
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:38 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.63min 99.96ppm m

response 819642

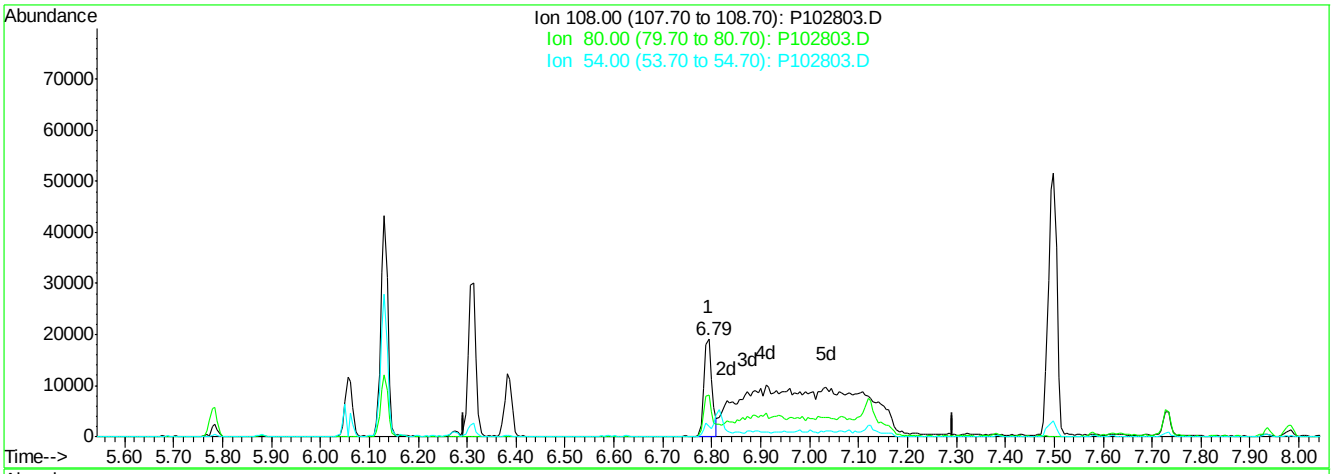
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

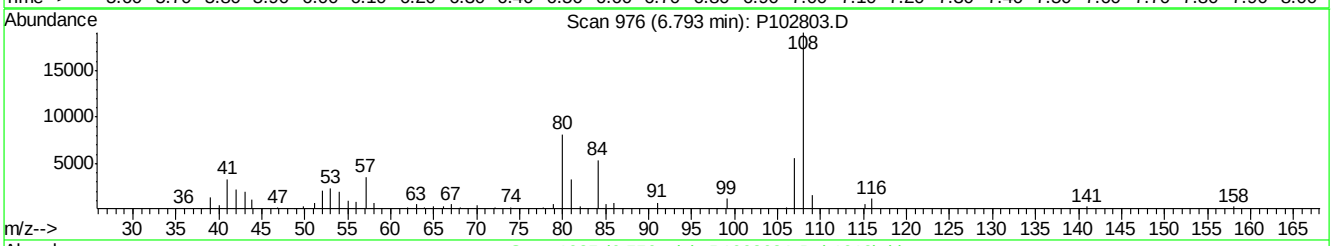
P102803.D MP4513.M Wed Feb 24 15:38:29 2016

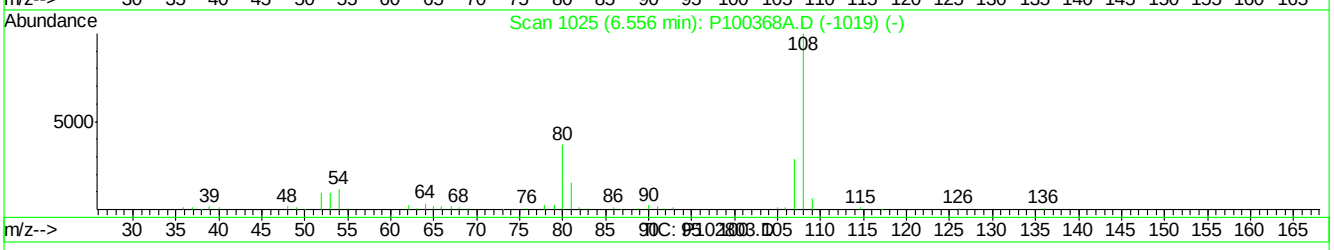
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:38 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 11.48ppm

response 22348

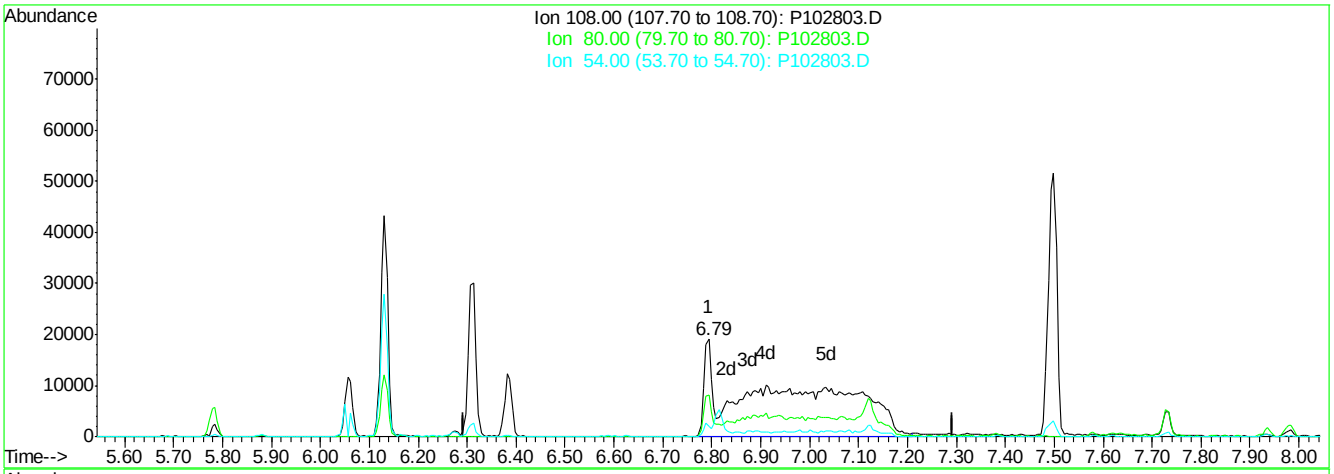
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	40.06#
54.00	1.80	0.00#
0.00	0.00	0.00

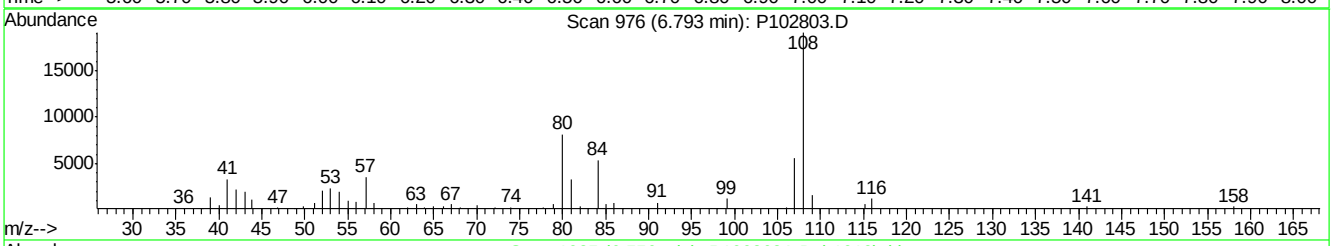
P102803.D MP4513.M Wed Feb 24 15:38:34 2016

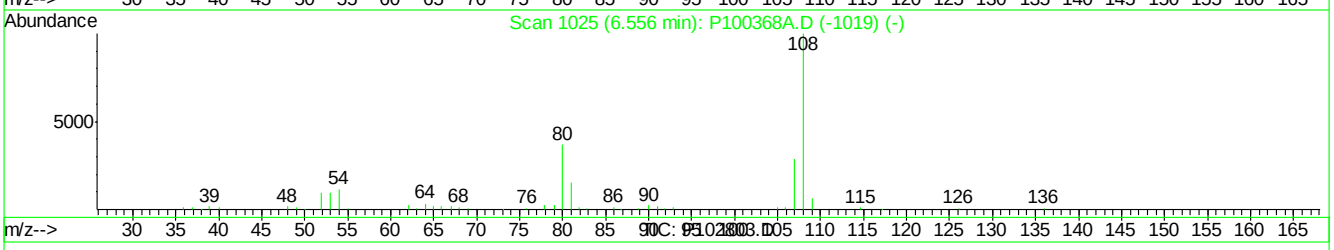
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:38 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 100.20ppm m

response 195109

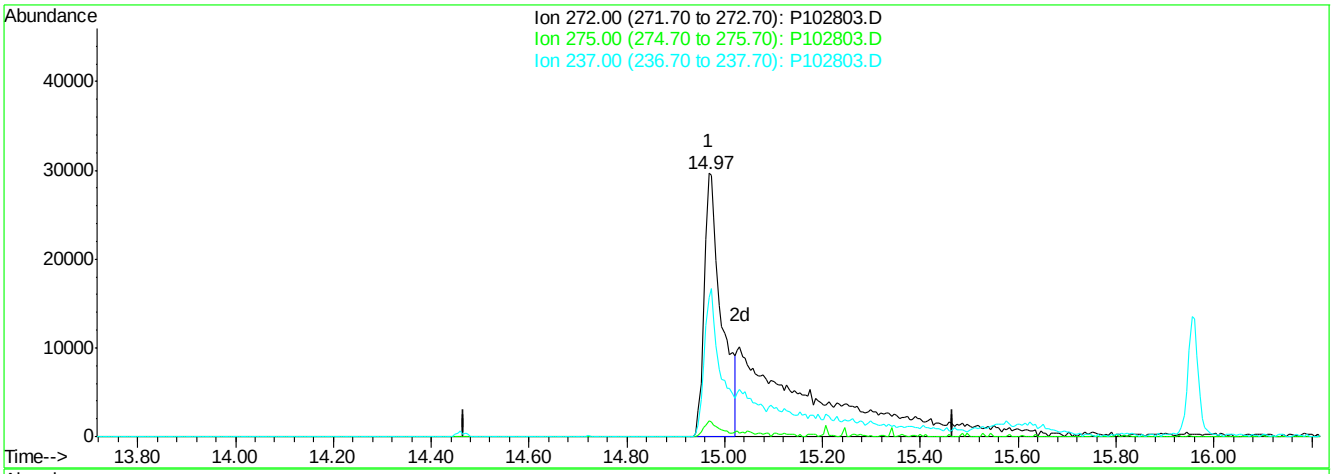
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	42.74#
54.00	1.80	10.50#
0.00	0.00	0.00

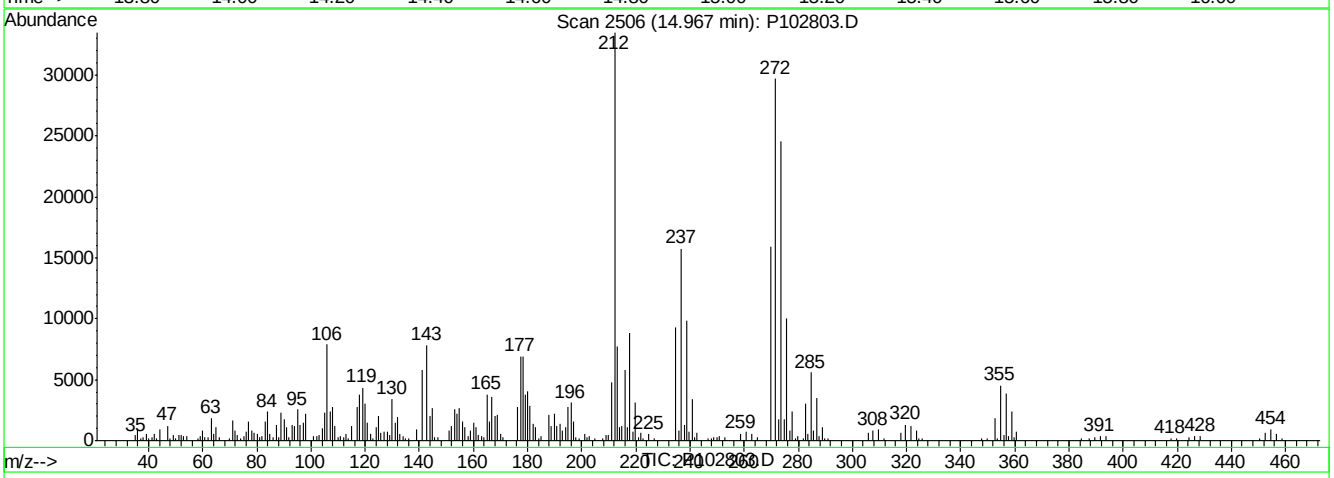
P102803.D MP4513.M Wed Feb 24 15:38:40 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:39 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.97min 600.00ppm

response 72669

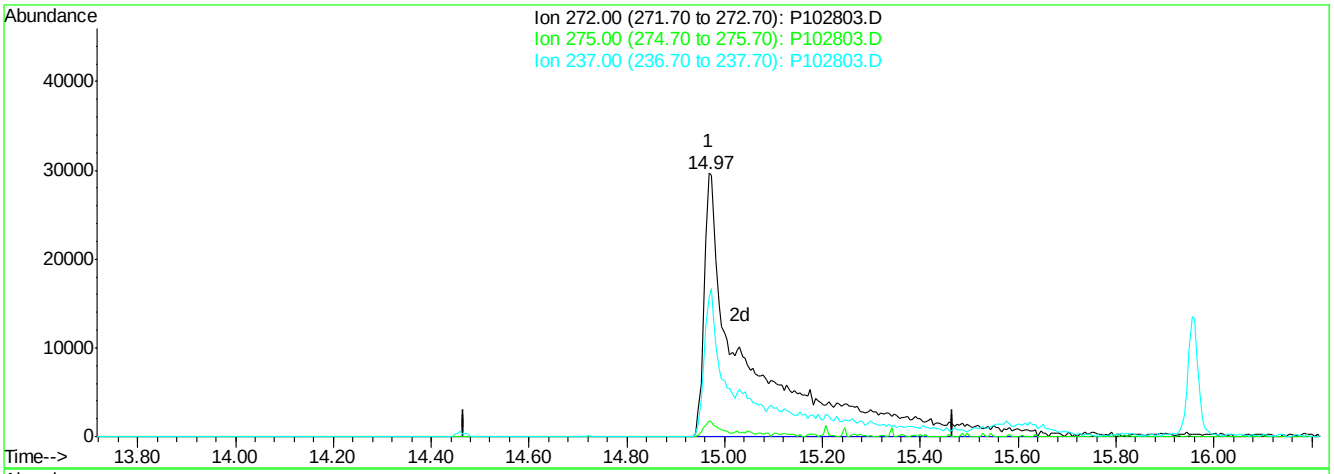
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	40.42#
237.00	28.40	54.59
0.00	0.00	0.00

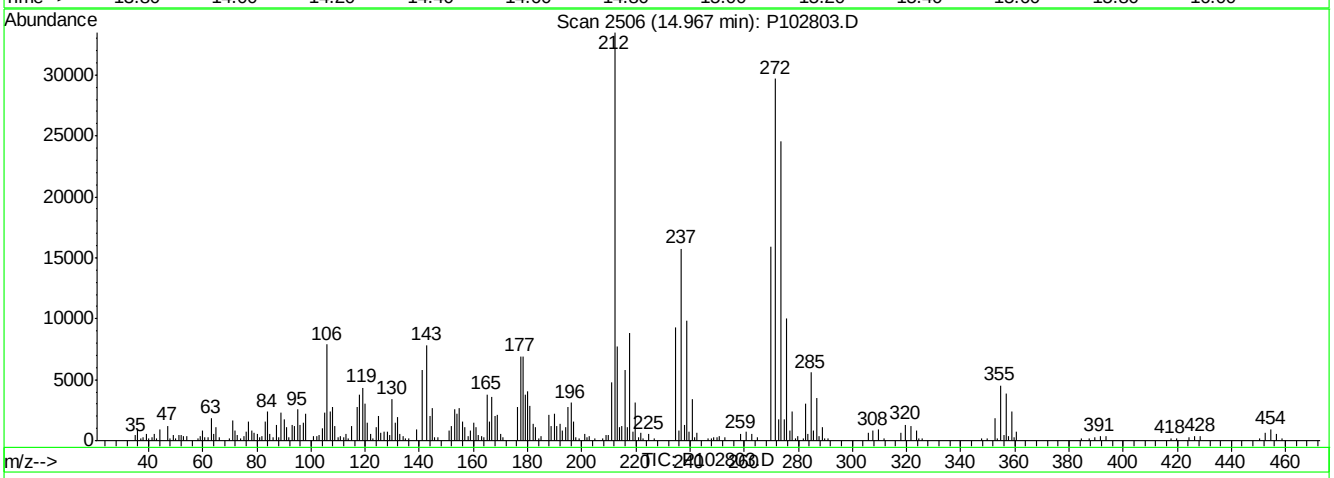
P102803.D MP4513.M Wed Feb 24 15:46:34 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102803.D Vial: 2
Acq On : 24 Feb 2016 10:15 am Operator: linseyk
Sample : ic4515-100 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:47 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.97min 1550.68ppm m

response 187811

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	33.80#
237.00	28.40	53.01
0.00	0.00	0.00

P102803.D MP4513.M Wed Feb 24 15:47:45 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:39:53 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	120465	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	424158	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	252552	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	405633	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	348748	40.00	ppm	0.00
92) Perylene-d12	18.53	264	337073	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	120465	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	424158	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	252552	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	405633	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	348748	40.00	ppm	0.00
155) Perylene-d12A	18.53	264	337073	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	120465	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	405633	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	348748	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	424158	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	252552	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	424158	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	120465	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	348748	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	348748	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	424158	40.00	ppm	0.17

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.48	93	369366	78.83	ppm		99
104) Pentachloroethane	4.03	167	128937	81.87	ppm		84
105) Methyl methanesulfonate	2.80	80	184410	80.07	ppm		79
106) N-Nitrosodiethylamine	3.17	102	158781	79.28	ppm		95
107) N-Nitrosomethylethylamine	2.55	42	123307	78.40	ppm		80
108) Ethyl methanesulfonate	3.47	79	246643	80.50	ppm		98
109) N-Nitrosopyrrolidine	4.87	41	92605	79.52	ppm		95
110) N-Nitrosomorpholine	4.92	56	118507	80.40	ppm		88
111) o-Toluidine	4.96	106	400690	81.71	ppm	#	19
113) O,O,O-Triethyl phosphoroth	5.78	198	126552	82.42	ppm		98
114) N-Nitrosopiperidine	5.34	42	160117	157.15	ppm		87
115) A,A-Dimethylphenethylamine	6.62	58	672312m	80.51	ppm		

(#) = qualifier out of range (m) = manual integration
P102804.D MP4513.M Wed Feb 24 15:48:08 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:39:53 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	173754	84.83	ppm		97
117)	N-Nitrosodi-n-butylamine	6.81	84	202351	81.68	ppm		95
118)	p-Phenylenediamine	6.79	108	169504m	85.47	ppm		
119)	Safrole	7.12	162	208980	82.18	ppm		84
120)	Isosafrole	7.93	162	70392	81.60	ppm	#	52
122)	Thionazin	9.76	143	77649	84.32	ppm		98
123)	Tetraethyl dithiopyrophosp	10.30	322	70762	84.30	ppm		100
124)	Phorate	10.47	75	332659	84.15	ppm		100
125)	Phenacetin	10.52	108	316340	83.40	ppm		98
126)	1,4-Naphthoquinone	8.26	158	151056	85.35	ppm		94
127)	m-Dinitrobenzene	8.50	168	96370	85.12	ppm		91
128)	Pentachlorobenzene	9.13	250	199698	84.92	ppm		97
129)	2-Naphthylamine	9.45	143	483387	83.77	ppm		92
130)	1-Naphthylamine	9.32	143	425031	82.63	ppm		93
131)	5-Nitro-o-toluidine	9.78	152	175257	83.53	ppm		98
133)	Disulfoton	11.32	88	276204	84.31	ppm		95
134)	Dinoseb	11.30	211	137985	86.53	ppm		95
135)	Dimethoate	10.73	87	235829	84.64	ppm		72
136)	4-Aminobiphenyl	10.97	169	526852	86.39	ppm		98
137)	Methyl parathion	11.92	125	168706	85.08	ppm		84
138)	Parathion	12.62	109	122119	86.22	ppm		96
139)	Diphenylamine	9.97	169	762145	84.39	ppm		99
140)	Isodrin	13.03	193	94177	84.32	ppm		86
141)	Diallate	10.47	86	185456	84.69	ppm		86
142)	Pentachloronitrobenzene	10.98	295	50942	168.99	ppm		89
143)	Pronamide	11.13	173	249646	83.61	ppm		98
144)	4-Nitroquinoline 1-oxide	12.60	190	370816	344.62	ppm	#	62
145)	Methapyriline	12.87	58	208391	92.27	ppm		85
146)	sym-Trinitrobenzene	10.41	213	54509	85.07	ppm	#	75
148)	Aramite	14.25	185	50655	166.24	ppm		97
149)	p-(Dimethylamine)azobenzen	14.34	120	294305	82.99	ppm		90
150)	Kepone	14.97	272	179723m	1453.80	ppm		
151)	Famphur	14.92	218	802664	594.46	ppm		94
152)	2-Acetylaminofluorene	15.43	181	386599	85.77	ppm		96
153)	3,3'-Dimethylbenzidine	14.97	212	96657	98.17	ppm		98
154)	Chlorobenzilate	14.46	251	226713	85.45	ppm		97
156)	4,4-Methylene-bis-(2-chlor	15.99	266	70834	86.31	ppm		99
157)	Hexachlorophene	18.31	196	291685	414.91	ppm	#	97
158)	3-Methylcholanthrene	19.03	252	158971	84.95	ppm	#	76

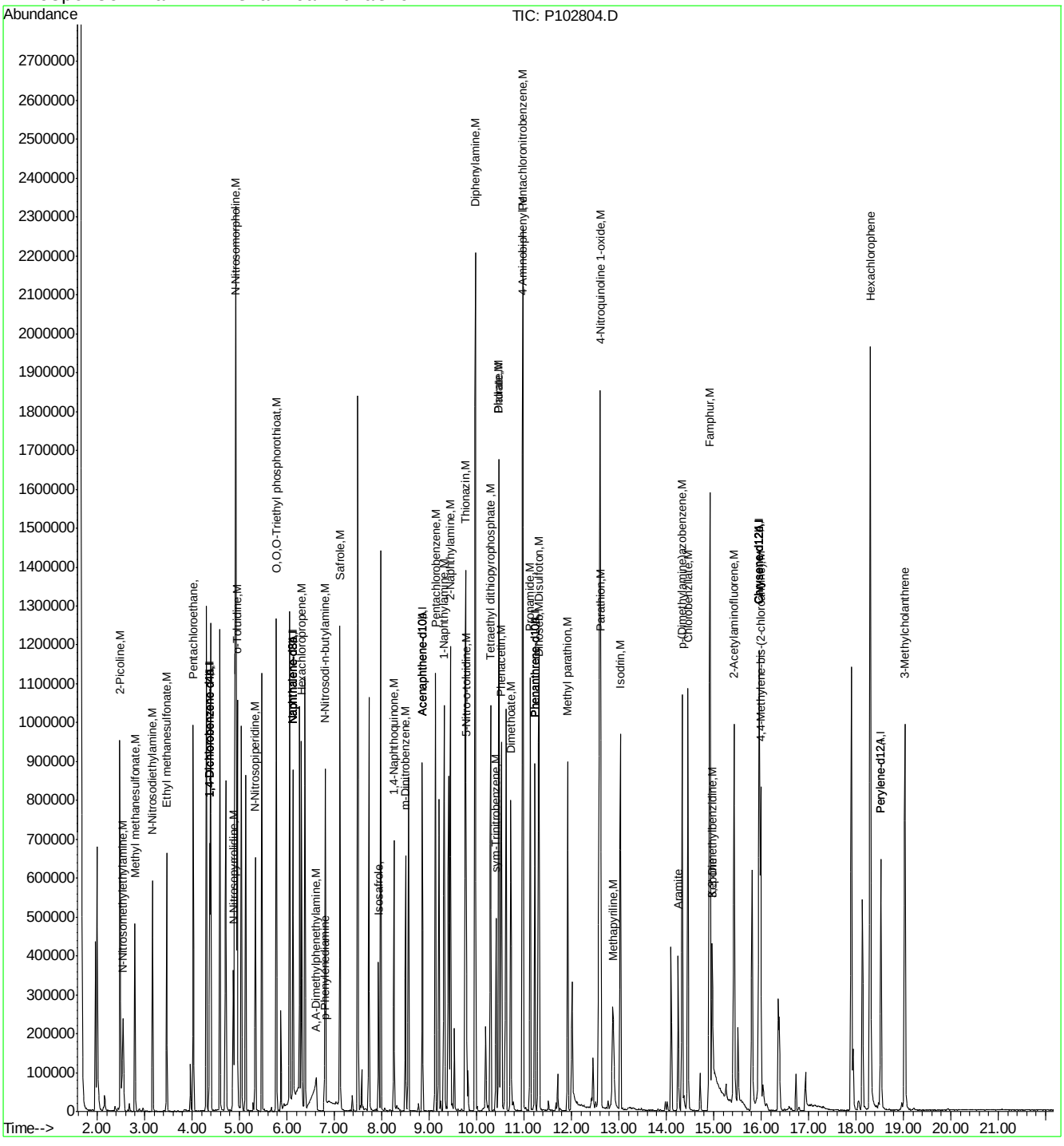
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:48 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration



Manual Integration Approval Summary

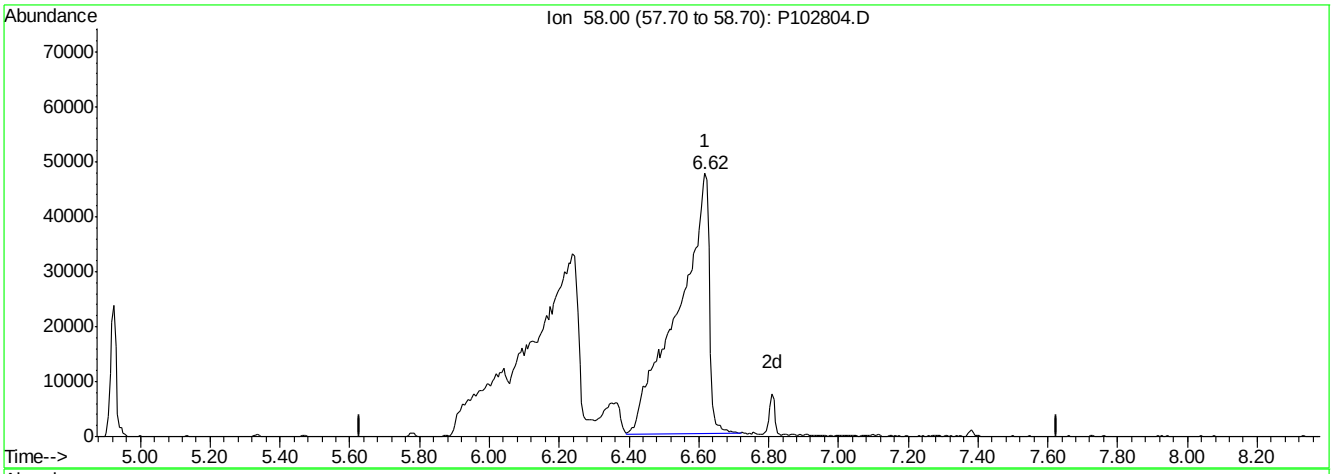
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102804.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 10:44	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

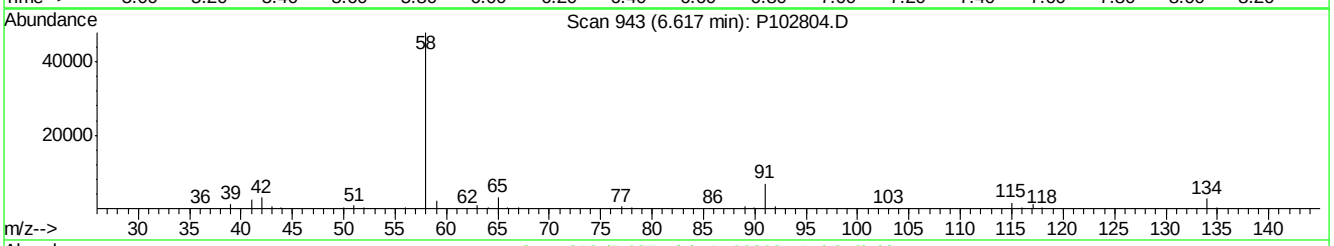
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.62	Split peak
p-Phenylenediamine	106-50-3		6.79	Split peak
Kepone	143-50-0		14.97	Split peak

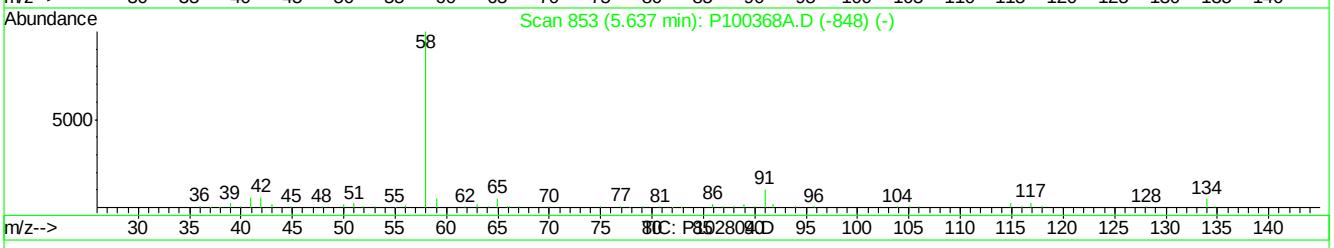
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:40 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.62min 34.67ppm

response 289509

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

P102804.D MP4513.M Wed Feb 24 15:40:40 2016

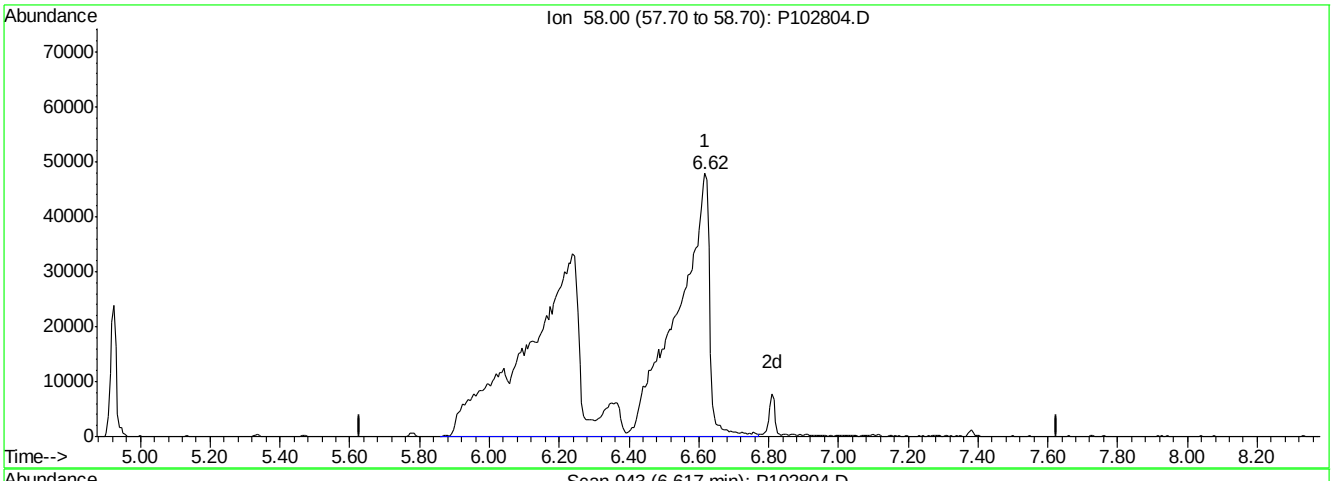
9.6.27.2

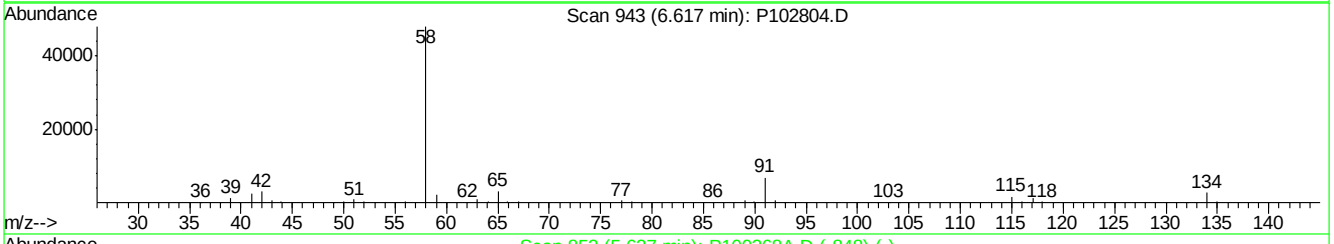
9

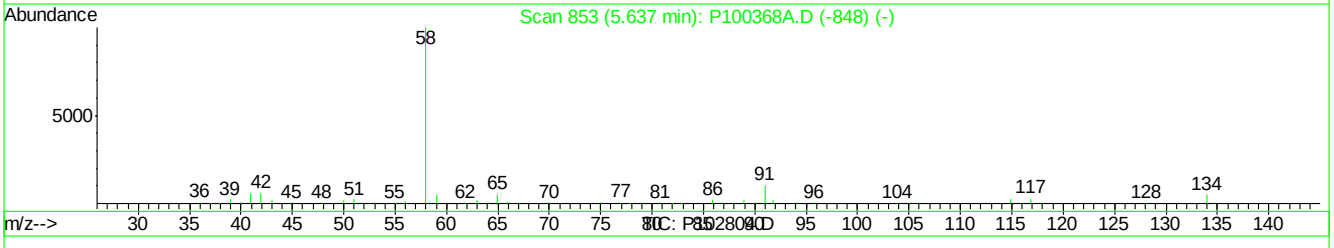
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:40 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.62min 80.51ppm m

response 672312

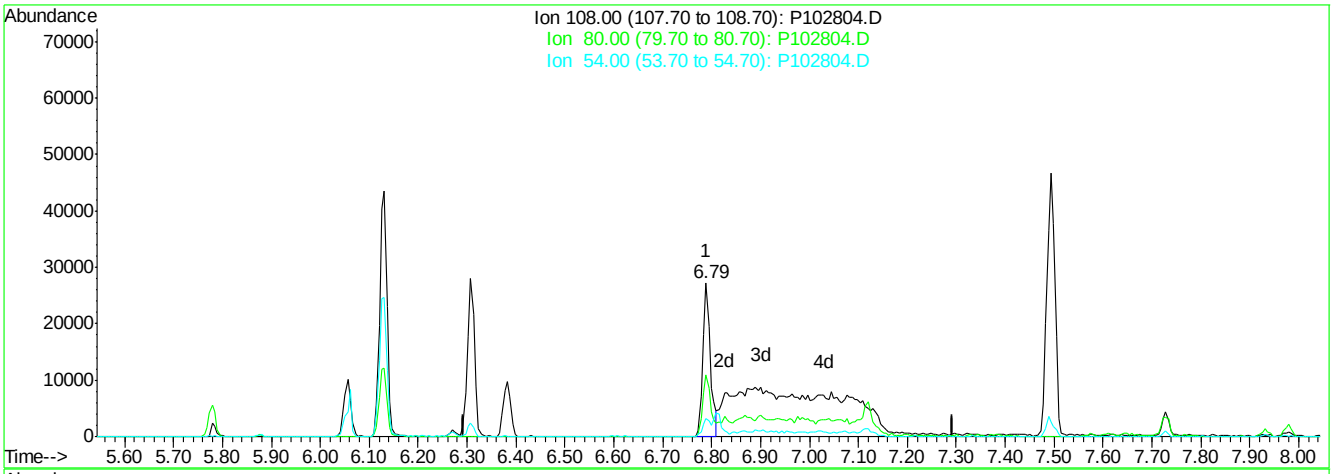
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

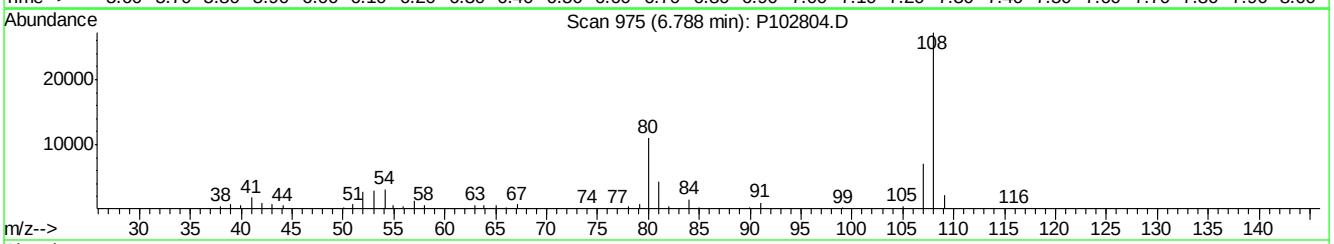
P102804.D MP4513.M Wed Feb 24 15:40:51 2016

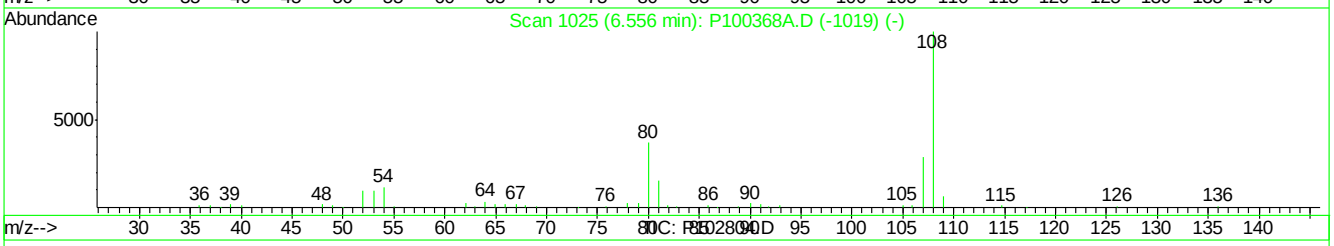
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:40 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 14.96ppm

response 29673

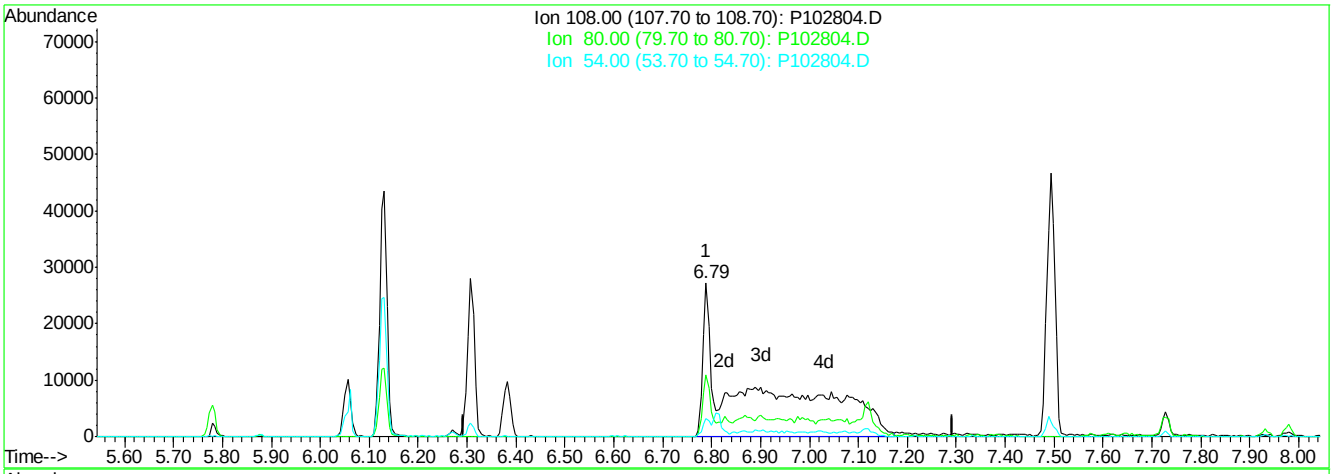
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	39.22#
54.00	1.80	4.32#
0.00	0.00	0.00

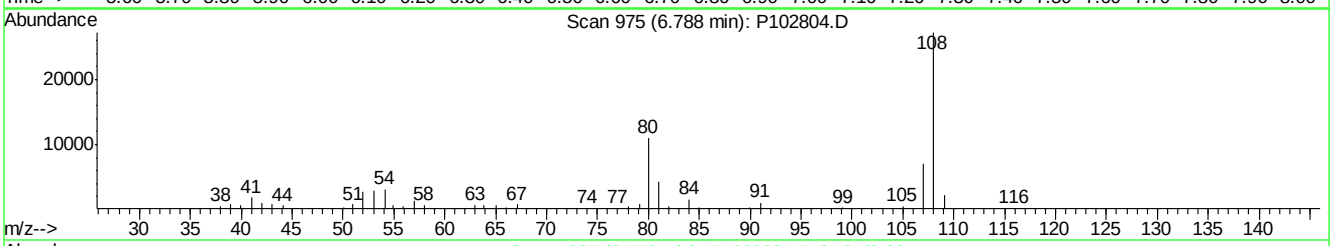
P102804.D MP4513.M Wed Feb 24 15:40:56 2016

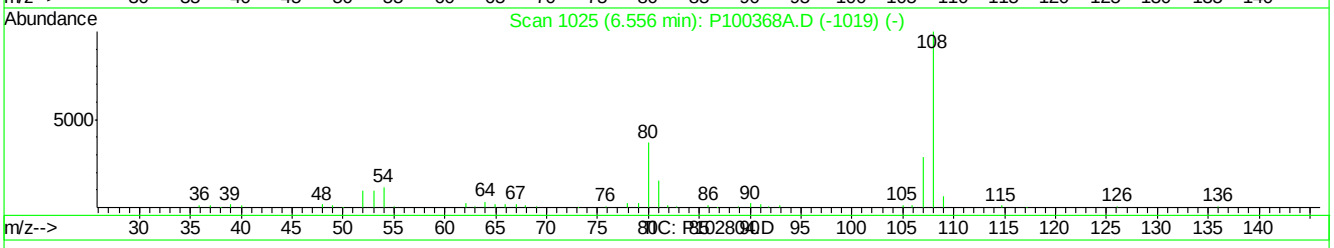
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:41 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 85.47ppm m

response 169504

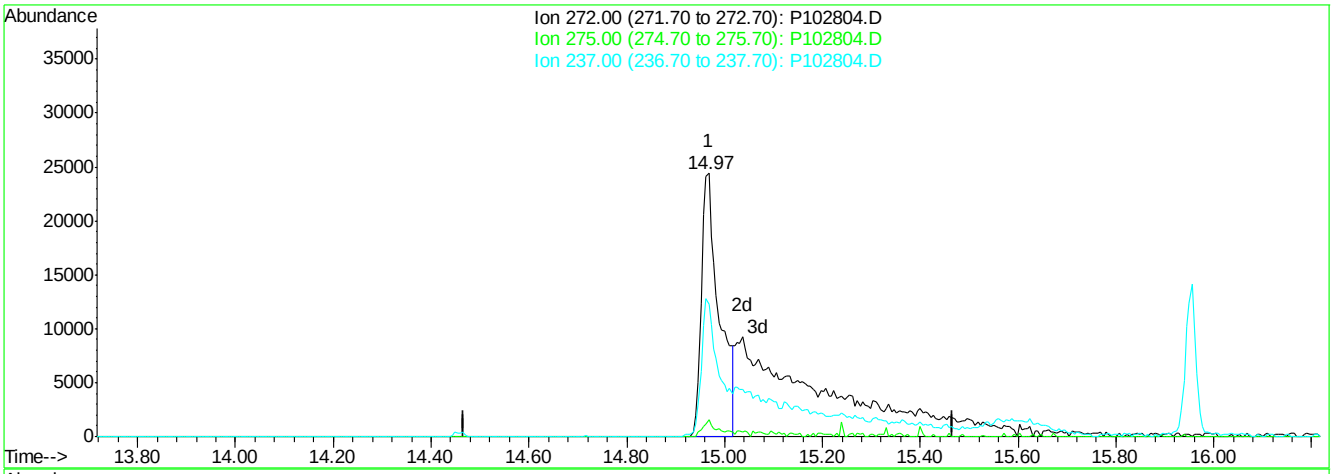
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	40.17#
54.00	1.80	11.54#
0.00	0.00	0.00

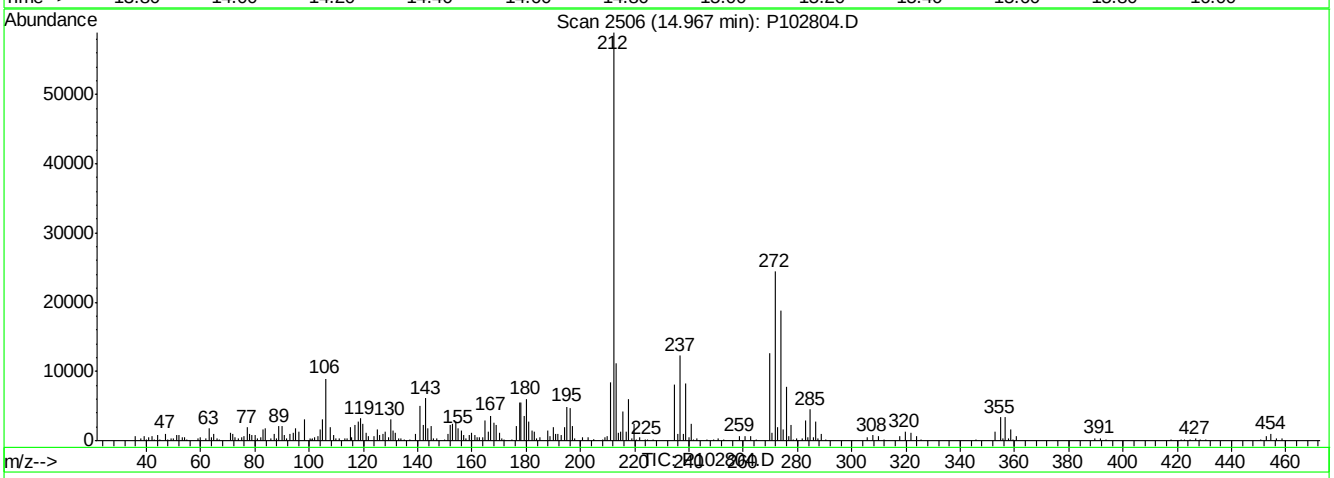
P102804.D MP4513.M Wed Feb 24 15:41:02 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:41 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.97min 499.62ppm

response 61764

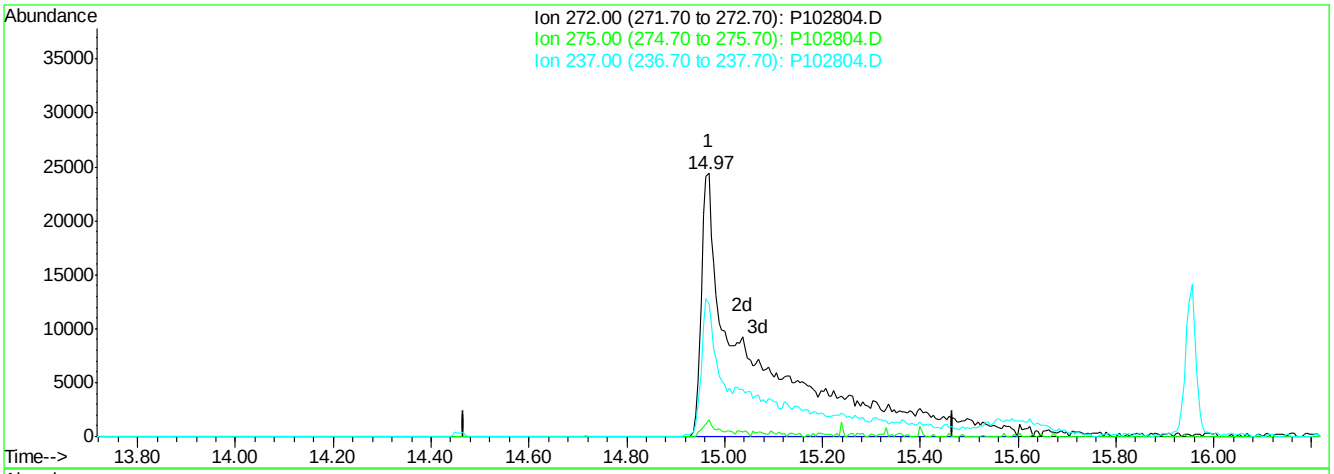
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	0.00
237.00	28.40	46.74
0.00	0.00	0.00

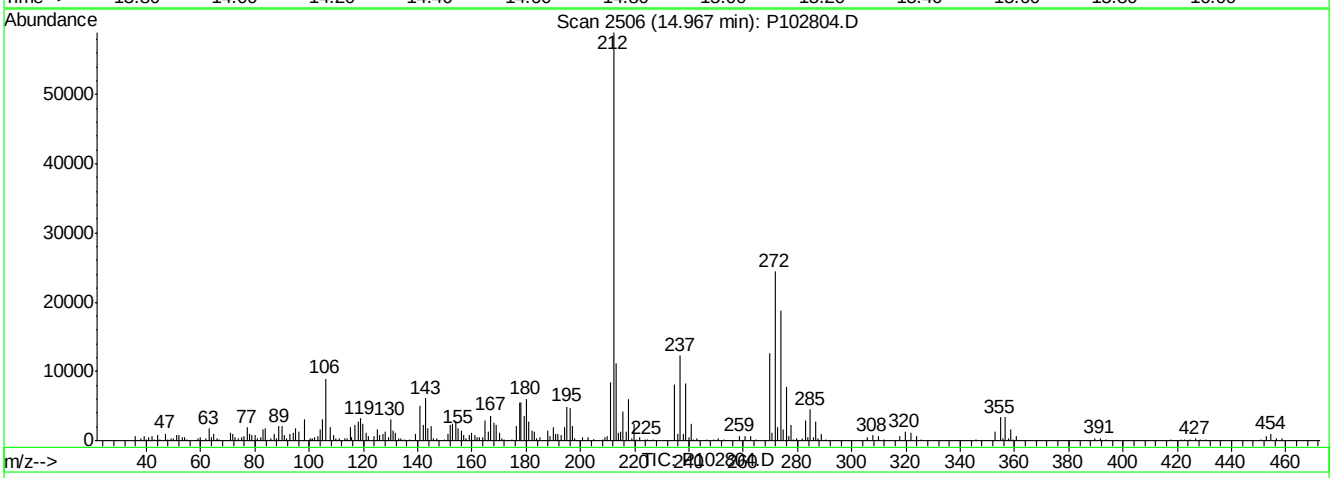
P102804.D MP4513.M Wed Feb 24 15:46:53 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102804.D Vial: 3
Acq On : 24 Feb 2016 10:44 am Operator: linseyk
Sample : ic4515-80 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:48 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.97min 1453.80ppm m

response 179723

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	6.53
237.00	28.40	50.15
0.00	0.00	0.00

P102804.D MP4513.M Wed Feb 24 15:48:03 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:41:58 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	115026	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	401949	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	240393	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	381071	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	332775	40.00	ppm	0.00
92) Perylene-d12	18.52	264	322025	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	115026	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	401949	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	240393	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	381071	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	332775	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	322025	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.37	152	115026	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	381071	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	332775	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	401949	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	240393	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	401949	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	115026	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	332775	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	332775	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	401949	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.48	93	232351	51.94	ppm		99
104) Pentachloroethane	4.03	167	80944	53.82	ppm		86
105) Methyl methanesulfonate	2.79	80	114983	52.29	ppm		78
106) N-Nitrosodiethylamine	3.17	102	98568	51.54	ppm		94
107) N-Nitrosomethylethylamine	2.55	42	76780	51.13	ppm		81
108) Ethyl methanesulfonate	3.47	79	152140	52.00	ppm		98
109) N-Nitrosopyrrolidine	4.86	41	55887	50.26	ppm		91
110) N-Nitrosomorpholine	4.91	56	76946	54.67	ppm		89
111) o-Toluidine	4.95	106	255050	54.47	ppm	#	31
113) O,O,O-Triethyl phosphoroth	5.78	198	78720	54.10	ppm		90
114) N-Nitrosopiperidine	5.33	42	97472	100.95	ppm		86
115) A,A-Dimethylphenethylamine	6.51	58	375931m	47.50	ppm		

(#) = qualifier out of range (m) = manual integration
P102805.D MP4513.M Wed Feb 24 15:48:21 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:41:58 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	105149	54.17	ppm		98
117)	N-Nitrosodi-n-butylamine	6.81	84	124197	52.90	ppm		95
118)	p-Phenylenediamine	6.79	108	92173m	49.05	ppm		
119)	Safrole	7.12	162	130538	54.17	ppm		88
120)	Isosafrole	7.93	162	41839	51.18	ppm	#	54
122)	Thionazin	9.76	143	48316	55.12	ppm		98
123)	Tetraethyl dithiopyrophosp	10.29	322	43419	54.34	ppm		100
124)	Phorate	10.47	75	209873	55.77	ppm		100
125)	Phenacetin	10.51	108	195289	54.09	ppm		98
126)	1,4-Naphthoquinone	8.26	158	92795	55.08	ppm		92
127)	m-Dinitrobenzene	8.50	168	54946	50.99	ppm		96
128)	Pentachlorobenzene	9.13	250	120471	53.82	ppm		98
129)	2-Naphthylamine	9.44	143	303580	55.27	ppm		96
130)	1-Naphthylamine	9.31	143	255754	52.24	ppm		94
131)	5-Nitro-o-toluidine	9.77	152	105687	52.92	ppm		98
133)	Disulfoton	11.31	88	175206	56.93	ppm		94
134)	Dinoseb	11.30	211	78428	52.35	ppm		90
135)	Dimethoate	10.71	87	148752	56.83	ppm		76
136)	4-Aminobiphenyl	10.97	169	340854	59.49	ppm		99
137)	Methyl parathion	11.92	125	107292	57.59	ppm		84
138)	Parathion	12.61	109	79378	59.65	ppm		92
139)	Diphenylamine	9.97	169	492416	58.04	ppm		99
140)	Isodrin	13.03	193	58666	55.91	ppm		87
141)	Diallate	10.46	86	116641	56.70	ppm		82
142)	Pentachloronitrobenzene	10.97	295	31437	111.01	ppm		92
143)	Pronamide	11.13	173	151727	54.09	ppm		98
144)	4-Nitroquinoline 1-oxide	12.59	190	226774	224.33	ppm	#	60
145)	Methapyriline	12.85	58	143991m	67.87	ppm		
146)	sym-Trinitrobenzene	10.40	213	30324	50.38	ppm	#	76
148)	Aramite	14.25	185	30151	103.70	ppm		95
149)	p-(Dimethylamine)azobenzen	14.33	120	184183	54.43	ppm		91
150)	Kepone	14.96	272	119368m	1011.93	ppm		
151)	Famphur	14.92	218	639151	496.08	ppm		93
152)	2-Acetylaminofluorene	15.42	181	233941	54.39	ppm		94
153)	3,3'-Dimethylbenzidine	14.97	212	83840	89.24	ppm		95
154)	Chlorobenzilate	14.45	251	137840	54.45	ppm		95
156)	4,4-Methylene-bis-(2-chlor	15.99	266	49974	63.74	ppm		98
157)	Hexachlorophene	18.29	196	146723	218.46	ppm	#	97
158)	3-Methylcholanthrene	19.02	252	97394	54.47	ppm	#	71

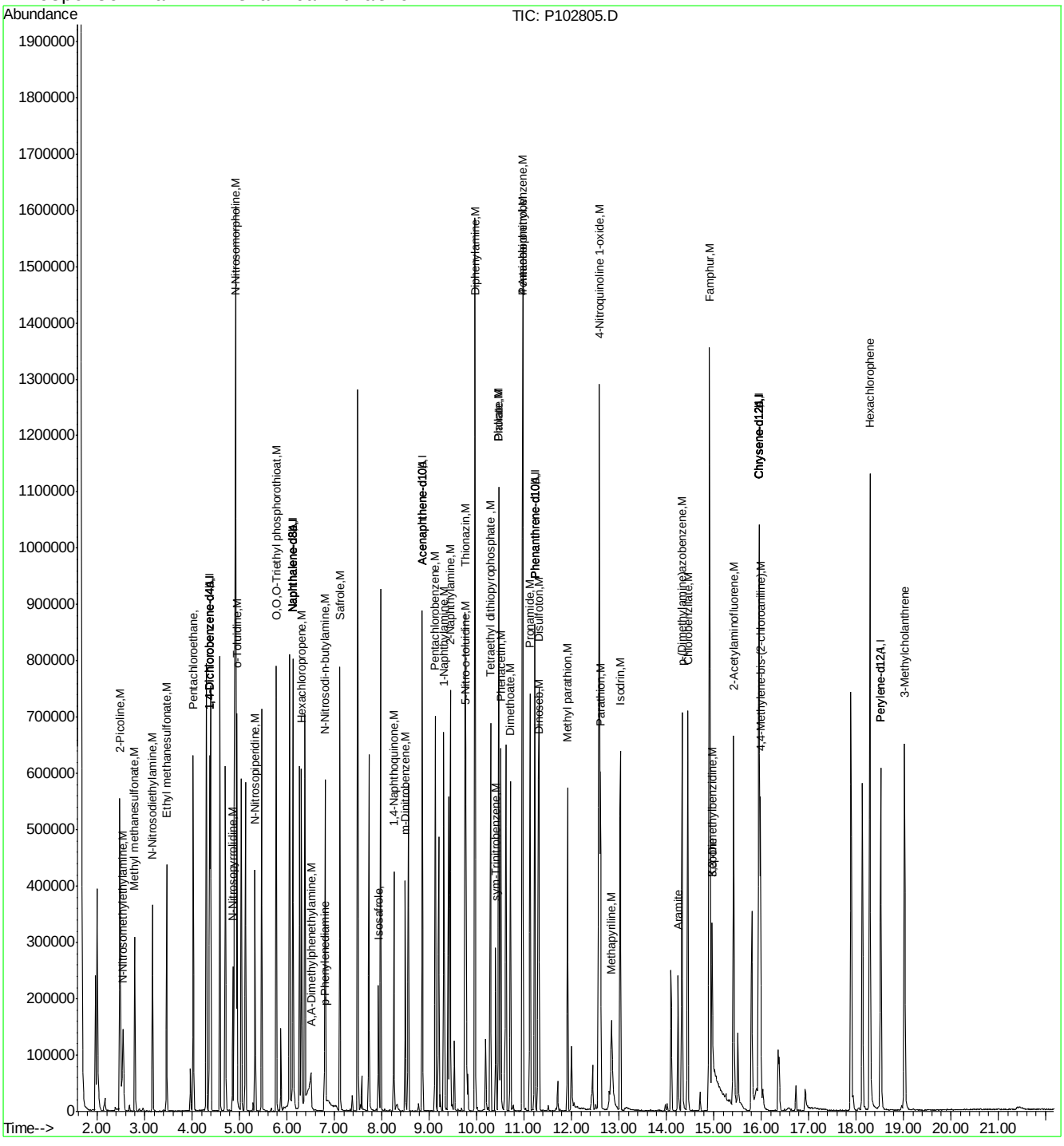
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:47 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

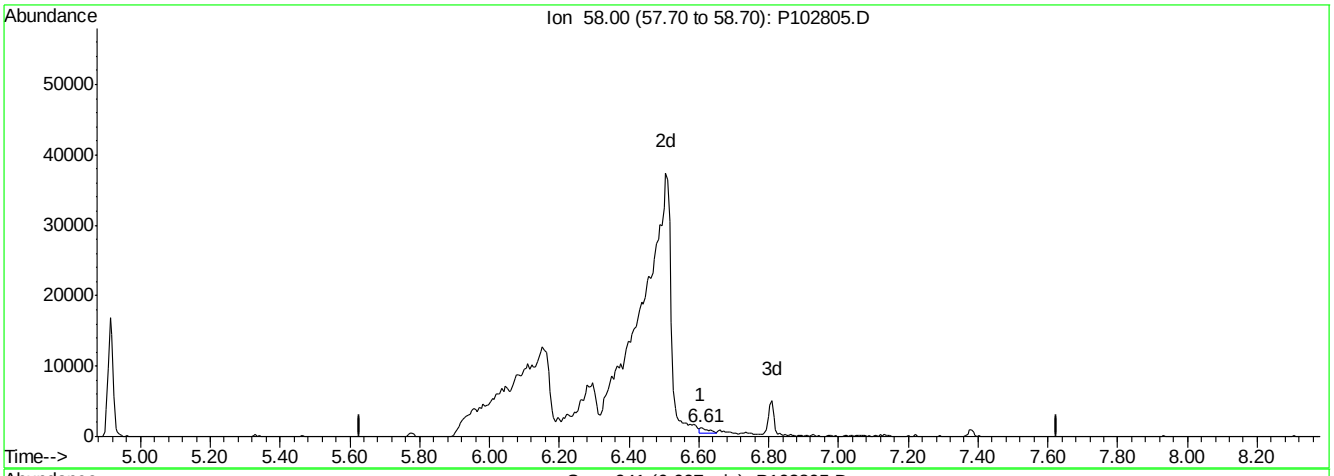
Sample Number:	EP4515-ICC4515	**Method:**	SW846 8270D
Lab FileID:	P102805.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 11:13	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

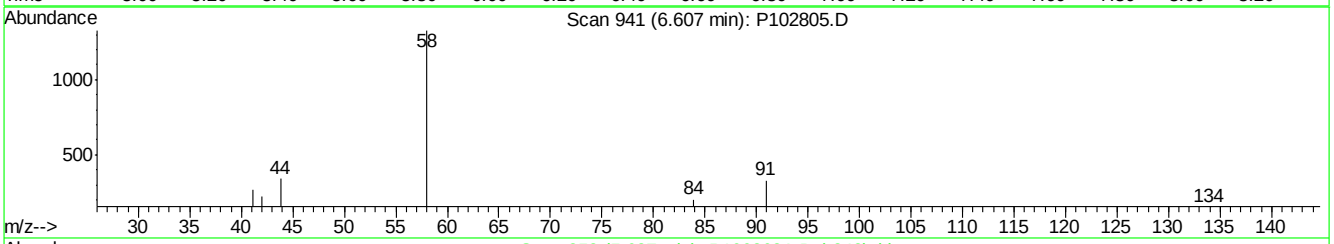
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.51	Split peak
p-Phenylenediamine	106-50-3		6.79	Split peak
Methapyrilene	91-80-5		12.85	Split peak
Kepone	143-50-0		14.96	Split peak

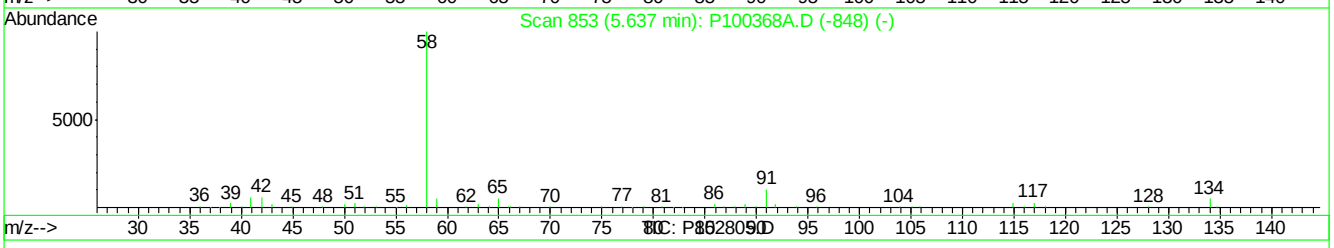
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:42 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.61min 0.14ppm

response 1136

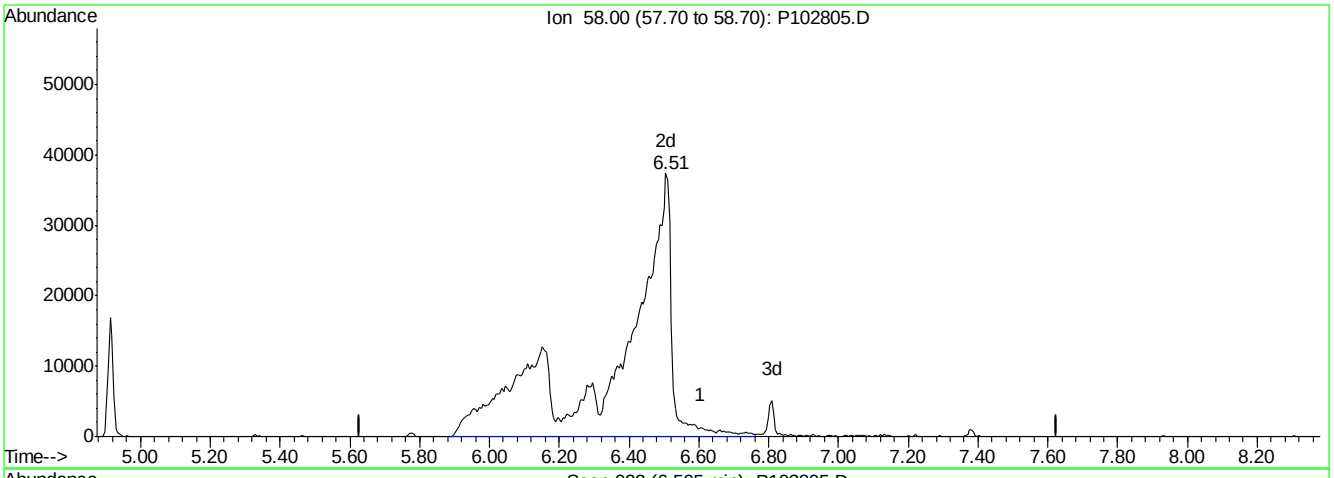
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

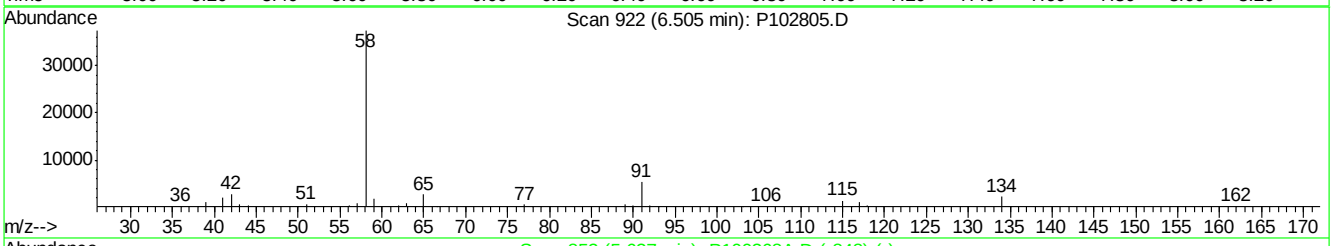
P102805.D MP4513.M Wed Feb 24 15:42:48 2016

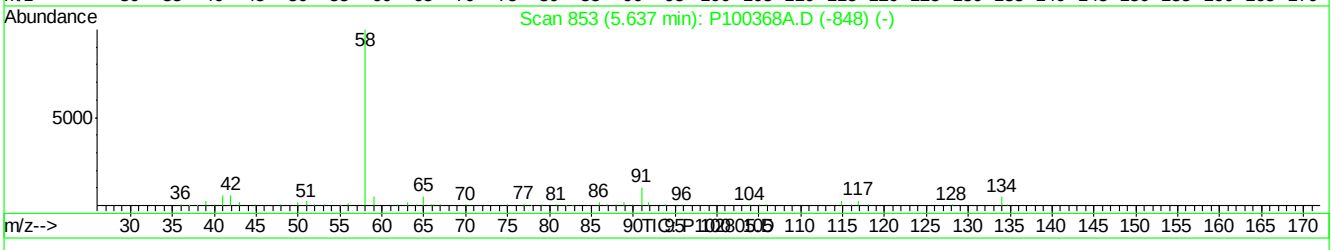
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:42 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.51min 47.50ppm m

response 375931

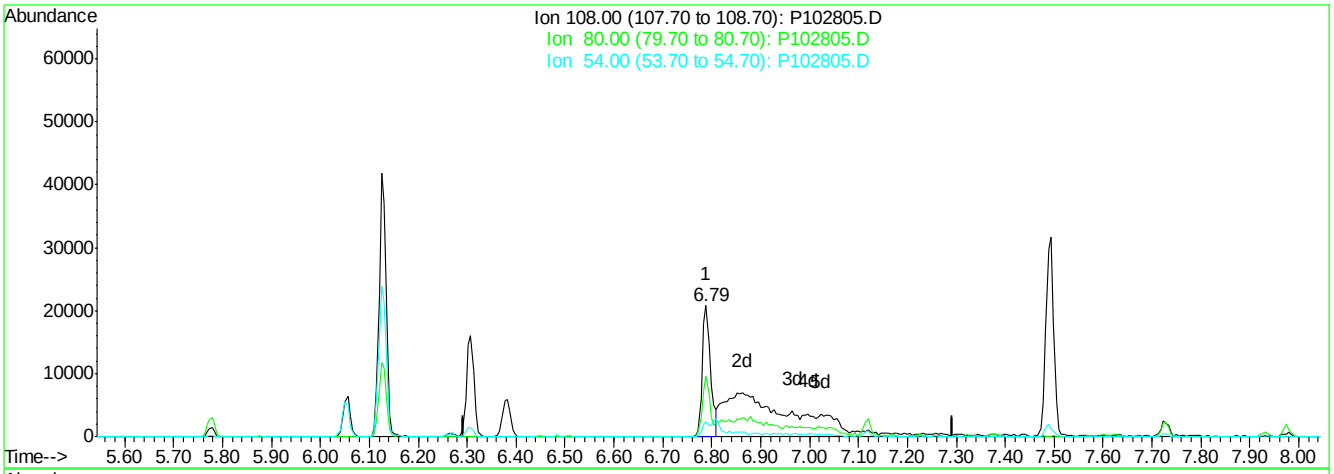
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

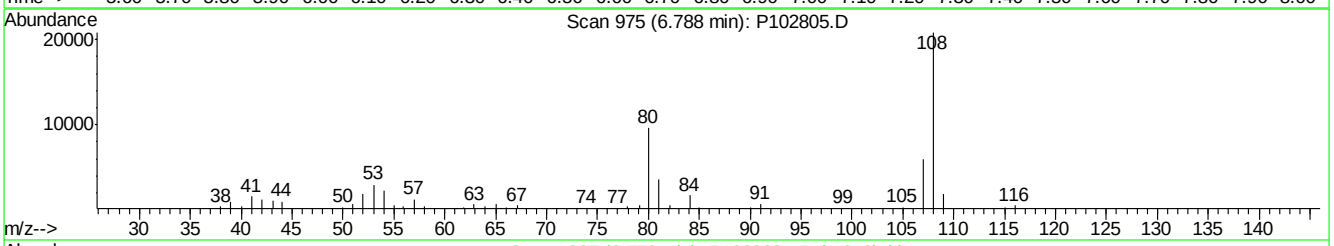
P102805.D MP4513.M Wed Feb 24 15:42:57 2016

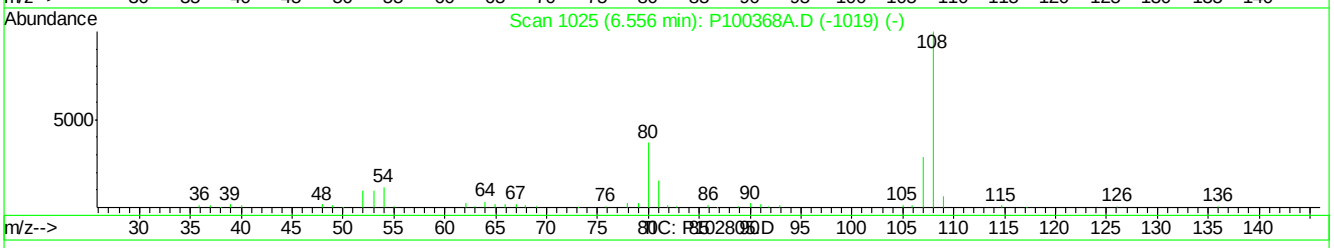
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:42 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 13.27ppm

response 24947

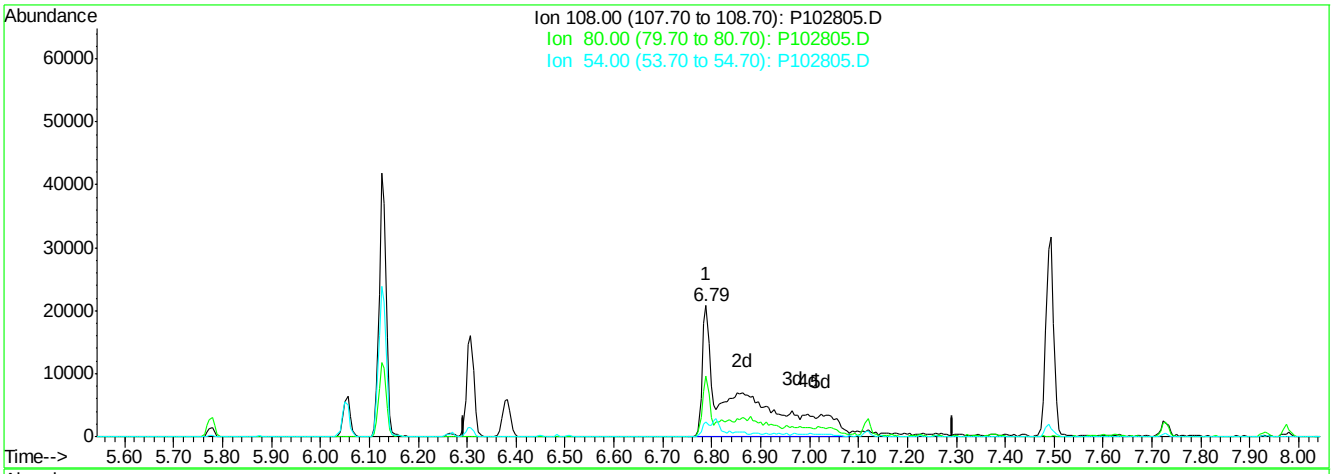
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	45.26#
54.00	1.80	4.52#
0.00	0.00	0.00

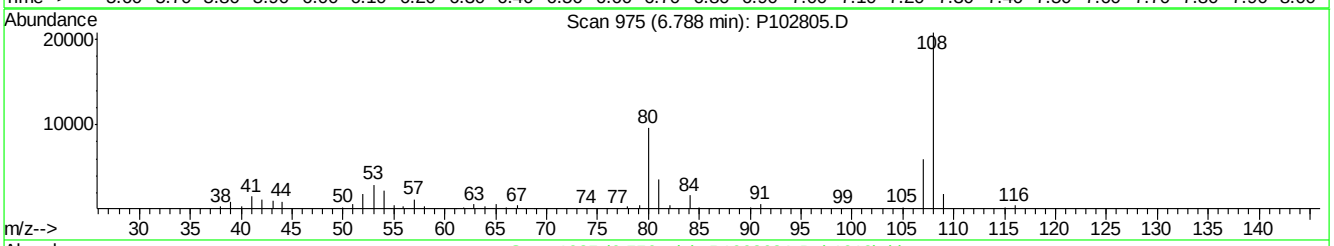
P102805.D MP4513.M Wed Feb 24 15:43:03 2016

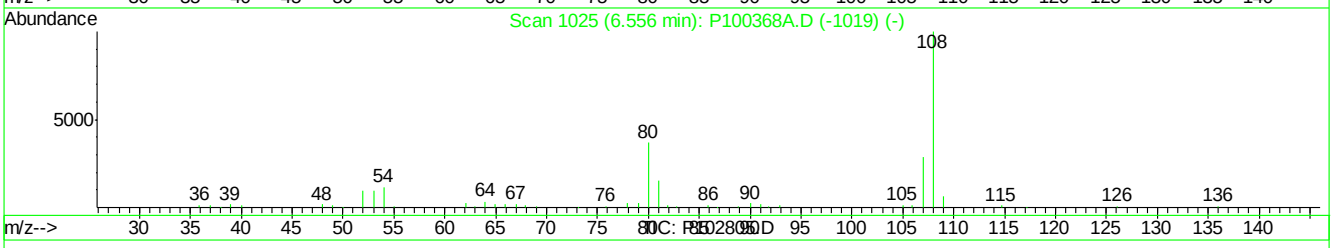
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:43 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 49.05ppm m

response 92173

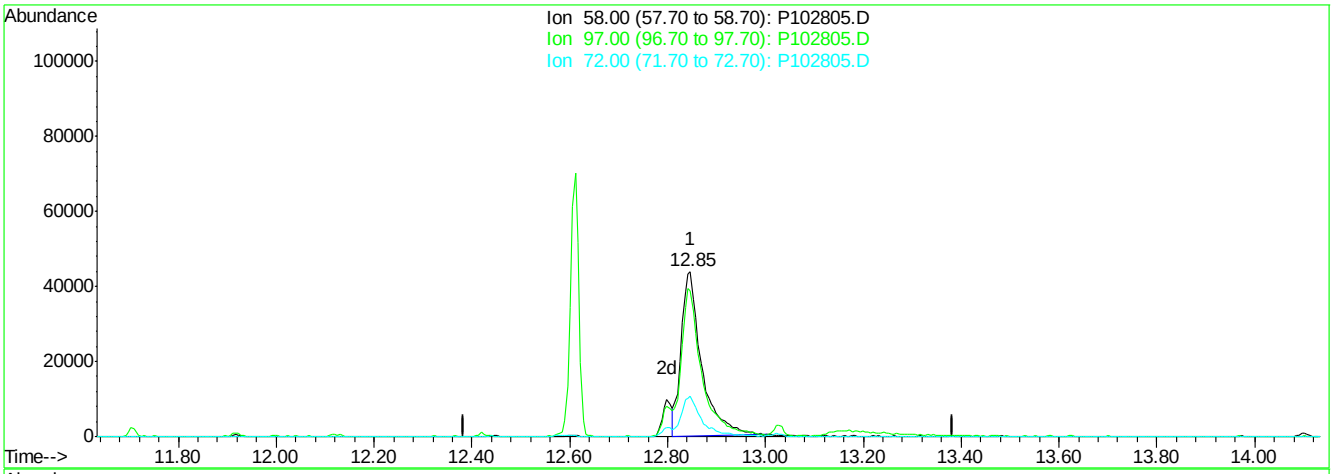
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	46.16#
54.00	1.80	10.92#
0.00	0.00	0.00

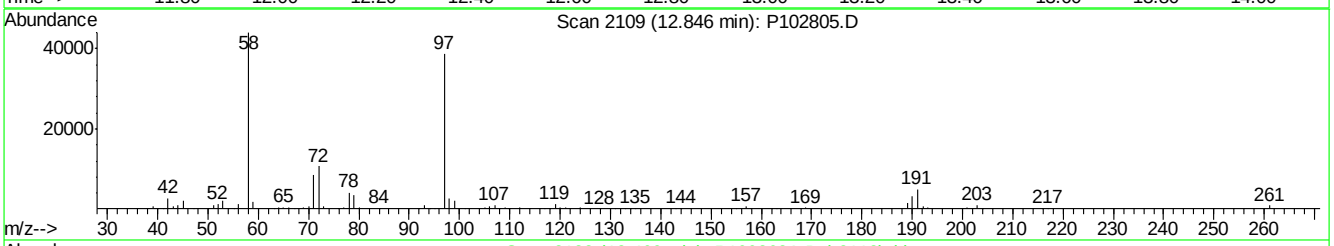
P102805.D MP4513.M Wed Feb 24 15:43:09 2016

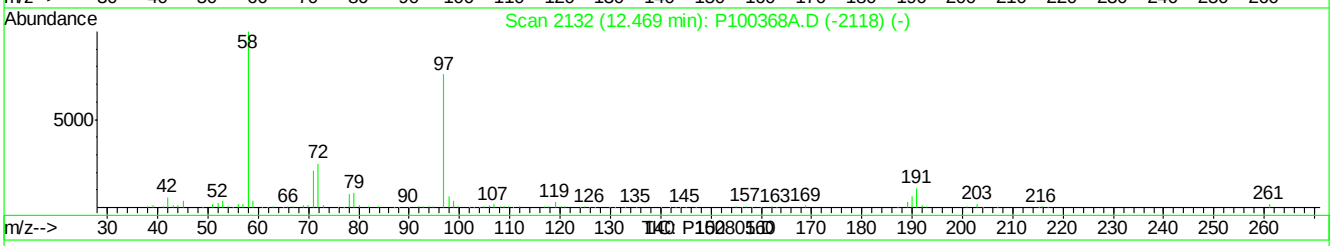
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:43 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(145) Methapyriline (M)

12.85min 60.20ppm

response 127719

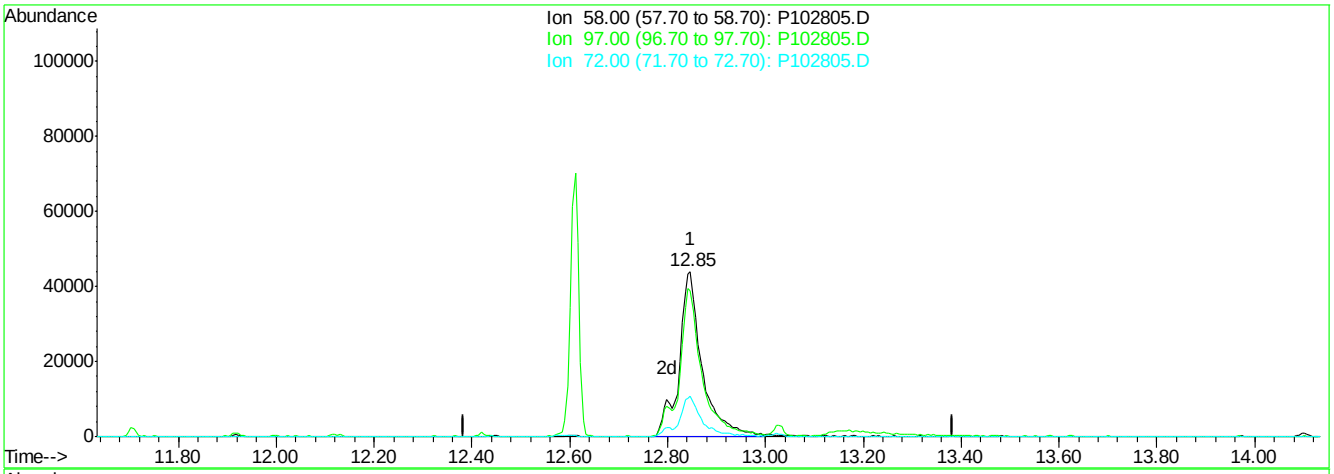
Ion	Exp%	Act%
58.00	100	100
97.00	72.10	87.63
72.00	27.20	24.13
0.00	0.00	0.00

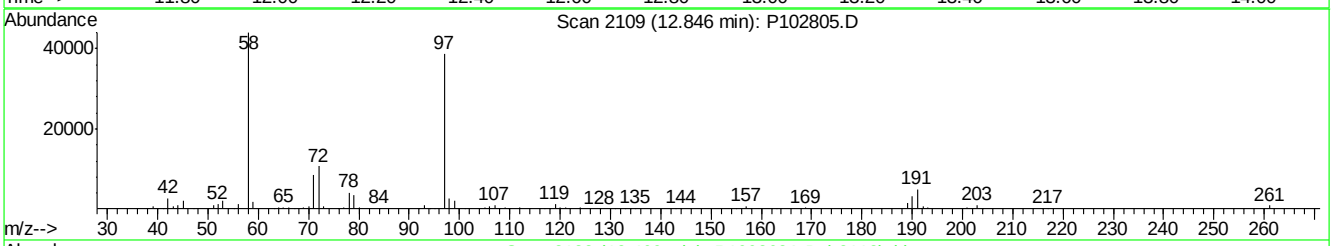
P102805.D MP4513.M Wed Feb 24 15:43:30 2016

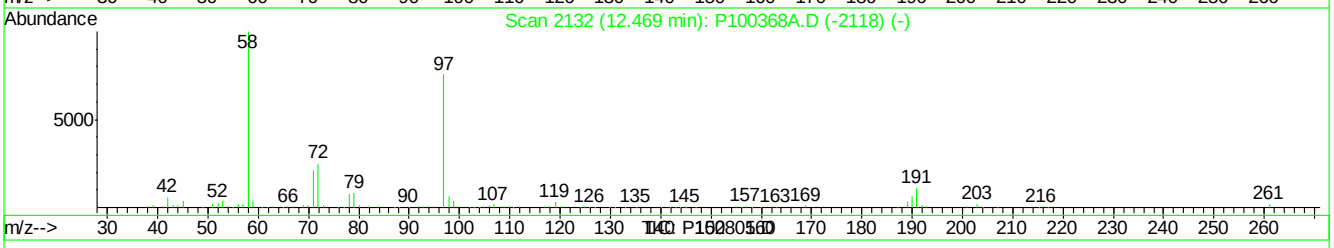
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:43 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(145) Methapyriline (M)

12.85min 67.87ppm m

response 143991

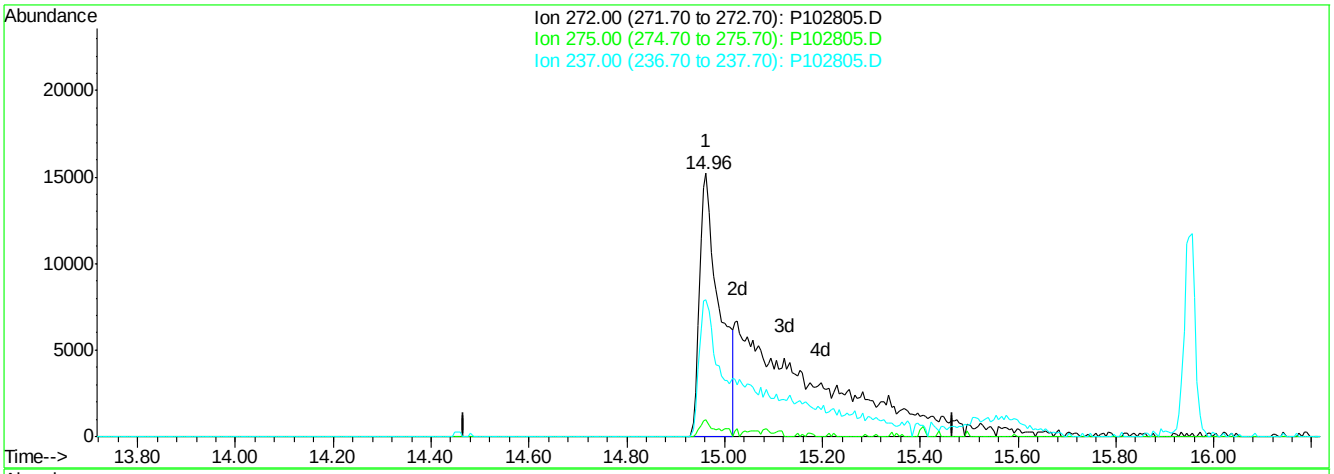
Ion	Exp%	Act%
58.00	100	100
97.00	72.10	88.19
72.00	27.20	24.39
0.00	0.00	0.00

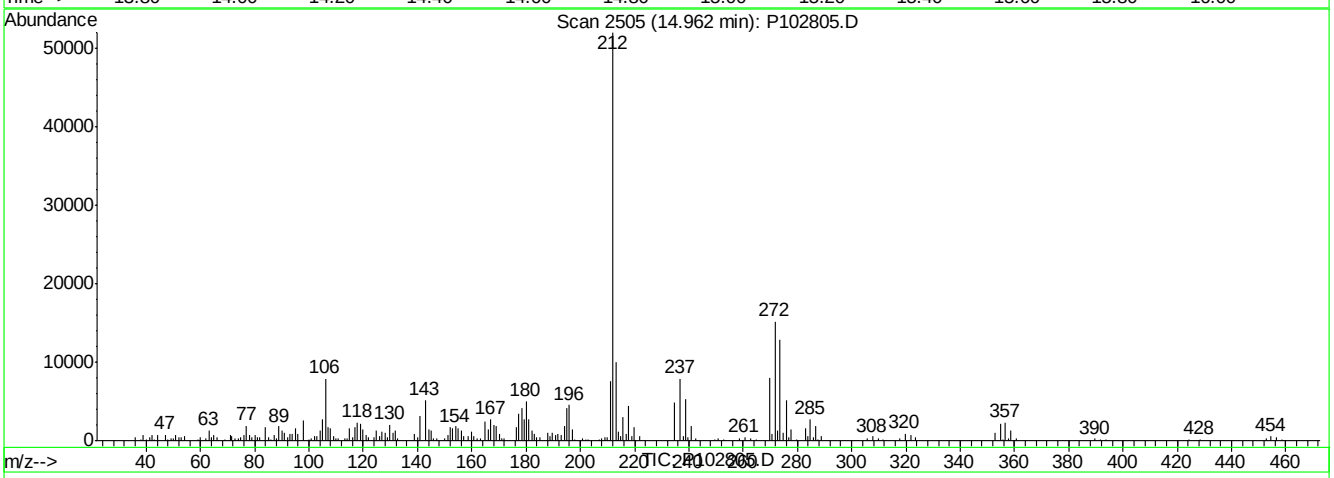
P102805.D MP4513.M Wed Feb 24 15:43:39 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:43 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.96min 357.43ppm

response 42163

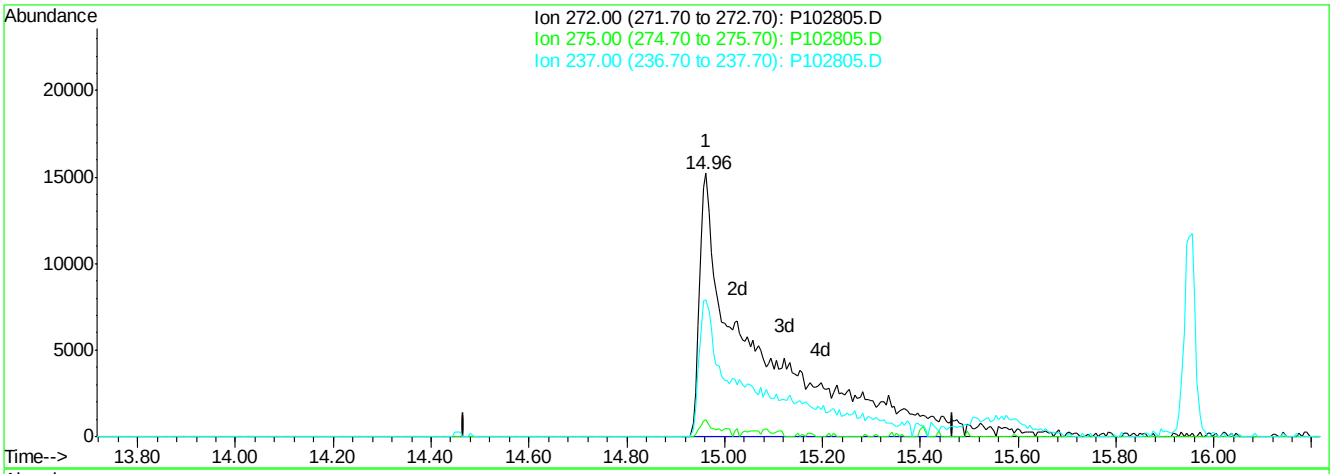
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	0.00
237.00	28.40	46.24
0.00	0.00	0.00

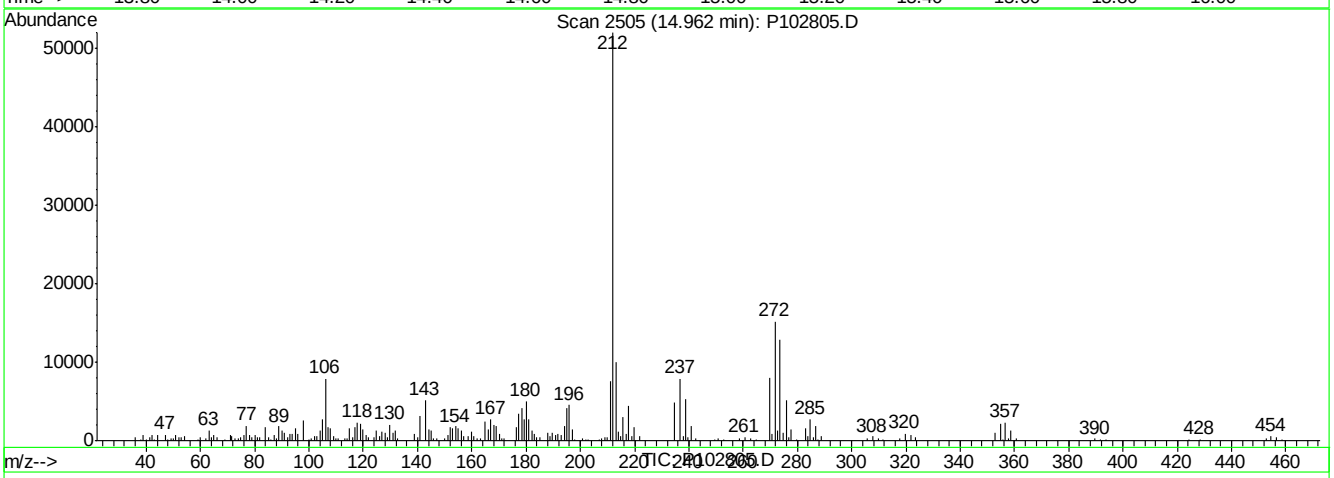
P102805.D MP4513.M Wed Feb 24 15:47:20 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102805.D Vial: 4
Acq On : 24 Feb 2016 11:13 am Operator: linseyk
Sample : icc4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:47 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.96min 1011.93ppm m

response 119368

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	6.41
237.00	28.40	51.76
0.00	0.00	0.00

P102805.D MP4513.M Wed Feb 24 15:47:28 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:44:19 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	114946	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	406001	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	235987	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	376750	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	332035	40.00	ppm	0.00
92) Perylene-d12	18.52	264	316586	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	114946	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	406001	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	235987	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	376750	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	332035	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	316586	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.37	152	114946	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	376750	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	332035	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	406001	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	235987	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	406001	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	114946	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	332035	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	332035	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	406001	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.48	93	121960	27.28	ppm		99
104) Pentachloroethane	4.03	167	42223	28.10	ppm		82
105) Methyl methanesulfonate	2.79	80	59405	27.03	ppm		81
106) N-Nitrosodiethylamine	3.17	102	49741	26.03	ppm		94
107) N-Nitrosomethylethylamine	2.55	42	39245	26.15	ppm		80
108) Ethyl methanesulfonate	3.46	79	80116	27.40	ppm		96
109) N-Nitrosopyrrolidine	4.85	41	27453	24.71	ppm		91
110) N-Nitrosomorpholine	4.91	56	44684	31.77	ppm		89
111) o-Toluidine	4.94	106	139779	29.87	ppm	#	35
113) O,O,O-Triethyl phosphoroth	5.77	198	41094	27.96	ppm		98
114) N-Nitrosopiperidine	5.32	42	51546	52.85	ppm		82
115) A,A-Dimethylphenethylamine	6.35	58	180824m	22.62	ppm		

(#) = qualifier out of range (m) = manual integration
P102806.D MP4513.M Wed Feb 24 15:48:39 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:44:19 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	54560	27.83	ppm		97
117)	N-Nitrosodi-n-butylamine	6.80	84	67253	28.36	ppm		98
118)	p-Phenylenediamine	6.79	108	49189m	25.91	ppm		
119)	Safrole	7.12	162	68481	28.13	ppm		88
120)	Isosafrole	7.93	162	21816	26.42	ppm	#	45
122)	Thionazin	9.76	143	24662	28.66	ppm		96
123)	Tetraethyl dithiopyrophosp	10.29	322	21880	27.90	ppm		100
124)	Phorate	10.46	75	117342	31.77	ppm		100
125)	Phenacetin	10.50	108	102759	28.99	ppm		99
126)	1,4-Naphthoquinone	8.25	158	47390	28.65	ppm		93
127)	m-Dinitrobenzene	8.50	168	26391	24.95	ppm		92
128)	Pentachlorobenzene	9.13	250	65342	29.74	ppm		95
129)	2-Naphthylamine	9.44	143	160137	29.70	ppm		92
130)	1-Naphthylamine	9.31	143	137758	28.66	ppm		95
131)	5-Nitro-o-toluidine	9.77	152	56551	28.84	ppm		99
133)	Disulfoton	11.31	88	96027	31.56	ppm		99
134)	Dinoseb	11.30	211	35348	23.87	ppm		95
135)	Dimethoate	10.71	87	81673	31.56	ppm		77
136)	4-Aminobiphenyl	10.97	169	182891	32.29	ppm		99
137)	Methyl parathion	11.92	125	54551	29.62	ppm		87
138)	Parathion	12.61	109	42220	32.09	ppm		96
139)	Diphenylamine	9.97	169	272159	32.45	ppm		98
140)	Isodrin	13.03	193	31363	30.23	ppm		89
141)	Diallate	10.46	86	65343	32.13	ppm		81
142)	Pentachloronitrobenzene	10.97	295	16553	59.12	ppm		86
143)	Pronamide	11.12	173	80051	28.87	ppm		96
144)	4-Nitroquinoline 1-oxide	12.58	190	111121	111.19	ppm	#	60
145)	Methapyriline	12.80	58	80818	38.53	ppm		85
146)	sym-Trinitrobenzene	10.40	213	13474	22.64	ppm	#	59
148)	Aramite	14.25	185	14961	51.57	ppm		93
149)	p-(Dimethylamine)azobenzen	14.33	120	97794	28.97	ppm		89
150)	Kepone	14.96	272	73592m	625.26	ppm		
151)	Famphur	14.91	218	443718	345.16	ppm		97
152)	2-Acetylaminofluorene	15.42	181	117771	27.44	ppm		97
153)	3,3'-Dimethylbenzidine	14.96	212	72004	76.81	ppm		98
154)	Chlorobenzilate	14.45	251	70819	28.04	ppm		94
156)	4,4-Methylene-bis-(2-chlor	15.98	266	27993	36.31	ppm		98
157)	Hexachlorophene	18.28	196	46684	70.70	ppm	#	95
158)	3-Methylcholanthrene	19.02	252	48069	27.35	ppm	#	75

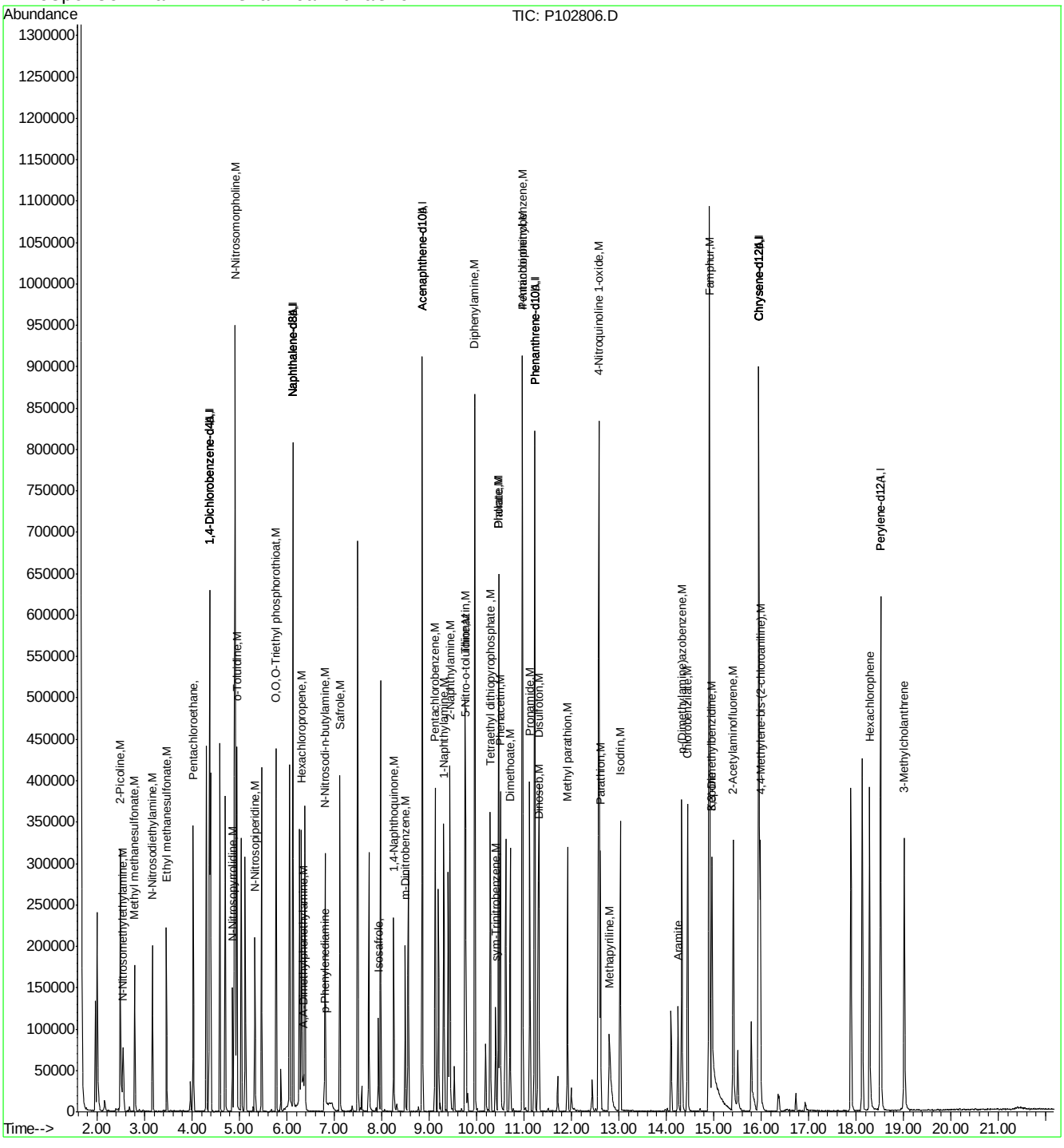
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:48 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

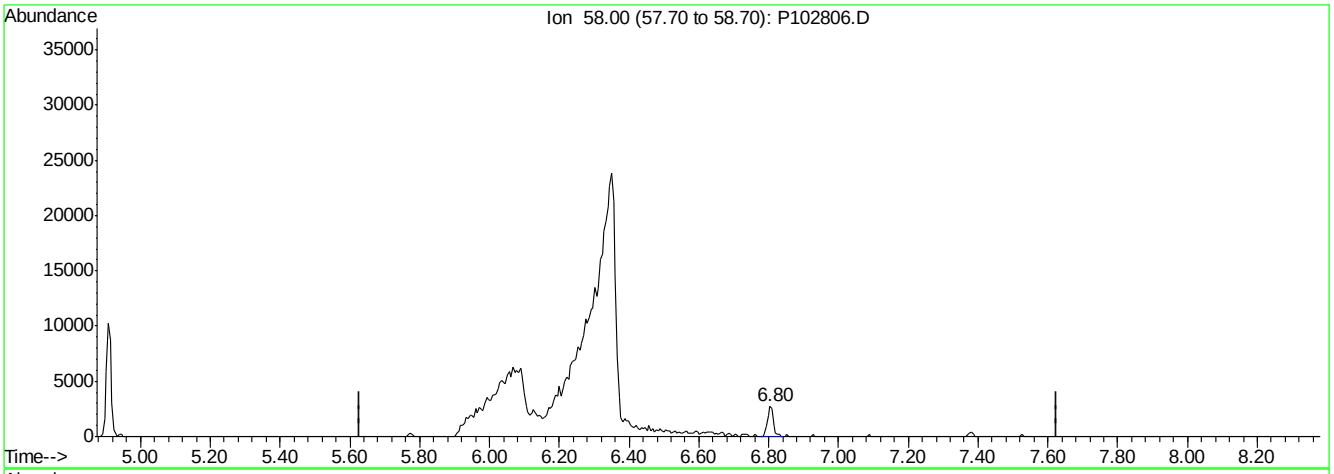
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102806.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 11:43	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

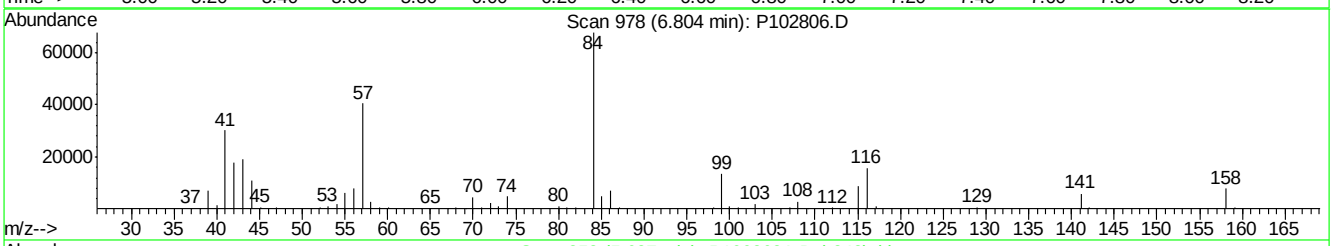
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.35	Split peak
p-Phenylenediamine	106-50-3		6.79	Split peak
Kepone	143-50-0		14.96	Split peak

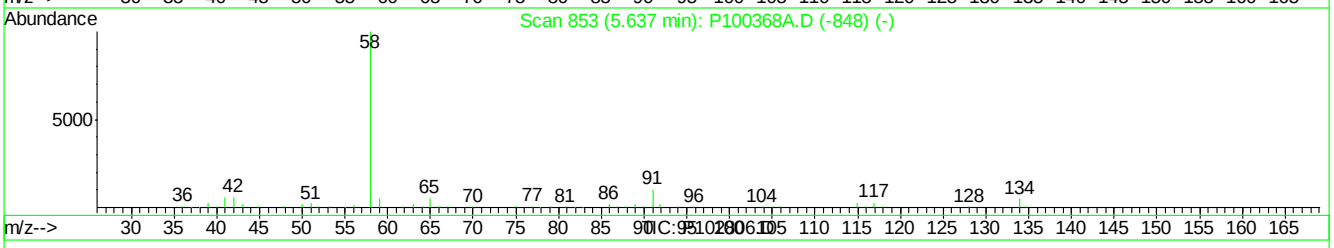
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:44 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.80min 0.40ppm

response 3211

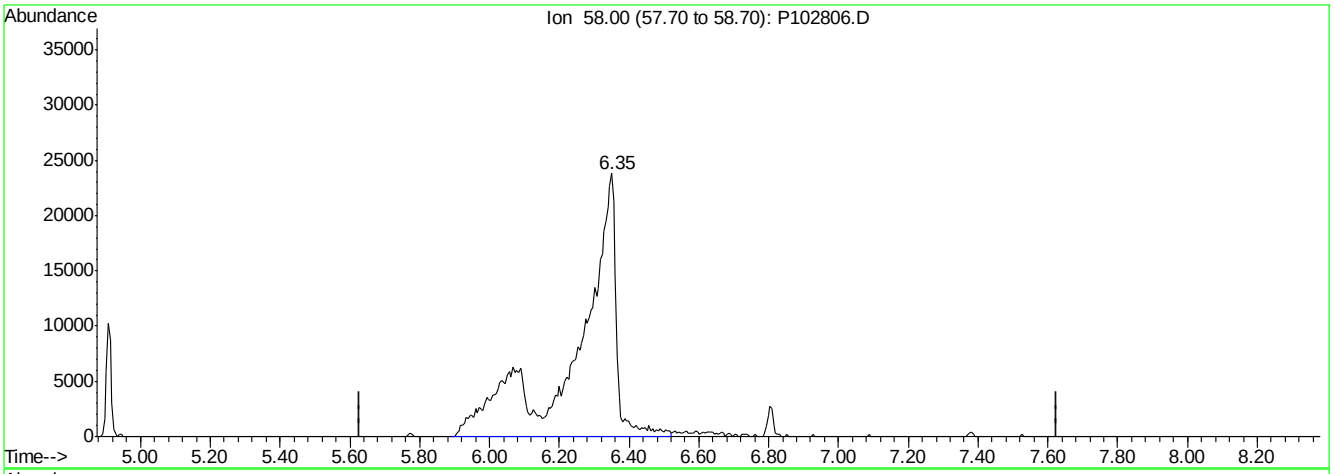
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

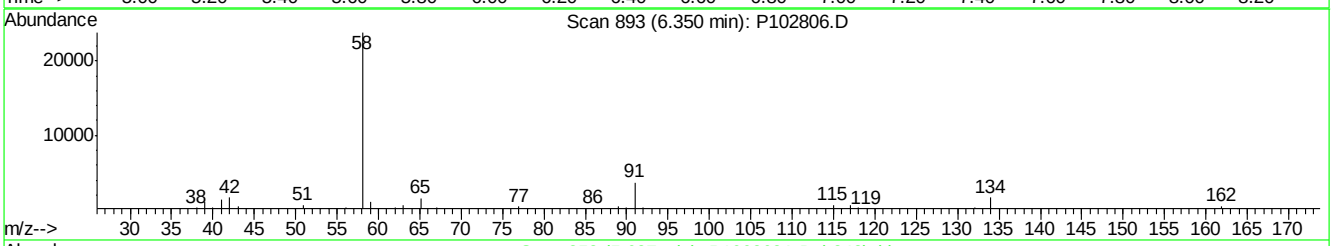
P102806.D MP4513.M Wed Feb 24 15:45:07 2016

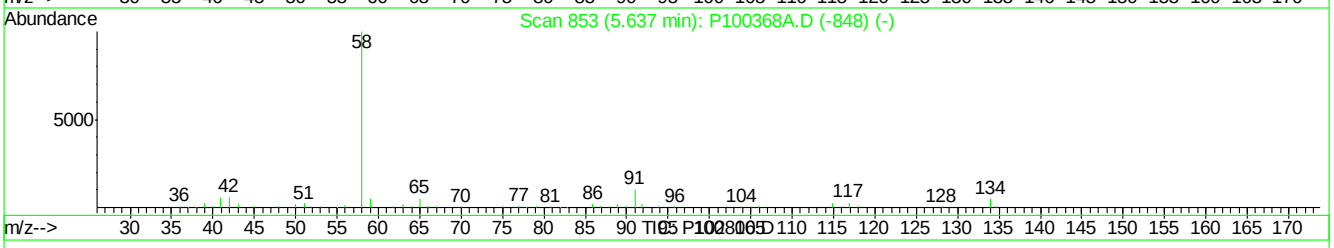
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.35min 22.62ppm m

response 180824

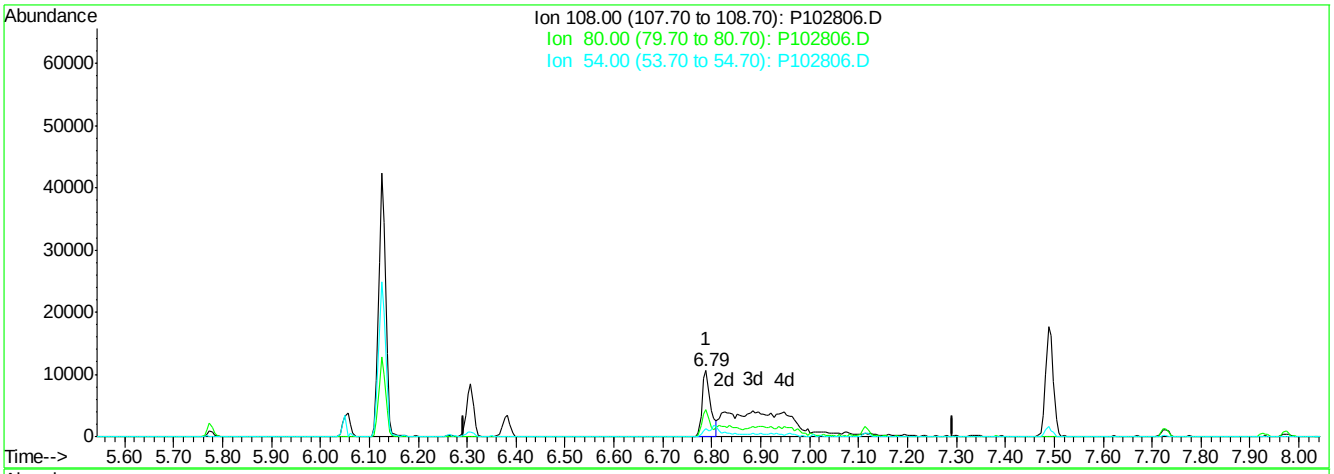
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

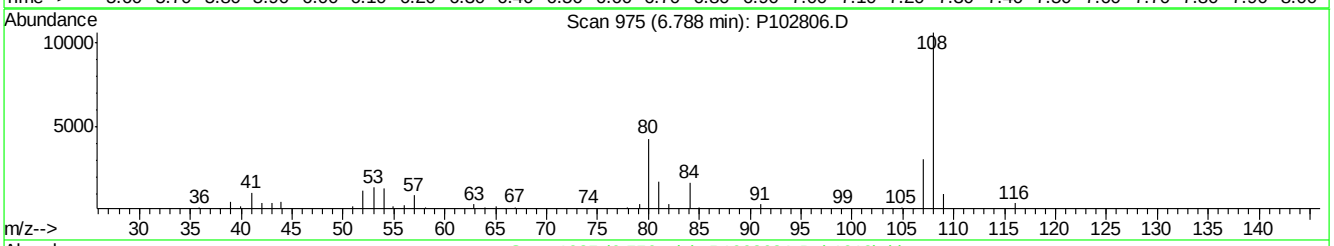
P102806.D MP4513.M Wed Feb 24 15:45:15 2016

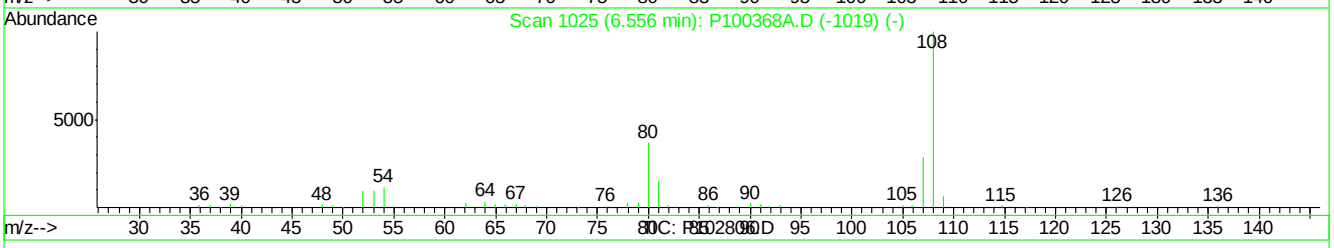
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 6.75ppm

response 12810

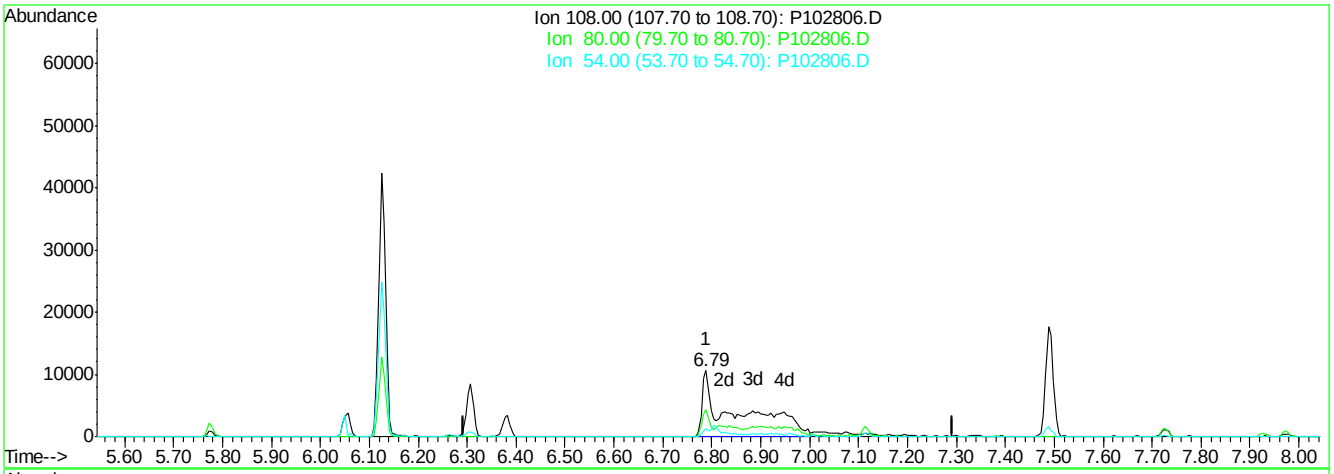
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	38.14#
54.00	1.80	5.75#
0.00	0.00	0.00

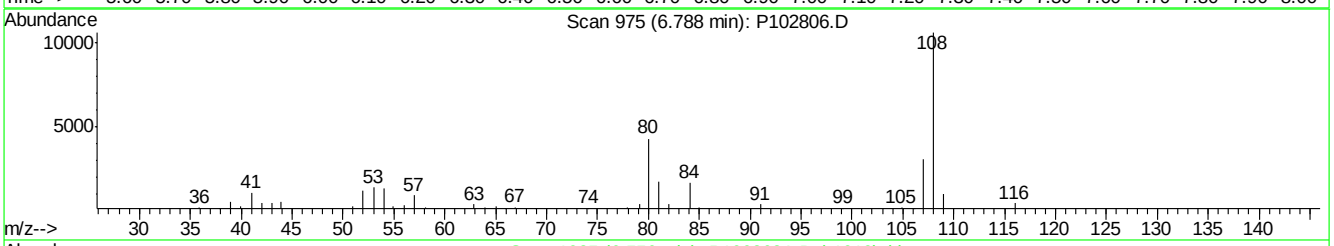
P102806.D MP4513.M Wed Feb 24 15:45:21 2016

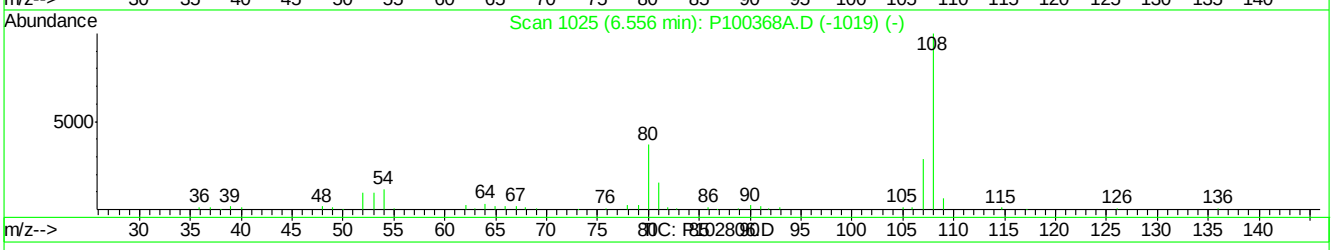
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 25.91ppm m

response 49189

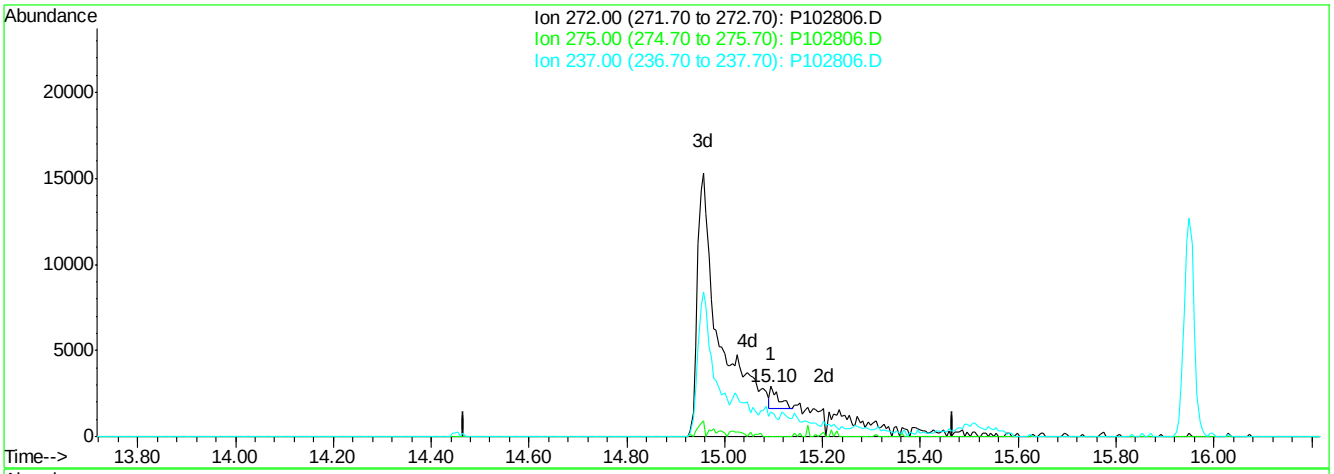
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	40.64#
54.00	1.80	12.47#
0.00	0.00	0.00

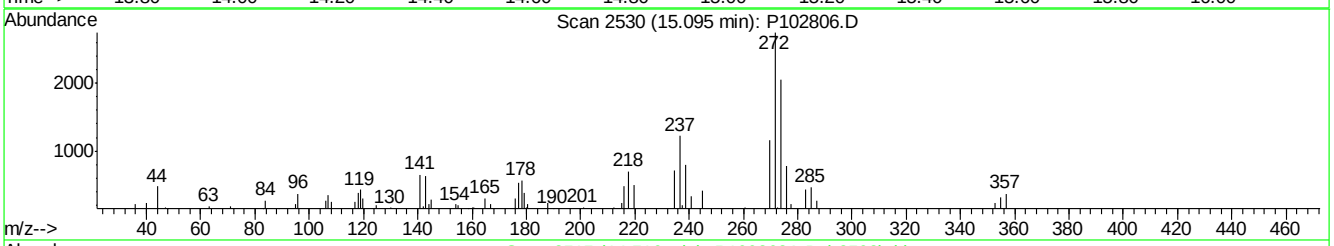
P102806.D MP4513.M Wed Feb 24 15:45:27 2016

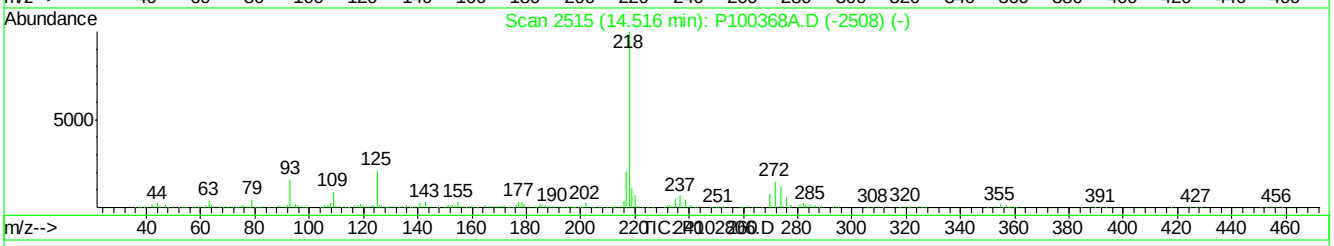
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration







(150) Kepone

15.10min 13.24ppm

response 1558

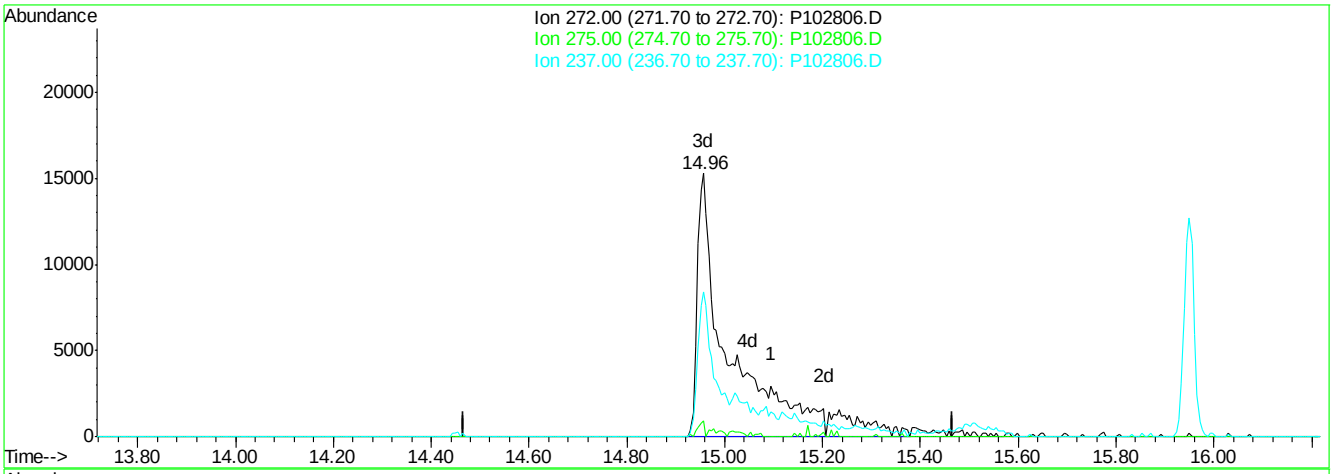
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	15.33
237.00	28.40	15.18
0.00	0.00	0.00

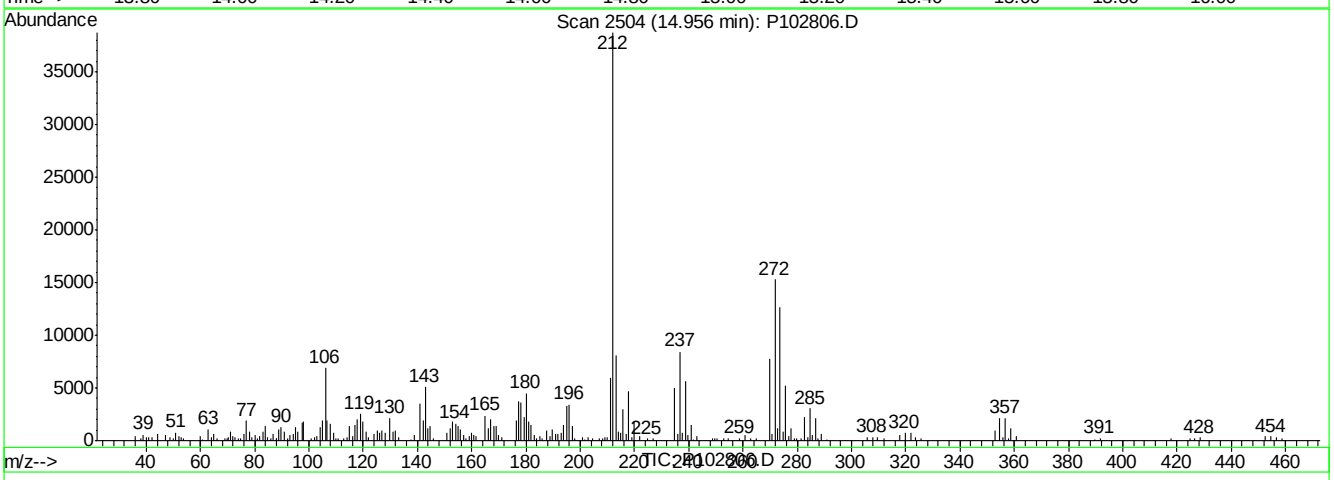
P102806.D MP4513.M Wed Feb 24 15:45:52 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102806.D Vial: 5
Acq On : 24 Feb 2016 11:43 am Operator: linseyk
Sample : ic4515-25 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:48 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:37:08 2016
Response via : Multiple Level Calibration





(150) Kepone

14.96min 625.26ppm m

response 73592

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	33.98#
237.00	28.40	55.15
0.00	0.00	0.00

P102806.D MP4513.M Wed Feb 24 15:48:35 2016

9.6.29.7

9

SGS ACCUTEST JC15518

P102806.D edits: Kepone

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:49:47 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	118813	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	417615	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	237994	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	383616	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	335017	40.00	ppm	0.00
92) Perylene-d12	18.52	264	319502	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	118813	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	417615	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	237994	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	383616	40.00	ppm	-0.01
147) Chrysene-d12A	15.95	240	335017	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	319502	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.37	152	118813	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	383616	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	335017	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	417615	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	237994	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	417615	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	118813	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	335017	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	335017	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	417615	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.48	93	49478	10.71	ppm		95
104) Pentachloroethane	4.03	167	17316	11.15	ppm		90
105) Methyl methanesulfonate	2.79	80	24405	10.74	ppm		79
106) N-Nitrosodiethylamine	3.17	102	20233	10.24	ppm		96
107) N-Nitrosomethylethylamine	2.55	42	16734	10.79	ppm		84
108) Ethyl methanesulfonate	3.46	79	32881	10.88	ppm		95
109) N-Nitrosopyrrolidine	4.85	41	11926	10.38	ppm		84
110) N-Nitrosomorpholine	4.91	56	19747	13.58	ppm		88
111) o-Toluidine	4.94	106	62120	12.84	ppm	#	51
113) O,O,O-Triethyl phosphoroth	5.77	198	16932	11.20	ppm		96
114) N-Nitrosopiperidine	5.32	42	21221	21.15	ppm		79
115) A,A-Dimethylphenethylamine	6.18	58	69311m	8.43	ppm		

(#) = qualifier out of range (m) = manual integration
P102807.D MP4513.M Wed Feb 24 15:51:55 2016

9.6.30
9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:49:47 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	22086	10.95	ppm		96
117)	N-Nitrosodi-n-butylamine	6.80	84	27216	11.16	ppm		95
118)	p-Phenylenediamine	6.84	108	12759m	6.53	ppm		
119)	Safrole	7.11	162	27437	10.96	ppm		86
120)	Isosafrole	7.93	162	8310	9.78	ppm	#	39
122)	Thionazin	9.75	143	10266	11.83	ppm		98
123)	Tetraethyl dithiopyrophosp	10.29	322	8820	11.15	ppm		100
124)	Phorate	10.46	75	49075	13.17	ppm		100
125)	Phenacetin	10.49	108	41353	11.57	ppm		96
126)	1,4-Naphthoquinone	8.25	158	18152	10.88	ppm		92
127)	m-Dinitrobenzene	8.50	168	9349	8.76	ppm		85
128)	Pentachlorobenzene	9.13	250	26283	11.86	ppm		98
129)	2-Naphthylamine	9.44	143	68070	12.52	ppm		97
130)	1-Naphthylamine	9.30	143	60694	12.52	ppm		93
131)	5-Nitro-o-toluidine	9.76	152	22904	11.58	ppm		95
133)	Disulfoton	11.31	88	39198	12.65	ppm		91
134)	Dinoseb	11.30	211	10800	7.16	ppm		93
135)	Dimethoate	10.70	87	31584	11.99	ppm		75
136)	4-Aminobiphenyl	10.96	169	74419	12.90	ppm		100
137)	Methyl parathion	11.92	125	19686	10.50	ppm		82
138)	Parathion	12.61	109	16083	12.01	ppm		92
139)	Diphenylamine	9.96	169	116923	13.69	ppm		98
140)	Isodrin	13.03	193	12434	11.77	ppm		72
141)	Diallate	10.46	86	26964	13.02	ppm		86
142)	Pentachloronitrobenzene	10.97	295	7246	25.42	ppm		89
143)	Pronamide	11.12	173	29912	10.59	ppm		97
144)	4-Nitroquinoline 1-oxide	12.57	190	33617	33.03	ppm	#	54
145)	Methapyriline	12.79	58	33593	15.73	ppm		86
146)	sym-Trinitrobenzene	10.40	213	3869	6.39	ppm		90
148)	Aramite	14.25	185	4959	16.94	ppm		77
149)	p-(Dimethylamine)azobenzen	14.33	120	37147	10.90	ppm		88
150)	Kepone	14.95	272	35190m	296.32	ppm		
151)	Famphur	14.90	218	226680	174.76	ppm		97
152)	2-Acetylaminofluorene	15.41	181	41419	9.57	ppm		92
153)	3,3'-Dimethylbenzidine	14.96	212	47602	50.33	ppm		98
154)	Chlorobenzilate	14.45	251	26065	10.23	ppm	#	80
156)	4,4-Methylene-bis-(2-chlor	15.98	266	10767	13.84	ppm		99
157)	Hexachlorophene	18.28	196	9096	13.65	ppm	#	99
158)	3-Methylcholanthrene	19.02	252	17310	9.76	ppm	#	75

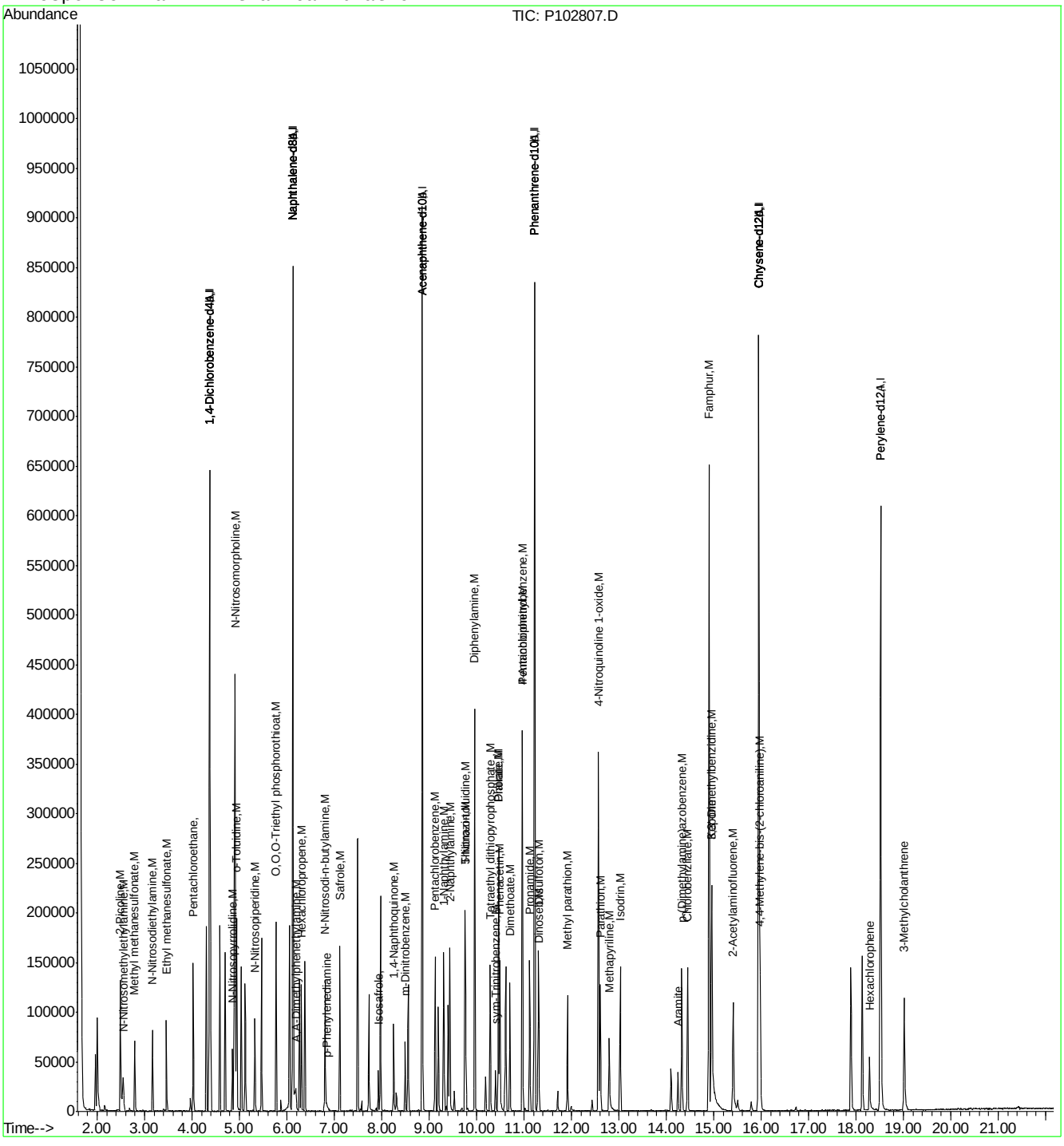
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:51 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration



P102807.D MP4513.M Wed Feb 24 15:51:55 2016 Page 3

Manual Integration Approval Summary

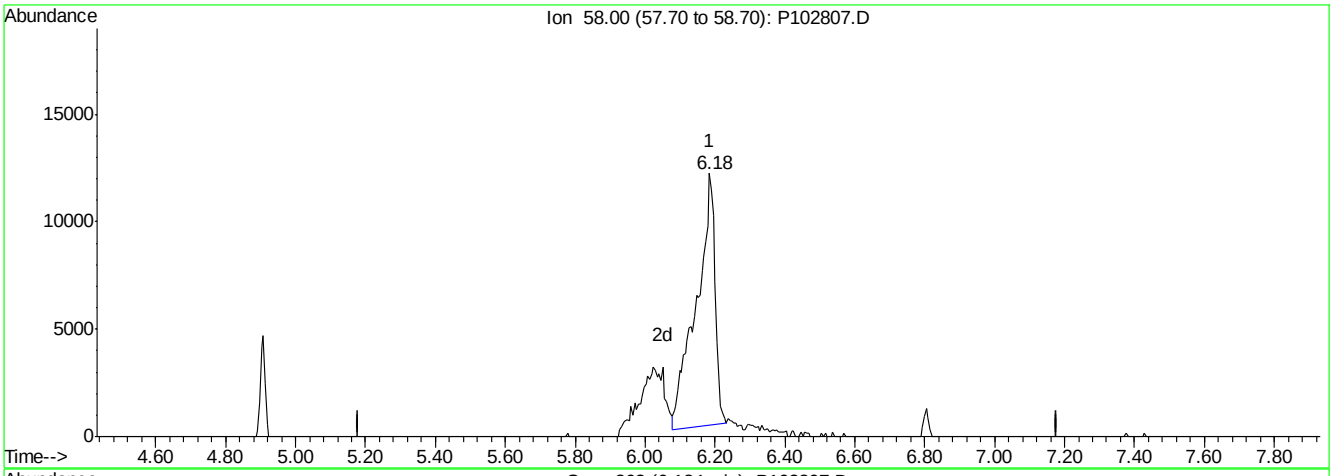
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102807.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 12:12	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

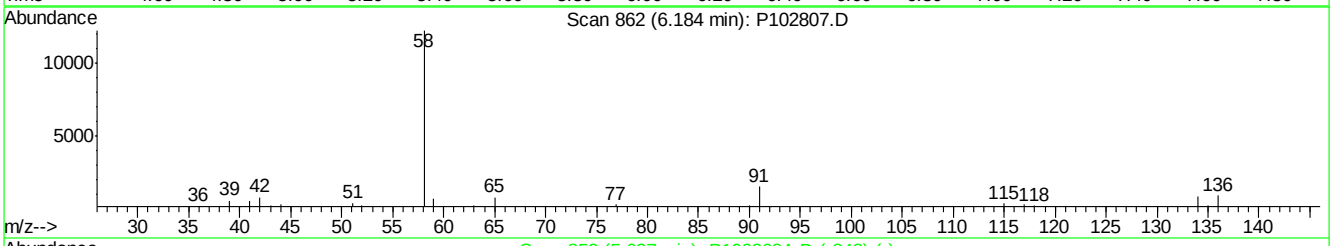
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.18	Split peak
p-Phenylenediamine	106-50-3		6.84	Split peak
Kepone	143-50-0		14.95	Split peak

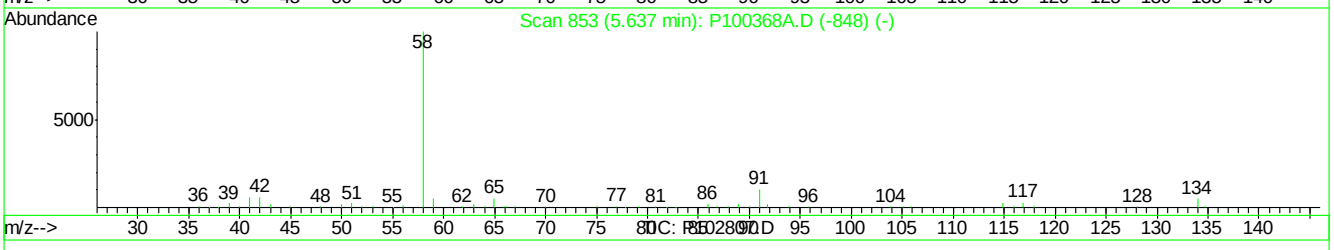
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:50 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.18min 5.33ppm

response 43853

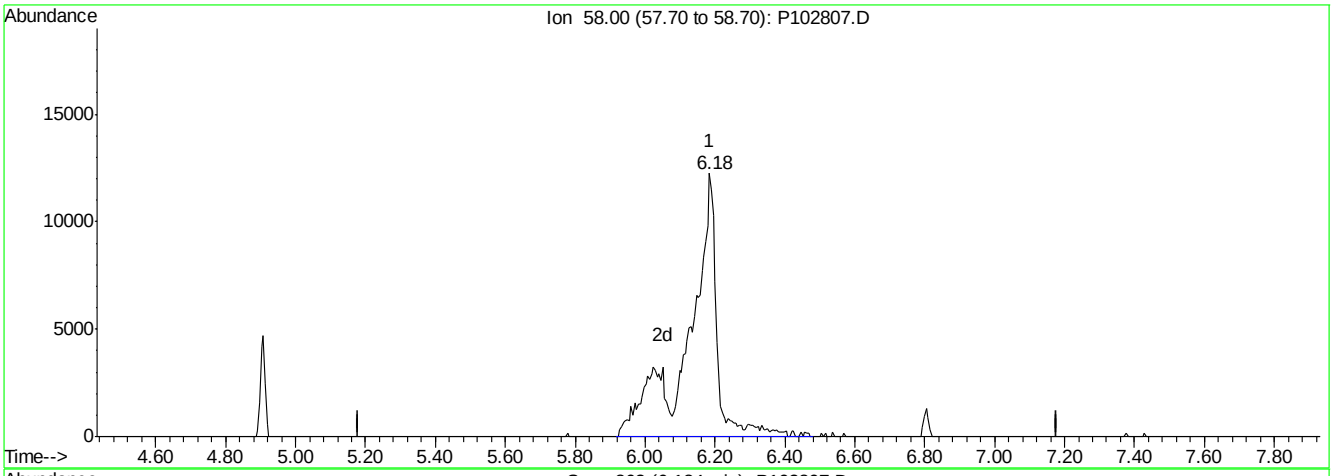
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

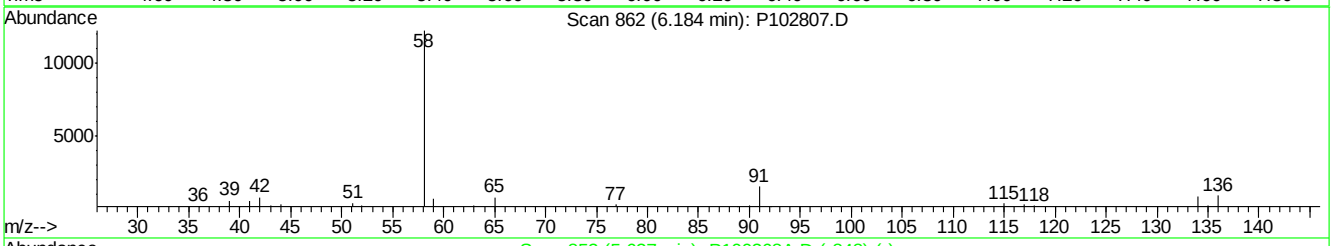
P102807.D MP4513.M Wed Feb 24 15:50:29 2016

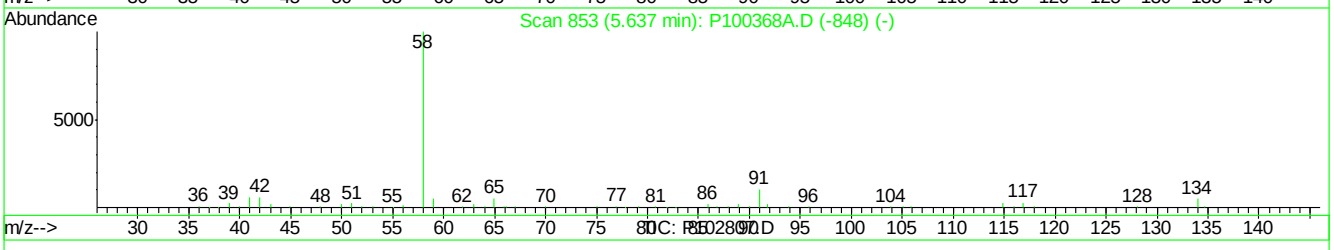
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:50 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.18min 8.43ppm m

response 69311

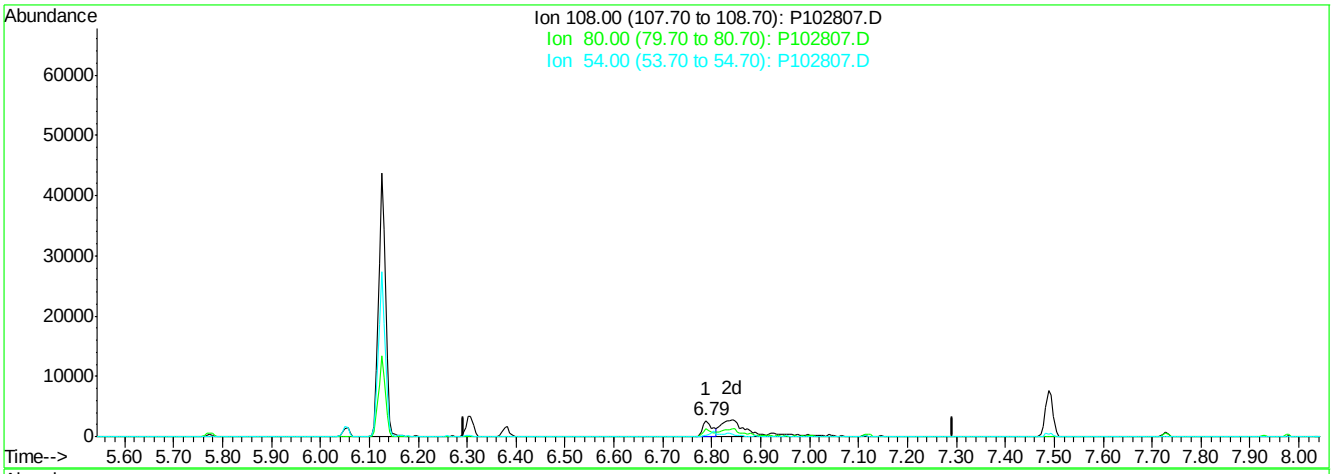
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

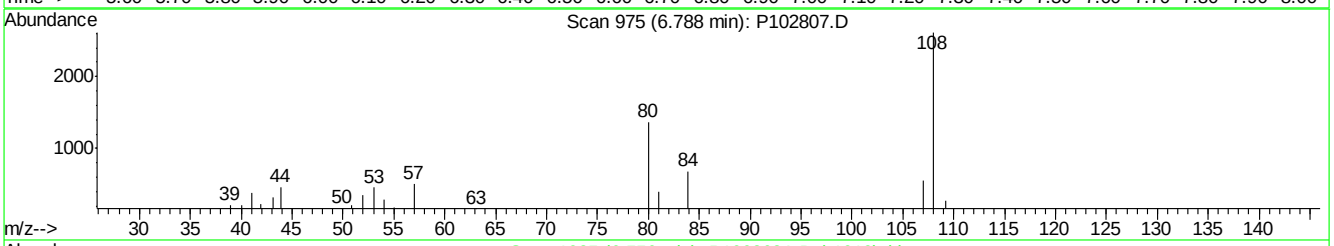
P102807.D MP4513.M Wed Feb 24 15:50:37 2016

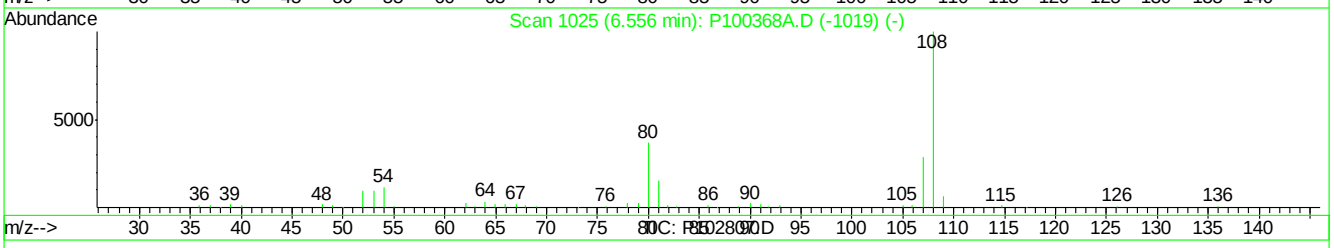
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:50 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.79min 1.91ppm

response 3728

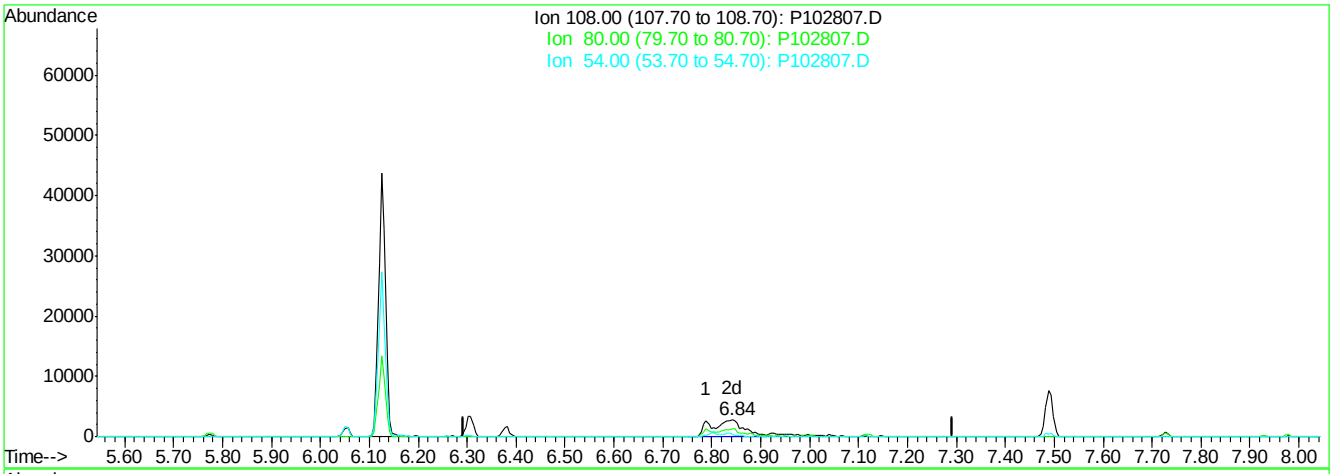
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	53.00#
54.00	1.80	3.16#
0.00	0.00	0.00

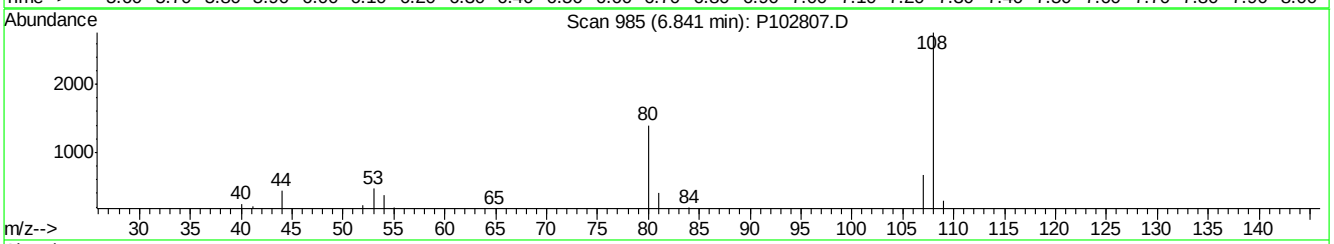
P102807.D MP4513.M Wed Feb 24 15:50:42 2016

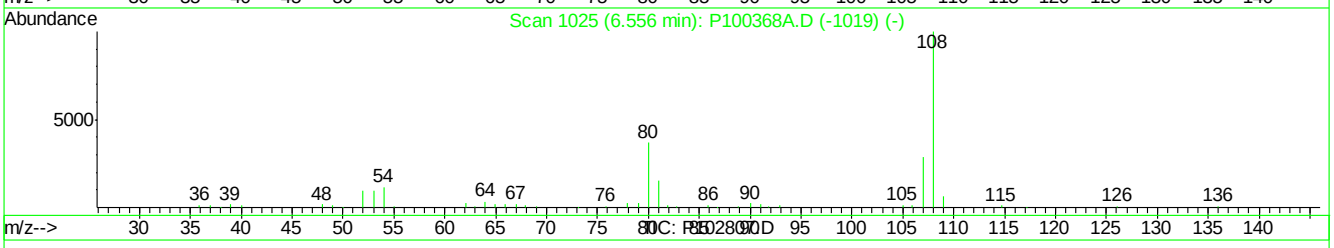
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:50 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.84min 6.53ppm m

response 12759

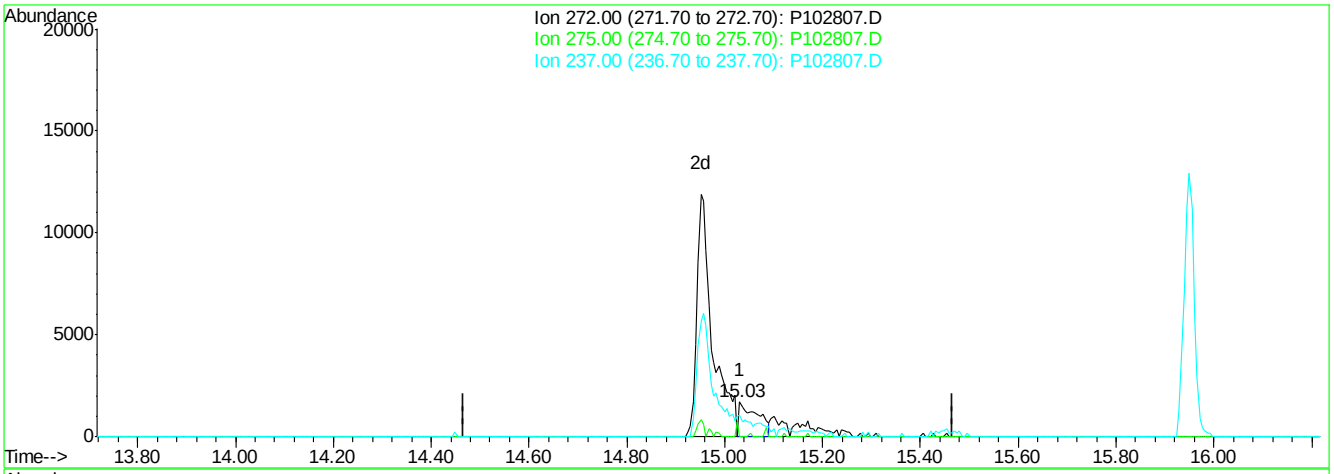
Ion	Exp%	Act%
108.00	100	100
80.00	19.80	50.69#
54.00	1.80	13.81#
0.00	0.00	0.00

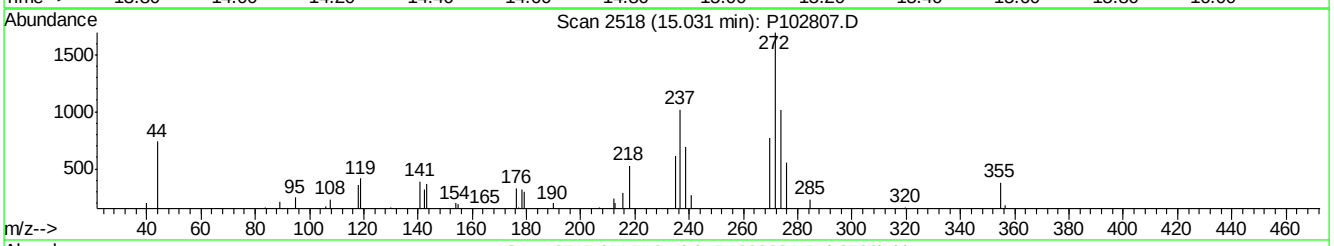
P102807.D MP4513.M Wed Feb 24 15:51:03 2016

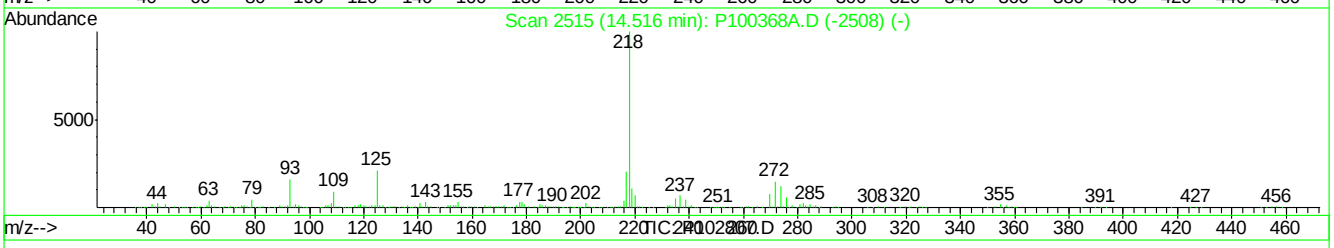
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:50 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

15.03min 36.99ppm

response 4393

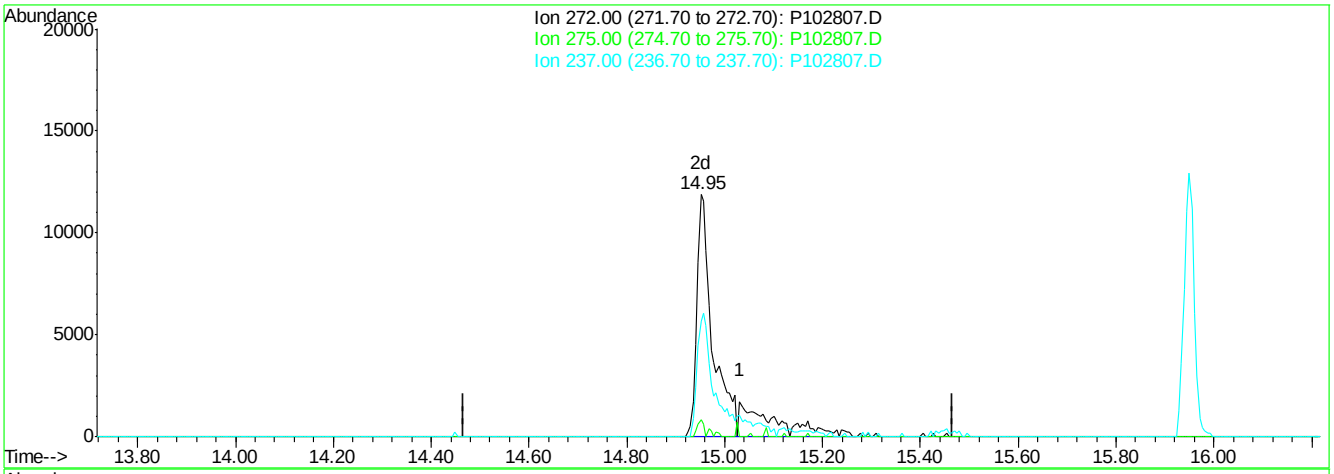
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	14.35
237.00	28.40	19.82
0.00	0.00	0.00

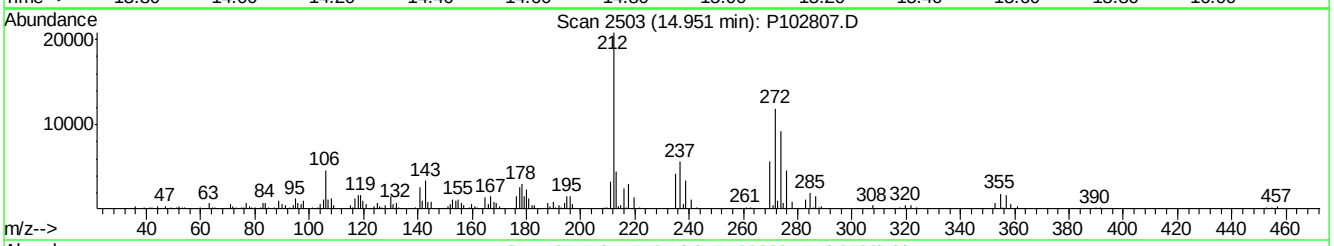
P102807.D MP4513.M Wed Feb 24 15:51:24 2016

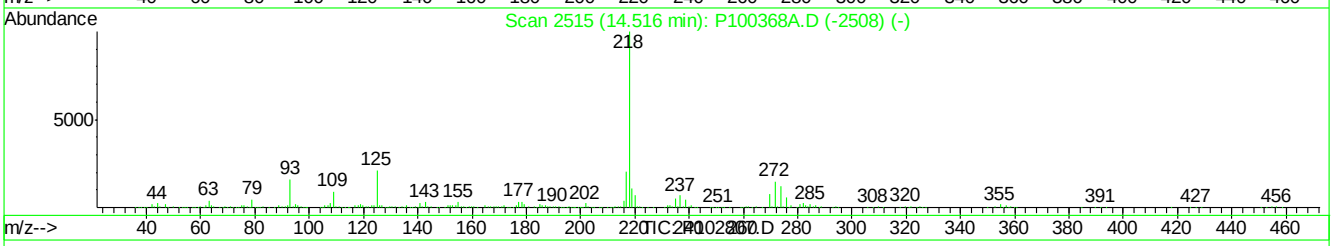
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102807.D Vial: 6
Acq On : 24 Feb 2016 12:12 pm Operator: linseyk
Sample : ic4515-10 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:51 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

14.95min 296.32ppm m

response 35190

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	38.62#
237.00	28.40	47.46
0.00	0.00	0.00

P102807.D MP4513.M Wed Feb 24 15:51:30 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:52:02 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	112473	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	388483	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	225007	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	358199	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	312591	40.00	ppm	0.00
92) Perylene-d12	18.51	264	301026	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	112473	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	388483	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	225007	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	358199	40.00	ppm	-0.01
147) Chrysene-d12A	15.95	240	312591	40.00	ppm	0.00
155) Perylene-d12A	18.51	264	301026	40.00	ppm	-0.02
159) 1,4-Dichlorobenzene-d4b	4.37	152	112473	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	358199	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	312591	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	388483	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	225007	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	388483	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	112473	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	312591	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	312591	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	388483	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.49	93	25819	5.90	ppm		96
104) Pentachloroethane	4.03	167	8684	5.91	ppm		85
105) Methyl methanesulfonate	2.79	80	12815	5.96	ppm		76
106) N-Nitrosodiethylamine	3.17	102	11063	5.92	ppm		92
107) N-Nitrosomethylethylamine	2.55	42	8791	5.99	ppm		85
108) Ethyl methanesulfonate	3.46	79	16931	5.92	ppm		97
109) N-Nitrosopyrrolidine	4.85	41	6363	5.85	ppm		83
110) N-Nitrosomorpholine	4.91	56	10121	7.35	ppm		84
111) o-Toluidine	4.94	106	32989	7.21	ppm	#	49
113) O,O,O-Triethyl phosphoroth	5.77	198	8407	5.98	ppm		98
114) N-Nitrosopiperidine	5.32	42	10406	11.15	ppm		85
115) A,A-Dimethylphenethylamine	6.10	58	35437m	4.63	ppm		

(#) = qualifier out of range (m) = manual integration
P102808.D MP4513.M Fri Feb 26 09:40:47 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:52:02 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	11044	5.89	ppm		95
117)	N-Nitrosodi-n-butylamine	6.80	84	13589	5.99	ppm		97
118)	p-Phenylenediamine	6.80	108	3866	2.13	ppm	#	50
119)	Safrole	7.11	162	13834	5.94	ppm		84
120)	Isosafrole	7.93	162	4120	5.21	ppm	#	48
122)	Thionazin	9.75	143	4659	5.68	ppm		95
123)	Tetraethyl dithiopyrophosp	10.29	322	4163	5.57	ppm		100
124)	Phorate	10.46	75	24280	6.89	ppm		100
125)	Phenacetin	10.49	108	20121	5.95	ppm		96
126)	1,4-Naphthoquinone	8.25	158	8042	5.10	ppm		91
127)	m-Dinitrobenzene	8.50	168	3951	3.92	ppm		85
128)	Pentachlorobenzene	9.13	250	13336	6.37	ppm		96
129)	2-Naphthylamine	9.43	143	36719	7.14	ppm		91
130)	1-Naphthylamine	9.30	143	30846	6.73	ppm		93
131)	5-Nitro-o-toluidine	9.76	152	10793	5.77	ppm		93
133)	Disulfoton	11.31	88	19670	6.80	ppm		99
134)	Dinoseb	11.30	211	3601	2.56	ppm		91
135)	Dimethoate	10.70	87	15503	6.30	ppm		82
136)	4-Aminobiphenyl	10.96	169	39165	7.27	ppm		98
137)	Methyl parathion	11.92	125	8779	5.01	ppm		88
138)	Parathion	12.61	109	7817	6.25	ppm		100
139)	Diphenylamine	9.96	169	60309	7.56	ppm		98
140)	Isodrin	13.03	193	6143	6.23	ppm		82
141)	Diallate	10.46	86	14105	7.29	ppm		88
142)	Pentachloronitrobenzene	10.97	295	3438	12.92	ppm		93
143)	Pronamide	11.12	173	14184	5.38	ppm		96
144)	4-Nitroquinoline 1-oxide	12.57	190	11251	11.84	ppm	#	49
145)	Methapyriline	12.79	58	15635	7.84	ppm		94
146)	sym-Trinitrobenzene	10.40	213	1214	2.15	ppm		89
148)	Aramite	14.25	185	2126	7.78	ppm		90
149)	p-(Dimethylamine)azobenzen	14.33	120	16870	5.31	ppm		98
150)	Kepone	14.95	272	19157m	172.89	ppm		
151)	Famphur	14.90	218	121296m	100.22	ppm		
152)	2-Acetylaminofluorene	15.41	181	16302	4.03	ppm		89
153)	3,3'-Dimethylbenzidine	14.96	212	26336	29.84	ppm		96
154)	Chlorobenzilate	14.45	251	12960	5.45	ppm		86
156)	4,4-Methylene-bis-(2-chlor	15.98	266	5463	7.45	ppm		93
157)	Hexachlorophene	18.28	196	2262	3.60	ppm	#	85
158)	3-Methylcholanthrene	19.02	252	7801	4.67	ppm	#	72

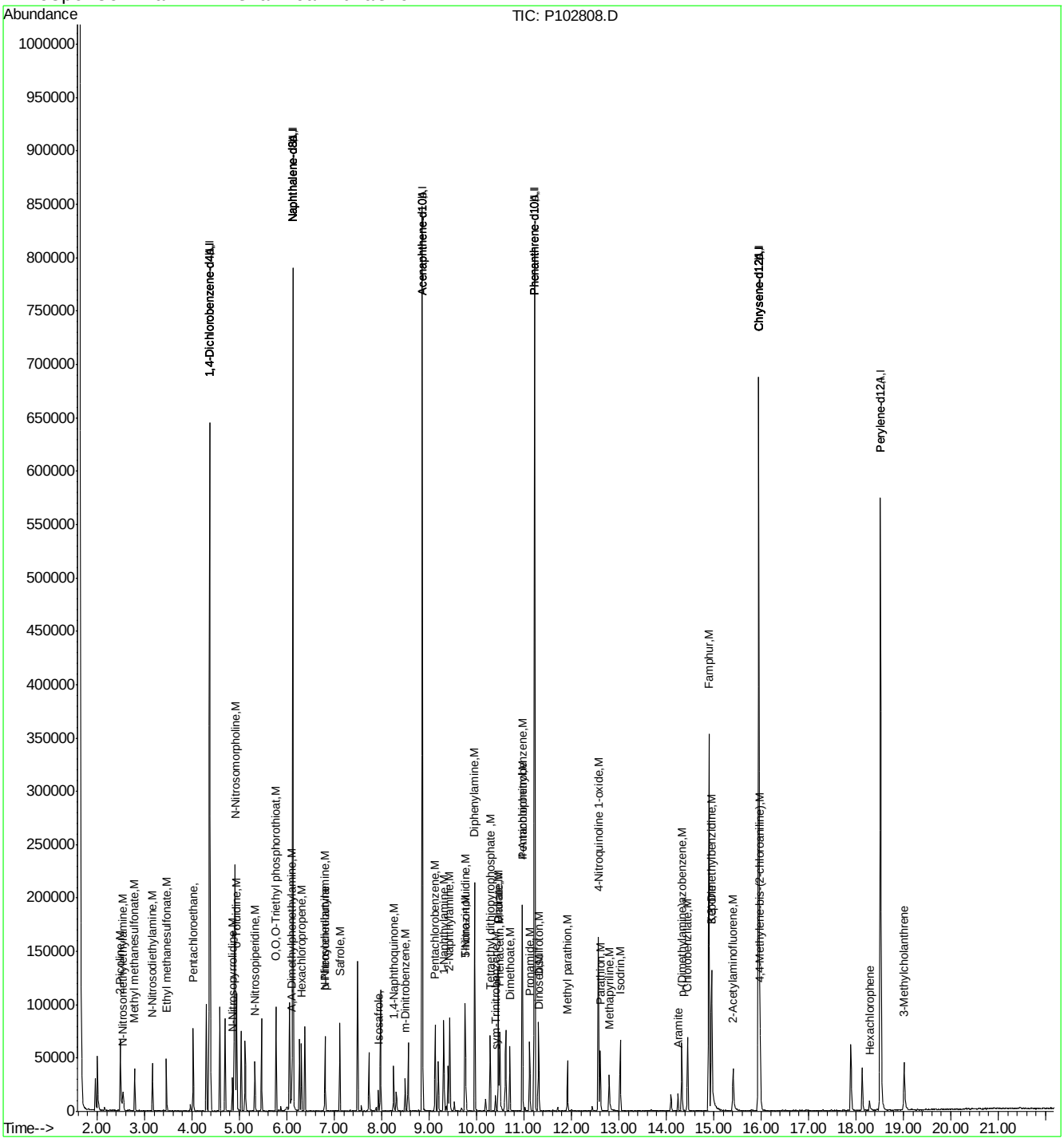
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:54 2016 Quant Results File: MP4513.RES

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



Manual Integration Approval Summary

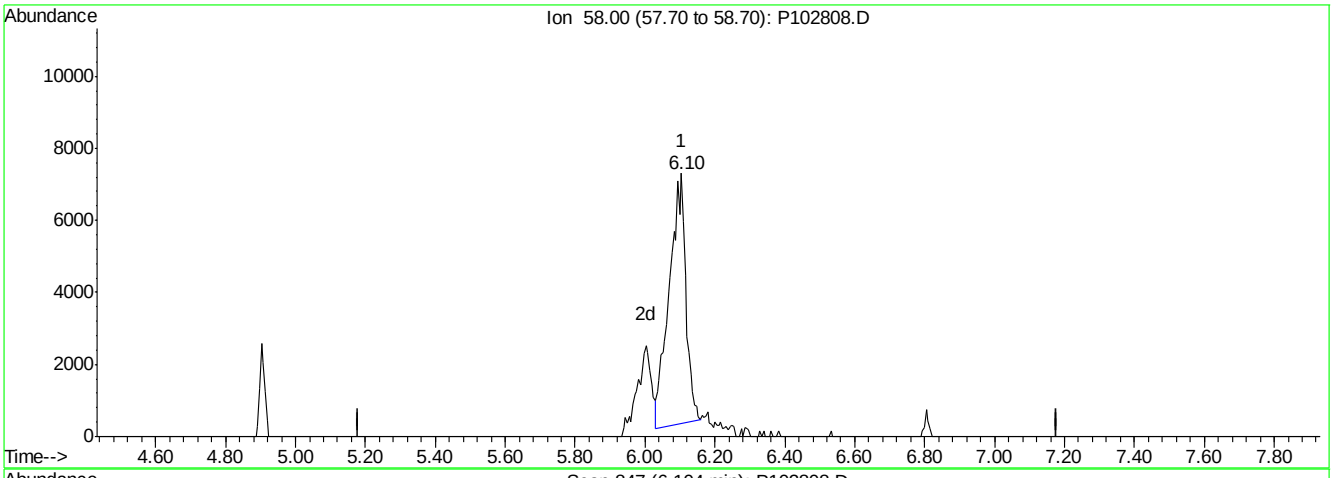
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102808.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 12:42	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

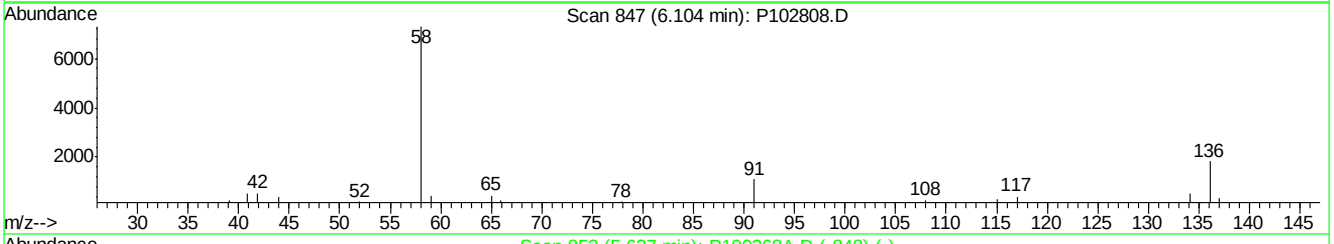
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.10	Split peak
Famphur	52-85-7		14.90	Split peak
Kepone	143-50-0		14.95	Split peak

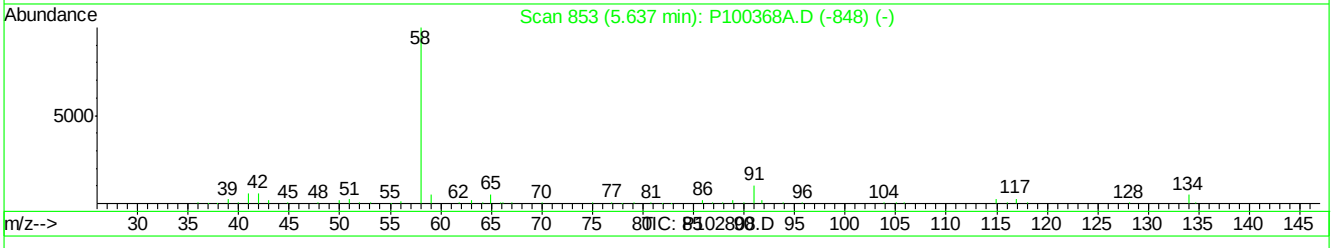
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.10min 3.00ppm

response 22968

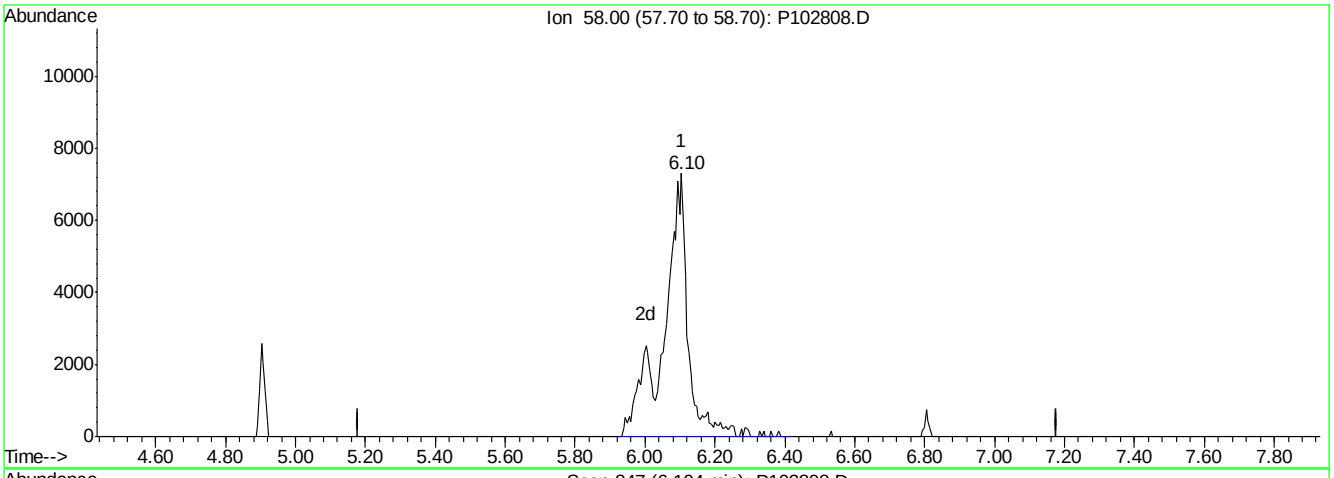
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

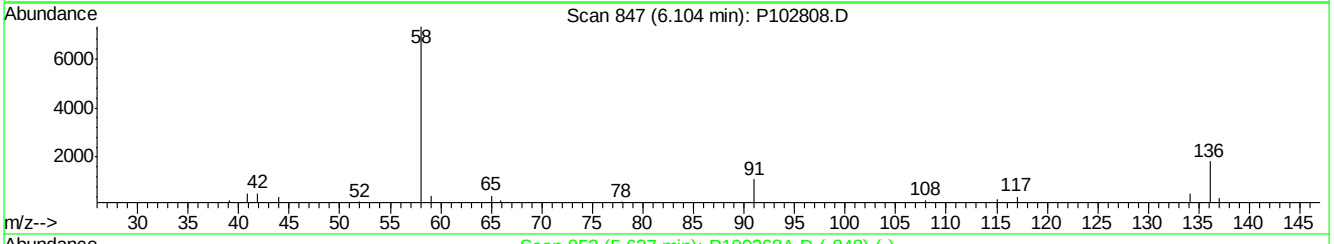
P102808.D MP4513.M Wed Feb 24 15:52:48 2016

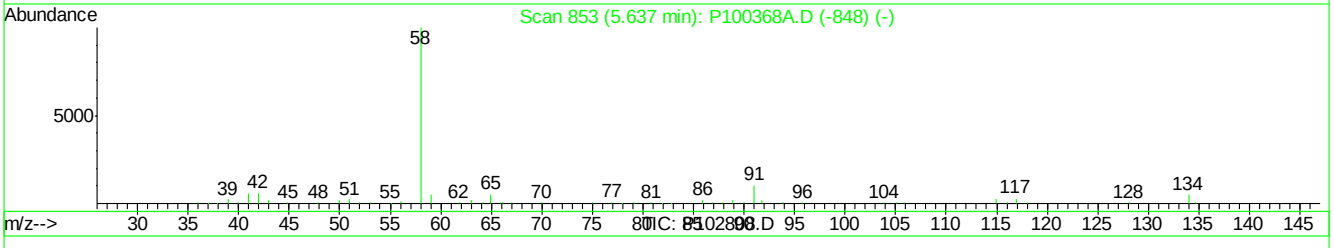
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.10min 4.63ppm m

response 35437

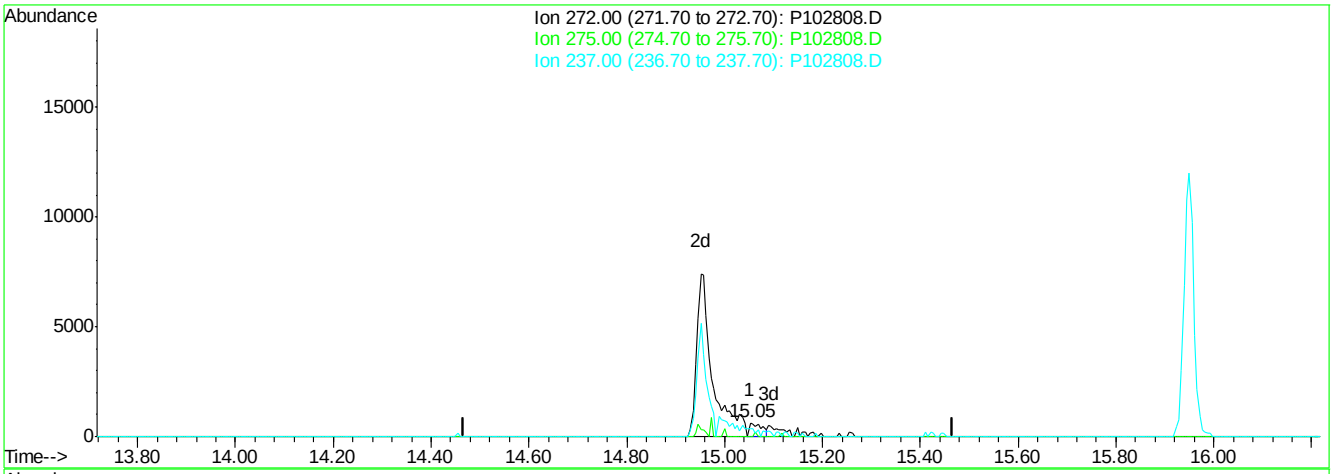
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

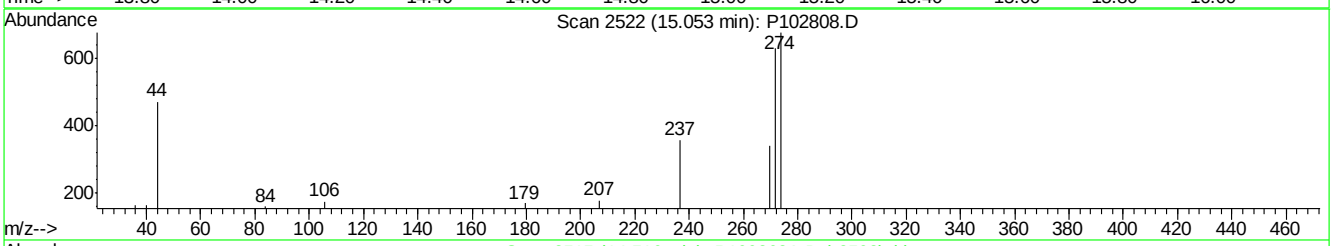
P102808.D MP4513.M Wed Feb 24 15:52:54 2016

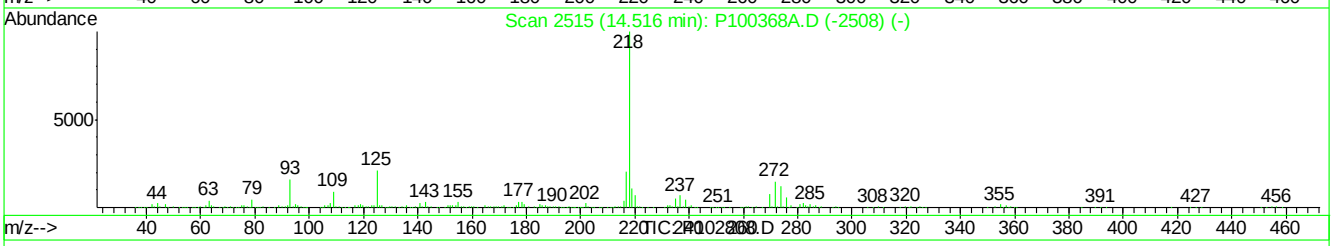
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

15.05min 9.61ppm

response 1065

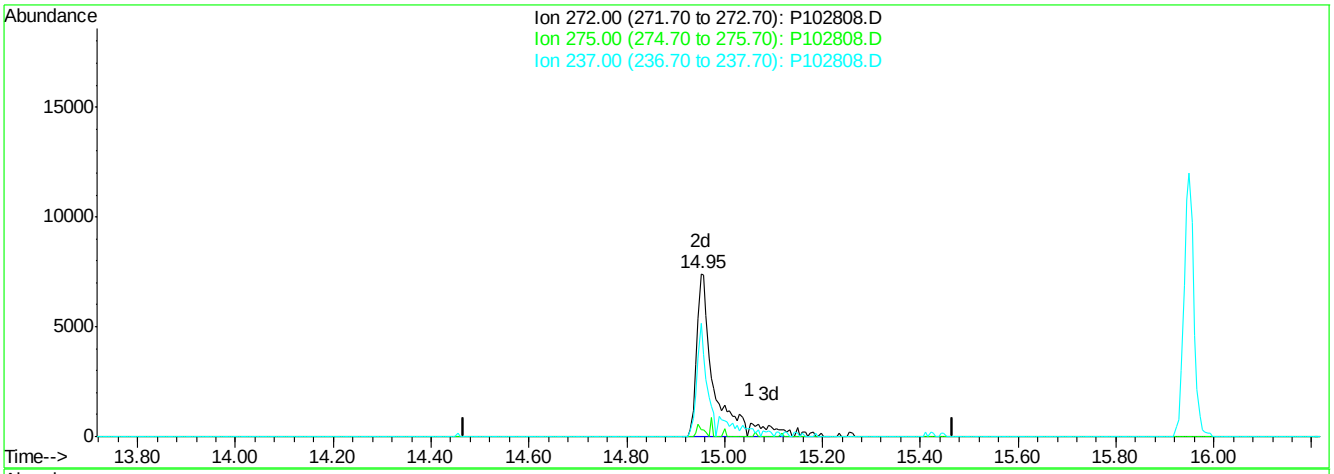
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	0.00
237.00	28.40	17.27
0.00	0.00	0.00

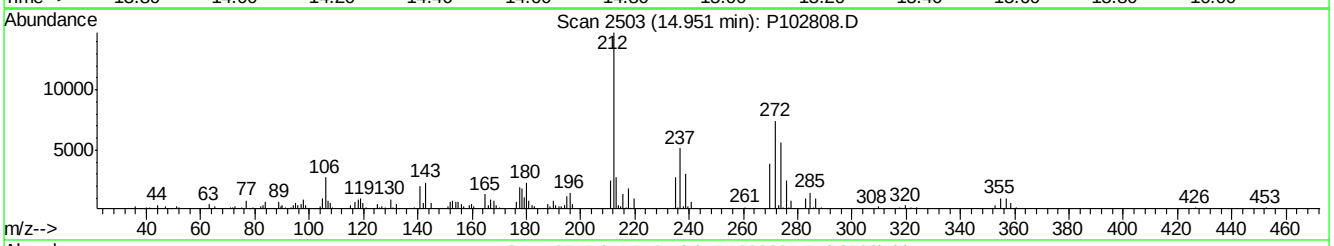
P102808.D MP4513.M Wed Feb 24 15:53:23 2016

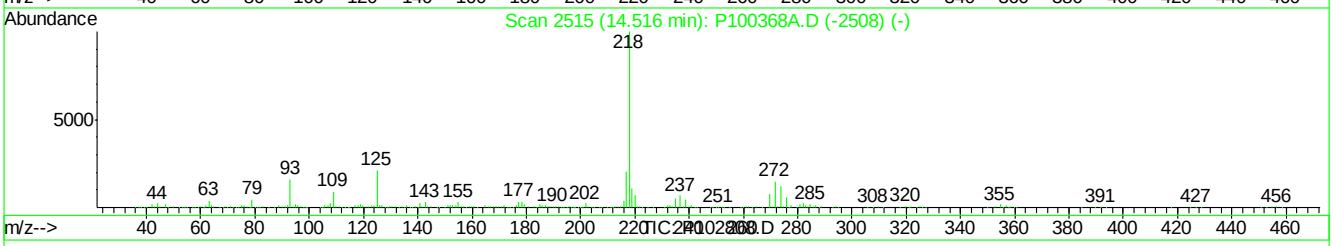
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:53 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

14.95min 172.89ppm m

response 19157

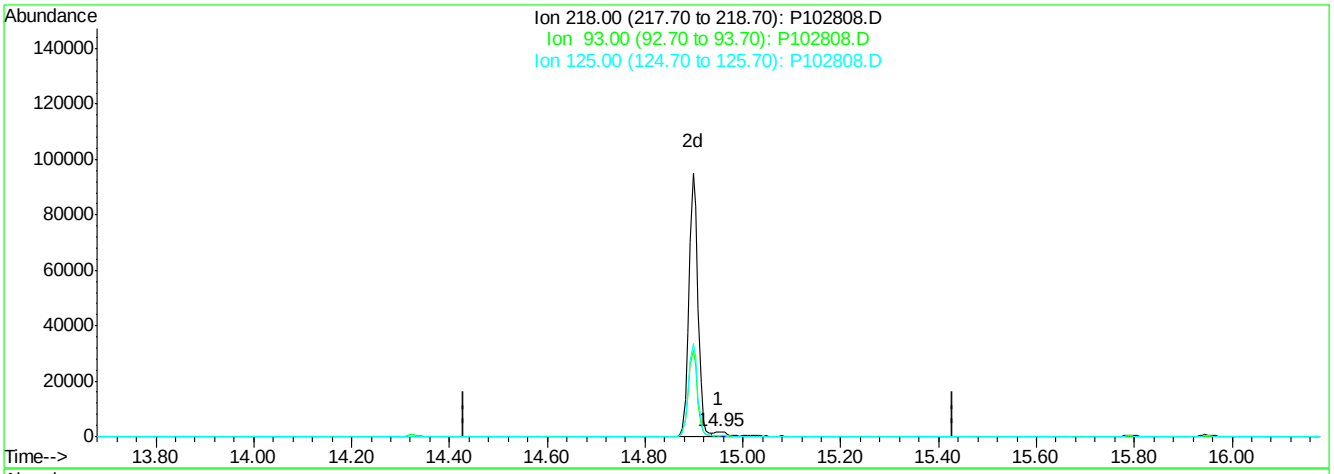
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	3.87
237.00	28.40	69.36#
0.00	0.00	0.00

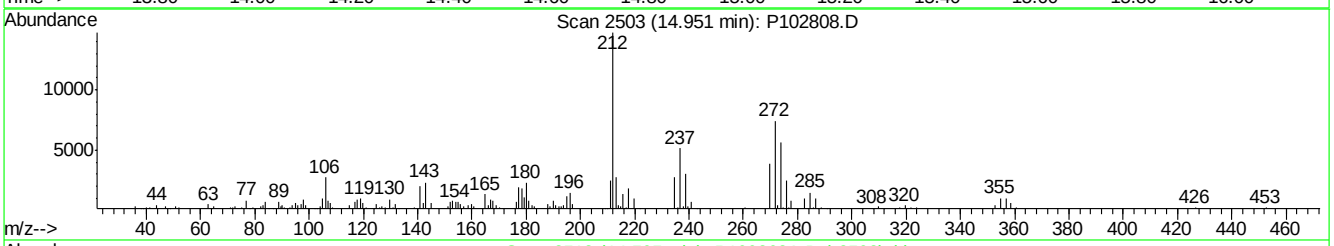
P102808.D MP4513.M Wed Feb 24 15:53:28 2016

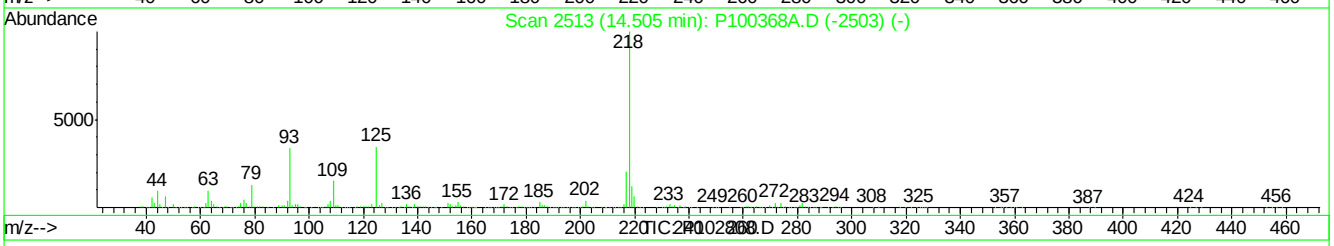
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:53 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(151) Famphur (M)

14.95min 2.88ppm

response 3481

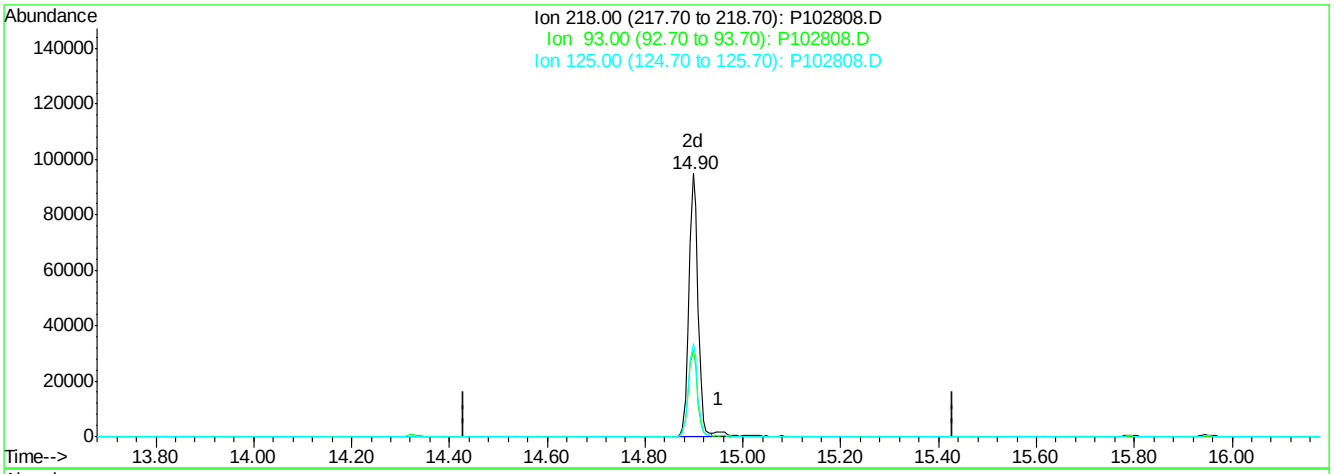
Ion	Exp%	Act%
218.00	100	100
93.00	35.60	6.54
125.00	35.50	26.97
0.00	0.00	0.00

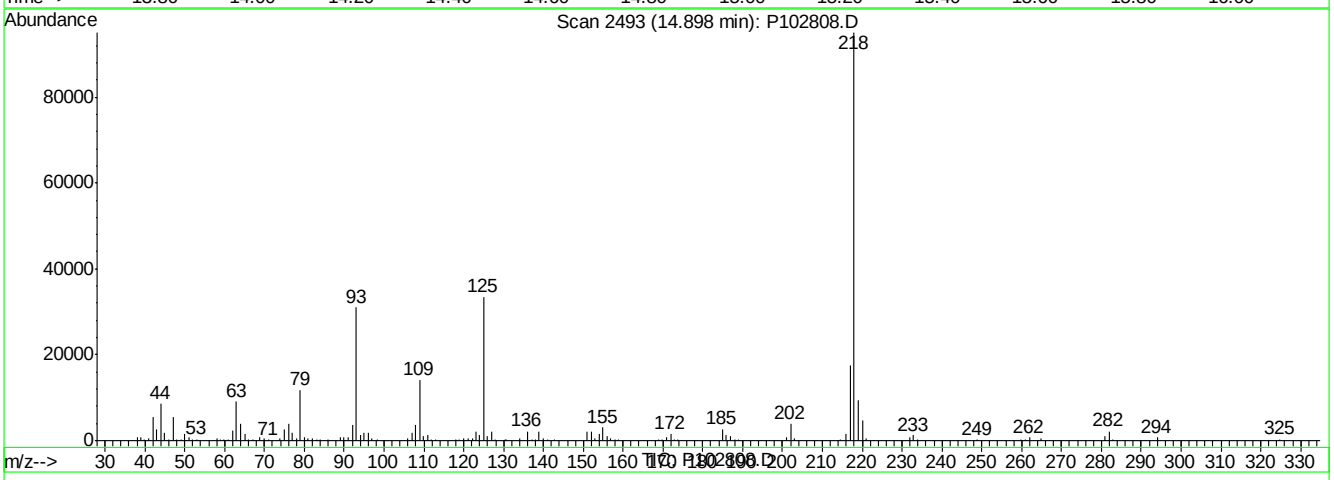
P102808.D MP4513.M Wed Feb 24 15:53:32 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102808.D Vial: 7
Acq On : 24 Feb 2016 12:42 pm Operator: linseyk
Sample : ic4515-5 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:54 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration





(151) Famphur (M)

14.90min 100.22ppm m

response 121296

Ion	Exp%	Act%
218.00	100	100
93.00	35.60	32.62
125.00	35.50	35.24
0.00	0.00	0.00

P102808.D MP4513.M Wed Feb 24 15:54:04 2016

P102809.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya 02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:55:08 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	114977	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	406209	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	227986	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	370043	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	321591	40.00	ppm	0.00
92) Perylene-d12	18.51	264	305782	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	114977	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	406209	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	227986	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	370043	40.00	ppm	-0.01
147) Chrysene-d12A	15.95	240	321591	40.00	ppm	0.00
155) Perylene-d12A	18.51	264	305782	40.00	ppm	-0.02
159) 1,4-Dichlorobenzene-d4b	4.37	152	114977	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	370043	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	321591	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	406209	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	227986	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	406209	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	114977	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	321591	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	321591	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	406209	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.49	93	11317	2.53	ppm		93
104) Pentachloroethane	4.03	167	3523	2.34	ppm		94
105) Methyl methanesulfonate	2.80	80	5221	2.38	ppm		83
106) N-Nitrosodiethylamine	3.17	102	3990	2.09	ppm		78
107) N-Nitrosomethylethylamine	2.55	42	3649	2.43	ppm		76
108) Ethyl methanesulfonate	3.47	79	6460	2.21	ppm		96
109) N-Nitrosopyrrolidine	4.85	41	2104	1.89	ppm		95
110) N-Nitrosomorpholine	4.91	56	4793	3.41	ppm		86
111) o-Toluidine	4.94	106	13688	2.92	ppm	#	53
113) O,O,O-Triethyl phosphoroth	5.77	198	3151	2.14	ppm		86
114) N-Nitrosopiperidine	5.32	42	3951	4.05	ppm		89
115) A,A-Dimethylphenethylamine	6.03	58	13373m	1.67	ppm		

(#) = qualifier out of range (m) = manual integration
P102809.D MP4513.M Wed Feb 24 16:23:39 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:55:08 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	3809	1.94	ppm		92
117)	N-Nitrosodi-n-butylamine	6.80	84	5061	2.13	ppm		94
118)	p-Phenylenediamine	6.79	108	507	0.27	ppm	#	42
119)	Safrole	7.12	162	5620	2.31	ppm		97
120)	Isosafrole	7.93	162	1473	1.78	ppm	#	45
122)	Thionazin	9.76	143	2041	2.46	ppm		89
123)	Tetraethyl dithiopyrophosp	10.29	322	1258	1.66	ppm		100
124)	Phorate	10.46	75	8978	2.52	ppm		100
125)	Phenacetin	10.49	108	6614	1.93	ppm		95
126)	1,4-Naphthoquinone	8.25	158	2833	1.77	ppm		82
127)	m-Dinitrobenzene	8.50	168	1178	1.15	ppm		79
128)	Pentachlorobenzene	9.13	250	5488	2.59	ppm		96
129)	2-Naphthylamine	9.44	143	14930	2.87	ppm		94
130)	1-Naphthylamine	9.30	143	11431	2.46	ppm		90
131)	5-Nitro-o-toluidine	9.76	152	3711	1.96	ppm		92
133)	Disulfoton	11.31	88	7338	2.46	ppm		95
134)	Dinoseb	11.30	211	807	0.55	ppm		89
135)	Dimethoate	10.70	87	5657	2.23	ppm		80
136)	4-Aminobiphenyl	10.96	169	15496	2.79	ppm		95
137)	Methyl parathion	11.92	125	2529	1.40	ppm	#	68
138)	Parathion	12.61	109	2213	1.71	ppm		77
139)	Diphenylamine	9.96	169	23857	2.90	ppm		96
140)	Isodrin	13.02	193	2287	2.24	ppm		98
141)	Diallate	10.45	86	5612m	2.81	ppm		
142)	Pentachloronitrobenzene	10.97	295	1253	4.56	ppm		90
143)	Pronamide	11.12	173	4849	1.78	ppm		90
144)	4-Nitroquinoline 1-oxide	12.57	190	2594	2.64	ppm	#	52
145)	Methapyriline	12.80	58	4501	2.18	ppm		97
146)	sym-Trinitrobenzene	10.39	213	295	0.50	ppm		97
148)	Aramite	14.25	185	411	1.46	ppm		65
149)	p-(Dimethylamine)azobenzen	14.33	120	5234	1.60	ppm		99
150)	Kepone	14.95	272	7382m	64.76	ppm		
151)	Famphur	14.90	218	44086	35.41	ppm		95
152)	2-Acetylaminofluorene	15.41	181	4949	1.19	ppm		89
153)	3,3'-Dimethylbenzidine	14.96	212	8399	9.25	ppm		94
154)	Chlorobenzilate	14.45	251	4290	1.75	ppm		86
156)	4,4-Methylene-bis-(2-chlor	15.98	266	1889	2.54	ppm	#	54
158)	3-Methylcholanthrene	19.02	252	2479	1.46	ppm	#	53

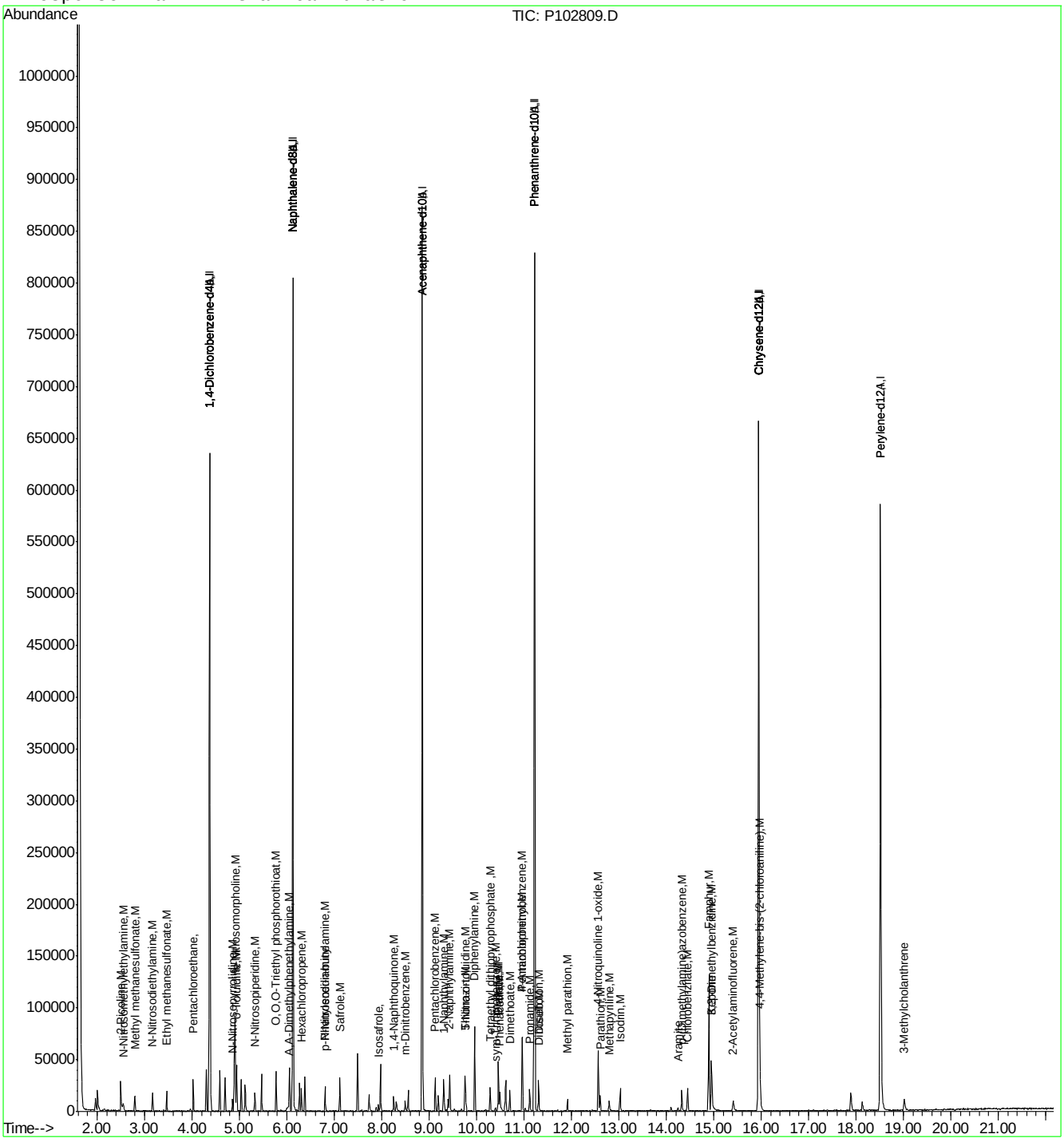
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:23 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:22:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

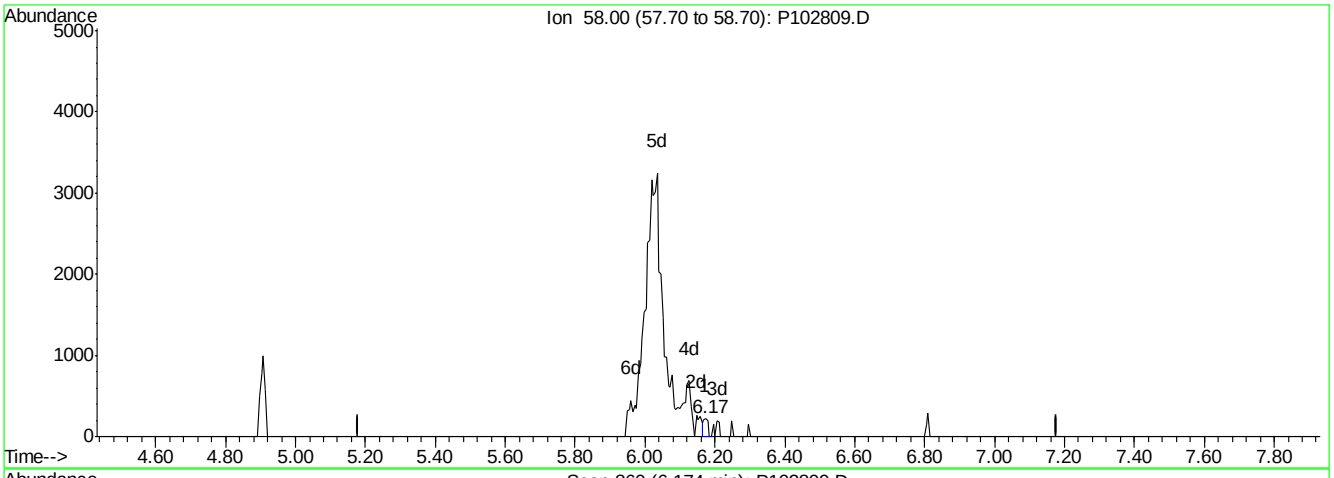
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102809.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 13:11	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

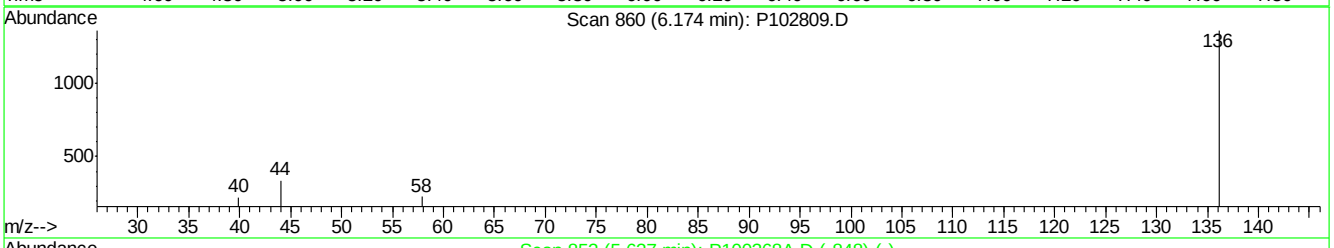
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.03	Split peak
Diallate	2303-16-4		10.45	Poor instrument integration
Kepone	143-50-0		14.95	Split peak

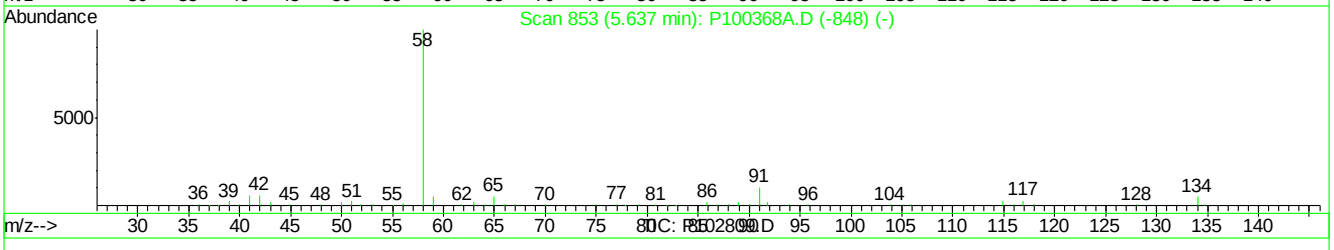
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:55 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.17min 0.03ppm

response 204

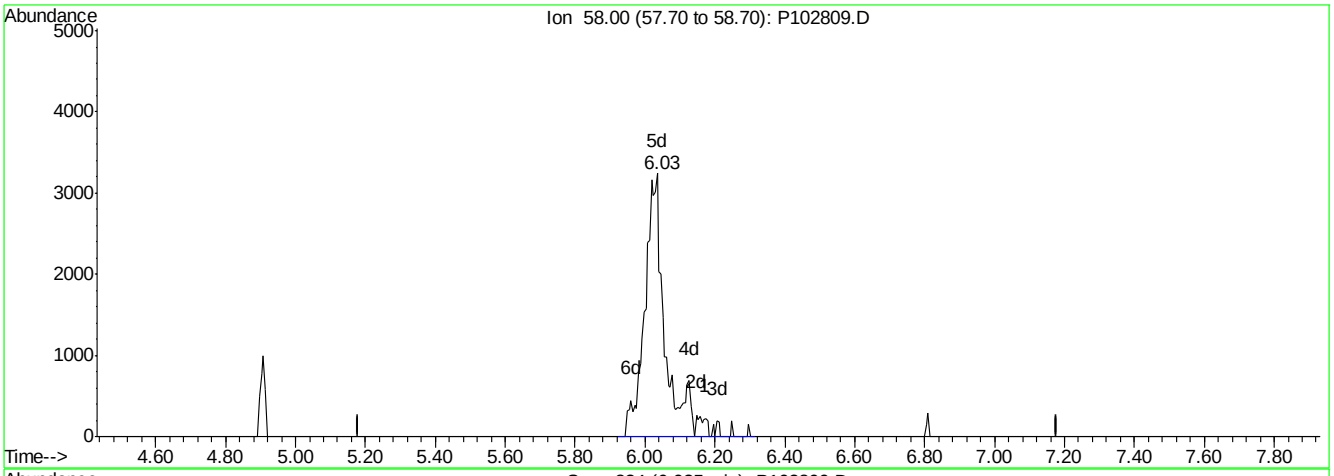
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

P102809.D MP4513.M Wed Feb 24 15:55:58 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration



(115) A,A-Dimethylphenethylamine (M)

6.03min 1.67ppm m

response 13373

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

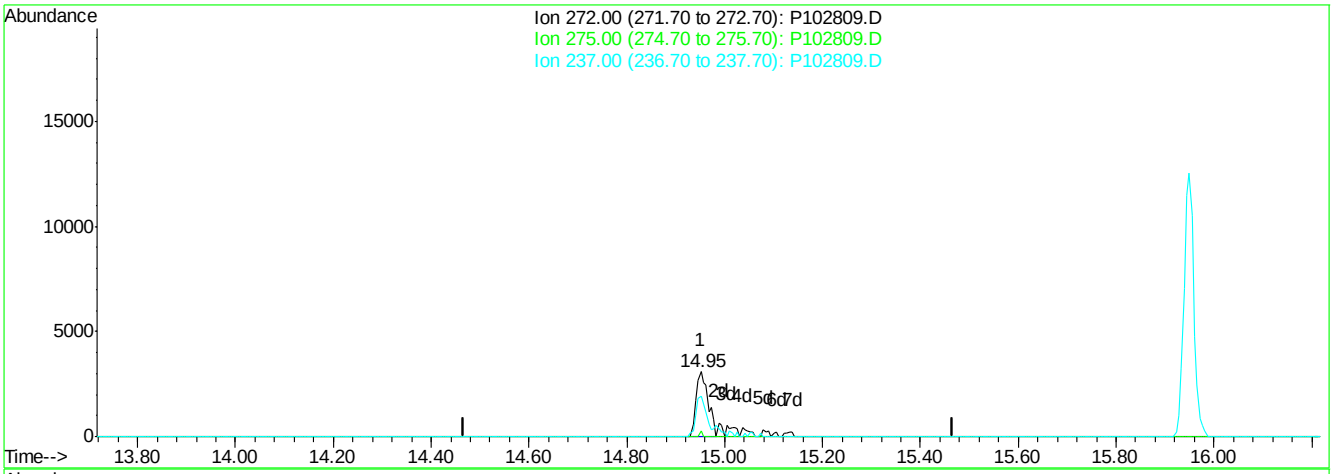
P102809.D MP4513.M Wed Feb 24 15:56:05 2016

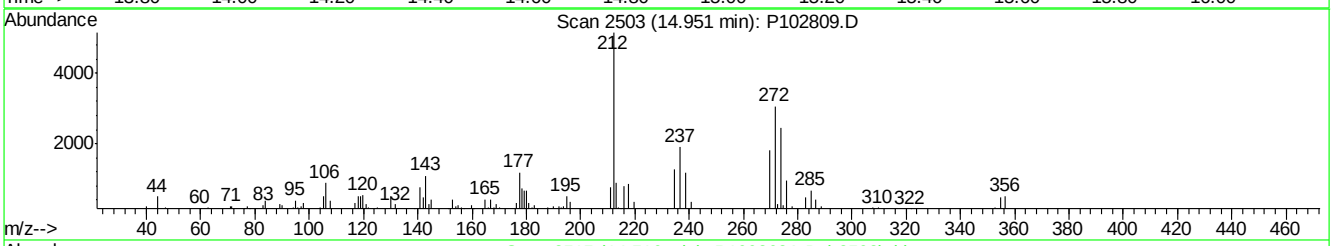
SGS ACCUTEST JC15518

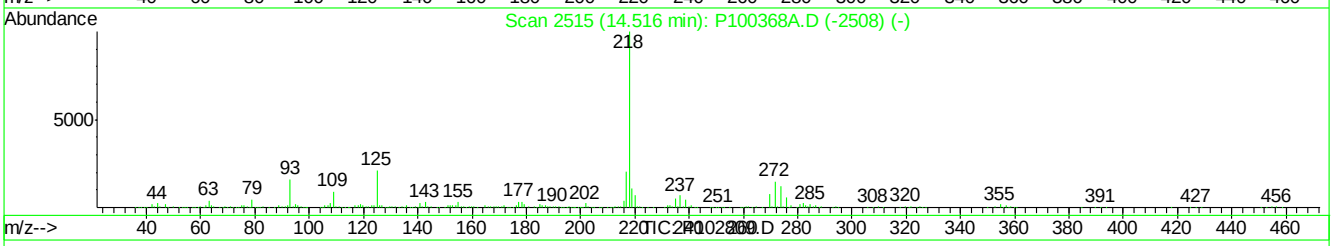
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

14.95min 46.13ppm

response 5259

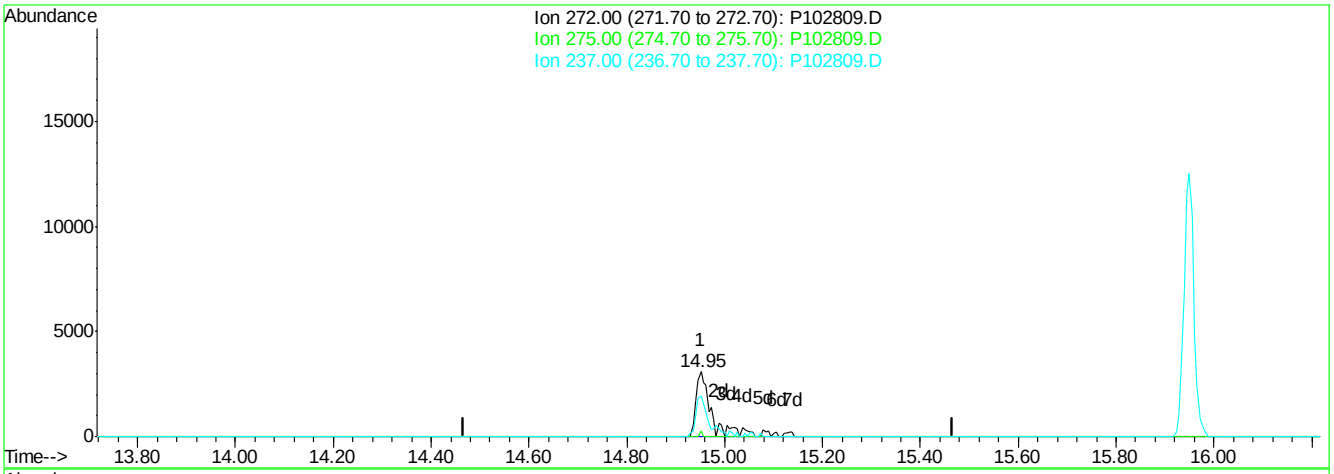
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	33.24
237.00	28.40	48.26
0.00	0.00	0.00

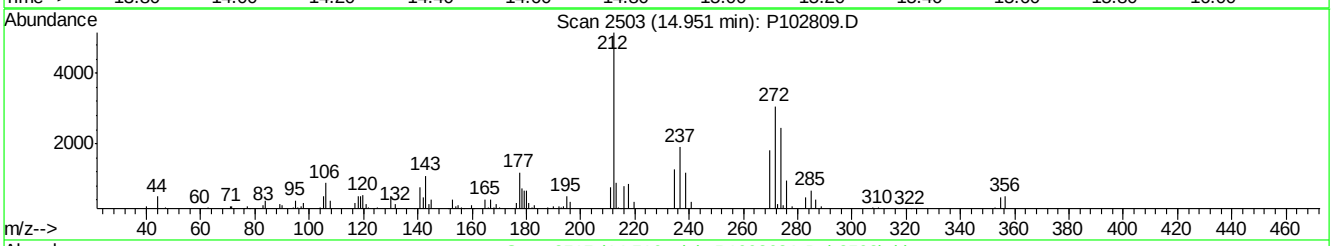
P102809.D MP4513.M Wed Feb 24 15:56:29 2016

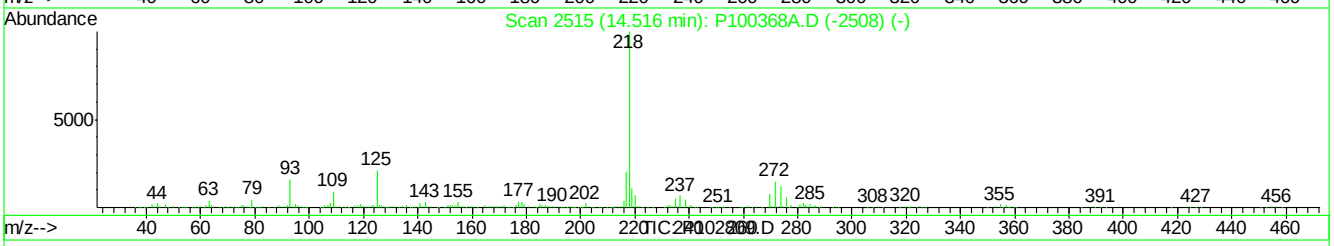
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

14.95min 64.76ppm m

response 7382

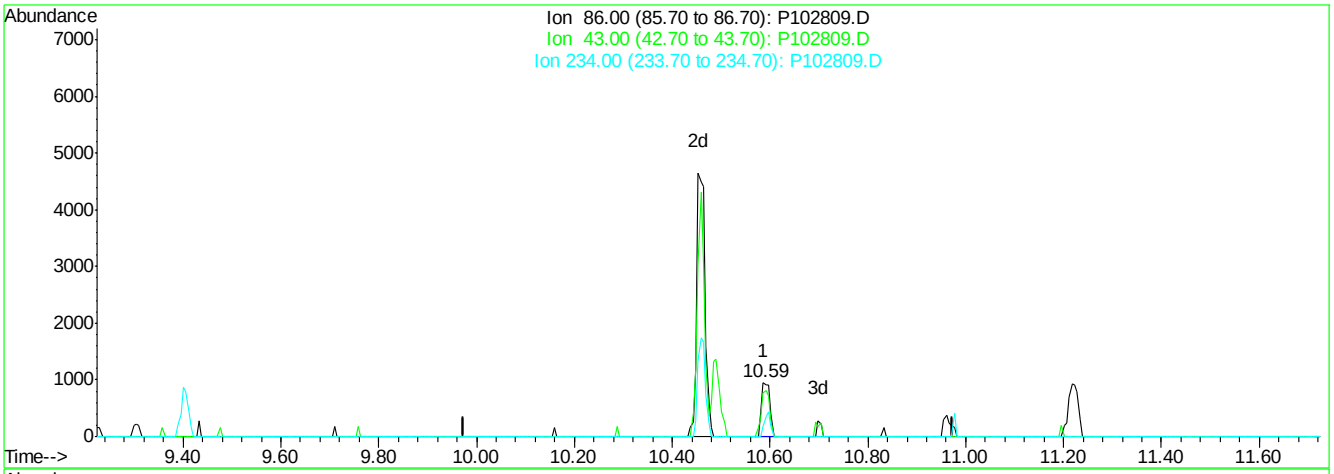
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	31.07
237.00	28.40	61.99#
0.00	0.00	0.00

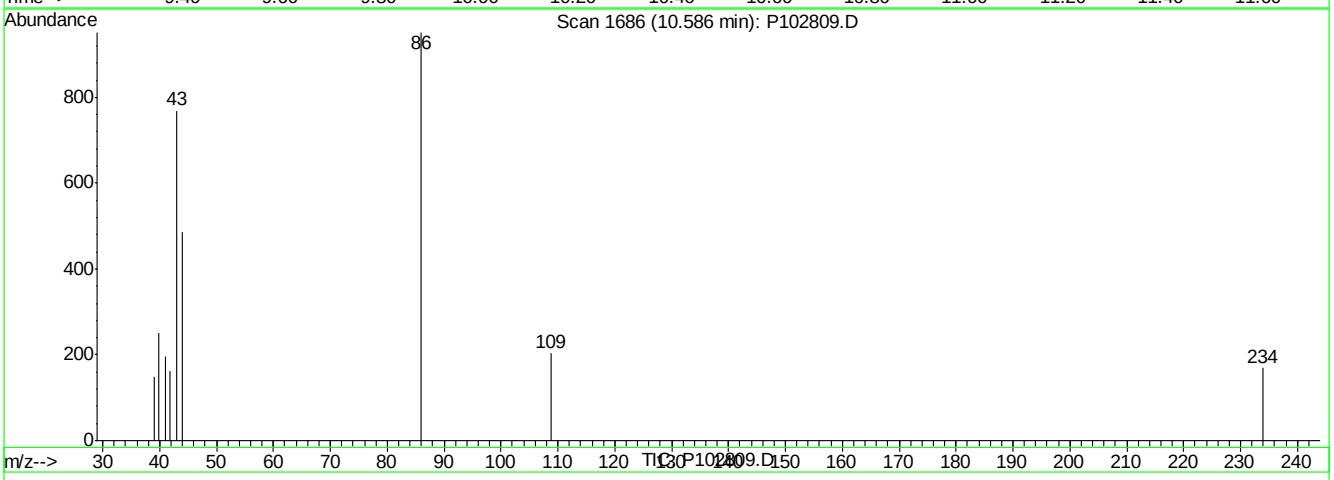
P102809.D MP4513.M Wed Feb 24 15:56:34 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:13:26 2016
Response via : Multiple Level Calibration





(141) Diallate (M)

10.59min 0.58ppm

response 1150

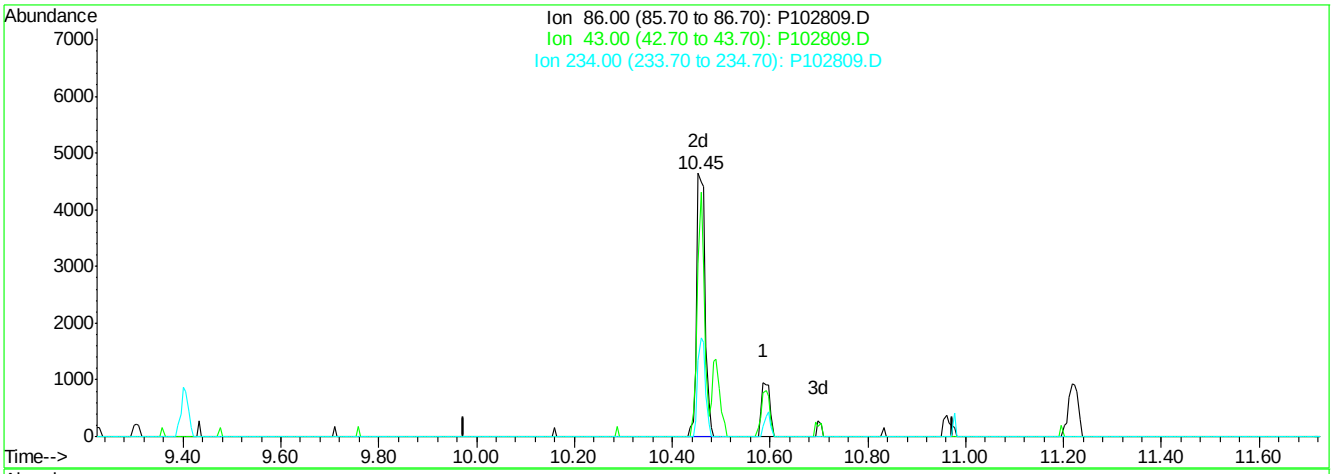
Ion	Exp%	Act%
86.00	100	100
43.00	81.90	80.86
234.00	30.80	17.77
0.00	0.00	0.00

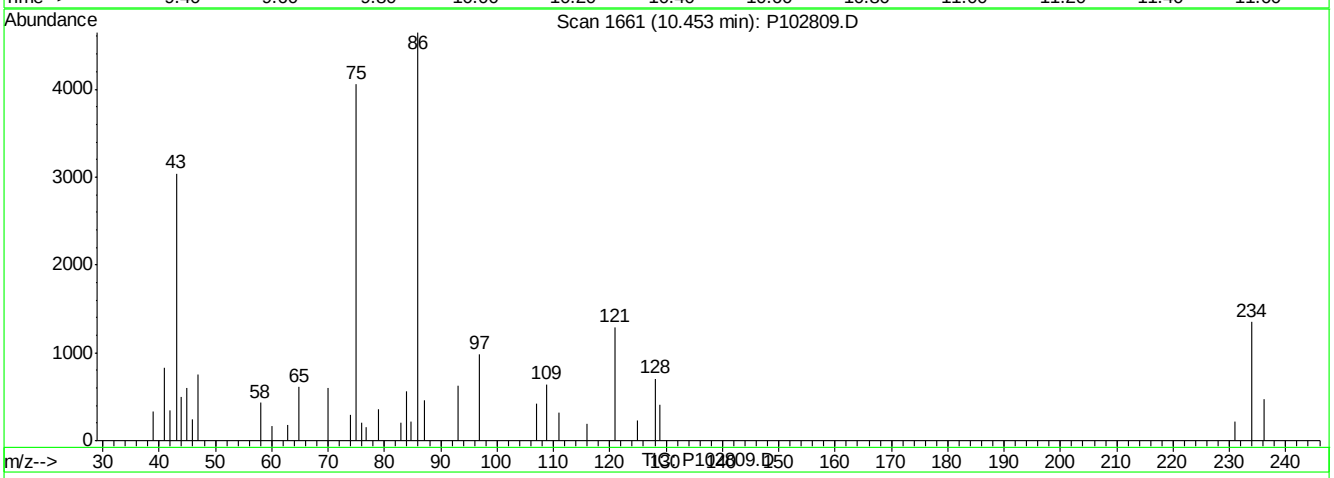
P102809.D MP4513.M Wed Feb 24 16:23:22 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102809.D Vial: 8
Acq On : 24 Feb 2016 1:11 pm Operator: linseyk
Sample : ic4515-2 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:23 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:13:26 2016
Response via : Multiple Level Calibration





(141) Diallate (M)

10.45min 2.81ppm m

response 5612

Ion	Exp%	Act%
86.00	100	100
43.00	81.90	65.44
234.00	30.80	29.01
0.00	0.00	0.00

P102809.D MP4513.M Wed Feb 24 16:23:34 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya 02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:57:02 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	119779	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	435521	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	243335	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	396205	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	341296	40.00	ppm	0.00
92) Perylene-d12	18.52	264	327759	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	119779	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	435521	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	243335	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	396205	40.00	ppm	-0.01
147) Chrysene-d12A	15.95	240	341296	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	327759	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.37	152	119779	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	396205	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	341296	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	435521	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	243335	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	435521	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	119779	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	341296	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	341296	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	435521	40.00	ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

							Qvalue
103) 2-Picoline	2.50	93	5508	1.18	ppm		94
104) Pentachloroethane	4.03	167	1693	1.08	ppm		98
105) Methyl methanesulfonate	2.80	80	2920	1.28	ppm		82
106) N-Nitrosodiethylamine	3.17	102	2145	1.08	ppm		87
107) N-Nitrosomethylethylamine	2.55	42	2006	1.28	ppm	#	67
108) Ethyl methanesulfonate	3.47	79	4041	1.33	ppm		91
109) N-Nitrosopyrrolidine	4.85	41	1337m	1.15	ppm		
110) N-Nitrosomorpholine	4.91	56	2271	1.55	ppm		82
111) o-Toluidine	4.94	106	7608	1.56	ppm	#	51
113) O,O,O-Triethyl phosphoroth	5.77	198	1783	1.13	ppm		82
114) N-Nitrosopiperidine	5.33	42	2398	2.29	ppm	#	73
115) A,A-Dimethylphenethylamine	6.00	58	7052m	0.82	ppm		

(#) = qualifier out of range (m) = manual integration
P102810.D MP4513.M Wed Feb 24 15:59:41 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:57:02 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116)	Hexachloropropene	6.31	213	2192	1.04	ppm		80
117)	N-Nitrosodi-n-butylamine	6.80	84	2706	1.06	ppm		93
118)	p-Phenylenediamine	6.79	108	599	0.29	ppm	#	38
119)	Safrole	7.11	162	2805	1.07	ppm		87
120)	Isosafrole	7.93	162	809	0.91	ppm	#	59
122)	Thionazin	9.75	143	777	0.88	ppm		94
123)	Tetraethyl dithiopyrophosp	10.29	322	612	0.76	ppm		100
124)	Phorate	10.46	75	4365	1.15	ppm		100
125)	Phenacetin	10.50	108	3169	0.87	ppm		94
126)	1,4-Naphthoquinone	8.25	158	1359	0.80	ppm		92
127)	m-Dinitrobenzene	8.50	168	488	0.45	ppm		87
128)	Pentachlorobenzene	9.13	250	2942	1.30	ppm		91
129)	2-Naphthylamine	9.44	143	7729	1.39	ppm		90
130)	1-Naphthylamine	9.31	143	6080	1.23	ppm		97
131)	5-Nitro-o-toluidine	9.77	152	1540	0.76	ppm		90
133)	Disulfoton	11.31	88	3491	1.09	ppm		98
134)	Dinoseb	11.30	211	251	0.16	ppm	#	39
135)	Dimethoate	10.70	87	2353	0.86	ppm		68
136)	4-Aminobiphenyl	10.96	169	7484	1.26	ppm		97
137)	Methyl parathion	11.91	125	926	0.48	ppm	#	65
138)	Parathion	12.61	109	957	0.69	ppm	#	72
139)	Diphenylamine	9.96	169	12696	1.44	ppm		98
140)	Isodrin	13.02	193	1393	1.28	ppm		72
141)	Diallate	10.46	86	2981	1.39	ppm		92
142)	Pentachloronitrobenzene	10.97	295	521	1.77	ppm		83
143)	Pronamide	11.12	173	2082	0.71	ppm		95
144)	4-Nitroquinoline 1-oxide	12.57	190	833	0.79	ppm	#	36
145)	Methapyriline	12.79	58	2254m	1.02	ppm		
146)	sym-Trinitrobenzene	10.39	213	106	0.17	ppm	#	23
148)	Aramite	14.25	185	134	0.45	ppm	#	65
149)	p-(Dimethylamine)azobenzen	14.33	120	2466	0.71	ppm		83
150)	Kepone	14.96	272	3255m	26.90	ppm		
151)	Famphur	14.89	218	21105	15.97	ppm		96
152)	2-Acetylaminofluorene	15.42	181	1818	0.41	ppm		74
153)	3,3'-Dimethylbenzidine	14.96	212	3654	3.79	ppm		87
154)	Chlorobenzilate	14.45	251	1717	0.66	ppm		94
156)	4,4-Methylene-bis-(2-chlor	15.99	266	587	0.74	ppm		83
158)	3-Methylcholanthrene	19.01	252	828	0.46	ppm	#	50

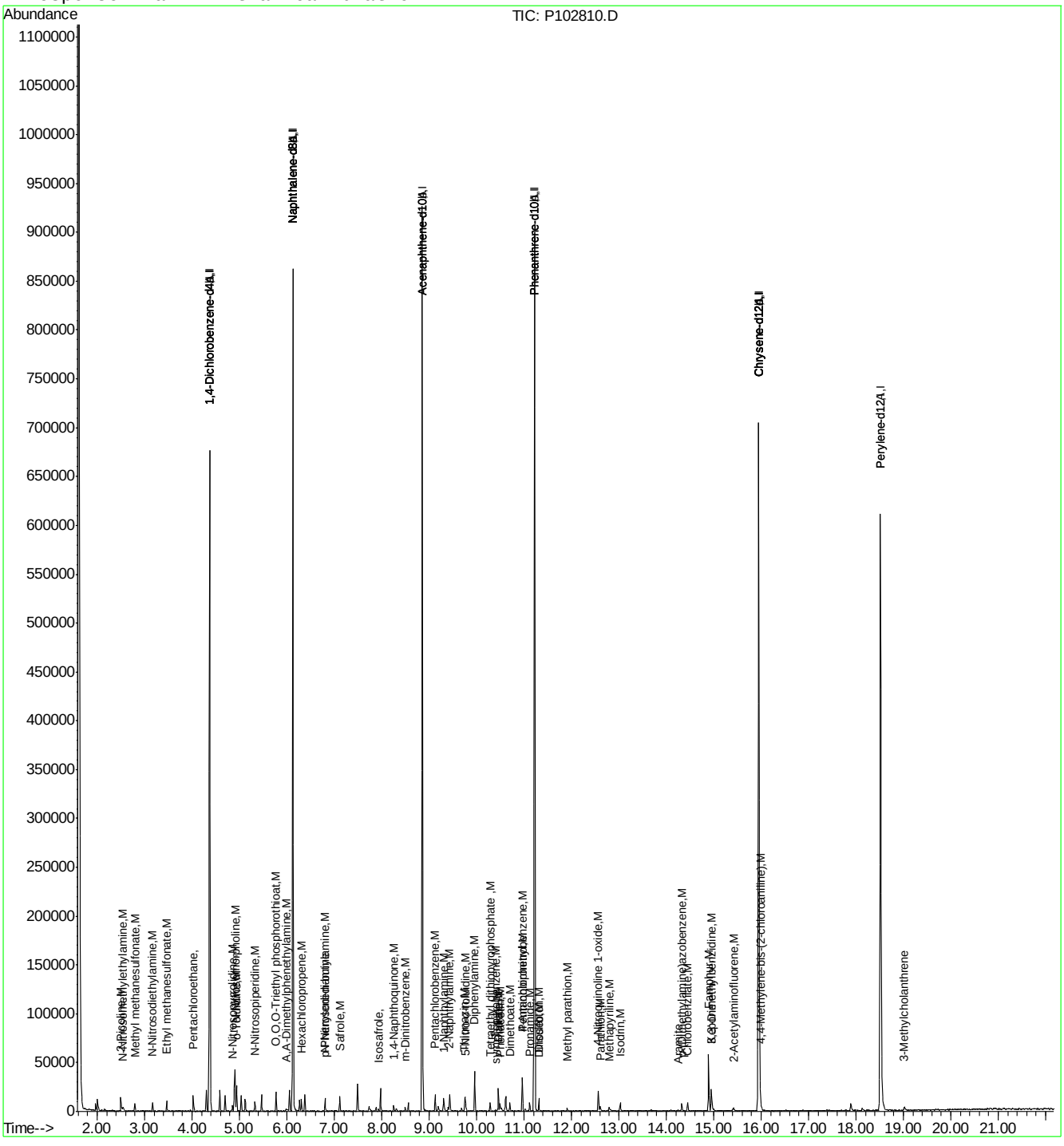
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:59 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

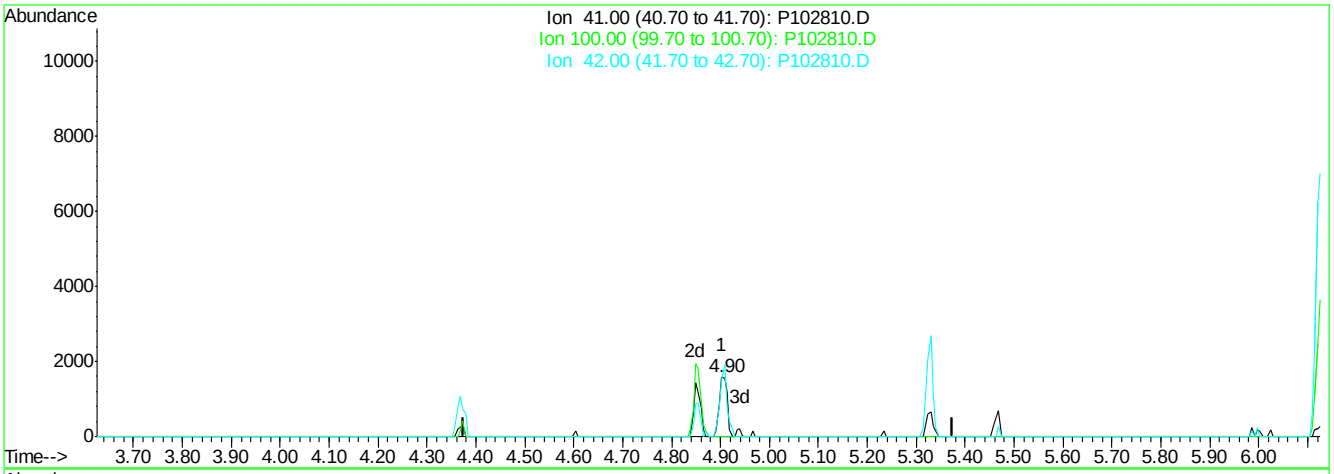
Sample Number:	EP4515-IC4515	**Method:**	SW846 8270D
Lab FileID:	P102810.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 13:41	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

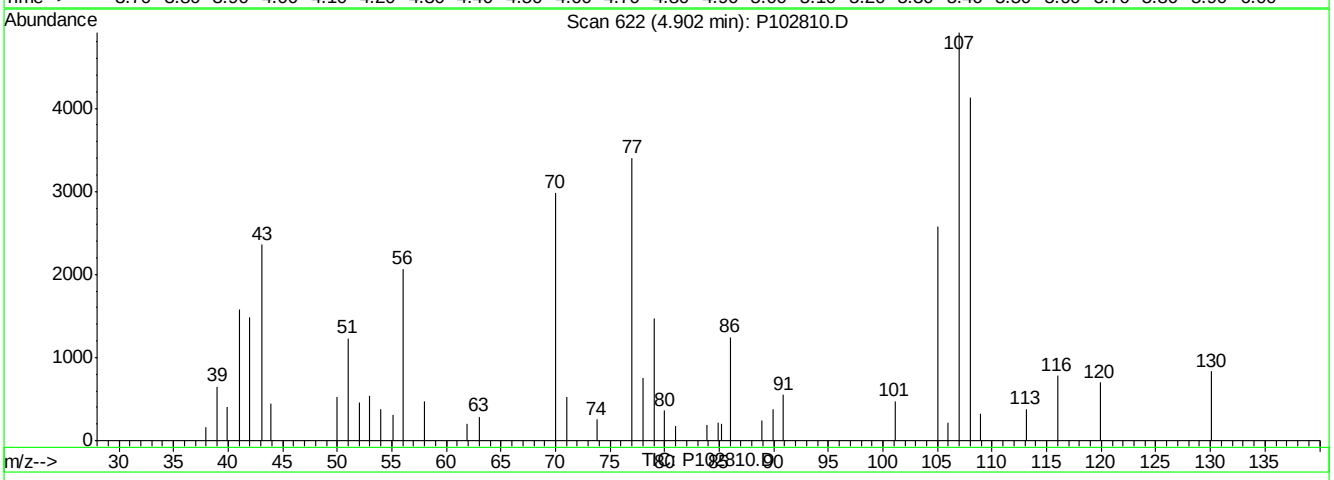
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosopyrrolidine	930-55-2		4.85	Poor instrument integration
A,A-Dimethylphenethylamine	122-09-8		6.00	Split peak
Methapyrilene	91-80-5		12.79	Split peak
Kepone	143-50-0		14.96	Split peak

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:57 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration





(109) N-Nitrosopyrrolidine (M)

4.90min 1.52ppm

response 1764

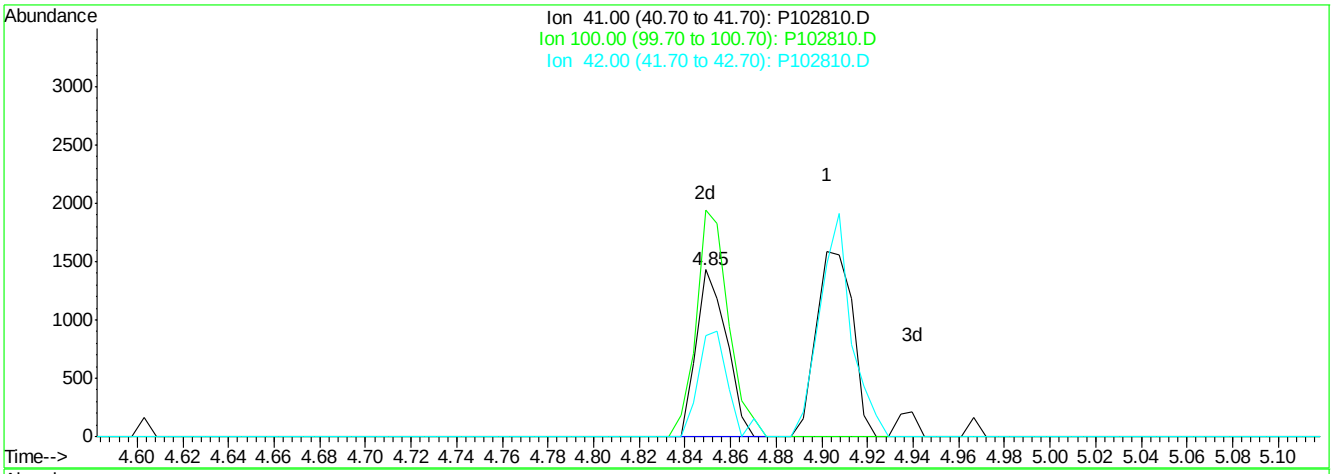
Ion	Exp%	Act%
41.00	100	100
100.00	176.30	0.00#
42.00	58.40	87.88
0.00	0.00	0.00

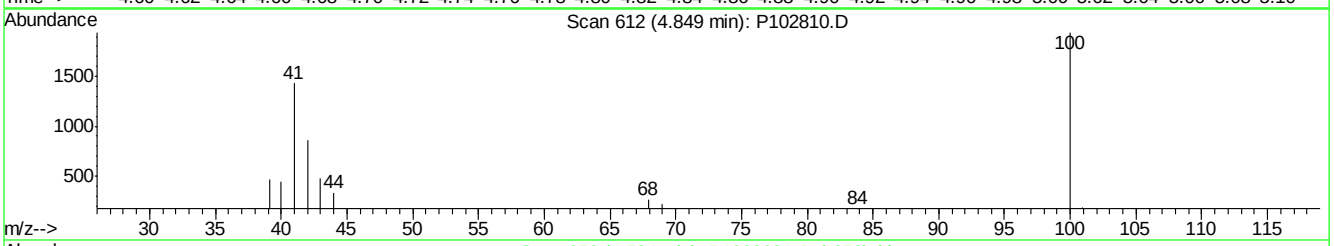
P102810.D MP4513.M Wed Feb 24 15:58:15 2016

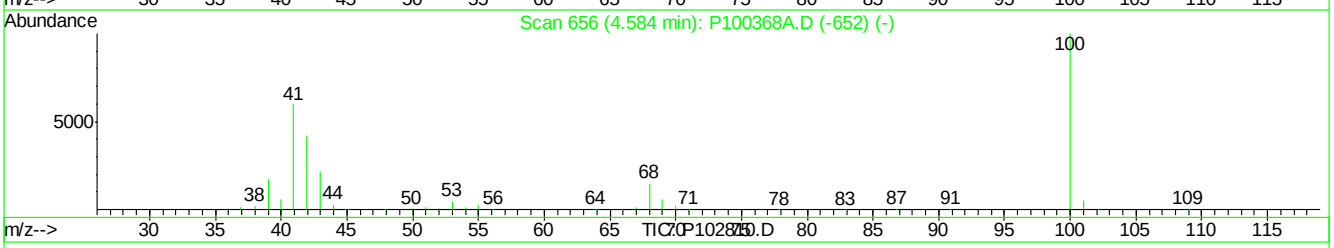
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(109) N-Nitrosopyrrolidine (M)

4.85min 1.15ppm m

response 1337

Ion	Exp%	Act%
41.00	100	100
100.00	176.30	135.66#
42.00	58.40	60.21
0.00	0.00	0.00

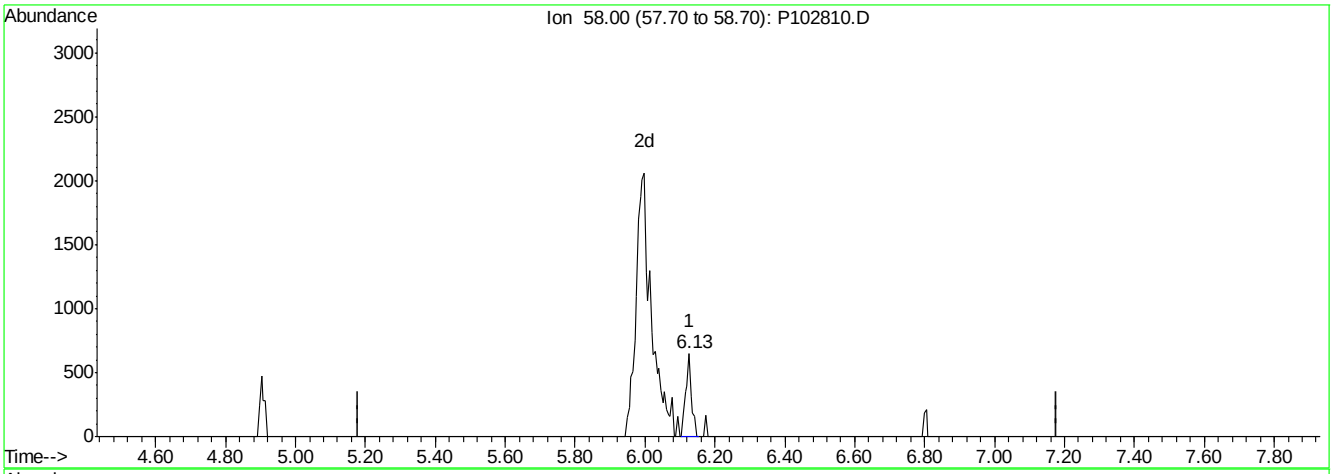
P102810.D MP4513.M Wed Feb 24 15:58:22 2016

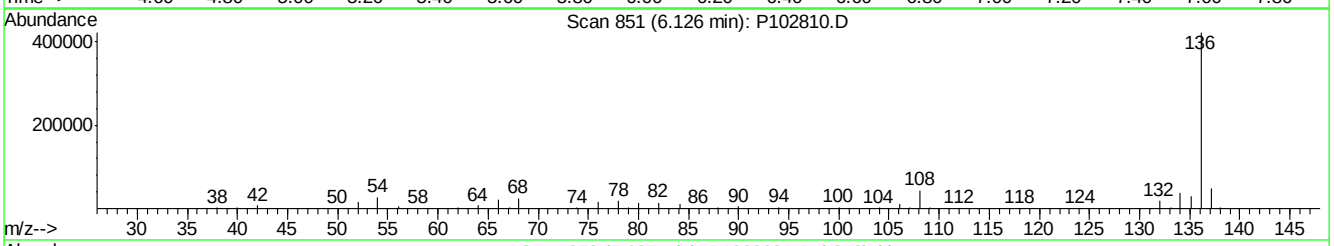
SGS ACCUTEST JC15518

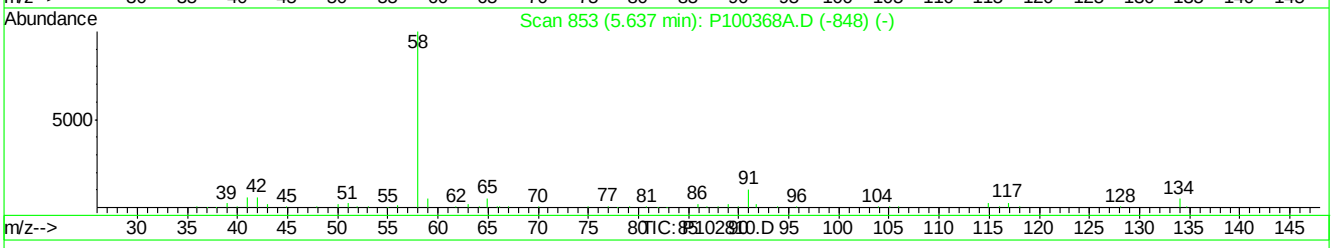
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.13min 0.08ppm

response 718

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

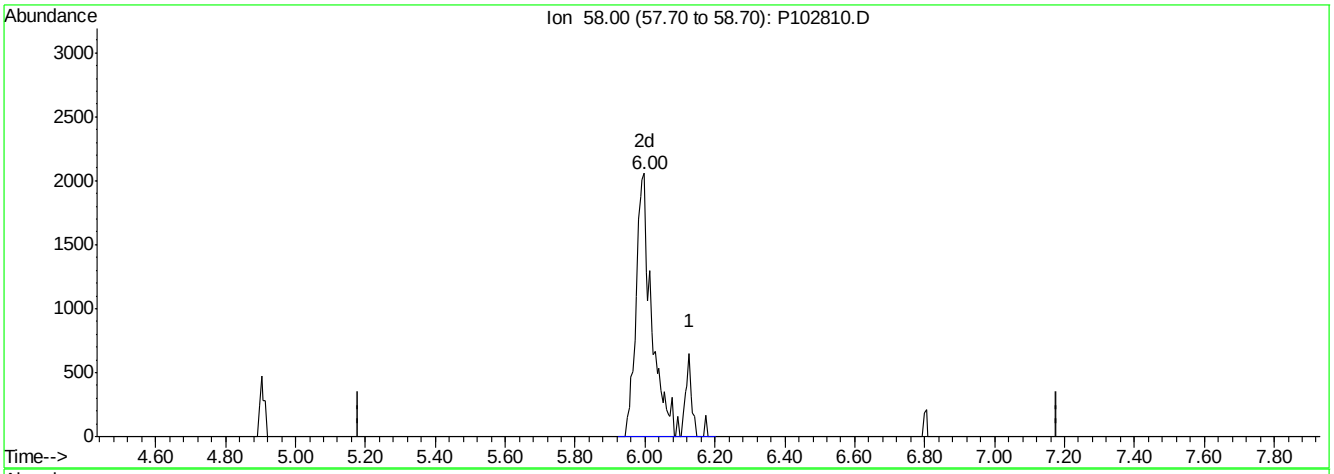
P102810.D MP4513.M Wed Feb 24 15:58:30 2016

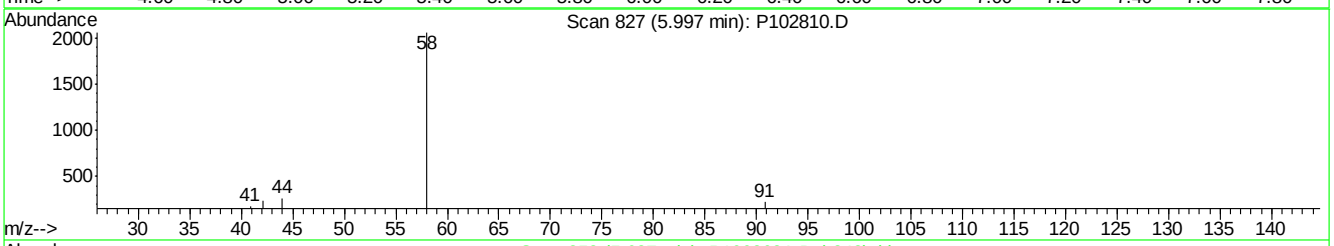
SGS ACCUTEST JC15518

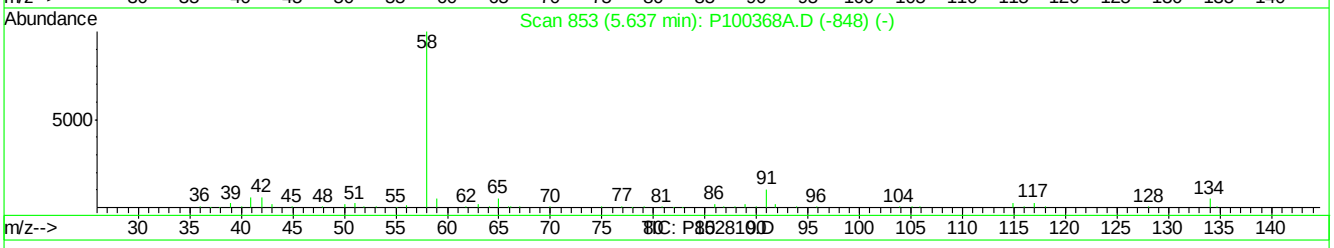
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.00min 0.82ppm m

response 7052

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

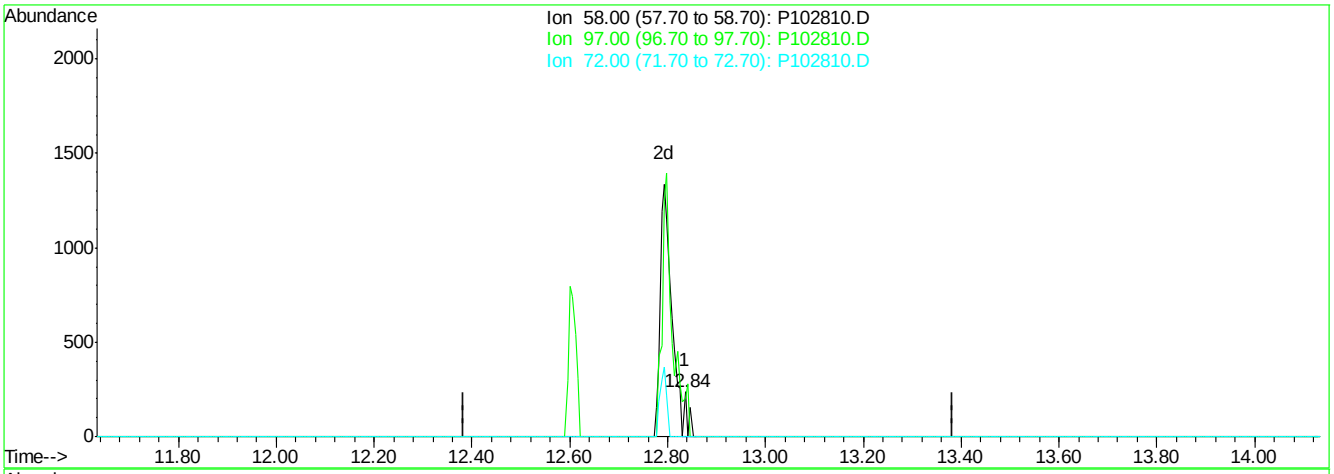
P102810.D MP4513.M Wed Feb 24 15:58:34 2016

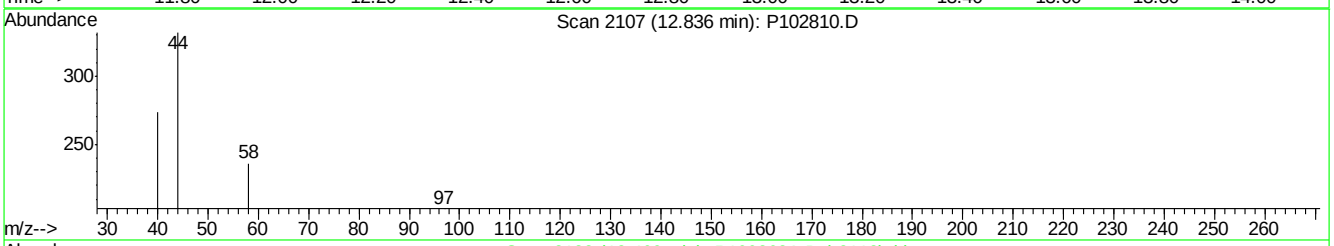
SGS ACCUTEST JC15518

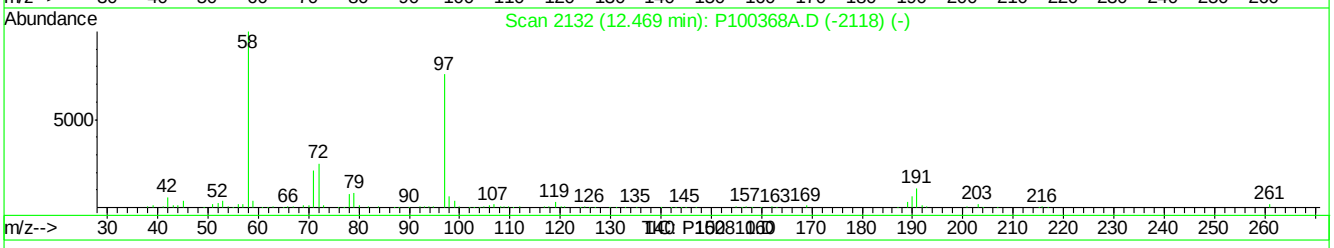
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(145) Methapyriline (M)

12.84min 0.06ppm

response 125

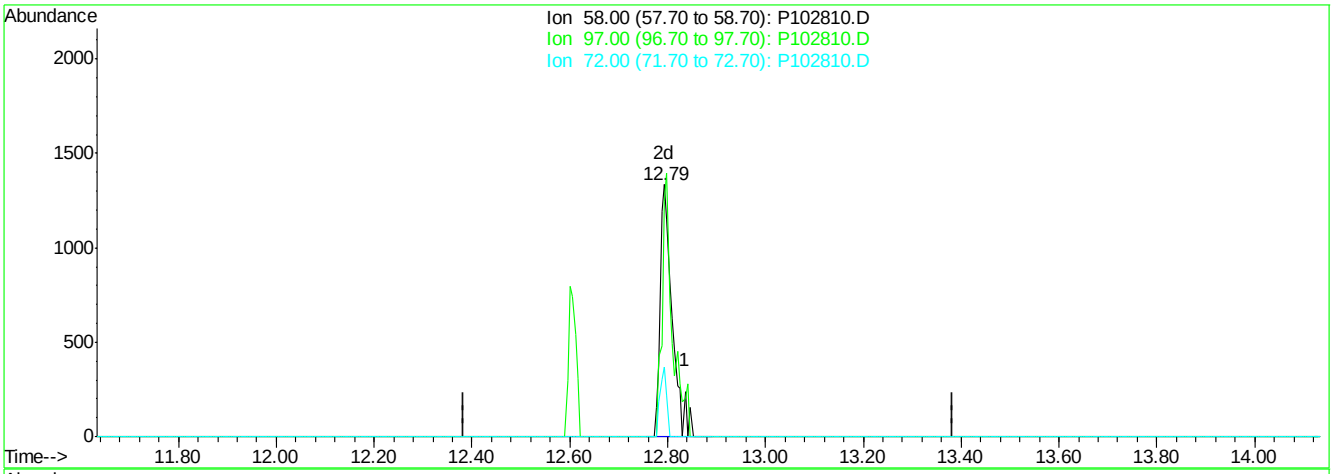
Ion	Exp%	Act%
58.00	100	100
97.00	72.10	47.03
72.00	27.20	0.00
0.00	0.00	0.00

P102810.D MP4513.M Wed Feb 24 15:59:03 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:59 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration



(145) Methapyriline (M)

12.79min 1.02ppm m

response 2254

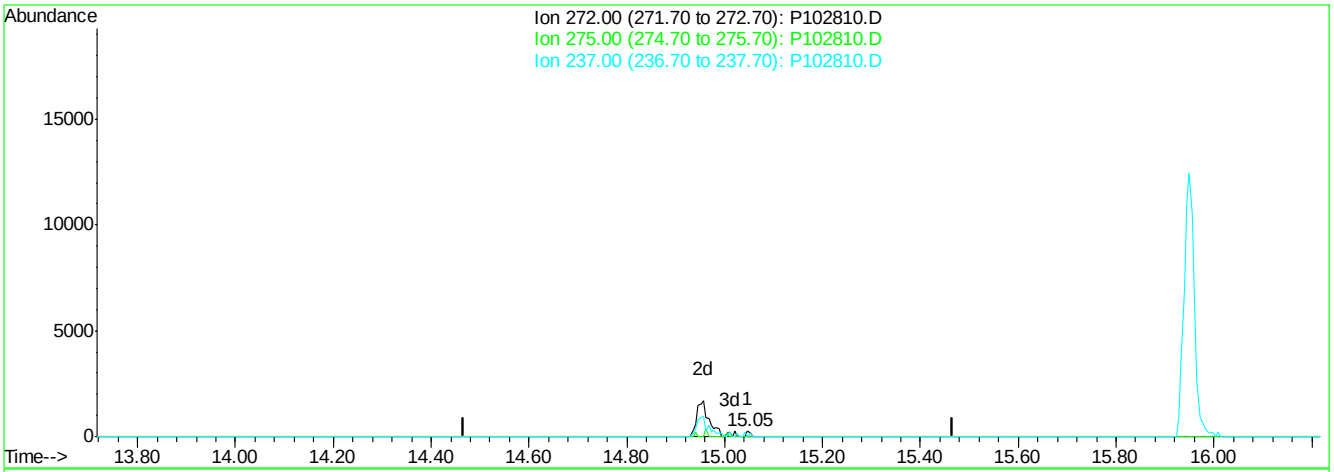
Ion	Exp%	Act%
58.00	100	100
97.00	72.10	93.33
72.00	27.20	27.79
0.00	0.00	0.00

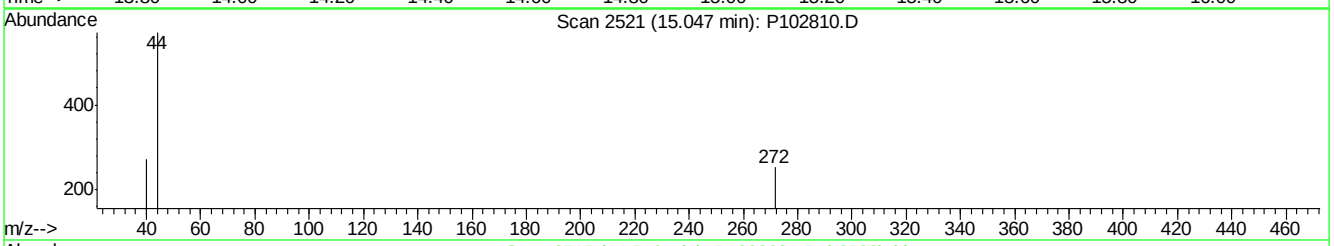
P102810.D MP4513.M Wed Feb 24 15:59:07 2016

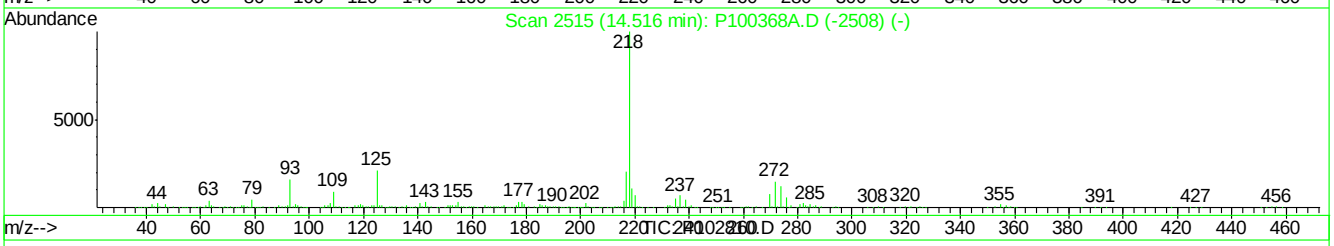
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:59 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

15.05min 1.10ppm

response 133

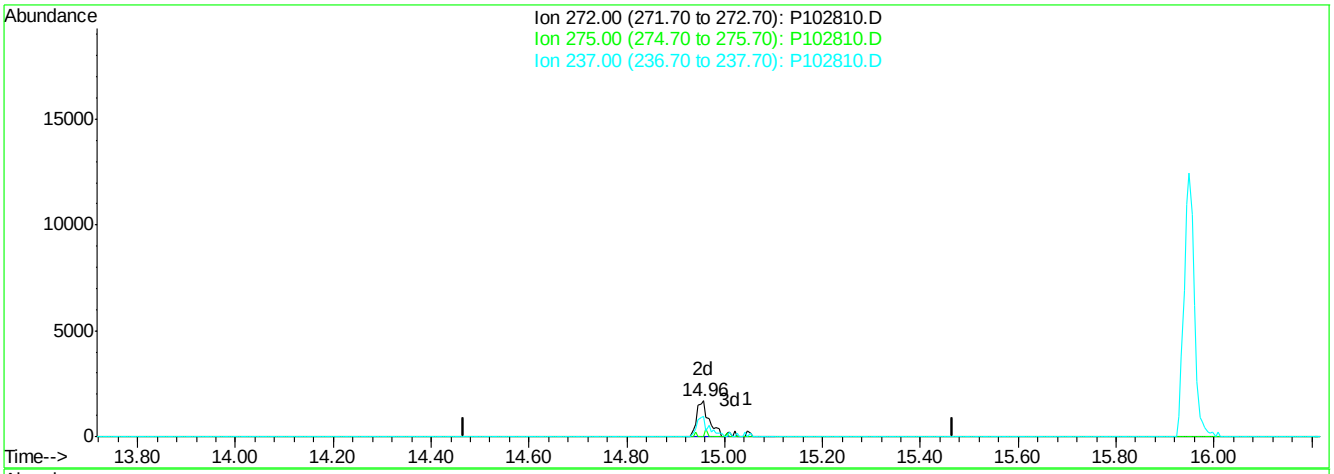
Ion	Exp%	Act%
272.00	100	100
275.00	3.50	0.00
237.00	28.40	0.00
0.00	0.00	0.00

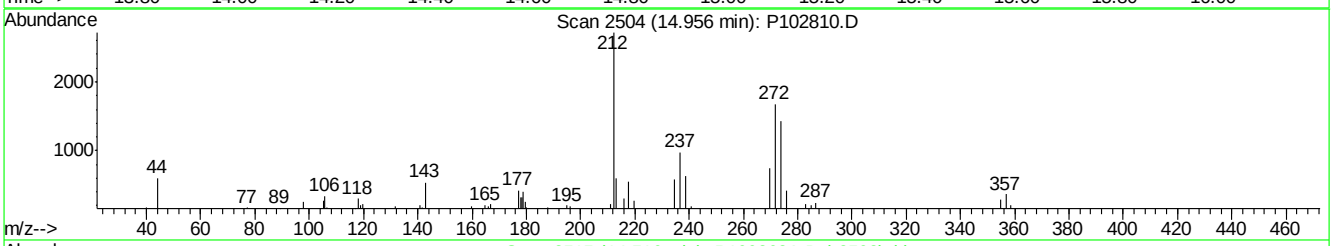
P102810.D MP4513.M Wed Feb 24 15:59:13 2016

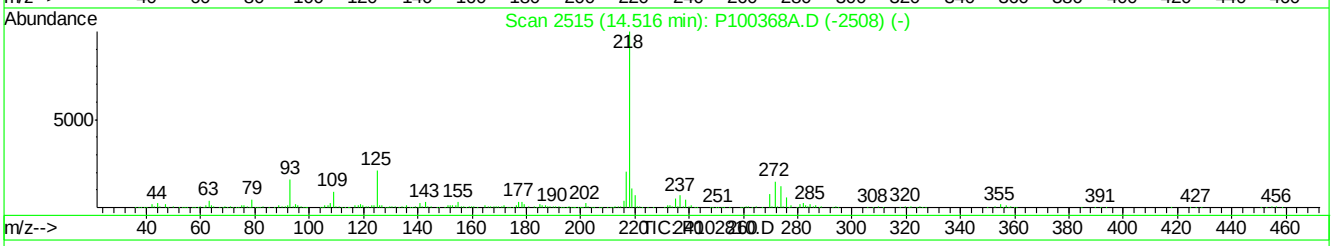
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102810.D Vial: 9
Acq On : 24 Feb 2016 1:41 pm Operator: linseyk
Sample : ic4515-1 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 15:59 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 15:49:44 2016
Response via : Multiple Level Calibration







(150) Kepone

14.96min 26.90ppm m

response 3255

Ion	Exp%	Act%
272.00	100	100
275.00	3.50	25.46
237.00	28.40	58.50#
0.00	0.00	0.00

P102810.D MP4513.M Wed Feb 24 15:59:17 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
02/26/16 12:38

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:34:27 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	123082	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	427280	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	252579	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	394401	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	352488	40.00	ppm	0.00
92) Perylene-d12	18.52	264	337330	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	123082	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	427280	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	252579	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	394401	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	352488	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	337330	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	123082	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	394401	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	352488	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	427280	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	252579	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	427280	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	123082	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	352488	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	352488	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	427280	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
103) 2-Picoline	2.47	93	231418	43.88	ppm	100
104) Pentachloroethane	4.03	167	65432	37.08	ppm	98
106) N-Nitrosodiethylamine	3.16	102	101496	47.29	ppm	95
107) N-Nitrosomethylethylamine	2.54	42	82475	46.54	ppm	99
108) Ethyl methanesulfonate	3.46	79	156399	45.19	ppm	95
109) N-Nitrosopyrrolidine	4.85	41	63509	51.46	ppm	98
110) N-Nitrosomorpholine	4.91	56	88725	45.10	ppm	98
113) O,O,O-Triethyl phosphoroth	5.78	198	80540	47.61	ppm	93
114) N-Nitrosopiperidine	5.32	42	103638	48.52	ppm	97
115) A,A-Dimethylphenethylamine	6.17	58	408697m	53.32	ppm	
116) Hexachloropropene	6.31	213	100224	45.49	ppm	99
117) N-Nitrosodi-n-butylamine	6.81	84	130669	48.38	ppm	99

(#) = qualifier out of range (m) = manual integration
P102811.D MP4513.M Fri Feb 26 09:41:09 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:34:27 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
118) p-Phenylenediamine	6.79	108	125220m	60.97 ppm	
119) Safrole	7.12	162	142043	50.71 ppm	98
122) Thionazin	9.76	143	50606	50.38 ppm	97
123) Tetraethyl dithiopyrophosp	10.29	322	43306	51.13 ppm	100
124) Phorate	10.47	75	227114	48.18 ppm	100
125) Phenacetin	10.51	108	198796	49.53 ppm	96
126) 1,4-Naphthoquinone	8.26	158	103585	57.75 ppm	96
128) Pentachlorobenzene	9.13	250	123001	44.62 ppm	98
131) 5-Nitro-o-toluidine	9.77	152	79845	36.63 ppm	94
133) Disulfoton	11.31	88	201659	53.89 ppm	96
135) Dimethoate	10.71	87	149883	49.77 ppm	98
137) Methyl parathion	11.92	125	91225	46.31 ppm	98
138) Parathion	12.61	109	85236	57.89 ppm	97
140) Isodrin	13.03	193	62390	49.94 ppm	96
141) Diallate	10.46	86	134022	50.17 ppm	95
142) Pentachloronitrobenzene	10.97	295	16559	50.58 ppm	92
143) Pronamide	11.13	173	168808	58.00 ppm	99
144) 4-Nitroquinoline 1-oxide	12.57	190	37738	38.13 ppm	95
145) Methapyriline	12.79	58	149554	52.86 ppm	98
148) Aramite	14.25	185	37676	117.44 ppm	93
149) p-(Dimethylamine)azobenzen	14.33	120	193771	54.42 ppm	97
152) 2-Acetylaminofluorene	15.42	181	259544	60.27 ppm	99
154) Chlorobenzilate	14.45	251	130363	49.05 ppm	97
158) 3-Methylcholanthrene	19.02	252	96526	52.40 ppm	91

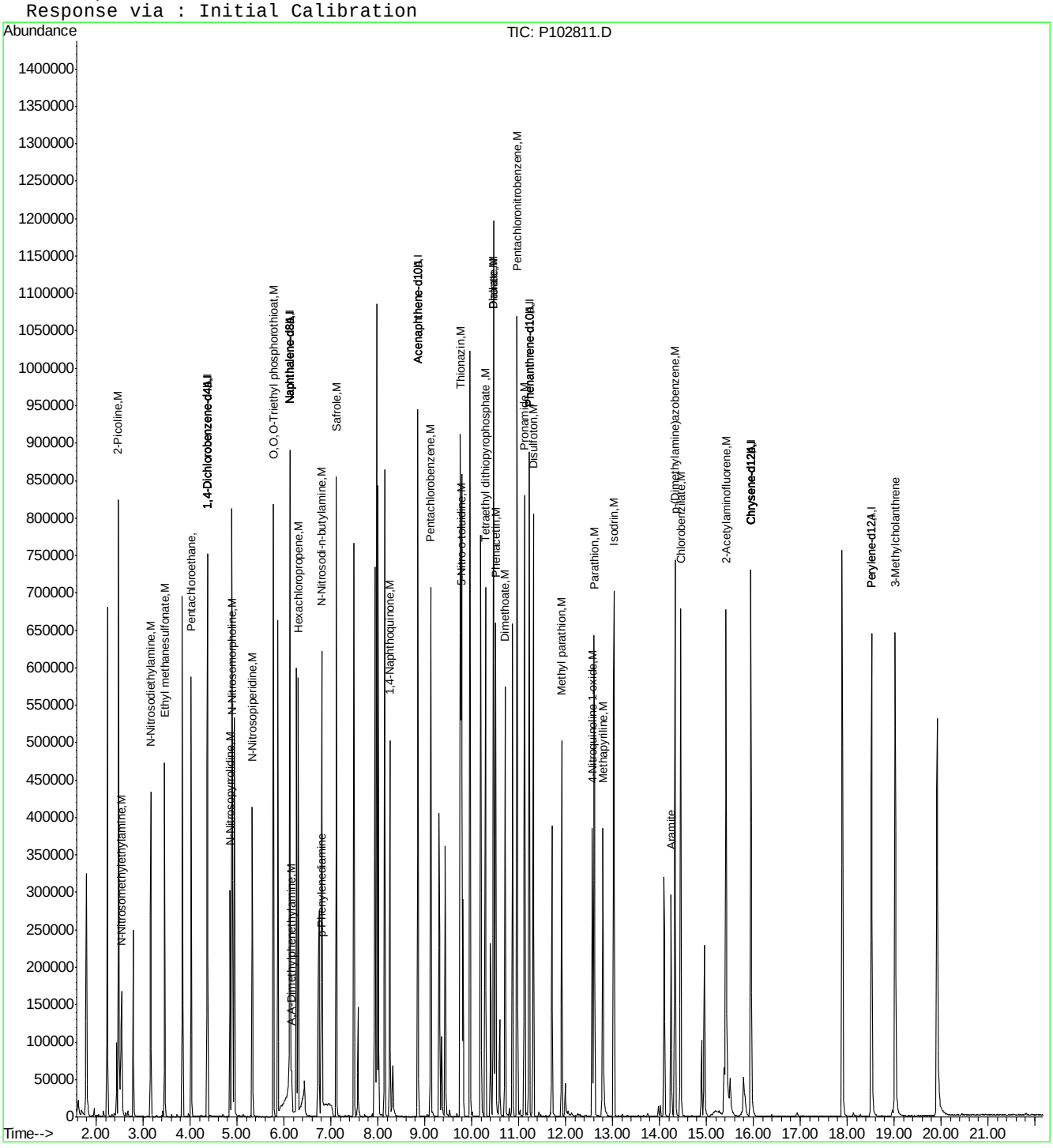
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 17:00 2016 Quant Results File: MP4513.RES

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



Manual Integration Approval Summary

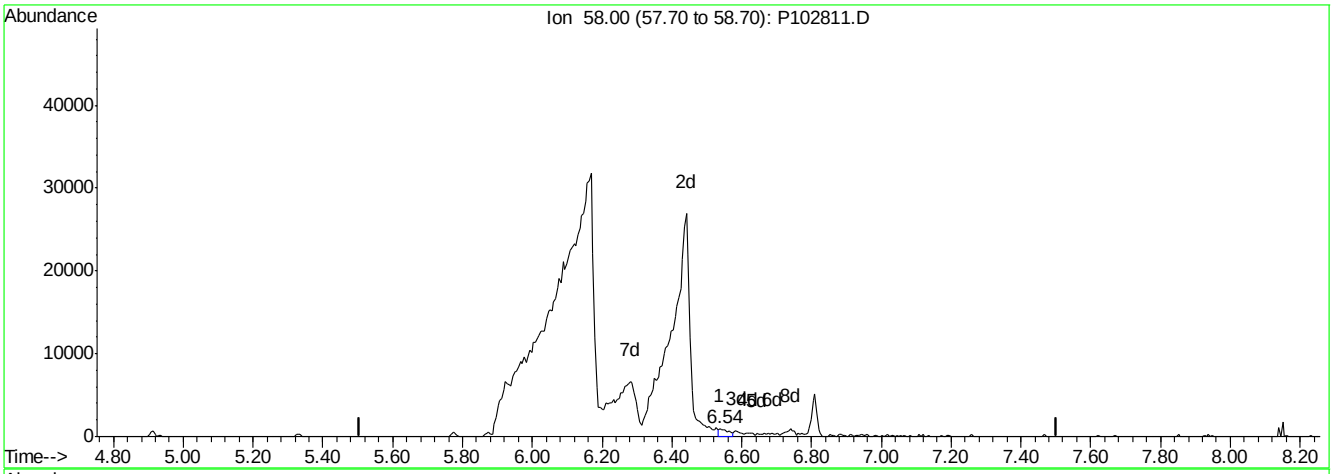
Sample Number:	EP4515-ICV4515	**Method:**	SW846 8270D
Lab FileID:	P102811.D	**Analyst approved:**	02/26/16 09:39 Kristi Schollenberger
Injection Time:	02/24/16 14:11	**Supervisor approved:**	02/26/16 12:38 Nina Pandya

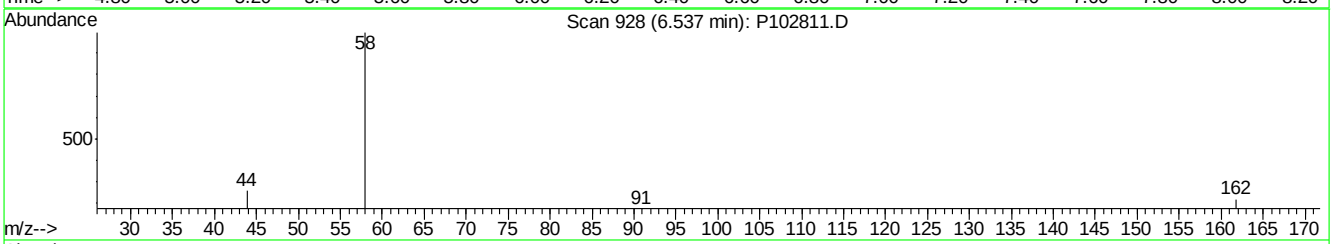
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.17	Split peak
p-Phenylenediamine	106-50-3		6.79	Split peak

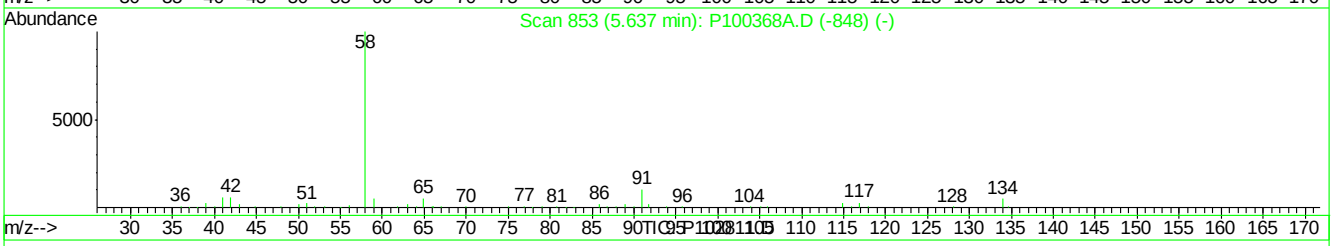
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:35 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.54min 0.24ppm

response 1827

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

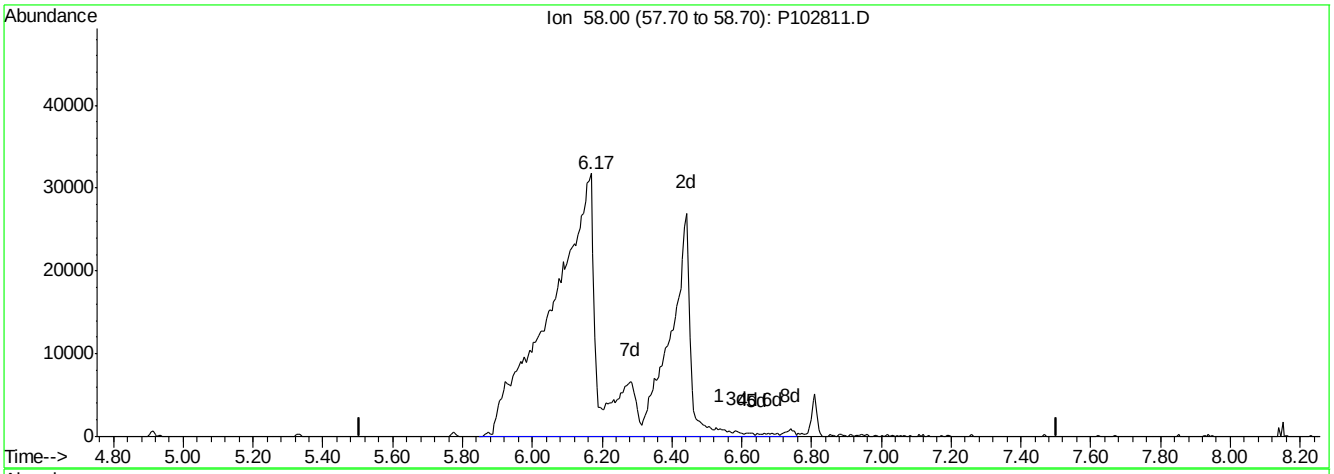
P102811.D MP4513.M Wed Feb 24 16:35:39 2016

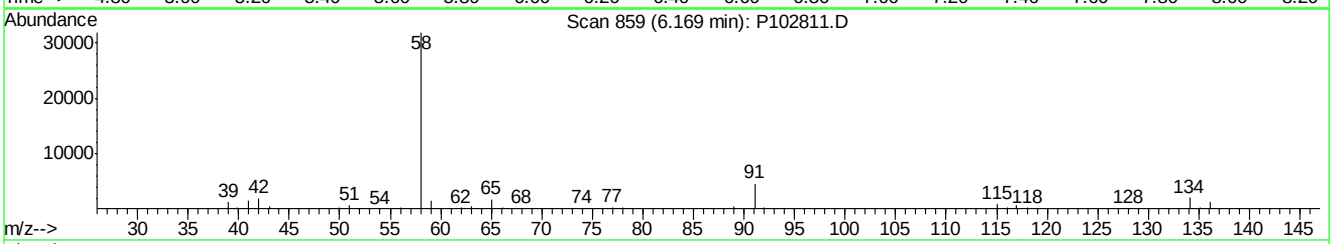
SGS ACCUTEST JC15518

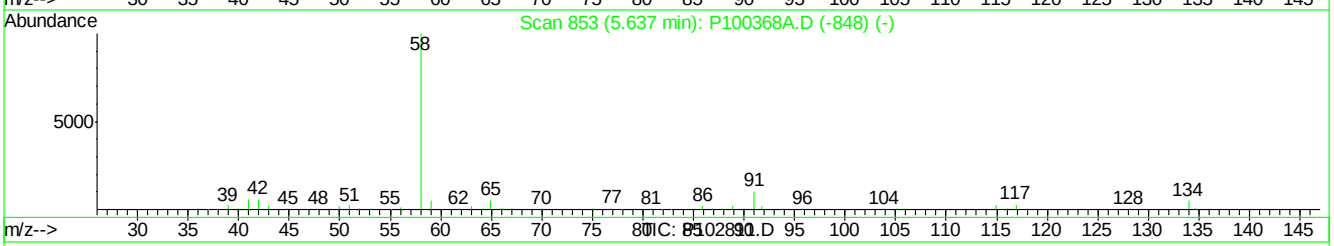
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:35 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.17min 53.32ppm m

response 408697

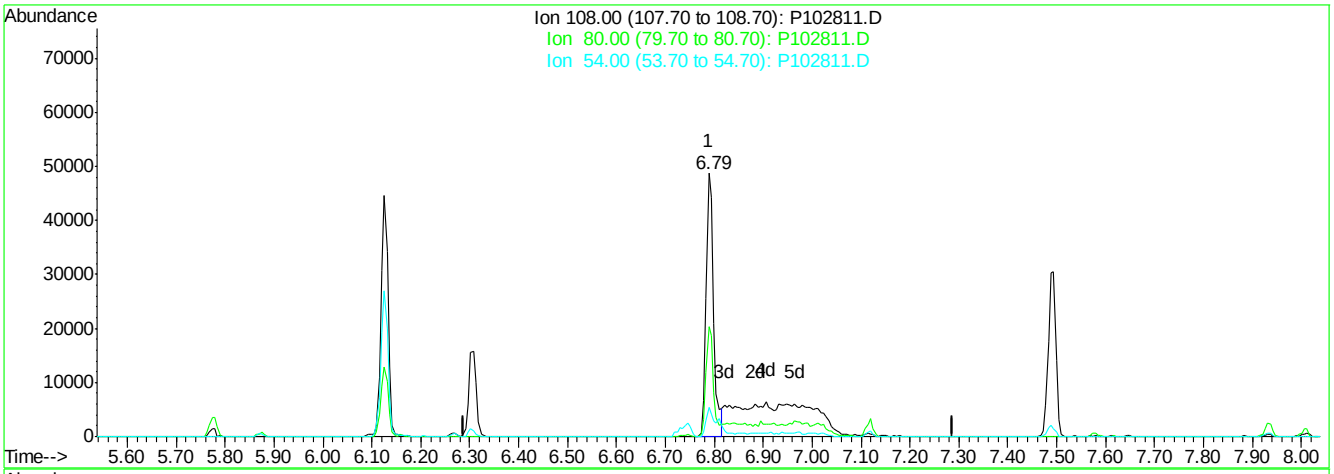
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

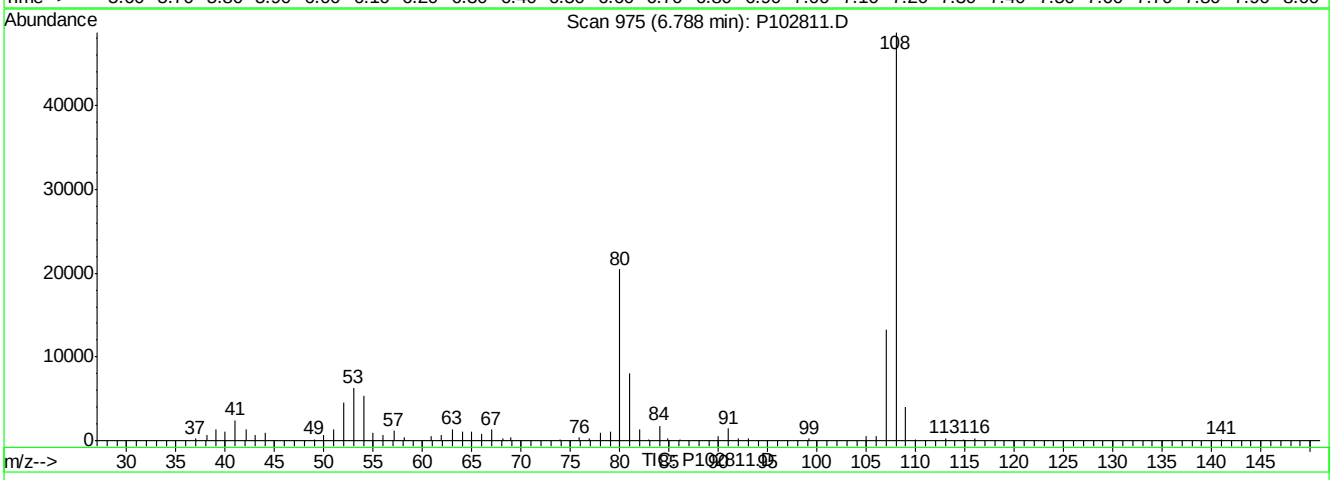
P102811.D MP4513.M Wed Feb 24 16:35:53 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:35 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Multiple Level Calibration





(118) p-Phenylenediamine

6.79min 26.54ppm

response 52862

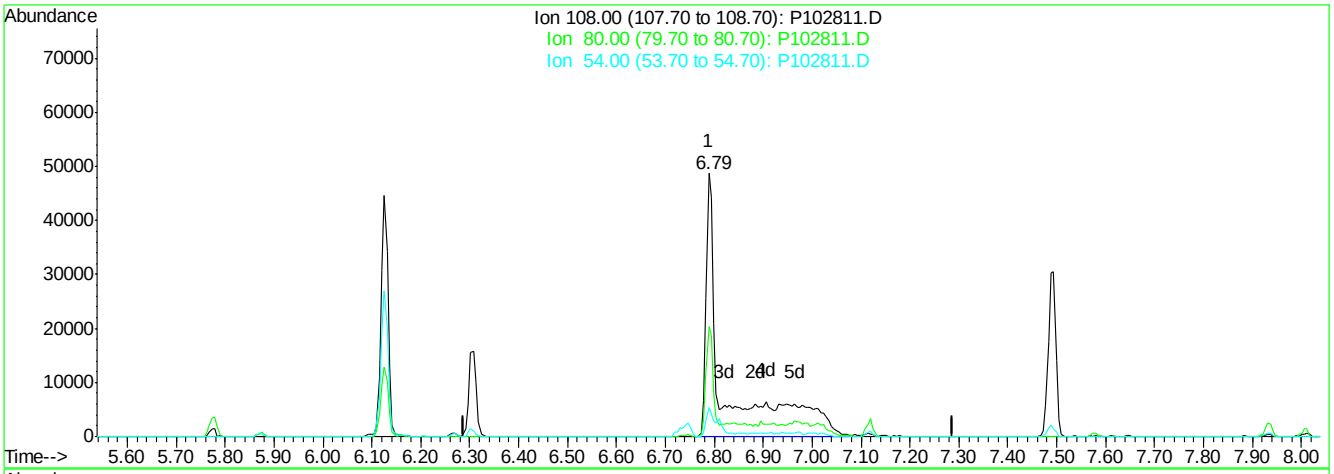
Ion	Exp%	Act%
108.00	100	100
80.00	46.20	41.85
54.00	10.90	9.27
0.00	0.00	0.00

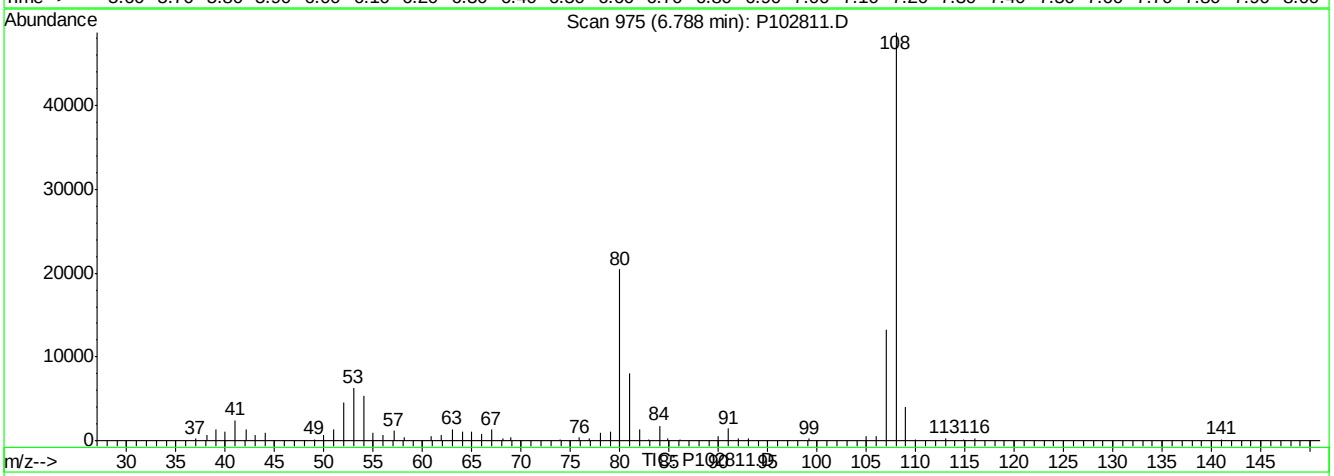
P102811.D MP4513.M Wed Feb 24 16:36:17 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102811.D Vial: 10
Acq On : 24 Feb 2016 2:11 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:36 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Multiple Level Calibration





(118) p-Phenylenediamine

6.79min 60.97ppm m

response 125220

Ion	Exp%	Act%
108.00	100	100
80.00	46.20	41.91
54.00	10.90	11.02
0.00	0.00	0.00

P102811.D MP4513.M Wed Feb 24 16:36:28 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102812.D Vial: 11
Acq On : 24 Feb 2016 2:41 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:43:10 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	122630	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	422708	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	249763	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	391099	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	352150	40.00	ppm	0.00
92) Perylene-d12	18.52	264	337445	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	122630	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	422708	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	249763	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	391099	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	352150	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	337445	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	122630	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	391099	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	352150	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	422708	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	249763	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	422708	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	122630	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	352150	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	352150	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	422708	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

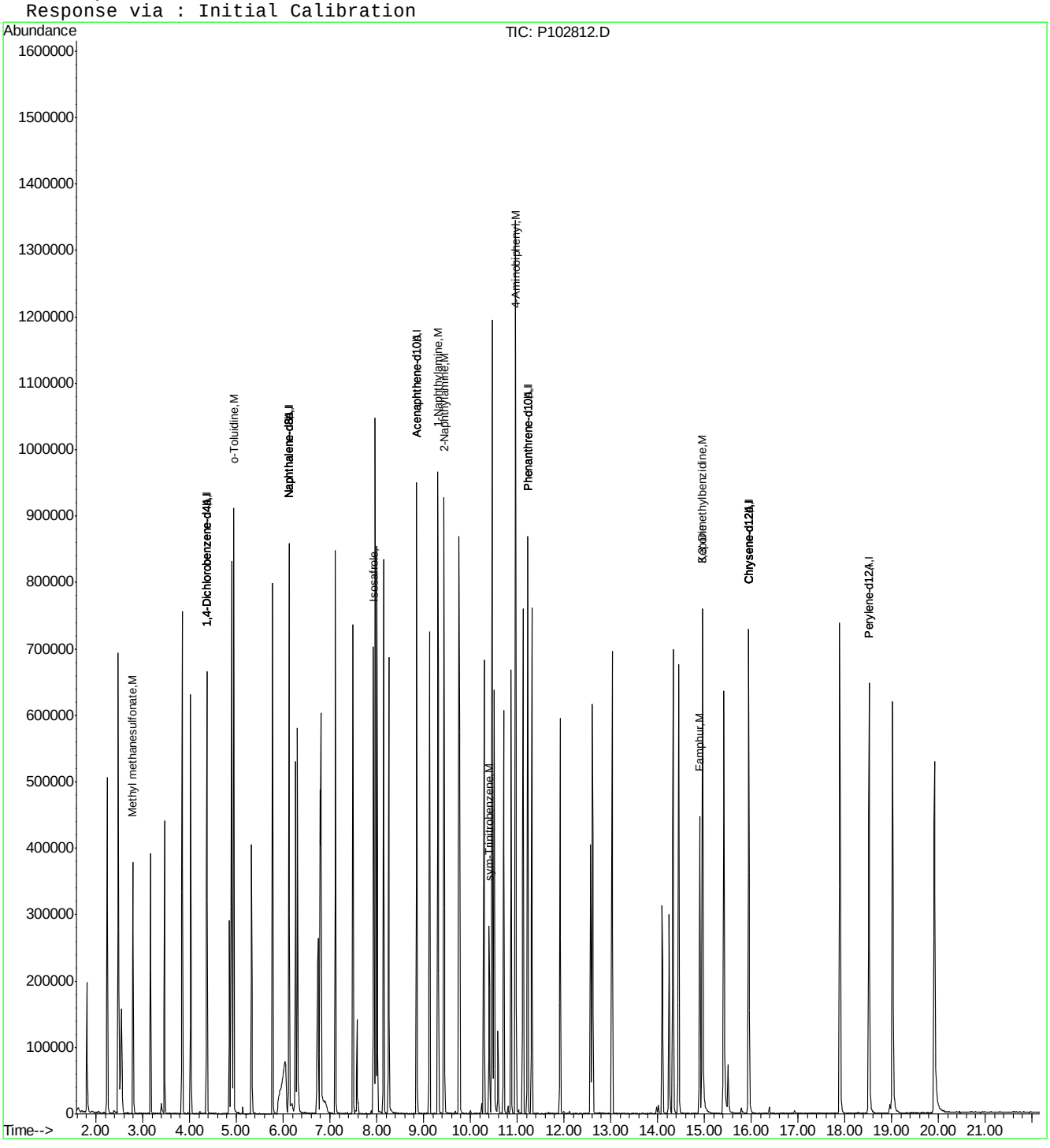
Target Compounds							Qvalue
105) Methyl methanesulfonate	2.79	80	126988	48.92	ppm		98
111) o-Toluidine	4.95	106	288307	45.97	ppm	#	24
120) Isosafrole	7.93	162	140754	165.24	ppm		96
129) 2-Naphthylamine	9.44	143	376816	53.66	ppm		95
130) 1-Naphthylamine	9.31	143	375243	63.59	ppm		99
136) 4-Aminobiphenyl	10.97	169	369752	50.53	ppm		99
146) sym-Trinitrobenzene	10.40	213	27851	44.63	ppm		95
150) Kepone	14.96	272	24844	41.27	ppm		96
151) Famphur	14.90	218	161782	43.02	ppm		95
153) 3,3'-Dimethylbenzidine	14.96	212	298778	90.71	ppm		97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102812.D Vial: 11
Acq On : 24 Feb 2016 2:41 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:47 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:33:26 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102813.D Vial: 12
Acq On : 24 Feb 2016 3:10 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:50:24 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:50:17 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	173337	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	621569	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	315441	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	591640	40.00	ppm	0.00
83) Chrysene-d12	15.97	240	516461	40.00	ppm	0.01
92) Perylene-d12	18.53	264	563012	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	173337	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	621569	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	315441	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	591640	40.00	ppm	0.00
147) Chrysene-d12A	15.97	240	516461	40.00	ppm	0.02
155) Perylene-d12A	18.53	264	563012	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	173337	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	591640	40.00	ppm	0.00
163) Chrysene-d12b	15.97	240	516461	40.00	ppm	0.02
165) Naphthalene-d8b	6.13	136	621569	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	315441	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	621569	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	173337	40.00	ppm	-0.08
176) Chrysene-d12c	15.97	240	516461	40.00	ppm	0.01
178) Chrysene-d12d	15.97	240	516461	40.00	ppm	0.01
180) Naphthalene-d8a	6.13	136	621569	40.00	ppm	0.17

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
127) m-Dinitrobenzene	8.39	168	83169	56.62	ppm	86

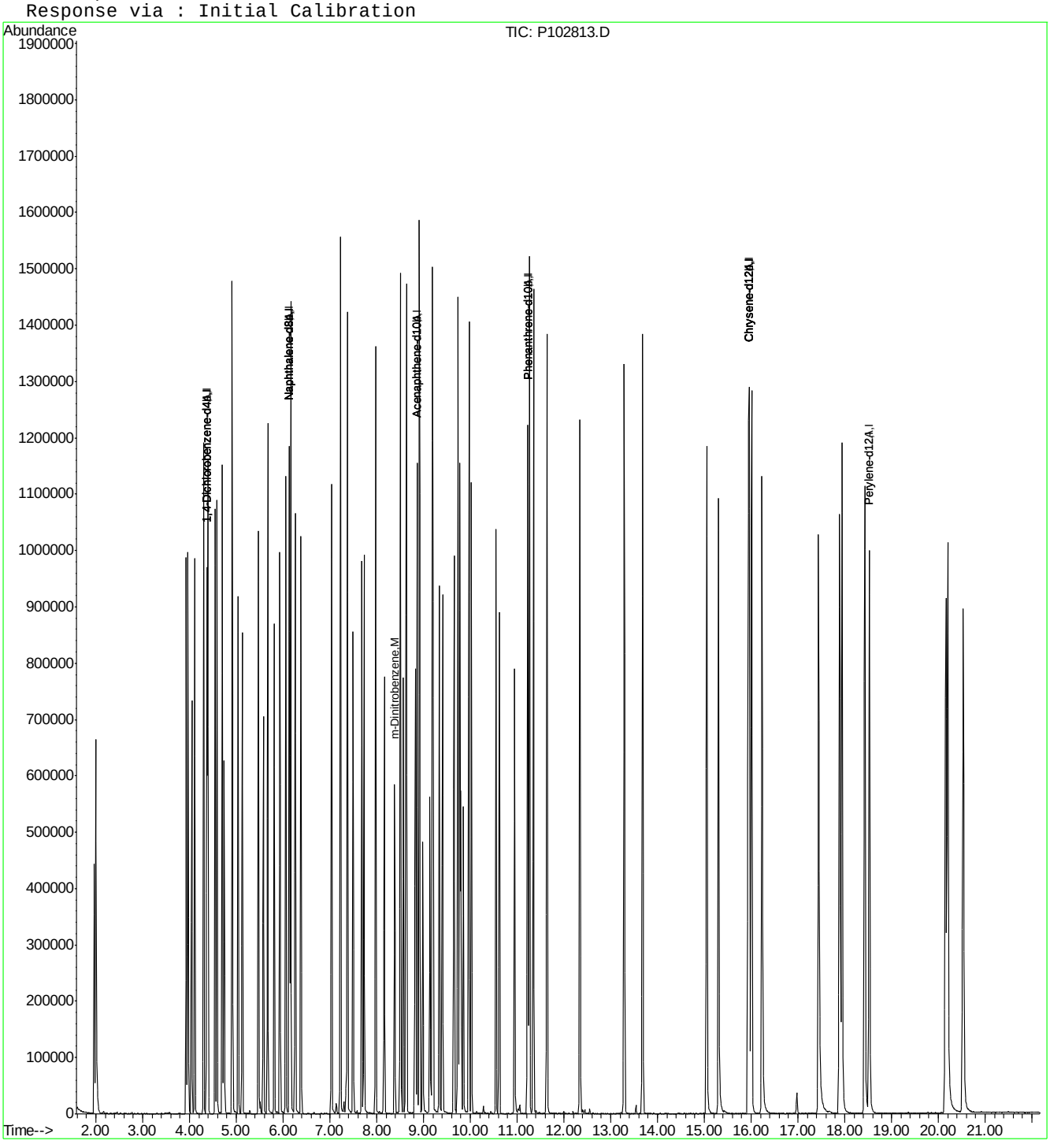
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102813.D MP4513.M Wed Feb 24 16:56:07 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102813.D Vial: 12
Acq On : 24 Feb 2016 3:10 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:56 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:50:17 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102814.D Vial: 13
Acq On : 24 Feb 2016 3:40 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 16:59:24 2016 Quant Results File: MP4513.RES

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

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	145758	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	503784	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	289048	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	455307	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	407845	40.00 ppm	0.00
92) Perylene-d12	18.52	264	413006	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	145758	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	503784	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	289048	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	455307	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	407845	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	413006	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	145758	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	455307	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	407845	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	503784	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	289048	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	503784	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	145758	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	407776	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	407776	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	503784	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
139) Diphenylamine	9.97	169	445760	35.68 ppm	98

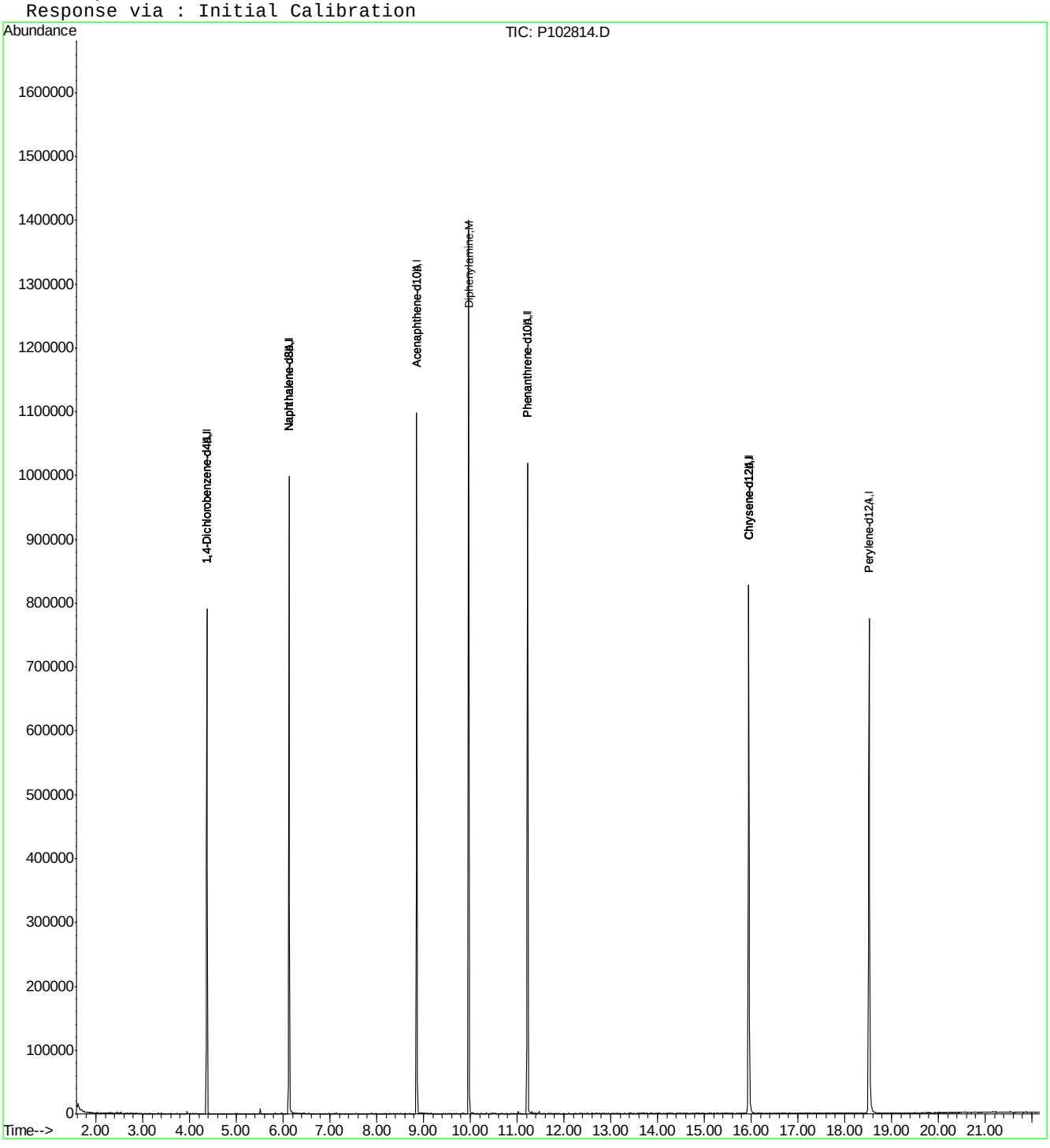
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4515\P102814.D Vial: 13
Acq On : 24 Feb 2016 3:40 pm Operator: linseyk
Sample : icv4515-50 Inst : MSP
Misc : op91338,ep4515 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 17:00 2016 Quant Results File: MP4513.RES

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



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102817.D Vial: 2
Acq On : 25 Feb 2016 10:23 am Operator: ashleyd
Sample : ic4516-100 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:52:47 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	133272	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	419901	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	245707	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	398813	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	340054	40.00	ppm	0.00
92) Perylene-d12	18.52	264	335719	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	133272	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	419901	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	245707	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	398813	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	340054	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	335719	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	133272	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	398813	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	340054	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	419901	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	245707	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	419901	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	133272	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	340054	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	340054	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	419901	40.00	ppm	0.17

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
170) Catechol	6.08	110	401405	108.29	ppm	100
171) 2-Chloroaniline	5.53	127	491115	92.46	ppm	99
172) 3-Chloroaniline	6.23	127	450669	92.58	ppm	99
173) 1-chloro-2-nitrobenzene	6.68	75	194347	102.42	ppm	98
175) m-Toluidine	5.01	106	646243	100.00	ppm	98

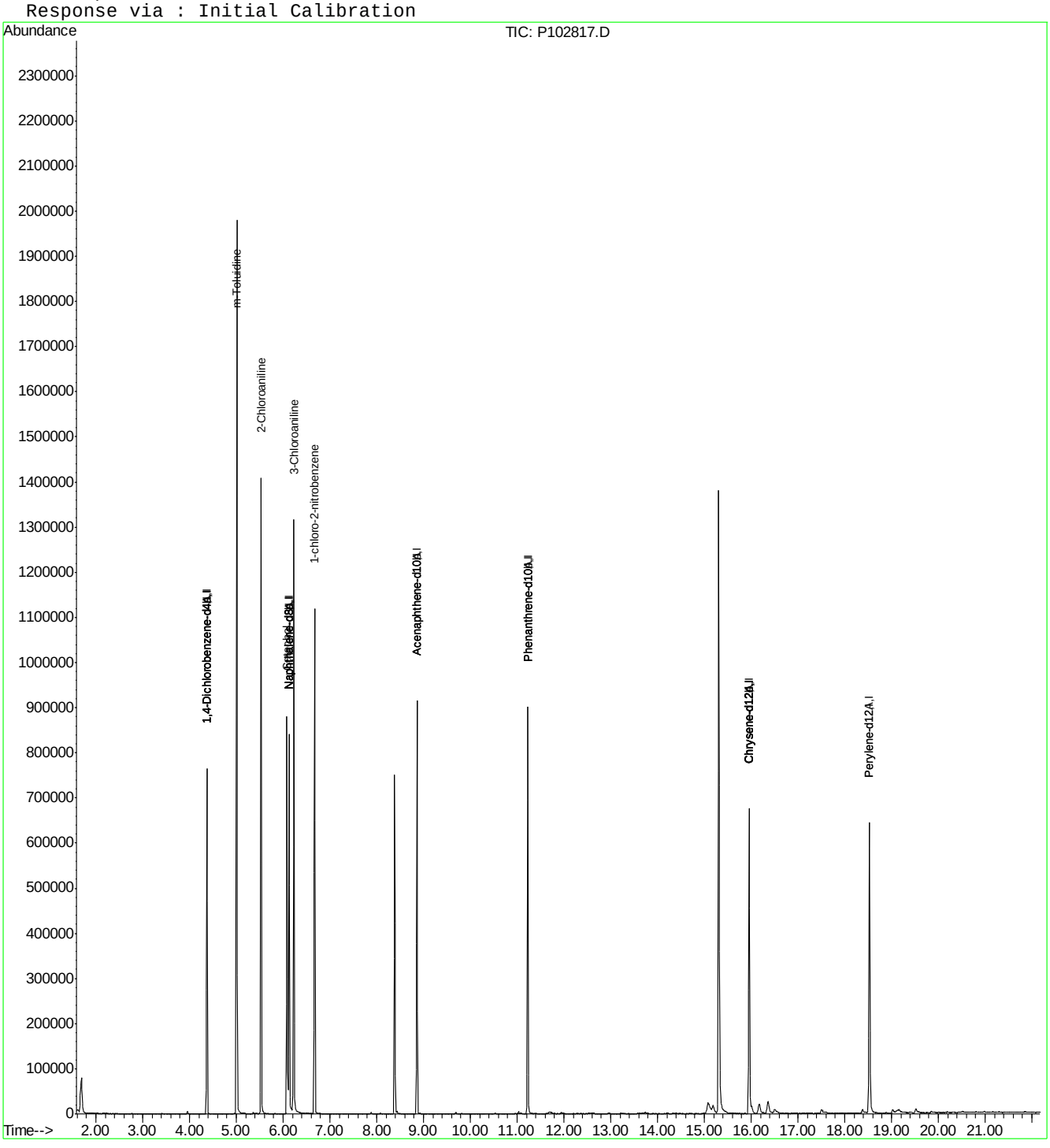
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102817.D Vial: 2
Acq On : 25 Feb 2016 10:23 am Operator: ashleyd
Sample : ic4516-100 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:53 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102818.D Vial: 3
Acq On : 25 Feb 2016 10:53 am Operator: ashleyd
Sample : ic4516-80 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:54:16 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	157919	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	505843	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	300938	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	495234	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	420582	40.00	ppm	0.00
92) Perylene-d12	18.52	264	416398	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	157919	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	505843	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	300938	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	495234	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	420582	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	416398	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	157919	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	495234	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	420582	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	505843	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	300938	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	505843	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	157919	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	420582	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	420582	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	505843	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
170) Catechol	6.08	110	412689	92.41	ppm	100
171) 2-Chloroaniline	5.53	127	493568	77.13	ppm	100
172) 3-Chloroaniline	6.23	127	456074	77.77	ppm	99
173) 1-chloro-2-nitrobenzene	6.67	75	195805	85.66	ppm	94
175) m-Toluidine	5.01	106	642866	83.95	ppm	98

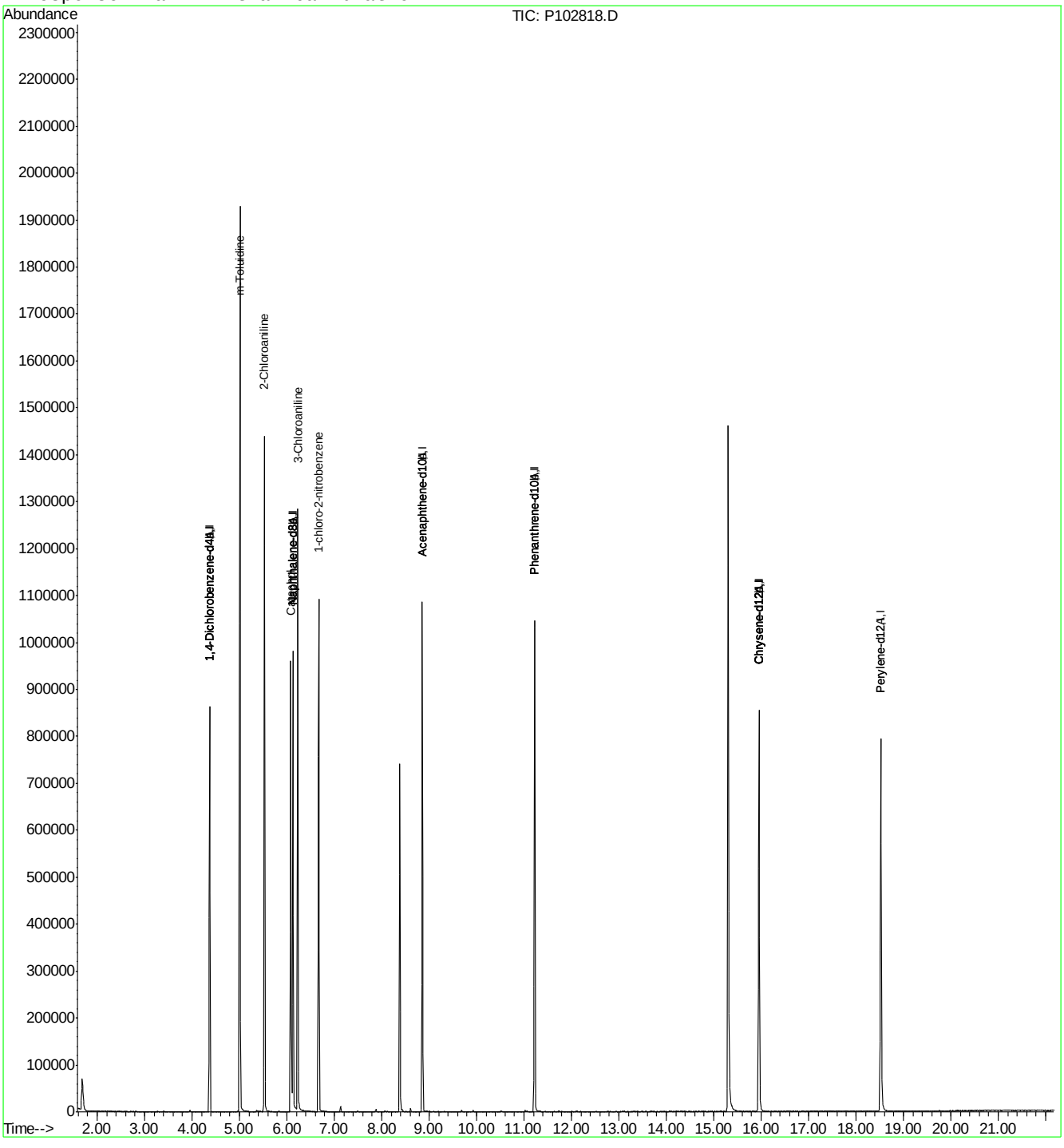
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102818.D Vial: 3
Acq On : 25 Feb 2016 10:53 am Operator: ashleyd
Sample : ic4516-80 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:02 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102819.D Vial: 4
Acq On : 25 Feb 2016 11:22 am Operator: ashleyd
Sample : icc4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:55:40 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	157296	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	510381	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	299351	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	480133	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	417812	40.00	ppm	0.00
92) Perylene-d12	18.53	264	410591	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	157296	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	510381	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	299351	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	480133	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	417812	40.00	ppm	0.00
155) Perylene-d12A	18.53	264	410591	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	157296	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	480133	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	417812	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	510381	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	299351	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	510381	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	157296	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	417812	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	417812	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	510381	40.00	ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
170) Catechol	6.08	110	244182	54.19	ppm	100
171) 2-Chloroaniline	5.53	127	319765	49.53	ppm	100
172) 3-Chloroaniline	6.23	127	294333	49.75	ppm	100
173) 1-chloro-2-nitrobenzene	6.67	75	122780	53.24	ppm	100
175) m-Toluidine	5.00	106	423577	55.53	ppm	100

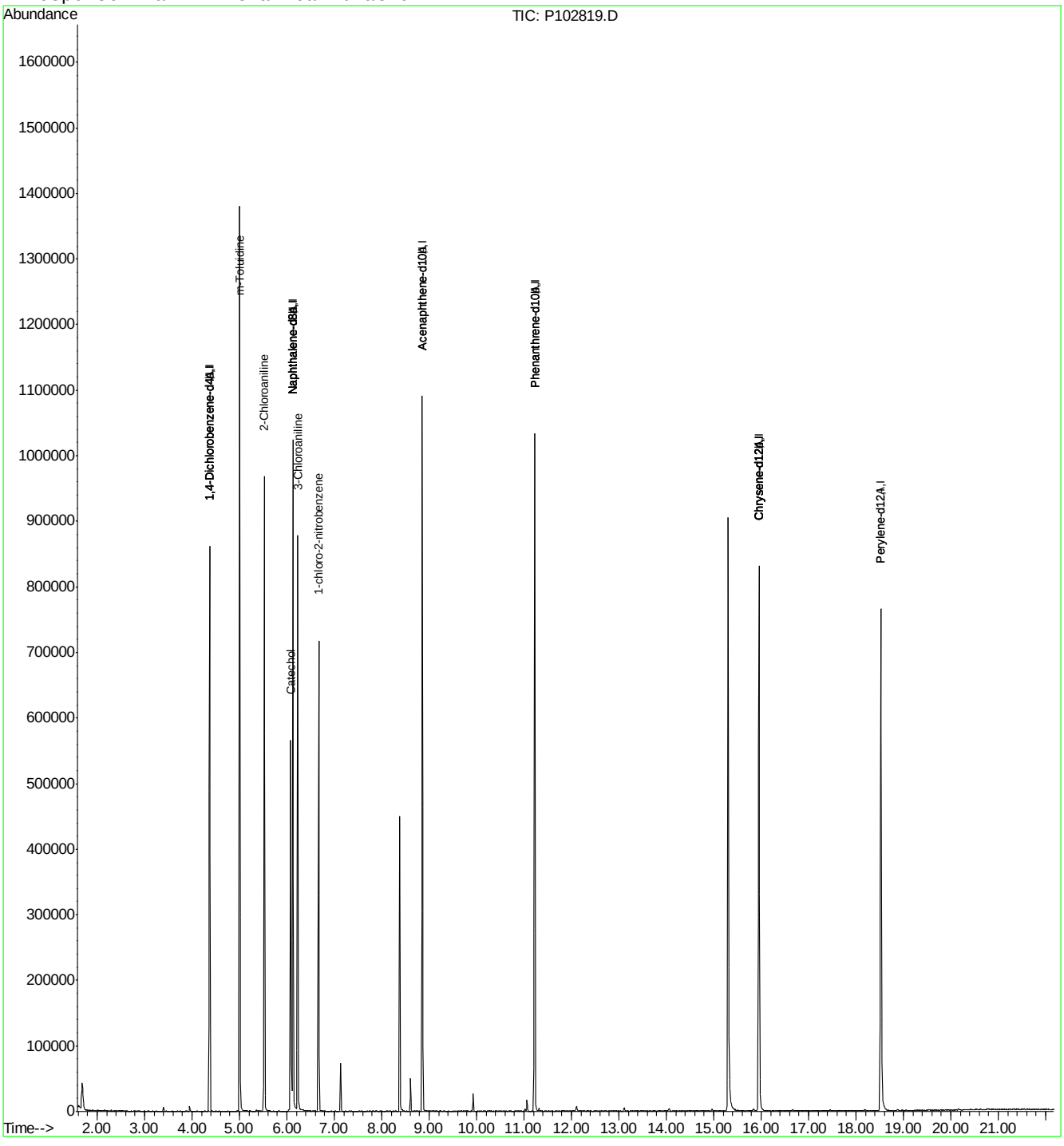
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102819.D Vial: 4
Acq On : 25 Feb 2016 11:22 am Operator: ashleyd
Sample : icc4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:56 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102820.D Vial: 5
Acq On : 25 Feb 2016 11:52 am Operator: ashleyd
Sample : ic4516-25 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:56:52 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	143880	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	467399	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	268892	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	426898	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	370528	40.00	ppm	0.00
92) Perylene-d12	18.53	264	357991	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	143880	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	467399	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	268892	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	426898	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	370528	40.00	ppm	0.00
155) Perylene-d12A	18.53	264	357991	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	143880	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	426898	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	370528	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	467399	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	268892	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	467399	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	143880	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	370528	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	370528	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	467399	40.00	ppm	0.16

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
170) Catechol	6.08	110	102409	24.82	ppm	96
171) 2-Chloroaniline	5.53	127	157742	26.68	ppm	98
172) 3-Chloroaniline	6.22	127	145297	26.82	ppm	97
173) 1-chloro-2-nitrobenzene	6.67	75	56843	26.91	ppm	93
175) m-Toluidine	5.00	106	212838	30.51	ppm	100

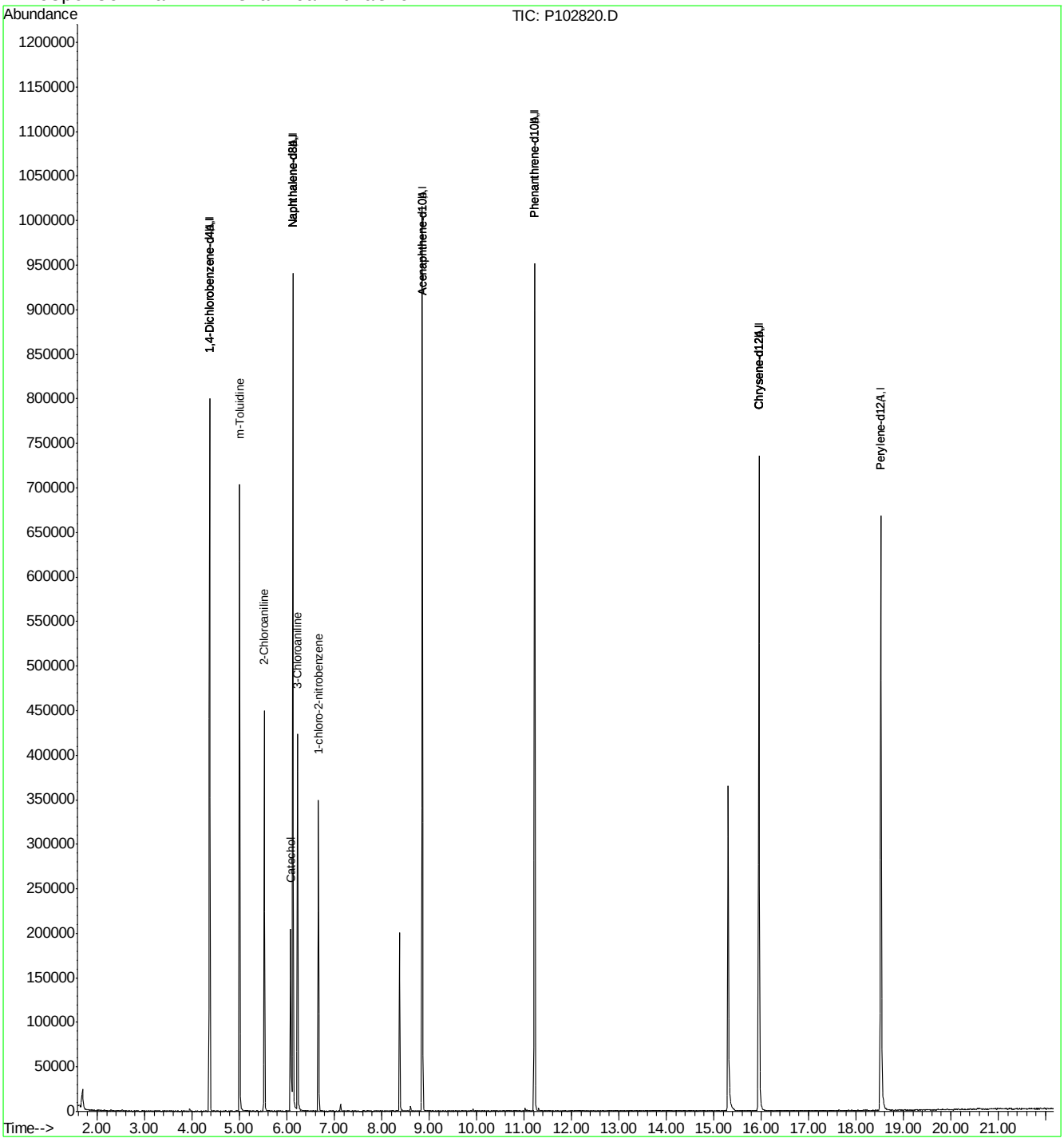
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102820.D Vial: 5
Acq On : 25 Feb 2016 11:52 am Operator: ashleyd
Sample : ic4516-25 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:57 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102821.D Vial: 6
Acq On : 25 Feb 2016 12:21 pm Operator: ashleyd
Sample : ic4516-10 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:57:52 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	134290	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	460801	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	259574	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	411500	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	350667	40.00	ppm	0.00
92) Perylene-d12	18.52	264	338715	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	134290	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	460801	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	259574	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	411500	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	350667	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	338715	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	134290	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	411500	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	350667	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	460801	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	259574	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	460801	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	134290	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	350667	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	350667	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	460801	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
170) Catechol	6.08	110	27879	6.85	ppm	94
171) 2-Chloroaniline	5.52	127	60157	10.32	ppm	97
172) 3-Chloroaniline	6.22	127	56077	10.50	ppm	96
173) 1-chloro-2-nitrobenzene	6.67	75	20151	9.68	ppm	95
175) m-Toluidine	5.00	106	81753	12.55	ppm	97

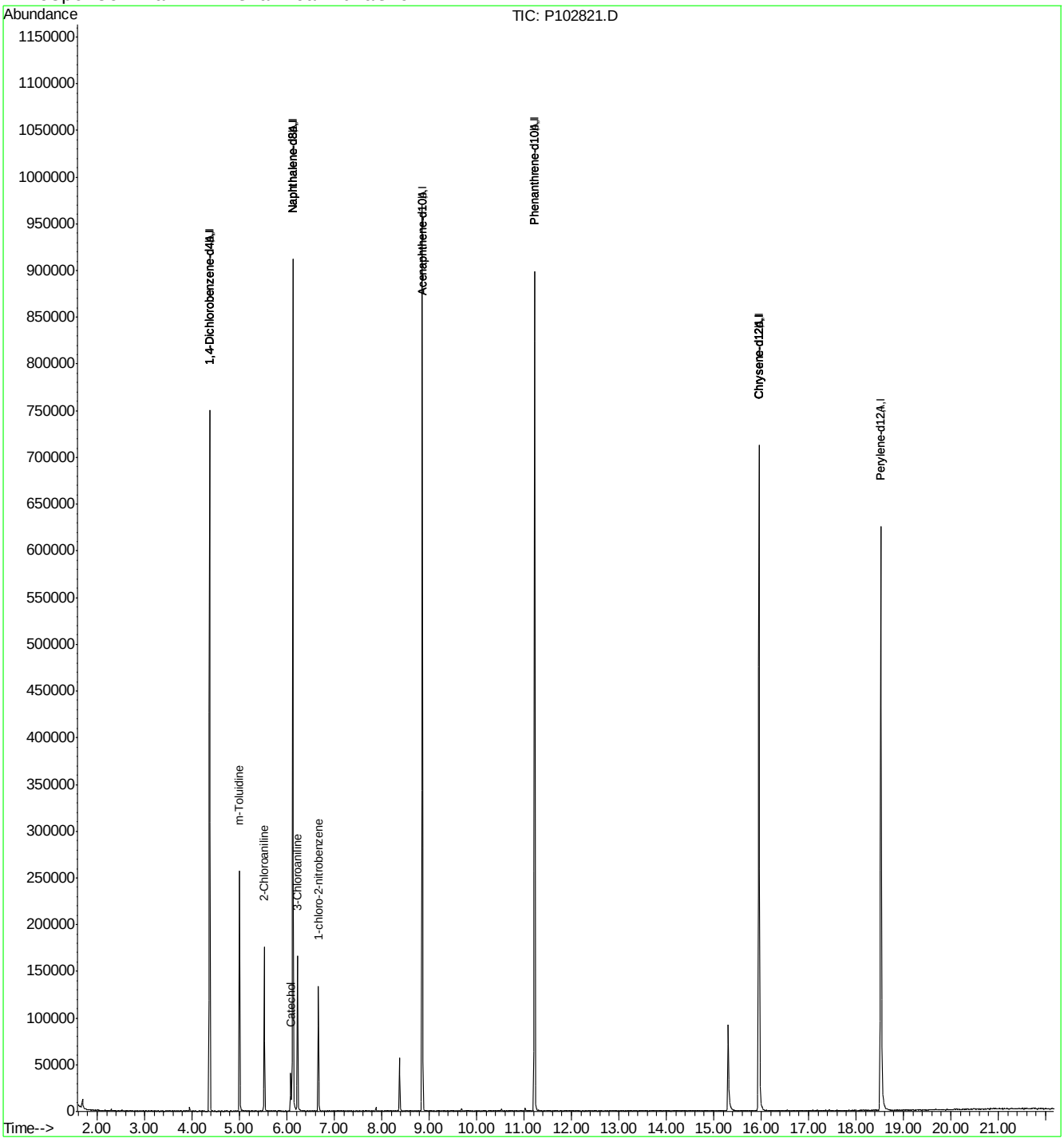
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102821.D Vial: 6
Acq On : 25 Feb 2016 12:21 pm Operator: ashleyd
Sample : ic4516-10 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:58 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



P102821.D MP4513AP9.M Fri Feb 26 12:58:30 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102822.D Vial: 7
Acq On : 25 Feb 2016 12:51 pm Operator: ashleyd
Sample : ic4516-5 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:58:51 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	144287	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	509343	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	281925	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	453337	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	387427	40.00	ppm	0.00
92) Perylene-d12	18.52	264	370427	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	144287	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	509343	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	281925	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	453337	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	387427	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	370427	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	144287	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	453337	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	387427	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	509343	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	281925	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	509343	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	144287	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	387427	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	387427	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	509343	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
170) Catechol	6.09	110	10196	2.27	ppm	88
171) 2-Chloroaniline	5.53	127	34557	5.36	ppm	98
172) 3-Chloroaniline	6.22	127	31087	5.26	ppm	99
173) 1-chloro-2-nitrobenzene	6.67	75	11668	5.07	ppm	90
175) m-Toluidine	5.00	106	44951	6.42	ppm	97

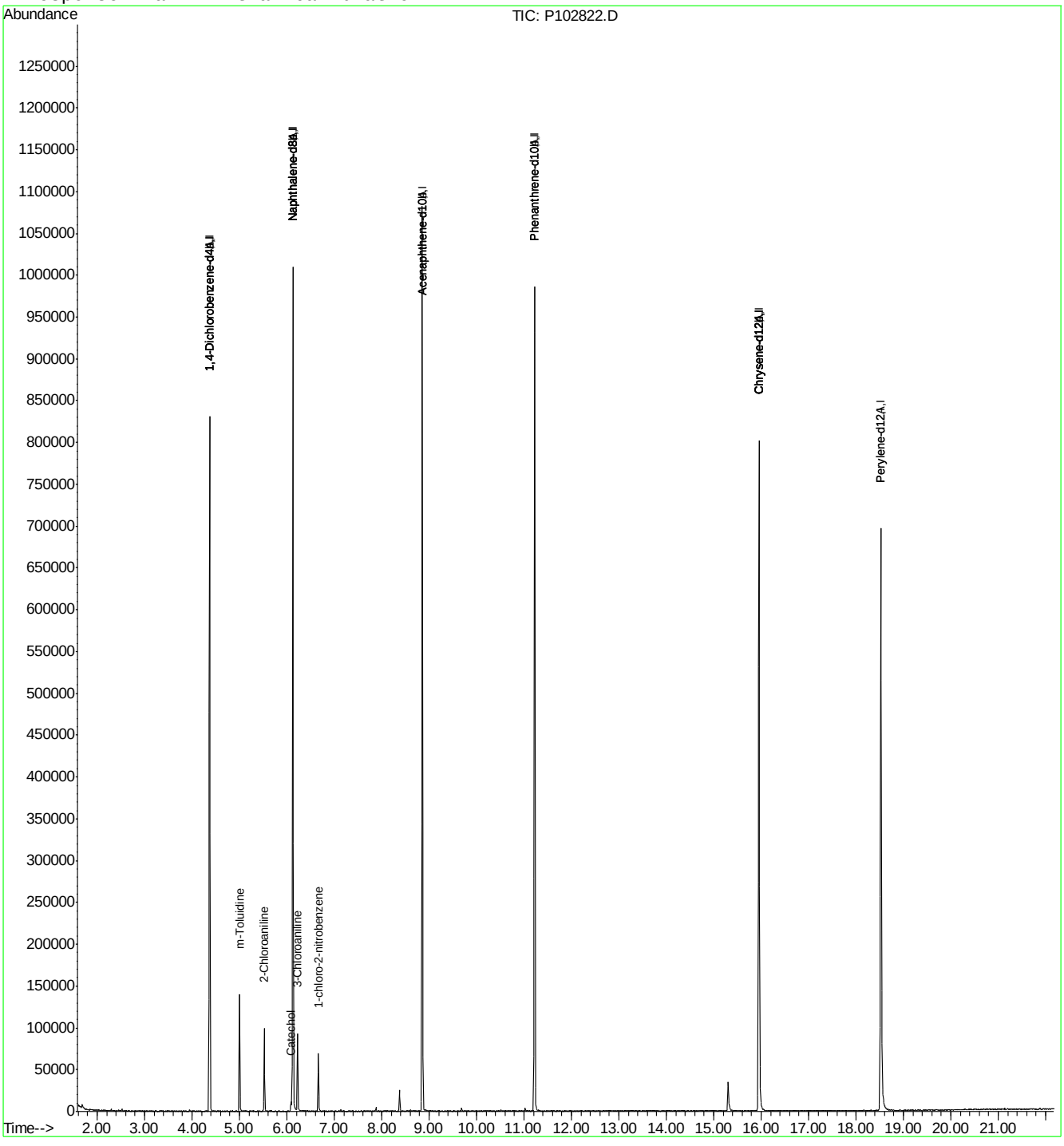
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102822.D Vial: 7
Acq On : 25 Feb 2016 12:51 pm Operator: ashleyd
Sample : ic4516-5 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:59 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102823.D Vial: 8
Acq On : 25 Feb 2016 1:20 pm Operator: ashleyd
Sample : ic4516-2 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 12:59:50 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	137553	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	480647	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	265536	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	420729	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	357488	40.00	ppm	0.00
92) Perylene-d12	18.52	264	342936	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	137553	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	480647	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	265536	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	420729	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	357488	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	342936	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	137553	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	420729	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	357488	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	480647	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	265536	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	480647	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	137553	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	357488	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	357488	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	480647	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
171) 2-Chloroaniline	5.53	127	11540	1.90	ppm	99
172) 3-Chloroaniline	6.23	127	10384	1.86	ppm	92
173) 1-chloro-2-nitrobenzene	6.67	75	3398	1.56	ppm	76
175) m-Toluidine	5.00	106	15138	2.27	ppm	94

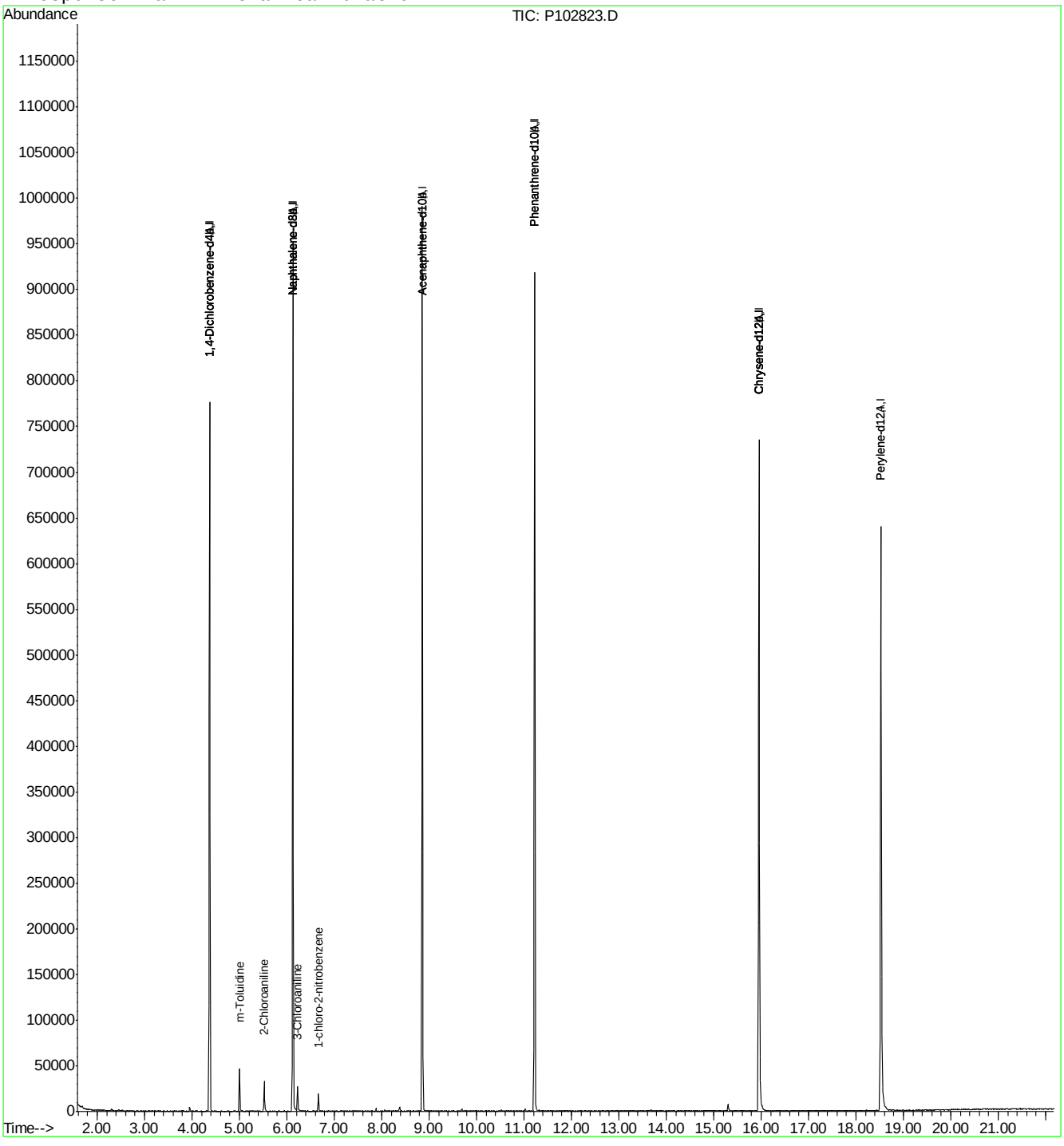
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102823.D Vial: 8
Acq On : 25 Feb 2016 1:20 pm Operator: ashleyd
Sample : ic4516-2 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:00 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 12:52:41 2016
Response via : Initial Calibration



P102823.D MP4513AP9.M Fri Feb 26 13:00:24 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102824.D Vial: 9
Acq On : 25 Feb 2016 1:50 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:06:02 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	144394	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	487704	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	272411	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	426441	40.00 ppm	0.00
83) Chrysene-d12	15.96	240	362540	40.00 ppm	0.00
92) Perylene-d12	18.53	264	312410	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	144394	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	487704	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	272411	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	426441	40.00 ppm	0.00
147) Chrysene-d12A	15.96	240	362540	40.00 ppm	0.00
155) Perylene-d12A	18.53	264	312410	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	144394	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	426441	40.00 ppm	0.00
163) Chrysene-d12b	15.96	240	362540	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	487704	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	272411	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	487704	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	144394	40.00 ppm	-0.08
176) Chrysene-d12c	15.96	240	362540	40.00 ppm	0.00
178) Chrysene-d12d	15.96	240	362540	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	487704	40.00 ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
171) 2-Chloroaniline	5.53	127	256303	41.54 ppm	98
172) 3-Chloroaniline	6.23	127	222234	39.31 ppm	96

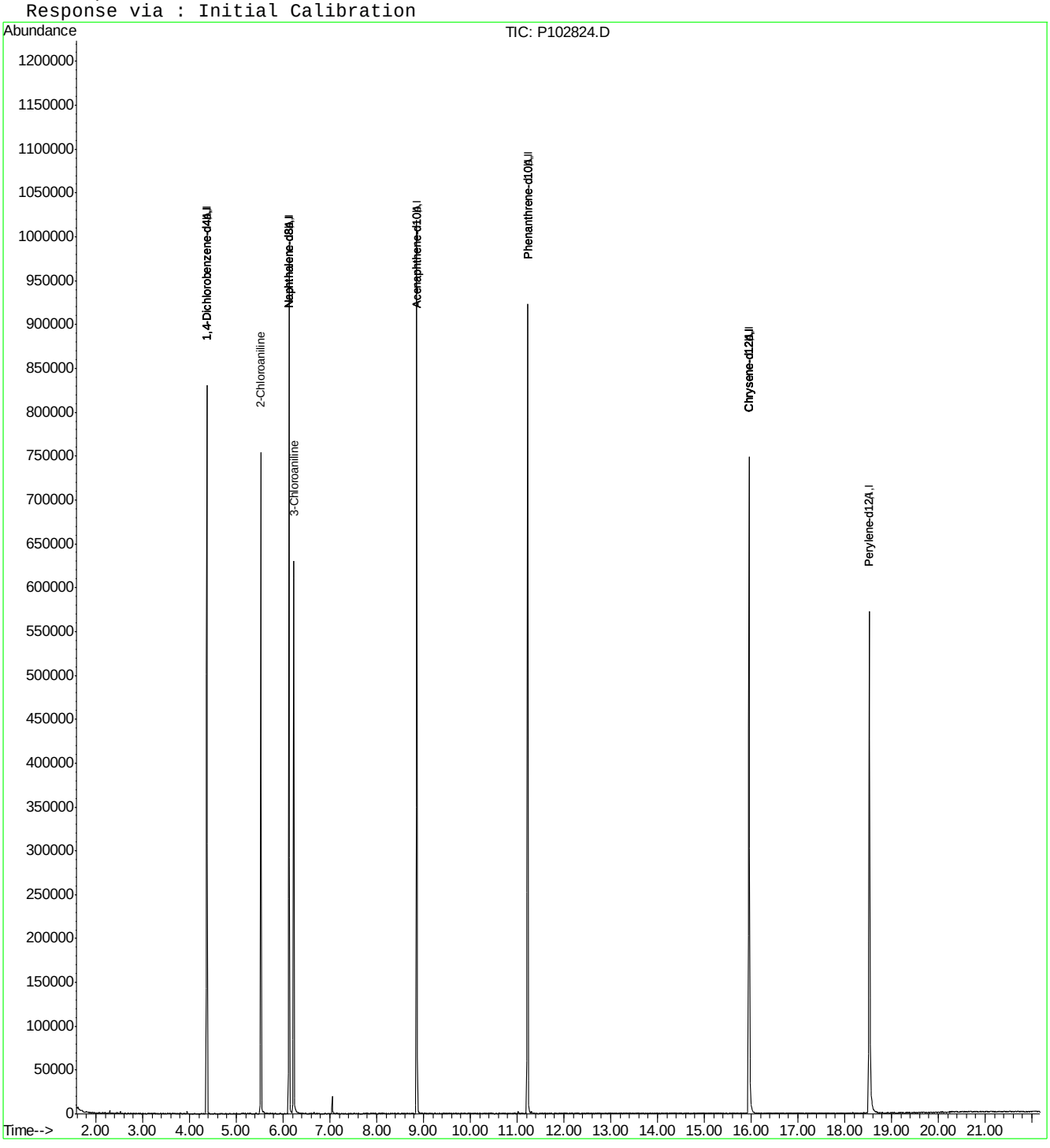
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102824.D Vial: 9
Acq On : 25 Feb 2016 1:50 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:06 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102825.D Vial: 10
Acq On : 25 Feb 2016 2:20 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:06:53 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	151103	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	525943	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	298885	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	473844	40.00 ppm	0.00
83) Chrysene-d12	15.96	240	415500	40.00 ppm	0.00
92) Perylene-d12	18.52	264	361589	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	151103	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	525943	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	298885	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	473844	40.00 ppm	0.00
147) Chrysene-d12A	15.96	240	415500	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	361589	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	151103	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	473844	40.00 ppm	0.00
163) Chrysene-d12b	15.96	240	415500	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	525943	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	298885	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	525943	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	151103	40.00 ppm	-0.08
176) Chrysene-d12c	15.96	240	415500	40.00 ppm	0.00
178) Chrysene-d12d	15.96	240	415500	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	525943	40.00 ppm	0.16

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
173) 1-chloro-2-nitrobenzene	6.67	75	118949	50.05 ppm	100

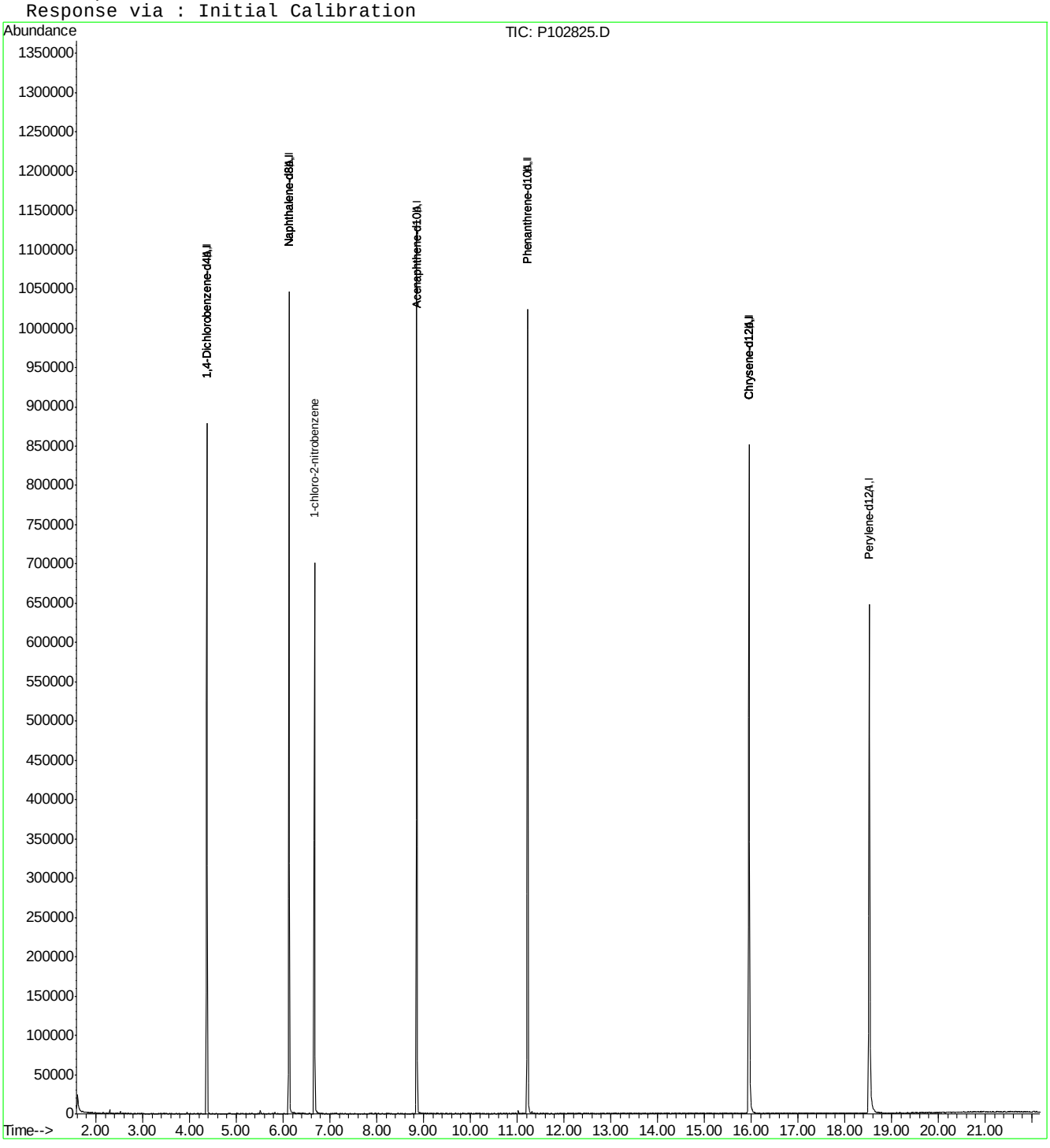
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102825.D MP4513AP9.M Fri Feb 26 13:07:32 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102825.D Vial: 10
Acq On : 25 Feb 2016 2:20 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:07 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102826.D Vial: 11
Acq On : 25 Feb 2016 2:49 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:07:38 2016 Quant Results File: MP4513AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	132882	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	443251	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	256647	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	408934	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	342351	40.00	ppm	0.00
92) Perylene-d12	18.53	264	321388	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	132882	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	443251	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	256647	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	408934	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	342351	40.00	ppm	0.00
155) Perylene-d12A	18.53	264	321388	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	132882	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	408934	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	342351	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	443251	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	256647	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	443251	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	132882	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	342351	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	342351	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	443251	40.00	ppm	0.16

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
170) Catechol	6.08	110	183261	46.83	ppm	99

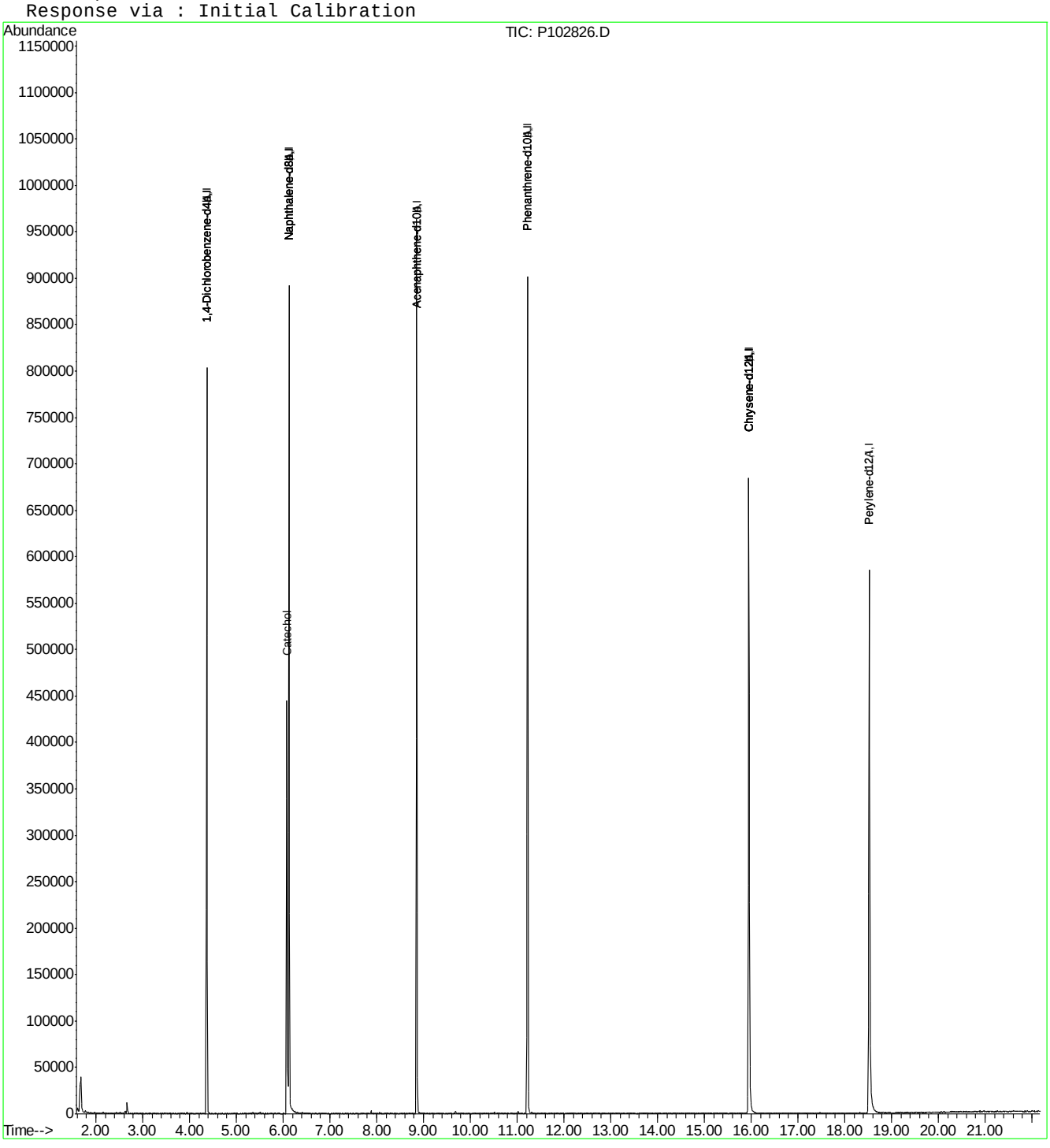
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4516\P102826.D Vial: 11
Acq On : 25 Feb 2016 2:49 pm Operator: ashleyd
Sample : icv4516-50 Inst : MSP
Misc : op91338,ep4516 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 26 13:08 2016 Quant Results File: MP4513AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4513AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Feb 26 13:04:42 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	176183	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	619829	40.00	ppm	0.00
47) Acenaphthene-d10	8.83	164	355407	40.00	ppm	0.00
69) Phenanthrene-d10	11.20	188	512187	40.00	ppm	0.00
83) Chrysene-d12	15.92	240	467796	40.00	ppm	0.00
92) Perylene-d12	18.48	264	486176	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	176183	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	619829	40.00	ppm	-0.02
121) Acenaphthene-d10A	8.83	164	355407	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.20	188	512187	40.00	ppm	-0.03
147) Chrysene-d12A	15.92	240	467796	40.00	ppm	-0.03
155) Perylene-d12A	18.48	264	486176	40.00	ppm	-0.04
159) 1,4-Dichlorobenzene-d4b	4.35	152	176183	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.20	188	512187	40.00	ppm	-0.03
163) Chrysene-d12b	15.92	240	467796	40.00	ppm	-0.03
165) Naphthalene-d8b	6.10	136	619829	40.00	ppm	-0.02
167) Acenaphthene-d10b	8.83	164	355407	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	619829	40.00	ppm	-0.02
174) 1,4-Dichlorobenzene-d4a	4.35	152	176183	40.00	ppm	-0.11
176) Chrysene-d12c	15.92	240	467796	40.00	ppm	-0.03
178) Chrysene-d12d	15.92	240	467796	40.00	ppm	-0.03
180) Naphthalene-d8a	6.10	136	619829	40.00	ppm	0.14

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	570985	93.30	ppm	0.00
Spiked Amount 50.000			Recovery = 186.60%			
8) Phenol-d5	3.96	99	627844	83.61	ppm	0.00
Spiked Amount 50.000			Recovery = 167.22%			
25) Nitrobenzene-d5	5.08	82	582783	98.09	ppm	0.00
Spiked Amount 50.000			Recovery = 196.18%			
51) 2-Fluorobiphenyl	7.80	172	870565	80.04	ppm	0.00
Spiked Amount 50.000			Recovery = 160.08%			
73) 2,4,6-Tribromophenol	10.11	330	131612	118.89	ppm	0.00
Spiked Amount 50.000			Recovery = 237.78%			
85) Terphenyl-d14	14.02	244	882195	98.61	ppm	0.00
Spiked Amount 50.000			Recovery = 197.22%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	275570	89.87	ppm	98
3) Pyridine	1.97	79	625045	93.10	ppm	92
4) N-Nitrosodimethylamine	1.94	42	238728	96.60	ppm	94
6) Indene	4.68	116	842496	86.20	ppm	97
7) Cumene	3.44	105	1110136	77.47	ppm	94
9) Phenol	3.98	94	709824	95.03	ppm	89
10) Aniline	3.95	93	638029	73.70	ppm	77
11) bis(2-Chloroethyl)ether	4.03	93	497004	93.03	ppm	98
12) 2-Chlorophenol	4.12	128	498225	86.03	ppm	95
13) Decane	4.17	43	369574	82.31	ppm	96
14) 1,3-Dichlorobenzene	4.28	146	545682	82.60	ppm	98
15) 1,4-Dichlorobenzene	4.37	146	531119	83.51	ppm	97

(#) = qualifier out of range (m) = manual integration
P103011.D MP4524.M Thu Mar 03 09:00:36 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.54	108	302600	85.76	ppm		96
17)	1,2-Dichlorobenzene	4.57	146	481791	78.82	ppm		95
18)	Acetophenone	4.88	105	684389	85.99	ppm		96
19)	2-Methylphenol	4.73	108	455556	92.82	ppm		100
20)	2,2'-oxybis(1-Chloropropan	4.71	121	169965	94.83	ppm	#	99
21)	3&4-Methylphenol	4.94	108	497101	96.56	ppm		97
22)	n-Nitroso-di-n-propylamine	4.90	70	349466	94.00	ppm		98
23)	Hexachloroethane	5.01	201	189667	96.96	ppm		92
26)	Nitrobenzene	5.11	77	529194	92.25	ppm		96
27)	Quinoline	6.66	129	1009644	91.70	ppm		97
28)	Isophorone	5.45	82	929548	91.48	ppm		97
29)	2-Nitrophenol	5.56	139	291563	100.49	ppm		88
30)	2,4-Dimethylphenol	5.69	107	498439	97.43	ppm		96
31)	Benzoic acid	5.96	105	420356	112.35	ppm		96
32)	bis(2-Chloroethoxy)methane	5.79	93	572823	92.08	ppm		97
33)	2,4-Dichlorophenol	5.95	162	405260	96.09	ppm		97
34)	2,6-Dichlorophenol	6.26	162	380206	93.29	ppm		96
35)	1,3,5-Trichlorobenzene	5.58	180	406052	81.82	ppm		98
36)	1,2,4-Trichlorobenzene	6.03	180	413411	84.87	ppm		99
37)	1,2,3-Trichlorobenzene	6.36	180	363649	80.87	ppm		98
38)	Naphthalene	6.14	128	1217903	80.13	ppm		95
39)	4-Chloroaniline	6.25	127	554419	82.52	ppm		99
40)	2,3-Dichloroaniline	7.65	161	496811	94.91	ppm		96
41)	Caprolactam	6.79	55	219369m	107.52	ppm		
42)	Hexachlorobutadiene	6.36	225	209515	93.01	ppm		99
43)	4-Chloro-3-methylphenol	7.09	107	462362	99.17	ppm	#	42
44)	2-Methylnaphthalene	7.20	141	706818	83.64	ppm		97
45)	1-Methylnaphthalene	7.35	142	869043	84.23	ppm		97
46)	Dimethylnaphthalene	8.19	156	769096	85.59	ppm		98
48)	Hexachlorocyclopentadiene	7.47	237	490346	194.12	ppm		98
49)	2,4,6-Trichlorophenol	7.69	196	276998	101.75	ppm		99
50)	2,4,5-Trichlorophenol	7.78	196	293890	101.38	ppm		99
52)	2-Chloronaphthalene	7.96	162	758937	82.32	ppm		97
53)	Biphenyl	7.95	154	928981	76.13	ppm		96
54)	2-Nitroaniline	8.16	65	285397	105.21	ppm		95
55)	Dimethylphthalate	8.48	163	970545	90.20	ppm		97
56)	Acenaphthylene	8.60	152	1222694	78.81	ppm		95
57)	2,6-Dinitrotoluene	8.55	165	242513	110.57	ppm		98
58)	3-Nitroaniline	8.81	138	278297	96.07	ppm		92
59)	Acenaphthene	8.88	153	785358	83.79	ppm		100
60)	2,4-Dinitrophenol	8.98	184	287438	203.82	ppm		98
61)	4-Nitrophenol	9.26	109	170879	114.27	ppm		97
62)	Dibenzofuran	9.17	168	1087992	84.28	ppm		97
63)	2,4-Dinitrotoluene	9.19	165	311807	103.79	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.40	232	230485	108.28	ppm		98
65)	Diethylphthalate	9.62	149	968281	89.11	ppm		97
66)	Fluorene	9.71	166	921407	88.88	ppm		99
67)	4-Chlorophenyl-phenylether	9.74	204	422718	93.14	ppm		98
68)	4-Nitroaniline	9.81	138	278252	106.61	ppm		96

(#) = qualifier out of range (m) = manual integration
P103011.D MP4524.M Thu Mar 03 09:00:36 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.84	198	196683	105.35	ppm	97
71)	n-Nitrosodiphenylamine	9.95	169	700545	101.13	ppm	99
72)	1,2-Diphenylhydrazine	9.99	77	928012	94.85	ppm	99
74)	4-Bromophenyl-phenylether	10.52	248	251581	105.30	ppm	100
75)	Hexachlorobenzene	10.59	284	257612	102.37	ppm	92
76)	Pentachlorophenol	10.94	266	332916	203.41	ppm	97
77)	Phenanthrene	11.24	178	1156803	88.24	ppm	96
78)	Anthracene	11.32	178	1189353	89.49	ppm	96
79)	Carbazole	11.62	167	1226554	94.89	ppm	97
80)	Di-n-butylphthalate	12.30	149	1524547	95.65	ppm	96
81)	Fluoranthene	13.26	202	1310898	99.03	ppm	99
82)	Octadecane	11.18	57	481755	105.14	ppm	95
84)	Pyrene	13.65	202	1350284	87.92	ppm	99
86)	Butylbenzylphthalate	15.01	149	765646	104.04	ppm	97
87)	Butyl stearate	15.23	56	363522	105.15	ppm	97
88)	Benzo[a]anthracene	15.90	228	1191767	96.57	ppm	98
89)	3,3'-Dichlorobenzidine	15.93	252	473076	111.18	ppm	97
90)	Chrysene	15.98	228	1142770	93.42	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.18	149	991080	101.19	ppm	92
93)	Di-n-octylphthalate	17.39	149	1680169	99.74	ppm	95
94)	Benzo[b]fluoranthene	17.85	252	1296844	98.82	ppm	97
95)	Benzo[k]fluoranthene	17.92	252	1156230	89.91	ppm	98
96)	Benzo[a]pyrene	18.39	252	1156450	97.79	ppm	97
97)	Indeno[1,2,3-cd]pyrene	20.12	276	1128833	106.11	ppm	95
98)	Dibenz(a,h)acridine	19.81	279	1014285	105.93	ppm	98
99)	Dibenz[a,h]anthracene	20.17	278	1149581	103.89	ppm	96
100)	7,12-Dimethylbenz(a)anthra	17.87	256	576640	103.98	ppm	98
101)	Benzo[g,h,i]perylene	20.50	276	1181370	101.52	ppm	98

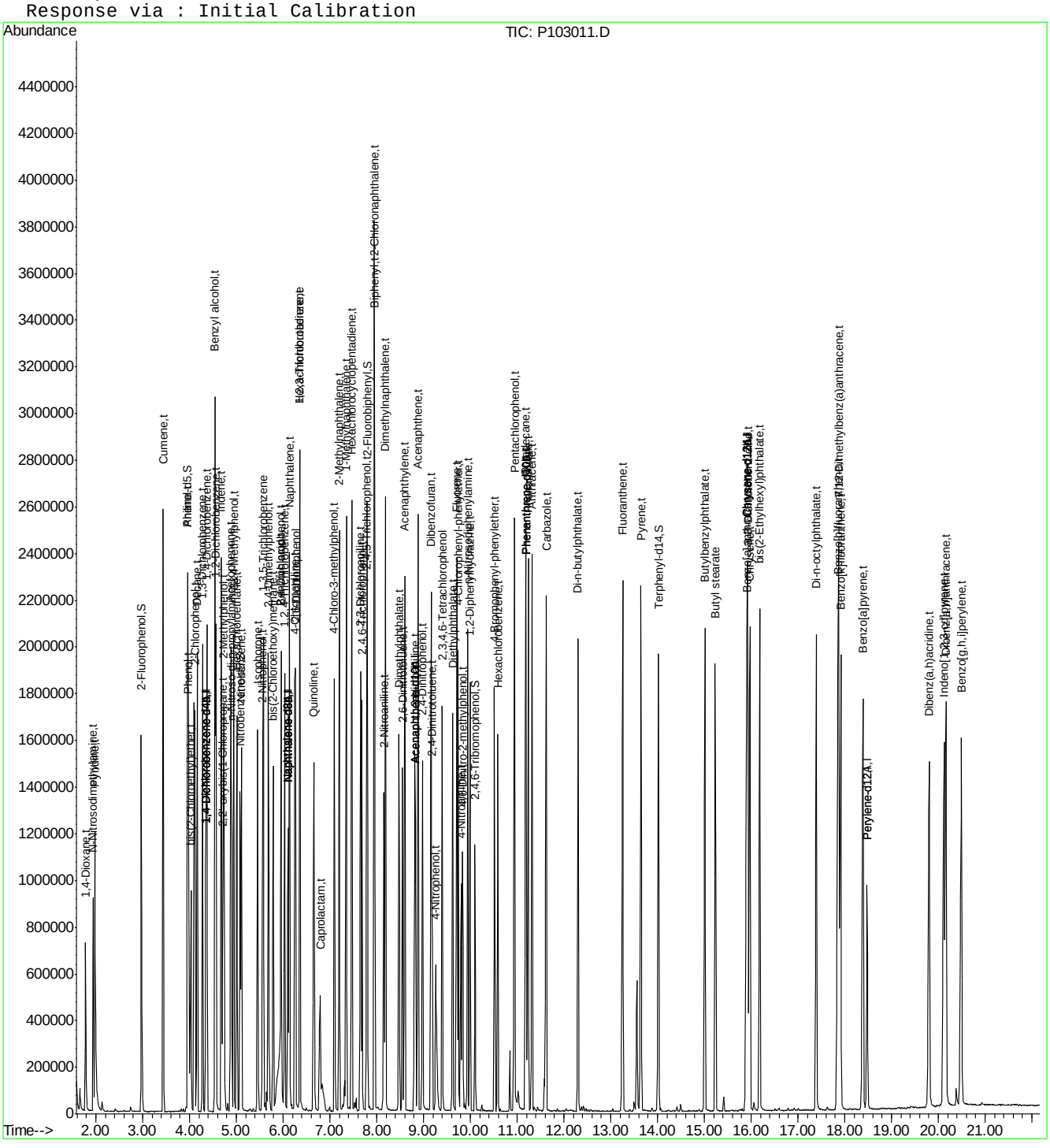
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:00 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

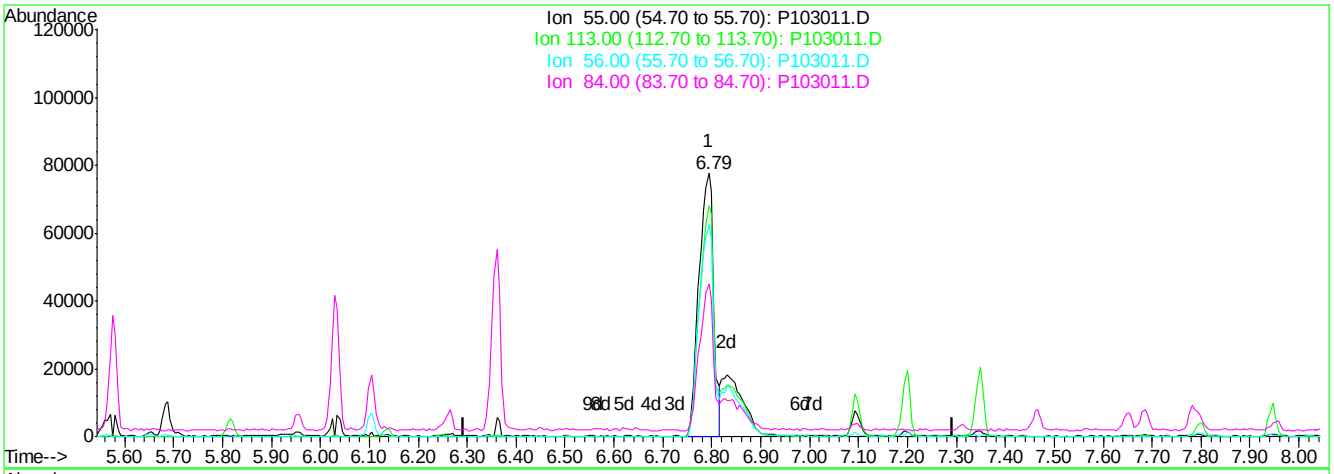
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103011.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 17:10	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

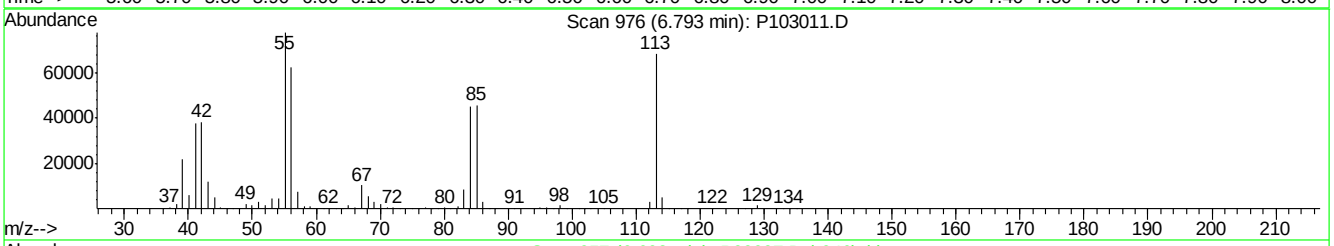
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.79	Split peak

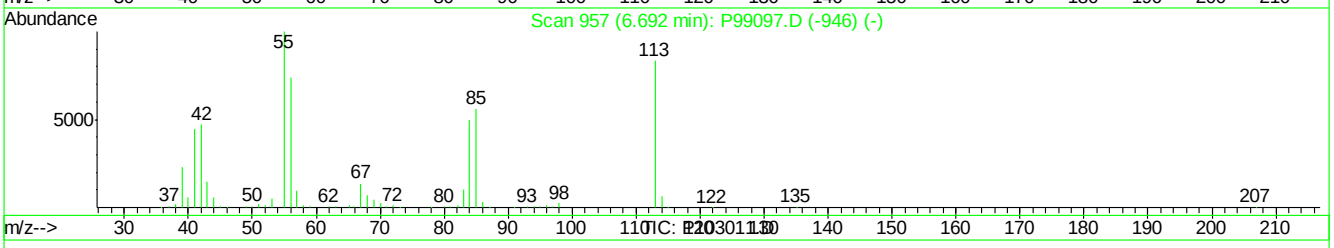
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Multiple Level Calibration







(41) Caprolactam (t)

6.79min 79.82ppm

response 162838

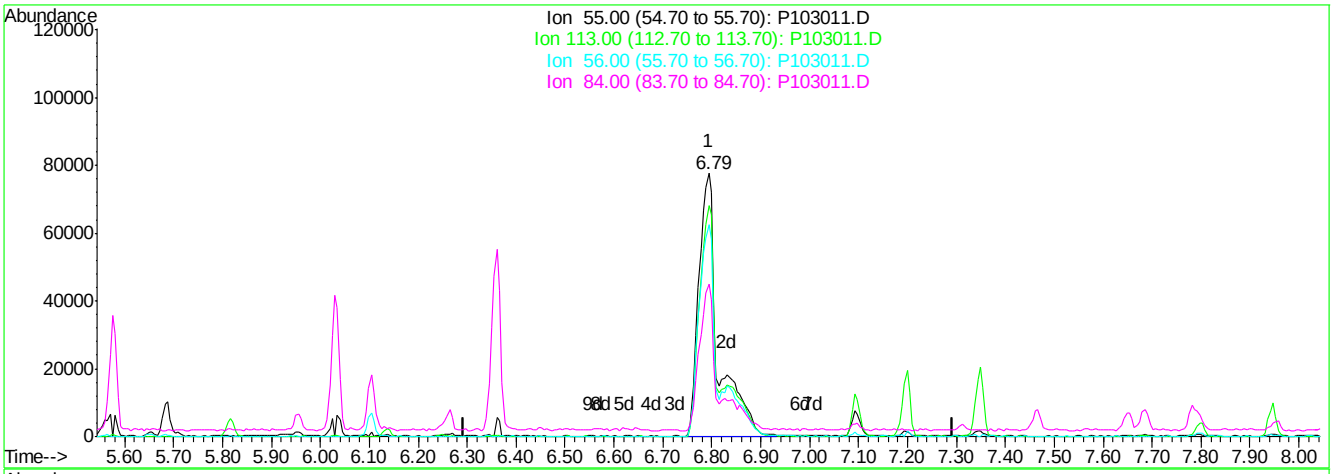
Ion	Exp%	Act%
55.00	100	100
113.00	88.10	87.95
56.00	77.60	81.09
84.00	52.10	55.97

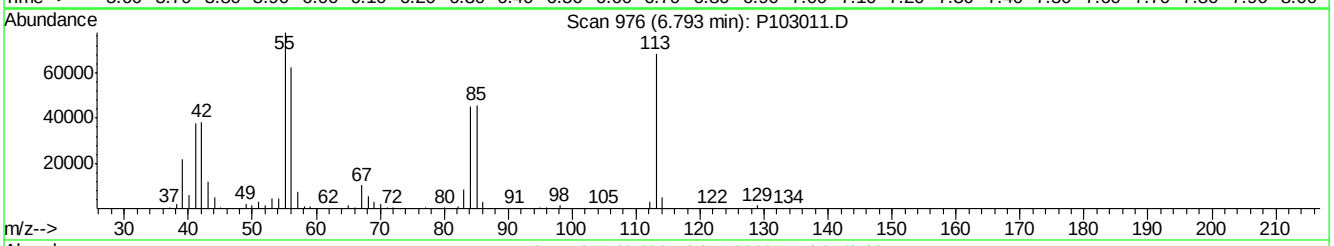
P103011.D MP4524.M Thu Mar 03 08:59:22 2016

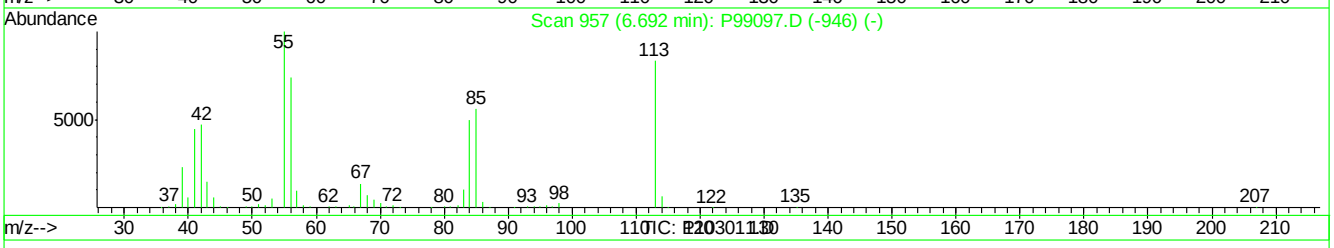
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:59 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Multiple Level Calibration







(41) Caprolactam (t)

6.79min 107.52ppm m

response 219369

Ion	Exp%	Act%
55.00	100	100
113.00	88.10	87.80
56.00	77.60	80.48
84.00	52.10	57.88

P103011.D MP4524.M Thu Mar 03 08:59:31 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	178586	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	620528	40.00	ppm	0.00
47) Acenaphthene-d10	8.83	164	360281	40.00	ppm	0.00
69) Phenanthrene-d10	11.20	188	528608	40.00	ppm	0.00
83) Chrysene-d12	15.92	240	473646	40.00	ppm	0.00
92) Perylene-d12	18.48	264	491928	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	178586	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	620528	40.00	ppm	-0.02
121) Acenaphthene-d10A	8.83	164	360281	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.20	188	528608	40.00	ppm	-0.03
147) Chrysene-d12A	15.92	240	473646	40.00	ppm	-0.03
155) Perylene-d12A	18.48	264	491928	40.00	ppm	-0.04
159) 1,4-Dichlorobenzene-d4b	4.35	152	178586	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.20	188	528608	40.00	ppm	-0.03
163) Chrysene-d12b	15.92	240	473646	40.00	ppm	-0.03
165) Naphthalene-d8b	6.10	136	620528	40.00	ppm	-0.02
167) Acenaphthene-d10b	8.83	164	360281	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	620528	40.00	ppm	-0.02
174) 1,4-Dichlorobenzene-d4a	4.35	152	178586	40.00	ppm	-0.11
176) Chrysene-d12c	15.92	240	473646	40.00	ppm	-0.04
178) Chrysene-d12d	15.92	240	473646	40.00	ppm	-0.04
180) Naphthalene-d8a	6.10	136	620528	40.00	ppm	0.14

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	465094	74.97	ppm	0.00
Spiked Amount 50.000			Recovery = 149.94%			
8) Phenol-d5	3.96	99	523320	68.75	ppm	0.00
Spiked Amount 50.000			Recovery = 137.50%			
25) Nitrobenzene-d5	5.08	82	471793	79.32	ppm	0.00
Spiked Amount 50.000			Recovery = 158.64%			
51) 2-Fluorobiphenyl	7.80	172	732307	66.42	ppm	0.00
Spiked Amount 50.000			Recovery = 132.84%			
73) 2,4,6-Tribromophenol	10.10	330	106345	93.08	ppm	0.00
Spiked Amount 50.000			Recovery = 186.16%			
85) Terphenyl-d14	14.02	244	728869	80.47	ppm	0.00
Spiked Amount 50.000			Recovery = 160.94%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	222785	71.68	ppm	98
3) Pyridine	1.97	79	500405	73.53	ppm	93
4) N-Nitrosodimethylamine	1.94	42	194874	77.79	ppm	93
6) Indene	4.68	116	704226	71.09	ppm	96
7) Cumene	3.44	105	946025	65.13	ppm	96
9) Phenol	3.98	94	583308	77.04	ppm	92
10) Aniline	3.95	93	537736	61.28	ppm	78
11) bis(2-Chloroethyl)ether	4.03	93	400655	73.98	ppm	97
12) 2-Chlorophenol	4.12	128	416149	70.89	ppm	96
13) Decane	4.17	43	310686	68.27	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	458830	68.52	ppm	100
15) 1,4-Dichlorobenzene	4.37	146	442639	68.66	ppm	98

(#) = qualifier out of range (m) = manual integration
P103012.D MP4524.M Thu Mar 03 09:01:53 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.54	108	252119	70.49	ppm		97
17)	1,2-Dichlorobenzene	4.57	146	404580	65.29	ppm		97
18)	Acetophenone	4.88	105	566522	70.23	ppm		97
19)	2-Methylphenol	4.73	108	367071	73.78	ppm		100
20)	2,2'-oxybis(1-Chloropropan	4.72	121	136332	75.04	ppm	#	95
21)	3&4-Methylphenol	4.94	108	410262	78.62	ppm		99
22)	n-Nitroso-di-n-propylamine	4.90	70	286991	76.16	ppm		98
23)	Hexachloroethane	5.01	201	153332	77.33	ppm		92
26)	Nitrobenzene	5.11	77	436257	75.96	ppm		97
27)	Quinoline	6.65	129	829668	75.27	ppm		97
28)	Isophorone	5.45	82	762842	74.99	ppm		98
29)	2-Nitrophenol	5.56	139	238435	82.08	ppm		90
30)	2,4-Dimethylphenol	5.68	107	407424	79.55	ppm		99
31)	Benzoic acid	5.94	105	344557	91.99	ppm		98
32)	bis(2-Chloroethoxy)methane	5.79	93	473263	75.99	ppm		99
33)	2,4-Dichlorophenol	5.95	162	338773	80.23	ppm		98
34)	2,6-Dichlorophenol	6.26	162	314906	77.18	ppm		97
35)	1,3,5-Trichlorobenzene	5.58	180	336682	67.77	ppm		99
36)	1,2,4-Trichlorobenzene	6.03	180	344599	70.67	ppm		98
37)	1,2,3-Trichlorobenzene	6.36	180	303801	67.48	ppm		98
38)	Naphthalene	6.14	128	1040109	68.36	ppm		96
39)	4-Chloroaniline	6.25	127	462641	68.78	ppm		98
40)	2,3-Dichloroaniline	7.65	161	408885	78.02	ppm		96
41)	Caprolactam	6.78	55	174783	85.57	ppm		96
42)	Hexachlorobutadiene	6.35	225	172834	76.64	ppm		100
43)	4-Chloro-3-methylphenol	7.09	107	375944	80.55	ppm	#	30
44)	2-Methylnaphthalene	7.19	141	595854	70.43	ppm		97
45)	1-Methylnaphthalene	7.35	142	729873	70.66	ppm		99
46)	Dimethylnaphthalene	8.19	156	636599	70.76	ppm		99
48)	Hexachlorocyclopentadiene	7.47	237	397814	155.36	ppm		98
49)	2,4,6-Trichlorophenol	7.69	196	229870	83.30	ppm		99
50)	2,4,5-Trichlorophenol	7.78	196	236902	80.62	ppm		98
52)	2-Chloronaphthalene	7.95	162	632054	67.63	ppm		98
53)	Biphenyl	7.94	154	796865	64.42	ppm		98
54)	2-Nitroaniline	8.15	65	229126	83.33	ppm		94
55)	Dimethylphthalate	8.48	163	802593	73.58	ppm		97
56)	Acenaphthylene	8.60	152	1034752	65.79	ppm		98
57)	2,6-Dinitrotoluene	8.55	165	198006	89.06	ppm		99
58)	3-Nitroaniline	8.81	138	228215	77.72	ppm		91
59)	Acenaphthene	8.88	153	652927	68.71	ppm		98
60)	2,4-Dinitrophenol	8.97	184	230535	164.09	ppm		100
61)	4-Nitrophenol	9.26	109	133510	88.07	ppm		99
62)	Dibenzofuran	9.16	168	920930	70.38	ppm		98
63)	2,4-Dinitrotoluene	9.18	165	253510	80.31	ppm		100
64)	2,3,4,6-Tetrachlorophenol	9.40	232	187545	86.91	ppm		98
65)	Diethylphthalate	9.62	149	804416	73.03	ppm		97
66)	Fluorene	9.70	166	770464	73.31	ppm		98
67)	4-Chlorophenyl-phenylether	9.74	204	351230	76.35	ppm		96
68)	4-Nitroaniline	9.80	138	222666	84.16	ppm		93

(#) = qualifier out of range (m) = manual integration
P103012.D MP4524.M Thu Mar 03 09:01:53 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.83	198	155961	82.07	ppm	94
71)	n-Nitrosodiphenylamine	9.95	169	583030	81.55	ppm	99
72)	1,2-Diphenylhydrazine	9.99	77	778787	77.13	ppm	99
74)	4-Bromophenyl-phenylether	10.52	248	204104	82.78	ppm	96
75)	Hexachlorobenzene	10.59	284	208450	80.26	ppm	96
76)	Pentachlorophenol	10.94	266	268273	150.32	ppm	98
77)	Phenanthrene	11.23	178	970432	71.73	ppm	97
78)	Anthracene	11.31	178	1003378	73.15	ppm	98
79)	Carbazole	11.62	167	1030855	77.27	ppm	98
80)	Di-n-butylphthalate	12.30	149	1289557	78.39	ppm	96
81)	Fluoranthene	13.25	202	1105211	80.90	ppm	99
82)	Octadecane	11.18	57	406806	86.03	ppm	95
84)	Pyrene	13.65	202	1138686	73.23	ppm	97
86)	Butylbenzylphthalate	15.00	149	630046	84.56	ppm	96
87)	Butyl stearate	15.23	56	306617	87.60	ppm	95
88)	Benzo[a]anthracene	15.90	228	980886	78.50	ppm	99
89)	3,3'-Dichlorobenzidine	15.93	252	385724	89.53	ppm	96
90)	Chrysene	15.97	228	934208	75.43	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.18	149	832867	83.98	ppm	95
93)	Di-n-octylphthalate	17.39	149	1403680	73.23	ppm	96
94)	Benzo[b]fluoranthene	17.85	252	1069927	80.57	ppm	99
95)	Benzo[k]fluoranthene	17.91	252	946696	72.76	ppm	96
96)	Benzo[a]pyrene	18.39	252	948815	79.29	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.11	276	891968	82.87	ppm	100
98)	Dibenz(a,h)acridine	19.80	279	835853	86.28	ppm	100
99)	Dibenz[a,h]anthracene	20.15	278	929880	83.06	ppm	97
100)	7,12-Dimethylbenz(a)anthra	17.86	256	476117	84.85	ppm	98
101)	Benzo[g,h,i]perylene	20.49	276	949594	80.65	ppm	98

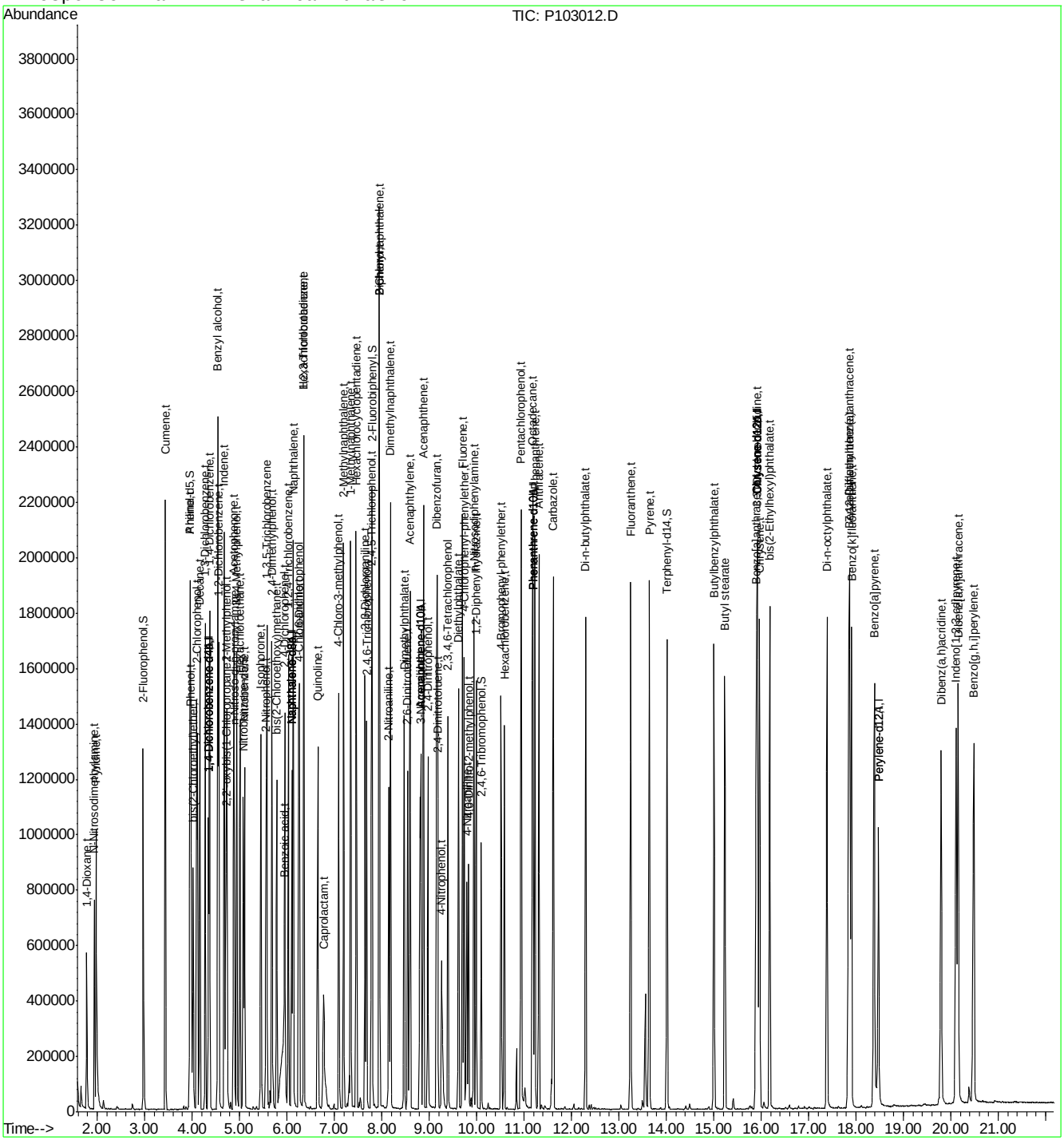
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:01 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155426	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	552817	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	324485	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	498966	40.00	ppm	-0.01
83) Chrysene-d12	15.91	240	463163	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	421054	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155426	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	552817	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	324485	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	498966	40.00	ppm	-0.04
147) Chrysene-d12A	15.91	240	463163	40.00	ppm	-0.04
155) Perylene-d12A	18.47	264	421054	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155426	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	498966	40.00	ppm	-0.04
163) Chrysene-d12b	15.91	240	463163	40.00	ppm	-0.04
165) Naphthalene-d8b	6.10	136	552817	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	324485	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	552817	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155426	40.00	ppm	-0.11
176) Chrysene-d12c	15.91	240	463163	40.00	ppm	-0.05
178) Chrysene-d12d	15.91	240	463163	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	552817	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	55136	10.21	ppm	0.00
Spiked Amount 50.000			Recovery = 20.42%			
8) Phenol-d5	3.97	99	68507	10.34	ppm	0.01
Spiked Amount 50.000			Recovery = 20.68%			
25) Nitrobenzene-d5	5.07	82	56575	10.68	ppm	-0.01
Spiked Amount 50.000			Recovery = 21.36%			
51) 2-Fluorobiphenyl	7.79	172	102683	10.34	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.68%			
73) 2,4,6-Tribromophenol	10.09	330	10993	10.19	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.38%			
85) Terphenyl-d14	14.01	244	88944	10.04	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.08%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	24506	9.06	ppm	95
3) Pyridine	1.97	79	63167	10.66	ppm	93
4) N-Nitrosodimethylamine	1.94	42	22730	10.43	ppm	94
6) Indene	4.68	116	91808	10.65	ppm	97
7) Cumene	3.44	105	131818	10.43	ppm	99
9) Phenol	3.99	94	69485	10.54	ppm	97
10) Aniline	3.95	93	77890	10.20	ppm	99
11) bis(2-Chloroethyl)ether	4.02	93	49772	10.56	ppm	97
12) 2-Chlorophenol	4.12	128	54613	10.69	ppm	99
13) Decane	4.16	43	42382	10.70	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	60103	10.31	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	57065	10.17	ppm	99

(#) = qualifier out of range (m) = manual integration
P103013.D MP4524.M Thu Mar 03 09:06:42 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	31766	10.21 ppm		98
17) 1,2-Dichlorobenzene	4.56	146	54367	10.08 ppm		99
18) Acetophenone	4.87	105	70625	10.06 ppm		99
19) 2-Methylphenol	4.73	108	45378	10.48 ppm		95
20) 2,2'-oxybis(1-Chloropropan	4.71	121	16189	10.24 ppm	#	99
21) 3&4-Methylphenol	4.94	108	48892	10.77 ppm		95
22) n-Nitroso-di-n-propylamine	4.88	70	36256	11.06 ppm		96
23) Hexachloroethane	5.01	201	18214	10.55 ppm		91
26) Nitrobenzene	5.10	77	54545	10.66 ppm		97
27) Quinoline	6.63	129	97447	9.92 ppm		97
28) Isophorone	5.44	82	94489	10.43 ppm		97
29) 2-Nitrophenol	5.55	139	26353	10.18 ppm		86
30) 2,4-Dimethylphenol	5.68	107	44496	9.75 ppm		96
31) Benzoic acid	5.82	105	25492	7.64 ppm		91
32) bis(2-Chloroethoxy)methane	5.78	93	56753	10.23 ppm		98
33) 2,4-Dichlorophenol	5.95	162	40441	10.75 ppm		98
34) 2,6-Dichlorophenol	6.25	162	38262	10.53 ppm		98
35) 1,3,5-Trichlorobenzene	5.57	180	44259	10.00 ppm		97
36) 1,2,4-Trichlorobenzene	6.02	180	43968	10.12 ppm		94
37) 1,2,3-Trichlorobenzene	6.36	180	41326	10.30 ppm		97
38) Naphthalene	6.13	128	139418	10.29 ppm		97
39) 4-Chloroaniline	6.24	127	61411	10.25 ppm		98
40) 2,3-Dichloroaniline	7.64	161	49954	10.70 ppm		99
41) Caprolactam	6.71	55	17813	9.79 ppm		97
42) Hexachlorobutadiene	6.35	225	21189	10.55 ppm		99
43) 4-Chloro-3-methylphenol	7.09	107	43449	10.45 ppm		99
44) 2-Methylnaphthalene	7.19	141	79541	10.55 ppm		99
45) 1-Methylnaphthalene	7.34	142	95406	10.37 ppm		98
46) Dimethylnaphthalene	8.18	156	83542	10.42 ppm		100
48) Hexachlorocyclopentadiene	7.46	237	44535	19.31 ppm		96
49) 2,4,6-Trichlorophenol	7.67	196	26349	10.60 ppm		95
50) 2,4,5-Trichlorophenol	7.78	196	27159	10.26 ppm		96
52) 2-Chloronaphthalene	7.94	162	88123	10.47 ppm		99
53) Biphenyl	7.94	154	114437	10.27 ppm		97
54) 2-Nitroaniline	8.13	65	25270	10.20 ppm		92
55) Dimethylphthalate	8.46	163	100109	10.19 ppm		99
56) Acenaphthylene	8.59	152	139479	9.85 ppm		97
57) 2,6-Dinitrotoluene	8.53	165	22361	11.17 ppm		100
58) 3-Nitroaniline	8.79	138	25976	9.82 ppm		98
59) Acenaphthene	8.87	153	85464	9.99 ppm		96
60) 2,4-Dinitrophenol	8.96	184	14131	16.88 ppm		93
61) 4-Nitrophenol	9.28	109	12377	9.07 ppm		91
62) Dibenzofuran	9.15	168	121720	10.33 ppm		97
63) 2,4-Dinitrotoluene	9.17	165	28231	9.50 ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.39	232	19384	9.97 ppm		94
65) Diethylphthalate	9.60	149	99740	10.05 ppm		97
66) Fluorene	9.69	166	100352	10.60 ppm		98
67) 4-Chlorophenyl-phenylether	9.74	204	44163	10.66 ppm		96
68) 4-Nitroaniline	9.76	138	24865	10.43 ppm		95

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

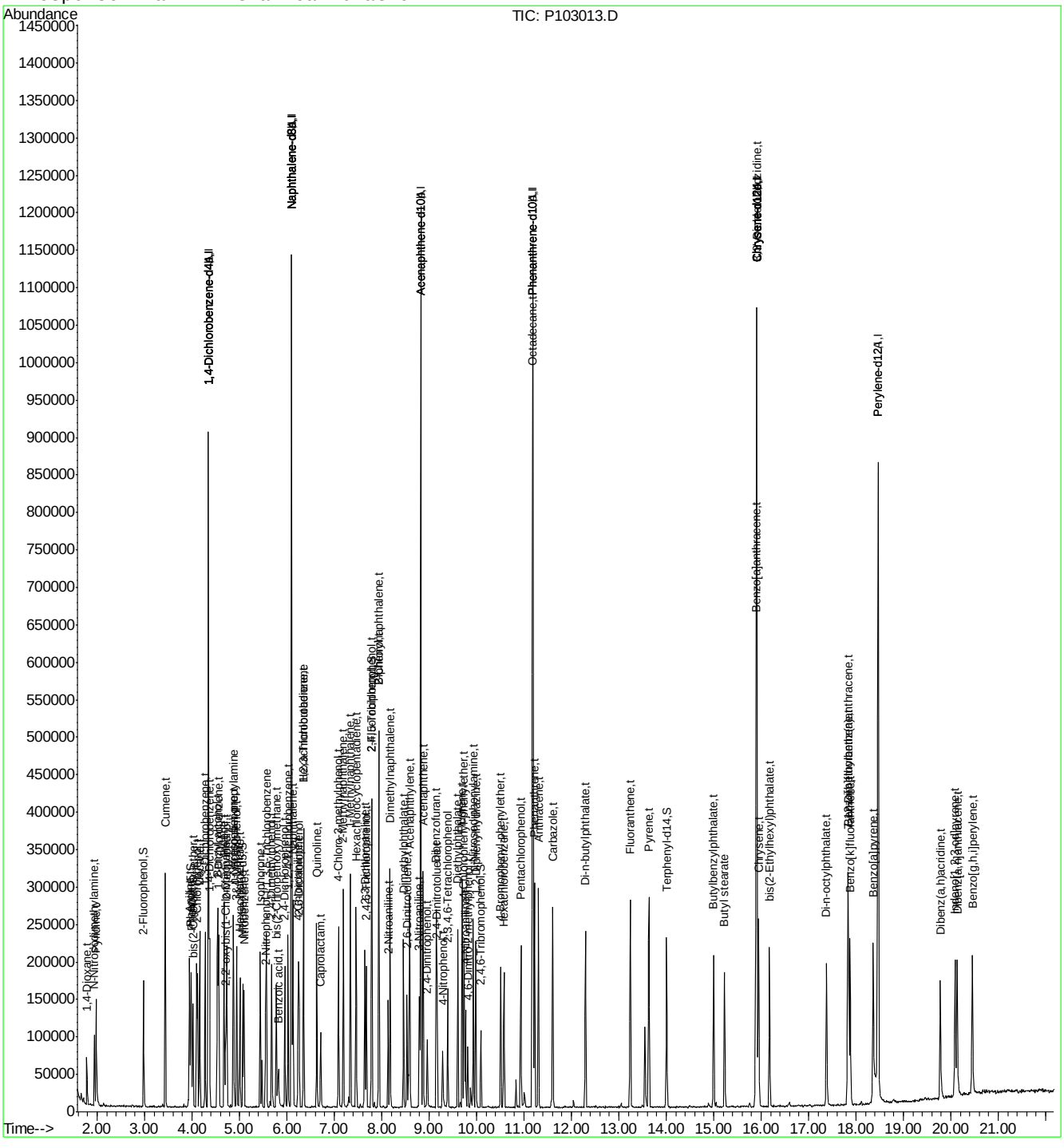
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	12476	11.42	ppm	90
71)	n-Nitrosodiphenylamine	9.93	169	71605	10.61	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	101728	10.67	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	24024	10.32	ppm	97
75)	Hexachlorobenzene	10.58	284	26016	10.61	ppm	88
76)	Pentachlorophenol	10.93	266	23396	15.80	ppm	97
77)	Phenanthrene	11.22	178	129538	10.14	ppm	98
78)	Anthracene	11.30	178	133090	10.28	ppm	98
79)	Carbazole	11.61	167	134489	10.68	ppm	99
80)	Di-n-butylphthalate	12.30	149	164165	10.57	ppm	98
81)	Fluoranthene	13.24	202	140545	10.90	ppm	97
82)	Octadecane	11.17	57	50585	11.33	ppm	97
84)	Pyrene	13.63	202	149529	9.83	ppm	98
86)	Butylbenzylphthalate	15.00	149	68466	9.40	ppm	98
87)	Butyl stearate	15.22	56	32764	9.57	ppm	96
88)	Benzo[a]anthracene	15.89	228	115379	9.44	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	40668	9.65	ppm	96
90)	Chrysene	15.95	228	118321	9.77	ppm	97
91)	bis(2-Ethylhexyl)phthalate	16.17	149	88395	9.12	ppm	99
93)	Di-n-octylphthalate	17.38	149	146382	9.00	ppm	98
94)	Benzo[b]fluoranthene	17.83	252	121995	10.73	ppm	97
95)	Benzo[k]fluoranthene	17.87	252	116254	10.44	ppm	99
96)	Benzo[a]pyrene	18.36	252	110921	10.83	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.09	276	94257	10.23	ppm	95
98)	Dibenz(a,h)acridine	19.78	279	89244	10.76	ppm	100
99)	Dibenz[a,h]anthracene	20.13	278	100671	10.51	ppm	99
100)	7,12-Dimethylbenz(a)anthra	17.84	256	47828	9.96	ppm	97
101)	Benzo[g,h,i]perylene	20.45	276	106051	10.52	ppm	97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:06 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155607	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	540889	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	318775	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	495165	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	453126	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	406577	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155607	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	540889	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	318775	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	495165	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	453126	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	406577	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155607	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	495165	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	453126	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	540889	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	318775	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	540889	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155607	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	453126	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	453126	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	540889	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	26969	4.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.98%	
8) Phenol-d5	3.97	99	33602	5.07	ppm	0.01
Spiked Amount 50.000			Recovery	=	10.14%	
25) Nitrobenzene-d5	5.07	82	26904	5.19	ppm	-0.01
Spiked Amount 50.000			Recovery	=	10.38%	
51) 2-Fluorobiphenyl	7.79	172	51547	5.28	ppm	-0.02
Spiked Amount 50.000			Recovery	=	10.56%	
73) 2,4,6-Tribromophenol	10.09	330	4944	4.62	ppm	-0.02
Spiked Amount 50.000			Recovery	=	9.24%	
85) Terphenyl-d14	14.01	244	42527	4.91	ppm	-0.02
Spiked Amount 50.000			Recovery	=	9.82%	

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	13932	5.14	ppm	96
3) Pyridine	1.98	79	32165	5.42	ppm	98
4) N-Nitrosodimethylamine	1.94	42	11536	5.29	ppm	89
6) Indene	4.67	116	46488	5.39	ppm	96
7) Cumene	3.44	105	66227	5.23	ppm	97
9) Phenol	3.99	94	33826	5.13	ppm	98
10) Aniline	3.95	93	40145	5.25	ppm	94
11) bis(2-Chloroethyl)ether	4.02	93	25050	5.31	ppm	98
12) 2-Chlorophenol	4.12	128	26588	5.20	ppm	96
13) Decane	4.16	43	21057	5.31	ppm	98
14) 1,3-Dichlorobenzene	4.28	146	29636	5.08	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	27956	4.98	ppm	97

(#) = qualifier out of range (m) = manual integration
P103014.D MP4524.M Thu Mar 03 09:08:06 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	15363	4.93	ppm		95
17)	1,2-Dichlorobenzene	4.56	146	27909	5.17	ppm		97
18)	Acetophenone	4.87	105	36422	5.18	ppm		96
19)	2-Methylphenol	4.73	108	21653	4.99	ppm		99
20)	2,2'-oxybis(1-Chloropropan	4.71	121	8174	5.16	ppm	#	94
21)	3&4-Methylphenol	4.94	108	23708	5.21	ppm		98
22)	n-Nitroso-di-n-propylamine	4.88	70	17413	5.30	ppm		98
23)	Hexachloroethane	5.01	201	9201	5.33	ppm		92
26)	Nitrobenzene	5.10	77	26808	5.36	ppm		96
27)	Quinoline	6.63	129	49913	5.19	ppm		98
28)	Isophorone	5.44	82	44969	5.07	ppm		97
29)	2-Nitrophenol	5.55	139	12006	4.74	ppm		85
30)	2,4-Dimethylphenol	5.68	107	21081	4.72	ppm		99
31)	Benzoic acid	5.81	105	9949	3.05	ppm		94
32)	bis(2-Chloroethoxy)methane	5.78	93	28551	5.26	ppm		98
33)	2,4-Dichlorophenol	5.95	162	19286	5.24	ppm		97
34)	2,6-Dichlorophenol	6.25	162	19007	5.34	ppm		95
35)	1,3,5-Trichlorobenzene	5.57	180	22364	5.16	ppm		98
36)	1,2,4-Trichlorobenzene	6.02	180	22530	5.30	ppm		92
37)	1,2,3-Trichlorobenzene	6.35	180	20382	5.19	ppm		91
38)	Naphthalene	6.13	128	71028	5.36	ppm		99
39)	4-Chloroaniline	6.24	127	30237	5.16	ppm		99
40)	2,3-Dichloroaniline	7.64	161	25352	5.55	ppm		98
41)	Caprolactam	6.71	55	8639	4.85	ppm		94
42)	Hexachlorobutadiene	6.35	225	11099	5.65	ppm		94
43)	4-Chloro-3-methylphenol	7.09	107	20273	4.98	ppm		96
44)	2-Methylnaphthalene	7.19	141	39005	5.29	ppm		97
45)	1-Methylnaphthalene	7.34	142	48329	5.37	ppm		97
46)	Dimethylnaphthalene	8.18	156	40886	5.21	ppm		98
48)	Hexachlorocyclopentadiene	7.46	237	18369	8.11	ppm		98
49)	2,4,6-Trichlorophenol	7.67	196	11786	4.83	ppm		96
50)	2,4,5-Trichlorophenol	7.78	196	12956	4.98	ppm		94
52)	2-Chloronaphthalene	7.94	162	45135	5.46	ppm		98
53)	Biphenyl	7.94	154	56812	5.19	ppm		96
54)	2-Nitroaniline	8.13	65	11086	4.56	ppm		94
55)	Dimethylphthalate	8.46	163	49583	5.14	ppm		98
56)	Acenaphthylene	8.59	152	69909	5.02	ppm		96
57)	2,6-Dinitrotoluene	8.53	165	9473	4.82	ppm		92
58)	3-Nitroaniline	8.79	138	11577	4.46	ppm		88
59)	Acenaphthene	8.87	153	42922	5.11	ppm		95
60)	2,4-Dinitrophenol	8.96	184	4195	9.06	ppm		93
61)	4-Nitrophenol	9.29	109	5034	3.75	ppm		90
62)	Dibenzofuran	9.15	168	61714	5.33	ppm		95
63)	2,4-Dinitrotoluene	9.17	165	12512	4.60	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.39	232	9273	4.86	ppm		94
65)	Diethylphthalate	9.60	149	48549	4.98	ppm		99
66)	Fluorene	9.69	166	50498	5.43	ppm		96
67)	4-Chlorophenyl-phenylether	9.73	204	22699	5.58	ppm		91
68)	4-Nitroaniline	9.76	138	10988	4.69	ppm		96

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	4274	7.14	ppm	94
71)	n-Nitrosodiphenylamine	9.93	169	35277	5.27	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	49064	5.19	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	11636	5.04	ppm	91
75)	Hexachlorobenzene	10.58	284	12826	5.27	ppm	95
76)	Pentachlorophenol	10.93	266	8538	8.36	ppm	94
77)	Phenanthrene	11.22	178	63535	5.01	ppm	100
78)	Anthracene	11.30	178	64555	5.02	ppm	99
79)	Carbazole	11.61	167	66824	5.35	ppm	98
80)	Di-n-butylphthalate	12.30	149	72767	4.72	ppm	98
81)	Fluoranthene	13.24	202	66948	5.23	ppm	97
82)	Octadecane	11.17	57	24057	5.43	ppm	95
84)	Pyrene	13.63	202	72231	4.86	ppm	99
86)	Butylbenzylphthalate	15.00	149	30411	4.27	ppm	94
87)	Butyl stearate	15.22	56	13848	4.14	ppm	91
88)	Benzo[a]anthracene	15.89	228	55988	4.68	ppm	97
89)	3,3'-Dichlorobenzidine	15.91	252	17340	4.21	ppm	91
90)	Chrysene	15.94	228	56260	4.75	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	37454	3.95	ppm	100
93)	Di-n-octylphthalate	17.38	149	58128	5.00	ppm	98
94)	Benzo[b]fluoranthene	17.83	252	58241	5.31	ppm	99
95)	Benzo[k]fluoranthene	17.87	252	58022	5.40	ppm	95
96)	Benzo[a]pyrene	18.36	252	50767	5.13	ppm	96
97)	Indeno[1,2,3-cd]pyrene	20.08	276	43144	4.85	ppm	95
98)	Dibenz(a,h)acridine	19.77	279	38461	4.80	ppm	96
99)	Dibenz[a,h]anthracene	20.13	278	46854	5.06	ppm	96
100)	7,12-Dimethylbenz(a)anthra	17.84	256	21729	4.69	ppm	99
101)	Benzo[g,h,i]perylene	20.45	276	51032	5.24	ppm	98

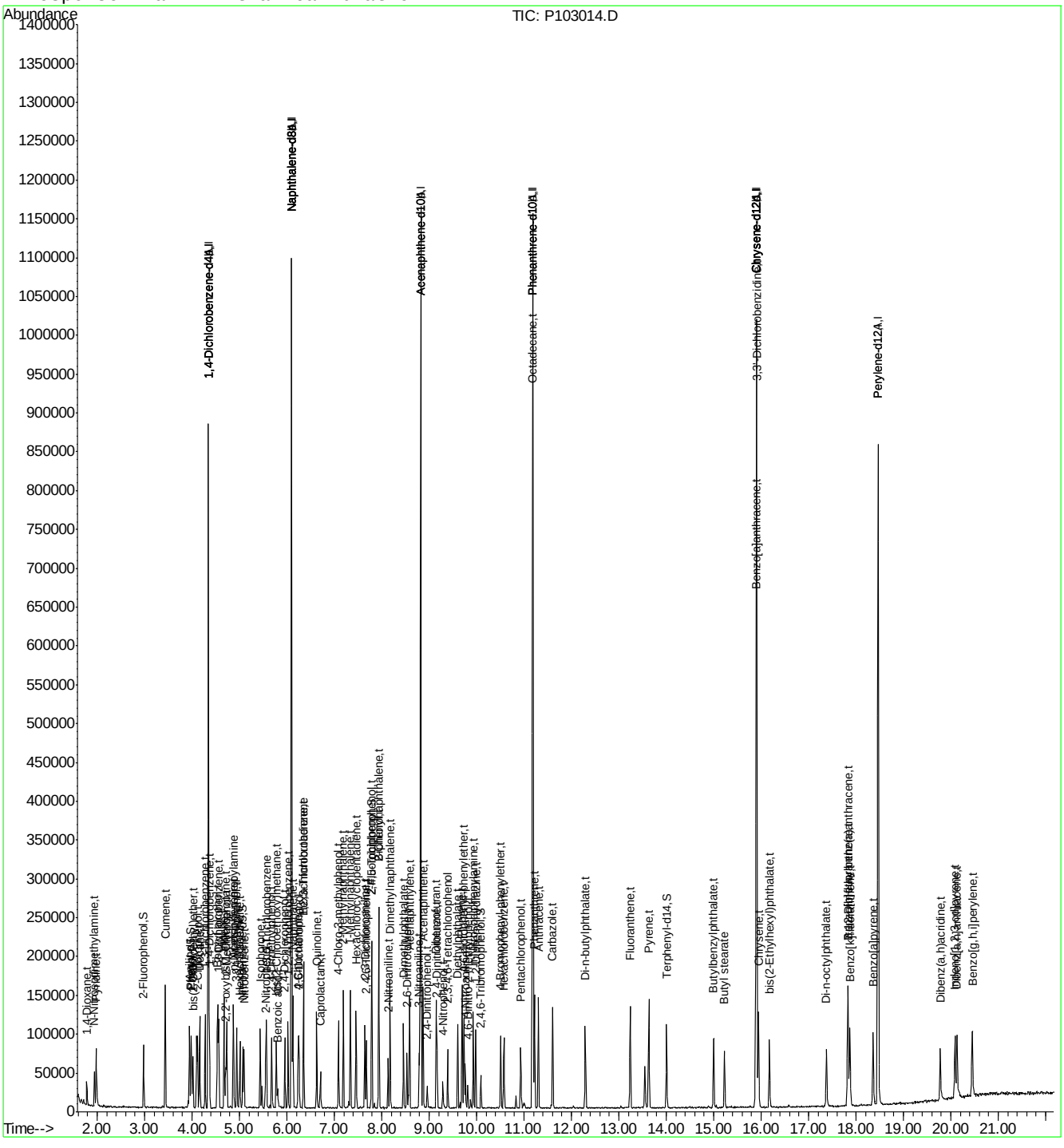
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:07 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	148071	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	519283	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	303889	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	468881	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	427194	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	384484	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	148071	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	519283	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	303889	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	468881	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	427194	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	384484	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	148071	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	468881	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	427194	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	519283	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	303889	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	519283	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	148071	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	427194	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	427194	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	519283	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.98	112	9792	1.90	ppm	0.01
Spiked Amount 50.000			Recovery = 3.80%			
8) Phenol-d5	3.98	99	13152	2.08	ppm	0.02
Spiked Amount 50.000			Recovery = 4.16%			
25) Nitrobenzene-d5	5.07	82	10608	2.13	ppm	-0.01
Spiked Amount 50.000			Recovery = 4.26%			
51) 2-Fluorobiphenyl	7.79	172	19830	2.13	ppm	-0.02
Spiked Amount 50.000			Recovery = 4.26%			
73) 2,4,6-Tribromophenol	10.09	330	1548	1.53	ppm	-0.02
Spiked Amount 50.000			Recovery = 3.06%			
85) Terphenyl-d14	14.01	244	15913	1.95	ppm	-0.02
Spiked Amount 50.000			Recovery = 3.90%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	5752	2.23	ppm	92
3) Pyridine	1.98	79	11702	2.07	ppm	96
4) N-Nitrosodimethylamine	1.94	42	4545	2.19	ppm	92
6) Indene	4.67	116	17006	2.07	ppm	95
7) Cumene	3.44	105	25241	2.10	ppm	97
9) Phenol	3.99	94	13209	2.10	ppm	97
10) Aniline	3.95	93	15193	2.09	ppm	79
11) bis(2-Chloroethyl)ether	4.02	93	10462	2.33	ppm	96
12) 2-Chlorophenol	4.12	128	10670	2.19	ppm	97
13) Decane	4.16	43	8913	2.36	ppm	89
14) 1,3-Dichlorobenzene	4.28	146	11777	2.12	ppm	89
15) 1,4-Dichlorobenzene	4.37	146	11491	2.15	ppm	89

(#) = qualifier out of range (m) = manual integration
P103015.D MP4524.M Thu Mar 03 09:10:04 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	5754	1.94 ppm		83
17) 1,2-Dichlorobenzene	4.56	146	10342	2.01 ppm		95
18) Acetophenone	4.87	105	13254	1.98 ppm		92
19) 2-Methylphenol	4.73	108	8340	2.02 ppm		96
20) 2,2'-oxybis(1-Chloropropan	4.72	121	3109	2.06 ppm		95
21) 3&4-Methylphenol	4.95	108	8900	2.06 ppm		98
22) n-Nitroso-di-n-propylamine	4.88	70	6765	2.17 ppm		97
23) Hexachloroethane	5.01	201	3499	2.13 ppm		90
26) Nitrobenzene	5.10	77	9920	2.06 ppm		95
27) Quinoline	6.63	129	18405	2.00 ppm		95
28) Isophorone	5.44	82	15954	1.87 ppm		95
29) 2-Nitrophenol	5.55	139	4542	1.87 ppm		91
30) 2,4-Dimethylphenol	5.68	107	7536	1.76 ppm		95
31) Benzoic acid	5.79	105	2676	0.85 ppm		87
32) bis(2-Chloroethoxy)methane	5.78	93	10818	2.08 ppm		92
33) 2,4-Dichlorophenol	5.96	162	6748	1.91 ppm		84
34) 2,6-Dichlorophenol	6.25	162	6535	1.91 ppm		91
35) 1,3,5-Trichlorobenzene	5.57	180	8324	2.00 ppm		95
36) 1,2,4-Trichlorobenzene	6.02	180	8294	2.03 ppm		89
37) 1,2,3-Trichlorobenzene	6.36	180	8219	2.18 ppm		95
38) Naphthalene	6.13	128	27359	2.15 ppm		96
39) 4-Chloroaniline	6.24	127	10739	1.91 ppm		94
40) 2,3-Dichloroaniline	7.64	161	9506	2.17 ppm		97
41) Caprolactam	6.70	55	2827	1.65 ppm		78
42) Hexachlorobutadiene	6.35	225	4199	2.22 ppm		95
43) 4-Chloro-3-methylphenol	7.09	107	6722	1.72 ppm		95
44) 2-Methylnaphthalene	7.19	141	14472	2.04 ppm		92
45) 1-Methylnaphthalene	7.34	142	17995	2.08 ppm		94
46) Dimethylnaphthalene	8.18	156	15216	2.02 ppm		92
48) Hexachlorocyclopentadiene	7.46	237	6584	3.05 ppm		96
49) 2,4,6-Trichlorophenol	7.67	196	4312	1.85 ppm		99
50) 2,4,5-Trichlorophenol	7.79	196	4313	1.74 ppm		95
52) 2-Chloronaphthalene	7.94	162	17541	2.23 ppm		94
53) Biphenyl	7.94	154	22996	2.20 ppm		97
54) 2-Nitroaniline	8.13	65	3978	1.72 ppm		83
55) Dimethylphthalate	8.46	163	18317	1.99 ppm		99
56) Acenaphthylene	8.59	152	25872	1.95 ppm		94
57) 2,6-Dinitrotoluene	8.53	165	3010	1.60 ppm		93
58) 3-Nitroaniline	8.79	138	3802	1.53 ppm		98
59) Acenaphthene	8.87	153	15999	2.00 ppm		93
60) 2,4-Dinitrophenol	8.96	184	785	6.33 ppm		82
61) 4-Nitrophenol	9.29	109	1841	1.44 ppm	#	83
62) Dibenzofuran	9.15	168	23300	2.11 ppm		98
63) 2,4-Dinitrotoluene	9.17	165	3967	1.95 ppm		92
64) 2,3,4,6-Tetrachlorophenol	9.39	232	2826	1.55 ppm		80
65) Diethylphthalate	9.60	149	18236	1.96 ppm		95
66) Fluorene	9.69	166	18432	2.08 ppm		93
67) 4-Chlorophenyl-phenylether	9.73	204	8412	2.17 ppm		98
68) 4-Nitroaniline	9.76	138	3584	1.61 ppm		94

(#) = qualifier out of range (m) = manual integration
P103015.D MP4524.M Thu Mar 03 09:10:04 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	1004	5.44	ppm	92
71)	n-Nitrosodiphenylamine	9.93	169	12791	2.02	ppm	95
72)	1,2-Diphenylhydrazine	9.98	77	17812	1.99	ppm	91
74)	4-Bromophenyl-phenylether	10.51	248	4180	1.91	ppm	92
75)	Hexachlorobenzene	10.58	284	5013	2.18	ppm	90
76)	Pentachlorophenol	10.93	266	2234	5.26	ppm	89
77)	Phenanthrene	11.22	178	24318	2.03	ppm	98
78)	Anthracene	11.30	178	23432	1.93	ppm	99
79)	Carbazole	11.60	167	23377	1.98	ppm	99
80)	Di-n-butylphthalate	12.29	149	23363	1.60	ppm	93
81)	Fluoranthene	13.24	202	23983	1.98	ppm	97
82)	Octadecane	11.17	57	8767	2.09	ppm	97
84)	Pyrene	13.63	202	26127	1.86	ppm	93
86)	Butylbenzylphthalate	14.99	149	8941	1.33	ppm	90
87)	Butyl stearate	15.22	56	3624	1.15	ppm	87
88)	Benzo[a]anthracene	15.89	228	20705	1.84	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	5154	1.33	ppm	87
90)	Chrysene	15.94	228	22166	1.98	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	10184	1.14	ppm	92
93)	Di-n-octylphthalate	17.38	149	13602	2.95	ppm	97
94)	Benzo[b]fluoranthene	17.83	252	20465	1.97	ppm	94
95)	Benzo[k]fluoranthene	17.87	252	20495	2.02	ppm	91
96)	Benzo[a]pyrene	18.36	252	16901	1.81	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.08	276	13908m	1.65	ppm	
98)	Dibenz(a,h)acridine	19.78	279	11517	1.52	ppm	97
99)	Dibenz[a,h]anthracene	20.13	278	16778	1.92	ppm	92
100)	7,12-Dimethylbenz(a)anthra	17.83	256	7263	1.66	ppm	87
101)	Benzo[g,h,i]perylene	20.45	276	17502	1.90	ppm	98

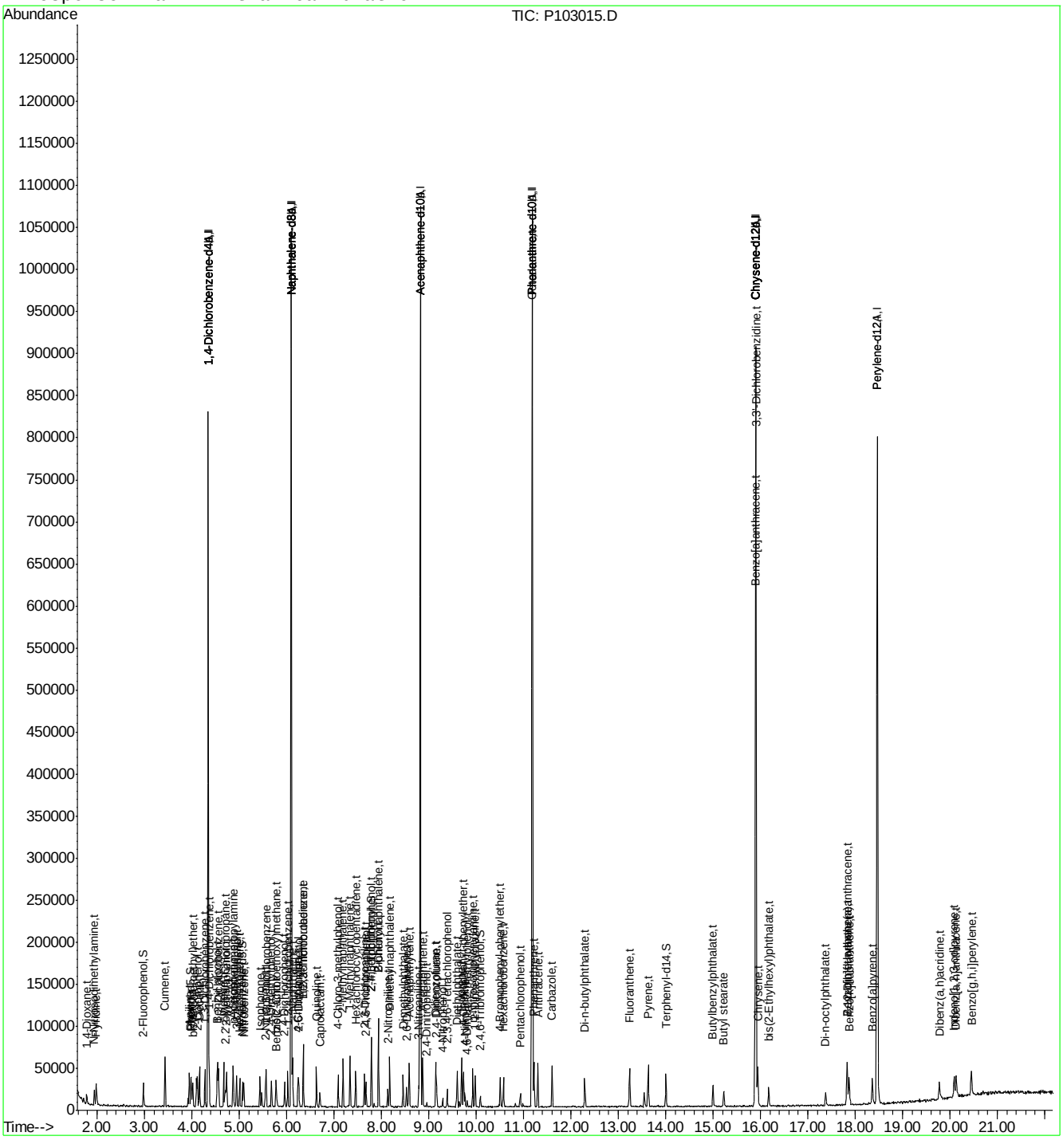
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:09 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

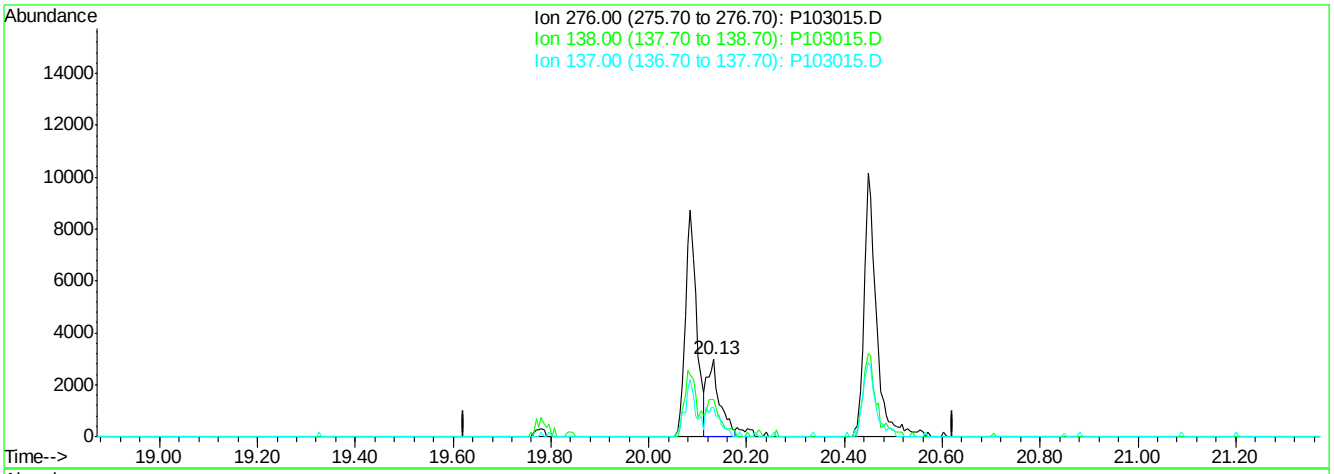
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103015.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 19:08	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

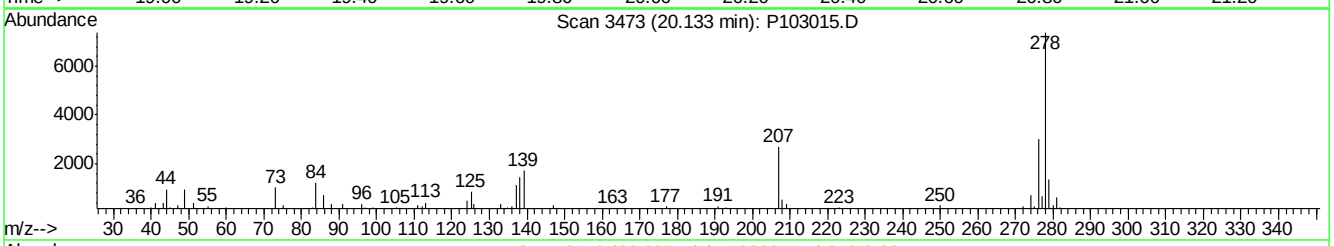
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.08	Poor instrument integration

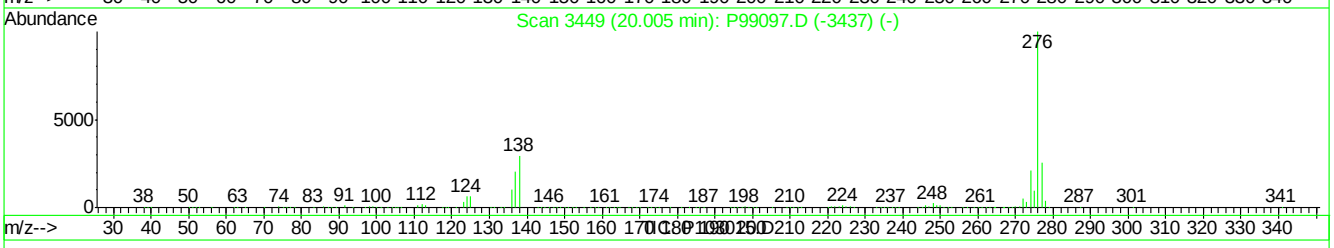
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:08 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.13min 0.65ppm

response 5497

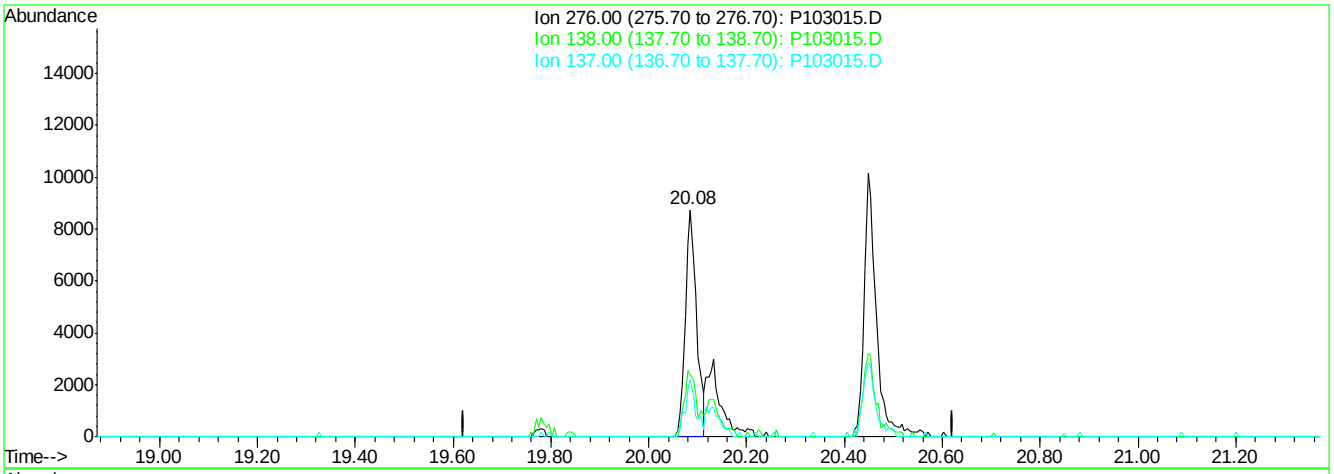
Ion	Exp%	Act%
276.00	100	100
138.00	28.90	45.22
137.00	20.50	50.31
0.00	0.00	0.00

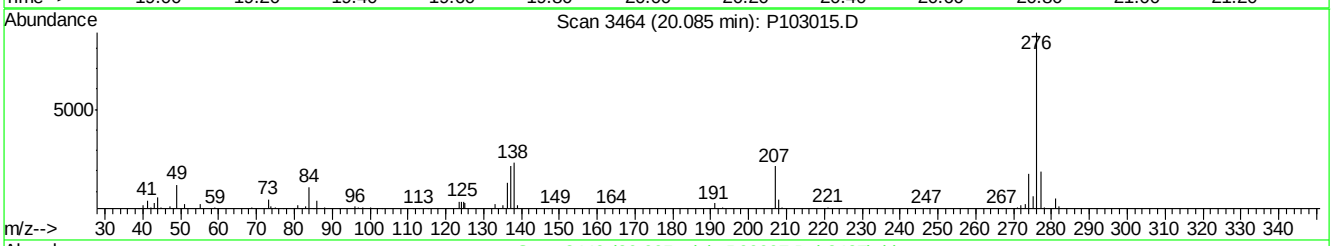
P103015.D MP4524.M Thu Mar 03 09:09:23 2016

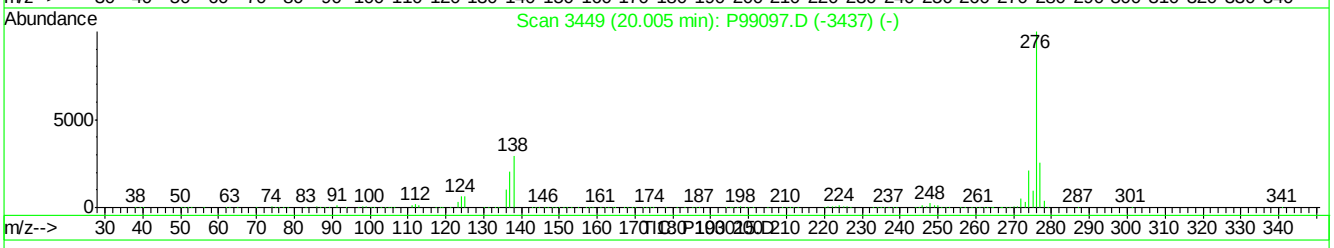
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:09 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.08min 1.65ppm m

response 13908

Ion	Exp%	Act%
276.00	100	100
138.00	28.90	27.33
137.00	20.50	25.37
0.00	0.00	0.00

P103015.D MP4524.M Thu Mar 03 09:09:29 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155171	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	555275	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	323538	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	495080	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	448414	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	398461	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155171	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	555275	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	323538	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	495080	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	448414	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	398461	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155171	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	495080	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	448414	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	555275	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	323538	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	555275	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155171	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	448414	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	448414	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	555275	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	4980	0.92	ppm	0.00
Spiked Amount 50.000			Recovery = 1.84%			
8) Phenol-d5	3.98	99	6538	0.99	ppm	0.02
Spiked Amount 50.000			Recovery = 1.98%			
25) Nitrobenzene-d5	5.07	82	5331	1.00	ppm	-0.01
Spiked Amount 50.000			Recovery = 2.00%			
51) 2-Fluorobiphenyl	7.79	172	10228	1.03	ppm	-0.02
Spiked Amount 50.000			Recovery = 2.06%			
73) 2,4,6-Tribromophenol	10.09	330	673	0.63	ppm	-0.02
Spiked Amount 50.000			Recovery = 1.26%			
85) Terphenyl-d14	14.01	244	8345	0.97	ppm	-0.02
Spiked Amount 50.000			Recovery = 1.94%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	3235	1.20	ppm	91
3) Pyridine	1.99	79	6499	1.10	ppm	98
4) N-Nitrosodimethylamine	1.94	42	2444	1.12	ppm	90
6) Indene	4.67	116	8844	1.03	ppm	91
7) Cumene	3.44	105	14638	1.16	ppm	92
9) Phenol	3.99	94	6552	1.00	ppm	93
10) Aniline	3.95	93	8065	1.06	ppm	87
11) bis(2-Chloroethyl)ether	4.02	93	5482	1.17	ppm	98
12) 2-Chlorophenol	4.12	128	4814	0.94	ppm	97
13) Decane	4.16	43	4471	1.13	ppm	89
14) 1,3-Dichlorobenzene	4.28	146	6006	1.03	ppm	99
15) 1,4-Dichlorobenzene	4.36	146	5565	0.99	ppm	82

(#) = qualifier out of range (m) = manual integration
P103016.D MP4524.M Thu Mar 03 09:14:57 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	2890	0.93	ppm		97
17)	1,2-Dichlorobenzene	4.56	146	5817	1.08	ppm		95
18)	Acetophenone	4.87	105	7136	1.02	ppm		95
19)	2-Methylphenol	4.73	108	4147	0.96	ppm		91
20)	2,2'-oxybis(1-Chloropropan	4.72	121	1794	1.14	ppm		98
21)	3&4-Methylphenol	4.94	108	4450	0.98	ppm		86
22)	n-Nitroso-di-n-propylamine	4.88	70	3507	1.07	ppm		89
23)	Hexachloroethane	5.00	201	1742	1.01	ppm		90
26)	Nitrobenzene	5.09	77	5747	1.12	ppm		89
27)	Quinoline	6.63	129	9837	1.00	ppm		90
28)	Isophorone	5.44	82	8238	0.91	ppm		95
29)	2-Nitrophenol	5.55	139	2172	0.84	ppm		84
30)	2,4-Dimethylphenol	5.68	107	3754	0.82	ppm		90
31)	Benzoic acid	5.79	105	835	0.25	ppm		95
32)	bis(2-Chloroethoxy)methane	5.78	93	5666	1.02	ppm		95
33)	2,4-Dichlorophenol	5.96	162	3337	0.88	ppm		97
34)	2,6-Dichlorophenol	6.25	162	3575	0.98	ppm		94
35)	1,3,5-Trichlorobenzene	5.57	180	4850	1.09	ppm		85
36)	1,2,4-Trichlorobenzene	6.02	180	4557	1.04	ppm		86
37)	1,2,3-Trichlorobenzene	6.35	180	4197	1.04	ppm		93
38)	Naphthalene	6.13	128	14418	1.06	ppm		98
39)	4-Chloroaniline	6.24	127	5443	0.90	ppm		97
40)	2,3-Dichloroaniline	7.64	161	4523	0.96	ppm		91
41)	Caprolactam	6.70	55	1510	0.83	ppm	#	76
42)	Hexachlorobutadiene	6.35	225	2229	1.10	ppm		90
43)	4-Chloro-3-methylphenol	7.09	107	3059	0.73	ppm	#	67
44)	2-Methylnaphthalene	7.19	141	7623	1.01	ppm		98
45)	1-Methylnaphthalene	7.34	142	9057	0.98	ppm		93
46)	Dimethylnaphthalene	8.18	156	8233	1.02	ppm		96
48)	Hexachlorocyclopentadiene	7.46	237	2913	1.27	ppm		88
49)	2,4,6-Trichlorophenol	7.68	196	2008	0.81	ppm		98
50)	2,4,5-Trichlorophenol	7.79	196	1993	0.76	ppm		97
52)	2-Chloronaphthalene	7.94	162	8595	1.02	ppm		90
53)	Biphenyl	7.94	154	11633	1.05	ppm		95
54)	2-Nitroaniline	8.13	65	1760	0.71	ppm		95
55)	Dimethylphthalate	8.46	163	9365	0.96	ppm		96
56)	Acenaphthylene	8.59	152	13949	0.99	ppm		95
57)	2,6-Dinitrotoluene	8.53	165	1603	0.80	ppm		93
58)	3-Nitroaniline	8.79	138	1709	0.65	ppm		73
59)	Acenaphthene	8.87	153	8759	1.03	ppm		92
60)	2,4-Dinitrophenol	8.96	184	259	5.87	ppm	#	22
61)	4-Nitrophenol	9.30	109	572	0.42	ppm	#	56
62)	Dibenzofuran	9.15	168	11667	0.99	ppm		98
63)	2,4-Dinitrotoluene	9.17	165	1578	1.12	ppm		88
64)	2,3,4,6-Tetrachlorophenol	9.39	232	1177	0.61	ppm		89
65)	Diethylphthalate	9.60	149	8984	0.91	ppm		98
66)	Fluorene	9.69	166	9121	0.97	ppm		89
67)	4-Chlorophenyl-phenylether	9.73	204	4077	0.99	ppm		96
68)	4-Nitroaniline	9.76	138	1447	0.61	ppm		92

(#) = qualifier out of range (m) = manual integration
P103016.D MP4524.M Thu Mar 03 09:14:57 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

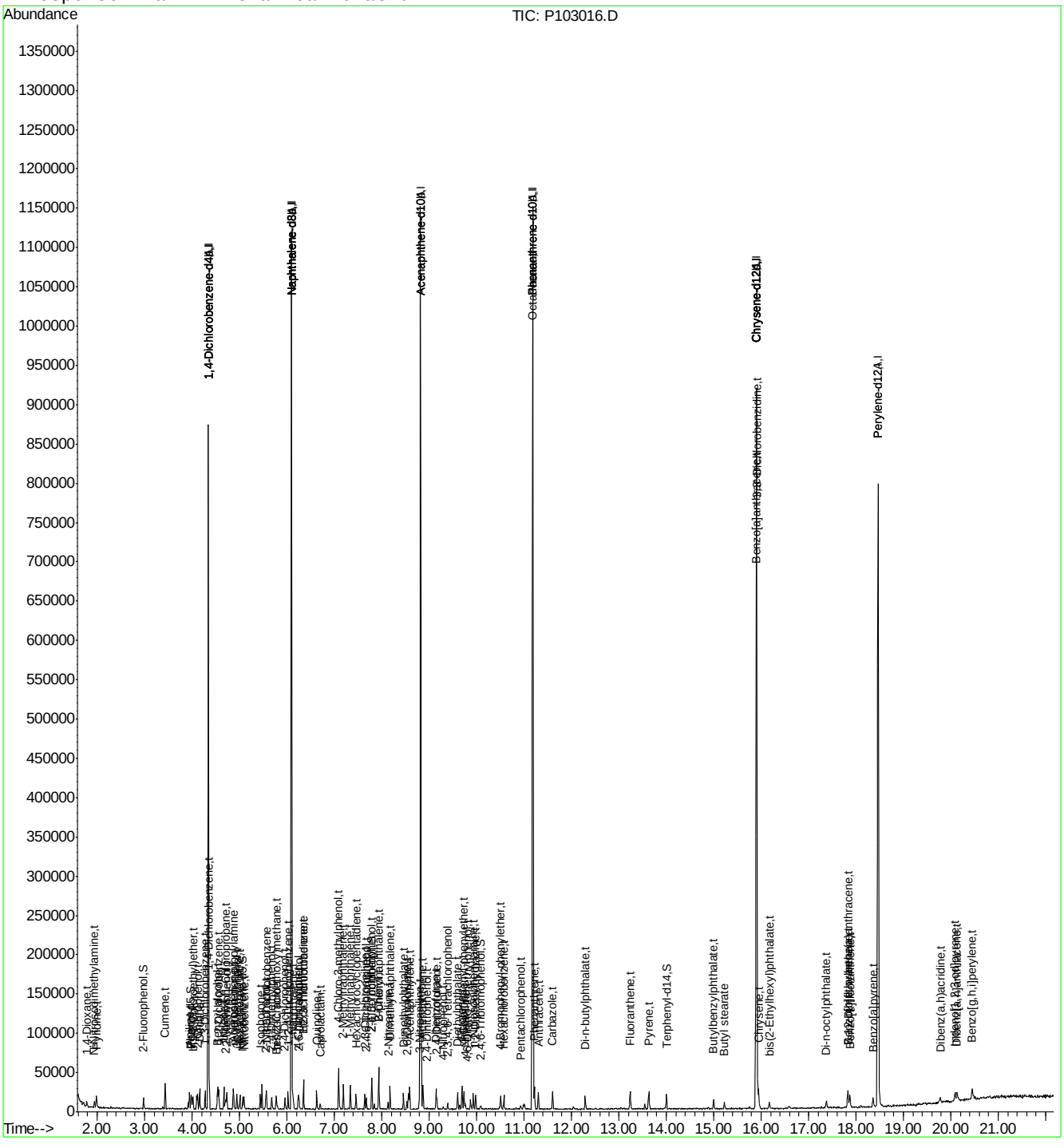
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	406	5.09	ppm	#	29
71)	n-Nitrosodiphenylamine	9.93	169	6294	0.94	ppm		96
72)	1,2-Diphenylhydrazine	9.98	77	8640	0.91	ppm		90
74)	4-Bromophenyl-phenylether	10.51	248	2225	0.96	ppm		96
75)	Hexachlorobenzene	10.58	284	2726	1.12	ppm		95
76)	Pentachlorophenol	10.93	266	748	4.45	ppm		78
77)	Phenanthrene	11.22	178	12359	0.98	ppm		98
78)	Anthracene	11.30	178	11081	0.86	ppm		93
79)	Carbazole	11.60	167	11258	0.90	ppm		93
80)	Di-n-butylphthalate	12.29	149	11428	0.74	ppm		98
81)	Fluoranthene	13.24	202	12351	0.97	ppm		94
82)	Octadecane	11.17	57	4325	0.98	ppm		95
84)	Pyrene	13.63	202	13036	0.89	ppm		96
86)	Butylbenzylphthalate	15.00	149	3399	0.48	ppm		87
87)	Butyl stearate	15.22	56	1463	0.44	ppm		73
88)	Benzo[a]anthracene	15.89	228	10942	0.92	ppm		97
89)	3,3'-Dichlorobenzidine	15.91	252	2232	0.55	ppm		86
90)	Chrysene	15.94	228	10699	0.91	ppm		93
91)	bis(2-Ethylhexyl)phthalate	16.17	149	3603	0.38	ppm		96
93)	Di-n-octylphthalate	17.38	149	5368	2.53	ppm		95
94)	Benzo[b]fluoranthene	17.83	252	9472	0.88	ppm		98
95)	Benzo[k]fluoranthene	17.87	252	10371	0.98	ppm		91
96)	Benzo[a]pyrene	18.36	252	7839	0.81	ppm		97
97)	Indeno[1,2,3-cd]pyrene	20.09	276	6348m	0.73	ppm		
98)	Dibenz(a,h)acridine	19.78	279	5613	0.72	ppm		86
99)	Dibenz[a,h]anthracene	20.13	278	7251	0.80	ppm		92
100)	7,12-Dimethylbenz(a)anthra	17.84	256	2773	0.61	ppm		87
101)	Benzo[g,h,i]perylene	20.45	276	8994	0.94	ppm		87

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:14 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

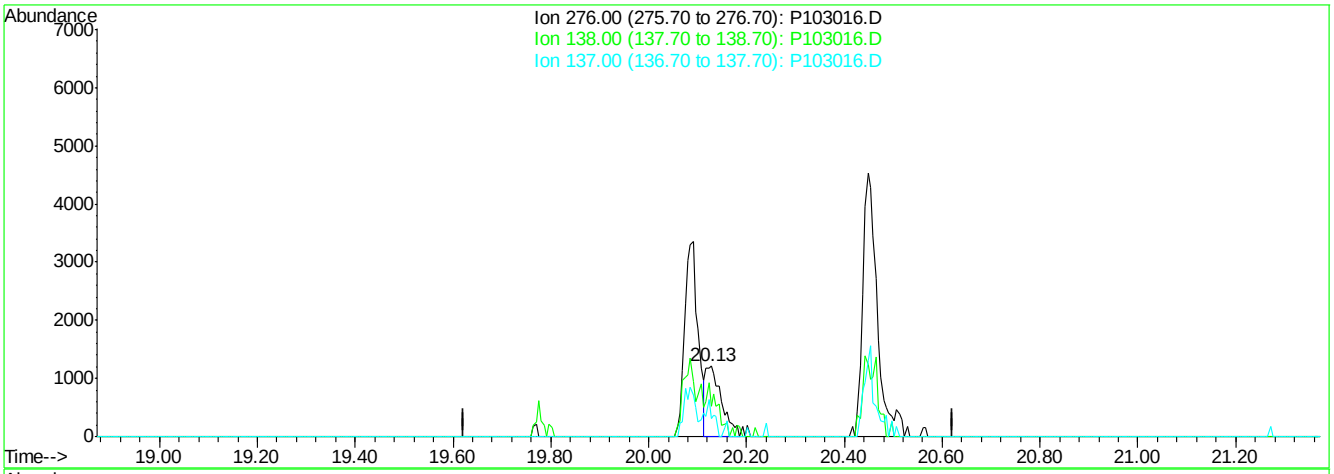
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103016.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 19:37	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

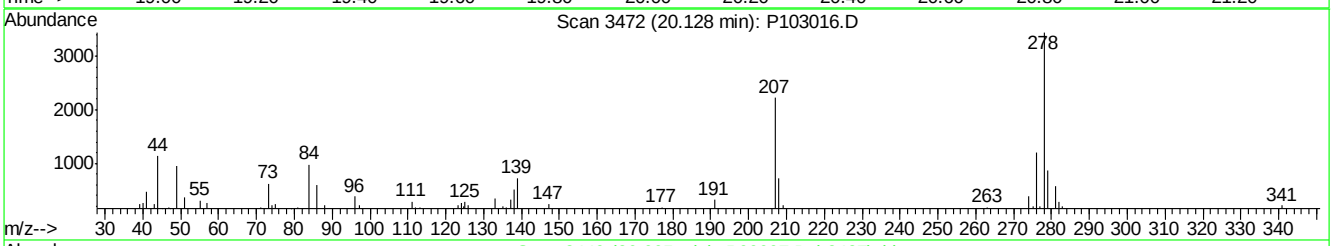
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.09	Poor instrument integration

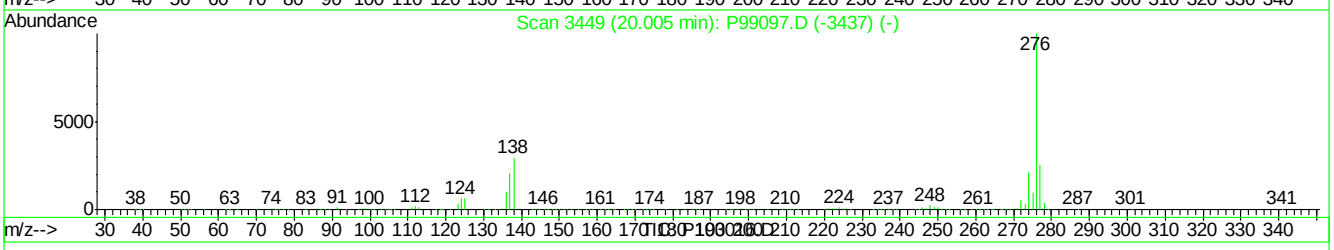
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.13min 0.32ppm

response 2751

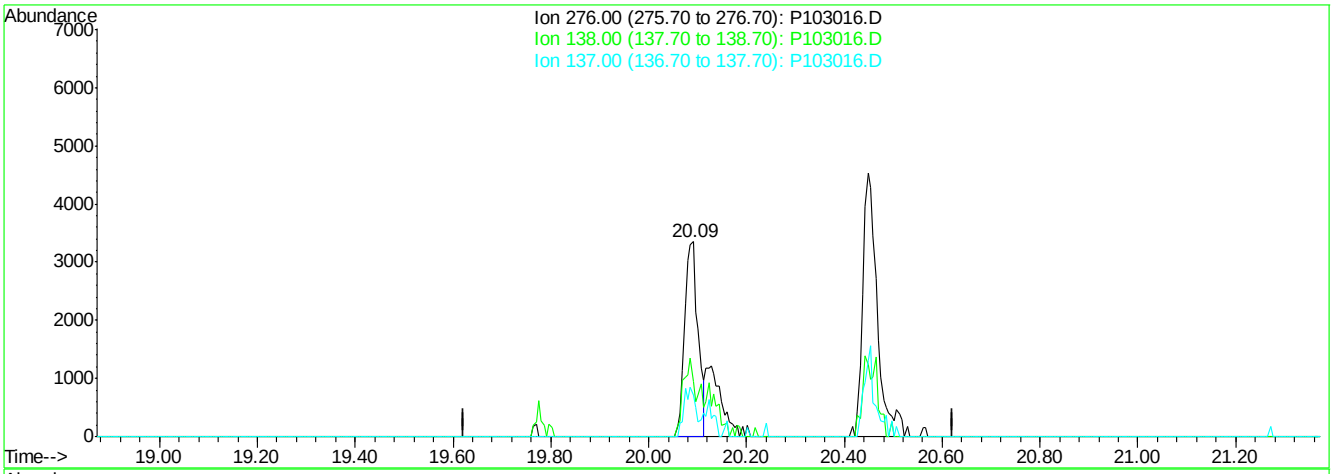
Ion	Exp%	Act%
276.00	100	100
138.00	28.90	24.11
137.00	20.50	15.27
0.00	0.00	0.00

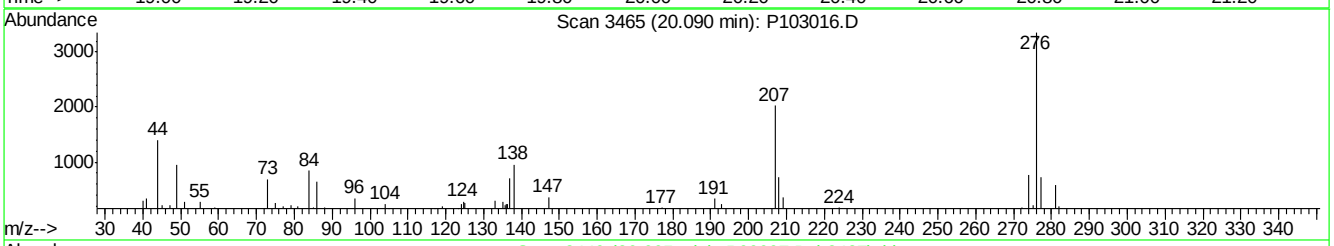
P103016.D MP4524.M Thu Mar 03 09:14:13 2016

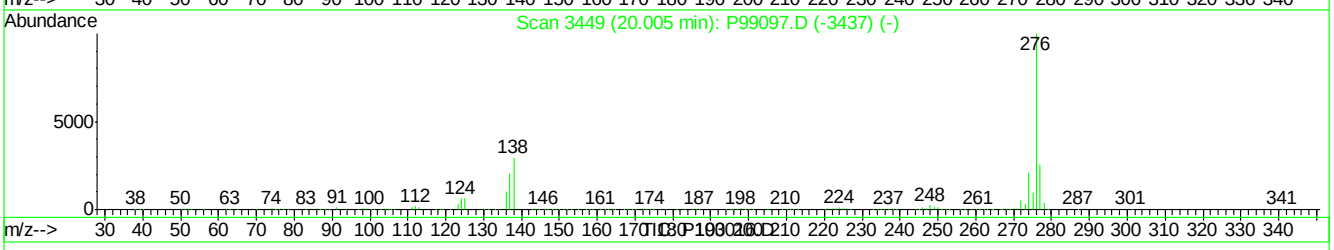
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:14 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.09min 0.73ppm m

response 6348

Ion	Exp%	Act%
276.00	100	100
138.00	28.90	28.36
137.00	20.50	21.29
0.00	0.00	0.00

P103016.D MP4524.M Thu Mar 03 09:14:20 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	124231	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	437439	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	253741	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	378134	40.00	ppm	-0.01
83) Chrysene-d12	15.91	240	350683	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	328054	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	124231	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	437439	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	253741	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	378134	40.00	ppm	-0.04
147) Chrysene-d12A	15.91	240	350683	40.00	ppm	-0.04
155) Perylene-d12A	18.47	264	328054	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	124231	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	378134	40.00	ppm	-0.04
163) Chrysene-d12b	15.91	240	350683	40.00	ppm	-0.04
165) Naphthalene-d8b	6.10	136	437439	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	253741	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	437439	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	124231	40.00	ppm	-0.11
176) Chrysene-d12c	15.91	240	350683	40.00	ppm	-0.05
178) Chrysene-d12d	15.91	240	350683	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	437439	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	244782	56.72	ppm	0.00
Spiked Amount 50.000			Recovery = 113.44%			
8) Phenol-d5	3.96	99	291076	54.97	ppm	0.00
Spiked Amount 50.000			Recovery = 109.94%			
25) Nitrobenzene-d5	5.07	82	243526	58.08	ppm	-0.01
Spiked Amount 50.000			Recovery = 116.16%			
51) 2-Fluorobiphenyl	7.79	172	409109	52.68	ppm	-0.01
Spiked Amount 50.000			Recovery = 105.36%			
73) 2,4,6-Tribromophenol	10.09	330	54000	66.07	ppm	-0.01
Spiked Amount 50.000			Recovery = 132.14%			
85) Terphenyl-d14	14.01	244	395789	59.01	ppm	-0.01
Spiked Amount 50.000			Recovery = 118.02%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	117581	54.38	ppm	95
3) Pyridine	1.97	79	268554	56.73	ppm	95
4) N-Nitrosodimethylamine	1.94	42	101045	57.99	ppm	98
6) Indene	4.68	116	387000	56.16	ppm	98
7) Cumene	3.44	105	542916	53.73	ppm	99
9) Phenol	3.98	94	292195	55.48	ppm	91
10) Aniline	3.95	93	305737	50.09	ppm	93
11) bis(2-Chloroethyl)ether	4.02	93	208557	55.36	ppm	97
12) 2-Chlorophenol	4.11	128	223091	54.63	ppm	97
13) Decane	4.16	43	168665	53.28	ppm	99
14) 1,3-Dichlorobenzene	4.28	146	244389	52.47	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	237485	52.96	ppm	100

(#) = qualifier out of range (m) = manual integration
P103017.D MP4524.M Thu Mar 03 09:16:27 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	141064	56.70	ppm		99
17)	1,2-Dichlorobenzene	4.56	146	222053	51.52	ppm		99
18)	Acetophenone	4.87	105	303490	54.08	ppm		97
19)	2-Methylphenol	4.73	108	193523	55.92	ppm		98
20)	2,2'-oxybis(1-Chloropropan	4.71	121	70318	55.64	ppm	#	84
21)	3&4-Methylphenol	4.94	108	215516	59.37	ppm		99
22)	n-Nitroso-di-n-propylamine	4.89	70	153156	58.43	ppm		97
23)	Hexachloroethane	5.01	201	77555	56.23	ppm		94
26)	Nitrobenzene	5.10	77	225838	55.78	ppm		98
27)	Quinoline	6.64	129	437092	56.25	ppm		99
28)	Isophorone	5.44	82	413211	57.62	ppm		99
29)	2-Nitrophenol	5.55	139	123178	60.15	ppm		92
30)	2,4-Dimethylphenol	5.68	107	209702	58.08	ppm		98
31)	Benzoic acid	5.88	105	155312	58.82	ppm		96
32)	bis(2-Chloroethoxy)methane	5.78	93	252768	57.57	ppm		98
33)	2,4-Dichlorophenol	5.95	162	177728	59.71	ppm		99
34)	2,6-Dichlorophenol	6.26	162	165495	57.54	ppm		97
35)	1,3,5-Trichlorobenzene	5.57	180	185172	52.87	ppm		99
36)	1,2,4-Trichlorobenzene	6.02	180	181262	52.73	ppm		95
37)	1,2,3-Trichlorobenzene	6.36	180	164492	51.83	ppm		99
38)	Naphthalene	6.13	128	585134	54.55	ppm		99
39)	4-Chloroaniline	6.24	127	257943	54.40	ppm		98
40)	2,3-Dichloroaniline	7.64	161	220036	59.56	ppm		98
41)	Caprolactam	6.75	55	86330	59.96	ppm		97
42)	Hexachlorobutadiene	6.35	225	90265	56.78	ppm		99
43)	4-Chloro-3-methylphenol	7.08	107	201867	61.35	ppm		95
44)	2-Methylnaphthalene	7.19	141	326822	54.80	ppm		98
45)	1-Methylnaphthalene	7.34	142	397618	54.61	ppm		99
46)	Dimethylnaphthalene	8.18	156	352622	55.60	ppm		100
48)	Hexachlorocyclopentadiene	7.46	237	206540	114.53	ppm		100
49)	2,4,6-Trichlorophenol	7.67	196	116436	59.91	ppm		100
50)	2,4,5-Trichlorophenol	7.78	196	125359	60.57	ppm		99
52)	2-Chloronaphthalene	7.95	162	352021	53.48	ppm		99
53)	Biphenyl	7.94	154	450733	51.74	ppm		100
54)	2-Nitroaniline	8.14	65	117767	60.81	ppm		91
55)	Dimethylphthalate	8.47	163	428351	55.76	ppm		98
56)	Acenaphthylene	8.59	152	586858	52.98	ppm		100
57)	2,6-Dinitrotoluene	8.54	165	101635	64.90	ppm		94
58)	3-Nitroaniline	8.80	138	120352	58.19	ppm		95
59)	Acenaphthene	8.87	153	363738	54.35	ppm		97
60)	2,4-Dinitrophenol	8.96	184	102911	107.60	ppm		98
61)	4-Nitrophenol	9.26	109	64581	60.49	ppm		97
62)	Dibenzofuran	9.15	168	510264	55.37	ppm		98
63)	2,4-Dinitrotoluene	9.17	165	131015	57.04	ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.39	232	95041	62.54	ppm		97
65)	Diethylphthalate	9.61	149	434775	56.04	ppm		99
66)	Fluorene	9.70	166	423992	57.28	ppm		100
67)	4-Chlorophenyl-phenylether	9.74	204	185974	57.40	ppm		97
68)	4-Nitroaniline	9.78	138	115638	62.06	ppm		100

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.82	198	74923	56.72	ppm	96
71)	n-Nitrosodiphenylamine	9.93	169	316794	61.94	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	426774	59.08	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	107403	60.89	ppm	99
75)	Hexachlorobenzene	10.58	284	109393	58.88	ppm	94
76)	Pentachlorophenol	10.93	266	131524	98.75	ppm	97
77)	Phenanthrene	11.23	178	542665	56.07	ppm	99
78)	Anthracene	11.31	178	562547	57.33	ppm	99
79)	Carbazole	11.61	167	581354	60.92	ppm	99
80)	Di-n-butylphthalate	12.30	149	728458	61.91	ppm	100
81)	Fluoranthene	13.25	202	609214	62.34	ppm	98
82)	Octadecane	11.17	57	230371	68.10	ppm	97
84)	Pyrene	13.64	202	625809	54.36	ppm	97
86)	Butylbenzylphthalate	15.00	149	332955	60.35	ppm	98
87)	Butyl stearate	15.23	56	163184	62.97	ppm	94
88)	Benzo[a]anthracene	15.89	228	528127	57.08	ppm	100
89)	3,3'-Dichlorobenzidine	15.92	252	197984	62.07	ppm	98
90)	Chrysene	15.96	228	504341	55.00	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.17	149	438733	59.75	ppm	98
93)	Di-n-octylphthalate	17.38	149	753065	55.08	ppm	98
94)	Benzo[b]fluoranthene	17.84	252	554377	62.60	ppm	99
95)	Benzo[k]fluoranthene	17.89	252	512346	59.04	ppm	100
96)	Benzo[a]pyrene	18.37	252	498096	62.42	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.10	276	455306	63.43	ppm	98
98)	Dibenz(a,h)acridine	19.79	279	433348	67.08	ppm	98
99)	Dibenz[a,h]anthracene	20.14	278	481767	64.53	ppm	99
100)	7,12-Dimethylbenz(a)anthra	17.85	256	243106	64.97	ppm	99
101)	Benzo[g,h,i]perylene	20.47	276	499527	63.61	ppm	98

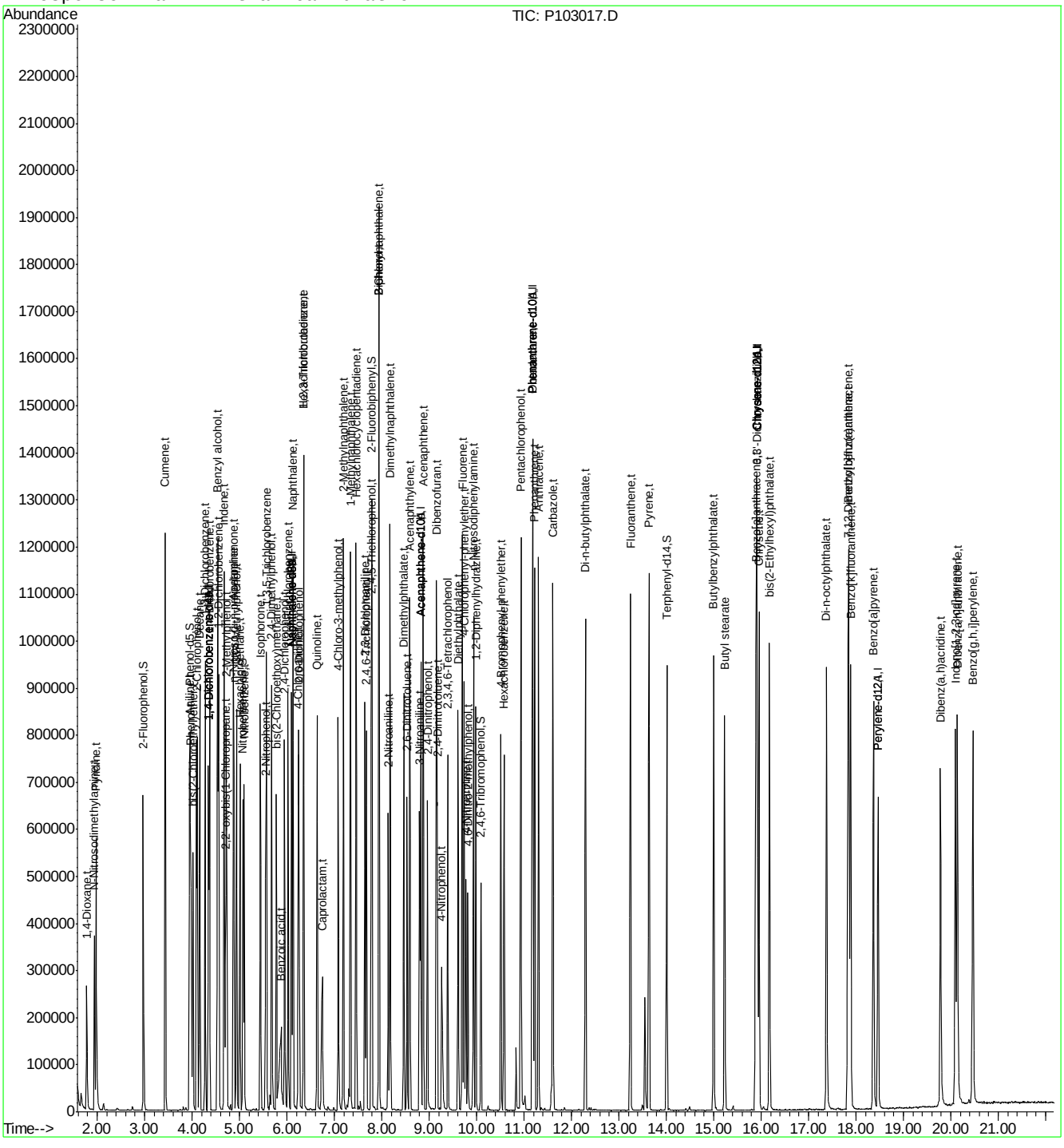
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:16 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	124470	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	442285	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	259301	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	393353	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	355354	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	330253	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	124470	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	442285	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	259301	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	393353	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	355354	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	330253	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	124470	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	393353	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	355354	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	442285	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	259301	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	442285	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	124470	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	355354	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	355354	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	442285	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	120675	27.91	ppm	0.00
Spiked Amount 50.000			Recovery = 55.82%			
8) Phenol-d5	3.97	99	145695	27.46	ppm	0.00
Spiked Amount 50.000			Recovery = 54.92%			
25) Nitrobenzene-d5	5.07	82	121082	28.56	ppm	-0.01
Spiked Amount 50.000			Recovery = 57.12%			
51) 2-Fluorobiphenyl	7.79	172	209611	26.41	ppm	-0.01
Spiked Amount 50.000			Recovery = 52.82%			
73) 2,4,6-Tribromophenol	10.09	330	25324	29.79	ppm	-0.02
Spiked Amount 50.000			Recovery = 59.58%			
85) Terphenyl-d14	14.01	244	192291	28.30	ppm	-0.02
Spiked Amount 50.000			Recovery = 56.60%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	56098	25.90	ppm	96
3) Pyridine	1.97	79	136188	28.71	ppm	97
4) N-Nitrosodimethylamine	1.94	42	49690	28.46	ppm	99
6) Indene	4.67	116	194064	28.11	ppm	98
7) Cumene	3.43	105	283811	28.04	ppm	98
9) Phenol	3.98	94	147604	27.97	ppm	97
10) Aniline	3.95	93	167753	27.43	ppm	82
11) bis(2-Chloroethyl)ether	4.02	93	103434	27.40	ppm	99
12) 2-Chlorophenol	4.11	128	111889	27.35	ppm	96
13) Decane	4.16	43	87928	27.72	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	124339	26.64	ppm	97
15) 1,4-Dichlorobenzene	4.37	146	121849	27.12	ppm	98

(#) = qualifier out of range (m) = manual integration
P103018.D MP4524.M Thu Mar 03 09:17:56 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	69022	27.69 ppm		96
17) 1,2-Dichlorobenzene	4.56	146	113594	26.30 ppm		100
18) Acetophenone	4.87	105	153764	27.35 ppm		99
19) 2-Methylphenol	4.73	108	97495	28.12 ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.71	121	35279	27.86 ppm	#	88
21) 3&4-Methylphenol	4.94	108	106602	29.31 ppm		98
22) n-Nitroso-di-n-propylamine	4.88	70	77193	29.39 ppm		97
23) Hexachloroethane	5.01	201	39144	28.32 ppm		92
26) Nitrobenzene	5.10	77	114670	28.01 ppm		98
27) Quinoline	6.63	129	217173	27.64 ppm		98
28) Isophorone	5.44	82	205558	28.35 ppm		97
29) 2-Nitrophenol	5.55	139	60673	29.31 ppm		91
30) 2,4-Dimethylphenol	5.68	107	99929	27.38 ppm		99
31) Benzoic acid	5.84	105	66251	24.82 ppm		97
32) bis(2-Chloroethoxy)methane	5.78	93	126470	28.49 ppm		98
33) 2,4-Dichlorophenol	5.95	162	89796	29.84 ppm		97
34) 2,6-Dichlorophenol	6.25	162	83622	28.76 ppm		99
35) 1,3,5-Trichlorobenzene	5.57	180	94745	26.75 ppm		99
36) 1,2,4-Trichlorobenzene	6.02	180	91759	26.40 ppm		98
37) 1,2,3-Trichlorobenzene	6.36	180	83571	26.04 ppm		98
38) Naphthalene	6.13	128	301381	27.79 ppm		98
39) 4-Chloroaniline	6.24	127	131232	27.37 ppm		98
40) 2,3-Dichloroaniline	7.64	161	108904	29.16 ppm		99
41) Caprolactam	6.72	55	41224	28.32 ppm		98
42) Hexachlorobutadiene	6.35	225	46039	28.64 ppm		97
43) 4-Chloro-3-methylphenol	7.08	107	97636	29.35 ppm		98
44) 2-Methylnaphthalene	7.19	141	166891	27.68 ppm		97
45) 1-Methylnaphthalene	7.34	142	203584	27.65 ppm		99
46) Dimethylnaphthalene	8.18	156	179244	27.95 ppm		99
48) Hexachlorocyclopentadiene	7.46	237	98948	53.69 ppm		99
49) 2,4,6-Trichlorophenol	7.67	196	57772	29.09 ppm		97
50) 2,4,5-Trichlorophenol	7.78	196	58929	27.86 ppm		97
52) 2-Chloronaphthalene	7.94	162	182832	27.18 ppm		99
53) Biphenyl	7.94	154	234397	26.33 ppm		99
54) 2-Nitroaniline	8.13	65	56891	28.75 ppm		90
55) Dimethylphthalate	8.46	163	213580	27.21 ppm		99
56) Acenaphthylene	8.59	152	302131	26.69 ppm		98
57) 2,6-Dinitrotoluene	8.54	165	47737	29.83 ppm		97
58) 3-Nitroaniline	8.79	138	58009	27.45 ppm		95
59) Acenaphthene	8.87	153	185046	27.06 ppm		97
60) 2,4-Dinitrophenol	8.96	184	40855	45.93 ppm		98
61) 4-Nitrophenol	9.27	109	29246	26.81 ppm		98
62) Dibenzofuran	9.15	168	263103	27.94 ppm		97
63) 2,4-Dinitrotoluene	9.17	165	64864	26.76 ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.39	232	44863	28.89 ppm		96
65) Diethylphthalate	9.60	149	214134	27.01 ppm		98
66) Fluorene	9.69	166	212970	28.16 ppm		99
67) 4-Chlorophenyl-phenylether	9.73	204	95178	28.75 ppm		98
68) 4-Nitroaniline	9.77	138	55005	28.89 ppm		97

(#) = qualifier out of range (m) = manual integration
P103018.D MP4524.M Thu Mar 03 09:17:56 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	32324	26.38	ppm	96
71)	n-Nitrosodiphenylamine	9.93	169	157662	29.63	ppm	98
72)	1,2-Diphenylhydrazine	9.98	77	217259	28.91	ppm	97
74)	4-Bromophenyl-phenylether	10.51	248	51682	28.17	ppm	96
75)	Hexachlorobenzene	10.58	284	54145	28.02	ppm	98
76)	Pentachlorophenol	10.93	266	57853	41.80	ppm	100
77)	Phenanthrene	11.22	178	279626	27.77	ppm	98
78)	Anthracene	11.30	178	284194	27.84	ppm	98
79)	Carbazole	11.61	167	295428	29.76	ppm	99
80)	Di-n-butylphthalate	12.29	149	359469	29.37	ppm	99
81)	Fluoranthene	13.24	202	306291	30.13	ppm	98
82)	Octadecane	11.17	57	112226	31.89	ppm	95
84)	Pyrene	13.63	202	321366	27.55	ppm	97
86)	Butylbenzylphthalate	15.00	149	156979	28.08	ppm	99
87)	Butyl stearate	15.22	56	77227	29.41	ppm	93
88)	Benzo[a]anthracene	15.89	228	257688	27.49	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	94027	29.09	ppm	99
90)	Chrysene	15.95	228	253919	27.33	ppm	97
91)	bis(2-Ethylhexyl)phthalate	16.17	149	206131	27.70	ppm	99
93)	Di-n-octylphthalate	17.38	149	346960	23.67	ppm	99
94)	Benzo[b]fluoranthene	17.83	252	263165	29.52	ppm	98
95)	Benzo[k]fluoranthene	17.88	252	258312	29.57	ppm	97
96)	Benzo[a]pyrene	18.36	252	243353	30.29	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.09	276	214090	29.63	ppm	96
98)	Dibenz(a,h)acridine	19.78	279	198286	30.49	ppm	99
99)	Dibenz[a,h]anthracene	20.13	278	225316	29.98	ppm	98
100)	7,12-Dimethylbenz(a)anthra	17.84	256	115782	30.74	ppm	99
101)	Benzo[g,h,i]perylene	20.46	276	234554	29.67	ppm	98

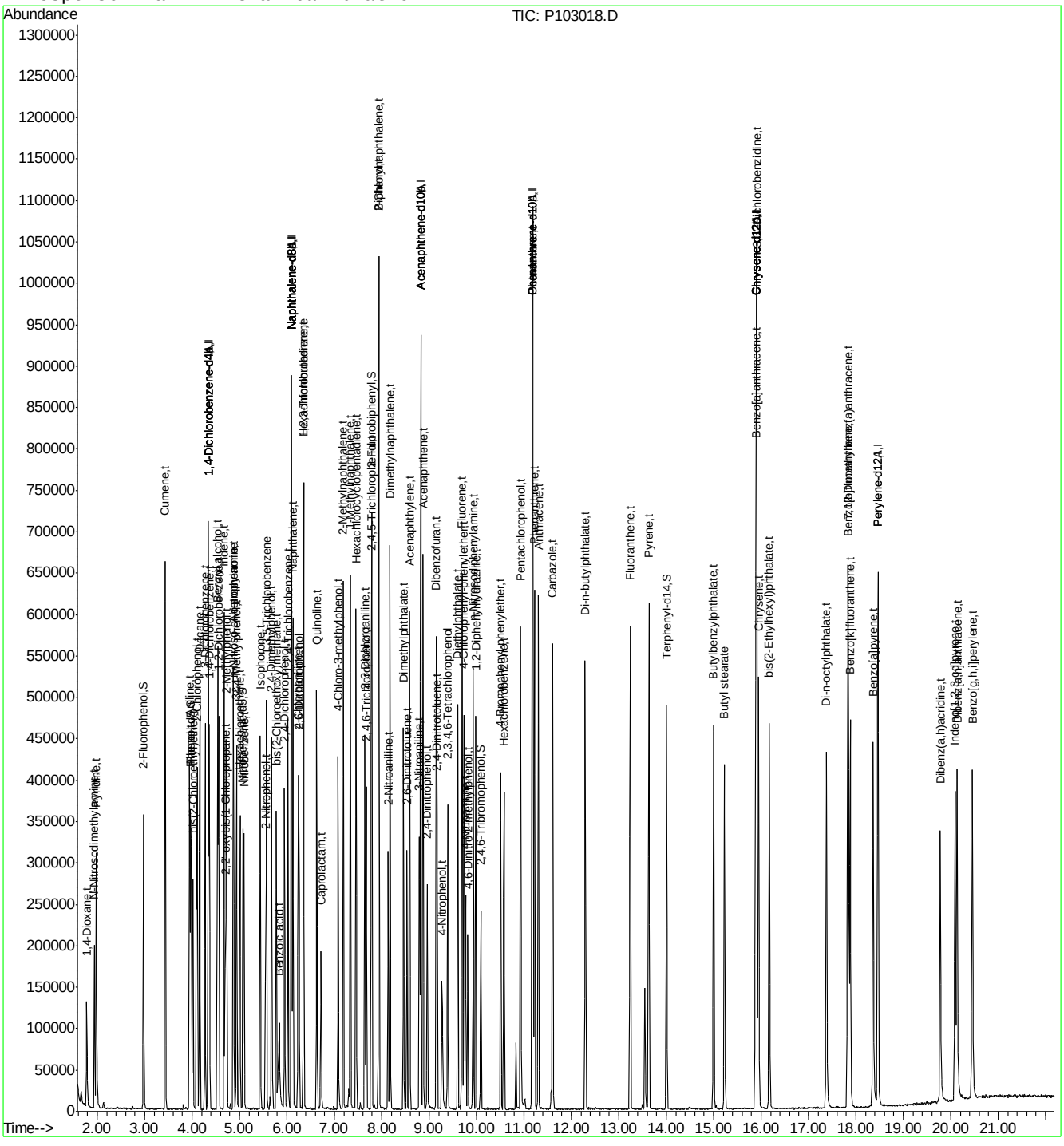
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:17 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

9.6.55 9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:47:37 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	149576	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	503799	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	294376	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	436802	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	397805	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	355781	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	149576	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	503799	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	294376	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	436802	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	397805	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	355781	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	149576	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	436802	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	397805	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	503799	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	294376	40.00	ppm	-0.04
169) Naphthalene-d8c	6.10	136	503799	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	149576	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	397753	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	397753	40.00	ppm	-0.06
180) Naphthalene-d8a	6.10	136	503799	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
9) Phenol	3.98	94	310486	47.36	ppm	88
12) 2-Chlorophenol	4.11	128	241093	48.54	ppm	99
19) 2-Methylphenol	4.72	108	214907	50.87	ppm	98
21) 3&4-Methylphenol	4.93	108	226649	49.17	ppm	99
29) 2-Nitrophenol	5.55	139	127036	52.92	ppm	98
30) 2,4-Dimethylphenol	5.67	107	227368	55.77	ppm	99
31) Benzoic acid	5.87	105	147006	46.42	ppm	97
33) 2,4-Dichlorophenol	5.95	162	177172	49.74	ppm	96
34) 2,6-Dichlorophenol	6.25	162	177036	51.78	ppm	96
43) 4-Chloro-3-methylphenol	7.07	107	196038	51.51	ppm	99
49) 2,4,6-Trichlorophenol	7.67	196	120063	52.06	ppm	100
50) 2,4,5-Trichlorophenol	7.77	196	117443	48.94	ppm	97

(#) = qualifier out of range (m) = manual integration
P103019.D MP4524.M Thu Mar 03 10:49:19 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:47:37 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

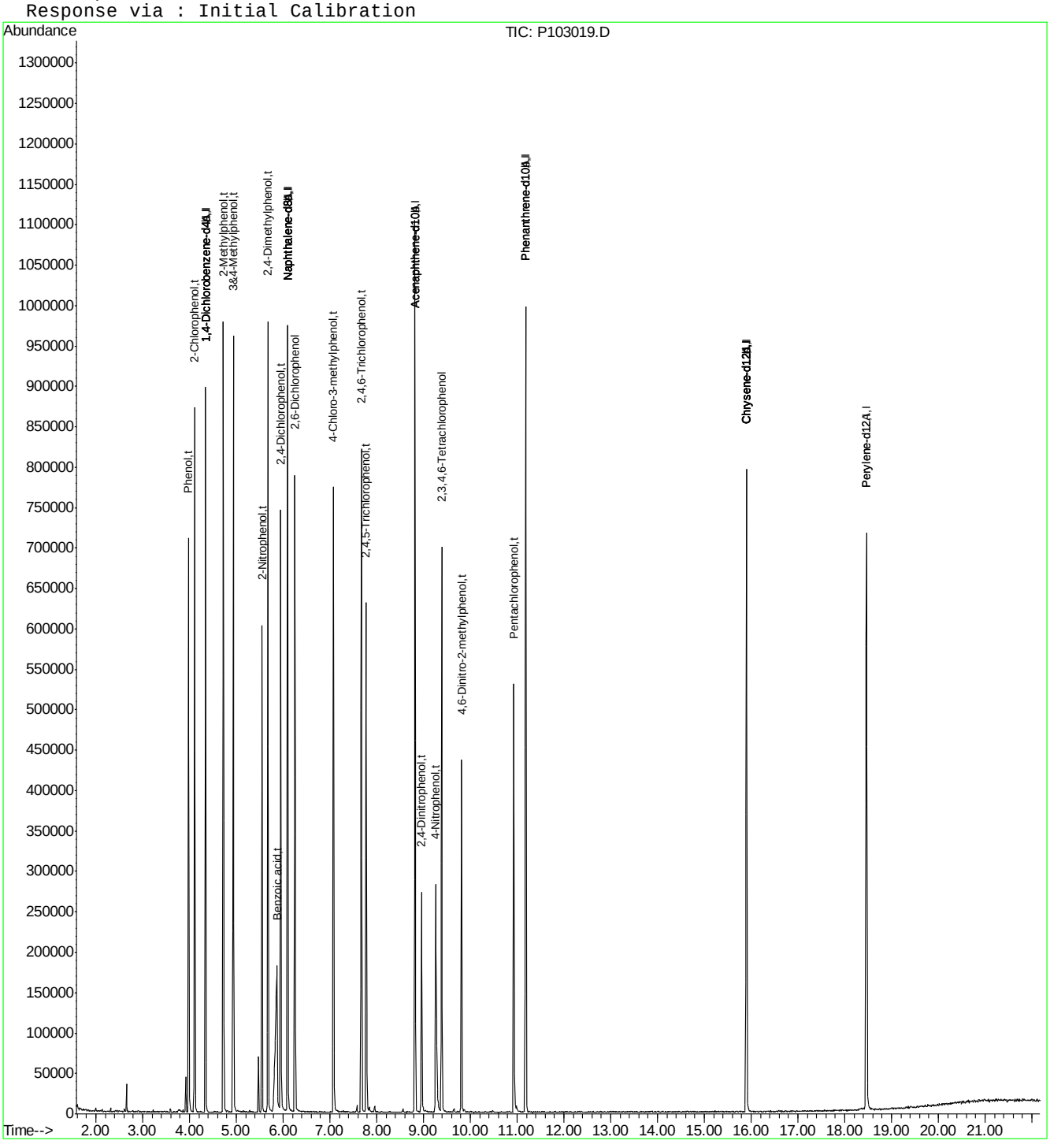
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
60) 2,4-Dinitrophenol	8.96	184	39439	39.37	ppm	96
61) 4-Nitrophenol	9.26	109	61537	50.38	ppm	99
64) 2,3,4,6-Tetrachlorophenol	9.39	232	87709	47.57	ppm	97
70) 4,6-Dinitro-2-methylphenol	9.81	198	67907	42.45	ppm	96
76) Pentachlorophenol	10.93	266	58985	43.19	ppm	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:49 2016 Quant Results File: MP4524.RES

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



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103020.D Vial: 11
Acq On : 2 Mar 2016 9:34 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:51:46 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	165057	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	607388	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	330896	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	536143	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	470505	40.00	ppm	0.00
92) Perylene-d12	18.47	264	408173	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	165057	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	607388	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	330896	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	536143	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	470505	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	408173	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	165057	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	536143	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	470505	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	607388	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	330896	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	607388	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	165057	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	470505	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	470505	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	607388	40.00	ppm	0.13

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

						Qvalue
3) Pyridine	2.05	79	343881	51.94	ppm	97
10) Aniline	3.96	93	418196	53.06	ppm	82
16) Benzyl alcohol	4.54	108	174956	53.69	ppm	98
39) 4-Chloroaniline	6.24	127	275208	42.97	ppm	99
44) 2-Methylnaphthalene	7.19	141	392398	47.02	ppm	97
54) 2-Nitroaniline	8.14	65	143073	56.92	ppm	96
58) 3-Nitroaniline	8.80	138	136496	54.11	ppm	98
62) Dibenzofuran	9.15	168	626653	51.53	ppm	99
68) 4-Nitroaniline	9.77	138	138652	54.71	ppm	96
79) Carbazole	11.61	167	687445	48.68	ppm	100

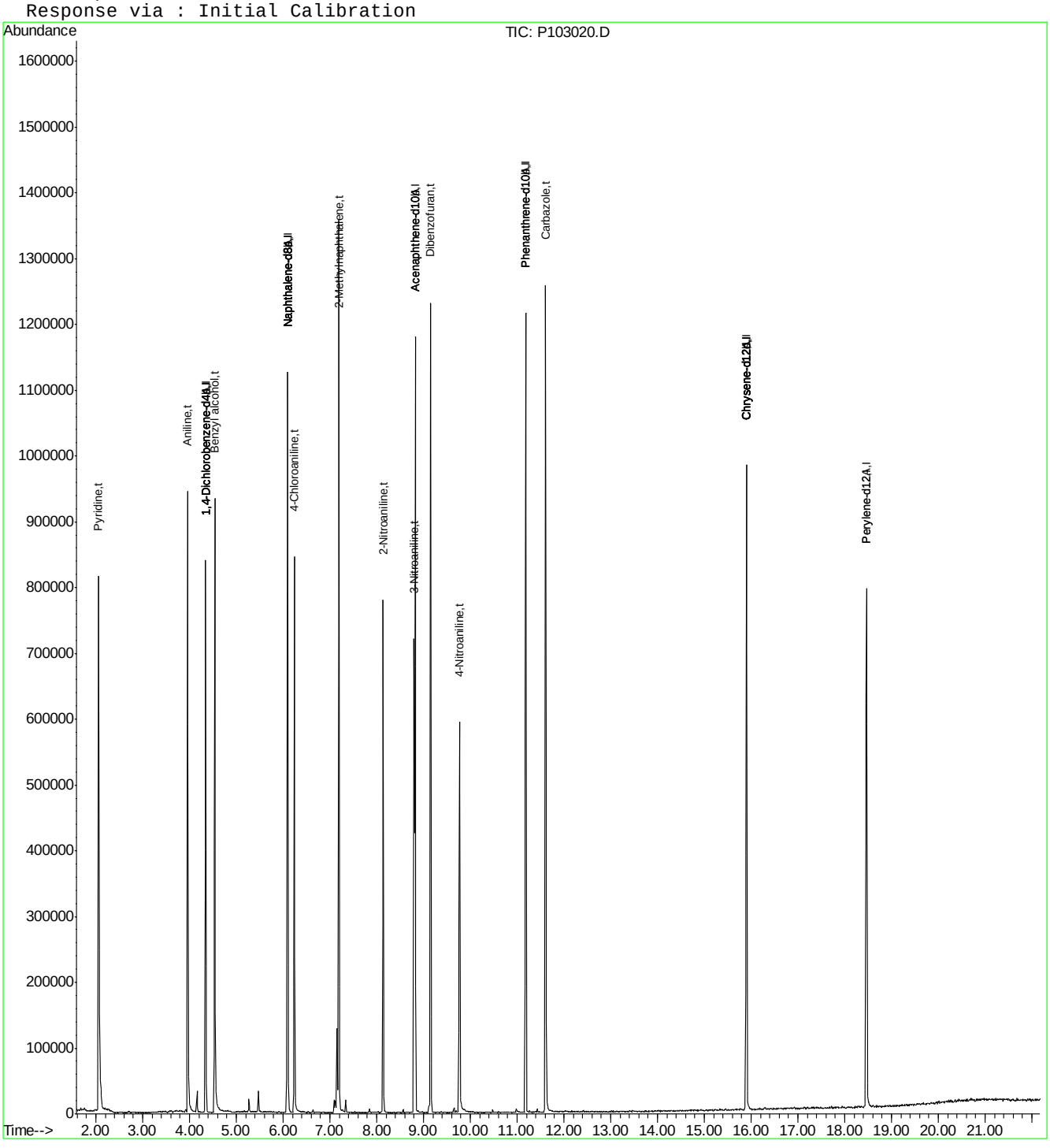
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103020.D Vial: 11
Acq On : 2 Mar 2016 9:34 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:53 2016 Quant Results File: MP4524.RES

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



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103021.D Vial: 12
Acq On : 2 Mar 2016 10:03 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:53:33 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	147735	40.00	ppm	0.00
24) Naphthalene-d8	6.09	136	516601	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	290907	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	432489	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	382422	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	337814	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	147735	40.00	ppm	-0.03
112) Naphthalene-d8A	6.09	136	516601	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	290907	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	432489	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	382422	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	337814	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	147735	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	432489	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	382422	40.00	ppm	-0.05
165) Naphthalene-d8b	6.09	136	516601	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	290907	40.00	ppm	-0.04
169) Naphthalene-d8c	6.09	136	516601	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	147735	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	382422	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	382422	40.00	ppm	-0.06
180) Naphthalene-d8a	6.09	136	516601	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	255627	49.71	ppm	0.00
Spiked Amount 50.000			Recovery = 99.42%			
8) Phenol-d5	3.96	99	316260	50.41	ppm	0.00
Spiked Amount 50.000			Recovery = 100.82%			
25) Nitrobenzene-d5	5.07	82	261274	49.96	ppm	0.00
Spiked Amount 50.000			Recovery = 99.92%			
51) 2-Fluorobiphenyl	7.79	172	434452	49.23	ppm	0.00
Spiked Amount 50.000			Recovery = 98.46%			
73) 2,4,6-Tribromophenol	10.09	330	48286	47.75	ppm	0.00
Spiked Amount 50.000			Recovery = 95.50%			
85) Terphenyl-d14	14.01	244	381107	50.61	ppm	0.00
Spiked Amount 50.000			Recovery = 101.22%			

Target Compounds Qvalue

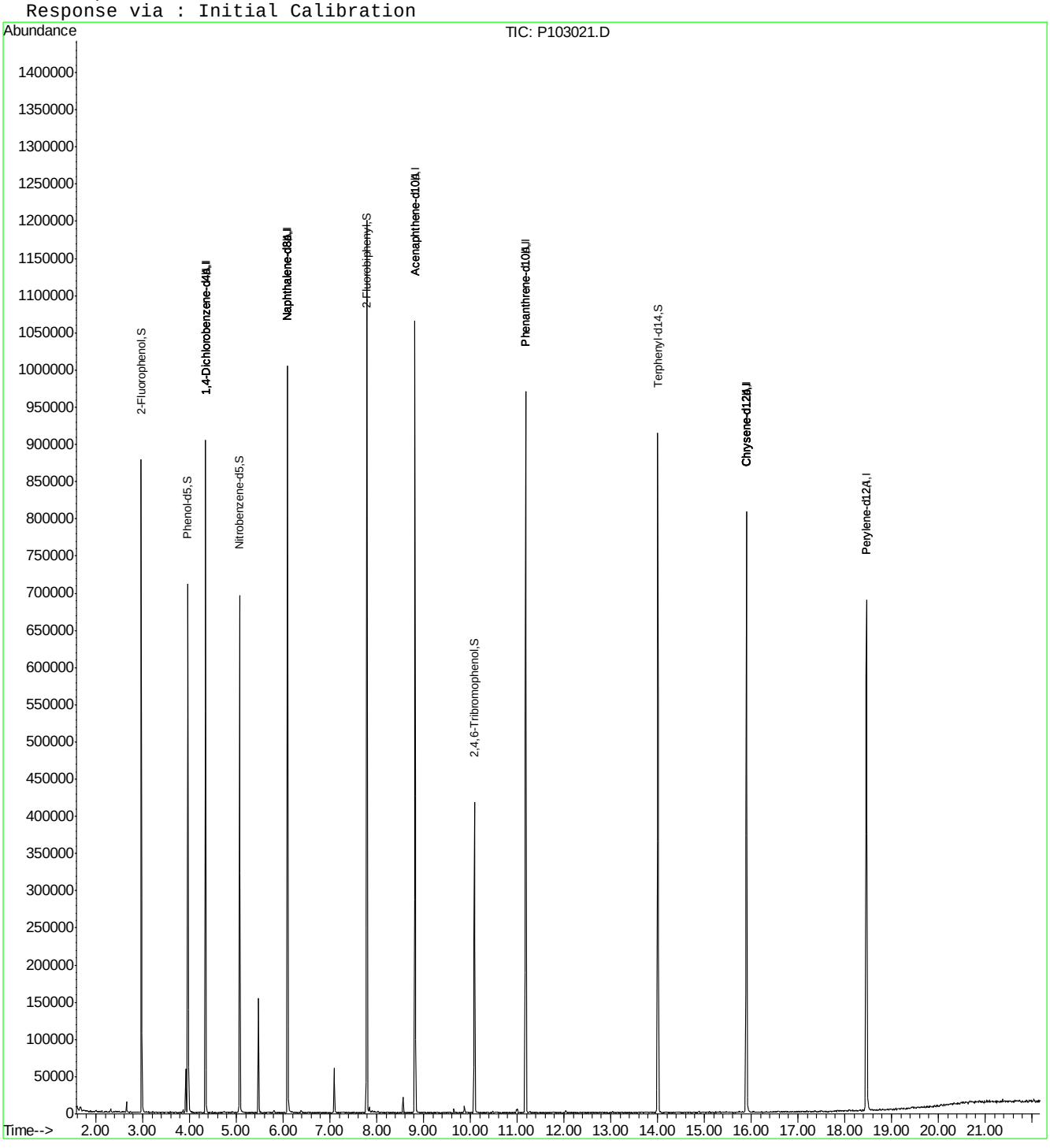
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103021.D Vial: 12
Acq On : 2 Mar 2016 10:03 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:55 2016 Quant Results File: MP4524.RES

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



P103021.D MP4524.M Thu Mar 03 10:55:49 2016 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:55:57 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	147977	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	502321	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	292838	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	450924	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	354813	40.00	ppm	0.00
92) Perylene-d12	18.47	264	324202	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	147977	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	502321	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	292838	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	450924	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	354813	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	324202	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.34	152	147977	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	450924	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	354813	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	502321	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	292838	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	502321	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	147977	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	354813	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	354813	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	502321	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
4) N-Nitrosodimethylamine	1.94	42	100466	45.27	ppm	97
11) bis(2-Chloroethyl)ether	4.02	93	250856	52.58	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	267100	48.52	ppm	100
15) 1,4-Dichlorobenzene	4.36	146	254446	48.13	ppm	96
17) 1,2-Dichlorobenzene	4.56	146	252827	50.40	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.70	121	70906m	45.19	ppm	
22) n-Nitroso-di-n-propylamine	4.88	70	165394	49.53	ppm	98
23) Hexachloroethane	5.00	201	85287	49.50	ppm	93
26) Nitrobenzene	5.10	77	235985	48.37	ppm	96
28) Isophorone	5.44	82	440842	53.28	ppm	99
32) bis(2-Chloroethoxy)methane	5.78	93	262567	50.25	ppm	97
36) 1,2,4-Trichlorobenzene	6.02	180	194922	49.53	ppm	96

(#) = qualifier out of range (m) = manual integration
P103022.D MP4524.M Thu Mar 03 11:02:09 2016

9.6.59

9

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:55:57 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	Naphthalene	6.13	128	620274	49.79	ppm	99
42)	Hexachlorobutadiene	6.34	225	101443	51.87	ppm	99
52)	2-Chloronaphthalene	7.94	162	394779	51.32	ppm	98
55)	Dimethylphthalate	8.47	163	428353	48.18	ppm	99
56)	Acenaphthylene	8.59	152	579395	47.15	ppm	99
57)	2,6-Dinitrotoluene	8.54	165	93484	49.29	ppm	91
59)	Acenaphthene	8.87	153	372302	48.75	ppm	99
63)	2,4-Dinitrotoluene	9.17	165	127397	43.76	ppm	96
65)	Diethylphthalate	9.60	149	422921	47.86	ppm	99
66)	Fluorene	9.69	166	427669	48.67	ppm	99
67)	4-Chlorophenyl-phenylether	9.74	204	185257	46.99	ppm	97
71)	n-Nitrosodiphenylamine	9.93	169	302754	46.62	ppm	97
72)	1,2-Diphenylhydrazine	9.98	77	418609	47.05	ppm	97
74)	4-Bromophenyl-phenylether	10.51	248	108414	49.14	ppm	94
75)	Hexachlorobenzene	10.58	284	106751	44.57	ppm	96
77)	Phenanthrene	11.22	178	553887	47.89	ppm	100
78)	Anthracene	11.30	178	548726	47.32	ppm	98
80)	Di-n-butylphthalate	12.29	149	700159	50.57	ppm	100
81)	Fluoranthene	13.24	202	605721	48.66	ppm	100
84)	Pyrene	13.63	202	617401	54.68	ppm	99
86)	Butylbenzylphthalate	15.00	149	309331	56.34	ppm	98
88)	Benzo[a]anthracene	15.89	228	503192	54.35	ppm	99
90)	Chrysene	15.95	228	477209	52.08	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	398242	46.47	ppm	99
93)	Di-n-octylphthalate	17.38	149	677691	48.96	ppm	99
94)	Benzo[b]fluoranthene	17.83	252	483064	52.39	ppm	98
95)	Benzo[k]fluoranthene	17.88	252	499185	56.20	ppm	98
96)	Benzo[a]pyrene	18.37	252	467487	57.48	ppm	97
97)	Indeno[1,2,3-cd]pyrene	20.09	276	415393	57.85	ppm	98
99)	Dibenz[a,h]anthracene	20.14	278	434182	56.12	ppm	98
101)	Benzo[g,h,i]perylene	20.46	276	443324	53.91	ppm	99

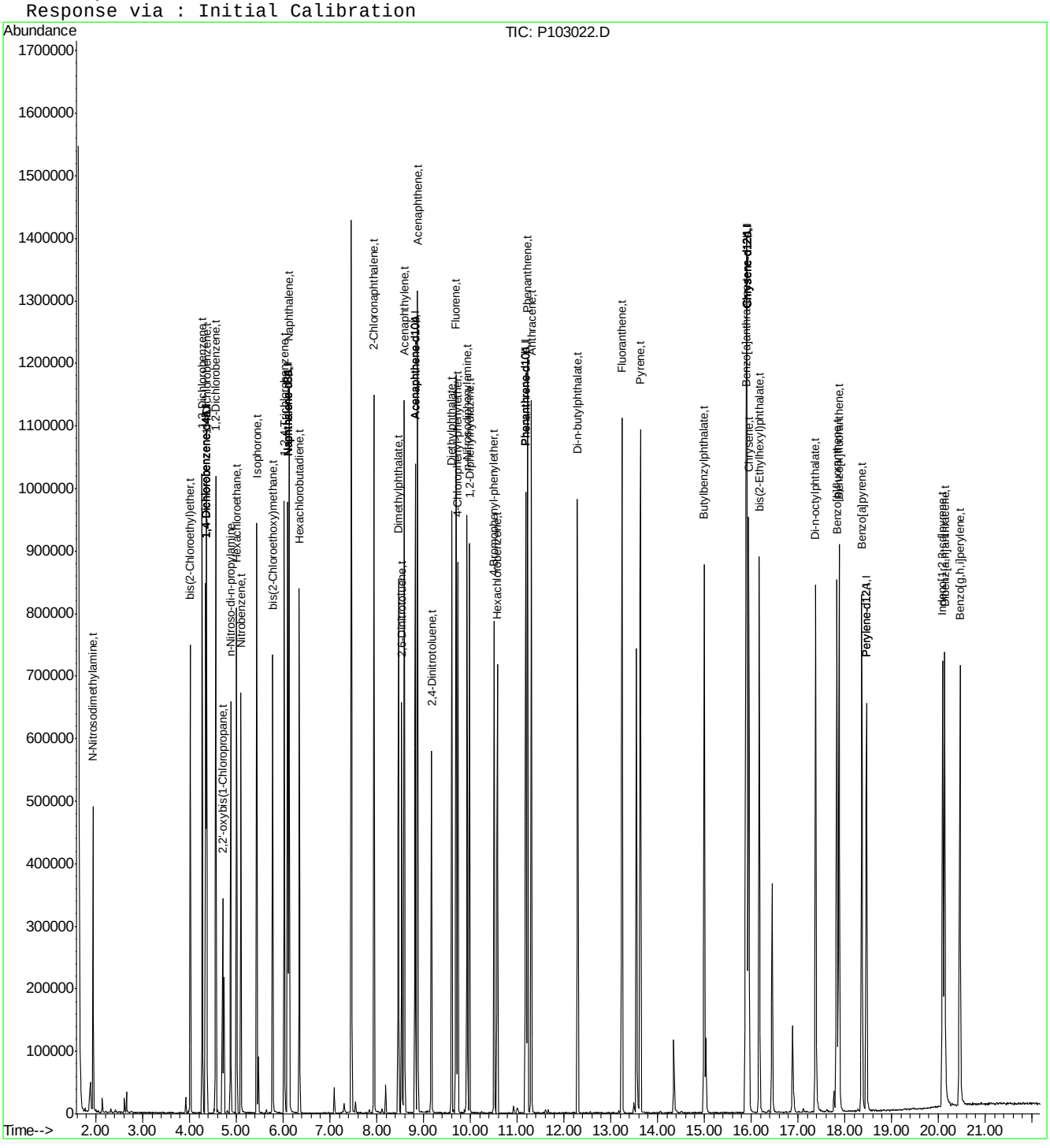
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:02 2016 Quant Results File: MP4524.RES

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



SGS ACCUTEST JC15518

Manual Integration Approval Summary

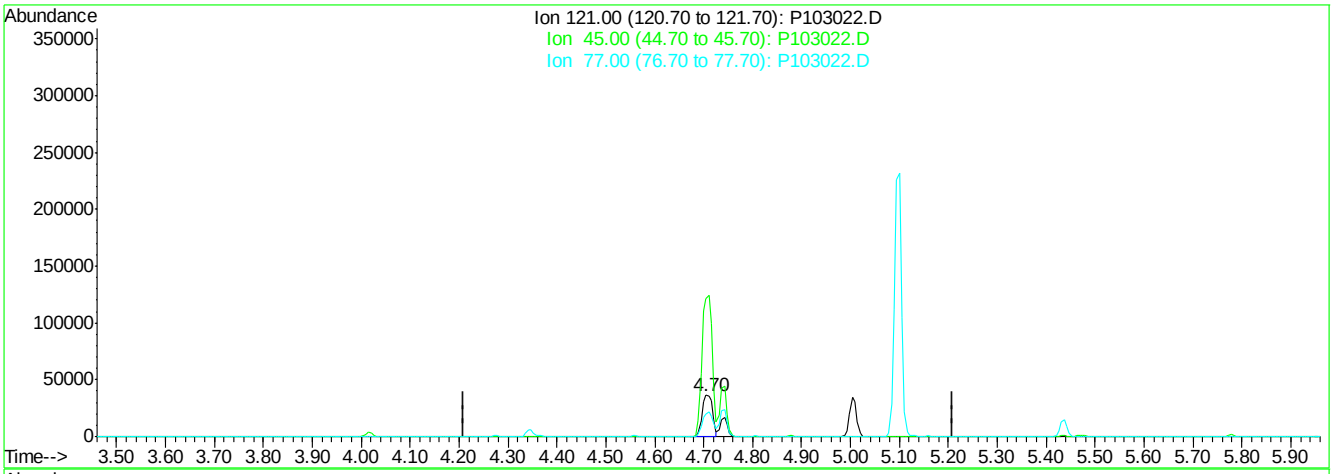
Sample Number:	EP4524-ICV4524	**Method:**	SW846 8270D
Lab FileID:	P103022.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 22:32	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

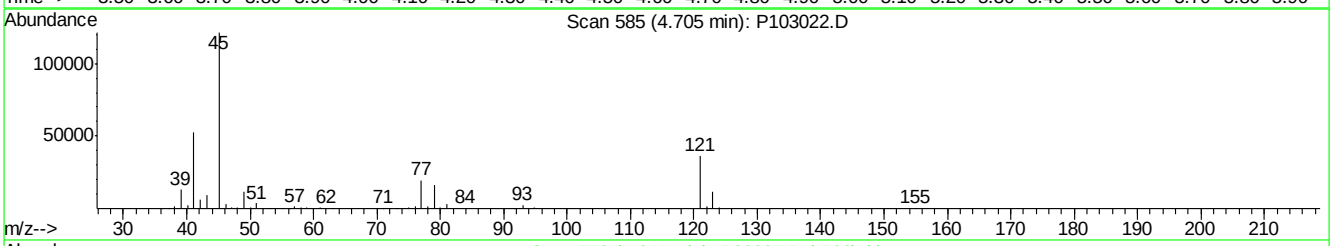
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.70	Split peak

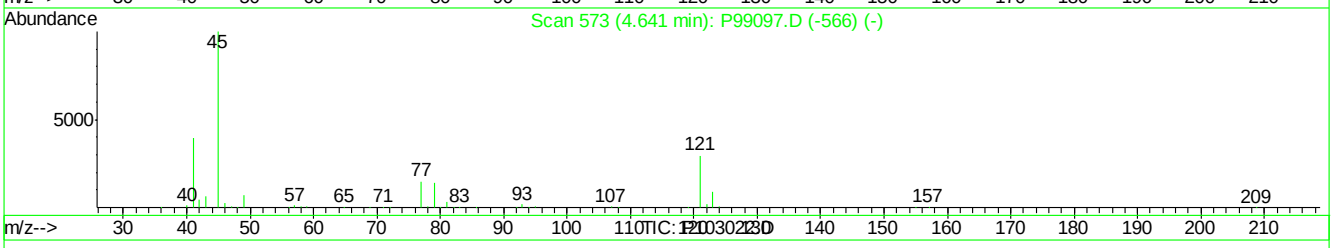
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:56 2016 Quant Results File: temp.res

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







(20) 2,2'-oxybis(1-Chloropropane (t)

4.70min 34.84ppm

response 54660

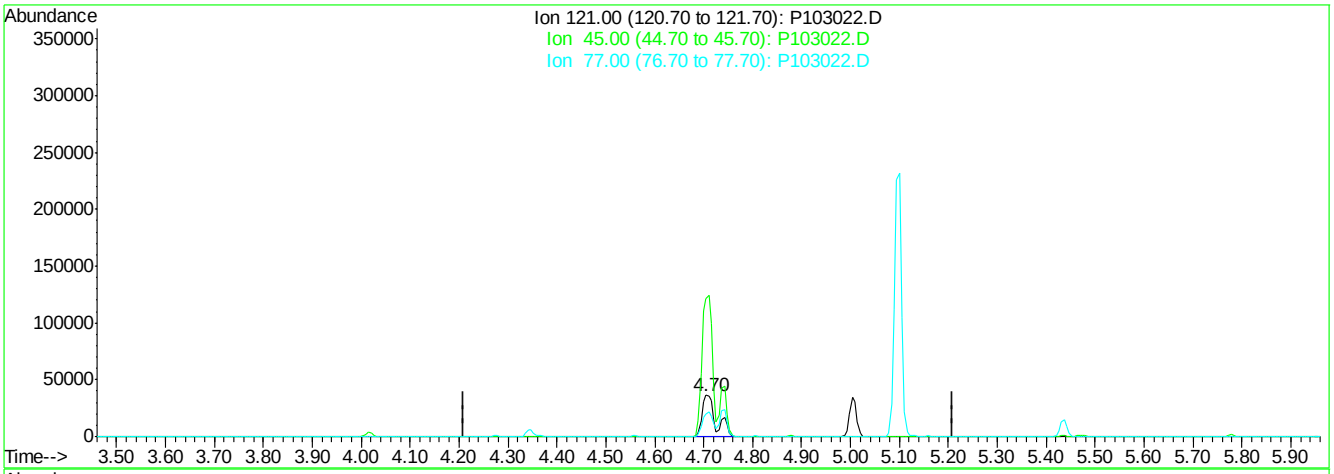
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	335.24
77.00	51.90	46.67
0.00	0.00	0.00

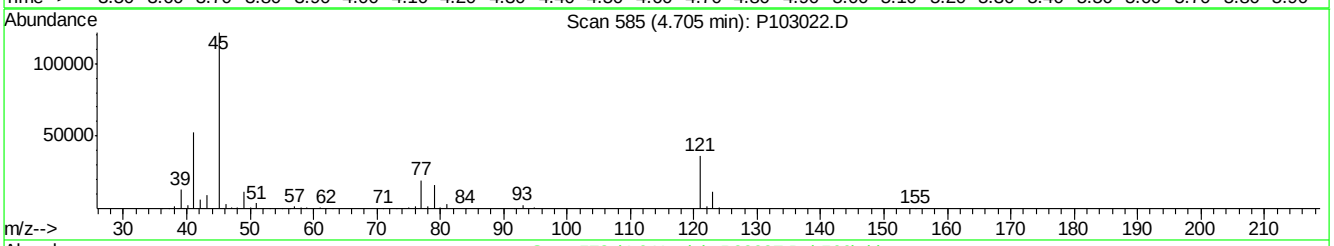
P103022.D MP4524.M Thu Mar 03 10:56:43 2016

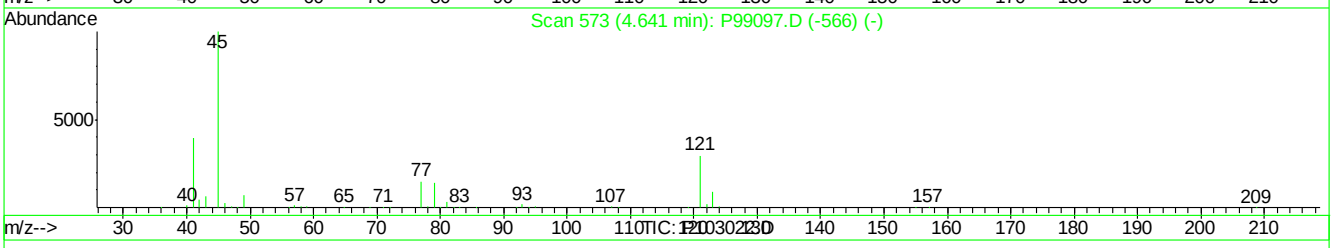
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:56 2016 Quant Results File: temp.res

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







(20) 2,2'-oxybis(1-Chloropropane (t)

4.70min 45.19ppm m

response 70906

Ion	Exp%	Act%
121.00	100	100
45.00	344.10	333.44
77.00	51.90	53.69
0.00	0.00	0.00

P103022.D MP4524.M Thu Mar 03 10:56:49 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:20:23 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	127339	40.00 ppm	0.00
24) Naphthalene-d8	6.09	136	457549	40.00 ppm	0.00
47) Acenaphthene-d10	8.82	164	255729	40.00 ppm	0.00
69) Phenanthrene-d10	11.18	188	363505	40.00 ppm	0.00
83) Chrysene-d12	15.90	240	347332	40.00 ppm	-0.01
92) Perylene-d12	18.46	264	296697	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	127339	40.00 ppm	-0.03
112) Naphthalene-d8A	6.09	136	457549	40.00 ppm	-0.03
121) Acenaphthene-d10A	8.82	164	255729	40.00 ppm	-0.04
132) Phenanthrene-d10A	11.18	188	363505	40.00 ppm	-0.04
147) Chrysene-d12A	15.90	240	347332	40.00 ppm	-0.05
155) Perylene-d12A	18.46	264	296697	40.00 ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	127339	40.00 ppm	-0.03
161) Phenanthrene-d10b	11.18	188	363505	40.00 ppm	-0.04
163) Chrysene-d12b	15.90	240	347332	40.00 ppm	-0.05
165) Naphthalene-d8b	6.09	136	457549	40.00 ppm	-0.03
167) Acenaphthene-d10b	8.82	164	255729	40.00 ppm	-0.04
169) Naphthalene-d8c	6.09	136	457549	40.00 ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	127339	40.00 ppm	-0.11
176) Chrysene-d12c	15.90	240	347332	40.00 ppm	-0.06
178) Chrysene-d12d	15.90	240	347332	40.00 ppm	-0.06
180) Naphthalene-d8a	6.09	136	457549	40.00 ppm	0.13

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	1.78	88	98061	43.34 ppm	91
6) Indene	4.67	116	344256	47.53 ppm	98
7) Cumene	3.43	105	482301	46.10 ppm	99
13) Decane	4.16	43	153028	45.48 ppm	98
18) Acetophenone	4.86	105	265568	46.37 ppm	98
27) Quinoline	6.63	129	360557	43.73 ppm	99
40) 2,3-Dichloroaniline	7.64	161	168248	40.93 ppm	99
41) Caprolactam	6.71	55	69184	45.49 ppm	93
45) 1-Methylnaphthalene	7.34	142	345005	44.99 ppm	100
46) Dimethylnaphthalene	8.18	156	303892	45.31 ppm	99
48) Hexachlorocyclopentadiene	7.46	237	86594	51.98 ppm	99
53) Biphenyl	7.94	154	416380	48.21 ppm	99

(#) = qualifier out of range (m) = manual integration
P103023.D MP4524.M Thu Mar 03 11:22:12 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:20:23 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

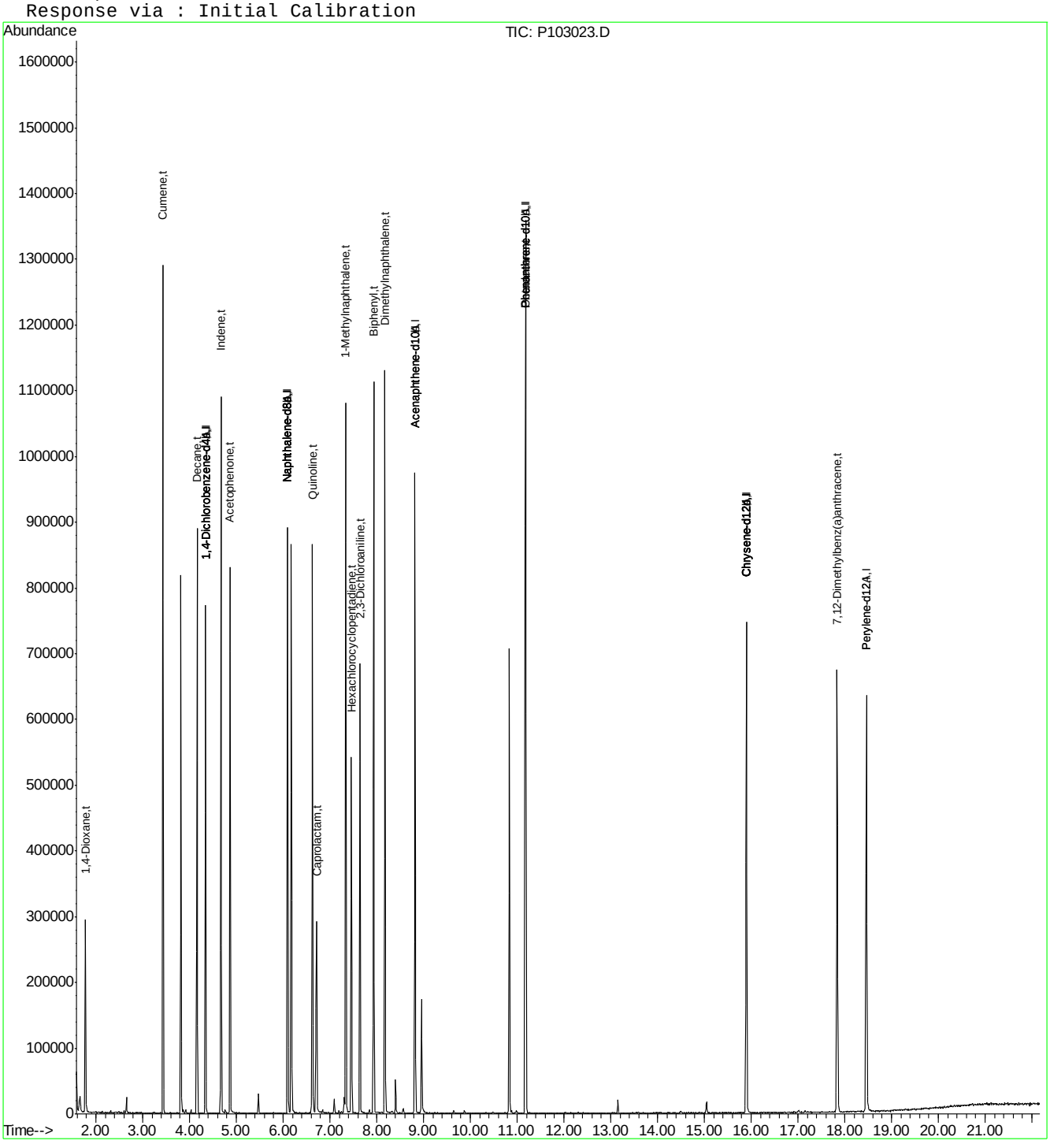
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	11.17	57	187929	51.34	ppm	97
100)	7,12-Dimethylbenz(a)anthra	17.84	256	191465	53.59	ppm	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:22 2016 Quant Results File: MP4524.RES

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



P103023.D MP4524.M Thu Mar 03 11:22:13 2016 Page 3

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103024.D Vial: 15
Acq On : 2 Mar 2016 11:31 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:03:32 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	158201	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	545592	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	322768	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	489171	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	437455	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	397000	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	158201	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	545592	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	322768	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	489171	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	437455	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	397000	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	158201	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	489171	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	437455	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	545592	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	322768	40.00	ppm	-0.04
169) Naphthalene-d8c	6.10	136	545592	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	158201	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	437455	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	437455	40.00	ppm	-0.06
180) Naphthalene-d8a	6.10	136	545592	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	15.91	252	206949	43.27	ppm	97

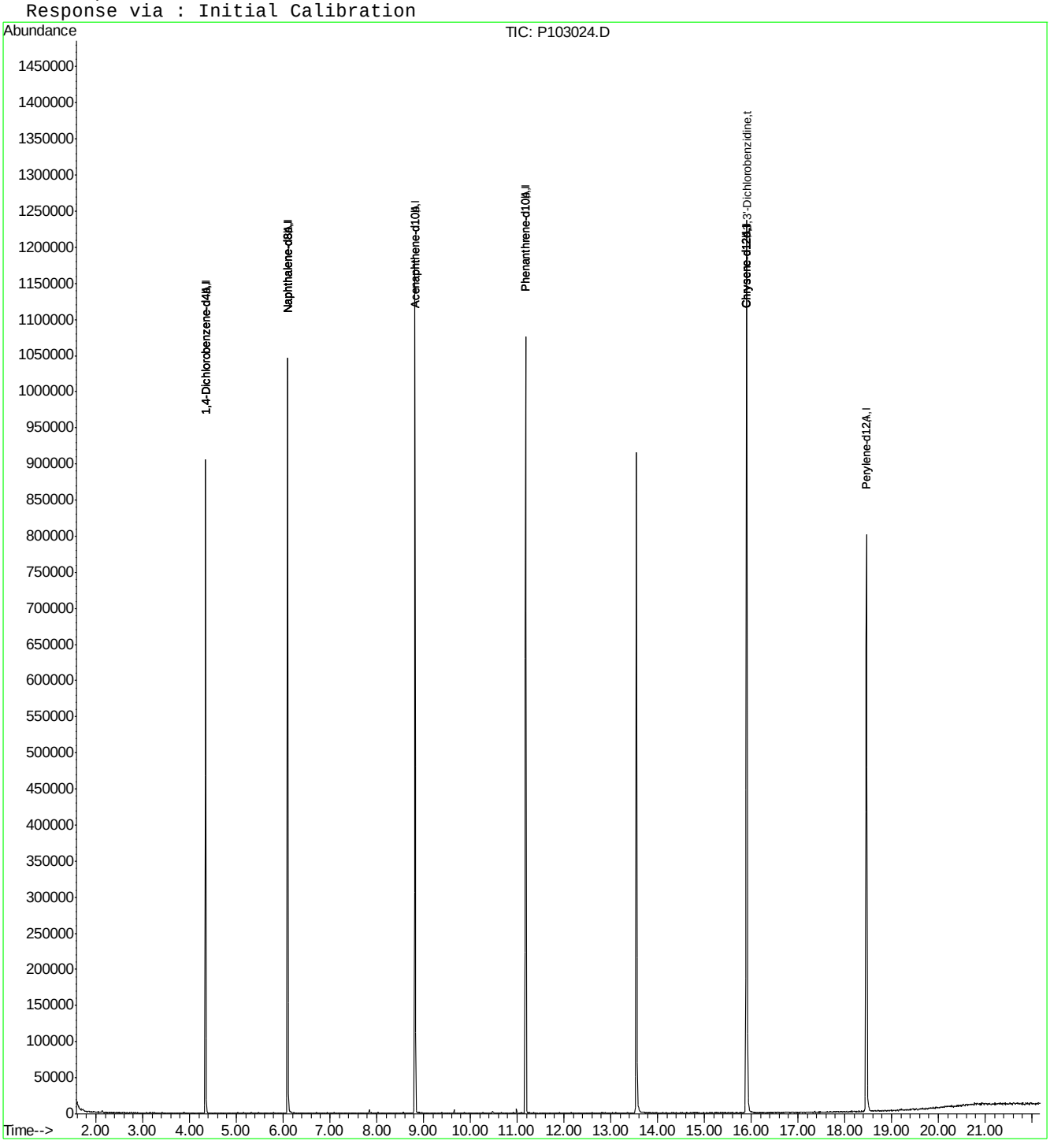
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103024.D Vial: 15
Acq On : 2 Mar 2016 11:31 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:04 2016 Quant Results File: MP4524.RES

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



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103208.D Vial: 2
Acq On : 9 Mar 2016 4:21 pm Operator: linseyk
Sample : cc4524-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 16:50:27 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 16:50:23 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	113234	40.00	ppm	0.00
24) Naphthalene-d8	5.99	136	412222	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	240424	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	353753	40.00	ppm	-0.02
83) Chrysene-d12	15.77	240	315942	40.00	ppm	-0.03
92) Perylene-d12	18.32	264	281399	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	113234	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	353753	40.00	ppm	-0.02
106) Chrysene-d12b	15.77	240	315942	40.00	ppm	-0.03
108) Naphthalene-d8b	5.99	136	412222	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	240424	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	2.88	112	198694	50.41	ppm	0.00
Spiked Amount 50.000			Recovery = 100.82%			
8) Phenol-d5	3.86	99	241417	50.20	ppm	0.02
Spiked Amount 50.000			Recovery = 100.40%			
25) Nitrobenzene-d5	4.97	82	203633	48.80	ppm	-0.03
Spiked Amount 50.000			Recovery = 97.60%			
51) 2-Fluorobiphenyl	7.69	172	335036	45.93	ppm	-0.02
Spiked Amount 50.000			Recovery = 91.86%			
73) 2,4,6-Tribromophenol	9.98	330	43360	52.42	ppm	-0.03
Spiked Amount 50.000			Recovery = 104.84%			
85) Terphenyl-d14	13.88	244	303920	48.85	ppm	-0.03
Spiked Amount 50.000			Recovery = 97.70%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.71	88	92685	46.07	ppm	98
3) Pyridine	1.91	79	220281	48.50	ppm	99
4) N-Nitrosodimethylamine	1.87	42	87210	51.36	ppm	87
6) Indene	4.57	116	316071	49.08	ppm	97
7) Cumene	3.34	105	448749	48.23	ppm	99
9) Phenol	3.88	94	250110	50.40	ppm	86
10) Aniline	3.85	93	232552	43.01	ppm	79
11) bis(2-Chloroethyl)ether	3.92	93	174334	47.75	ppm	95
12) 2-Chlorophenol	4.01	128	182552	48.55	ppm	98
13) Decane	4.06	43	152601	51.01	ppm	98
14) 1,3-Dichlorobenzene	4.18	146	198241	47.06	ppm	98
15) 1,4-Dichlorobenzene	4.27	146	194202	48.00	ppm	97
16) Benzyl alcohol	4.43	108	117667	52.63	ppm	95
17) 1,2-Dichlorobenzene	4.46	146	179958	46.88	ppm	100
18) Acetophenone	4.77	105	251830	49.45	ppm	99
19) 2-Methylphenol	4.62	108	157423	49.22	ppm	98
20) 2,2'-oxybis(1-Chloropropan	4.61	121	56170	46.78	ppm	88
21) 3&4-Methylphenol	4.83	108	175758	50.37	ppm	99
22) n-Nitroso-di-n-propylamine	4.78	70	128812	50.41	ppm	95
23) Hexachloroethane	4.90	201	63889	48.46	ppm	96
26) Nitrobenzene	5.00	77	192187	48.00	ppm	100
27) Quinoline	6.53	129	344506	46.38	ppm	99
28) Isophorone	5.33	82	341549	50.31	ppm	97

(#) = qualifier out of range (m) = manual integration
P103208.D MP4524.M Thu Mar 10 09:01:21 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103208.D Vial: 2
Acq On : 9 Mar 2016 4:21 pm Operator: linseyk
Sample : cc4524-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 16:50:27 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 16:50:23 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	5.45	139	101060	51.45	ppm	96
30) 2,4-Dimethylphenol	5.57	107	170383	51.08	ppm	98
31) Benzoic acid	5.76	105	141598	54.65	ppm	98
32) bis(2-Chloroethoxy)methane	5.68	93	209280	48.81	ppm	99
33) 2,4-Dichlorophenol	5.84	162	143694	49.30	ppm	97
34) 2,6-Dichlorophenol	6.15	162	132488	47.36	ppm	97
35) 1,3,5-Trichlorobenzene	5.46	180	149215	45.68	ppm	98
36) 1,2,4-Trichlorobenzene	5.92	180	149518	46.30	ppm	99
37) 1,2,3-Trichlorobenzene	6.25	180	134762	45.44	ppm	99
38) Naphthalene	6.02	128	476881	46.65	ppm	99
39) 4-Chloroaniline	6.14	127	199498	45.90	ppm	98
40) 2,3-Dichloroaniline	7.54	161	175172	47.30	ppm	99
41) Caprolactam	6.63	55	74456	54.34	ppm	92
42) Hexachlorobutadiene	6.24	225	73292	45.67	ppm	97
43) 4-Chloro-3-methylphenol	6.96	107	163429	52.49	ppm	99
44) 2-Methylnaphthalene	7.08	141	265644	46.90	ppm	100
45) 1-Methylnaphthalene	7.23	142	321401	46.52	ppm	99
46) Dimethylnaphthalene	8.07	156	286473	47.41	ppm	100
48) Hexachlorocyclopentadiene	7.35	237	173158	110.56	ppm	100
49) 2,4,6-Trichlorophenol	7.56	196	94703	50.28	ppm	96
50) 2,4,5-Trichlorophenol	7.65	196	100167	51.11	ppm	97
52) 2-Chloronaphthalene	7.84	162	285366	45.19	ppm	99
53) Biphenyl	7.83	154	368145	45.34	ppm	99
54) 2-Nitroaniline	8.03	65	97993	53.66	ppm	94
55) Dimethylphthalate	8.36	163	347284	47.57	ppm	99
56) Acenaphthylene	8.48	152	468566	46.44	ppm	99
57) 2,6-Dinitrotoluene	8.43	165	80085	51.43	ppm	92
58) 3-Nitroaniline	8.69	138	94235	51.41	ppm	99
59) Acenaphthene	8.76	153	293813	46.86	ppm	99
60) 2,4-Dinitrophenol	8.86	184	83233	90.22	ppm	98
61) 4-Nitrophenol	9.12	109	52002	52.13	ppm	98
62) Dibenzofuran	9.04	168	411351	46.56	ppm	98
63) 2,4-Dinitrotoluene	9.06	165	106890	44.81	ppm	96
64) 2,3,4,6-Tetrachlorophenol	9.28	232	75063	49.85	ppm	98
65) Diethylphthalate	9.50	149	351519	48.45	ppm	99
66) Fluorene	9.59	166	340353	47.18	ppm	98
67) 4-Chlorophenyl-phenylether	9.62	204	147831	45.67	ppm	98
68) 4-Nitroaniline	9.67	138	87390	47.46	ppm	99
70) 4,6-Dinitro-2-methylphenol	9.71	198	59288	45.53	ppm	98
71) n-Nitrosodiphenylamine	9.82	169	251952	49.46	ppm	98
72) 1,2-Diphenylhydrazine	9.87	77	359068	51.44	ppm	97
74) 4-Bromophenyl-phenylether	10.40	248	84523	48.84	ppm	98
75) Hexachlorobenzene	10.47	284	85251	45.37	ppm	98
76) Pentachlorophenol	10.82	266	106341	91.73	ppm	99
77) Phenanthrene	11.11	178	428799	47.26	ppm	99
78) Anthracene	11.19	178	436316	47.96	ppm	99
79) Carbazole	11.49	167	449385	48.23	ppm	99
80) Di-n-butylphthalate	12.18	149	595423	54.82	ppm	100
81) Fluoranthene	13.12	202	470235	48.16	ppm	100

(#) = qualifier out of range (m) = manual integration
P103208.D MP4524.M Thu Mar 10 09:01:21 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103208.D Vial: 2
Acq On : 9 Mar 2016 4:21 pm Operator: linseyk
Sample : cc4524-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 16:50:27 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 16:50:23 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

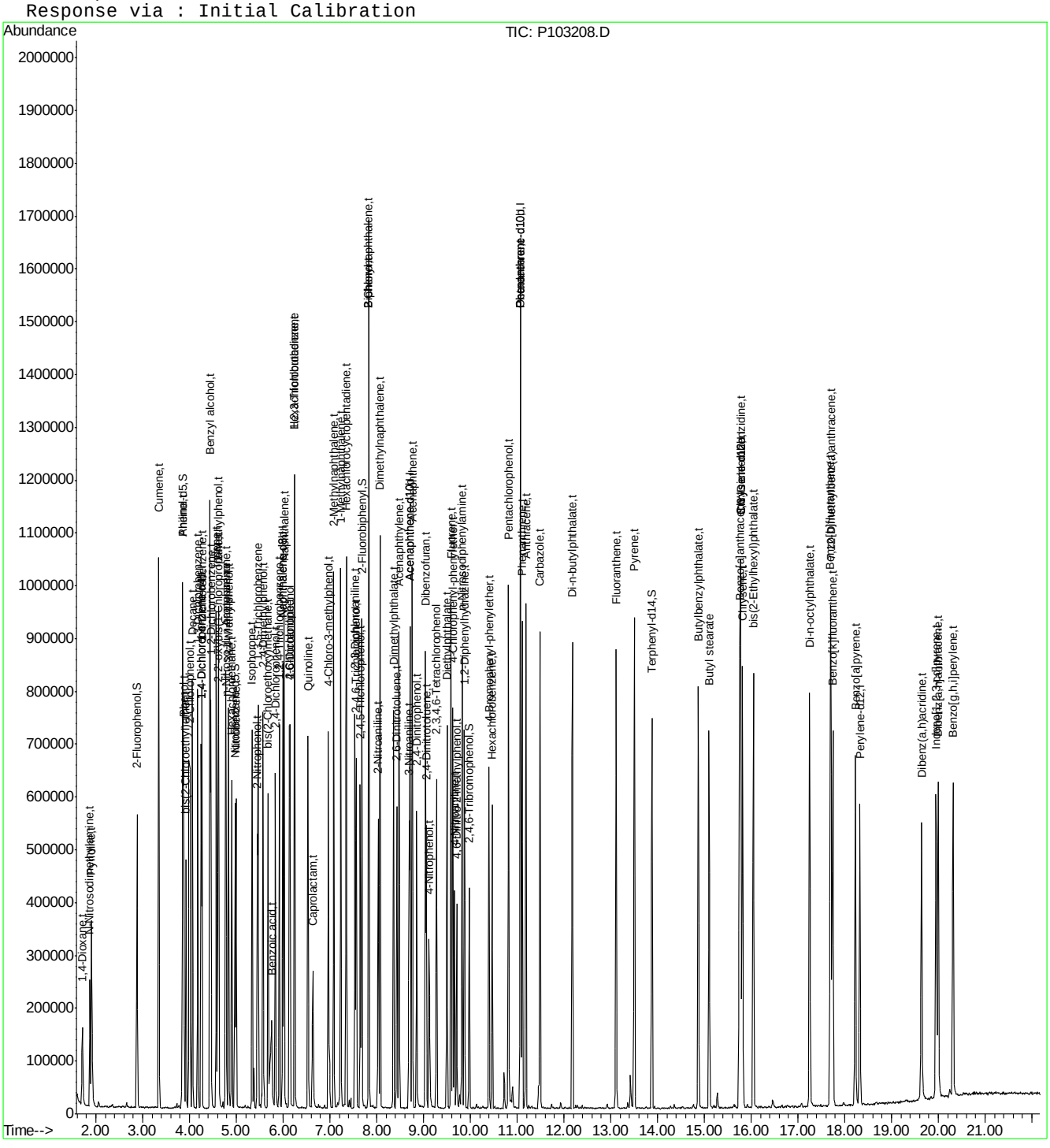
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	11.07	57	192170	53.94	ppm	98
84)	Pyrene	13.50	202	497419	49.47	ppm	98
86)	Butylbenzylphthalate	14.87	149	267629	54.74	ppm	97
87)	Butyl stearate	15.10	56	143115	50.88	ppm	95
88)	Benzo[a]anthracene	15.75	228	408317	49.53	ppm	99
89)	3,3'-Dichlorobenzidine	15.78	252	151899	44.00	ppm	96
90)	Chrysene	15.82	228	383058	46.95	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.05	149	363200	47.70	ppm	99
93)	Di-n-octylphthalate	17.25	149	618150	52.00	ppm	99
94)	Benzo[b]fluoranthene	17.69	252	405771	50.70	ppm	97
95)	Benzo[k]fluoranthene	17.74	252	384075	49.81	ppm	97
96)	Benzo[a]pyrene	18.23	252	361062	51.14	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.95	276	319453	51.25	ppm	97
98)	Dibenz(a,h)acridine	19.64	279	303059	51.07	ppm	98
99)	Dibenz[a,h]anthracene	20.00	278	344911	51.36	ppm	97
100)	7,12-Dimethylbenz(a)anthra	17.71	256	179891	53.09	ppm	99
101)	Benzo[g,h,i]perylene	20.31	276	338391	47.41	ppm	96

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103208.D Vial: 2
Acq On : 9 Mar 2016 4:21 pm Operator: linseyk
Sample : cc4524-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 9 16:51 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103209.D Vial: 3
Acq On : 9 Mar 2016 4:57 pm Operator: linseyk
Sample : cc4514-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 09 17:19:19 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.25	152	86534	40.00	ppm	-0.01
24) Naphthalene-d8	5.99	136	329453	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	195718	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	306256	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	283500	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	249166	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.25	152	86534	40.00	ppm	-0.01
104) Phenanthrene-d10b	11.07	188	306256	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	283500	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	329453	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	195718	40.00	ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds						Qvalue
103) Benzaldehyde	3.72	105	107582	41.36	ppm	96
105) Atrazine	10.73	200	71063	45.47	ppm	86
107) Benzidine	13.42	184	154252	30.91	ppm	98
109) Hydroquinone	6.75	110	152303	50.43	ppm	98
111) 1,2,4,5-Tetrachlorobenzene	7.35	216	103748	38.62	ppm	99

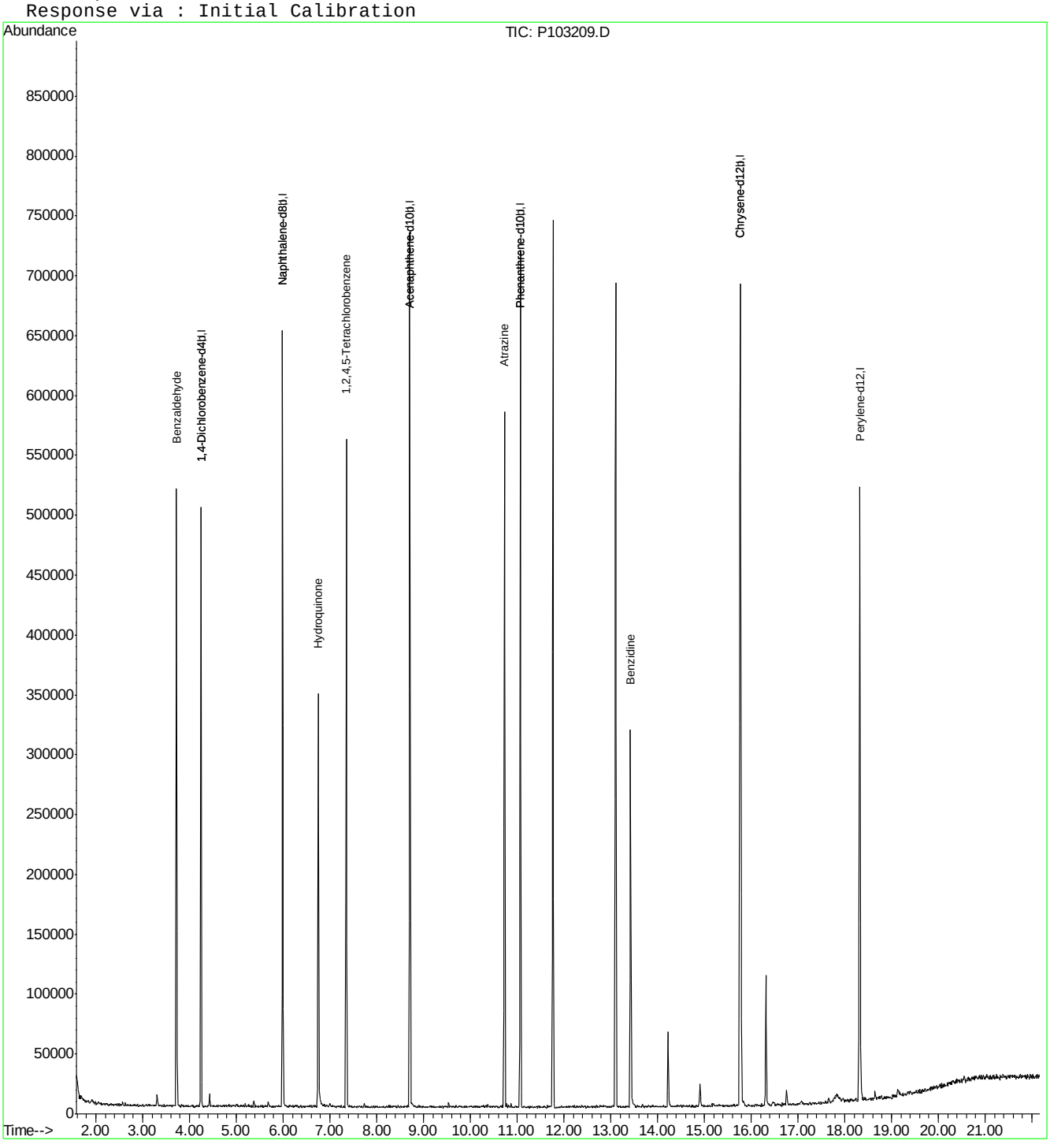
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P103209.D MP4524.M Thu Mar 10 09:02:24 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4533\P103209.D Vial: 3
Acq On : 9 Mar 2016 4:57 pm Operator: linseyk
Sample : cc4514-50 Inst : MSP
Misc : op91801,ep4533 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 9:02 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103232.D Vial: 2
Acq On : 10 Mar 2016 9:02 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 09:24:45 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.24	152	167099	40.00 ppm	-0.02
24) Naphthalene-d8	5.99	136	594238	40.00 ppm	-0.02
47) Acenaphthene-d10	8.71	164	350184	40.00 ppm	-0.02
69) Phenanthrene-d10	11.07	188	533277	40.00 ppm	-0.02
83) Chrysene-d12	15.77	240	488566	40.00 ppm	-0.03
92) Perylene-d12	18.33	264	462867	40.00 ppm	-0.03
102) 1,4-Dichlorobenzene-d4b	4.24	152	167099	40.00 ppm	-0.02
104) Phenanthrene-d10b	11.07	188	533277	40.00 ppm	-0.02
106) Chrysene-d12b	15.77	240	488566	40.00 ppm	-0.03
108) Naphthalene-d8b	5.99	136	594238	40.00 ppm	-0.02
110) Acenaphthene-d10b	8.71	164	350184	40.00 ppm	-0.02
System Monitoring Compounds					
5) 2-Fluorophenol	2.87	112	145600	25.03 ppm	-0.01
Spiked Amount 50.000			Recovery	= 50.06%	
8) Phenol-d5	3.85	99	180008	25.37 ppm	0.00
Spiked Amount 50.000			Recovery	= 50.74%	
25) Nitrobenzene-d5	4.97	82	157350	26.16 ppm	-0.03
Spiked Amount 50.000			Recovery	= 52.32%	
51) 2-Fluorobiphenyl	7.68	172	260108	24.48 ppm	-0.03
Spiked Amount 50.000			Recovery	= 48.96%	
73) 2,4,6-Tribromophenol	9.97	330	31555	25.31 ppm	-0.04
Spiked Amount 50.000			Recovery	= 50.62%	
85) Terphenyl-d14	13.88	244	237236	24.66 ppm	-0.04
Spiked Amount 50.000			Recovery	= 49.32%	

Target Compounds					Qvalue
2) 1,4-Dioxane	1.71	88	71360	24.04 ppm	98
3) Pyridine	1.90	79	167061	24.93 ppm	98
4) N-Nitrosodimethylamine	1.87	42	63151	25.20 ppm	89
6) Indene	4.57	116	241516	25.41 ppm	99
7) Cumene	3.34	105	331058	24.11 ppm	99
9) Phenol	3.87	94	187575	25.61 ppm	79
10) Aniline	3.85	93	184532	23.13 ppm	74
11) bis(2-Chloroethyl)ether	3.92	93	132200	24.54 ppm	95
12) 2-Chlorophenol	4.00	128	140052	25.24 ppm	99
13) Decane	4.06	43	113957	25.81 ppm	99
14) 1,3-Dichlorobenzene	4.18	146	150489	24.21 ppm	99
15) 1,4-Dichlorobenzene	4.26	146	145667	24.40 ppm	96
16) Benzyl alcohol	4.43	108	88229	26.74 ppm	94
17) 1,2-Dichlorobenzene	4.46	146	135484	23.92 ppm	99
18) Acetophenone	4.76	105	191334	25.46 ppm	97
19) 2-Methylphenol	4.61	108	119553	25.33 ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.61	121	41827	23.61 ppm #	65
21) 3&4-Methylphenol	4.82	108	135417	26.30 ppm	99
22) n-Nitroso-di-n-propylamine	4.78	70	102791	27.26 ppm	98
23) Hexachloroethane	4.90	201	46404	23.85 ppm	93
26) Nitrobenzene	4.99	77	147727	25.59 ppm	99
27) Quinoline	6.52	129	267803	25.01 ppm	100
28) Isophorone	5.33	82	260183	26.58 ppm	97

(#) = qualifier out of range (m) = manual integration
P103232.D MP4524.M Thu Mar 10 11:19:34 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103232.D Vial: 2
Acq On : 10 Mar 2016 9:02 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 09:24:45 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	5.44	139	73455	25.94	ppm	96
30) 2,4-Dimethylphenol	5.56	107	119707	24.90	ppm	97
31) Benzoic acid	5.75	105	96797	25.92	ppm	97
32) bis(2-Chloroethoxy)methane	5.67	93	161561	26.14	ppm	99
33) 2,4-Dichlorophenol	5.83	162	108573	25.84	ppm	97
34) 2,6-Dichlorophenol	6.14	162	100280	24.87	ppm	97
35) 1,3,5-Trichlorobenzene	5.46	180	113401	24.08	ppm	95
36) 1,2,4-Trichlorobenzene	5.92	180	110339	23.70	ppm	96
37) 1,2,3-Trichlorobenzene	6.24	180	101846	23.82	ppm	99
38) Naphthalene	6.02	128	363969	24.70	ppm	98
39) 4-Chloroaniline	6.13	127	161179	25.72	ppm	100
40) 2,3-Dichloroaniline	7.53	161	133916	25.08	ppm	99
41) Caprolactam	6.62	55	57640	29.18	ppm	92
42) Hexachlorobutadiene	6.24	225	54294	23.47	ppm	94
43) 4-Chloro-3-methylphenol	6.96	107	124516	27.74	ppm	97
44) 2-Methylnaphthalene	7.08	141	201873	24.73	ppm	99
45) 1-Methylnaphthalene	7.23	142	248170	24.92	ppm	100
46) Dimethylnaphthalene	8.06	156	218363	25.07	ppm	98
48) Hexachlorocyclopentadiene	7.34	237	122894	53.87	ppm	100
49) 2,4,6-Trichlorophenol	7.56	196	70150	25.57	ppm	98
50) 2,4,5-Trichlorophenol	7.64	196	78122	27.37	ppm	98
52) 2-Chloronaphthalene	7.83	162	226375	24.61	ppm	98
53) Biphenyl	7.82	154	290279	24.55	ppm	100
54) 2-Nitroaniline	8.02	65	77235	29.04	ppm	96
55) Dimethylphthalate	8.35	163	267818	25.19	ppm	98
56) Acenaphthylene	8.47	152	359912	24.49	ppm	98
57) 2,6-Dinitrotoluene	8.42	165	60423	26.64	ppm	92
58) 3-Nitroaniline	8.68	138	73711	27.61	ppm	100
59) Acenaphthene	8.75	153	222899	24.41	ppm	97
60) 2,4-Dinitrophenol	8.85	184	57740	46.81	ppm	97
61) 4-Nitrophenol	9.11	109	39343	27.08	ppm	97
62) Dibenzofuran	9.04	168	319498	24.83	ppm	99
63) 2,4-Dinitrotoluene	9.06	165	83878	23.47	ppm	87
64) 2,3,4,6-Tetrachlorophenol	9.27	232	55979	25.52	ppm	99
65) Diethylphthalate	9.50	149	272014	25.74	ppm	99
66) Fluorene	9.58	166	266459	25.36	ppm	99
67) 4-Chlorophenyl-phenylether	9.62	204	113740	24.12	ppm	99
68) 4-Nitroaniline	9.66	138	70190	26.17	ppm	94
70) 4,6-Dinitro-2-methylphenol	9.70	198	43945	23.93	ppm	100
71) n-Nitrosodiphenylamine	9.82	169	197263	25.69	ppm	98
72) 1,2-Diphenylhydrazine	9.87	77	280328	26.64	ppm	97
74) 4-Bromophenyl-phenylether	10.39	248	64401	24.68	ppm	95
75) Hexachlorobenzene	10.46	284	66667	23.53	ppm	97
76) Pentachlorophenol	10.81	266	79389	47.16	ppm	99
77) Phenanthrene	11.10	178	341853	24.99	ppm	99
78) Anthracene	11.18	178	350625	25.57	ppm	99
79) Carbazole	11.48	167	363161	25.85	ppm	100
80) Di-n-butylphthalate	12.17	149	449946	27.48	ppm	100
81) Fluoranthene	13.11	202	375646	25.52	ppm	98

(#) = qualifier out of range (m) = manual integration
P103232.D MP4524.M Thu Mar 10 11:19:34 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103232.D Vial: 2
Acq On : 10 Mar 2016 9:02 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 09:24:45 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	11.06	57	142129	26.47	ppm	97
84)	Pyrene	13.50	202	395087	25.41	ppm	96
86)	Butylbenzylphthalate	14.87	149	206420	27.30	ppm	96
87)	Butyl stearate	15.10	56	108135	24.19	ppm	94
88)	Benzo[a]anthracene	15.75	228	320287	25.12	ppm	99
89)	3,3'-Dichlorobenzidine	15.78	252	121724	22.87	ppm	100
90)	Chrysene	15.81	228	315093	24.97	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.04	149	274047	22.95	ppm	99
93)	Di-n-octylphthalate	17.25	149	465000	22.39	ppm	98
94)	Benzo[b]fluoranthene	17.69	252	336167	25.53	ppm	98
95)	Benzo[k]fluoranthene	17.74	252	325694	25.68	ppm	96
96)	Benzo[a]pyrene	18.23	252	302197	26.02	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.95	276	273024	26.63	ppm	97
98)	Dibenz(a,h)acridine	19.64	279	255242	26.15	ppm	98
99)	Dibenz[a,h]anthracene	19.99	278	300578	27.21	ppm	98
100)	7,12-Dimethylbenz(a)anthra	17.70	256	143101	25.67	ppm	99
101)	Benzo[g,h,i]perylene	20.31	276	304180	25.91	ppm	98

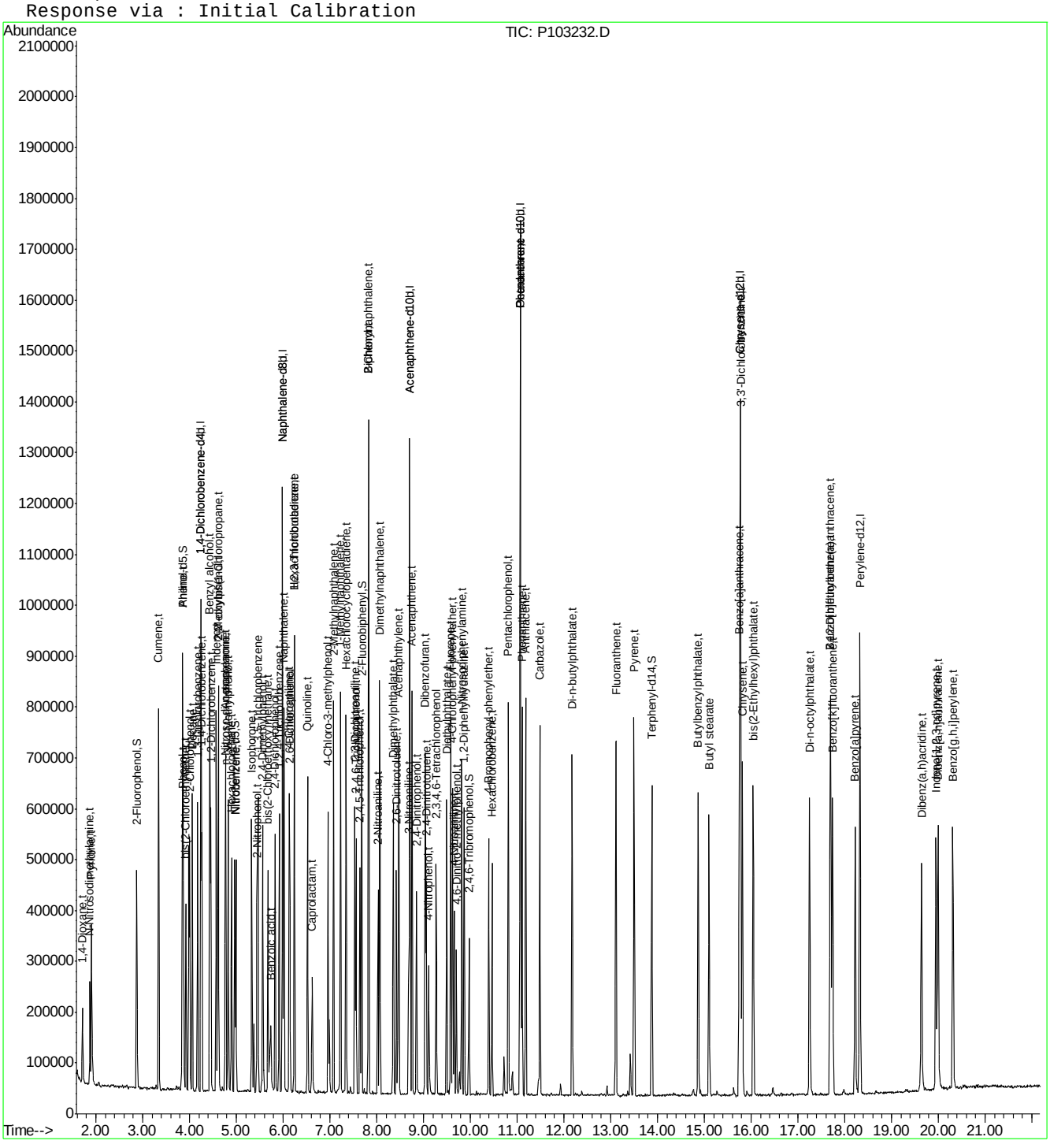
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103232.D Vial: 2
Acq On : 10 Mar 2016 9:02 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 9:27 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103233.D Vial: 3
Acq On : 10 Mar 2016 9:33 am Operator: linseyk
Sample : cc4514-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 09:55:14 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.24	152	149731	40.00	ppm	-0.02
24) Naphthalene-d8	5.99	136	538785	40.00	ppm	-0.02
47) Acenaphthene-d10	8.71	164	323248	40.00	ppm	-0.02
69) Phenanthrene-d10	11.07	188	495269	40.00	ppm	-0.02
83) Chrysene-d12	15.76	240	453032	40.00	ppm	-0.04
92) Perylene-d12	18.32	264	427159	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.24	152	149731	40.00	ppm	-0.02
104) Phenanthrene-d10b	11.07	188	495269	40.00	ppm	-0.02
106) Chrysene-d12b	15.76	240	453032	40.00	ppm	-0.04
108) Naphthalene-d8b	5.99	136	538785	40.00	ppm	-0.02
110) Acenaphthene-d10b	8.71	164	323248	40.00	ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00	ppm
Spiked Amount 50.000			Recovery = 0.00%		

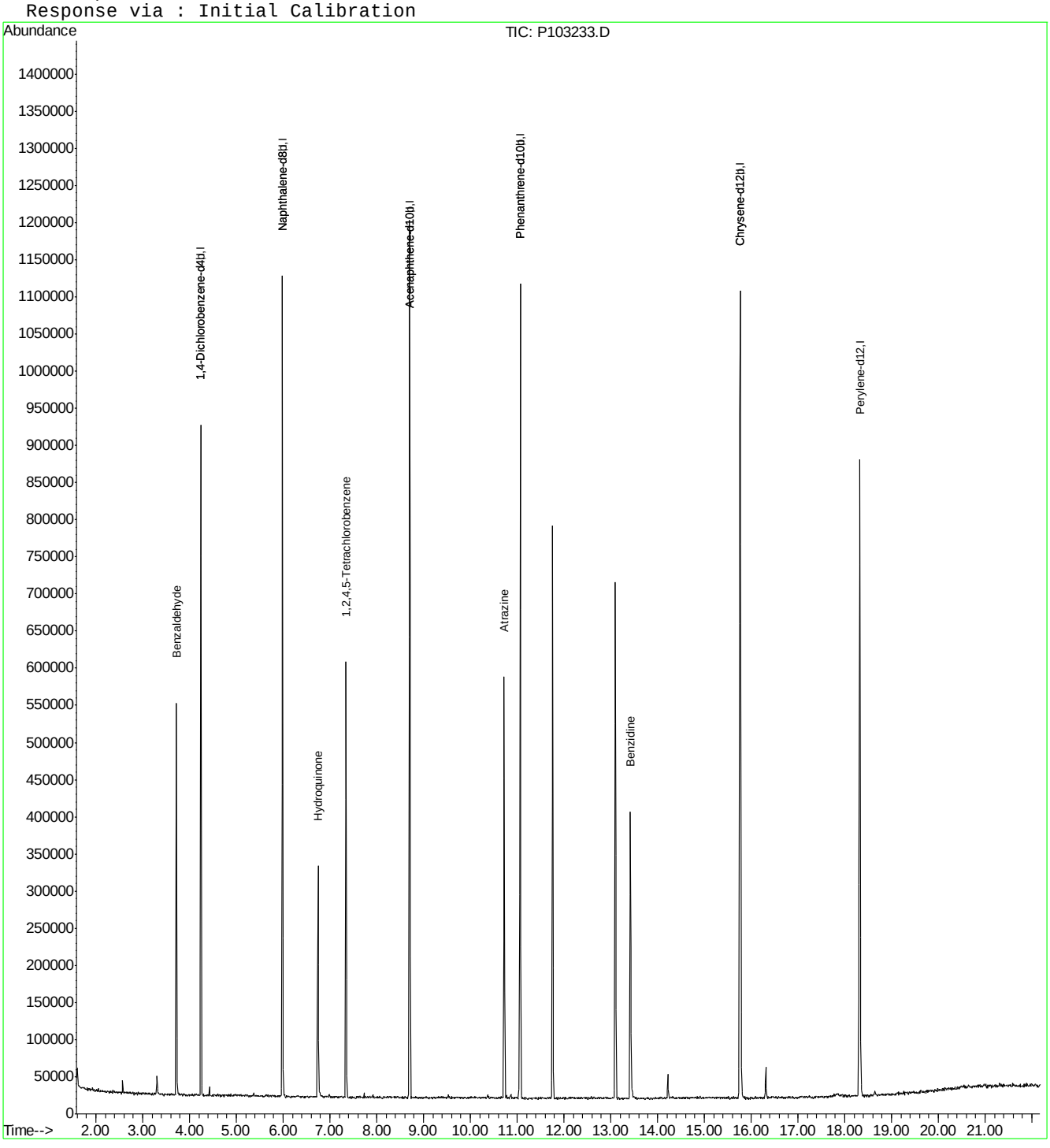
Target Compounds						Qvalue
103) Benzaldehyde	3.72	105	107083	23.79	ppm	98
105) Atrazine	10.73	200	70955	28.07	ppm	88
107) Benzidine	13.42	184	198585	24.90	ppm	99
109) Hydroquinone	6.75	110	148939	30.15	ppm	98
111) 1,2,4,5-Tetrachlorobenzene	7.34	216	105970	23.89	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P103233.D MP4524.M Thu Mar 10 11:19:51 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103233.D Vial: 3
Acq On : 10 Mar 2016 9:33 am Operator: linseyk
Sample : cc4514-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 9:56 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Mar 09 15:00:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/11/16 17:03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:31:34 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.24	152	119117	40.00	ppm	-0.05
24) Naphthalene-d8	5.99	136	417542	40.00	ppm	-0.05
47) Acenaphthene-d10	8.71	164	249204	40.00	ppm	-0.05
69) Phenanthrene-d10	11.07	188	384778	40.00	ppm	-0.05
83) Chrysene-d12	15.76	240	344018	40.00	ppm	-0.06
92) Perylene-d12	18.32	264	305981	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4A	4.24	152	119117	40.00	ppm	-0.05
112) Naphthalene-d8A	5.99	136	417542	40.00	ppm	-0.05
121) Acenaphthene-d10A	8.71	164	249204	40.00	ppm	-0.05
132) Phenanthrene-d10A	11.07	188	384778	40.00	ppm	-0.05
147) Chrysene-d12A	15.76	240	344018	40.00	ppm	-0.06
155) Perylene-d12A	18.32	264	305981	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.24	152	119117	40.00	ppm	-0.05
161) Phenanthrene-d10b	11.07	188	384778	40.00	ppm	-0.05
163) Chrysene-d12b	15.76	240	344018	40.00	ppm	-0.06
165) Naphthalene-d8b	5.99	136	417542	40.00	ppm	-0.05
167) Acenaphthene-d10b	8.71	164	249204	40.00	ppm	-0.05
169) Naphthalene-d8c	5.99	136	417542	40.00	ppm	-0.05
174) 1,4-Dichlorobenzene-d4a	4.24	152	119117	40.00	ppm	-0.05
176) Chrysene-d12c	15.76	240	344018	40.00	ppm	-0.06
178) Chrysene-d12d	15.76	240	344018	40.00	ppm	-0.06
180) Naphthalene-d8a	5.99	136	417542	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
103) 2-Picoline	2.38	93	131674	25.80	ppm		100
104) Pentachloroethane	3.90	167	43771	25.63	ppm		96
105) Methyl methanesulfonate	2.69	80	63702	25.27	ppm		93
106) N-Nitrosodiethylamine	3.05	102	54243	26.11	ppm		96
107) N-Nitrosomethylethylamine	2.44	42	48127	28.06	ppm		94
108) Ethyl methanesulfonate	3.35	79	90887	27.13	ppm		95
109) N-Nitrosopyrrolidine	4.73	41	35383	29.63	ppm		91
110) N-Nitrosomorpholine	4.78	56	55699	29.25	ppm		94
111) o-Toluidine	4.82	106	151295	24.83	ppm	#	1
113) O,O,O-Triethyl phosphoroth	5.64	198	42558	25.75	ppm		91
114) N-Nitrosopiperidine	5.20	42	61042	29.25	ppm		94
115) A,A-Dimethylphenethylamine	6.00	58	183624m	24.52	ppm		

(#) = qualifier out of range (m) = manual integration
P103234.D MP4524AP9.M Fri Mar 11 12:33:39 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:31:34 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
116) Hexachloropropene	6.16	213	57568	26.74	ppm		98
117) N-Nitrosodi-n-butylamine	6.67	84	74355	28.17	ppm		93
118) p-Phenylenediamine	6.66	108	49404m	25.47	ppm		
119) Safrole	6.97	162	73327	26.79	ppm		98
120) Isosafrole	7.79	162	22011	26.16	ppm		95
122) Thionazin	9.61	143	26407	26.65	ppm		99
123) Tetraethyl dithiopyrophosp	10.14	322	23384	27.98	ppm		100
124) Phorate	10.31	75	131033m	28.17	ppm		
125) Phenacetin	10.36	108	106648	26.93	ppm		98
126) 1,4-Naphthoquinone	8.11	158	41806	23.62	ppm		92
127) m-Dinitrobenzene	8.36	168	32135	27.82	ppm		98
128) Pentachlorobenzene	8.98	250	67631	24.86	ppm		98
129) 2-Naphthylamine	9.29	143	160680	22.93	ppm		96
130) 1-Naphthylamine	9.16	143	140142	23.80	ppm		99
131) 5-Nitro-o-toluidine	9.63	152	58871	27.37	ppm		95
133) Disulfoton	11.15	88	106383	29.14	ppm		99
134) Dinoseb	11.14	211	36632	23.66	ppm		91
135) Dimethoate	10.56	87	91077	31.00	ppm		97
136) 4-Aminobiphenyl	10.81	169	179488	24.93	ppm		98
137) Methyl parathion	11.76	125	59301	30.86	ppm		97
138) Parathion	12.44	109	45744	31.84	ppm		95
139) Diphenylamine	9.82	169	296601	28.09	ppm		99
140) Isodrin	12.85	193	32158	26.38	ppm		97
141) Diallate	10.30	86	73575	28.23	ppm		76
142) Pentachloronitrobenzene	10.81	295	17461	54.67	ppm		85
143) Pronamide	10.98	173	82410	29.02	ppm		97
144) 4-Nitroquinoline 1-oxide	12.42	190	89186	78.89	ppm		94
145) Methapyriline	12.62	58	98687m	35.76	ppm		
146) sym-Trinitrobenzene	10.29	213	14653	24.85	ppm	#	37
148) Aramite	14.07	185	15400	49.54	ppm		97
149) p-(Dimethylamine)azobenzen	14.15	120	97148	27.96	ppm		99
150) Kepone	14.76	272	45723m	85.97	ppm		
151) Famphur	14.73	218	471849	171.62	ppm		99
152) 2-Acetylaminofluorene	15.24	181	120051	28.56	ppm		97
153) 3,3'-Dimethylbenzidine	14.79	212	65788	20.45	ppm		100
154) Chlorobenzilate	14.27	251	76339	29.43	ppm		99
156) 4,4-Methylene-bis-(2-chlor	15.80	266	26697	28.03	ppm		97
158) 3-Methylcholanthrene	18.82	252	50032	29.94	ppm		88

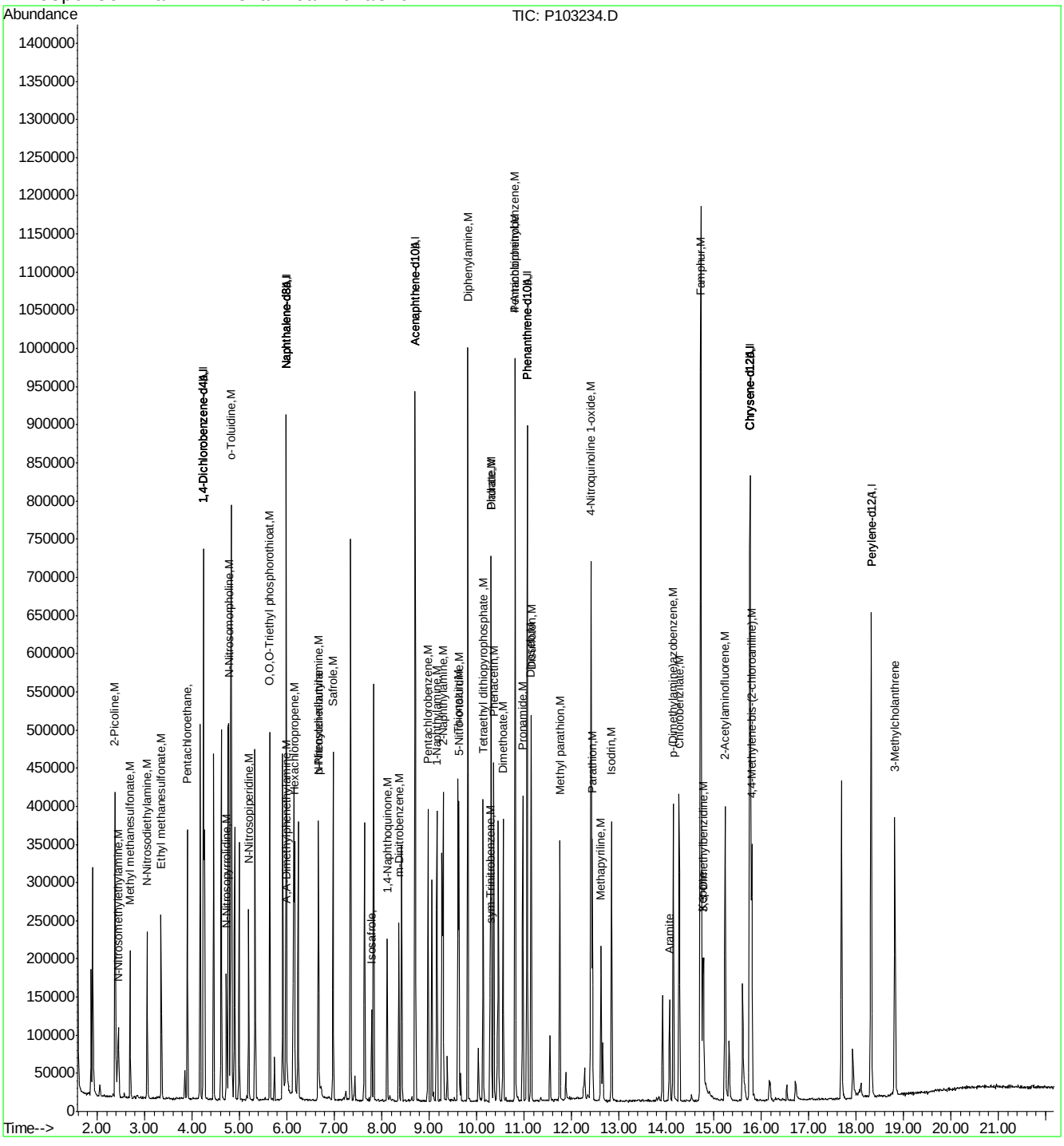
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:33 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

Manual Integration Approval Summary

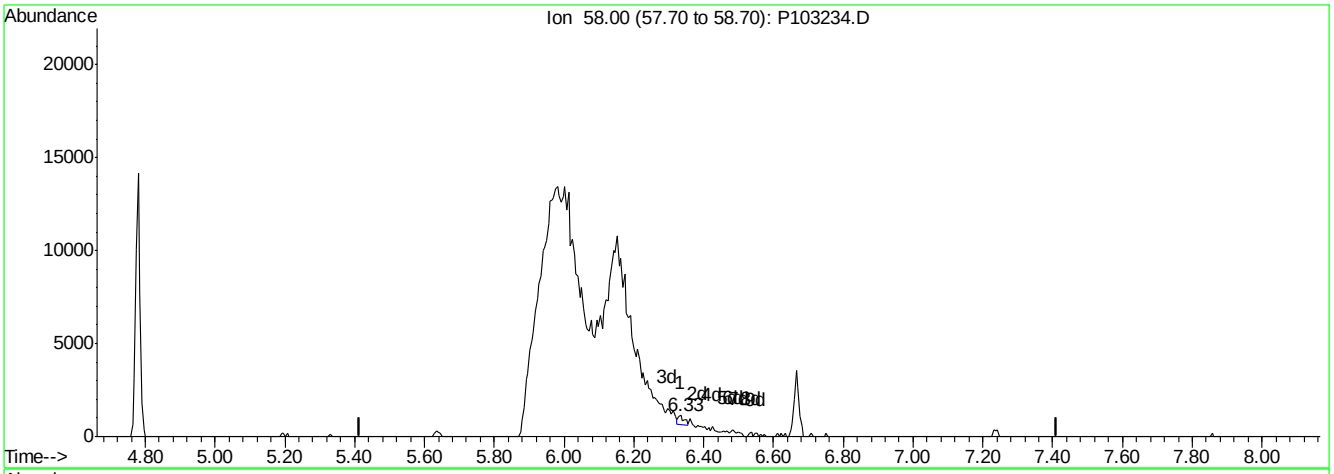
Sample Number:	EP4534-CC4515	**Method:**	SW846 8270D
Lab FileID:	P103234.D	**Analyst approved:**	03/11/16 14:42 Linsey Kirschmann
Injection Time:	03/10/16 10:02	**Supervisor approved:**	03/11/16 17:03 Nina Pandya

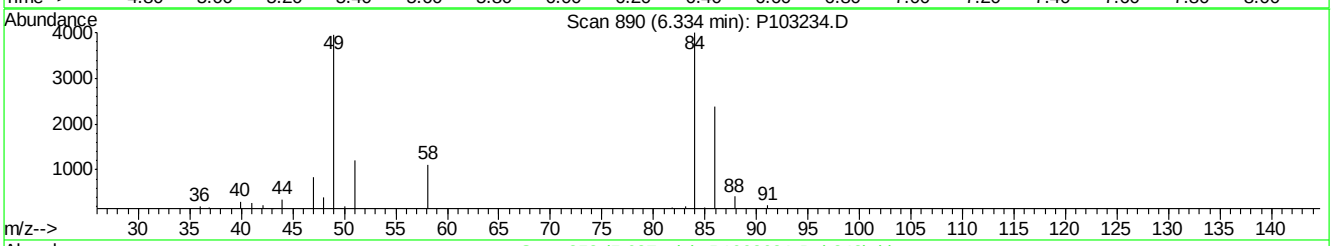
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.00	Poor instrument integration
p-Phenylenediamine	106-50-3		6.66	Poor instrument integration
Phorate	298-02-2		10.31	Poor instrument integration
Methapyrilene	91-80-5		12.62	Split peak
Kepone	143-50-0		14.76	Poor instrument integration

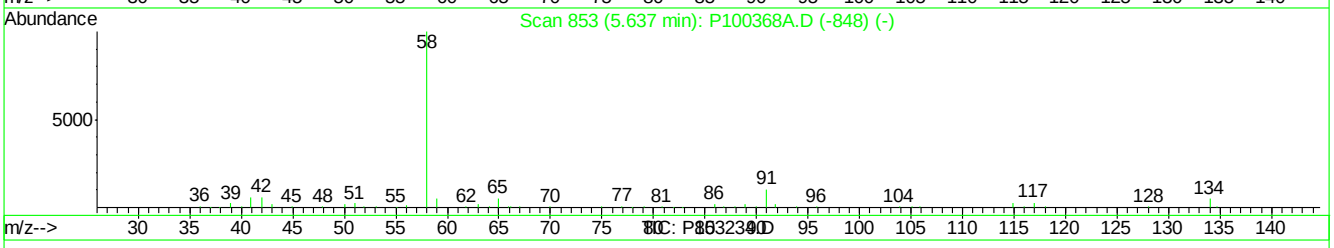
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.33min 0.07ppm

response 546

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

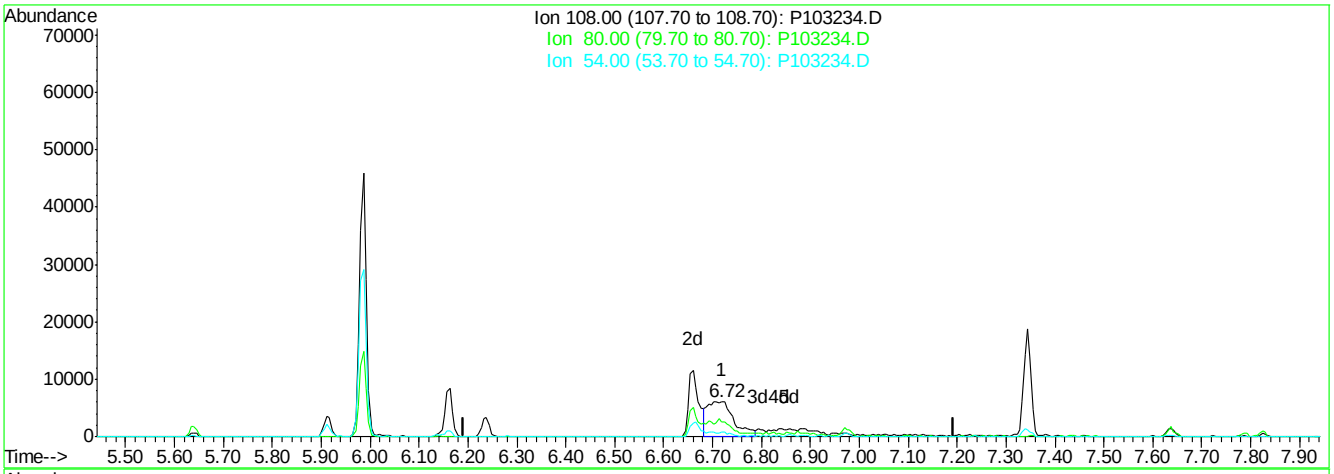
P103234.D MP4524AP9.M Thu Mar 10 10:28:32 2016

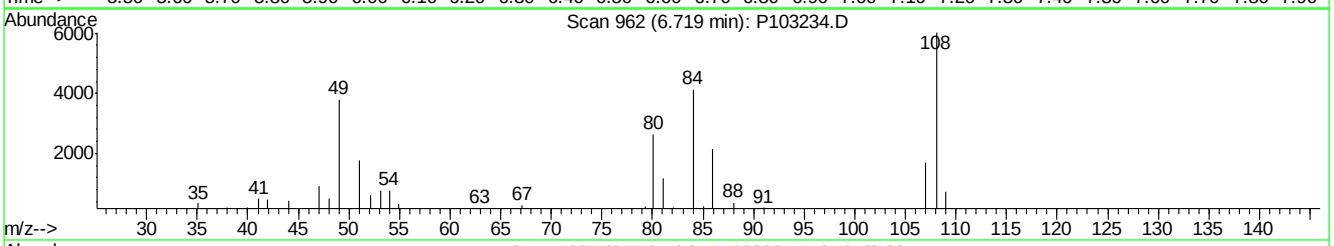
SGS ACCUTEST JC15518

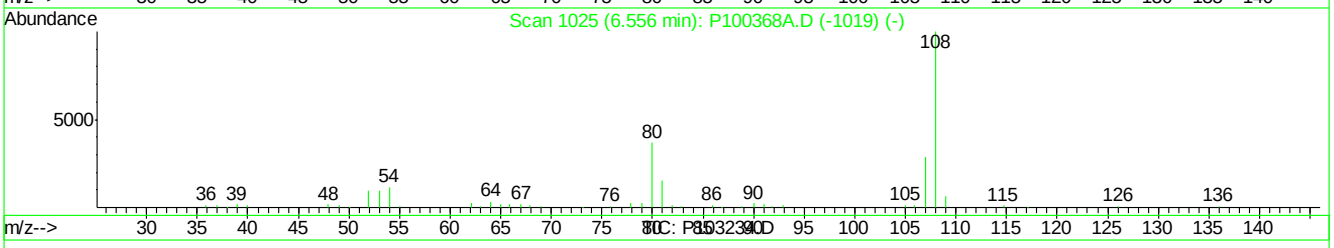
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.72min 12.82ppm

response 22646

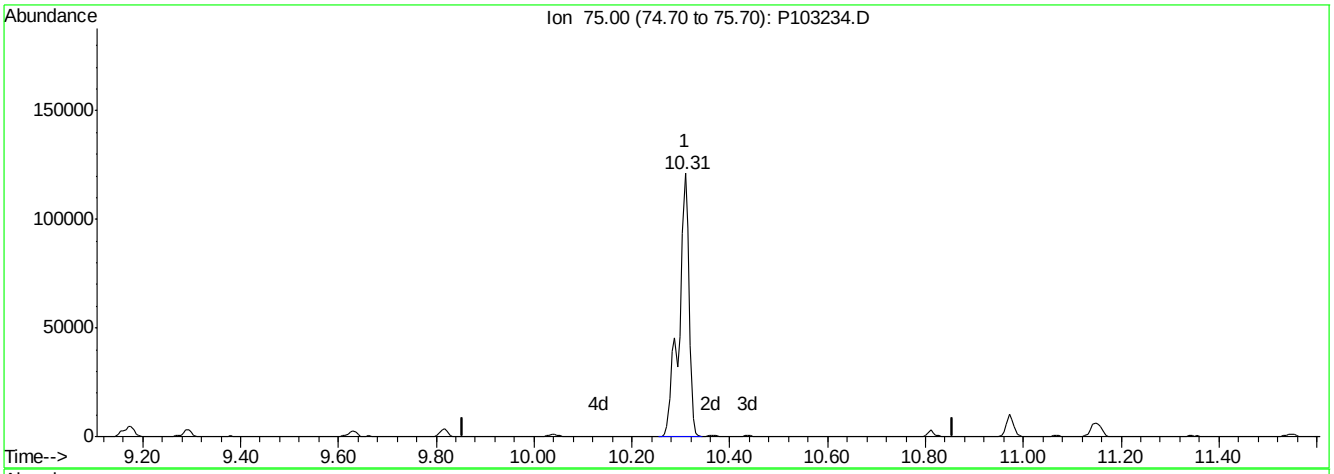
Ion	Exp%	Act%
108.00	100	100
80.00	46.20	40.35
54.00	10.90	9.90
0.00	0.00	0.00

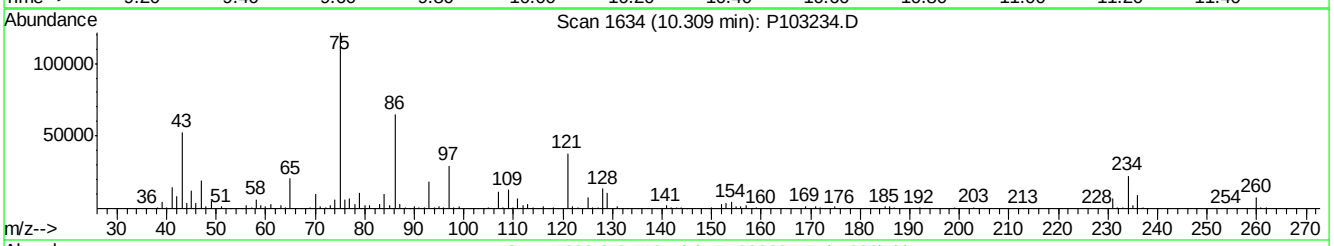
P103234.D MP4524AP9.M Thu Mar 10 10:28:38 2016

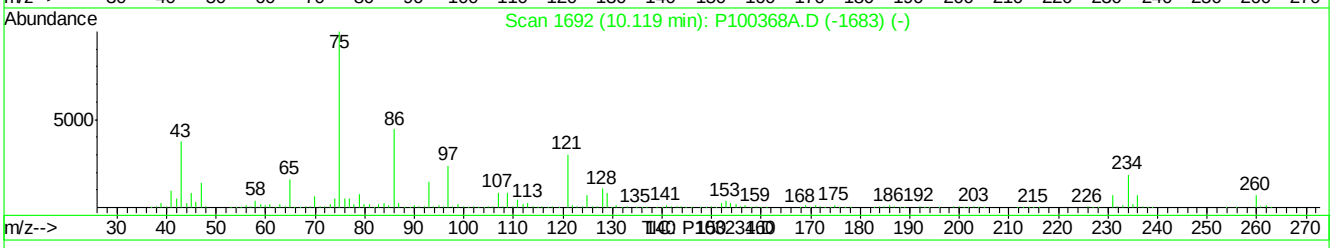
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Multiple Level Calibration







(124) Phorate (M)

10.31min 37.77ppm

response 175658

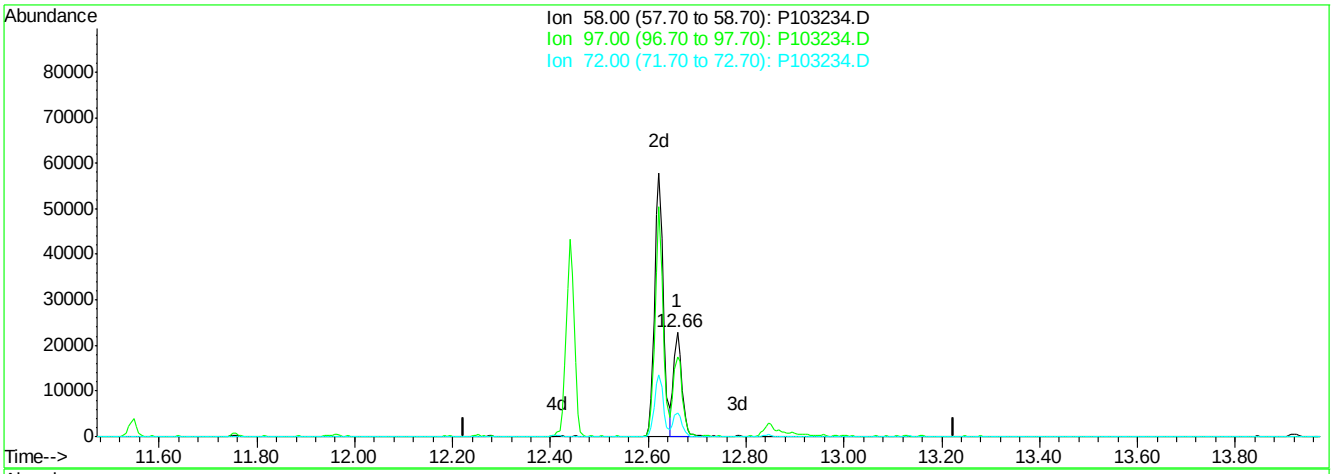
Ion	Exp%	Act%
75.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

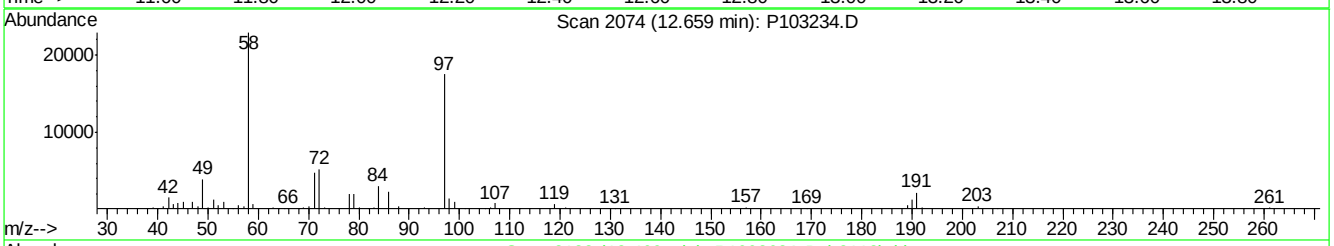
P103234.D MP4524AP9.M Thu Mar 10 10:28:47 2016

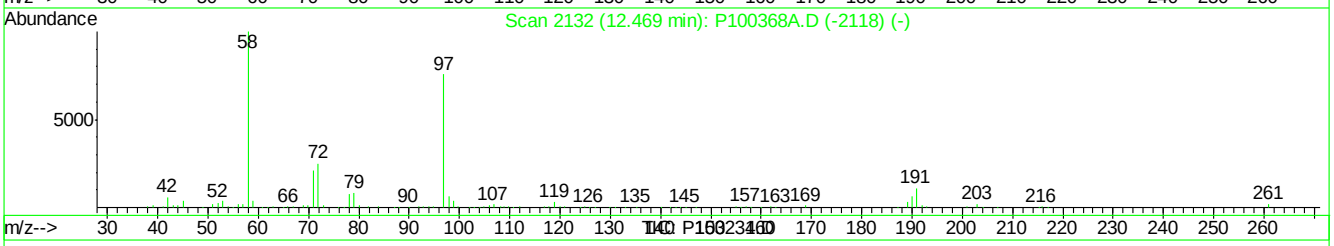
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Multiple Level Calibration







(145) Methapyriline (M)

12.66min 9.92ppm

response 27380

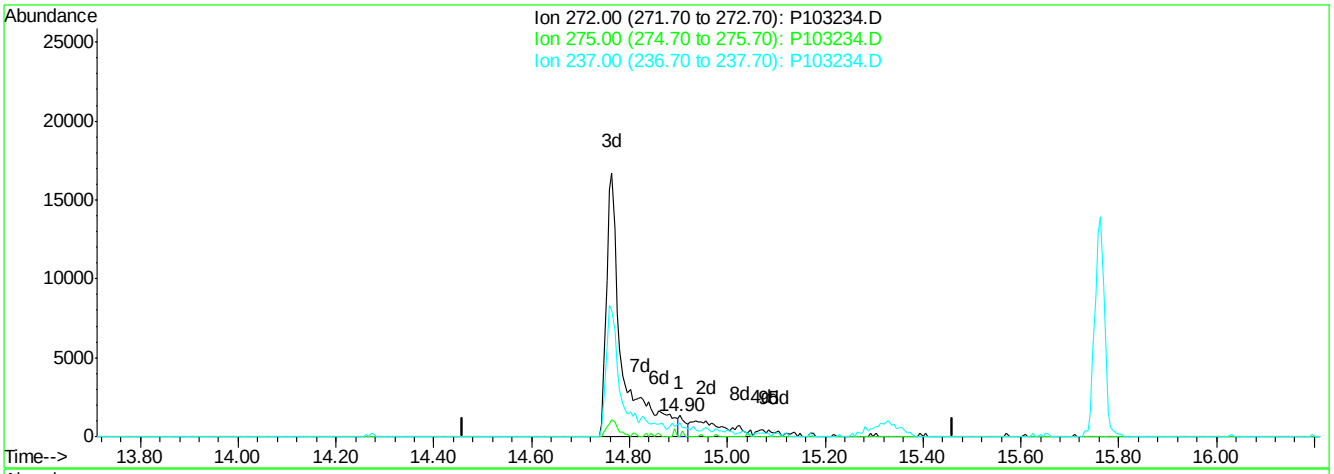
Ion	Exp%	Act%
58.00	100	100
97.00	88.20	77.13
72.00	24.40	22.65
0.00	0.00	0.00

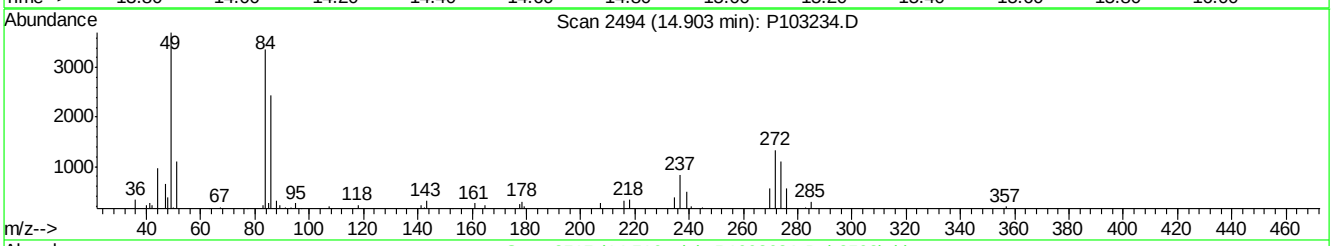
P103234.D MP4524AP9.M Thu Mar 10 10:29:04 2016

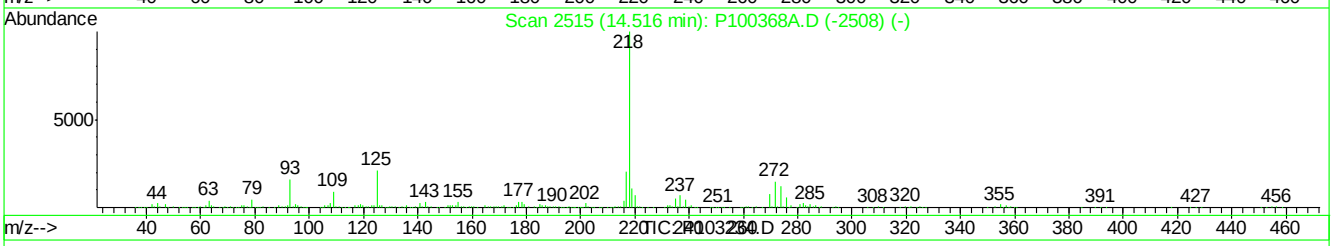
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 10:29 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Multiple Level Calibration







(150) Kepone

14.90min -1.00ppm

response 1295

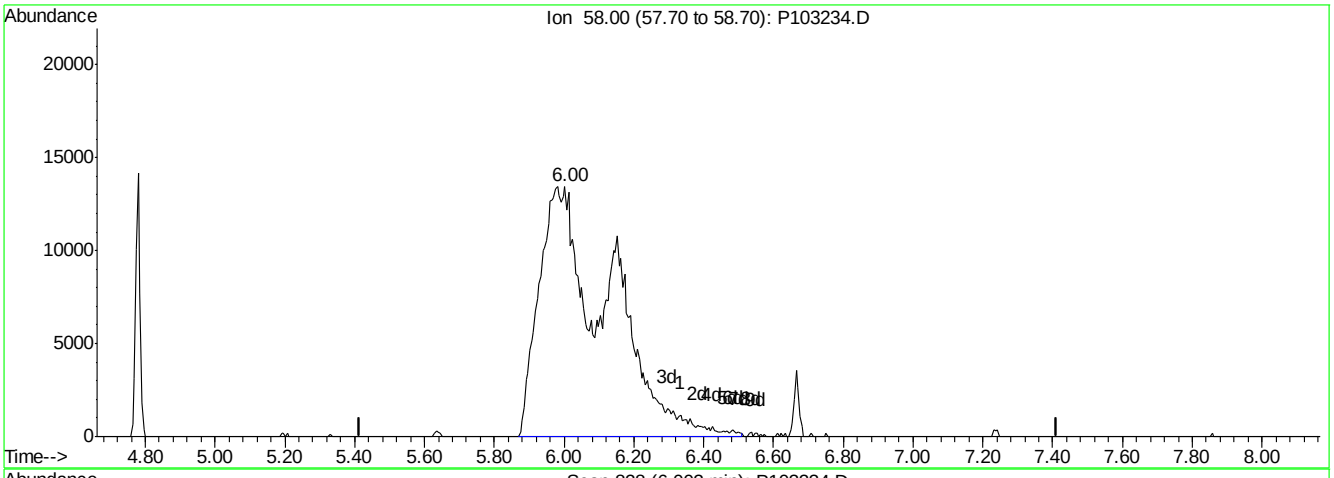
Ion	Exp%	Act%
272.00	100	100
275.00	6.40	0.00
237.00	51.80	53.02
0.00	0.00	0.00

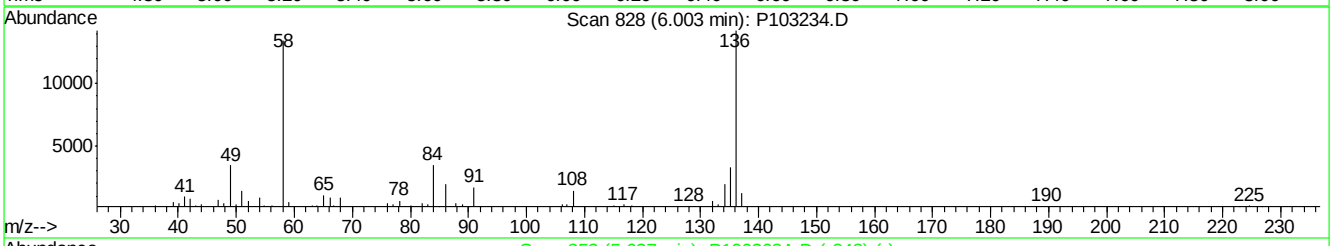
P103234.D MP4524AP9.M Thu Mar 10 10:29:14 2016

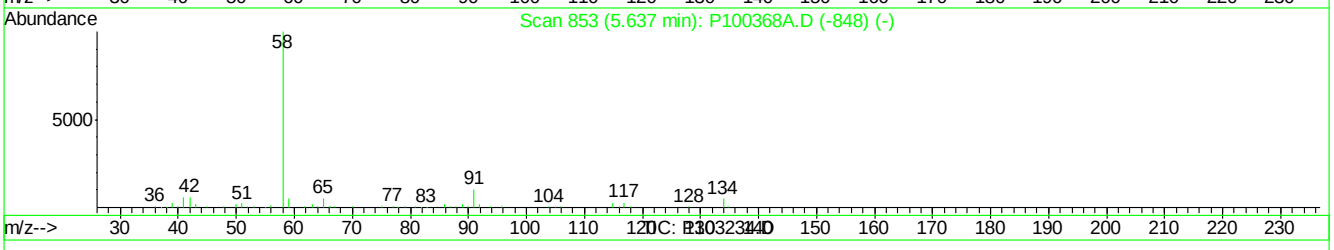
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration







(115) A,A-Dimethylphenethylamine (M)

6.00min 24.52ppm m

response 183624

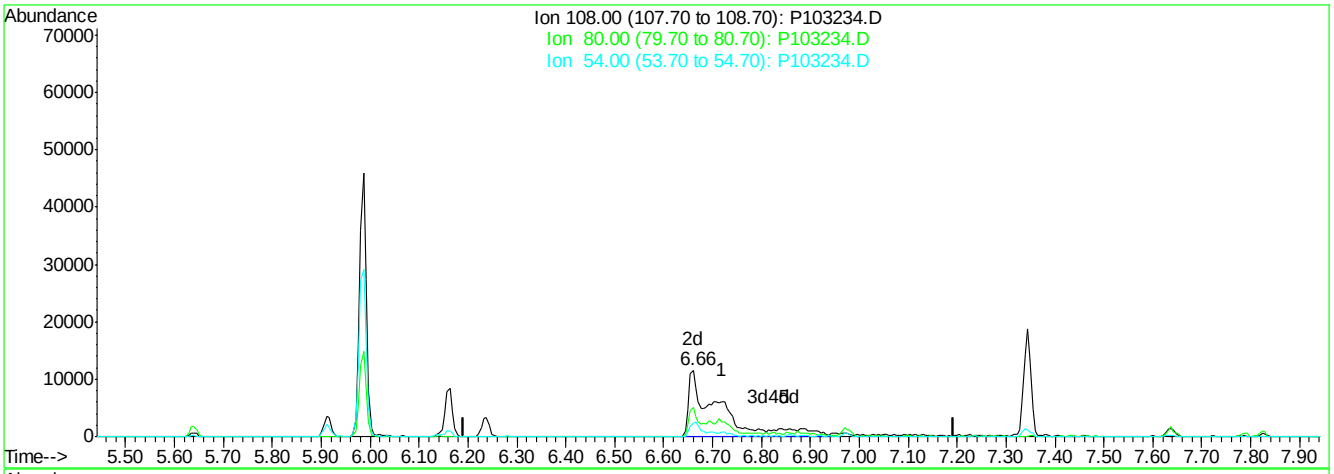
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

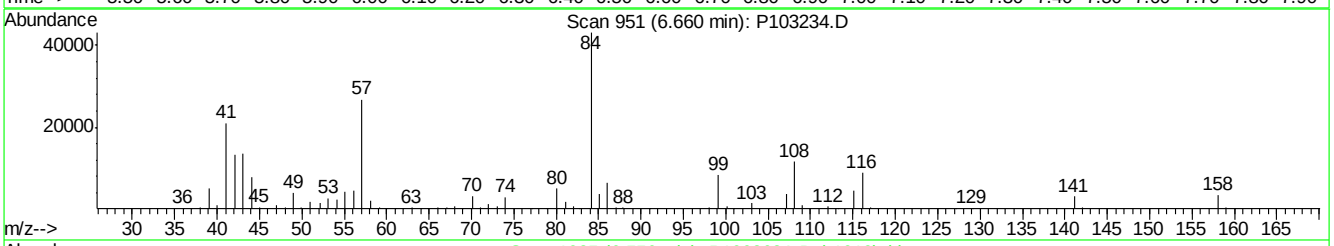
P103234.D MP4524AP9.M Fri Mar 11 12:32:25 2016

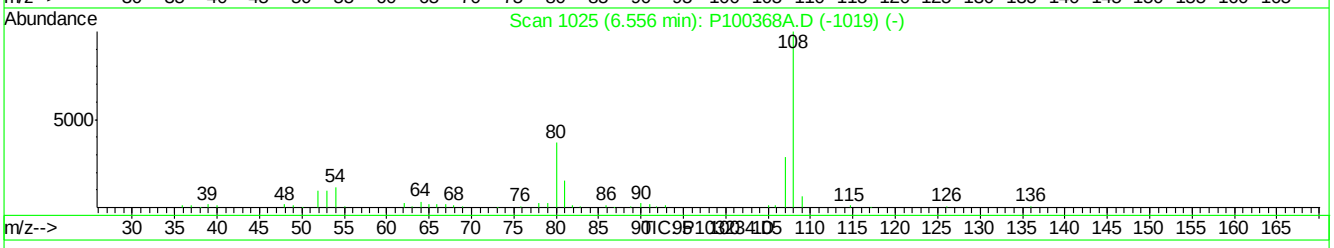
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration







(118) p-Phenylenediamine

6.66min 25.47ppm m

response 49404

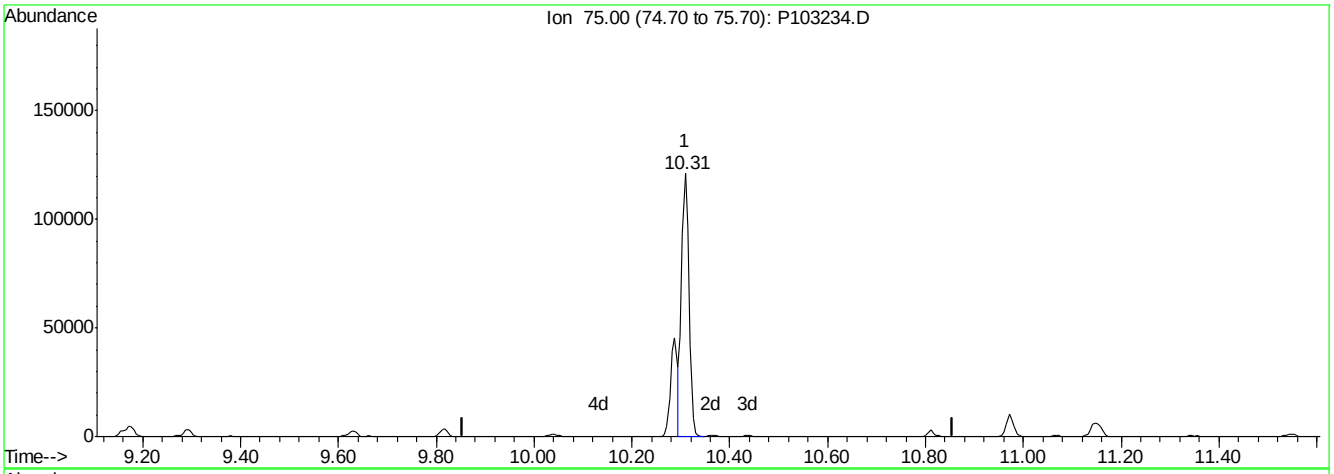
Ion	Exp%	Act%
108.00	100	100
80.00	46.20	43.25
54.00	10.90	19.79#
0.00	0.00	0.00

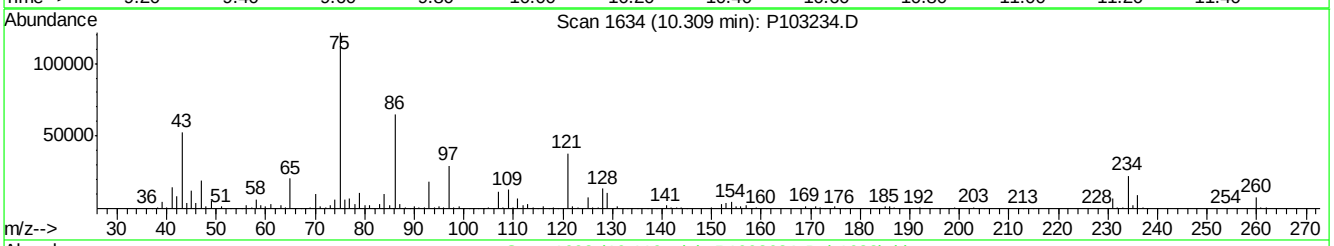
P103234.D MP4524AP9.M Fri Mar 11 12:32:32 2016

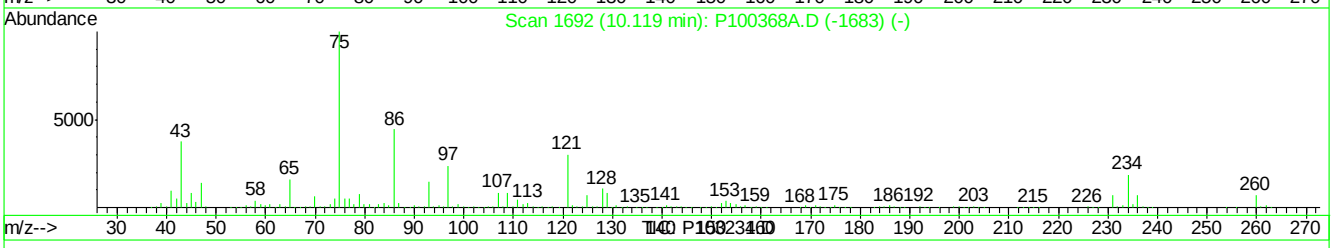
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration







(124) Phorate (M)

10.31min 28.17ppm m

response 131033

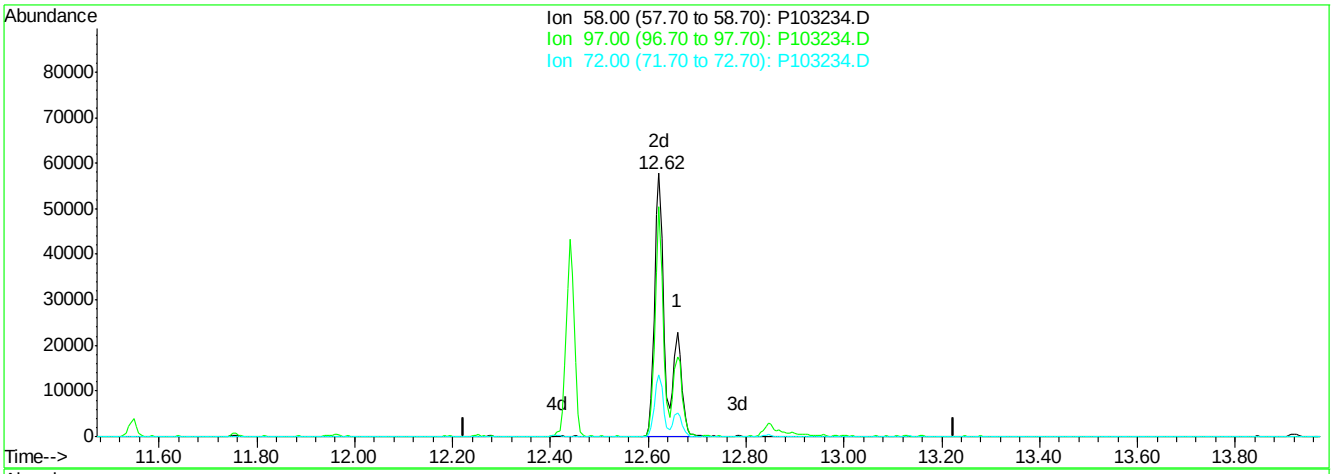
Ion	Exp%	Act%
75.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

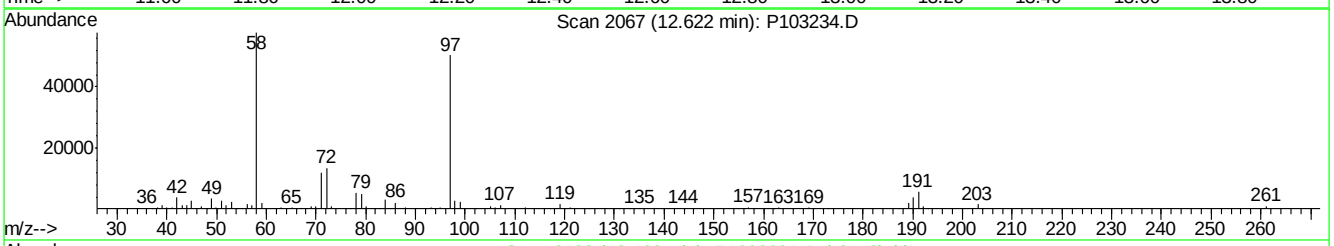
P103234.D MP4524AP9.M Fri Mar 11 12:32:45 2016

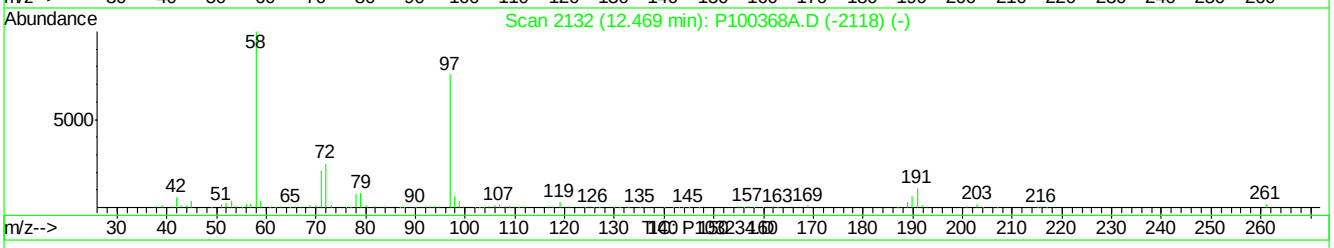
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration







(145) Methapyriline (M)

12.62min 35.76ppm m

response 98687

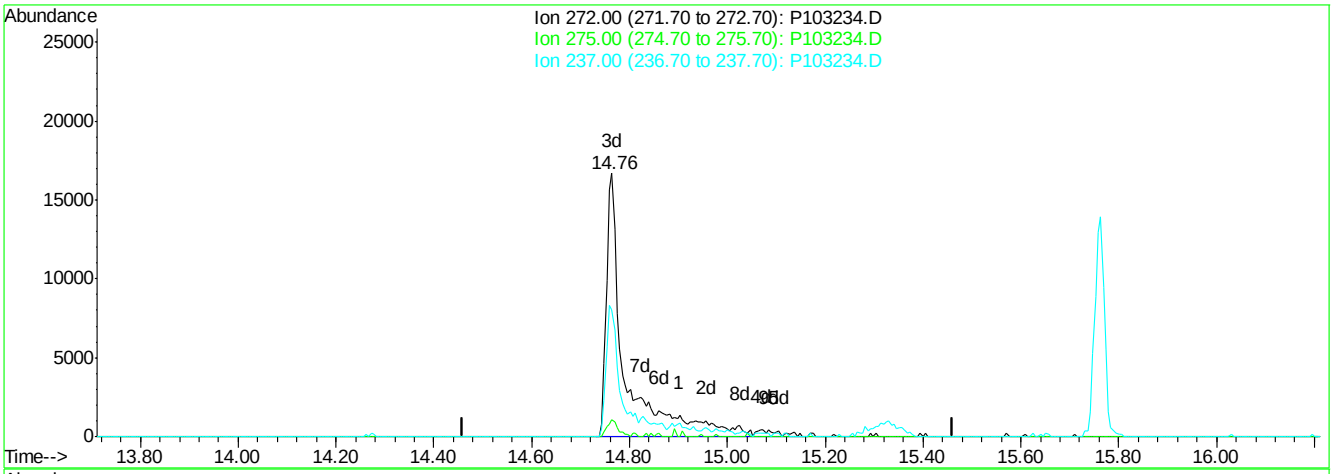
Ion	Exp%	Act%
58.00	100	100
97.00	88.20	87.15
72.00	24.40	23.24
0.00	0.00	0.00

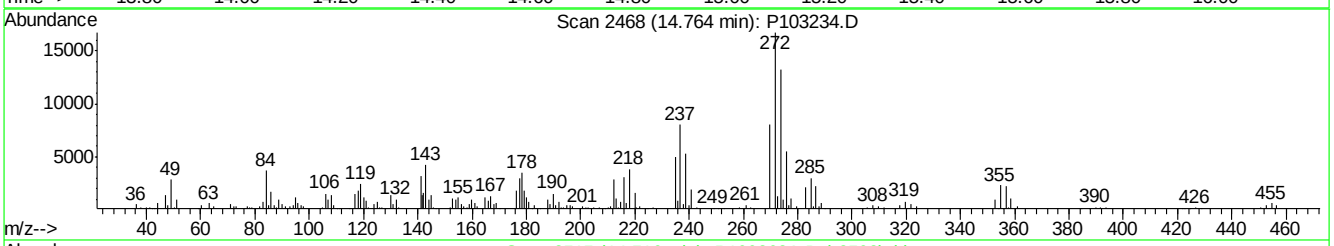
P103234.D MP4524AP9.M Fri Mar 11 12:32:57 2016

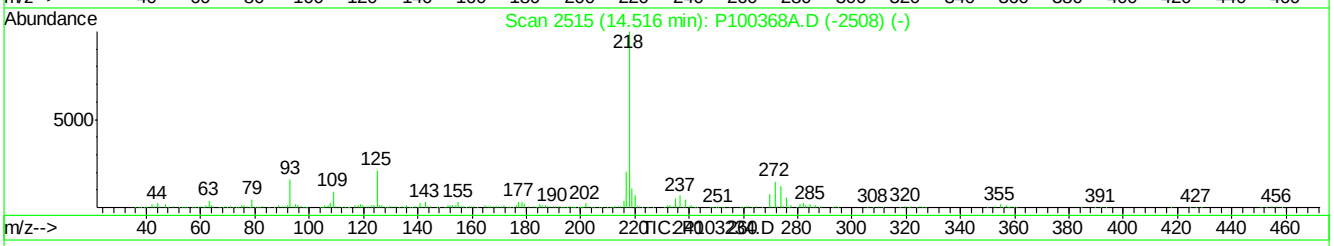
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103234.D Vial: 4
Acq On : 10 Mar 2016 10:02 am Operator: linseyk
Sample : cc4515-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:33 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Multiple Level Calibration







(150) Kepone

14.76min 85.97ppm m

response 45723

Ion	Exp%	Act%
272.00	100	100
275.00	6.40	6.20
237.00	51.80	48.09
0.00	0.00	0.00

P103234.D MP4524AP9.M Fri Mar 11 12:33:07 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103235.D Vial: 5
Acq On : 10 Mar 2016 10:36 am Operator: linseyk
Sample : cc4516-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 10 11:00:04 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Mar 07 10:00:15 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.24	152	134980	40.00 ppm	-0.05
24) Naphthalene-d8	5.99	136	485475	40.00 ppm	-0.05
47) Acenaphthene-d10	8.71	164	288624	40.00 ppm	-0.05
69) Phenanthrene-d10	11.07	188	453472	40.00 ppm	-0.05
83) Chrysene-d12	15.76	240	414614	40.00 ppm	-0.06
92) Perylene-d12	18.32	264	377668	40.00 ppm	-0.06
102) 1,4-Dichlorobenzene-d4A	4.24	152	134980	40.00 ppm	-0.05
112) Naphthalene-d8A	5.99	136	485475	40.00 ppm	-0.05
121) Acenaphthene-d10A	8.71	164	288624	40.00 ppm	-0.05
132) Phenanthrene-d10A	11.07	188	453472	40.00 ppm	-0.05
147) Chrysene-d12A	15.76	240	414614	40.00 ppm	-0.06
155) Perylene-d12A	18.32	264	377668	40.00 ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.24	152	134980	40.00 ppm	-0.05
161) Phenanthrene-d10b	11.07	188	453472	40.00 ppm	-0.05
163) Chrysene-d12b	15.76	240	414614	40.00 ppm	-0.06
165) Naphthalene-d8b	5.99	136	485475	40.00 ppm	-0.05
167) Acenaphthene-d10b	8.71	164	288624	40.00 ppm	-0.05
169) Naphthalene-d8c	5.99	136	485475	40.00 ppm	-0.05
174) 1,4-Dichlorobenzene-d4a	4.24	152	134980	40.00 ppm	-0.05
176) Chrysene-d12c	15.76	240	414614	40.00 ppm	-0.06
178) Chrysene-d12d	15.76	240	414614	40.00 ppm	-0.06
180) Naphthalene-d8a	5.99	136	485475	40.00 ppm	-0.05

System Monitoring Compounds					
5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
170) Catechol	6.07	110	107583	25.10 ppm	61
171) 2-Chloroaniline	5.39	127	156361	25.46 ppm	97
172) 3-Chloroaniline	6.10	127	145209	25.80 ppm	99
173) 1-chloro-2-nitrobenzene	6.53	75	75240	34.30 ppm	89
175) m-Toluidine	4.88	106	227222	30.17 ppm	98

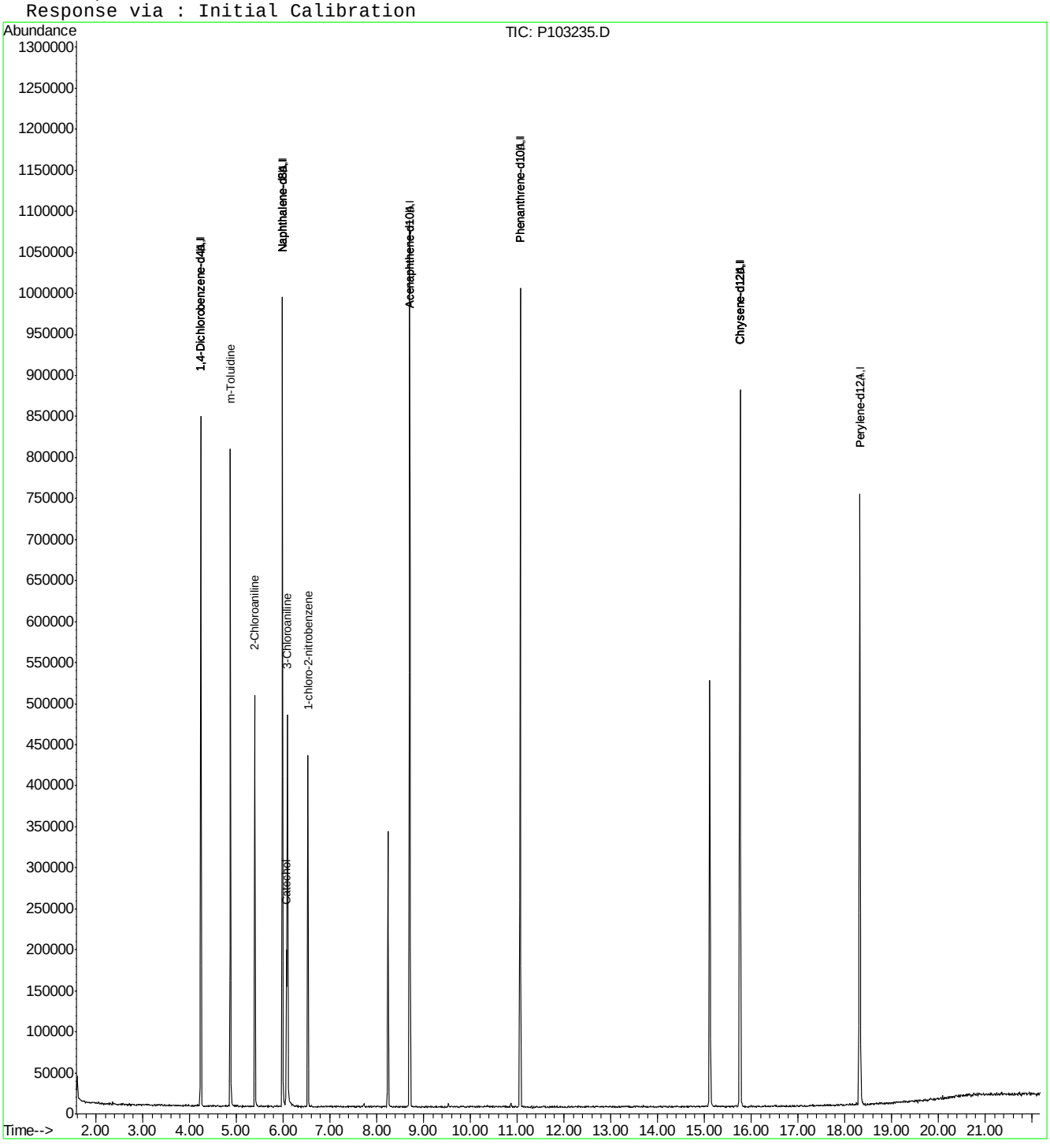
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4534\P103235.D Vial: 5
Acq On : 10 Mar 2016 10:36 am Operator: linseyk
Sample : cc4516-25 Inst : MSP
Misc : op91884,ep4534 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 11 12:35 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 11 12:31:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC15518

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2788

Date: 2/3/16.

Analyst Signature: AMO.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU526921	DFTPP	50 ppm
SU5182987	SM7 internal	400 ppm
158433	DCM (Fisher)	

Columns: Rtx5silms30m.25 mm×25µm

Method 8270D 1605

Initial Cal. Method M3M2788 SIM AMO 2/3/16

Injection Volume: µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 2/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M59637	DFTPP				1					OK	1213pm
	59638	ICV2788-1		BNA SIM	W	2					OK	SU5182913A
	59639	ICV2788-.5				3					OK	B
	59640	-.2				4					OK	SU5176492 E
	59641	-.1				5					OK	F
	59642	-.05				6					OK	G
	59643	-.02				7					OK	H
	59644	-.01				8					OK	I
	59645	-5				9					OK	A
	59646	-2.5				10					OK	B
	59647	ICV2788-1.0				11					OK	OP15162430
	59648	-1.0				12					OK	SU5182985
	59649	-1.0				13					RR	made at wrong concentration
												AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2789

Date: 2/4/16.

Analyst Signature: AWO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SH517869/21	DFTPP	50 ppm
SH5182996	Acid	5 ppm
SH5182984	Similtemal	400 ppm
158433	O Cal (Fisher)	—

Columns: Rtx5/Im30m0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method M3M2788sim

Injection Volume: µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/5/16

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
3M59650	DFTPP				1					not using	410 ppm
59651	CR ICV 2788-1.0 AWO 2/4/16		BLAsim	W	2					[illegible]	acid slow reinstall
59652	DFTPP				1					OK	6.23 ppm
59653	ICV2788-1.0				2					OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

Strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Date: 1/16/2006

9.7.2 9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3m2811

Date: 3/10/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS1826-08	DFTPP	50ppm
SMS1827-42	SimStd	0.5ppm
-53	SimInternal	400ppm
Vas900	DCM-Cfisher	—

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3m2788sim

Injection Volume: 1ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 3/11/16

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
3m59944	DFTPP			W	1					OK	9:03AM
59945	CC2788-05		B10sim	W	2					OK	18V
59946	OP91930-mb	91930-1	B5270	W	3			/	/	OK	
59947	-bs12				4			/	/	OK	
59948	OP91884-mb	91884-1	B5270	W	5			/	/	OK	
59949	-bs12				6			/	/	OK	
59950	JC15578-3		~~B5MMS~~ 1,4dioxane		7			/	/	OK	
59951	JC15711-1	91930-1	~~B5MMS~~ 1,4dioxane	W	8			/	/	OK	8270!
59952	JC15518-1	91884-1	1,4dioxane	W	9			/	/	OK	
59953	-2				10			/	/	OK	
59954	-3				11			/	/	OK	
59955	-4				12			/	/	OK	
59956	-5				13			/	/	OK	
59957	-6				14			/	/	OK	
59958	-7				15			/	/	OK	
59959	-8				16			/	/	OK	
59960	JC15458-13		1,4dioxane		17			/	/	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

37

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

9.7.3

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2811

Date: 3/10/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see pg 37	

Columns: RXI-5SIL MS 30m x .25mm x .25um

Method 8270D/1625

Initial Cal. Method M3M2788sim

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: AMR

Date: 3/11/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3M59961	JC15458-14	91884-1	1,4dioxane	W	18			/	/	OK	
	59962	JC15471-2		1,4dioxane		19			/	/	OK	
	59963	-3				20			/	/	OK	
	59964	JC15458-15		1,4dioxane		21			/	/	OK	
	59965	OPG91884-MS		B8270		22			/	/	OK	
	59966	-MSD				23			/	/	OK	
	59967	OPG1930-MS	91930-1	B8270		24			/	/	OK	8:41pm
	59968	-MSD				25					N	Out of Clock 9:12pm

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

mple volume/weight used and final volumes refer to extraction log.

39

l strikeouts must be initialed, dated and reason code applied as follows:
: reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

m: OR015-05
. Date: 1/16/2006

9.7.3

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

SD ② 2/24/16

Batch ID: EP4514

Date: 2/~~23~~ 24/ 2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151828-102	TCL42	100 ppm
-103	↓	80 ↓
-105		10
-106		5
-107		2
-108	↓	1 ↓

Standard Data

Lot #	Description	Conc.
SV151828-108	DFTPP	50 ppm
SV151829-107A	TCL42	50 ppm
-107B	↓	25 ppm
CM-5732	SD ② ~~CM-5732~~ I Std	4000 ppm
160168	2/24/16 ~~Internal S~~ Dcm (Fluor)	—

Columns: Rxi-5sil ms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MP4513

Injection Volume: 1 ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/29/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P102786	DFTPP			W	1					OK	1:55 am
	102787	TC4514-100		TCL42	W	10					OK	
	102788	-80				11					OK	
	102789	-10				12					OK	
	102790	-5				13					OK	
	102791	-2				14					OK	
	102792	-1				15					OK	
	102793	-25				16					OK	
	102794	TCC4514-50				17					OK	
	102795	TCV4513-50		Acids		18					~~NK~~ OK 2/24/16	SV151829-128 ~~Lot~~ NK 2/24/16
	102796	-50		Aniline		19					OK	-129
	102797	-50		ABN SUR		20					OK	OP15162442
	102798	-50		BN1		21					OK	SV151827-26
	102799	-50		BN2		22					OK	SV151829-116
	102800	TCV4514-50		HQ		23					OK	-64D
	102801	-50		Benzidine 3rd		24					OK	-88C 8:58 am

MTX = Matrix. Designate W for water, S for soil, O for oil. ~~L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.~~

Sample volume/weight used and final volumes refer to extraction log.

123

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4515

Date: 2/24/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151829-100	DFTPP	50ppm
CM5732	Internal Std	400ppm
160168	DCM (Fisher)	—

Columns: RXI-5Silms 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method MP4513

Injection Volume: 2uL

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: 2-25-16

TR	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P102802	DFTPP			W	1					ok	10:01AM
	102803	IC4515-100		APP	W	2					ok	SV151829-118A
	102804	-80				3					ok	-118B
	102805	IC4515-50				4					ok	-118C
	102806	IC4515-25				5					ok	-118D
	102807	-10				6					ok	-118E
	102808	-5				7					ok	-118F
	102809	-2				8					ok	-118H
	102810	-1				9					ok	-118I
	102811	IC4515-50		APP 2nd		10					ok	OP151564-54
	102812	IC4515-50		APP 3rd		11					ok	SV151829-122A
	102813	IC4515-50		APP megamix		12					ok	SV151829-68
	102814	IC4515-50		Diphenylamine		13					ok	SV151769-35
	102815	IC4515-50		0-to1		14					not needed	OP151564-48

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

125

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

9.7.5

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4516

Date: 2/25/16.

Analyst Signature: AMO.

Columns: 12ui Si/Ms 30m x 0.25mm x 25µm

Method 8270D/625

Initial Cal. Method MP4513

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM518298105	DFTPP	50ppm
CM5732	Internal Std.	4000ppm
160168	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: AL

Date: 2/26/16

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
P102816	DFTPP				1					dl	1008am.
102817	IC4516-100		AP982	W	2					dl	SM518298A
102818	-80				3					dl	↓ B
102819	IC4516-50				4					dl	SM5769120A
102820	IC4516-25				5					dl	↓ B
102821	-10				6					dl	SM518298C
102822	-5				7					dl	↓ D
102823	-2				8					dl	↓ E
102824	ICV4516-50		2,3 Cl aniline	W	9					dl	AMO 2/25/16 SI OP15156439
102825	-50		1-Cl 2 nitro	W	10					dl	OP15156463
102826	-50		catechol	W	11					dl	OP1516248

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Rev. Date: 1/16/2006

9.7.6

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ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4524

Date: 3/2/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.
SV151824-134A	BNA	100
-134B		80
-134E		10
-134F		5
-134G		2
-134H		1

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-30A	BNA	50 ppm
-30B	↓	25 ppm
CM-5732	Internal Std	4000 ppm
160906	DCM (Fisher)	—

Columns: Rxi-5ilms 30mX.25mmX.25um

Method 8270D/625

Initial Cal. Method MP4513 24 JK3216

Injection Volume: 1uL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 3/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P102997	DFTPP			W	1					NG	127↑ reinject
	102998	DFTPP			W	1					↓	127↑ reinjec
	102999	DFTPP			W	1					NG	127↑ retune
	103000	DFTPP			W	1					↓	127↑ reinject JK3216
	103001	DFTPP			W	1					↓	127↑ retune
	103002	DFTPP			W	1					NG	127↑ retune
	103003	DFTPP			W	1					NG	12:38pm
	103004	CC451350		BNA	W	2					↓	RT↑ reinjec
	103005	DFTPP			W	1					NG	127↑ reinject
	103006	DFTPP			W	1					↓	127↑ reinjec
	103007	DFTPP			W	1					NG	127↑, retune
	103008	DFTPP			W	1					↓	127↑, retune
	103009	DFTPP			W	1					↓	127↑, retune
	103010	DFTPP			W	1					OK	
	103011	IC4524-100		BNA		2					OK	
	103012	-80				3					OK	
	103013	-10				4					OK	

TX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

151

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

orm: OR015-05
ev. Date: 1/16/2006

9.7.7

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4524

Date: 3/2/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 151	

Columns: Rxi-5silms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MP4524

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 3/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P103014	ICC4524-5		BNA	W	5					OK	
	103015	-2				6					OK	
	103016	-1				7					OK	
	103017	ICC4524-~~25~~ 50	SD ② 3/2/16			8					OK	
	103018	ICC4524-25 ~~ICC4524-50~~				9					OK	
	103019	ICV4524-50		Acids		10					OK	SV151829-128
	103020	-50		Aniline		11					OK	-114
	103021	-50		ABN surr		12					OK	OP1516244 2
	103022	-50		BN1		13					OK	SV151827-26
	103023	-50		BN2		14					OK	-2
	103024	-50		Benzidine 3rd		15					OK	-38F

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

153

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
ev. Date: 1/16/2006

9.7.7

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4533

Date: 3/9/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151824-108	DFTPP	50ppm
-131	BNA	50ppm
SV151824-25	TCL42	50ppm
CM5232	Internal Std.	40ppm
160206	DCM (Fisher)	—

Columns: Rxi-5Sil MS 30m X .25mm X .25um

Method 8270 D / 625

Initial Cal. Method MP4524

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: 3/11/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P103206	DFTPP			W	1					NG	Aborted ↓ reinstall
	103207	DFTPP			W	1					OK	4:05pm
	103208	CC4524-50		BNA	W	2					OK	
	103209	CC4514-50		TCL42	W	3					OK	Benzidine, 1245 TCB ↓
	103210	Std test		ABPSL test	W	4					OK	MHOL, 1C2nb, 14DNB
	103211	TCL42 verif 1ppm				5					OK	SV151829-40 I
	103212	OP91884-MB1	91884	AB8270+	W	6		+	✓	✓	OK	
	103213	-BS1				7			3 ✓	3 ✓	OK	M for internal
	103214	JC15518-1		ABTCL20* AMO 3/10/16		8		+	✓	✓	OK	RR 1:10 (14 Dioxane)
	103215	-2				9		+	✓	✓	OK	
	103216	-3				10		+	✓	✓	OK	
	103217	-4				11			✓	✓	OK	
	103218	-5				12			✓	✓	OK	RR 1:10 (14 Dioxane)
	103219	-6				13			✓	✓	OK	RR 1:10 (14 Dioxane)
	103220	-7				14			✓	✓	OK	
	103221	-8				15			✓	✓	OK	
	103222	JC15511-29A		ABSL		16			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

mple volume/weight used and final volumes refer to extraction log.

183

l strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

m: OR015-05
. Date: 1/16/2006

9.7.8

9

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4533

Date: 3/9/16

Analyst Signature: JMJ

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Page 183	

Columns: Rxi5si/ms30m x 25mm x .25µm

Method 8270D/625

Initial Cal. Method MP4524

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: 3/11/16.

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P 103223	JC15511-30A	91884	ABSL	W	17			/	/	OK	
	103224	JC15578-3		BNJTCLO+		18	+		/	/	OK	
	103225	JC15382-11	91865	ABSL		19			/	/	OK	
	103226	OP91884-MS	91884	AB8270	W	20			/	/	OK	
	103227	-MSD				21			/	/	OK	
R	103228	JC15518-1		ABTCLO+		22	10		/	/	OK	
R	103229	-5				23	10		/	/	OK	
R	103230	-6				24	10		/	/	OK	3:09AM

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

185

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
ev. Date: 1/16/2006

9.7.8

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Date: 3/10/16

Batch ID: EP4534

Analyst Signature: JK

Columns: RXI-5Si/MS 30mX.25mmX.25um

Method 8270D/1625

Initial Cal. Method MP4524

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.
SV151824-118	APY	25ppm
SV151824-58	APYSL	25ppm

Standard Data

Lot #	Description	Conc.
SV151824-108	DFTPP	50ppm
-134	BNA	25ppm
-107	TCL42	25ppm
CMS732	Internal Std.	400ppm
160906	12M (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMW

Date: 3/11/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P103231	DFTPP			W	1					OK	8:48AM
	103232	CC4524-25		BNA	W	2					OK	
	103233	CC4514-25		TCL42	W	3					OK	HQ↑
	103234	CC4515-25		APY	W	4					OK	
	103235	CC4516-25		APYSL	W	5					OK	173↑
R	103236	op91884-bsl	91884-1	AB8270	S	6		/	/		OK	
	103237	op91865-ms	91865-1	AB8270	W	7	AMW 3/10/16 4	/	/		OK	
	103238	-bsl				8		/	/		OK	
	103239	JC15891-2		APYSL2 +more		9		/	/		OK	
	103240	-3				10		/	/		OK	
	103241	-4				11		/	/		OK	
	103242	-5				12		/	/		OK	
	103243	op91865-ms		AB8270		13		/	/		OK	
	103244	-msd				14	AMW 3/10/16	/	/		OK	3:58pm
	103245	JC15280-2	91801-1	AB1162		15	25	/	/		OK	VG-5mL Vial After P103232
	103246	-3				16	25	/	↑		OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

187

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

LOGBOOK ID: 6-1973

ABN Aqueous Extraction Logbook

Date Started: 3/9/16 Time Started: 0800
Date Finished: 3/9/16 Time Finished: 1230

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____ 3510C SIM_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 91884	RACK# A-5
Extracted by:	YB
Concentrated by:	CD
Vialed by:	[illegible]
Relinquished by:	
Accepted by:	
Supervisor Review:	3/9/16

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) Δ 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		
	JC15518-1 MS		1	Yellow	500	1	4	Yellow	1		
	↳ MSD		1	Yellow	500	1	4	Yellow	1		
	BS	12 SIM		DI H2O	1000	1	4	Yellow	1		
	JC15518-2 MS		2	Yellow	500	1	4	Yellow	1		
	MSD		2	Yellow	500	1	4	Yellow	1		
1	JC15518-1	ABN	2	Yellow	1000	1	4	Yellow	1		
2	-2		1	Yellow	1000	1	4	Yellow	1		
3	-3		2	Gold	1000	1	4	Yellow	1		
4	-4		1	Yellow	990	1	4	Yellow	1		
5	-5		1	Yellow	980	1	4	Clear	1		
6	-6		1	Yellow	990	1	4	Yellow	1		
7	-7		1	Yellow	990	1	4	Yellow	1		
8	-8		1	Yellow	900	1	4	Yellow	1		
9	JC15511-29A		1	Clear	1000	1	4	Clear	1		
10	-30A		1	Clear	1000	1	4	Clear	1		
11	JC15578-3		1	Brown	1000	1	4	Brown	1		
12	JC15458-13		2	Clear	990	1	4	Clear	1		
13	-14		2	Clear	990	1	4	Clear	1		
14	-15		1	Clear	990	1	4	Clear	1		
15	JC15471-2		1	Clear	1000	1	4	Yellow	1		
16	-3		2	Clear	1000	1	4	Yellow	1		
17											
18											
19											
20											

2d TAT

Comments: okay to split MS/MSD x SIM MS/MSD, not enough bottles

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6,7	75,76.1	1.6,1.2	77,76	N/A
Waterbath Chiller (GPM)	F2	2	—	—	1.5
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	151624136	50ppm	1mL

WITNESS SIGN: YB SPIKE SIGN: [illegible]

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827-43	50ppm	Acid: 1mL
Acid (for SIM)			A(SIM): 0.1mL
Base #1	151827-44	50ppm	
Base #2	151827-35	50ppm	1mL
Anilines	151827-46	50ppm	1mL
BSIM	151624132	[illegible]ppm	1mL

WITNESS SIGN: YB SPIKE SIGN: [illegible]

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	158253	Fisher	1mL

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2511607	Fisher
Sodium Sulfate	153169	Fisher
Glass Wool	09P29-2	Lab
Filter Paper		
pH strips	212713	Hydrion

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID: 6-1973

ABN Aqueous Extraction Logbook

Date Started: 3/9/16 Time Started: 0800
Date Finished: 3/9/16 Time Finished: 1230

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____ 3510C SIM_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 91884	RACK# A-5
Extracted by:	YB
Concentrated by:	CD
Vialed by:	[illegible]
Relinquished by:	
Accepted by:	
Supervisor Review:	3/9/16

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) Δ 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		
	JC15518-1 MS		1	Yellow	500	1	4	Yellow	1		
	↳ MSD		1	Yellow	500	1	4	Yellow	1		
	BS	12 SIM		DI H2O	1000	1	4	Yellow	1		
	JC15518-2 MS		2	Yellow	500	1	4	Yellow	1		
	MSD		2	Yellow	500	1	4	Yellow	1		
1	JC15518-1	ABN	2	Yellow	1000	1	4	Yellow	1		
2	-2		1	Yellow	1000	1	4	Yellow	1		
3	-3		2	Gold	1000	1	4	Yellow	1		
4	-4		1	Yellow	990	1	4	Yellow	1		
5	-5		1	Yellow	980	1	4	Clear	1		
6	-6		1	Yellow	990	1	4	Yellow	1		
7	-7		1	Yellow	990	1	4	Yellow	1		
8	-8		1	Yellow	900	1	4	Yellow	1		
9	JC15511-29A		1	Clear	1000	1	4	Clear	1		
10	-30A		1	Clear	1000	1	4	Clear	1		
11	JC15578-3		1	Brown	1000	1	4	Brown	1		
12	JC15458-13		2	Clear	990	1	4	Clear	1		
13	-14		2	Clear	990	1	4	Clear	1		
14	-15		1	Clear	990	1	4	Clear	1		
15	JC15471-2		1	Clear	1000	1	4	Yellow	1		
16	-3		2	Clear	1000	1	4	Yellow	1		
17											
18											
19											
20											

2d TAT

Comments: okay to split MS/MSD x SIM MS/MSD, not enough bottles

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6,7	75,76.1	1.6,1.2	77,76	N/A
Waterbath Chiller (GPM)	F2	2	—	—	1.5
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	151624136	50ppm	1mL

WITNESS SIGN: YB SPIKE SIGN: [illegible]

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827-43	50ppm	Acid: 1mL
Acid (for SIM)			A(SIM): 0.1mL
Base #1	151827-44	50ppm	
Base #2	151827-35	50ppm	1mL
Anilines	151827-46	50ppm	1mL
BSIM	151624132	50ppm	1mL

WITNESS SIGN: YB SPIKE SIGN: [illegible]

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	158253	Fisher	1mL

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2511607	Fisher
Sodium Sulfate	153169	Fisher
Glass Wool	09P29-2	Lab
Filter Paper		
pH strips	212713	Hydrion

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5205-MB2	GH103674.D	1	03/11/16	XPL	n/a	n/a	GGH5205

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC15518-1

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	87%	56-145%
111-27-3	Hexanol	91%	56-145%

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5205-MB3	GH103684.D	1	03/11/16	XPL	n/a	n/a	GGH5205

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

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	86%	56-145%
111-27-3	Hexanol	90%	56-145%

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5205-MB4	GH103695.D	1	03/11/16	XPL	n/a	n/a	GGH5205

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC15518-9

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	84%	56-145%
111-27-3	Hexanol	86%	56-145%

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5205-BS	GH103675.D	1	03/11/16	XPL	n/a	n/a	GGH5205

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	4750	95	74-123
78-83-1	Isobutyl Alcohol	5000	4870	97	70-124
67-63-0	Isopropyl Alcohol	5000	4850	97	76-121
71-23-8	n-Propyl Alcohol	5000	4750	95	73-122
71-36-3	n-Butyl Alcohol	5000	4390	88	67-116
78-92-2	sec-Butyl Alcohol	5000	4800	96	74-118
67-56-1	Methanol	5000	4060	81	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	88%	56-145%
111-27-3	Hexanol	91%	56-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC15518-1MS	GH103678.D	1	03/11/16	XPL	n/a	n/a	GGH5205
JC15518-1MSD	GH103679.D	1	03/11/16	XPL	n/a	n/a	GGH5205
JC15518-1	GH103677.D	1	03/11/16	XPL	n/a	n/a	GGH5205

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8, JC15518-9

CAS No.	Compound	JC15518-1 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	5200	104	5000	4620	92	12	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	4780	96	5000	4880	98	2	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5120	102	5000	5630	113	9	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	4980	100	5000	4850	97	3	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	5720	114	5000	4060	81	34* [a]	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5030	101	5000	4950	99	2	64-136/25
67-56-1	Methanol	ND		5000	4830	97	5000	4140	83	15	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC15518-1	Limits
111-27-3	Hexanol	91%	78%	86%	56-145%
111-27-3	Hexanol	89%	79%	90%	56-145%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103673.D	**Injection Time:**	08:25
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5205-BS	**Injection Date:**	03/11/16
Lab File ID:	GH103675.D	**Injection Time:**	09:20
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.82	1.83	5040		ug/l	5.9
Ethanol	2 [a]	1.02	1.02	4750		ug/l	
Isobutyl Alcohol	1	3.79	3.79	4960		ug/l	1.8
Isobutyl Alcohol	2 [a]	2.69	2.69	4870		ug/l	
Isopropyl Alcohol	1	2.20	2.21	5010		ug/l	3.2
Isopropyl Alcohol	2 [a]	1.24	1.24	4850		ug/l	
n-Propyl Alcohol	1	2.96	2.97	5030		ug/l	5.7
n-Propyl Alcohol	2 [a]	1.76	1.77	4750		ug/l	
n-Butyl Alcohol	1	4.21	4.21	4750		ug/l	7.9
n-Butyl Alcohol	2 [a]	3.18	3.18	4390		ug/l	
sec-Butyl Alcohol	1 [a]	3.40	3.40	4800		ug/l	0.4
sec-Butyl Alcohol	2	2.32	2.31	4820		ug/l	
Methanol	1	1.40	1.40	4740		ug/l	15.5
Methanol	2 [a]	0.79	0.79	4060		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103673.D	**Injection Time:**	08:25
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC15518-1MS	**Injection Date:**	03/11/16
Lab File ID:	GH103678.D	**Injection Time:**	10:07
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.87	1.83	5210		ug/l	0.2
Ethanol	2 [a]	1.02	1.02	5200		ug/l	
Isobutyl Alcohol	1	3.80	3.79	4630		ug/l	3.2
Isobutyl Alcohol	2 [a]	2.69	2.69	4780		ug/l	
Isopropyl Alcohol	1	2.24	2.21	5330		ug/l	4.0
Isopropyl Alcohol	2 [a]	1.24	1.24	5120		ug/l	
n-Propyl Alcohol	1	2.99	2.97	4550		ug/l	9.0
n-Propyl Alcohol	2 [a]	1.76	1.77	4980		ug/l	
n-Butyl Alcohol	1	4.22	4.21	4270		ug/l	29.0
n-Butyl Alcohol	2 [a]	3.18	3.18	5720		ug/l	
sec-Butyl Alcohol	1	3.42	3.40	4750		ug/l	5.7
sec-Butyl Alcohol	2 [a]	2.32	2.31	5030		ug/l	
Methanol	1	1.44	1.40	3800		ug/l	23.9
Methanol	2 [a]	0.79	0.79	4830		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103673.D	**Injection Time:**	08:25
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC15518-1MSD	**Injection Date:**	03/11/16
Lab File ID:	GH103679.D	**Injection Time:**	10:25
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.82	1.83	5110		ug/l	10.1
Ethanol	2 [a]	1.02	1.02	4620		ug/l	
Isobutyl Alcohol	1	3.78	3.79	5200		ug/l	6.3
Isobutyl Alcohol	2 [a]	2.69	2.69	4880		ug/l	
Isopropyl Alcohol	1	2.20	2.21	5120		ug/l	9.5
Isopropyl Alcohol	2 [a]	1.24	1.24	5630		ug/l	
n-Propyl Alcohol	1	2.96	2.97	5040		ug/l	3.8
n-Propyl Alcohol	2 [a]	1.77	1.77	4850		ug/l	
n-Butyl Alcohol	1	4.21	4.21	4740		ug/l	15.5
n-Butyl Alcohol	2 [a]	3.18	3.18	4060		ug/l	
sec-Butyl Alcohol	1	3.40	3.40	5890		ug/l	17.3
sec-Butyl Alcohol	2 [a]	2.31	2.31	4950		ug/l	
Methanol	1	1.40	1.40	5110		ug/l	21.0
Methanol	2 [a]	0.79	0.79	4140		ug/l	

(a) QC results reported from this column.

Volatile Surrogate Recovery Summary

Job Number: JC15518
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]	S1 [b]
JC15518-1	GH103677.D	86	90
JC15518-2	GH103686.D	93	95
JC15518-3	GH103687.D	103	97
JC15518-4	GH103688.D	93	94
JC15518-5	GH103689.D	98	98
JC15518-6	GH103690.D	95	94
JC15518-7	GH103691.D	98	98
JC15518-8	GH103692.D	97	97
JC15518-9	GH103696.D	100	98
GGH5205-BS	GH103675.D	88	91
GGH5205-MB2	GH103674.D	87	91
GGH5205-MB3	GH103684.D	86	90
GGH5205-MB4	GH103695.D	84	86
JC15518-1MS	GH103678.D	91	89
JC15518-1MSD	GH103679.D	78	79

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103673.D	**Injection Time:**	08:25
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.33	5.87

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5205-MB2	GH103674.D	03/11/16	09:05	5.32	5.86
GGH5205-BS	GH103675.D	03/11/16	09:20	5.32	5.86
ZZZZZZ	GH103676.D	03/11/16	09:34	5.33	5.87
JC15518-1	GH103677.D	03/11/16	09:56	5.32	5.86
JC15518-1MS	GH103678.D	03/11/16	10:07	5.32	5.87
JC15518-1MSD	GH103679.D	03/11/16	10:25	5.33	5.86
ZZZZZZ	GH103680.D	03/11/16	10:39	5.33	5.86
ZZZZZZ	GH103681.D	03/11/16	10:53	5.32	5.86
ZZZZZZ	GH103682.D	03/11/16	11:08	5.33	5.86

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103683.D	**Injection Time:**	11:22
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.32	5.86

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5205-MB3	GH103684.D	03/11/16	11:54	5.33	5.86
ZZZZZZ	GH103685.D	03/11/16	12:09	5.33	5.86
JC15518-2	GH103686.D	03/11/16	12:23	5.32	5.86
JC15518-3	GH103687.D	03/11/16	12:38	5.32	5.86
JC15518-4	GH103688.D	03/11/16	12:59	5.33	5.86
JC15518-5	GH103689.D	03/11/16	13:15	5.32	5.86
JC15518-6	GH103690.D	03/11/16	13:25	5.32	5.86
JC15518-7	GH103691.D	03/11/16	13:42	5.33	5.86
JC15518-8	GH103692.D	03/11/16	13:56	5.32	5.86

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5205-CC5193	**Injection Date:**	03/11/16
Lab File ID:	GH103694.D	**Injection Time:**	15:16
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.32	5.86

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5205-MB4	GH103695.D	03/11/16	15:59	5.32	5.86
JC15518-9	GH103696.D	03/11/16	16:14	5.32	5.86
JC15883-1	GH103697.D	03/11/16	16:28	5.33	5.86
JC15883-1MS	GH103698.D	03/11/16	16:42	5.32	5.86
JC15883-1MSD	GH103699.D	03/11/16	16:57	5.33	5.86
ZZZZZZ	GH103700.D	03/11/16	17:18	5.33	5.86
ZZZZZZ	GH103701.D	03/11/16	17:33	5.32	5.86
ZZZZZZ	GH103702.D	03/11/16	17:47	5.32	5.86
ZZZZZZ	GH103703.D	03/11/16	18:02	5.32	5.86

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5193-ICC5193
Lab FileID: GH103541.D

Response Factor Report GCGH

Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue Mar 01 12:10:59 2016
Response via : Initial Calibration

Calibration Files
0.5 =GH103543.D 1 =GH103536.D 5 =GH103541.D 10 =GH103538.D
50 =GH103539.D 100 =GH103540.D 0.1 =GH103544.D =

Compound	0.5	1	5	10	50	100	0.1	Avg	%RSD
1) Methanol	1.426	1.841	1.852	1.703	1.663	1.780	1.952	1.745 E1	9.79
2) Ethanol	2.194	2.249	2.373	2.356	2.184	2.349	2.002	2.244 E1	5.89
3) Tert-Butyl A	2.774	3.753	3.616	3.510	3.237	3.492	3.482	3.409 E1	9.40
4) 1-Propanol	2.092	3.059	3.087	2.991	2.821	3.030	3.265	2.907 E1	13.16
5) 2-Propanol	1.682	2.949	2.637	2.504	2.346	2.529	2.559	2.458 E1	15.80
6) Propionitril									
7) Isobutanol	2.896	3.485	3.556	3.505	3.219	3.484	3.542	3.384 E1	7.18
8) 1-Butanol	2.743	3.627	3.420	3.389	3.054	3.265	3.899	3.343 E1	11.25
9) 2-Butanol	2.347	3.176	3.154	3.122	2.873	3.066	3.756	3.071 E1	13.64
10) Hexanol	1.693	1.305	1.255	1.265	1.256	0.953	1.202	1.275 E2	17.09

Signal #2

1) Methanol	1.818	1.614	1.723	1.711	1.573	1.708	2.010	1.736 E1	8.31
2) Ethanol	2.024	2.267	2.294	2.284	2.092	2.288	2.194	2.206 E1	4.91
3) Tert-Butyl A	2.906	3.370	3.219	3.317	3.054	3.303	3.221	3.198 E1	5.13
4) 1-Propanol	2.365	2.891	3.042	2.928	2.683	2.894	3.320	2.875 E1	10.31
5) 2-Propanol	2.053	2.413	2.353	2.406	2.218	2.413	2.475	2.333 E1	6.33
6) Propionitril									
7) Isobutanol	2.864	3.107	3.214	3.374	3.059	3.290	3.670	3.226 E1	7.97
8) 1-Butanol	** This compound does not meet initial calibration criteria.								
	3.431	3.074	3.191	3.268	2.937	3.245	5.688	3.548 E1	26.96
9) 2-Butanol	2.452	2.996	2.918	2.985	2.721	2.924	3.049	2.864 E1	7.31
10) Hexanol	1.783	1.289	1.223	1.238	1.230	0.945	1.219	1.275 E2	19.65

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

MGH5193.M Tue Mar 01 12:19:45 2016 GCGH

Initial Calibration Verification

Job Number: JC15518 **Sample:** GGH5193-ICV5193
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH103545.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID1A.CH Vial: 20
Acq On    : 29 Feb 2016   1:20 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID2B.CH Vial: 20
Acq On    : 29 Feb 2016   1:36 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 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	17.453	17.951	-2.9	97	0.00	1.33- 1.50
2		Ethanol	22.440	23.663	-5.5	100	0.00	1.80- 1.89
3		Tert-Butyl Alcohol	34.092	35.190	-3.2	97	0.00	2.47- 2.56
4		1-Propanol	29.066	30.968	-6.5	100	0.00	2.96- 3.03
5		2-Propanol	24.580	25.257	-2.8	96	0.00	2.18- 2.27
6		Propionitrile		----------NA----------				
7		Isobutanol	33.839	34.562	-2.1	97	0.00	3.76- 3.85
8		1-Butanol	33.426	33.817	-1.2	99	0.00	4.18- 4.27
9		2-Butanol	30.706	31.208	-1.6	99	0.00	3.37- 3.47
10	S	Hexanol	127.542	124.268	2.6	99	0.00	5.85- 5.91

***** Signal #2 *****

1		Methanol	17.364	17.370	-0.0	101	0.00	0.77- 0.83
2		Ethanol	22.062	22.926	-3.9	100	0.00	0.99- 1.05
3		Tert-Butyl Alcohol	31.985	33.340	-4.2	104	0.00	1.44- 1.50
4		1-Propanol	28.748	29.155	-1.4	96	0.00	1.74- 1.80
5		2-Propanol	23.330	24.634	-5.6	105	0.00	1.22- 1.28
6		Propionitrile		----------NA----------				
7		Isobutanol	32.255	33.041	-2.4	103	0.00	2.67- 2.73
8		1-Butanol	35.477	32.815	7.5	103	0.00	3.16- 3.22
9		2-Butanol	28.637	29.520	-3.1	101	0.00	2.29- 2.35
10	S	Hexanol	127.519	121.131	5.0	99	0.00	5.29- 5.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH103541.D MGH5193.M Tue Mar 01 12:26:43 2016 GCGH

Continuing Calibration Summary

Job Number: JC15518 **Sample:** GGH5205-CC5193
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH103673.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH103673.D\FID1A.CH         Vial: 94
Acq On    : 11 Mar 2016   8:25 am                    Operator: XULIU
Sample    : CC5193-5000                              Inst    : GCGH
Misc      : GC47883,GGH5204,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103673.D\FID2B.CH         Vial: 94
Acq On    : 11 Mar 2016   8:39 am                    Operator: XULIU
Sample    : CC5193-5000                              Inst    : GCGH
Misc      : GC47883,GGH5204,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 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	17.453	15.343	12.1	83	0.00	1.31- 1.49
2	Ethanol	22.440	24.872	-10.8	105	0.00	1.78- 1.88
3	Tert-Butyl Alcohol	34.092	36.565	-7.3	101	0.00	2.45- 2.54
4	1-Propanol	29.066	32.016	-10.1	104	0.00	2.94- 3.01
5	2-Propanol	24.580	26.953	-9.7	102	0.00	2.16- 2.25
6	Propionitrile		----------NA----------				
7	Isobutanol	33.839	35.587	-5.2	100	0.00	3.74- 3.84
8	1-Butanol	33.426	34.299	-2.6	100	0.00	4.17- 4.26
9	2-Butanol	30.706	32.115	-4.6	102	0.00	3.36- 3.45
10 S	Hexanol	127.542	134.893	-5.8	108	0.00	5.84- 5.90

***** Signal #2 *****

1	Methanol	17.364	18.090	-4.2	105	0.00	0.76- 0.82
2	Ethanol	22.062	24.162	-9.5	105	0.00	0.99- 1.05
3	Tert-Butyl Alcohol	31.985	35.431	-10.8	110	0.00	1.42- 1.48
4	1-Propanol	28.748	30.962	-7.7	102	0.00	1.74- 1.80
5	2-Propanol	23.330	25.684	-10.1	109	0.00	1.21- 1.27
6	Propionitrile		----------NA----------				
7	Isobutanol	32.255	34.492	-6.9	107	0.00	2.66- 2.72
8	1-Butanol	35.477	31.639	10.8	99	0.00	3.15- 3.21
9	2-Butanol	28.637	31.429	-9.7	108	0.00	2.28- 2.34
10 S	Hexanol	127.519	139.787	-9.6	114	0.00	5.28- 5.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH103541.D MGH5193.M Fri Mar 11 10:17:53 2016 GCGH

10.7.3 10

Continuing Calibration Summary

Job Number: JC15518 **Sample:** GGH5205-CC5193
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH103683.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH103683.D\FID1A.CH        Vial: 95
Acq On    : 11 Mar 2016  11:22 am                   Operator: XULIU
Sample    : CC5193-10000                            Inst    : GCGH
Misc      : GC47881,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103683.D\FID2B.CH        Vial: 95
Acq On    : 11 Mar 2016  11:42 am                   Operator: XULIU
Sample    : CC5193-10000                            Inst    : GCGH
Misc      : GC47881,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 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	17.453	16.369	6.2	96	0.00	1.31- 1.48
2		Ethanol	22.440	23.701	-5.6	101	0.00	1.78- 1.87
3		Tert-Butyl Alcohol	34.092	34.011	0.2	97	0.00	2.44- 2.53
4		1-Propanol	29.066	30.561	-5.1	102	0.00	2.93- 3.00
5		2-Propanol	24.580	24.988	-1.7	100	0.00	2.15- 2.25
6		Propionitrile		----------NA----------				
7		Isobutanol	33.839	35.430	-4.7	101	0.00	3.74- 3.83
8		1-Butanol	33.426	33.000	1.3	97	0.00	4.16- 4.25
9		2-Butanol	30.706	31.039	-1.1	99	0.00	3.35- 3.45
10	S	Hexanol	127.542	121.350	4.9	96	0.00	5.83- 5.89

***** Signal #2 *****

1		Methanol	17.364	15.018	13.5	88	0.00	0.76- 0.82
2		Ethanol	22.062	20.024	9.2	88	0.00	0.99- 1.05
3		Tert-Butyl Alcohol	31.985	31.133	2.7	94	0.00	1.43- 1.49
4		1-Propanol	28.748	28.974	-0.8	99	0.00	1.74- 1.80
5		2-Propanol	23.330	21.405	8.3	89	0.00	1.21- 1.27
6		Propionitrile		----------NA----------				
7		Isobutanol	32.255	33.271	-3.1	99	0.00	2.66- 2.72
8		1-Butanol	35.477	31.843	10.2	97	0.00	3.14- 3.20
9		2-Butanol	28.637	28.367	0.9	95	0.00	2.29- 2.35
10	S	Hexanol	127.519	117.940	7.5	95	0.00	5.27- 5.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH103538.D MGH5193.M Fri Mar 11 13:35:13 2016 GCGH

Continuing Calibration Summary

Job Number: JC15518 **Sample:** GGH5205-CC5193
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH103694.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH103694.D\FID1A.CH        Vial: 95
Acq On    : 11 Mar 2016   3:16 pm                   Operator: XULIU
Sample    : CC5193-5000                             Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103694.D\FID2B.CH        Vial: 95
Acq On    : 11 Mar 2016   3:30 pm                   Operator: XULIU
Sample    : CC5193-5000                             Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 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	17.453	17.852	-2.3	96	0.00	1.30- 1.48
2	Ethanol	22.440	24.140	-7.6	102	0.00	1.77- 1.86
3	Tert-Butyl Alcohol	34.092	40.248	-18.1	111	0.00	2.43- 2.52
4	1-Propanol	29.066	32.378	-11.4	105	0.00	2.92- 2.99
5	2-Propanol	24.580	28.308	-15.2	107	0.00	2.15- 2.24
6	Propionitrile		----------NA----------				
7	Isobutanol	33.839	36.265	-7.2	102	0.00	3.73- 3.82
8	1-Butanol	33.426	34.866	-4.3	102	0.00	4.15- 4.25
9	2-Butanol	30.706	32.413	-5.6	103	0.00	3.34- 3.44
10 S	Hexanol	127.542	127.141	0.3	101	0.00	5.83- 5.89

***** Signal #2 *****

1	Methanol	17.364	19.112	-10.1	111	0.00	0.77- 0.83
2	Ethanol	22.062	25.011	-13.4	109	0.00	0.99- 1.05
3	Tert-Butyl Alcohol	31.985	35.345	-10.5	110	0.00	1.43- 1.49
4	1-Propanol	28.748	30.585	-6.4	101	0.00	1.74- 1.80
5	2-Propanol	23.330	26.058	-11.7	111	0.00	1.22- 1.28
6	Propionitrile		----------NA----------				
7	Isobutanol	32.255	33.306	-3.3	104	0.00	2.67- 2.73
8	1-Butanol	35.477	34.057	4.0	107	0.00	3.15- 3.21
9	2-Butanol	28.637	30.400	-6.2	104	0.00	2.28- 2.34
10 S	Hexanol	127.519	125.913	1.3	103	0.00	5.27- 5.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH103541.D MGH5193.M Mon Mar 14 08:26:46 2016 GCGH

10.7.5 10

Continuing Calibration Summary

Job Number: JC15518 **Sample:** GGH5205-CC5193
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH103704.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH103704.D\FID1A.CH        Vial: 9
Acq On    : 11 Mar 2016   6:16 pm                   Operator: XULIU
Sample    : CC5193-10000                            Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103704.D\FID2B.CH        Vial: 9
Acq On    : 11 Mar 2016   6:31 pm                   Operator: XULIU
Sample    : CC5193-10000                            Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 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	17.453	16.661	4.5	98	0.00	1.31- 1.48
2		Ethanol	22.440	22.690	-1.1	96	0.00	1.77- 1.87
3		Tert-Butyl Alcohol	34.092	33.642	1.3	96	0.00	2.44- 2.53
4		1-Propanol	29.066	30.099	-3.6	101	0.00	2.93- 3.00
5		2-Propanol	24.580	24.285	1.2	97	0.00	2.15- 2.24
6		Propionitrile		----------NA----------				
7		Isobutanol	33.839	34.779	-2.8	99	0.00	3.73- 3.83
8		1-Butanol	33.426	32.476	2.8	96	0.00	4.15- 4.25
9		2-Butanol	30.706	30.149	1.8	97	0.00	3.35- 3.44
10	S	Hexanol	127.542	129.233	-1.3	102	0.00	5.83- 5.89

***** Signal #2 *****

1		Methanol	17.364	15.292	11.9	89	0.00	0.77- 0.83
2		Ethanol	22.062	22.194	-0.6	97	0.00	0.99- 1.05
3		Tert-Butyl Alcohol	31.985	32.084	-0.3	97	0.00	1.43- 1.49
4		1-Propanol	28.748	28.238	1.8	96	0.00	1.74- 1.80
5		2-Propanol	23.330	23.489	-0.7	98	0.00	1.21- 1.27
6		Propionitrile		----------NA----------				
7		Isobutanol	32.255	33.771	-4.7	100	0.00	2.66- 2.72
8		1-Butanol	35.477	31.034	12.5	95	0.00	3.15- 3.21
9		2-Butanol	28.637	28.889	-0.9	97	0.00	2.29- 2.35
10	S	Hexanol	127.519	128.327	-0.6	104	0.00	5.27- 5.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH103538.D MGH5193.M Mon Mar 14 09:07:34 2016 GCGH

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103677.D\FID1A.CH          Vial: 16
Acq On    : 11 Mar 2016   9:56 am                     Operator: XULIU
Sample    : JC15518-1                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103677.D\FID2B.CH          Vial: 16
Acq On    : 11 Mar 2016  10:07 am                     Operator: XULIU
Sample    : JC15518-1                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 10:12 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    573087   548288 4493.328  4299.647
  Spiked Amount   5000.000                  Recovery     =   89.87%    85.99%

Target Compounds
```

11.1.1

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103677.D  MGH5193.M      Fri Mar 11 13:26:09 2016      GCGH
```

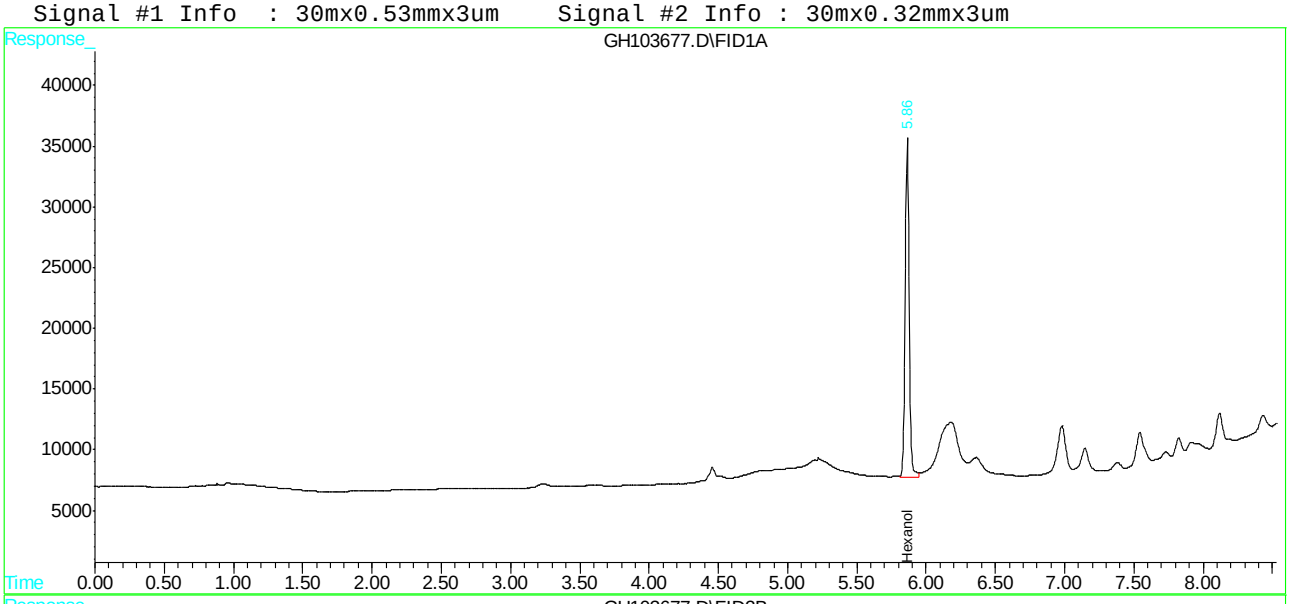
Quantitation Report (QT Reviewed)

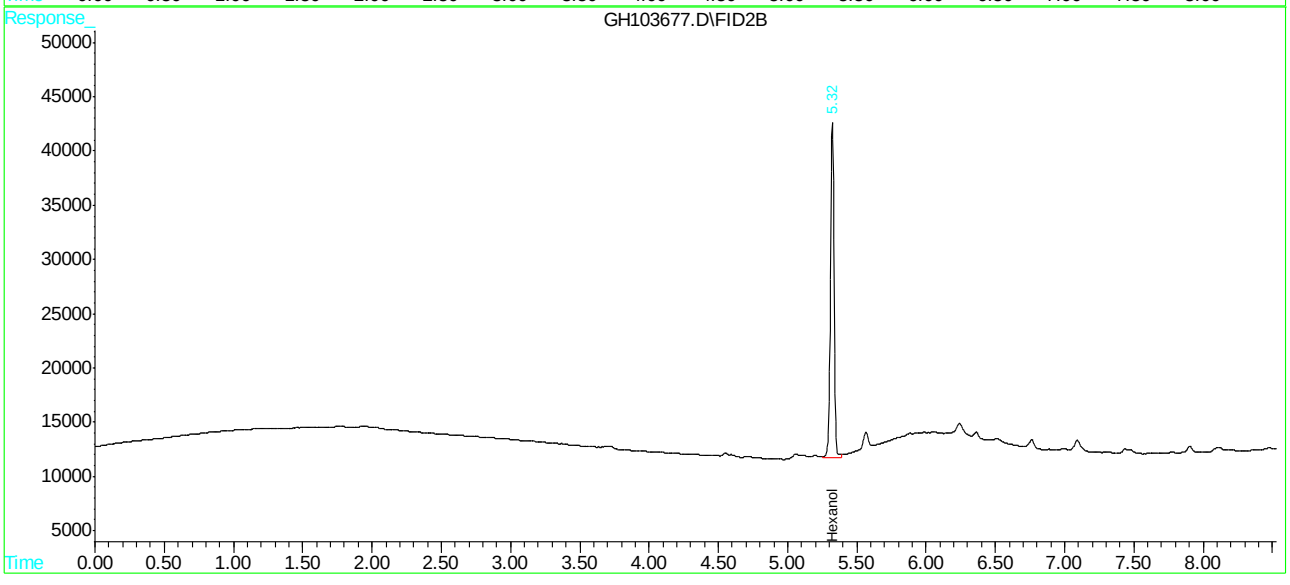
```
Data File : C:\HPCHEM\1\DATA\GH103677.D\FID1A.CH          Vial: 16
Acq On    : 11 Mar 2016   9:56 am                     Operator: XULIU
Sample    : JC15518-1                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103677.D\FID2B.CH          Vial: 16
Acq On    : 11 Mar 2016  10:07 am                     Operator: XULIU
Sample    : JC15518-1                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 10:12 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103686.D\FID1A.CH          Vial: 16
Acq On    : 11 Mar 2016  12:23 pm                     Operator: XULIU
Sample    : JC15518-2                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103686.D\FID2B.CH          Vial: 16
Acq On    : 11 Mar 2016  12:38 pm                     Operator: XULIU
Sample    : JC15518-2                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 13:46 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    606248   595692 4753.329  4671.387
  Spiked Amount   5000.000                 Recovery     =   95.07%    93.43%

Target Compounds
```

11.1.2

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103686.D  MGH5193.M      Mon Mar 14 08:18:56 2016      GCGH
```

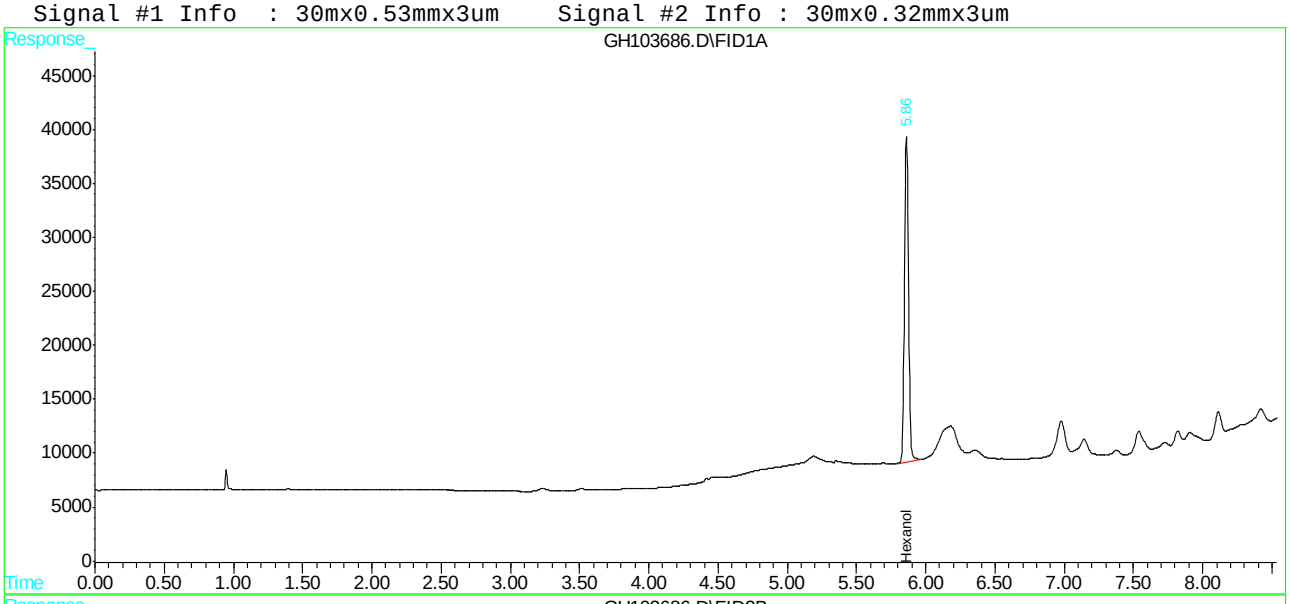
Quantitation Report (QT Reviewed)

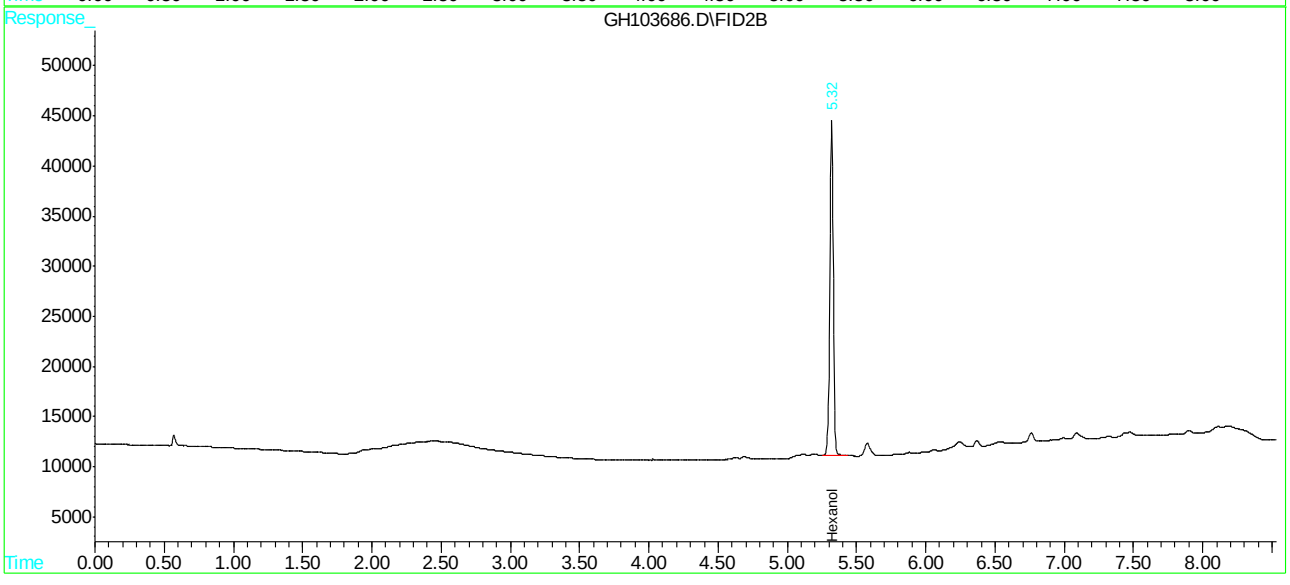
```
Data File : C:\HPCHEM\1\DATA\GH103686.D\FID1A.CH          Vial: 16
Acq On    : 11 Mar 2016  12:23 pm                     Operator: XULIU
Sample    : JC15518-2                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103686.D\FID2B.CH          Vial: 16
Acq On    : 11 Mar 2016  12:38 pm                     Operator: XULIU
Sample    : JC15518-2                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 13:46 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103687.D\FID1A.CH          Vial: 17
Acq On    : 11 Mar 2016  12:38 pm                     Operator: XULIU
Sample    : JC15518-3                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103687.D\FID2B.CH          Vial: 17
Acq On    : 11 Mar 2016  12:59 pm                     Operator: XULIU
Sample    : JC15518-3                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:19 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    620414   655937 4864.399  5143.828
  Spiked Amount   5000.000                  Recovery     =   97.29%   102.88%

Target Compounds
```

11.1.3

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103687.D  MGH5193.M      Mon Mar 14 08:19:14 2016      GCGH
```

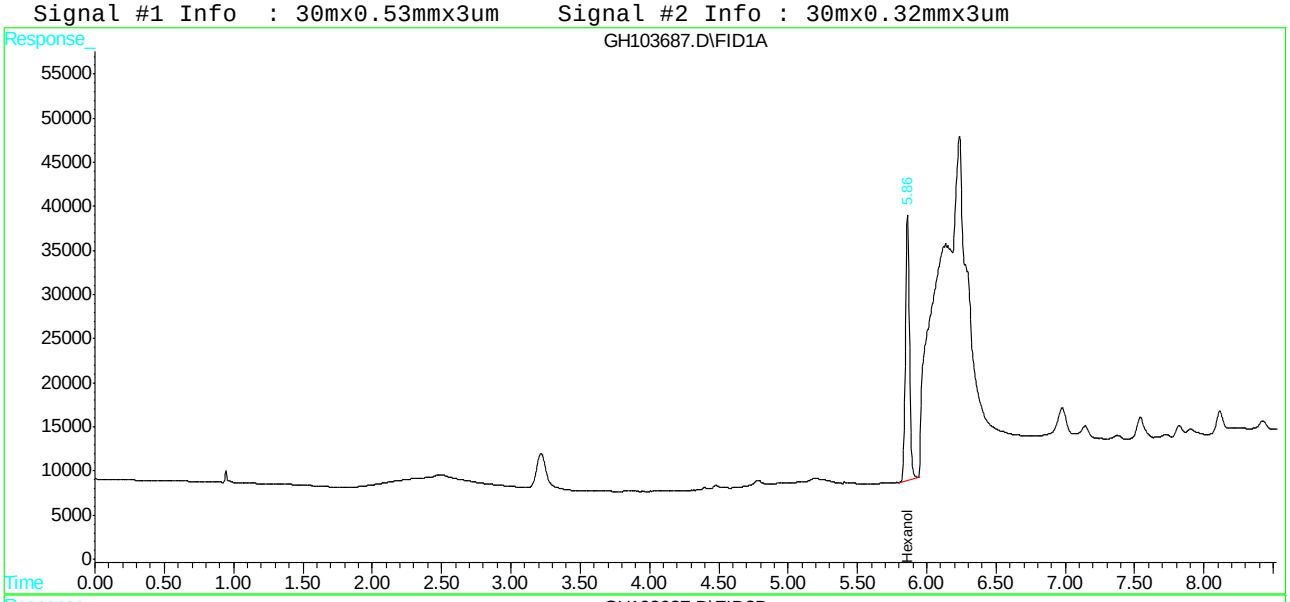
Quantitation Report (QT Reviewed)

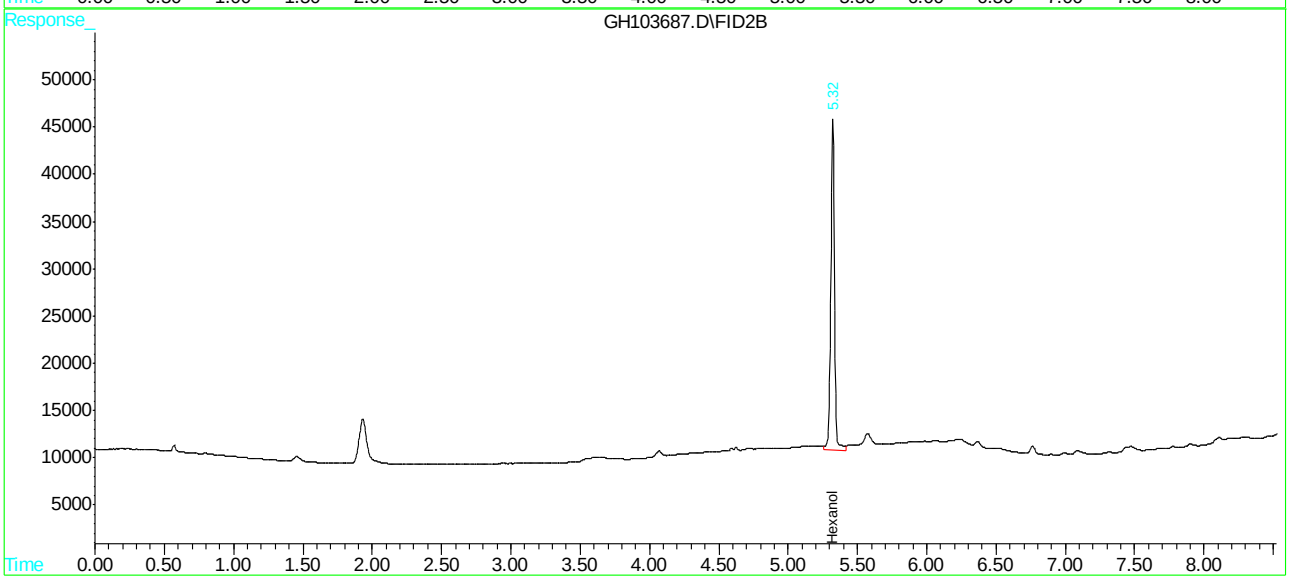
Data File : C:\HPCHEM\1\DATA\GH103687.D\FID1A.CH Vial: 17
Acq On : 11 Mar 2016 12:38 pm Operator: XULIU
Sample : JC15518-3 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103687.D\FID2B.CH Vial: 17
Acq On : 11 Mar 2016 12:59 pm Operator: XULIU
Sample : JC15518-3 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 14 8:19 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\DATA1036\GH103688.D\FID1A.CH Vial: 18
Acq On    : 11 Mar 2016  12:59 pm                    Operator: XULIU
Sample    : JC15518-4                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103688.D\FID2B.CH Vial: 18
Acq On    : 11 Mar 2016   1:15 pm                    Operator: XULIU
Sample    : JC15518-4                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:36 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.33    601069   590306 4712.724  4629.151
  Spiked Amount   5000.000                  Recovery     =   94.25%    92.58%

Target Compounds
```

11.1.4

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103688.D  MGH5193.M      Wed Mar 16 09:36:25 2016      GCGH
```

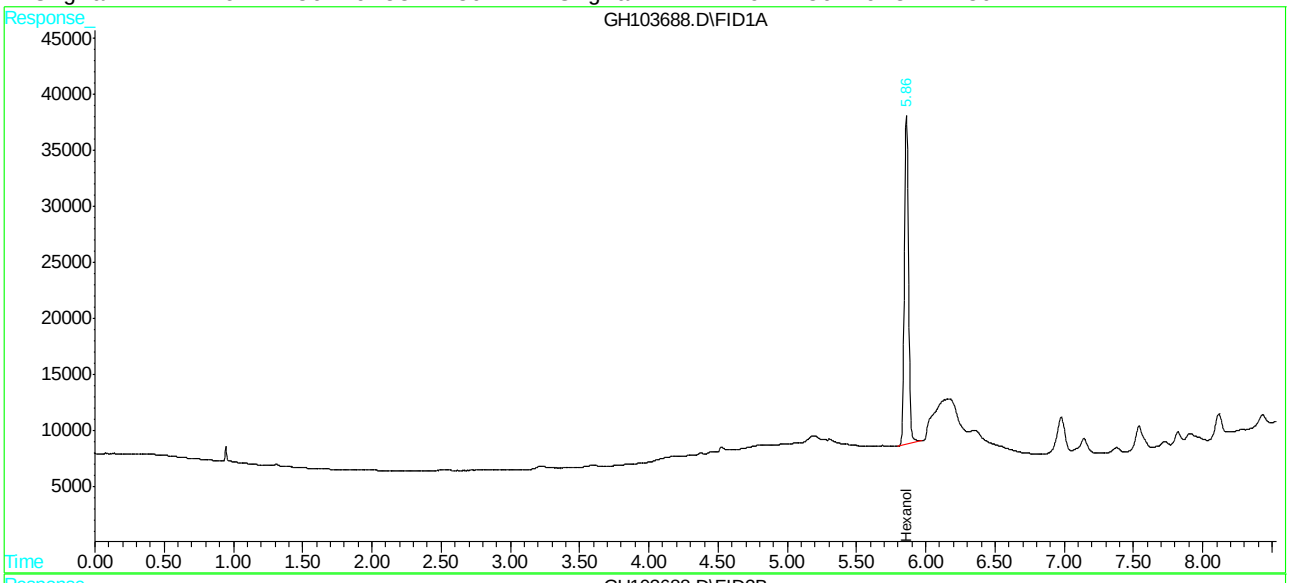
Quantitation Report (QT Reviewed)

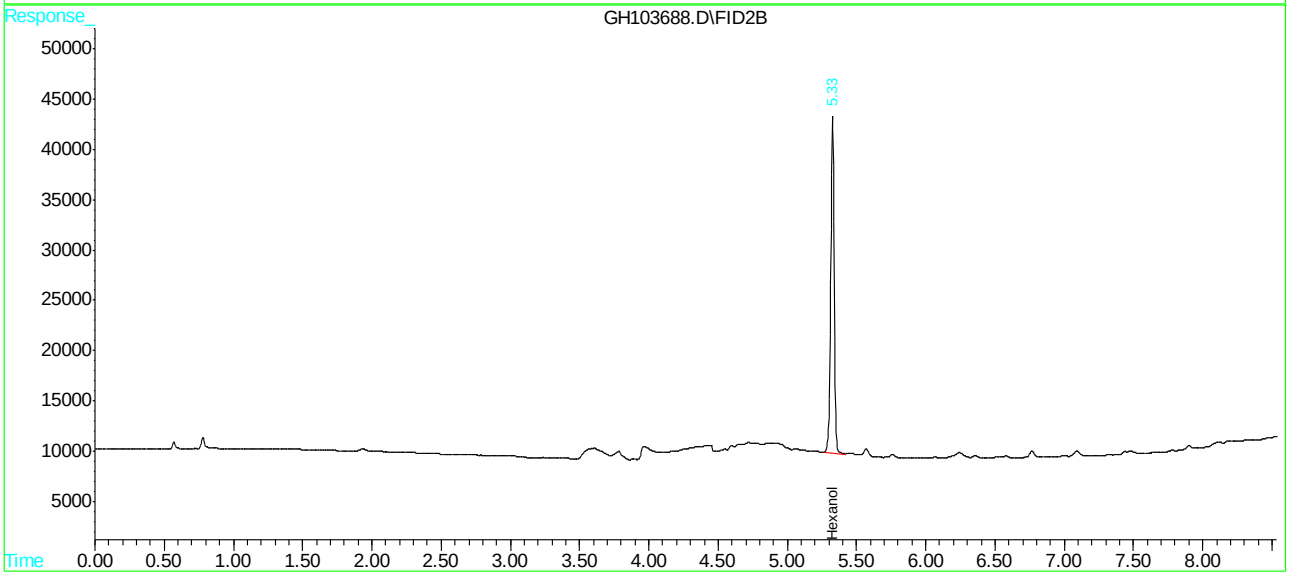
Data File : C:\HPCHEM\1\DATA\DATA1036\GH103688.D\FID1A.CH Vial: 18
Acq On : 11 Mar 2016 12:59 pm Operator: XULIU
Sample : JC15518-4 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103688.D\FID2B.CH Vial: 18
Acq On : 11 Mar 2016 1:15 pm Operator: XULIU
Sample : JC15518-4 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 16 9:36 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\DATA1036\GH103689.D\FID1A.CH Vial: 19
Acq On    : 11 Mar 2016   1:15 pm                    Operator: XULIU
Sample    : JC15518-5                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103689.D\FID2B.CH Vial: 19
Acq On    : 11 Mar 2016   1:25 pm                    Operator: XULIU
Sample    : JC15518-5                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:37 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    624779   621733 4898.629  4875.600
  Spiked Amount   5000.000                  Recovery     =   97.97%    97.51%

Target Compounds
```

11.1.5

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103689.D  MGH5193.M      Wed Mar 16 09:37:14 2016      GCGH
```


SGS ACCUTEST JC15518

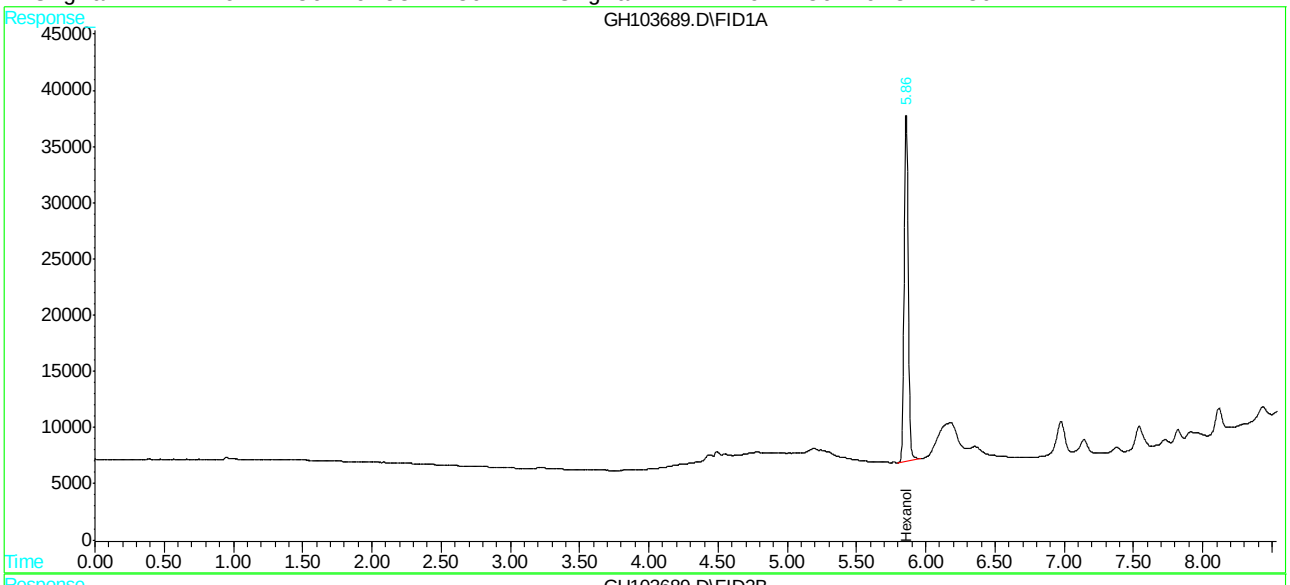
Quantitation Report (QT Reviewed)

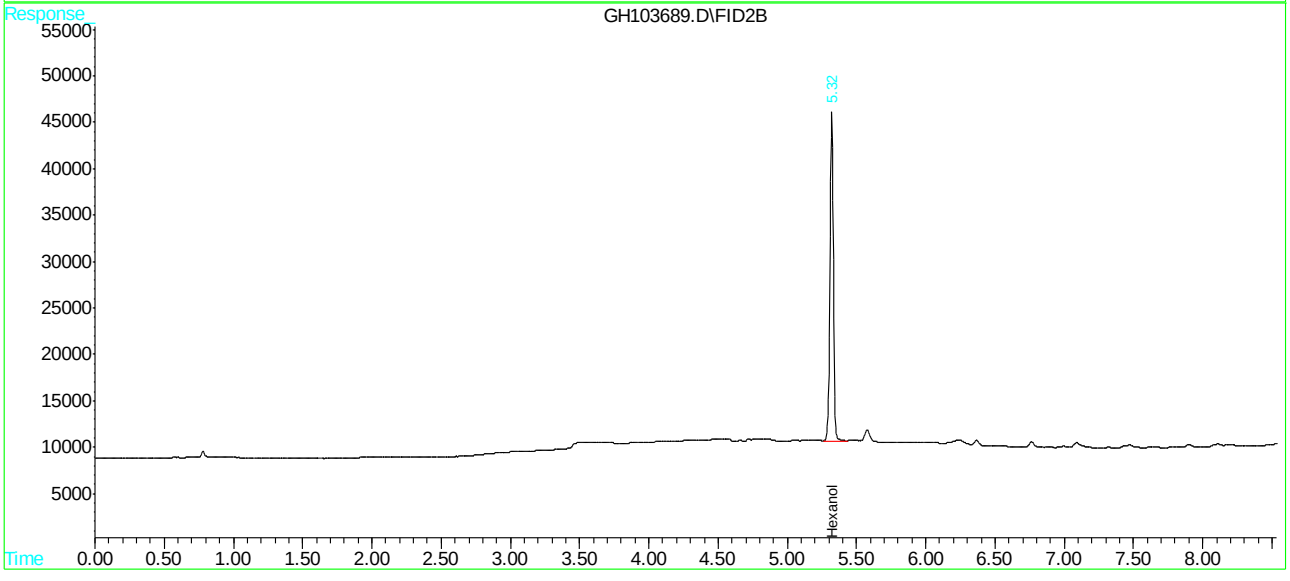
Data File : C:\HPCHEM\1\DATA\DATA1036\GH103689.D\FID1A.CH Vial: 19
Acq On : 11 Mar 2016 1:15 pm Operator: XULIU
Sample : JC15518-5 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103689.D\FID2B.CH Vial: 19
Acq On : 11 Mar 2016 1:25 pm Operator: XULIU
Sample : JC15518-5 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 16 9:37 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\DATA1036\GH103690.D\FID1A.CH Vial: 20
Acq On    : 11 Mar 2016   1:25 pm                    Operator: XULIU
Sample    : JC15518-6                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103690.D\FID2B.CH Vial: 20
Acq On    : 11 Mar 2016   1:42 pm                    Operator: XULIU
Sample    : JC15518-6                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:37 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    600631   607264 4709.288  4762.136
  Spiked Amount   5000.000                  Recovery     =   94.19%    95.24%

Target Compounds
```

11.1.6

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103690.D  MGH5193.M      Wed Mar 16 09:37:45 2016      GCGH
```


SGS ACCUTEST JC15518

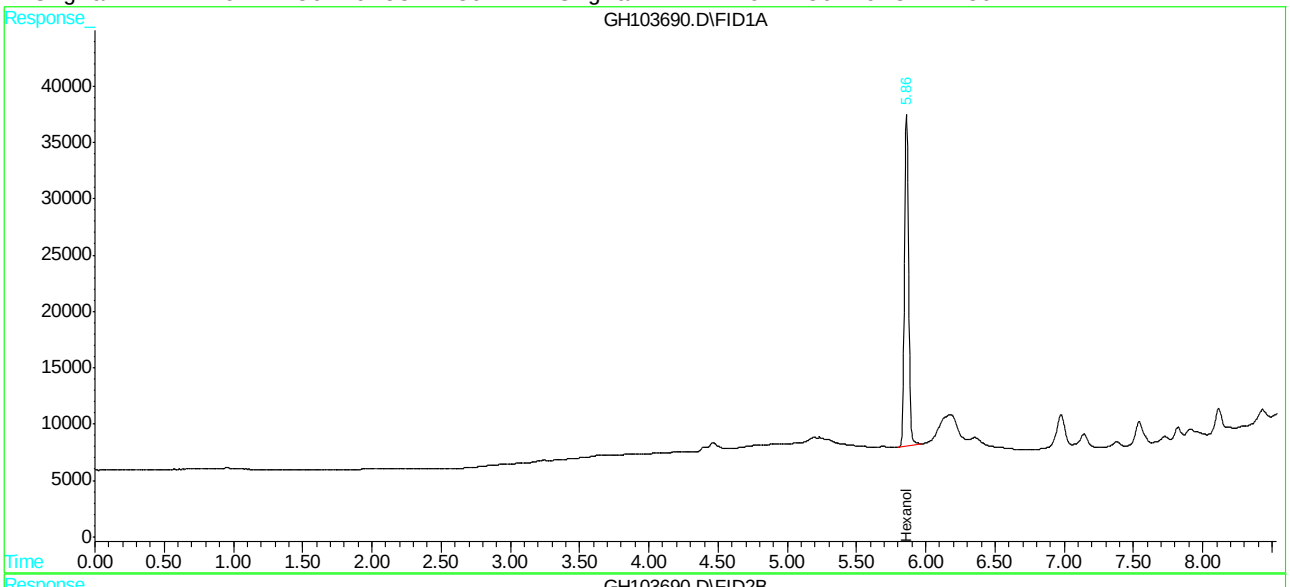
Quantitation Report (QT Reviewed)

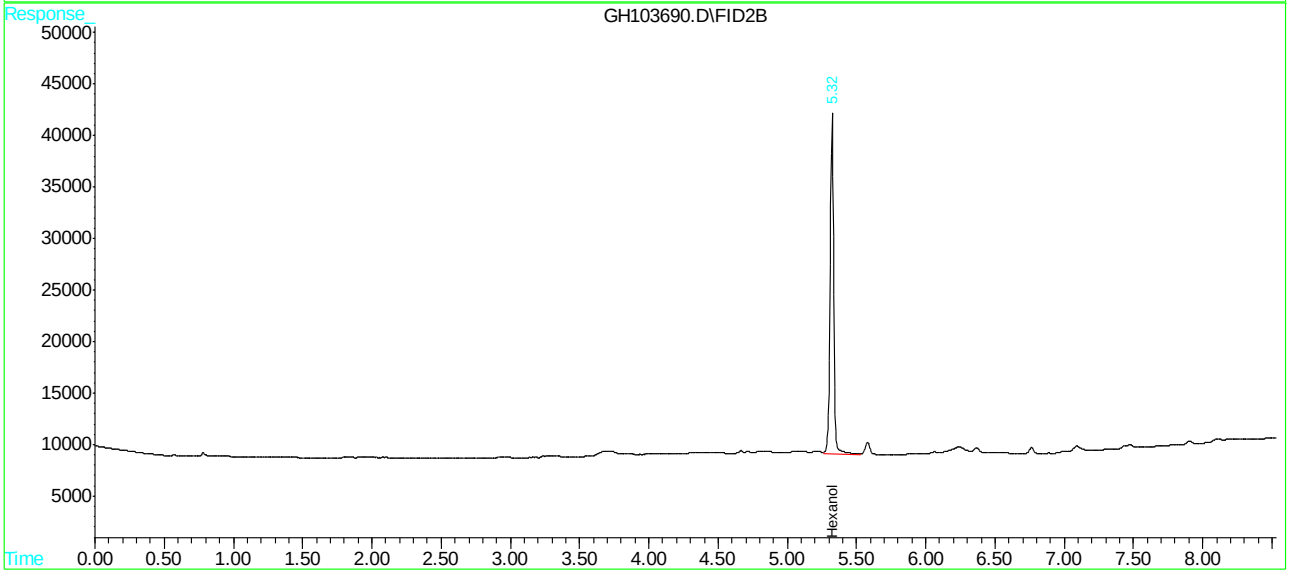
```
Data File : C:\HPCHEM\1\DATA\DATA1036\GH103690.D\FID1A.CH Vial: 20
Acq On    : 11 Mar 2016   1:25 pm                    Operator: XULIU
Sample    : JC15518-6                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103690.D\FID2B.CH Vial: 20
Acq On    : 11 Mar 2016   1:42 pm                    Operator: XULIU
Sample    : JC15518-6                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:37 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\DATA1036\GH103691.D\FID1A.CH Vial: 21
Acq On    : 11 Mar 2016   1:42 pm                    Operator: XULIU
Sample    : JC15518-7                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103691.D\FID2B.CH Vial: 21
Acq On    : 11 Mar 2016   1:56 pm                    Operator: XULIU
Sample    : JC15518-7                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:38 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.33    624671   623266 4897.778  4887.620
  Spiked Amount   5000.000                  Recovery     =   97.96%    97.75%

Target Compounds
```

11.1.7

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103691.D  MGH5193.M      Wed Mar 16 09:38:29 2016      GCGH
```

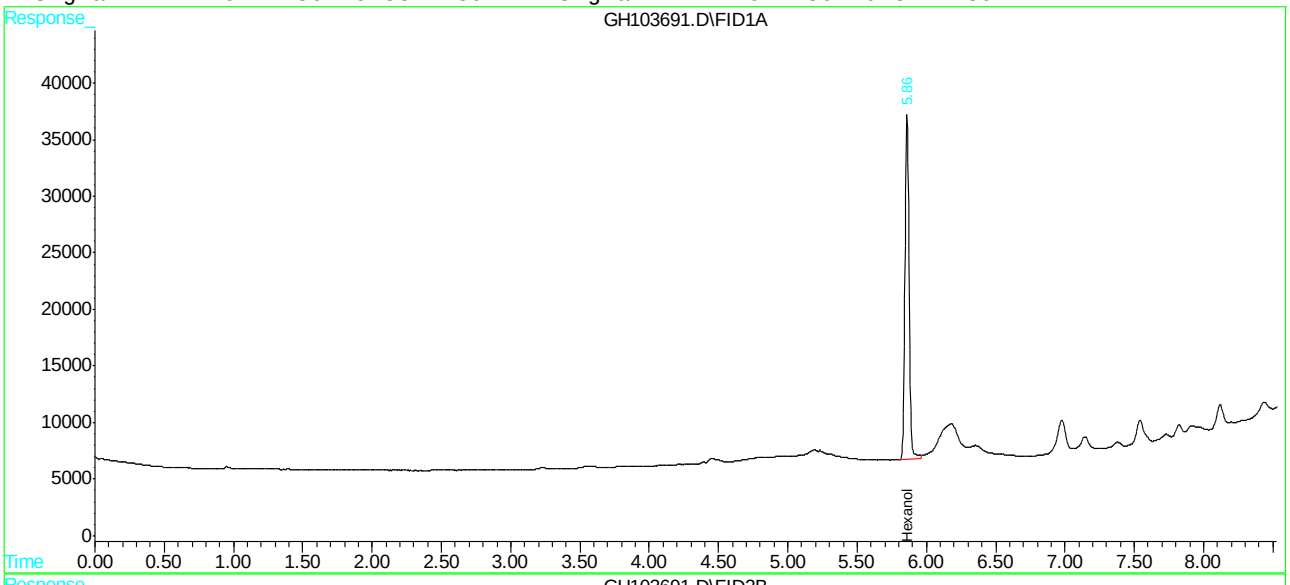
Quantitation Report (QT Reviewed)

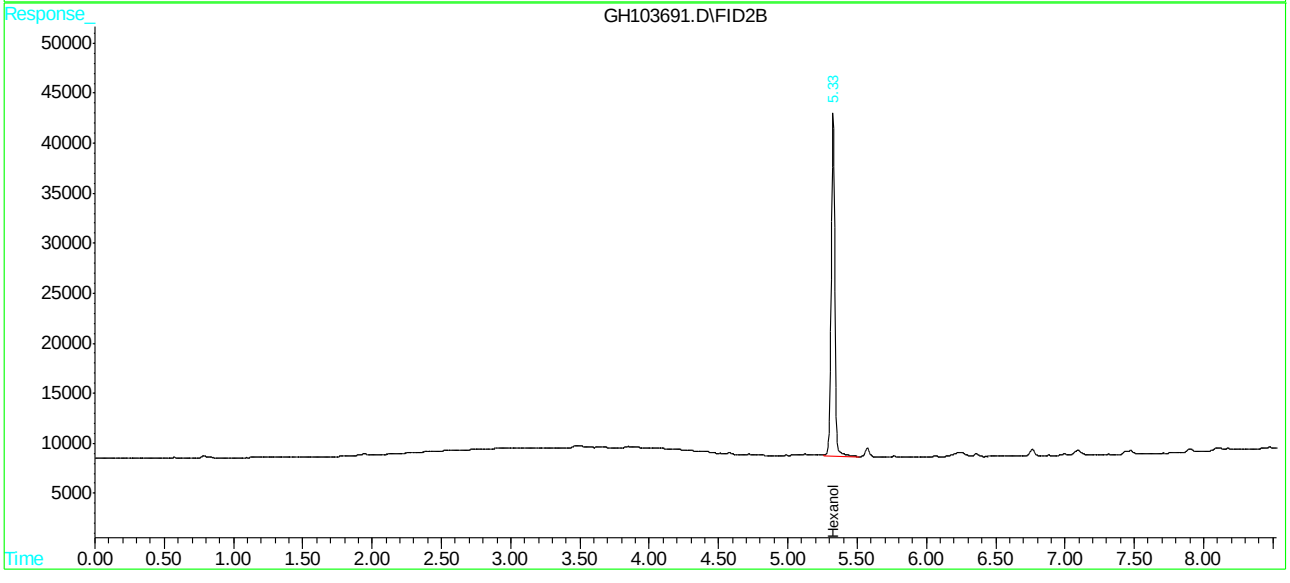
```
Data File : C:\HPCHEM\1\DATA\DATA1036\GH103691.D\FID1A.CH Vial: 21
Acq On    : 11 Mar 2016   1:42 pm                    Operator: XULIU
Sample    : JC15518-7                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1036\GH103691.D\FID2B.CH Vial: 21
Acq On    : 11 Mar 2016   1:56 pm                    Operator: XULIU
Sample    : JC15518-7                                Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 16  9:38 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103692.D\FID1A.CH          Vial: 22
Acq On    : 11 Mar 2016   1:56 pm                     Operator: XULIU
Sample    : JC15518-8                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103692.D\FID2B.CH          Vial: 22
Acq On    : 11 Mar 2016   2:11 pm                     Operator: XULIU
Sample    : JC15518-8                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:12 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    616962   618314 4837.337  4848.788
  Spiked Amount   5000.000                  Recovery     =   96.75%    96.98%

Target Compounds
```

11.1.8

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103692.D  MGH5193.M      Mon Mar 14 08:19:30 2016      GCGH
```

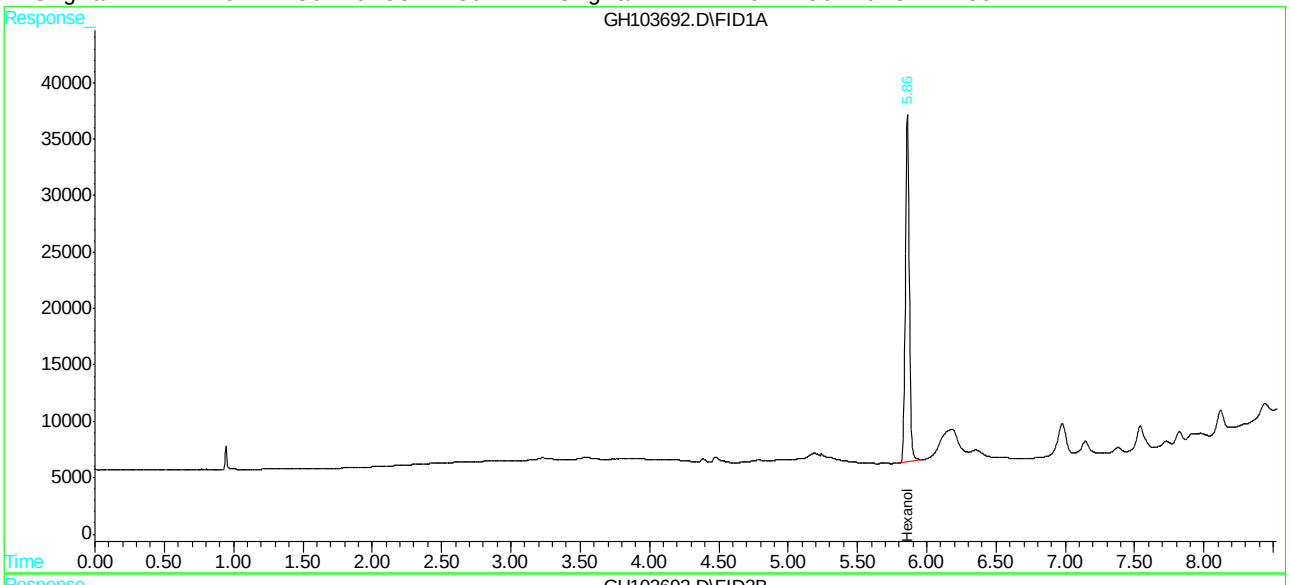
Quantitation Report (QT Reviewed)

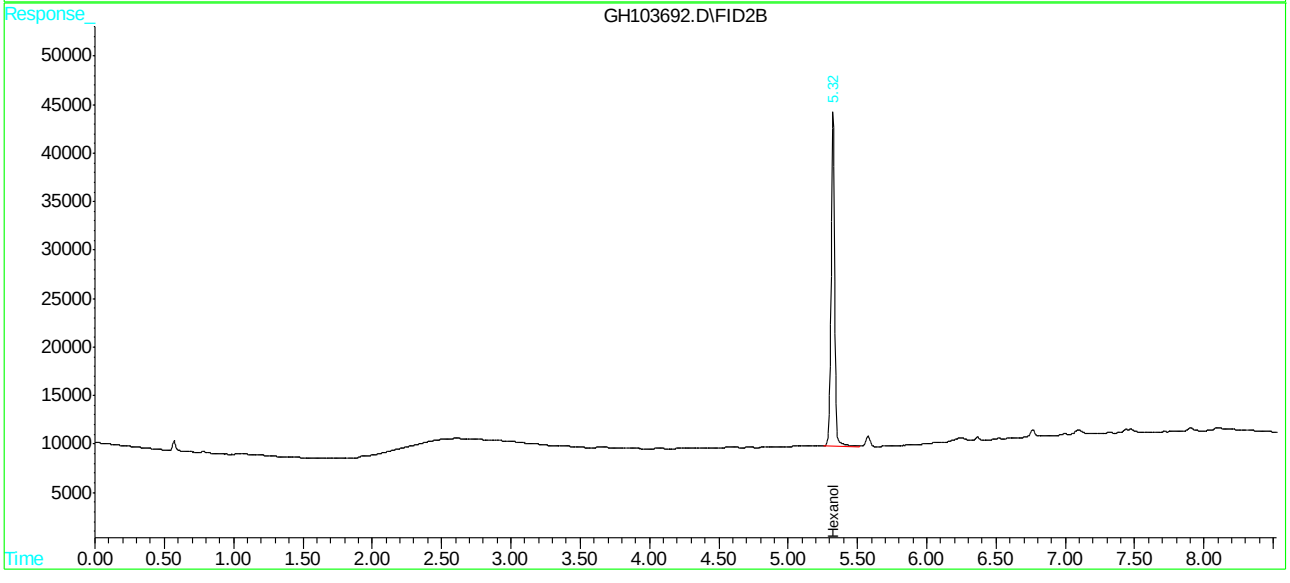
Data File : C:\HPCHEM\1\DATA\GH103692.D\FID1A.CH Vial: 22
Acq On : 11 Mar 2016 1:56 pm Operator: XULIU
Sample : JC15518-8 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103692.D\FID2B.CH Vial: 22
Acq On : 11 Mar 2016 2:11 pm Operator: XULIU
Sample : JC15518-8 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 14 8:12 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103696.D\FID1A.CH          Vial: 1
Acq On    : 11 Mar 2016   4:14 pm                     Operator: XULIU
Sample    : JC15518-9                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103696.D\FID2B.CH          Vial: 1
Acq On    : 11 Mar 2016   4:28 pm                     Operator: XULIU
Sample    : JC15518-9                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:46 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    628002   635579 4923.899  4984.180
  Spiked Amount   5000.000                  Recovery     =   98.48%    99.68%

Target Compounds
```

11.1.9

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103696.D  MGH5193.M      Mon Mar 14 08:53:29 2016      GCGH
```


SGS ACCUTEST JC15518

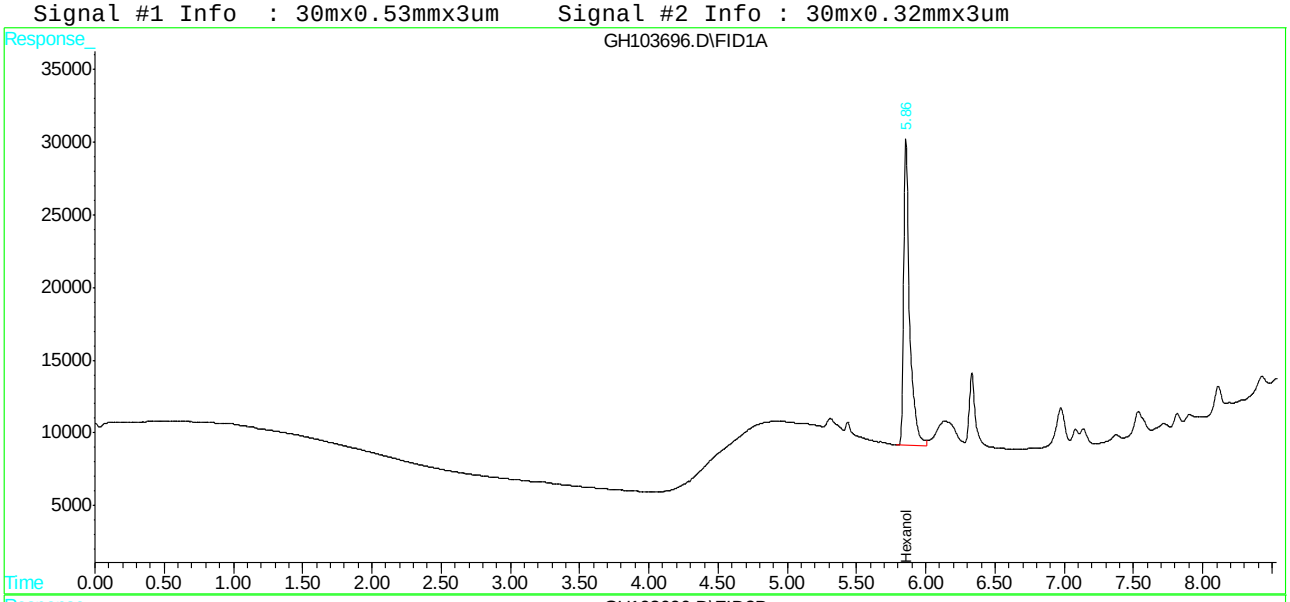
Quantitation Report (QT Reviewed)

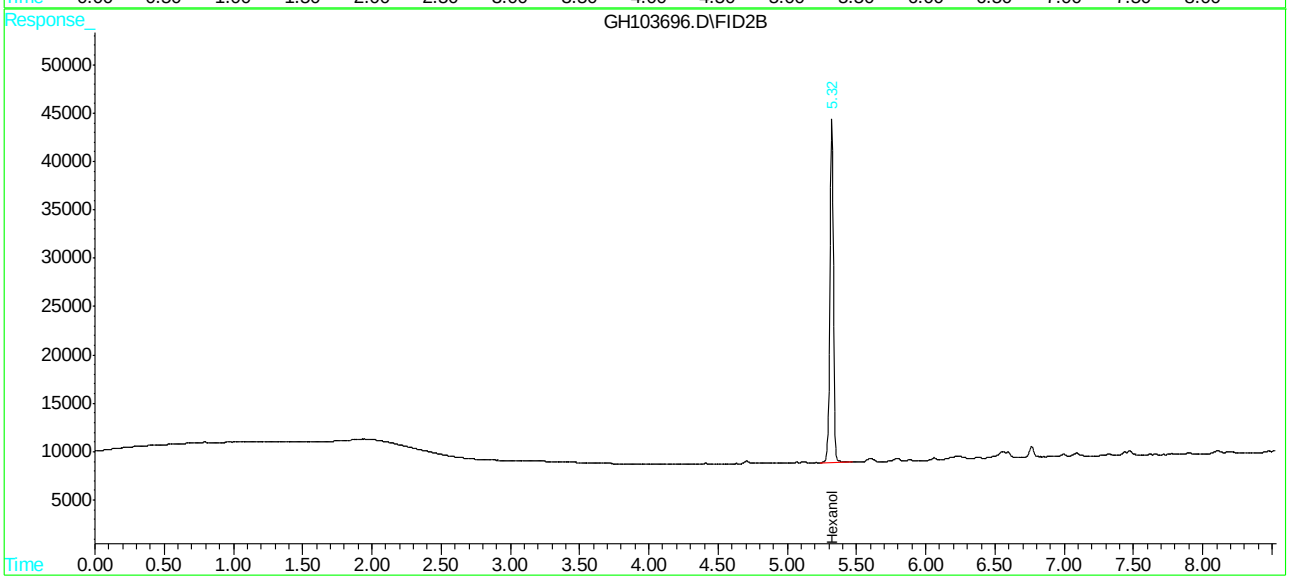
```
Data File : C:\HPCHEM\1\DATA\GH103696.D\FID1A.CH          Vial: 1
Acq On    : 11 Mar 2016   4:14 pm                     Operator: XULIU
Sample    : JC15518-9                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103696.D\FID2B.CH          Vial: 1
Acq On    : 11 Mar 2016   4:28 pm                     Operator: XULIU
Sample    : JC15518-9                                 Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:46 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103674.D\FID1A.CH          Vial: 95
Acq On    : 11 Mar 2016   9:05 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103674.D\FID2B.CH          Vial: 95
Acq On    : 11 Mar 2016   9:20 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11  9:59 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 08:58:41 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    579291   555487 4541.973  4356.099
  Spiked Amount   5000.000                  Recovery     =   90.84%    87.12%

Target Compounds
```

11.2.1

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103674.D  MGH5193.M      Fri Mar 11 10:11:31 2016      GCGH
```


SGS ACCUTEST JC15518

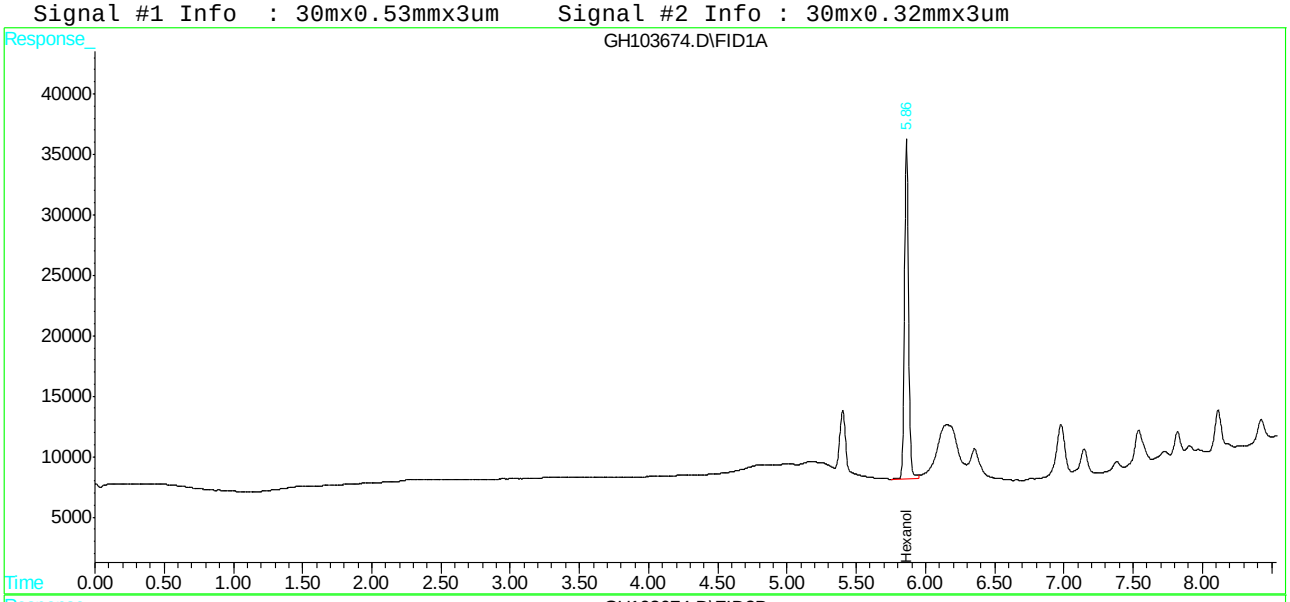
Quantitation Report (QT Reviewed)

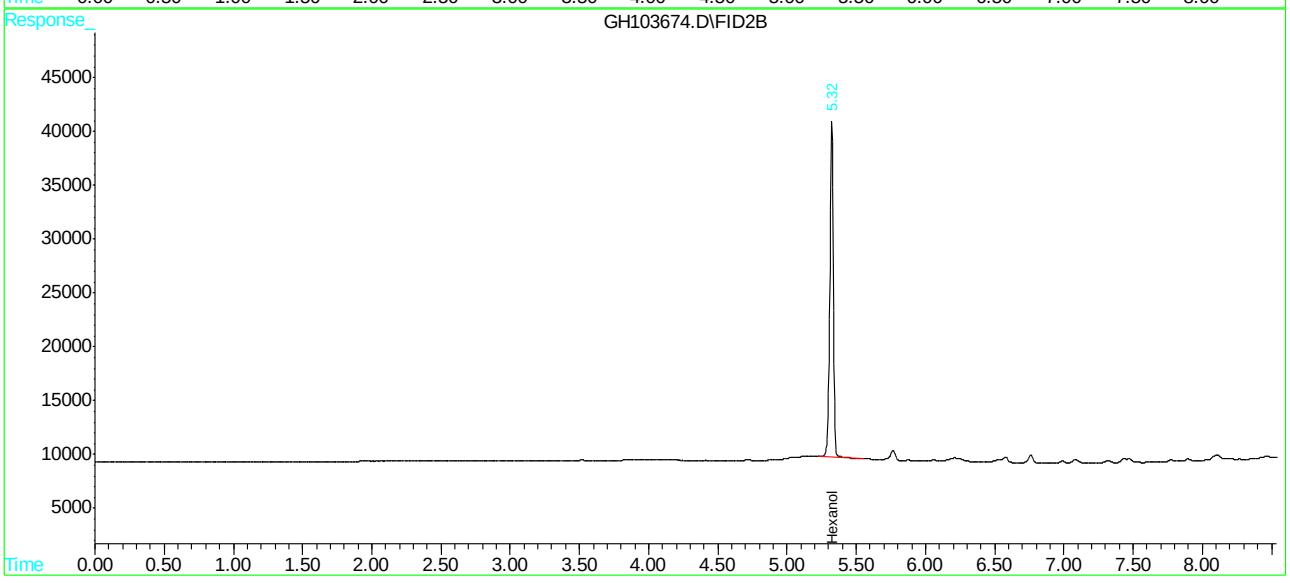
```
Data File : C:\HPCHEM\1\DATA\GH103674.D\FID1A.CH          Vial: 95
Acq On    : 11 Mar 2016   9:05 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103674.D\FID2B.CH          Vial: 95
Acq On    : 11 Mar 2016   9:20 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11  9:59 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 08:58:41 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103684.D\FID1A.CH          Vial: 91
Acq On    : 11 Mar 2016  11:54 am                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103684.D\FID2B.CH          Vial: 91
Acq On    : 11 Mar 2016  12:09 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  7:58 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.33    574561   546692 4504.885  4287.134
  Spiked Amount   5000.000                  Recovery     =   90.10%    85.74%

Target Compounds
```

11.2.2

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103684.D  MGH5193.M      Mon Mar 14 08:41:12 2016      GCGH
```


SGS ACCUTEST JC15518

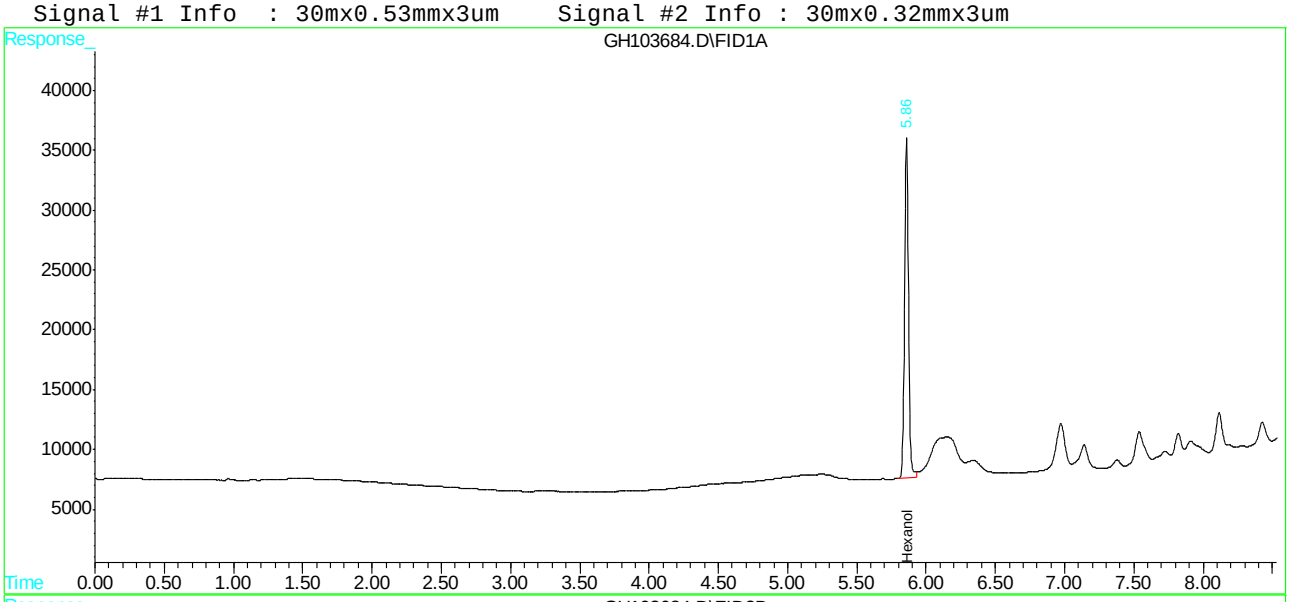
Quantitation Report (QT Reviewed)

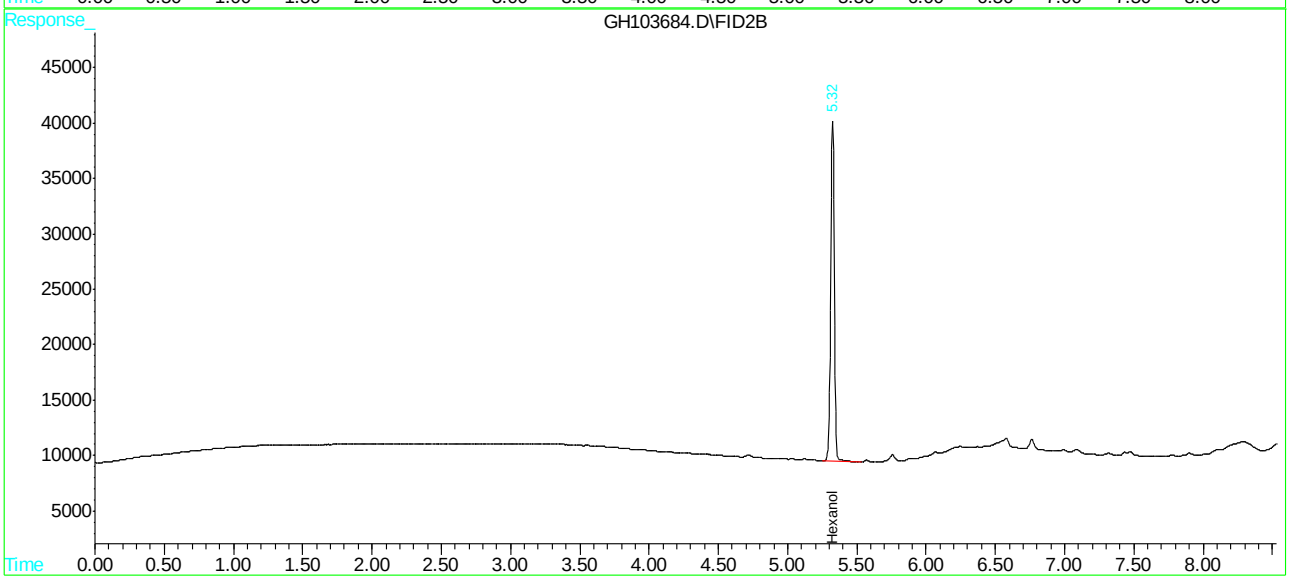
```
Data File : C:\HPCHEM\1\DATA\GH103684.D\FID1A.CH          Vial: 91
Acq On    : 11 Mar 2016  11:54 am                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103684.D\FID2B.CH          Vial: 91
Acq On    : 11 Mar 2016  12:09 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  7:58 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103695.D\FID1A.CH          Vial: 91
Acq On    : 11 Mar 2016   3:59 pm                     Operator: XULIU
Sample    : MB4                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103695.D\FID2B.CH          Vial: 91
Acq On    : 11 Mar 2016   4:14 pm                     Operator: XULIU
Sample    : MB4                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:45 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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
10) S   Hexanol           5.86   5.32    547880   534679 4295.697  4192.926
  Spiked Amount   5000.000                  Recovery     =   85.91%    83.86%

Target Compounds
```

11.2.3

11

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH103695.D  MGH5193.M      Mon Mar 14 08:53:19 2016      GCGH
```


SGS ACCUTEST JC15518

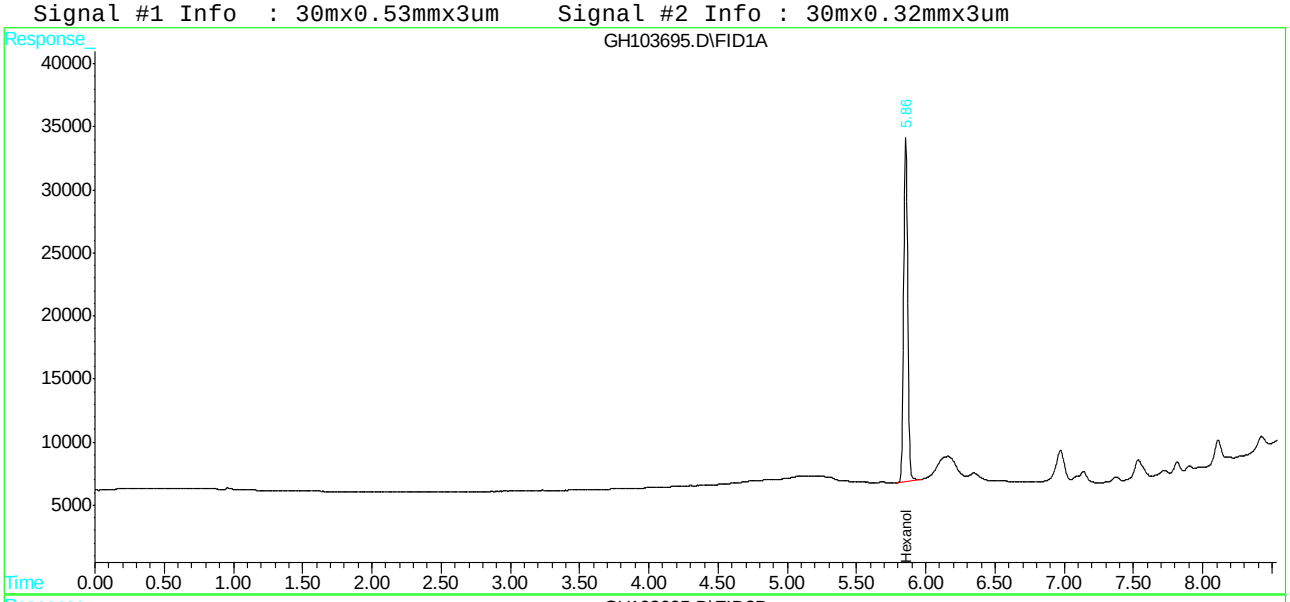
Quantitation Report (QT Reviewed)

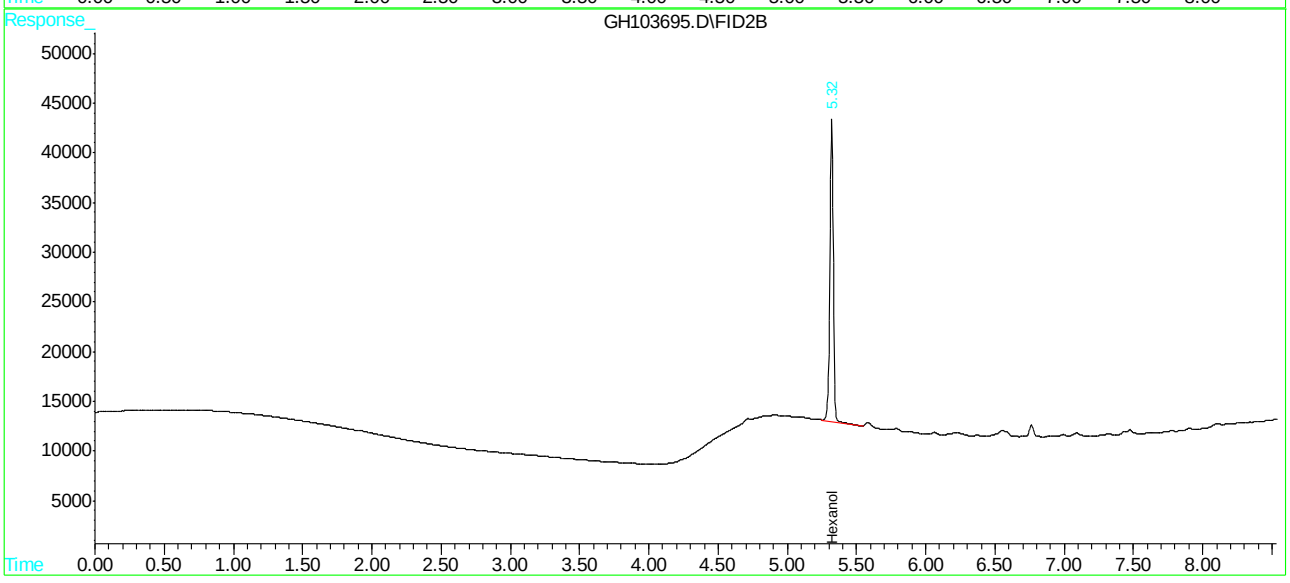
```
Data File : C:\HPCHEM\1\DATA\GH103695.D\FID1A.CH          Vial: 91
Acq On    : 11 Mar 2016   3:59 pm                     Operator: XULIU
Sample    : MB4                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103695.D\FID2B.CH          Vial: 91
Acq On    : 11 Mar 2016   4:14 pm                     Operator: XULIU
Sample    : MB4                                       Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:45 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103675.D\FID1A.CH          Vial: 96
Acq On    : 11 Mar 2016   9:20 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103675.D\FID2B.CH          Vial: 96
Acq On    : 11 Mar 2016   9:34 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 10:11 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 08:58:41 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.86	5.32	578069	558746	4532.391	4381.658
	Spiked Amount 5000.000			Recovery	=	90.65%	87.63%
	Target Compounds						
1)	Methanol	1.40	0.79	82683	70533	4737.542	4062.014
2)	Ethanol	1.82	1.02	113185	104687	5043.887	4745.181
3)	Tert-Butyl Alcoh	2.49	1.45	164415	156308	4822.655	4886.957
4)	1-Propanol	2.96	1.76	146064	136558	5025.314	4750.251
5)	2-Propanol	2.20	1.24	123132	113049	5009.435	4845.727
7)	Isobutanol	3.79	2.69	167789	156987	4958.412	4867.008
8)	1-Butanol	4.21	3.18	158815	155611	4751.302	4386.258
9)	2-Butanol	3.40	2.32	147275	138092	4796.317	4822.112

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

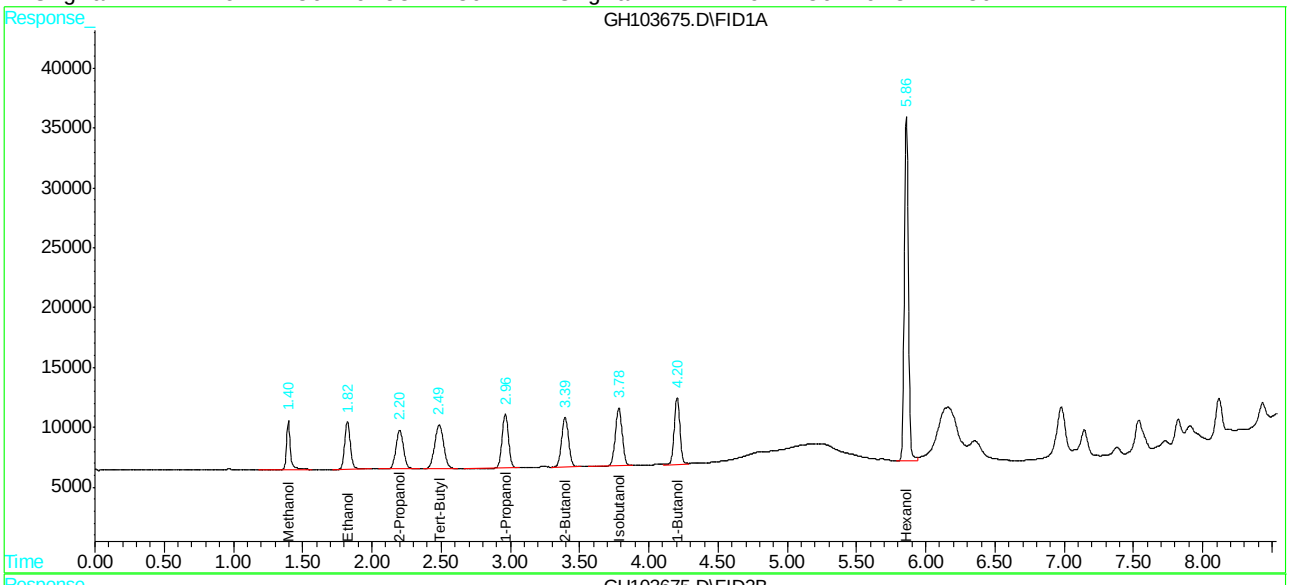
Quantitation Report (QT Reviewed)

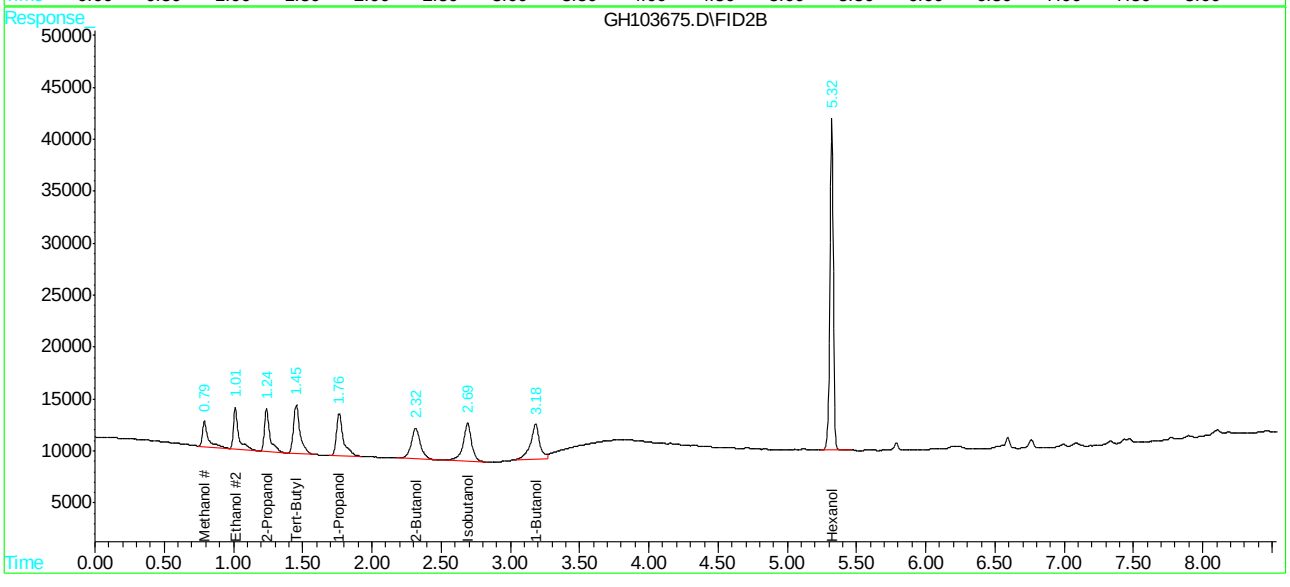
```
Data File : C:\HPCHEM\1\DATA\GH103675.D\FID1A.CH          Vial: 96
Acq On    : 11 Mar 2016   9:20 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103675.D\FID2B.CH          Vial: 96
Acq On    : 11 Mar 2016   9:34 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 10:11 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 08:58:41 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH103678.D\FID1A.CH Vial: 17
Acq On : 11 Mar 2016 10:07 am Operator: XULIU
Sample : JC15518-1MS Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103678.D\FID2B.CH Vial: 17
Acq On : 11 Mar 2016 10:25 am Operator: XULIU
Sample : JC15518-1MS Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 11 13:26 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:35:03 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.87	5.32	568151	578698	4454.631	4538.124
Spiked Amount	5000.000			Recovery	=	89.09%	90.76%
	Target Compounds						
1)	Methanol	1.44	0.79	66370	83924	3802.873	4833.214
2)	Ethanol	1.87	1.02	116931	114791	5210.803	5203.169
3)	Tert-Butyl Alcoh	2.52	1.46	181458	158699	5322.561	4961.710
4)	1-Propanol	2.99	1.76	132175	143248	4547.466	4982.953
5)	2-Propanol	2.24	1.24	130957	119506	5327.815	5122.486
7)	Isobutanol	3.80	2.69	156528	154104	4625.634	4777.627
8)	1-Butanol	4.22	3.18	142797	202841	4272.102	5717.545
9)	2-Butanol	3.42	2.32	145717	143907	4745.552	5025.147

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

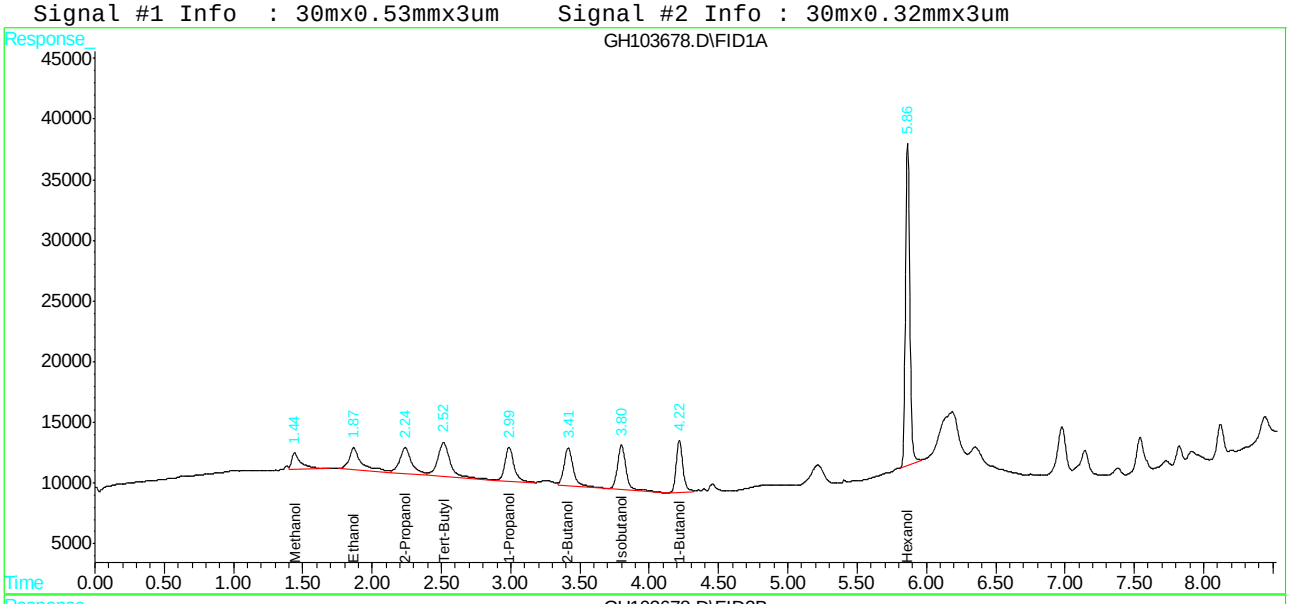
Quantitation Report (QT Reviewed)

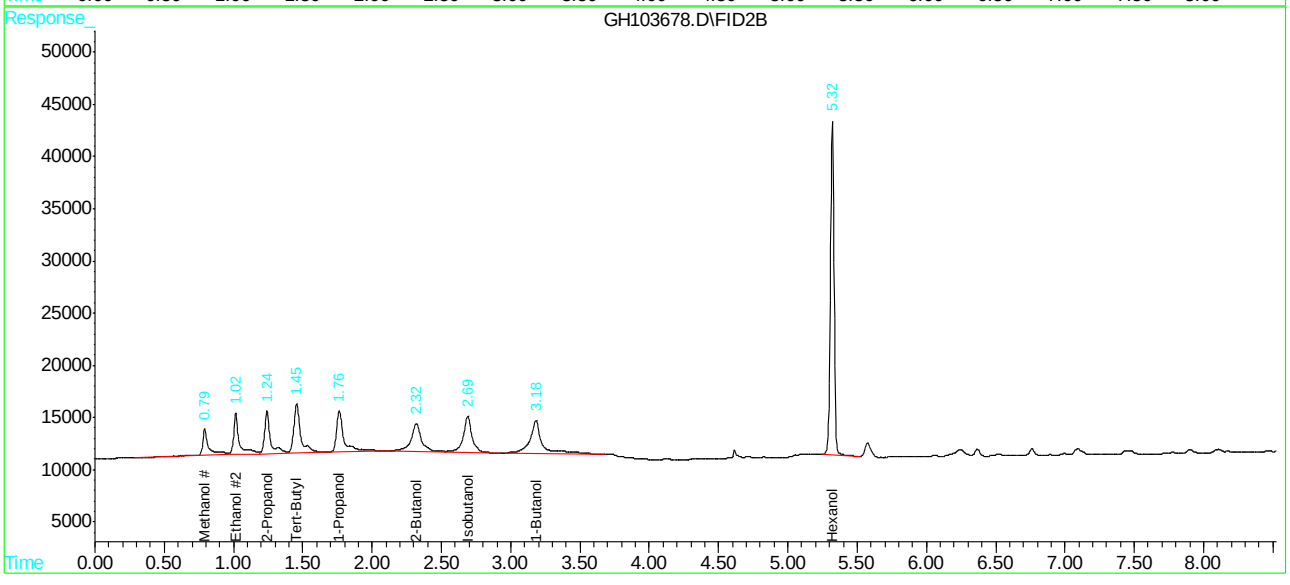
```
Data File : C:\HPCHEM\1\DATA\GH103678.D\FID1A.CH          Vial: 17
Acq On    : 11 Mar 2016  10:07 am                     Operator: XULIU
Sample    : JC15518-1MS                               Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103678.D\FID2B.CH          Vial: 17
Acq On    : 11 Mar 2016  10:25 am                     Operator: XULIU
Sample    : JC15518-1MS                               Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 13:26 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:35:03 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103679.D\FID1A.CH Vial: 18
Acq On : 11 Mar 2016 10:25 am Operator: XULIU
Sample : JC15518-1MSD Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103679.D\FID2B.CH Vial: 18
Acq On : 11 Mar 2016 10:39 am Operator: XULIU
Sample : JC15518-1MSD Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 11 13:26 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:44:30 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.86	5.33	501306	500148	3930.530	3922.136
Spiked Amount	5000.000			Recovery	=	78.61%	78.44%
	Target Compounds						
1)	Methanol	1.40	0.79	89222	71924	5112.230	4142.081
2)	Ethanol	1.82	1.02	114726	101854	5112.556	4616.751
3)	Tert-Butyl Alcoh	2.48	1.46	171352	170396	5026.144	5327.430
4)	1-Propanol	2.96	1.77	146448	139369	5038.504	4848.035
5)	2-Propanol	2.20	1.24	125935	131302	5123.473	5628.138
7)	Isobutanol	3.78	2.69	176114	157479	5204.415	4882.271
8)	1-Butanol	4.21	3.18	158332	144135	4736.853	4062.792
9)	2-Butanol	3.40	2.31	180723	141809	5885.594	4951.912

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH103679.D MGH5193.M Fri Mar 11 13:26:36 2016 GCGH

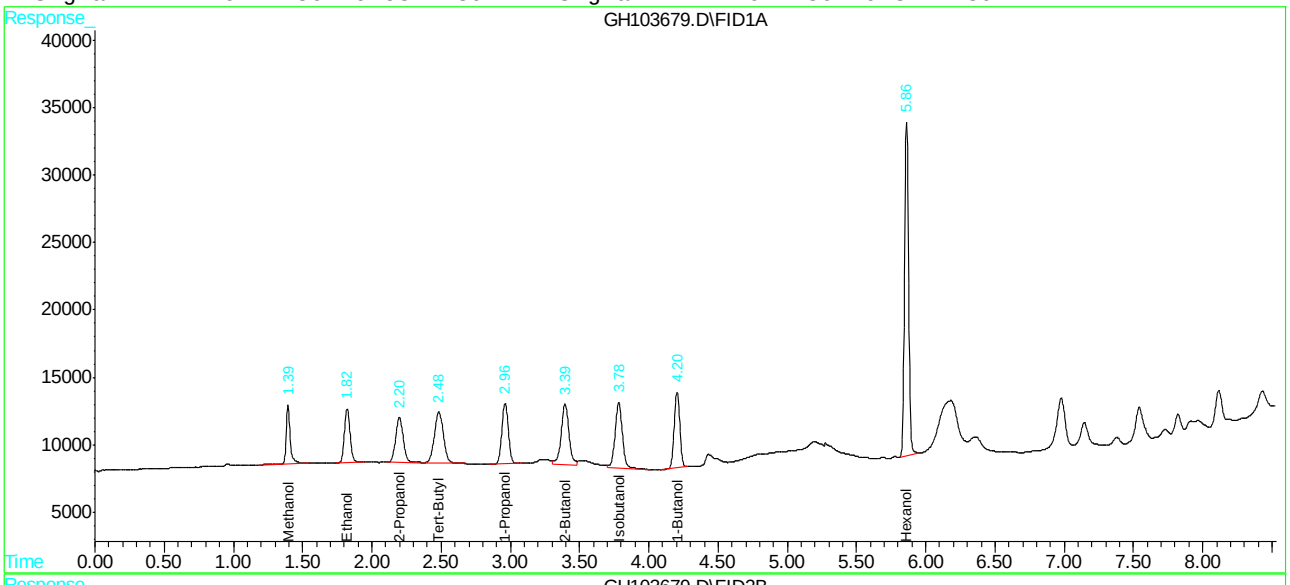
Quantitation Report (QT Reviewed)

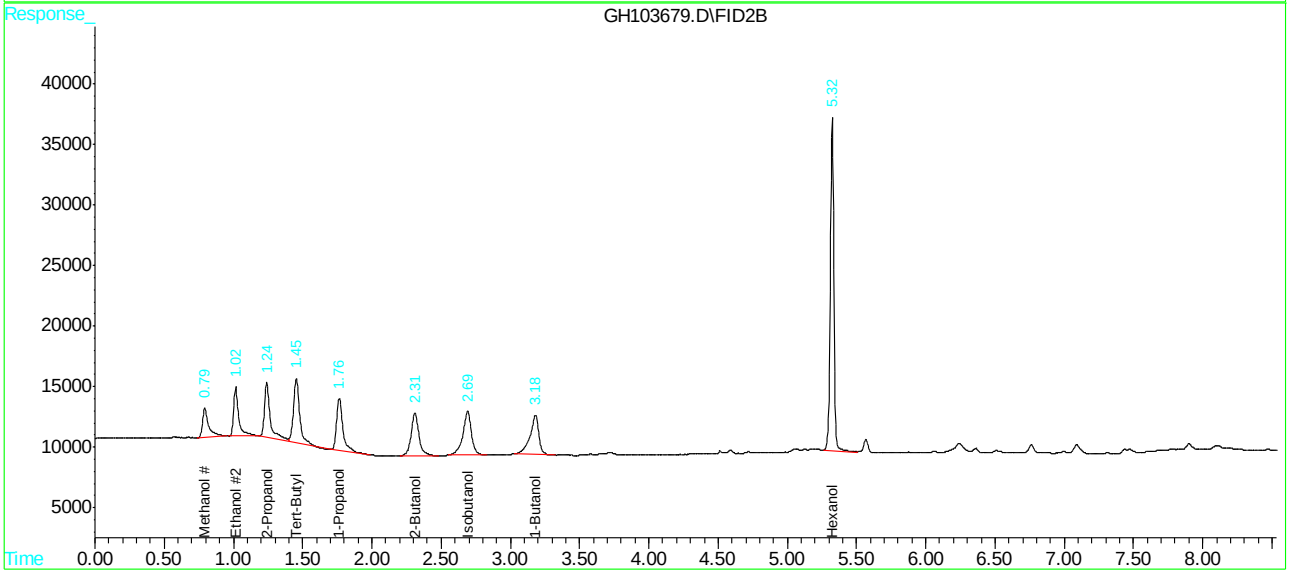
Data File : C:\HPCHEM\1\DATA\GH103679.D\FID1A.CH Vial: 18
Acq On : 11 Mar 2016 10:25 am Operator: XULIU
Sample : JC15518-1MSD Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103679.D\FID2B.CH Vial: 18
Acq On : 11 Mar 2016 10:39 am Operator: XULIU
Sample : JC15518-1MSD Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 11 13:26 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:44:30 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 03/01/16 14:34

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103536.D\FID1A.CH          Vial: 17
Acq On    : 29 Feb 2016   9:41 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103536.D\FID2B.CH          Vial: 17
Acq On    : 29 Feb 2016   9:56 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:41 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:34:22 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.89	5.34	521870	515664	4414.308	4449.995
	Spiked Amount 5000.000			Recovery	=	88.29%	89.00%
	Target Compounds						
1)	Methanol	1.43	0.80	18411	16136	1052.348	961.397
2)	Ethanol	1.86	1.02	22490	22670	971.203	1012.320
3)	Tert-Butyl Alcoh	2.52	1.47	37533	33699	1083.596	1045.494
4)	1-Propanol	3.00	1.78	30594	28909	1025.859	1001.376m
5)	2-Propanol	2.24	1.25	29488	24128	1177.659	1027.831
7)	Isobutanol	3.82	2.71	34848	31069	1012.693	960.595
8)	1-Butanol	4.24	3.19	36273	30738	1105.147	972.642
9)	2-Butanol	3.43	2.33	31759	29963	1039.954	1037.836

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

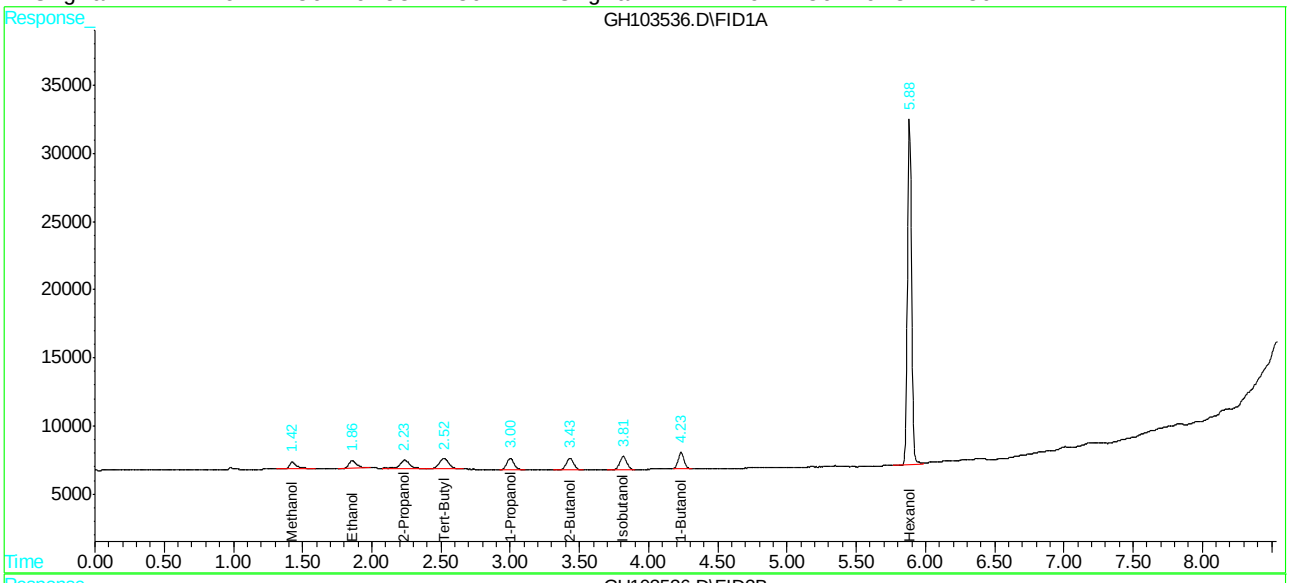
Quantitation Report (QT Reviewed)

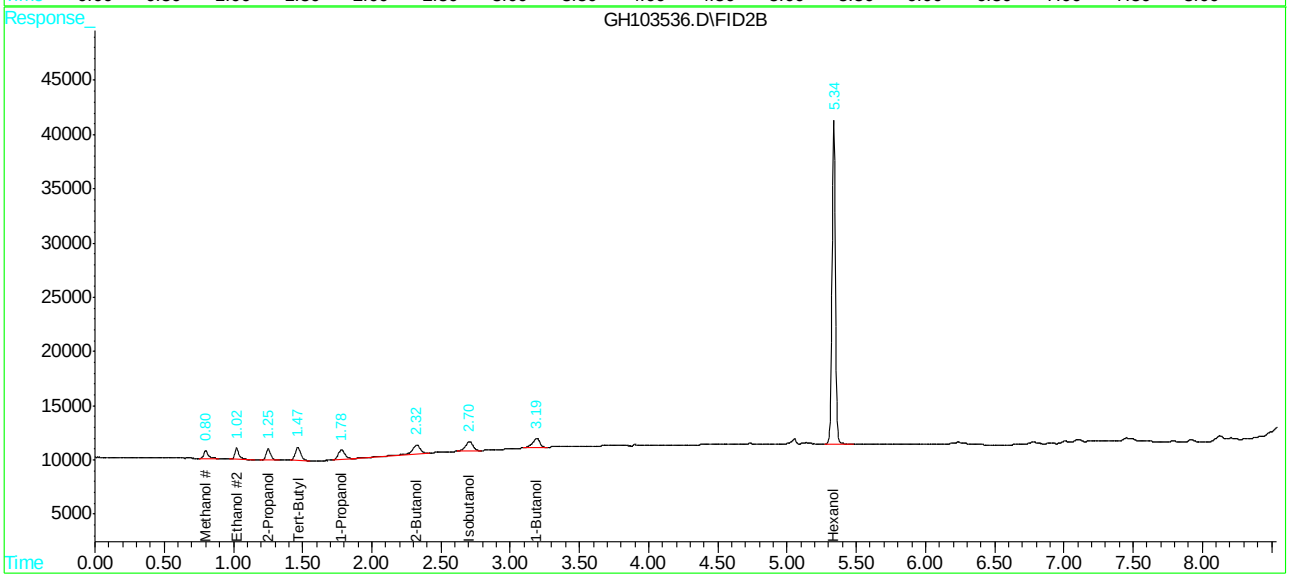
Data File : C:\HPCHEM\1\DATA\GH103536.D\FID1A.CH Vial: 17
Acq On : 29 Feb 2016 9:41 am Operator: XULIU
Sample : IC5193-1000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103536.D\FID2B.CH Vial: 17
Acq On : 29 Feb 2016 9:56 am Operator: XULIU
Sample : IC5193-1000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 29 13:41 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon Feb 29 13:34:22 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Manual Integration Approval Summary

Sample Number:	GGH5193-IC5193	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH103536.D	**Analyst approved:**	03/01/16 13:28 Xu Liu
Injection Time:	02/29/16 09:41	**Supervisor approved:**	03/01/16 14:34 Jessica Reitan-Chu

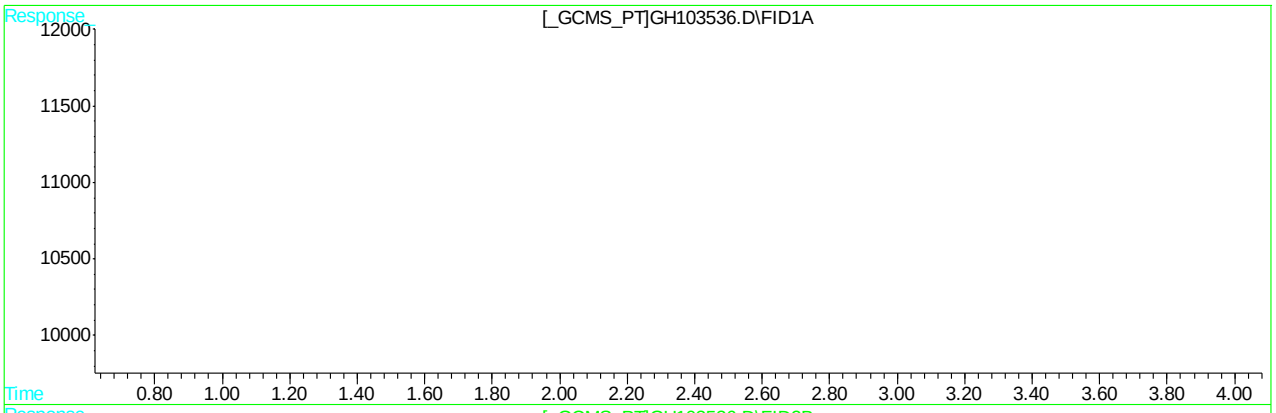
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Propyl Alcohol	71-23-8	2	1.78	Poorly defined baseline

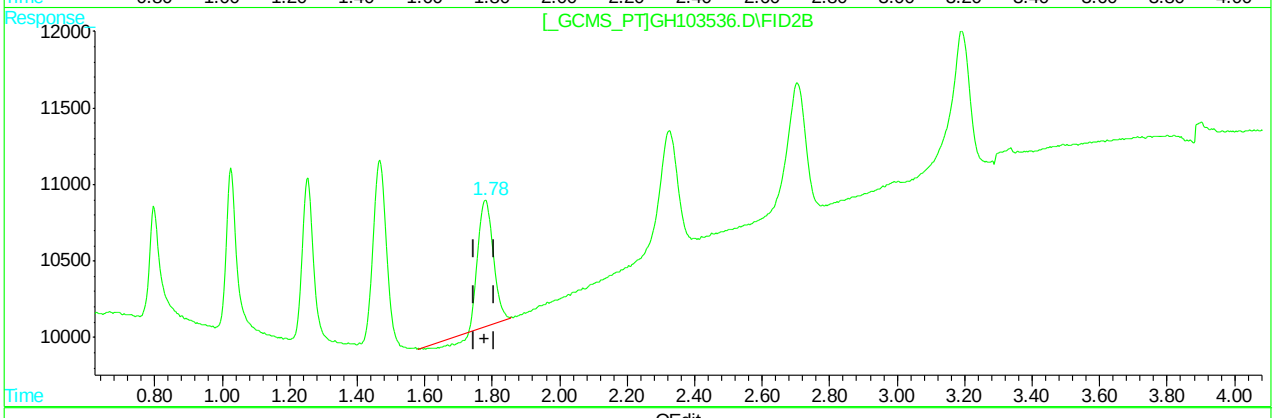
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103536.D\FID1A.CH          Vial: 17
Acq On    : 29 Feb 2016   9:41 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103536.D\FID2B.CH          Vial: 17
Acq On    : 29 Feb 2016   9:56 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:39 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:39:43 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

3.00min 1025.859PPB

response 30594

(4) 1-Propanol #2

1.78min 805.984PPB

response 23268

(+) = Expected Retention Time

GH103536.D MGH5193.M Mon Feb 29 13:40:46 2016 GCGH

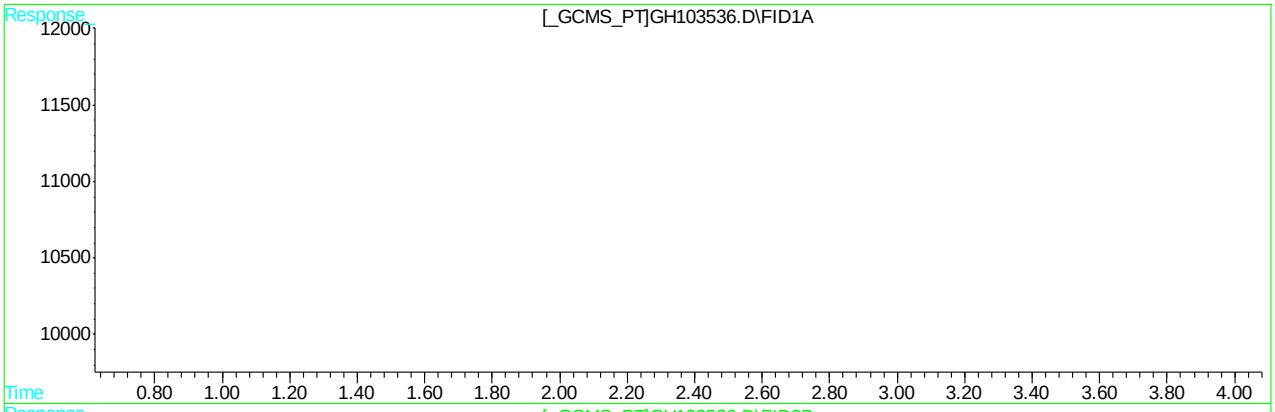
SGS ACCUTEST JC15518

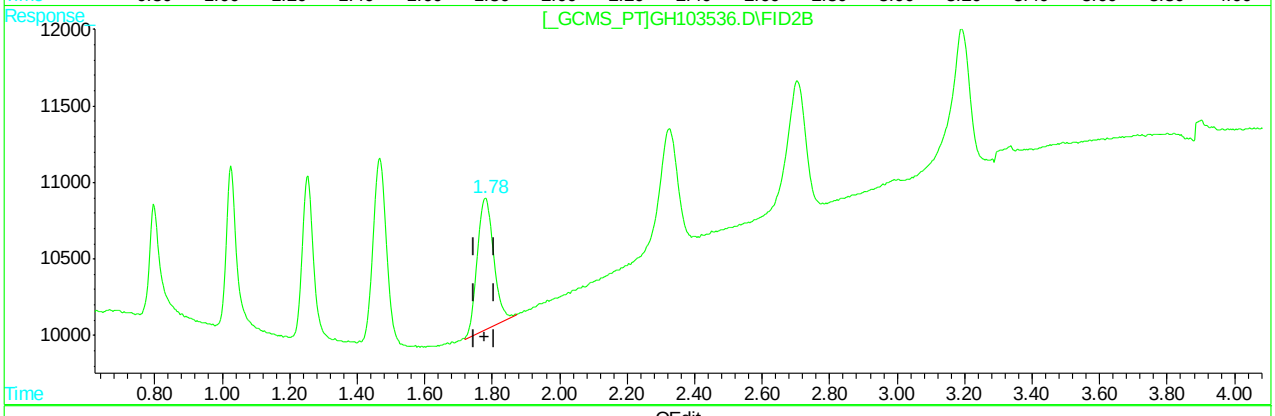
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103536.D\FID1A.CH          Vial: 17
Acq On    : 29 Feb 2016   9:41 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103536.D\FID2B.CH          Vial: 17
Acq On    : 29 Feb 2016   9:56 am                     Operator: XULIU
Sample    : IC5193-1000                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:39 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:39:43 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

3.00min 1025.859PPB

response 30594

(4) 1-Propanol #2

1.78min 1001.376PPB m

response 28909

(+) = Expected Retention Time

GH103536.D MGH5193.M Mon Feb 29 13:41:35 2016 GCGH

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103538.D\FID1A.CH          Vial: 19
Acq On    : 29 Feb 2016  10:10 am                     Operator: XULIU
Sample    : IC5193-10000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103538.D\FID2B.CH          Vial: 19
Acq On    : 29 Feb 2016  10:25 am                     Operator: XULIU
Sample    : IC5193-10000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:24 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 10:49:38 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.88	5.34	632380	618892	5290.958	5011.876
	Spiked Amount 5000.000			Recovery	=	105.82%	100.24%
	Target Compounds						
1)	Methanol	1.42	0.80	170293	171065	11684.918	11628.082
2)	Ethanol	1.85	1.02	235648	228413	11443.732	11055.620
3)	Tert-Butyl Alcoh	2.52	1.47	350977	331750	10799.667	10330.810
4)	1-Propanol	2.99	1.78	299088	292838	10599.555	10839.016
5)	2-Propanol	2.23	1.25	250373	240597	11170.240	10725.872
7)	Isobutanol	3.81	2.70	350529	337406	10985.588	10485.575
8)	1-Butanol	4.23	3.19	338910	326780	10764.220	10083.368
9)	2-Butanol	3.43	2.33	312227	298461	10912.214	11064.895

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

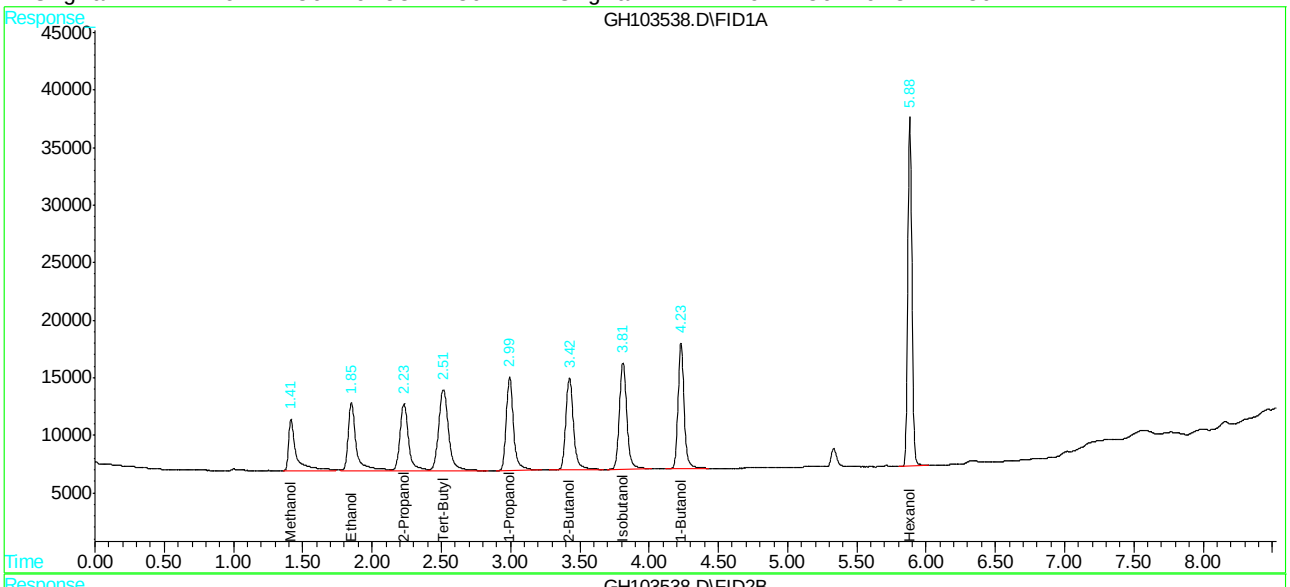
Quantitation Report (QT Reviewed)

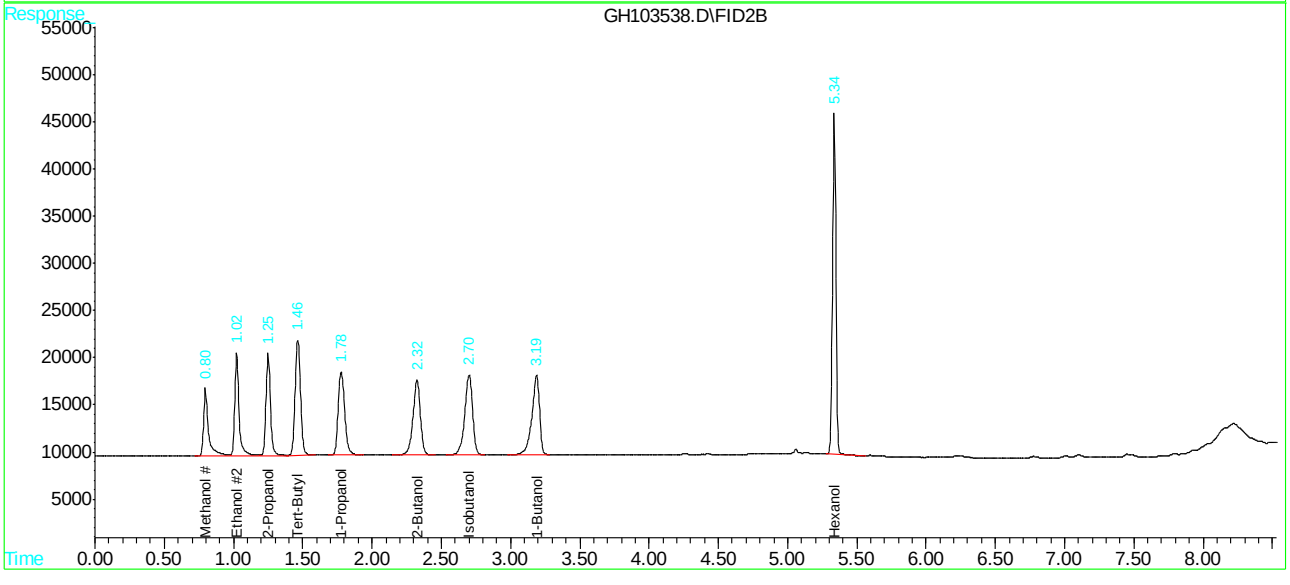
```
Data File : C:\HPCHEM\1\DATA\GH103538.D\FID1A.CH          Vial: 19
Acq On    : 29 Feb 2016  10:10 am                     Operator: XULIU
Sample    : IC5193-10000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103538.D\FID2B.CH          Vial: 19
Acq On    : 29 Feb 2016  10:25 am                     Operator: XULIU
Sample    : IC5193-10000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:24 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 10:49:38 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103539.D\FID1A.CH          Vial: 20
Acq On    : 29 Feb 2016  10:25 am                     Operator: XULIU
Sample    : IC5193-50000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103539.D\FID2B.CH          Vial: 20
Acq On    : 29 Feb 2016  10:39 am                     Operator: XULIU
Sample    : IC5193-50000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:25 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 10:49:38 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.89	5.34	753846	737708	6307.224	5974.064
	Spiked Amount 5000.000			Recovery	=	126.14%	119.48%
	Target Compounds						
1)	Methanol	1.42	0.80	831725	786308	57070.044	53449.149
2)	Ethanol	1.85	1.02	1091869	1046013	53024.163	50628.896
3)	Tert-Butyl Alcoh	2.51	1.47	1618405	1527069	49798.786	47553.501
4)	1-Propanol	2.99	1.78	1410633	1341483	49992.231	49653.259
5)	2-Propanol	2.23	1.25	1173173	1108753	52340.302	49428.497
7)	Isobutanol	3.82	2.70	1609558	1529443	50443.618	47530.526
8)	1-Butanol	4.23	3.20	1527185	1468644	48505.323	45317.541
9)	2-Butanol	3.43	2.32	1436581	1360726	50207.941	50446.386

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

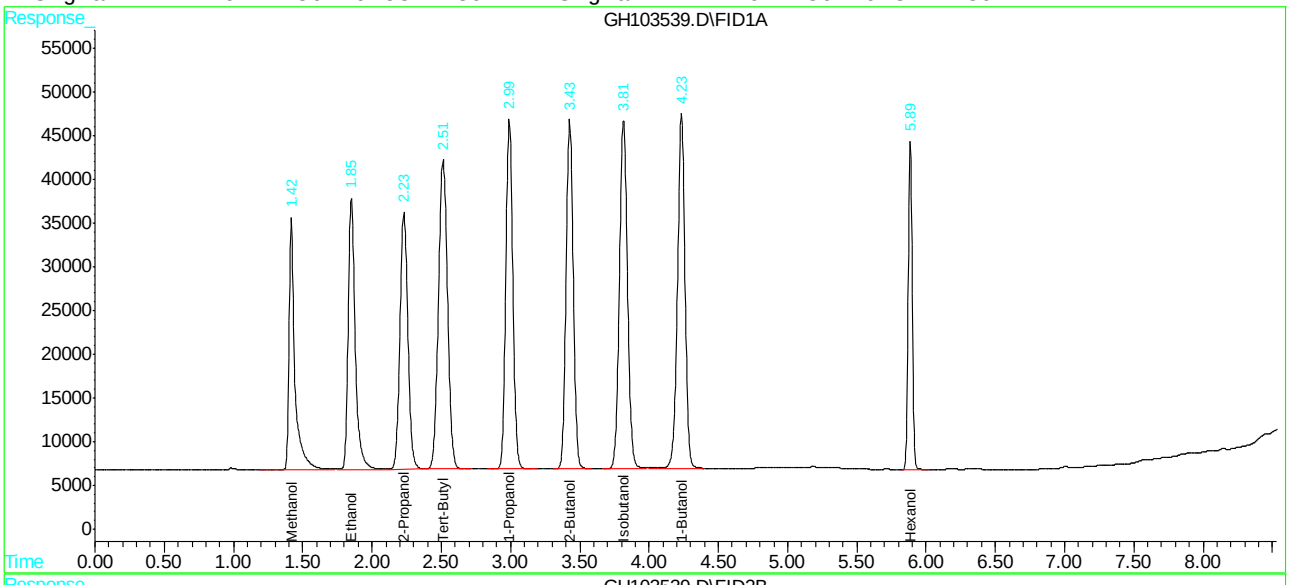
Quantitation Report (QT Reviewed)

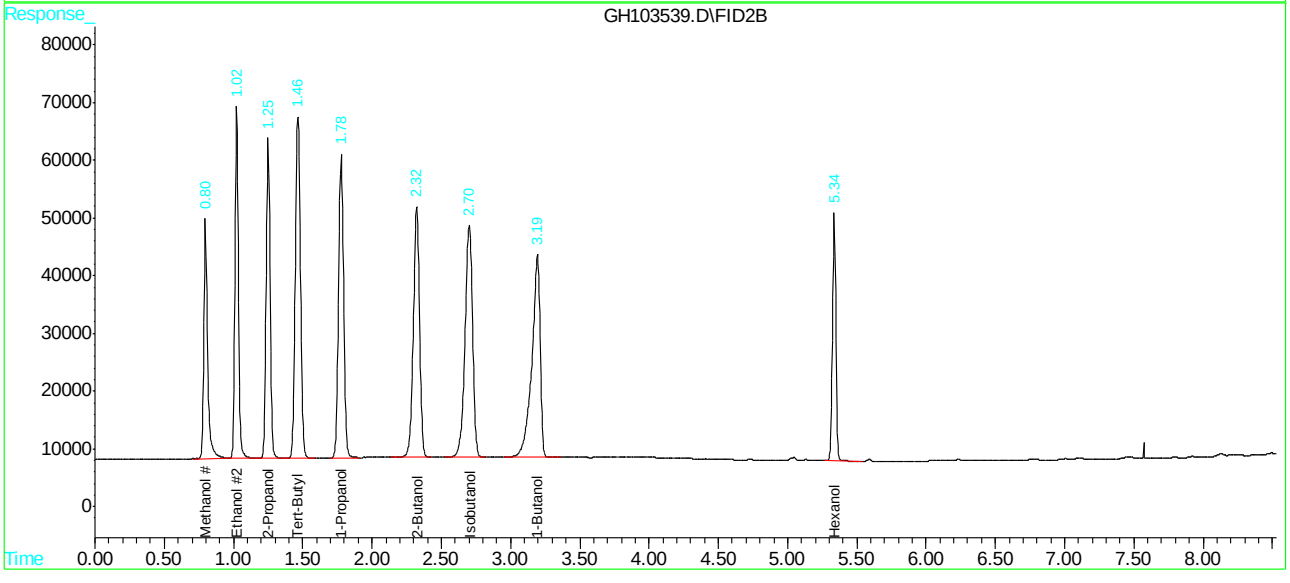
Data File : C:\HPCHEM\1\DATA\GH103539.D\FID1A.CH Vial: 20
Acq On : 29 Feb 2016 10:25 am Operator: XULIU
Sample : IC5193-50000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103539.D\FID2B.CH Vial: 20
Acq On : 29 Feb 2016 10:39 am Operator: XULIU
Sample : IC5193-50000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 29 13:25 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon Feb 29 10:49:38 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH103540.D\FID1A.CH Vial: 21
Acq On : 29 Feb 2016 10:39 am Operator: XULIU
Sample : IC5193-100000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103540.D\FID2B.CH Vial: 21
Acq On : 29 Feb 2016 10:57 am Operator: XULIU
Sample : IC5193-100000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 29 13:25 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon Feb 29 10:49:38 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.89	5.34	762379	756038	6378.624	6122.502
Spiked Amount	5000.000			Recovery	=	127.57%	122.45%
	Target Compounds						
1)	Methanol	1.42	0.80	1779651	1707777	122113.328	116085.808
2)	Ethanol	1.85	1.02	2349319	2287965	114089.375	110741.557
3)	Tert-Butyl Alcoh	2.51	1.46	3492408	3302691	107462.375	102847.039
4)	1-Propanol	2.99	1.78	3029689	2893990	107370.879	107117.291
5)	2-Propanol	2.23	1.25	2529033	2413432	112831.064	107591.432
7)	Isobutanol	3.82	2.70	3484319	3290247	109198.681	102251.057
8)	1-Butanol	4.23	3.19	3265181	3245269	103706.261	100138.368
9)	2-Butanol	3.43	2.32	3066220	2923878	107163.152	108397.288

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH103540.D MGH5193.M Mon Feb 29 13:25:30 2016 GCGH

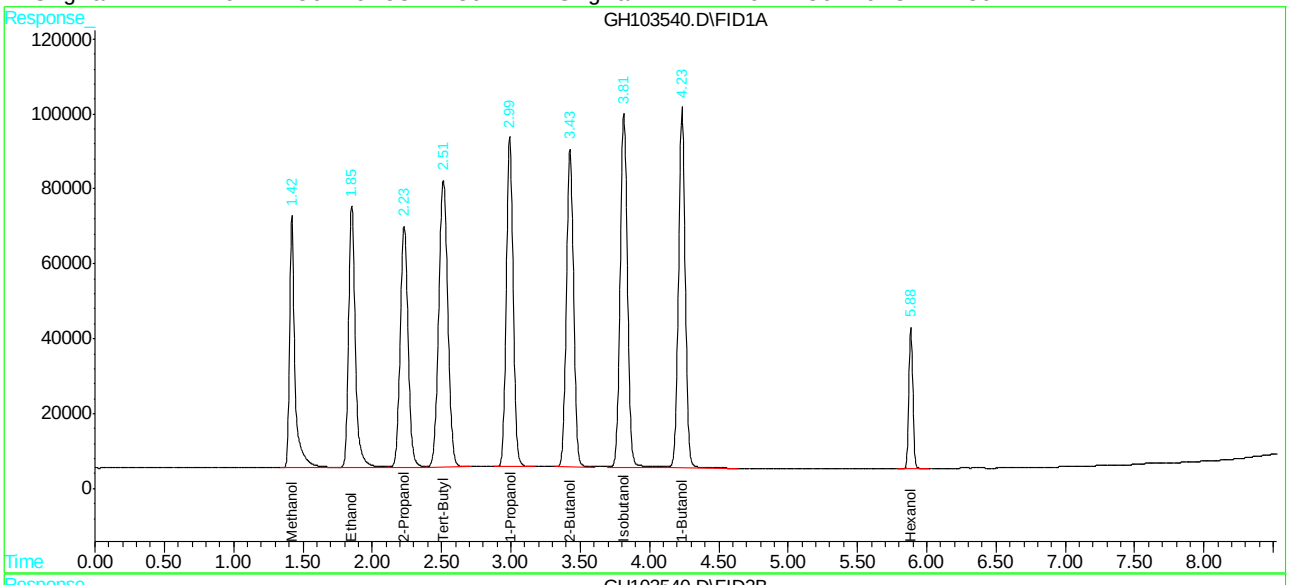
Quantitation Report (QT Reviewed)

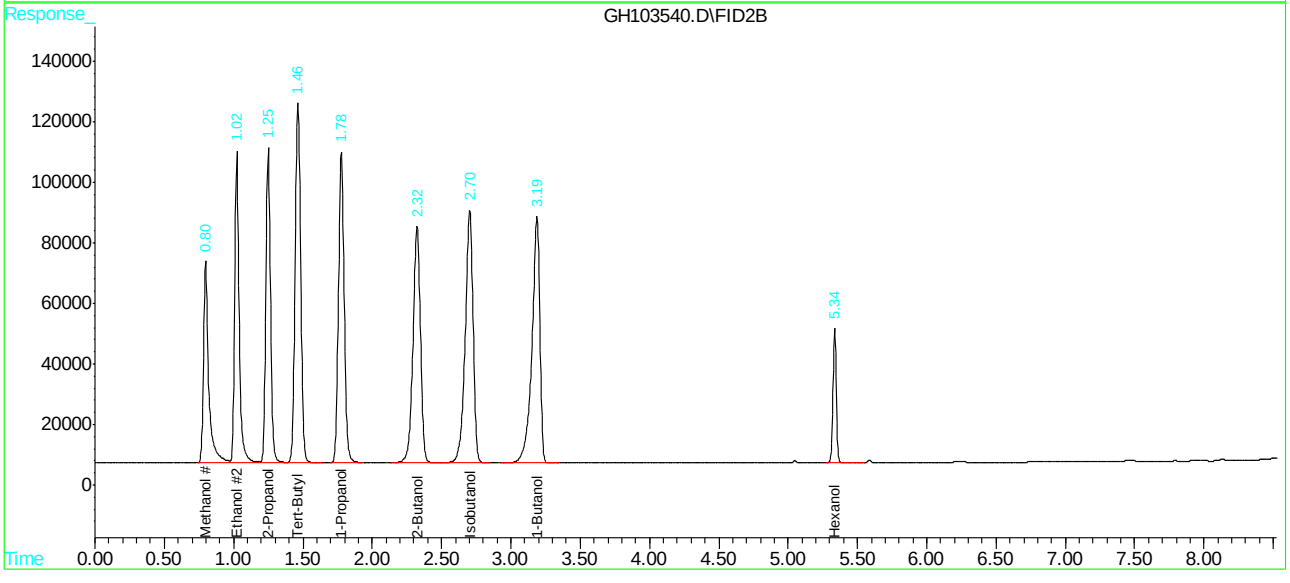
Data File : C:\HPCHEM\1\DATA\GH103540.D\FID1A.CH Vial: 21
Acq On : 29 Feb 2016 10:39 am Operator: XULIU
Sample : IC5193-100000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103540.D\FID2B.CH Vial: 21
Acq On : 29 Feb 2016 10:57 am Operator: XULIU
Sample : IC5193-100000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 29 13:25 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon Feb 29 10:49:38 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 03/01/16 14:34

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103541.D\FID1A.CH          Vial: 22
Acq On    : 29 Feb 2016  10:57 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103541.D\FID2B.CH          Vial: 22
Acq On    : 29 Feb 2016  11:10 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:34 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:27:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.88	5.34	627374	611421	5306.730	5276.343
	Spiked Amount 5000.000			Recovery	=	106.13%	105.53%
	Target Compounds						
1)	Methanol	1.42	0.80	92609	86129	5293.274	5131.587
2)	Ethanol	1.85	1.03	118659	114677	5124.160	5120.833
3)	Tert-Butyl Alcoh	2.51	1.47	180800	160931	5219.790	4965.652
4)	1-Propanol	2.99	1.78	154372	152110	5176.241	5084.369
5)	2-Propanol	2.23	1.25	131831	117651	5264.955	5011.800
7)	Isobutanol	3.81	2.70	177787	160719	5166.554	4673.557
8)	1-Butanol	4.23	3.19	171004	159534	5210.074	5016.629
9)	2-Butanol	3.42	2.33	157688	145917	5163.577	4269.357m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH103541.D MGH5193.M Mon Feb 29 13:34:13 2016 GCGH

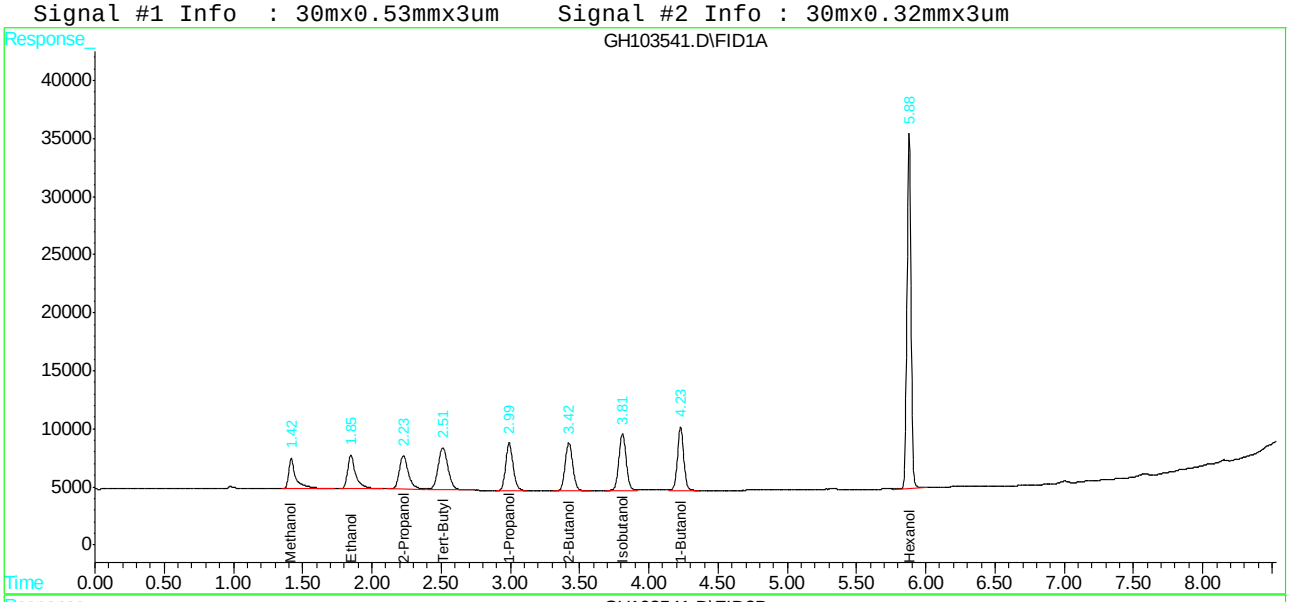
Quantitation Report (QT Reviewed)

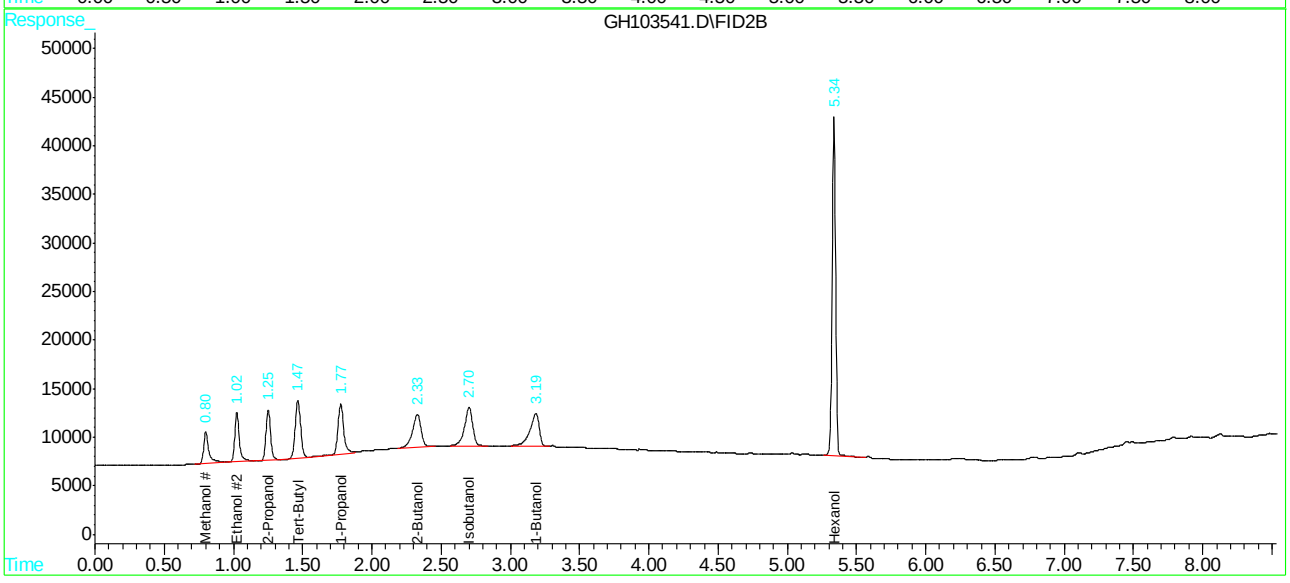
Data File : C:\HPCHEM\1\DATA\GH103541.D\FID1A.CH Vial: 22
Acq On : 29 Feb 2016 10:57 am Operator: XULIU
Sample : ICC5193-5000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103541.D\FID2B.CH Vial: 22
Acq On : 29 Feb 2016 11:10 am Operator: XULIU
Sample : ICC5193-5000 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 29 13:34 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon Feb 29 13:27:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Manual Integration Approval Summary

Sample Number:	GGH5193-ICC5193	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH103541.D	**Analyst approved:**	03/01/16 13:28 Xu Liu
Injection Time:	02/29/16 10:57	**Supervisor approved:**	03/01/16 14:34 Jessica Reitan-Chu

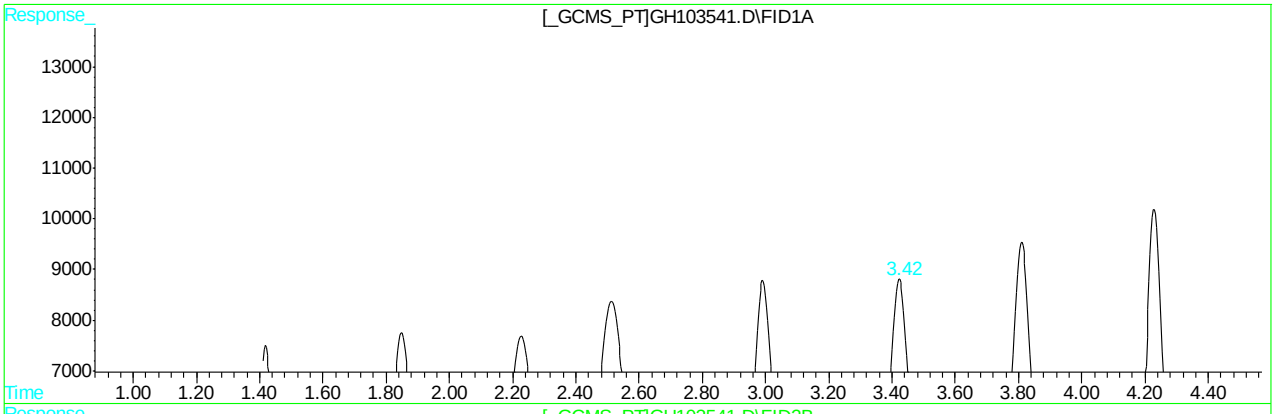
Parameter	CAS	Sig#	R.T. (min.)	Reason
sec-Butyl Alcohol	78-92-2	2	2.33	Poorly defined baseline

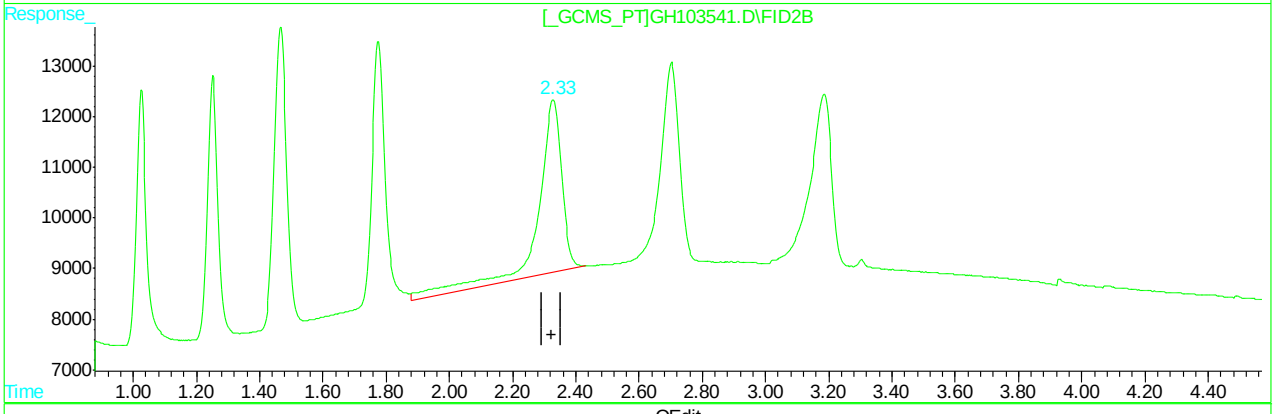
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103541.D\FID1A.CH          Vial: 22
Acq On    : 29 Feb 2016  10:57 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103541.D\FID2B.CH          Vial: 22
Acq On    : 29 Feb 2016  11:10 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:32 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:32:26 2016
Response via : Multiple Level Calibration
```





QEdit

(9) 2-Butanol

3.42min 5163.577PPB

response 157688

(9) 2-Butanol #2

2.33min 5176.951PPB

response 176936

(+) = Expected Retention Time

GH103541.D MGH5193.M Mon Feb 29 13:33:18 2016 GCGH

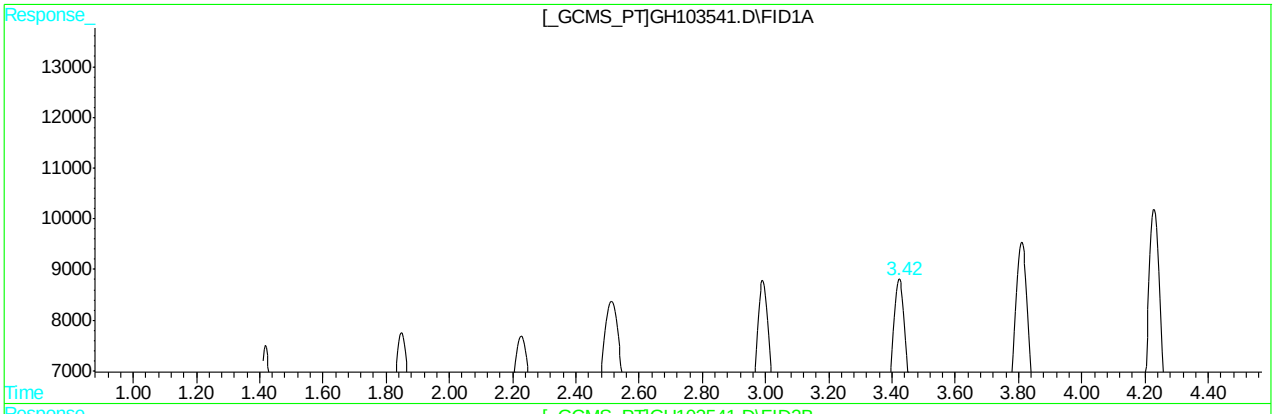
SGS ACCUTEST JC15518

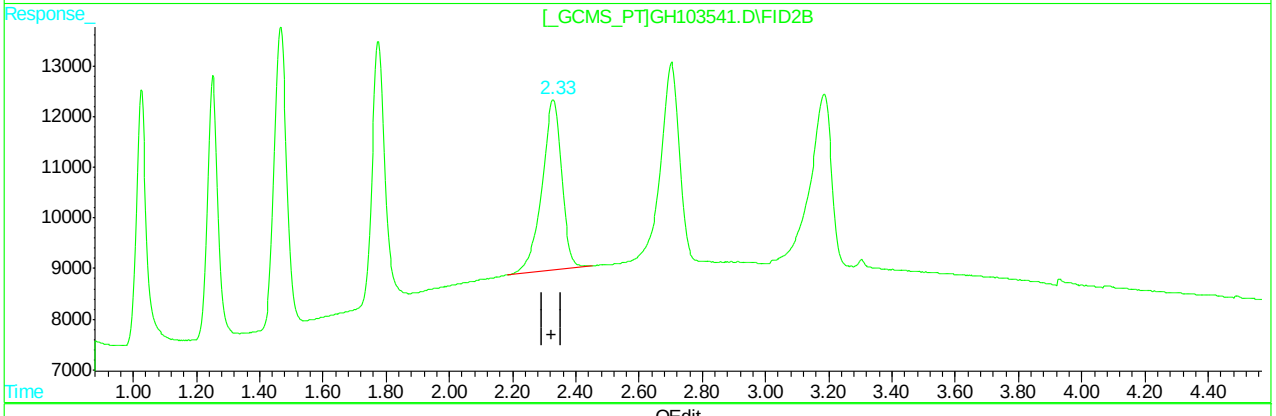
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103541.D\FID1A.CH          Vial: 22
Acq On    : 29 Feb 2016  10:57 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103541.D\FID2B.CH          Vial: 22
Acq On    : 29 Feb 2016  11:10 am                     Operator: XULIU
Sample    : ICC5193-5000                              Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Feb 29 13:32 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon Feb 29 13:32:26 2016
Response via : Multiple Level Calibration
```





QEdit

(9) 2-Butanol

3.42min 5163.577PPB

response 157688

(9) 2-Butanol #2

2.33min 4269.357PPB m

response 145917

(+) = Expected Retention Time

GH103541.D MGH5193.M Mon Feb 29 13:34:08 2016 GCGH

Manual Integrations APPROVED (compounds with "m" flag)
Jessica Reitan-Chu 03/01/16 14:34

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 12:07 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 07:54:41 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.88	5.34	338506	356649	2628.802	2776.345
	Spiked Amount 5000.000			Recovery	=	52.58%	55.53%
	Target Compounds						
1)	Methanol	1.45f	0.80	7128	9089	416.617	502.554m
2)	Ethanol	1.87f	1.03	10970	10120	480.229	458.322
3)	Tert-Butyl Alcoh	2.52	1.47	13871	14529	388.904m	454.774
4)	1-Propanol	3.01f	1.78	10460	11823	355.989m	422.185
5)	2-Propanol	2.24	1.25	8410	10264	318.255m	444.470
7)	Isobutanol	3.82	2.70	14482	14321	431.331	454.428
8)	1-Butanol	4.23	3.19	13713	17157	421.970	537.665
9)	2-Butanol	3.45f	2.33	11734	12260	396.922	432.808

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

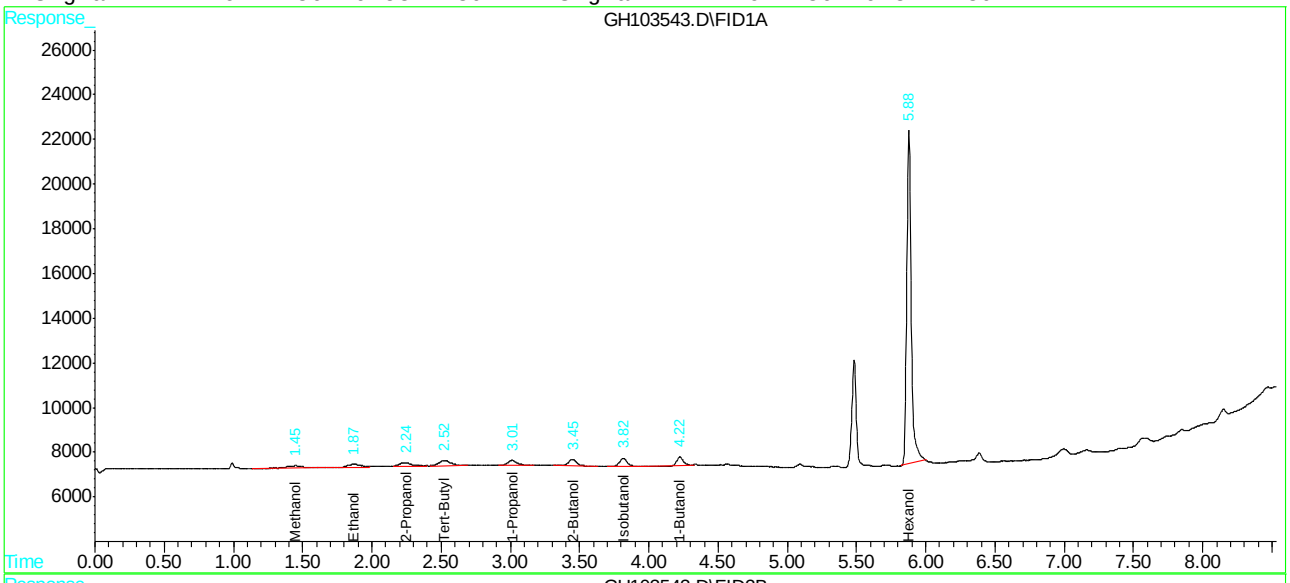
Quantitation Report (QT Reviewed)

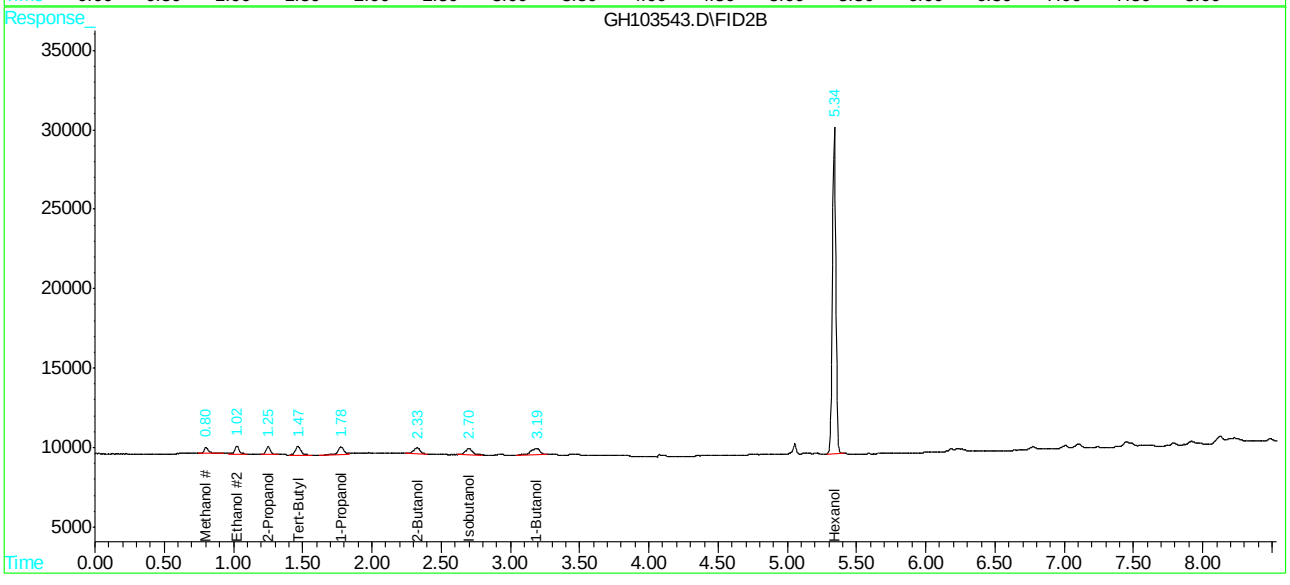
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On : 29 Feb 2016 12:05 pm Operator: XULIU
Sample : IC5193-500 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On : 29 Feb 2016 12:23 pm Operator: XULIU
Sample : IC5193-500 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 1 12:07 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue Mar 01 07:54:41 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Manual Integration Approval Summary

Sample Number:	GGH5193-IC5193	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH103543.D	**Analyst approved:**	03/01/16 13:28 Xu Liu
Injection Time:	02/29/16 12:05	**Supervisor approved:**	03/01/16 14:34 Jessica Reitan-Chu

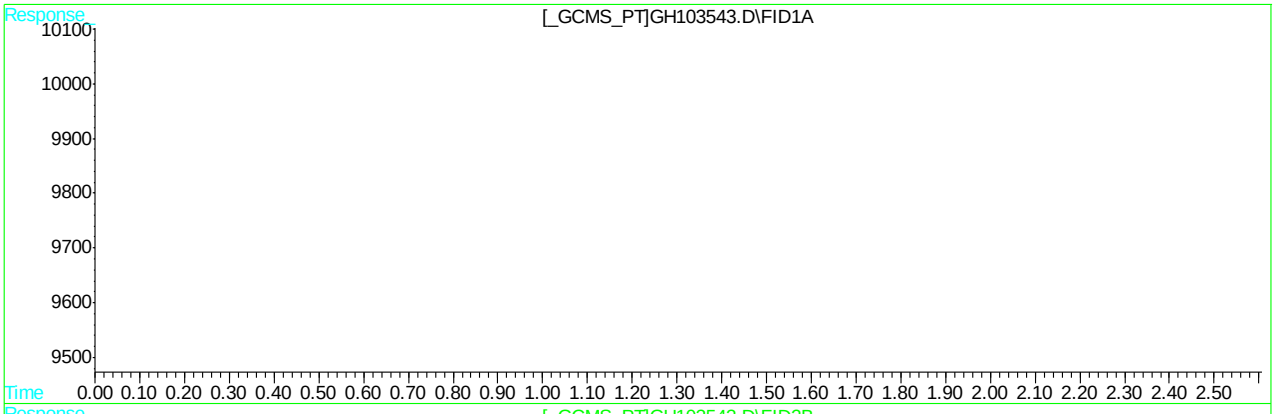
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.80	Poorly defined baseline
Isopropyl Alcohol	67-63-0	1	2.24	Poorly defined baseline
Tertiary Butyl Alcohol	75-65-0	1	2.52	Poorly defined baseline
n-Propyl Alcohol	71-23-8	1	3.01	Poorly defined baseline

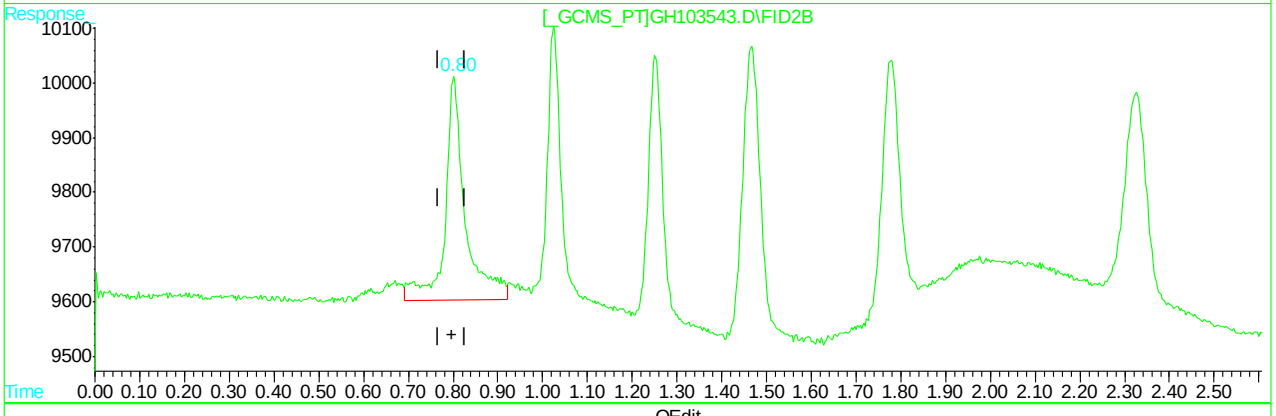
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103543.D\FID1A.CH          Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                     Operator: XULIU
Sample    : IC5193-500                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103543.D\FID2B.CH          Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-500                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  7:57 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:12:38 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.45min 416.617PPB

response 7128

(1) Methanol #2

0.80min 697.836PPB

response 12621

(+) = Expected Retention Time

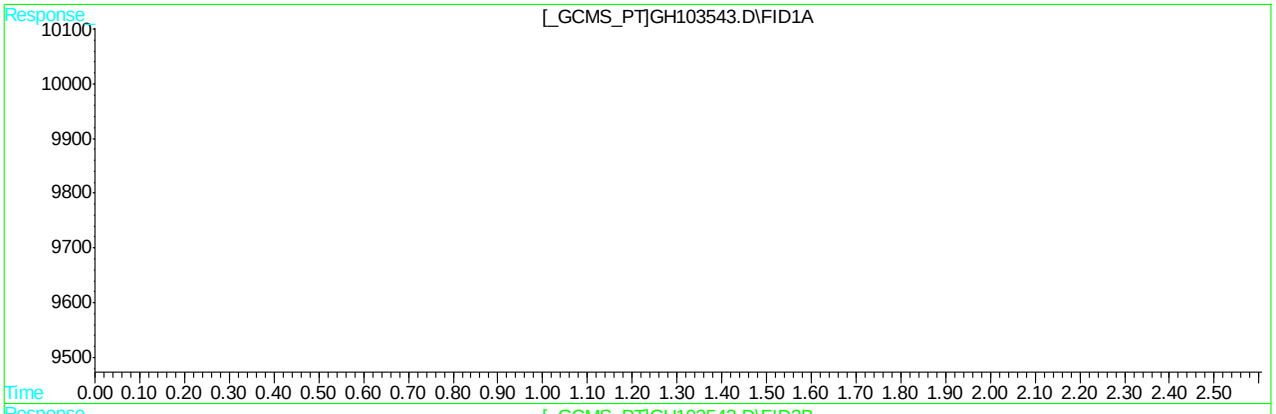
GH103543.D MGH5193.M Tue Mar 01 08:16:04 2016 GCGH

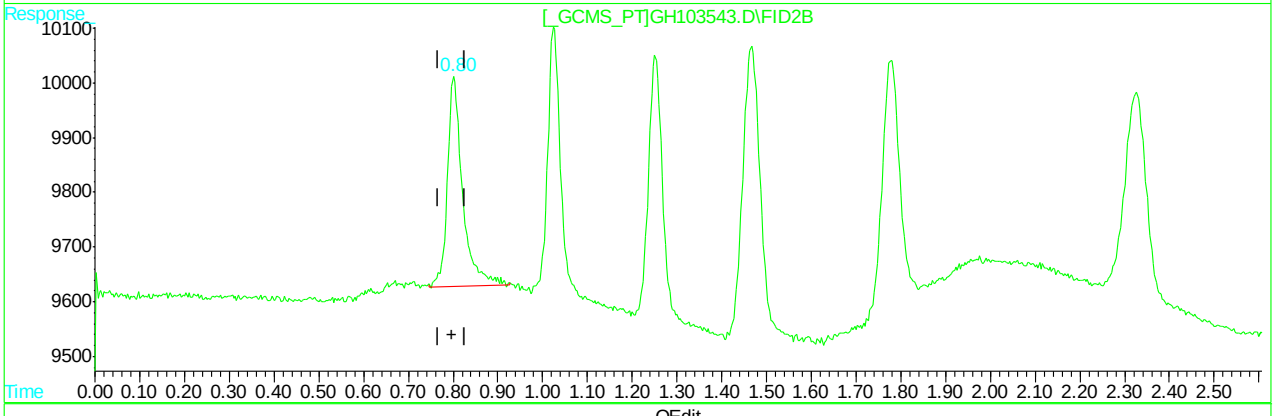
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103543.D\FID1A.CH          Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                     Operator: XULIU
Sample    : IC5193-500                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103543.D\FID2B.CH          Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-500                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  7:57 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:12:38 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.45min 416.617PPB

response 7128

(1) Methanol #2

0.80min 502.554PPB m

response 9089

(+) = Expected Retention Time

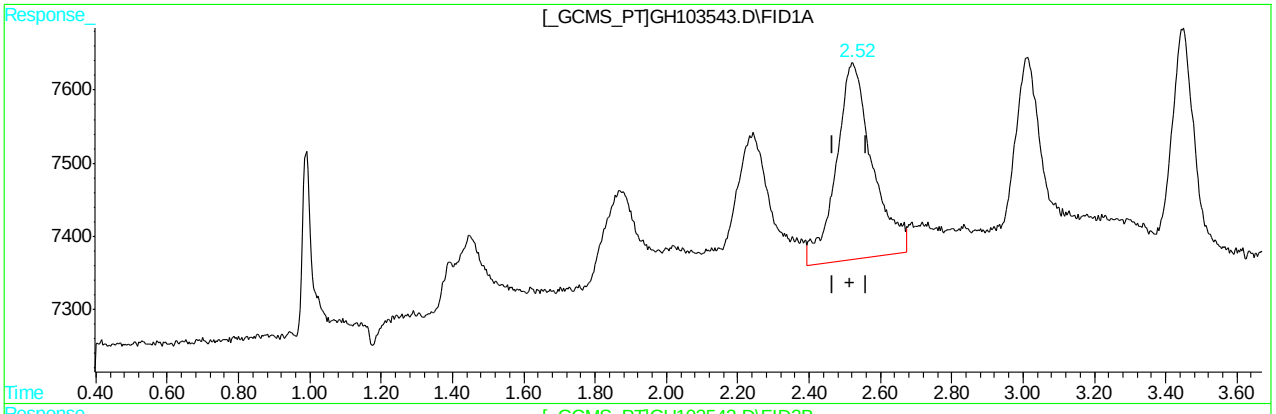
GH103543.D MGH5193.M Tue Mar 01 08:16:50 2016 GCGH

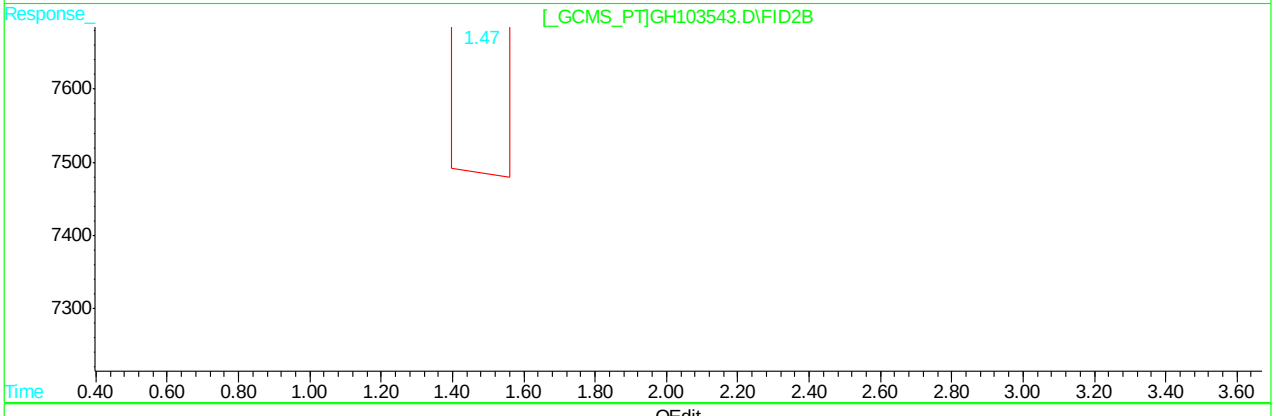
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:16 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```





QEdit

(3) Tert-Butyl Alcohol

2.52min 531.527PPB

response 18958

(3) Tert-Butyl Alcohol #2

1.47min 454.774PPB

response 14529

(+) = Expected Retention Time

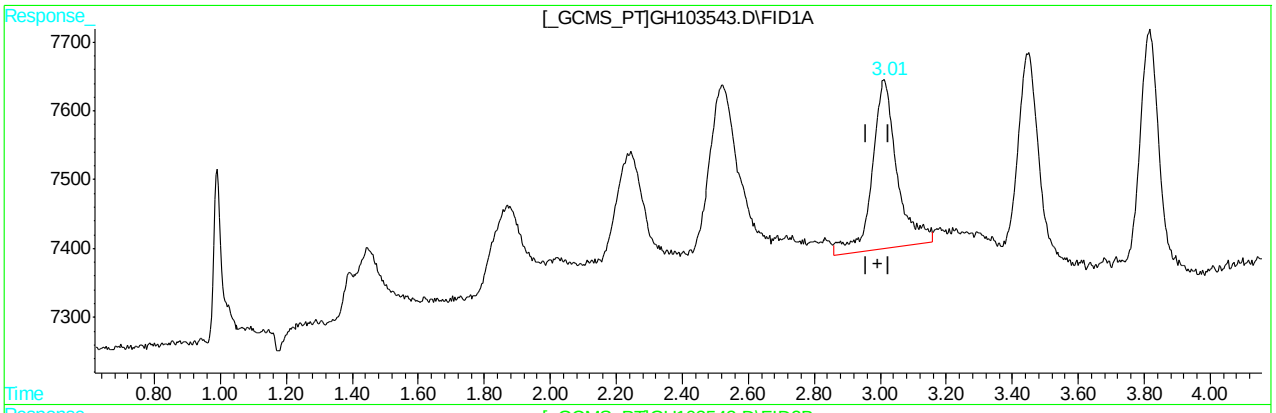
GH103543.D MGH5193.M Tue Mar 01 10:16:49 2016 GCGH

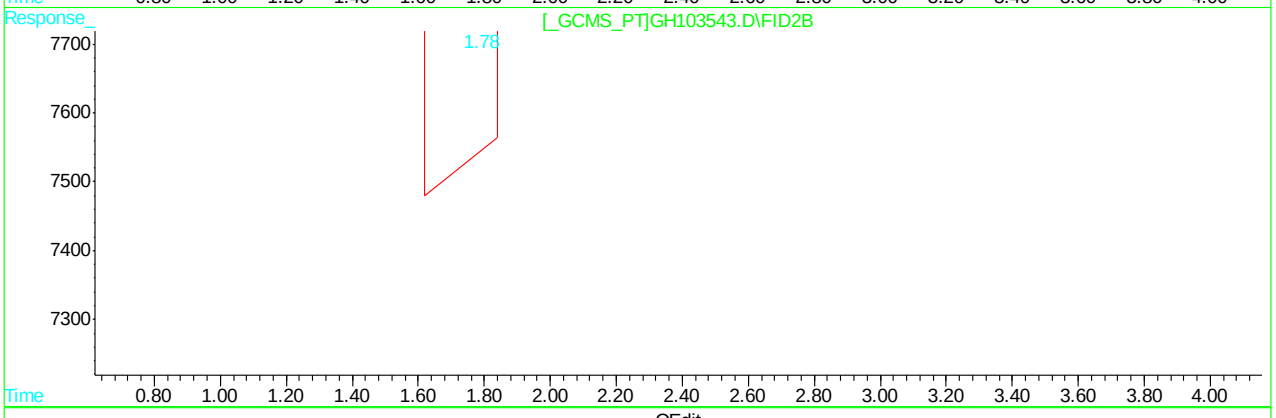
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:16 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

3.01min 449.441PPB

response 13206

(4) 1-Propanol #2

1.78min 422.185PPB

response 11823

(+) = Expected Retention Time

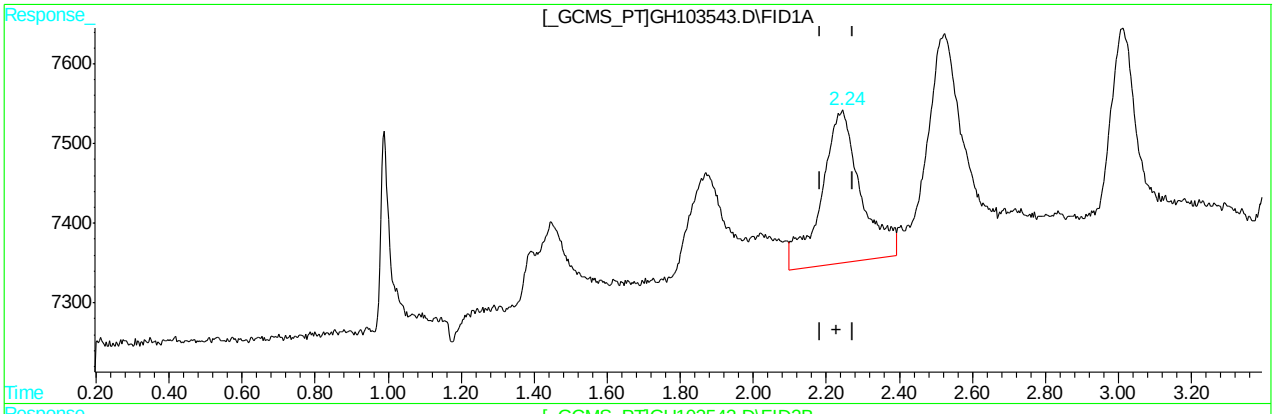
GH103543.D MGH5193.M Tue Mar 01 10:17:11 2016 GCGH

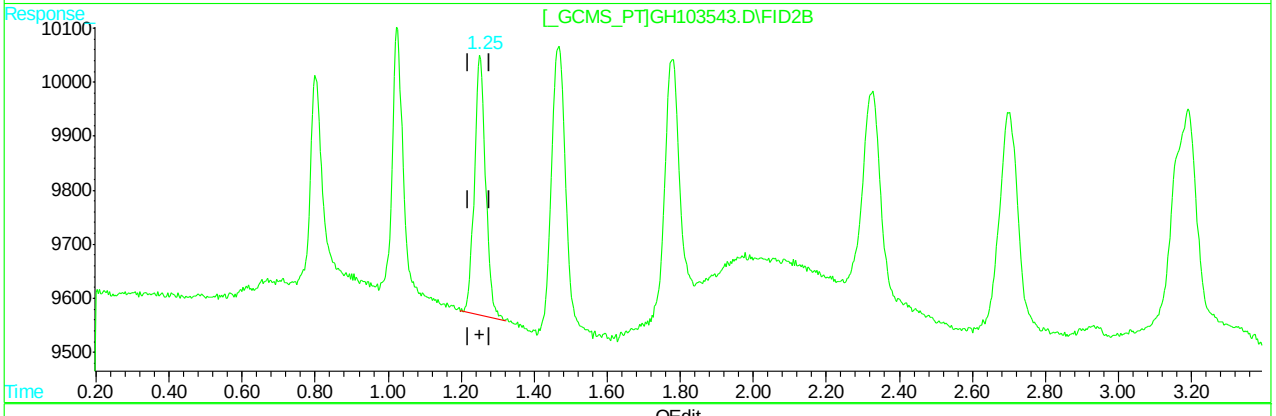
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:16 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```





QEdit

(5) 2-Propanol

2.24min 546.957PPB

response 14454

(5) 2-Propanol #2

1.25min 444.470PPB

response 10264

(+) = Expected Retention Time

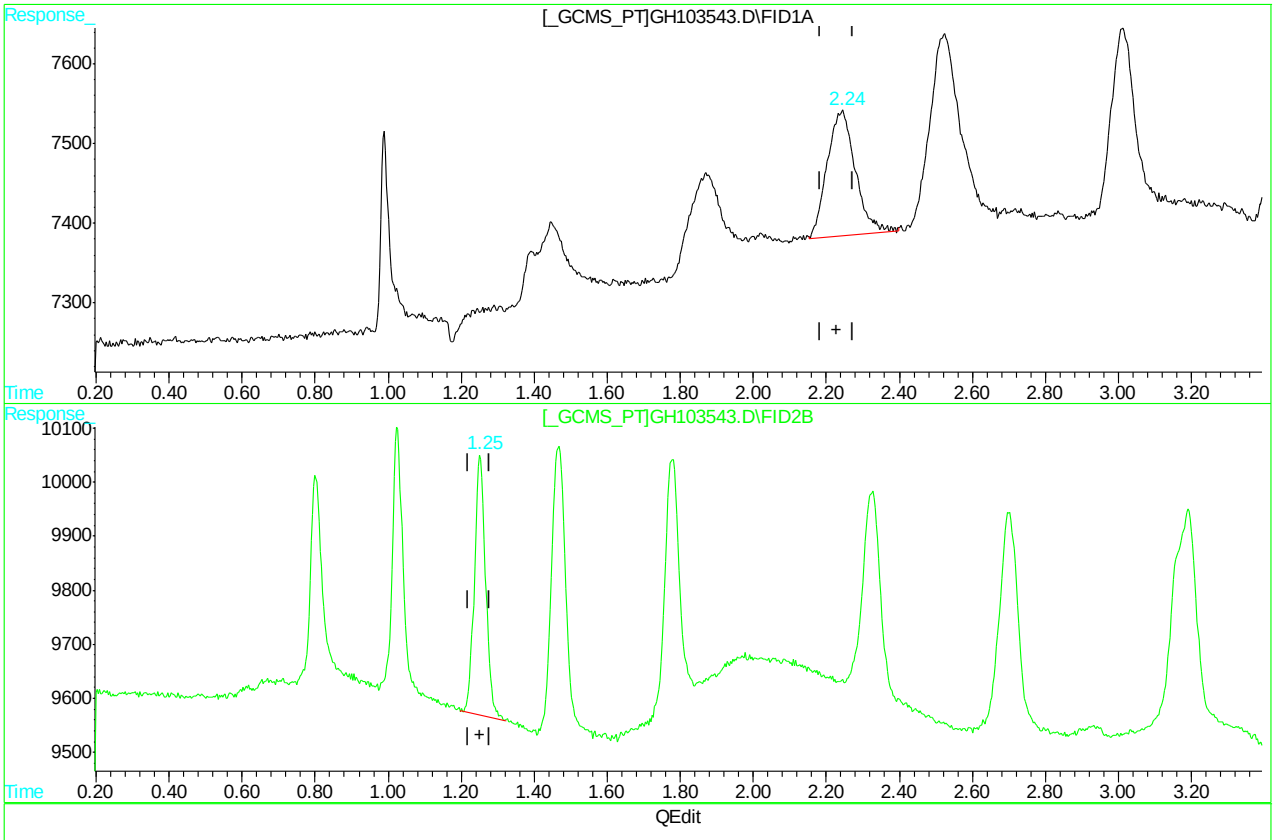
GH103543.D MGH5193.M Tue Mar 01 10:17:42 2016 GCGH

Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:16 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```



(5) 2-Propanol

2.24min 318.255PPB m

response 8410

(5) 2-Propanol #2

1.25min 444.470PPB

response 10264

(+) = Expected Retention Time

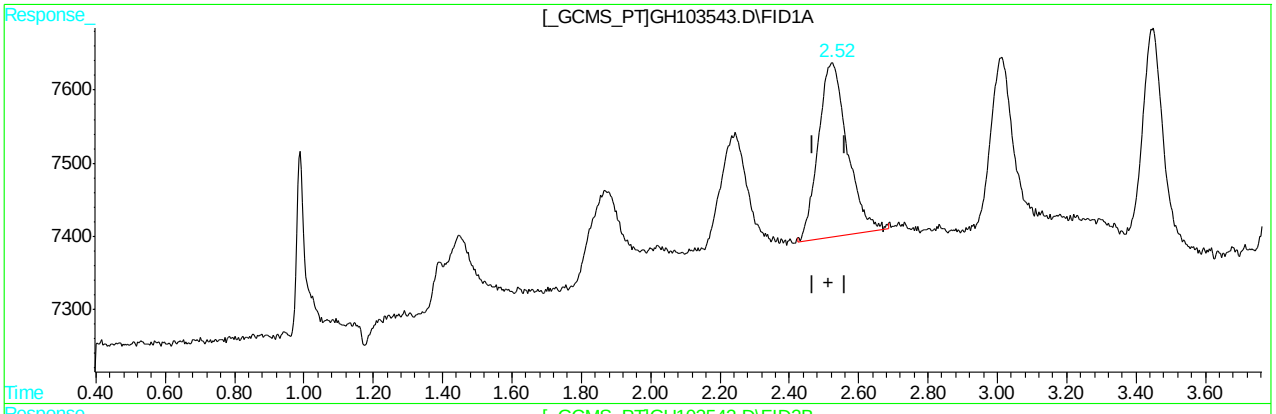
GH103543.D MGH5193.M Tue Mar 01 10:18:02 2016 GCGH

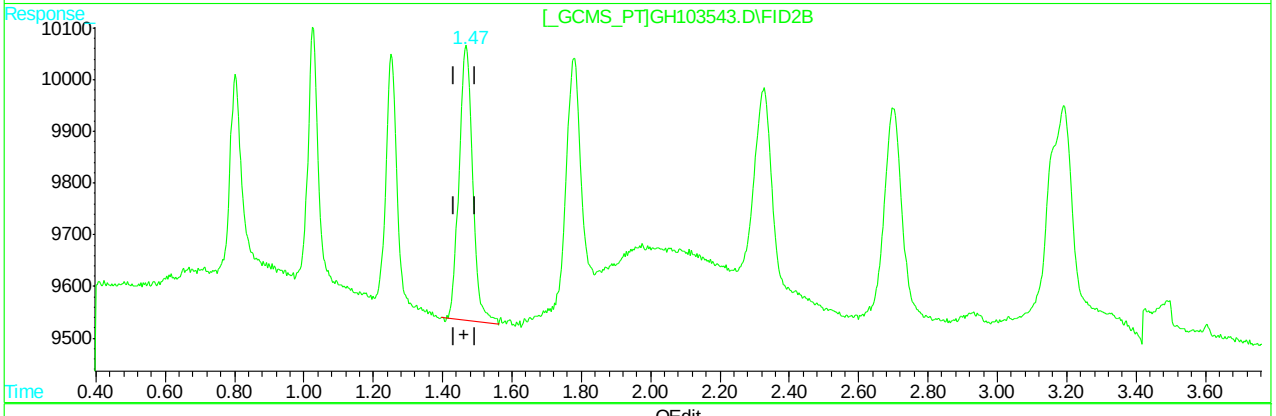
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 10:17 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 11:02:24 2016
Response via : Multiple Level Calibration
```





QEdit

(3) Tert-Butyl Alcohol

2.52min 388.904PPB m

response 13871

(3) Tert-Butyl Alcohol #2

1.47min 454.774PPB

response 14529

(+) = Expected Retention Time

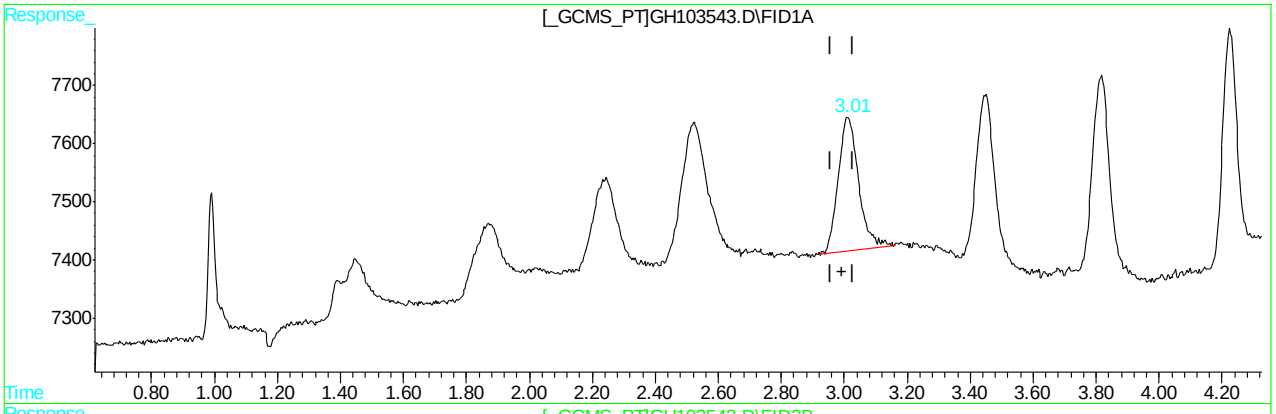
GH103543.D MGH5193.M Tue Mar 01 12:06:57 2016 GCGH

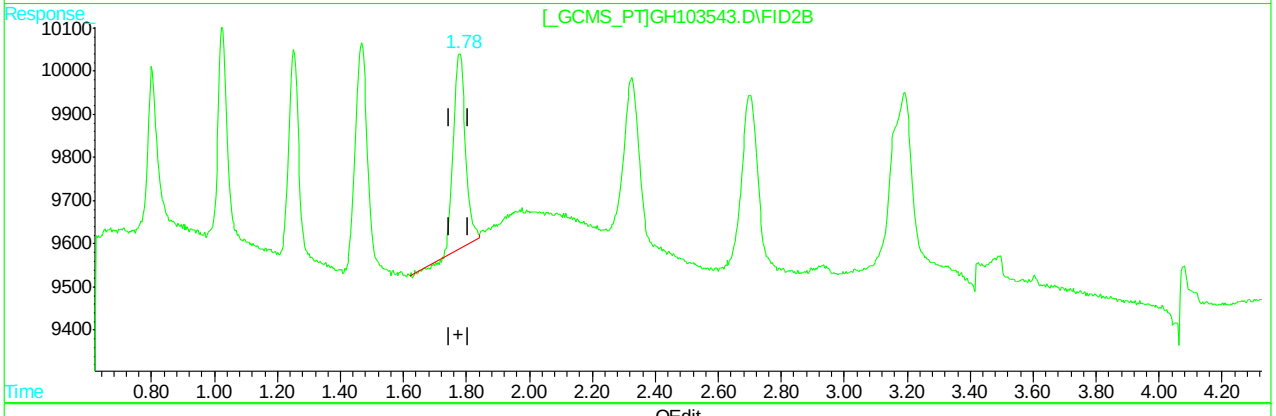
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID1A.CH Vial: 10
Acq On    : 29 Feb 2016  12:05 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103543.D\FID2B.CH Vial: 10
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-500                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 10:17 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 11:02:24 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

3.01min 355.989PPB m

response 10460

(4) 1-Propanol #2

1.78min 422.185PPB

response 11823

(+) = Expected Retention Time

GH103543.D MGH5193.M Tue Mar 01 12:07:11 2016 GCGH

11.5.6.9 11

SGS ACCUTEST JC15518

GH103544.D

Manual Integrations APPROVED (compounds with "m" flag)

Jessica Reitan-Chu 03/01/16 14:34

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID1A.CH Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID2B.CH Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 10:15 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:10:45 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.88	5.34	96146	97501	753.837	764.597
	Spiked Amount 5000.000			Recovery	=	15.08%	15.29%
	Target Compounds						
1)	Methanol	1.42	0.80	1952	2010	111.847	109.390
2)	Ethanol	1.85	1.02	2002	2194	82.002m	99.470
3)	Tert-Butyl Alcoh	2.51	1.47	3482	3221	97.961	100.694
4)	1-Propanol	2.99	1.78	3265	3320	109.388	115.495
5)	2-Propanol	2.22	1.25	2559	2475	96.011m	106.098
7)	Isobutanol	3.81	2.70	3542	3670	104.664	113.781
8)	1-Butanol	4.23	3.18	3899	5688	116.654	155.884m
9)	2-Butanol	3.42	2.32	3756	3049	122.321	106.484

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH103544.D MGH5193.M Tue Mar 01 10:16:01 2016 GCGH

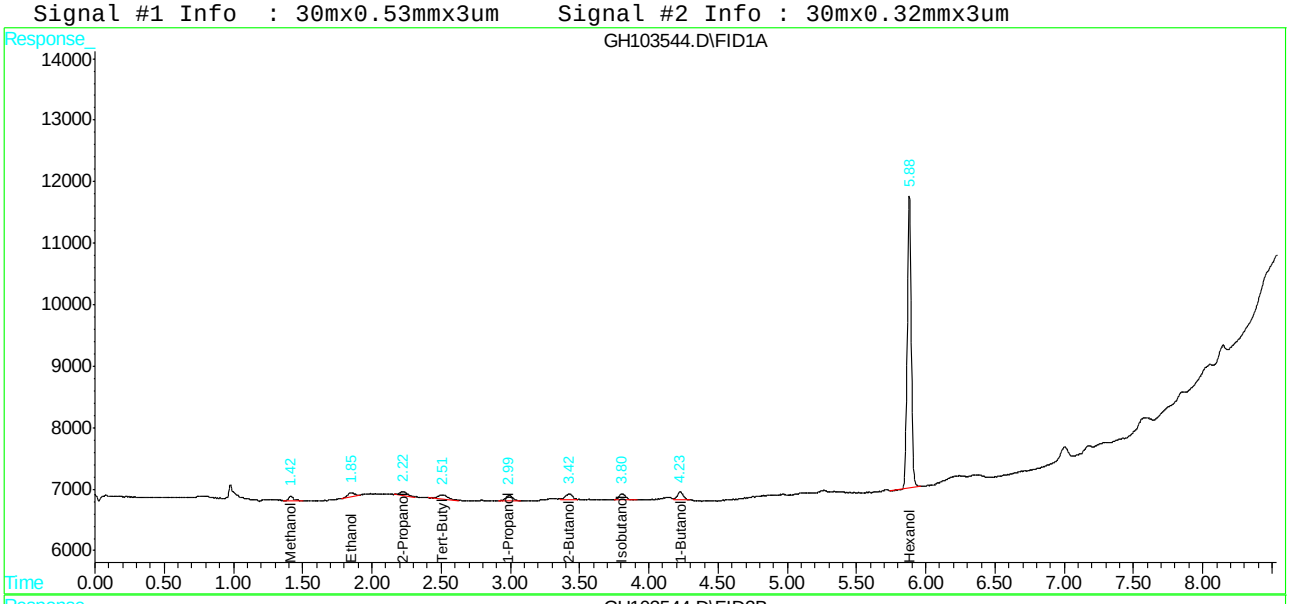
Quantitation Report (QT Reviewed)

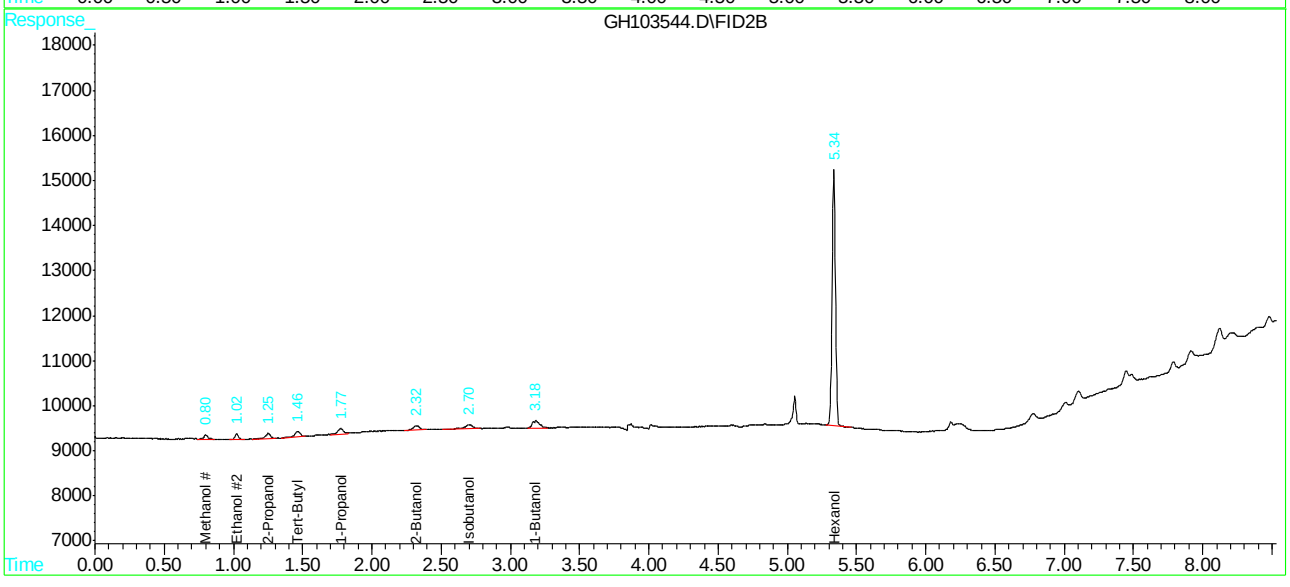
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID1A.CH Vial: 5
Acq On : 29 Feb 2016 12:23 pm Operator: XULIU
Sample : IC5193-100 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID2B.CH Vial: 5
Acq On : 29 Feb 2016 12:38 pm Operator: XULIU
Sample : IC5193-100 Inst : GCGH
Misc : GC47719,GGH5193,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 1 10:15 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue Mar 01 08:10:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Manual Integration Approval Summary

Sample Number:	GGH5193-IC5193	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH103544.D	**Analyst approved:**	03/01/16 13:28 Xu Liu
Injection Time:	02/29/16 12:23	**Supervisor approved:**	03/01/16 14:34 Jessica Reitan-Chu

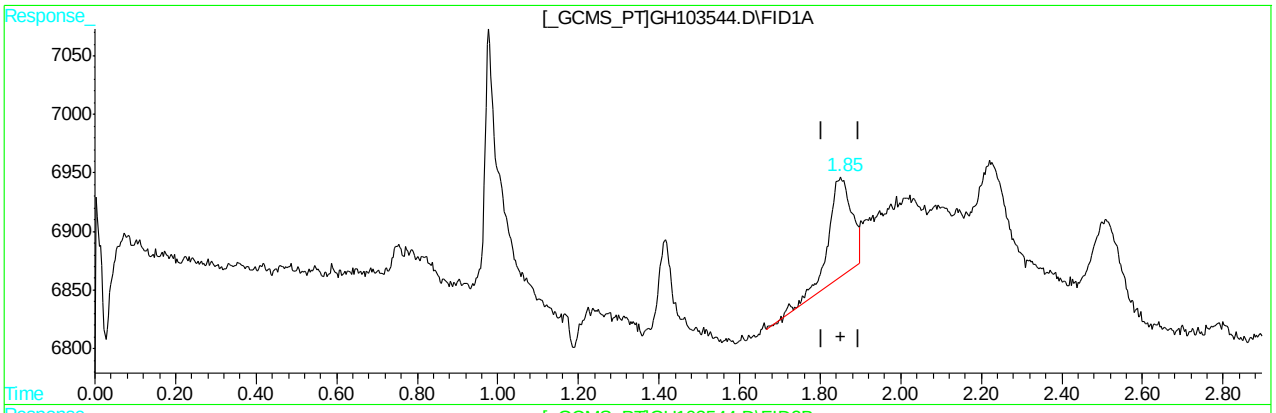
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethanol	64-17-5	1	1.85	Poorly defined baseline
Isopropyl Alcohol	67-63-0	1	2.22	Missed peak
n-Butyl Alcohol	71-36-3	2	3.18	Split peak

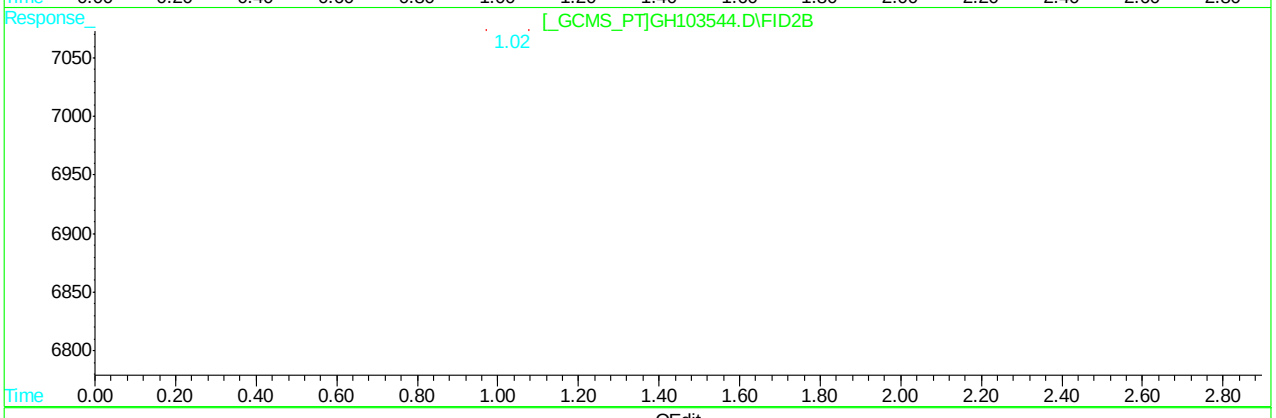
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103544.D\FID1A.CH          Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103544.D\FID2B.CH          Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:12 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:12:38 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.85min 138.711PPB

response 3387

(2) Ethanol #2

1.02min 99.470PPB

response 2194

(+) = Expected Retention Time

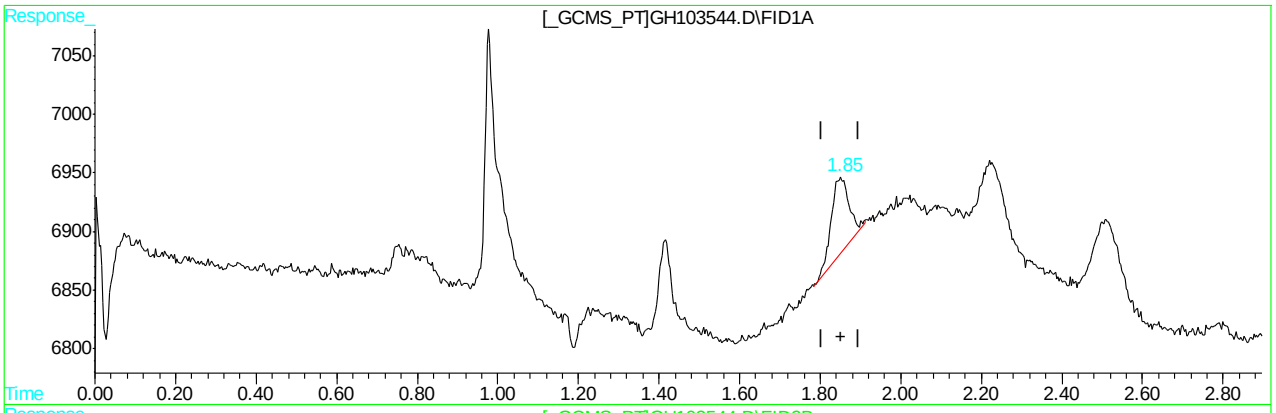
GH103544.D MGH5193.M Tue Mar 01 08:18:52 2016 GCGH

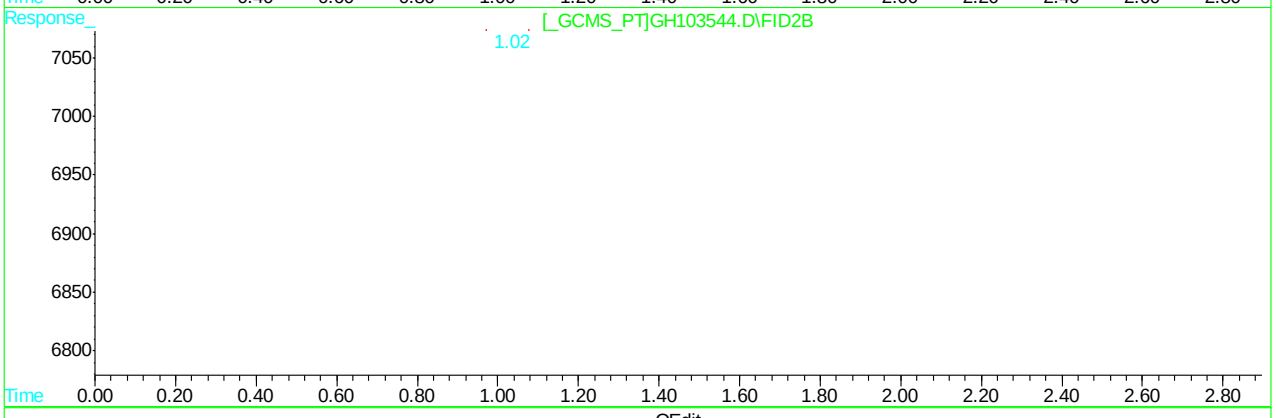
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103544.D\FID1A.CH          Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103544.D\FID2B.CH          Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:12 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:12:38 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.85min 82.002PPB m

response 2002

(2) Ethanol #2

1.02min 99.470PPB

response 2194

(+) = Expected Retention Time

GH103544.D MGH5193.M Tue Mar 01 08:20:10 2016 GCGH

SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103544.D\FID1A.CH          Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103544.D\FID2B.CH          Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:19 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:23:36 2016
Response via : Multiple Level Calibration
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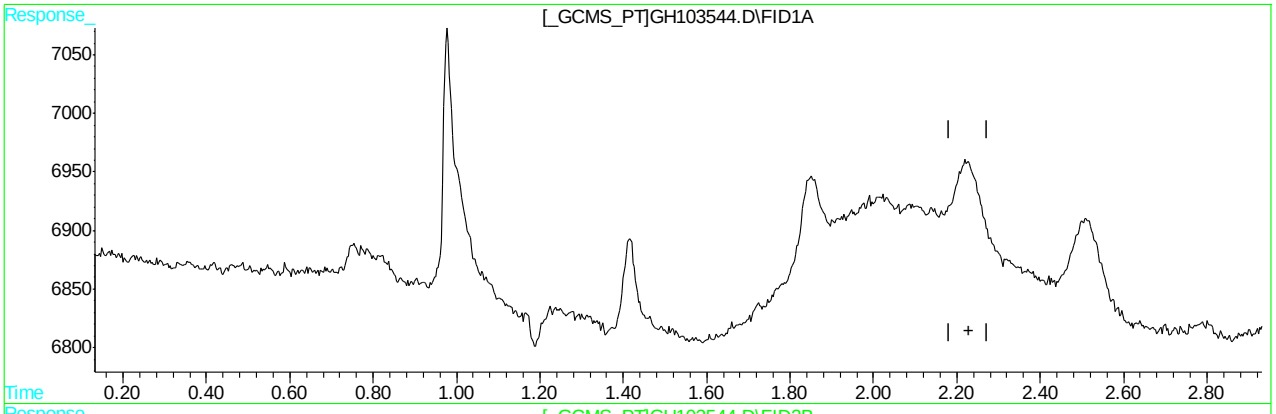

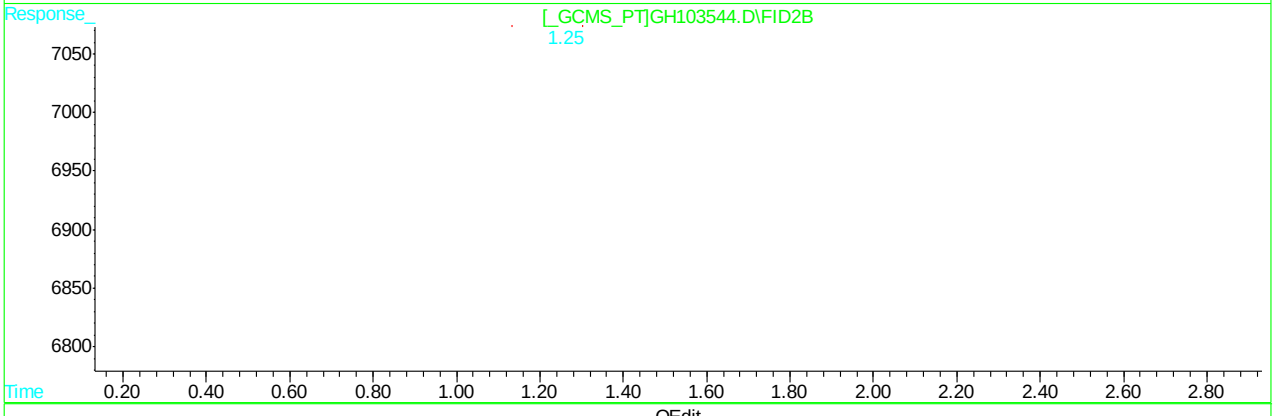

QEdit

(5) 2-Propanol

0.00min 0.000PPB

response 0

(5) 2-Propanol #2

1.25min 106.098PPB

response 2475

(+) = Expected Retention Time

GH103544.D MGH5193.M Tue Mar 01 08:24:02 2016 GCGH

Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH103544.D\FID1A.CH          Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103544.D\FID2B.CH          Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                     Operator: XULIU
Sample    : IC5193-100                                Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:19 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:23:36 2016
Response via : Multiple Level Calibration
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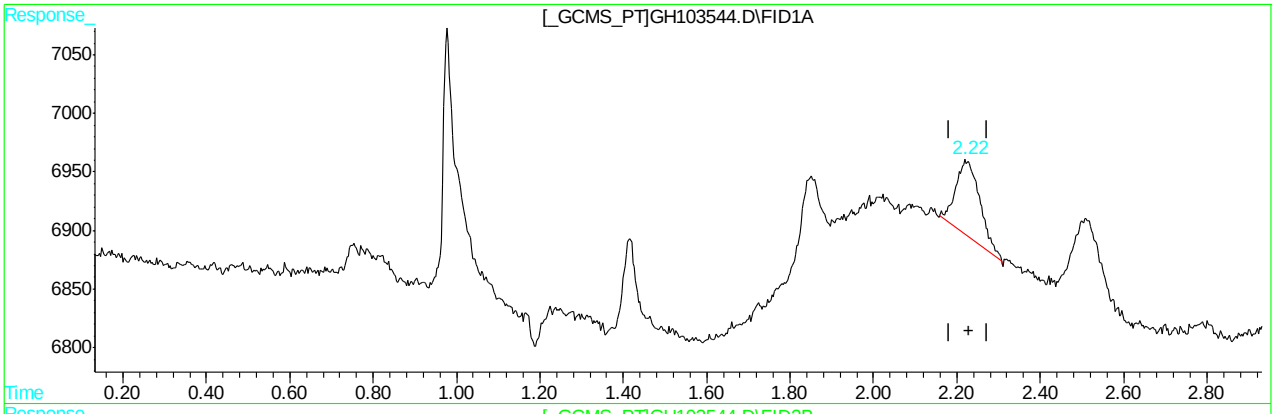
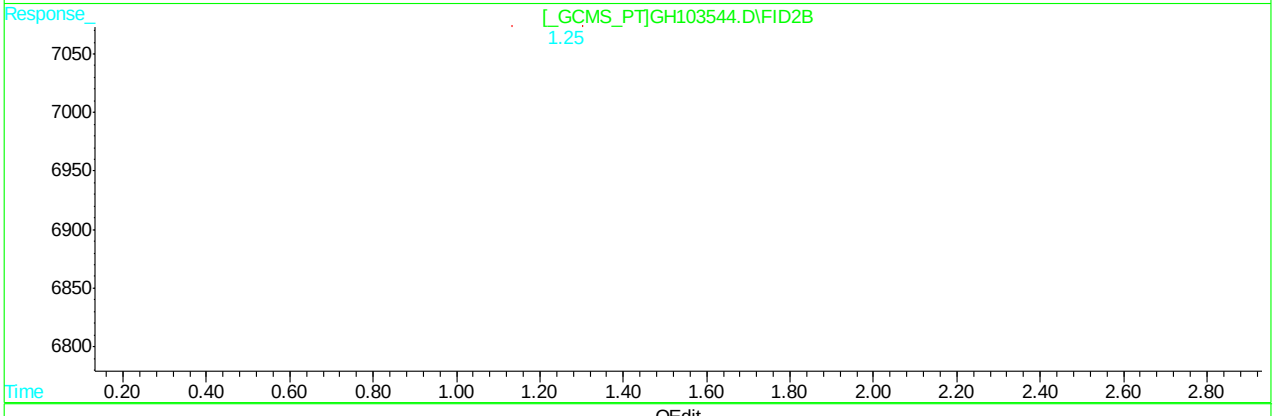




QEdit

(5) 2-Propanol

2.22min 96.011PPB m

response 2559

(5) 2-Propanol #2

1.25min 106.098PPB

response 2475

(+) = Expected Retention Time

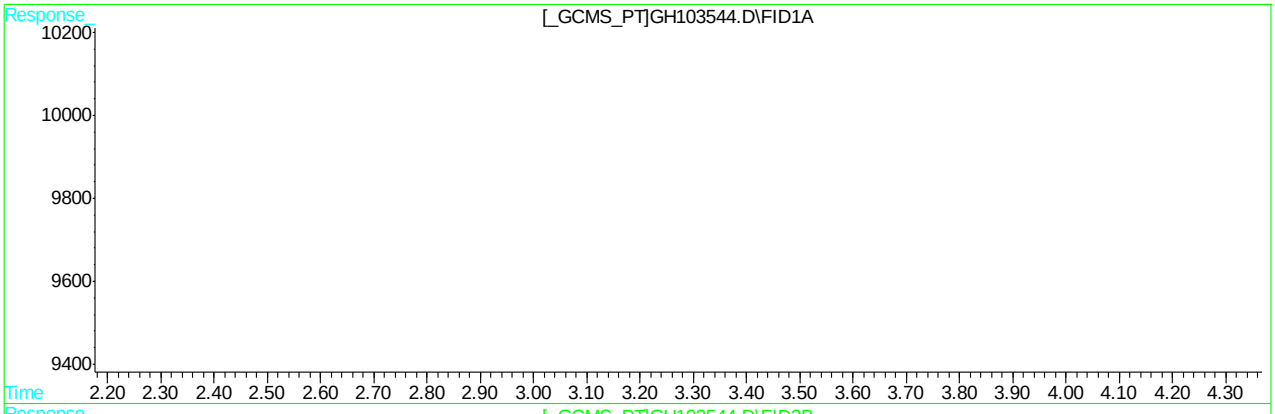
GH103544.D MGH5193.M Tue Mar 01 08:25:29 2016 GCGH

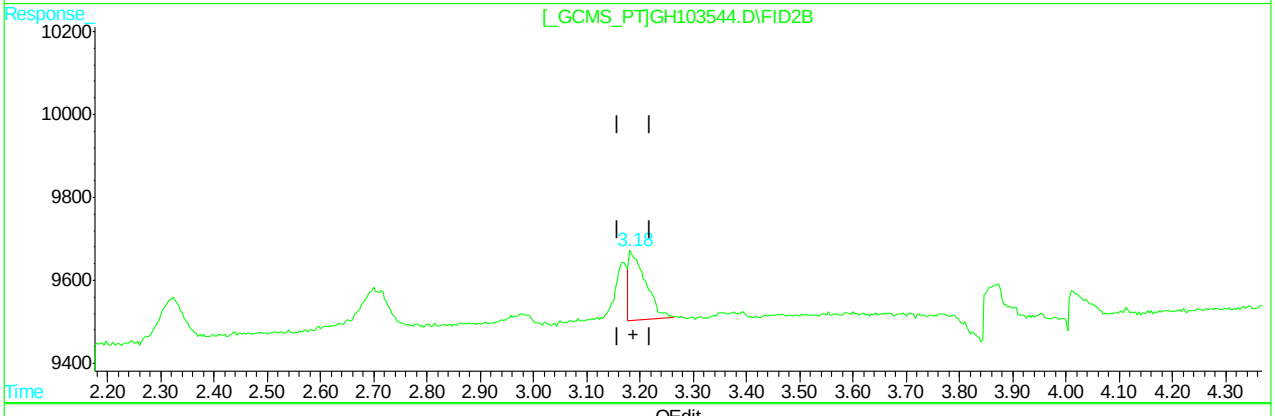
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID1A.CH Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID2B.CH Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:25 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 1-Butanol

4.23min 116.654PPB

response 3899

(8) 1-Butanol #2

3.18min 104.373PPB

response 3808

(+) = Expected Retention Time

GH103544.D MGH5193.M Tue Mar 01 10:15:45 2016 GCGH

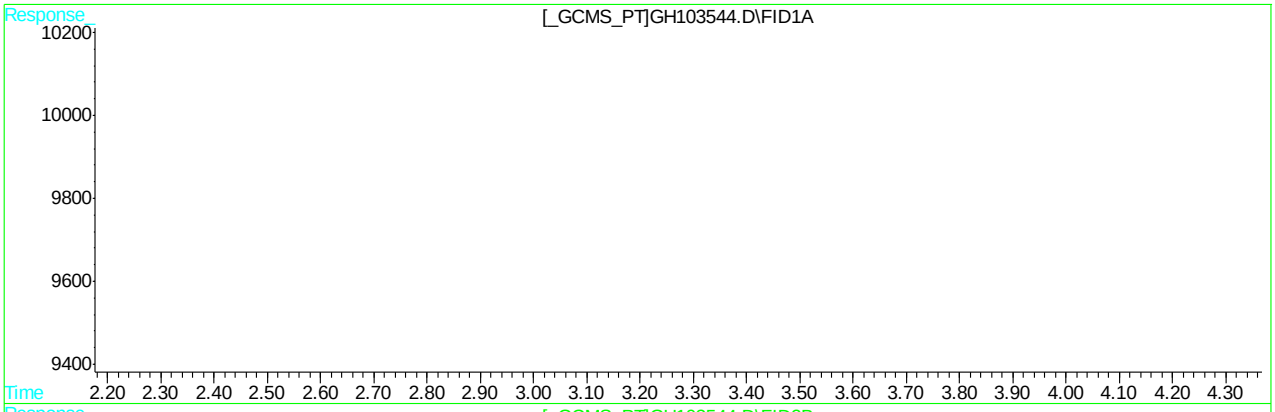
SGS ACCUTEST JC15518

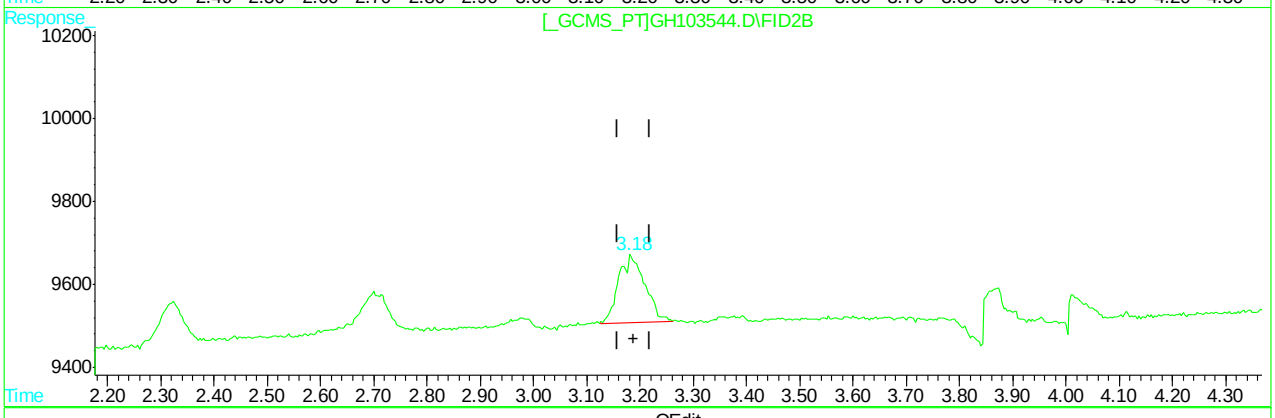
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID1A.CH Vial: 5
Acq On    : 29 Feb 2016  12:23 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103544.D\FID2B.CH Vial: 5
Acq On    : 29 Feb 2016  12:38 pm                    Operator: XULIU
Sample    : IC5193-100                               Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1  8:25 2016  Quant Results File: MGH5193.RES


Method       : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 08:26:22 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 1-Butanol

4.23min 116.654PPB

response 3899

(8) 1-Butanol #2

3.18min 155.884PPB m

response 5688

(+) = Expected Retention Time

GH103544.D MGH5193.M Tue Mar 01 10:15:55 2016 GCGH

11.5.7.7

11

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID1A.CH Vial: 20
Acq On    : 29 Feb 2016   1:20 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID2B.CH Vial: 20
Acq On    : 29 Feb 2016   1:36 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 12:24 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.88	5.34	621339	605656	4871.651	4749.523
	Spiked Amount 5000.000			Recovery	=	97.43%	94.99%
	Target Compounds						
1)	Methanol	1.42	0.80	89753	86850	5142.658	5001.679
2)	Ethanol	1.85	1.02	118314	114631	5272.444	5195.921
3)	Tert-Butyl Alcoh	2.51	1.47	175949	166701	5160.980	5211.888
4)	1-Propanol	2.99	1.77	154839	145777	5327.199	5070.941
5)	2-Propanol	2.23	1.25	126287	123170	5137.821	5279.569
7)	Isobutanol	3.81	2.70	172809	165206	5106.756	5121.827
8)	1-Butanol	4.23	3.19	169085	164075	5058.564	4624.847
9)	2-Butanol	3.42	2.32	156041	147599	5081.800	5154.079

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

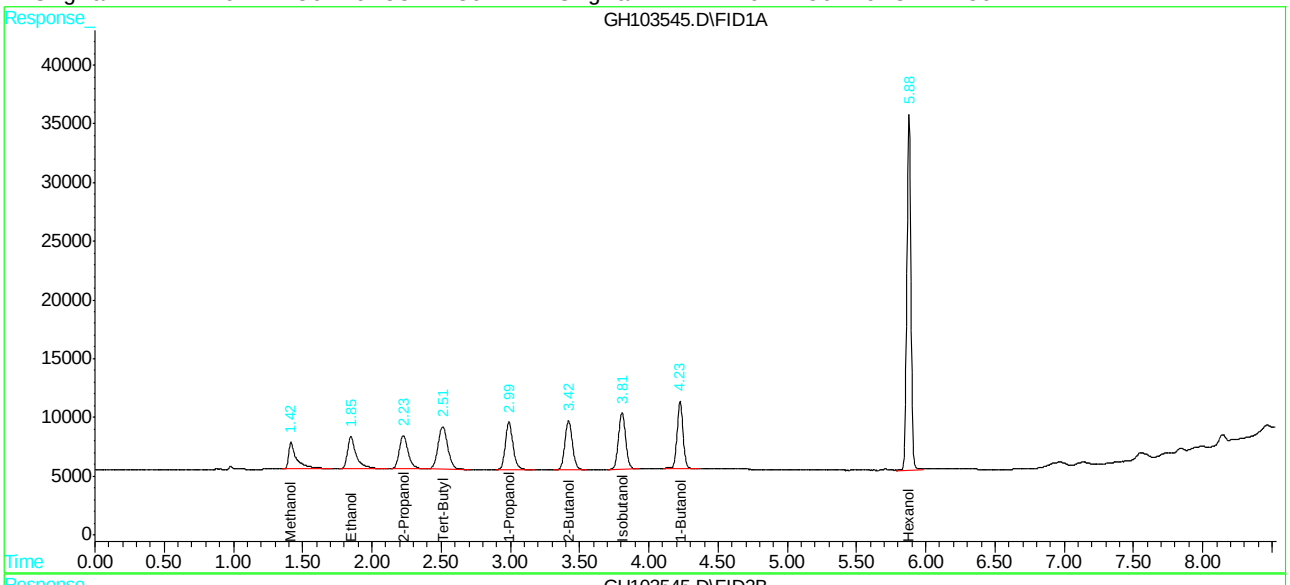
Quantitation Report (QT Reviewed)

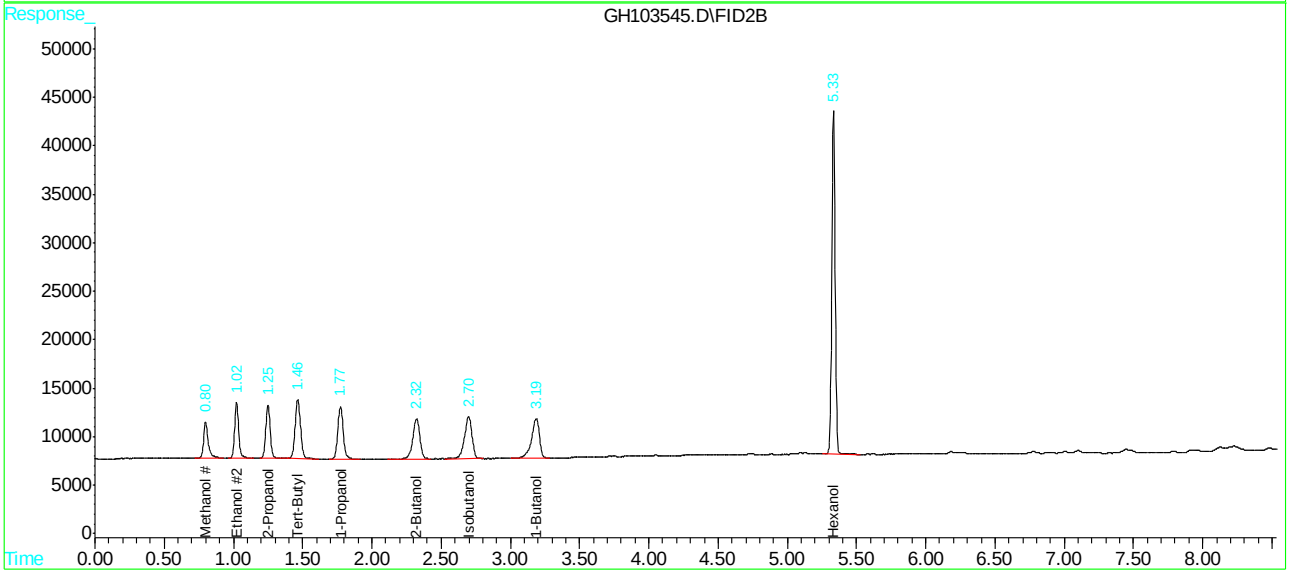
```
Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID1A.CH Vial: 20
Acq On    : 29 Feb 2016   1:20 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\DATA1035\GH103545.D\FID2B.CH Vial: 20
Acq On    : 29 Feb 2016   1:36 pm                    Operator: XULIU
Sample    : ICV5193-5000                             Inst    : GCGH
Misc      : GC47719,GGH5193,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar  1 12:24 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue Mar 01 12:10:59 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH103673.D\FID1A.CH          Vial: 94
Acq On    : 11 Mar 2016   8:25 am                     Operator: XULIU
Sample    : CC5193-5000                               Inst    : GCGH
Misc      : GC47883,GGH5204,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103673.D\FID2B.CH          Vial: 94
Acq On    : 11 Mar 2016   8:39 am                     Operator: XULIU
Sample    : CC5193-5000                               Inst    : GCGH
Misc      : GC47883,GGH5204,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 10:11 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 08:58:41 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.87	5.33	674467	698935	5288.210	5481.013
	Spiked Amount 5000.000			Recovery	=	105.76%	109.62%
	Target Compounds						
1)	Methanol	1.40	0.79	76713	90451	4395.483	5209.084
2)	Ethanol	1.83	1.02	124362	120810	5541.986	5476.001
3)	Tert-Butyl Alcoh	2.49	1.45	182827	177157	5362.730	5538.801
4)	1-Propanol	2.97	1.77	160078	154808	5507.453	5385.078
5)	2-Propanol	2.21	1.24	134765	128420	5482.705	5504.570
7)	Isobutanol	3.79	2.69	177935	172459	5258.239	5346.670
8)	1-Butanol	4.21	3.18	171494	158196	5130.628	4459.116
9)	2-Butanol	3.40	2.31	160576	157146	5229.487	5487.458

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

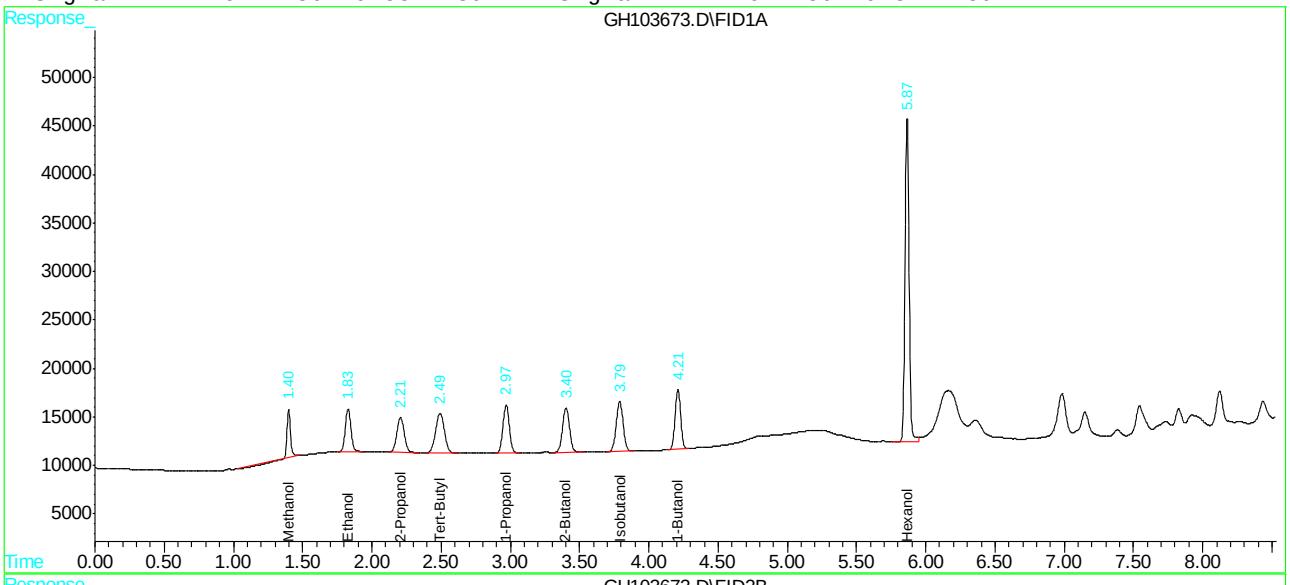
Quantitation Report (QT Reviewed)

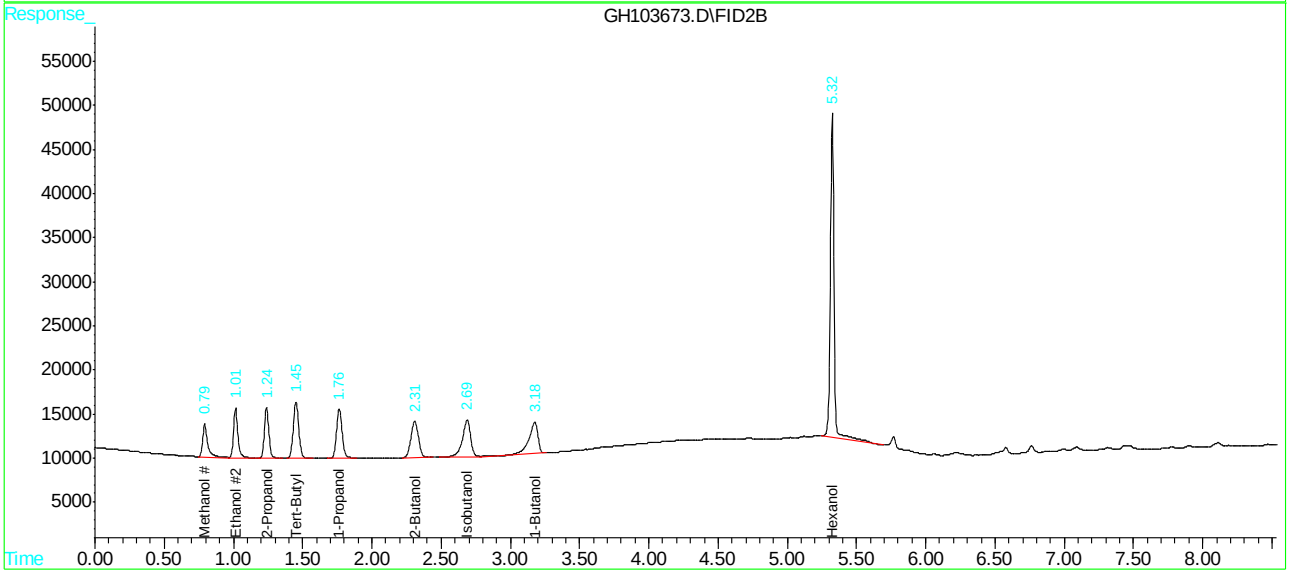
Data File : C:\HPCHEM\1\DATA\GH103673.D\FID1A.CH Vial: 94
Acq On : 11 Mar 2016 8:25 am Operator: XULIU
Sample : CC5193-5000 Inst : GCGH
Misc : GC47883,GGH5204,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103673.D\FID2B.CH Vial: 94
Acq On : 11 Mar 2016 8:39 am Operator: XULIU
Sample : CC5193-5000 Inst : GCGH
Misc : GC47883,GGH5204,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 11 10:11 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 08:58:41 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103683.D\FID1A.CH          Vial: 95
Acq On    : 11 Mar 2016  11:22 am                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47881,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103683.D\FID2B.CH          Vial: 95
Acq On    : 11 Mar 2016  11:42 am                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47881,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 11 13:27 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.86	5.32	606749	589700	4757.263	4624.395
	Spiked Amount 5000.000			Recovery	=	95.15%	92.49%
	Target Compounds						
1)	Methanol	1.40	0.79	163694	150178	9379.312	8648.745
2)	Ethanol	1.82	1.02	237008	200238	10561.846	9076.281
3)	Tert-Butyl Alcoh	2.49	1.46	340106	311327	9976.067	9733.627
4)	1-Propanol	2.97	1.77	305608	289740	10514.370	10078.774
5)	2-Propanol	2.20	1.24	249882	214049	10166.095	9174.961
7)	Isobutanol	3.78	2.69	354302	332711	10470.137	10314.894
8)	1-Butanol	4.20	3.17	329998	318434	9872.647	8975.828
9)	2-Butanol	3.40	2.32	310392	283673	10108.526	9905.721

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

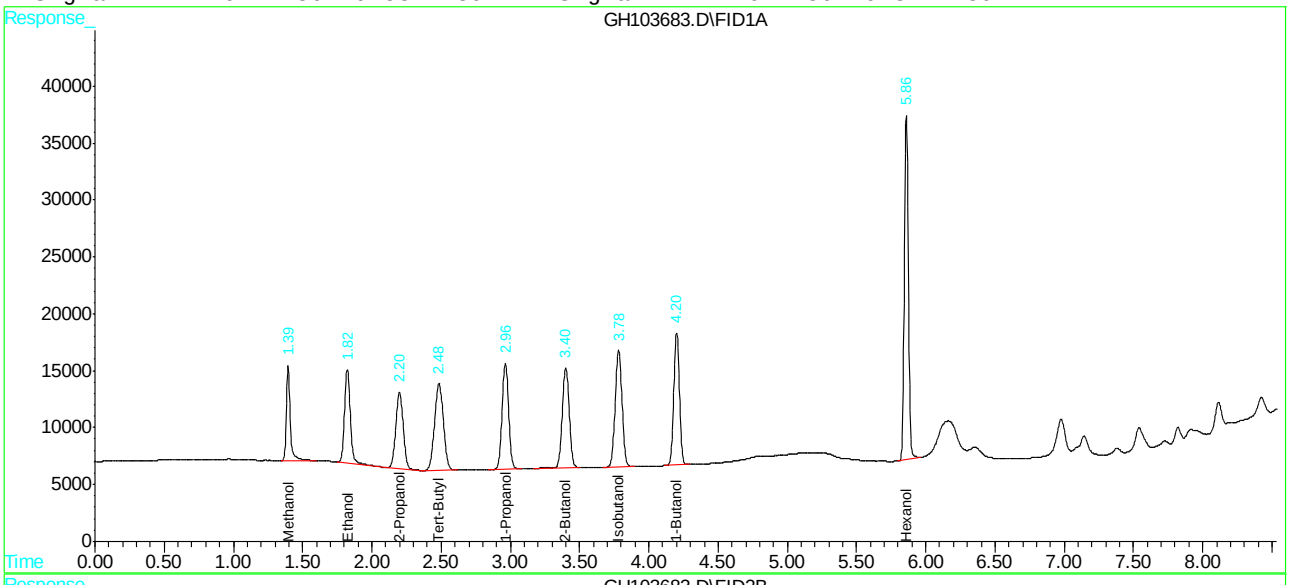
Quantitation Report (QT Reviewed)

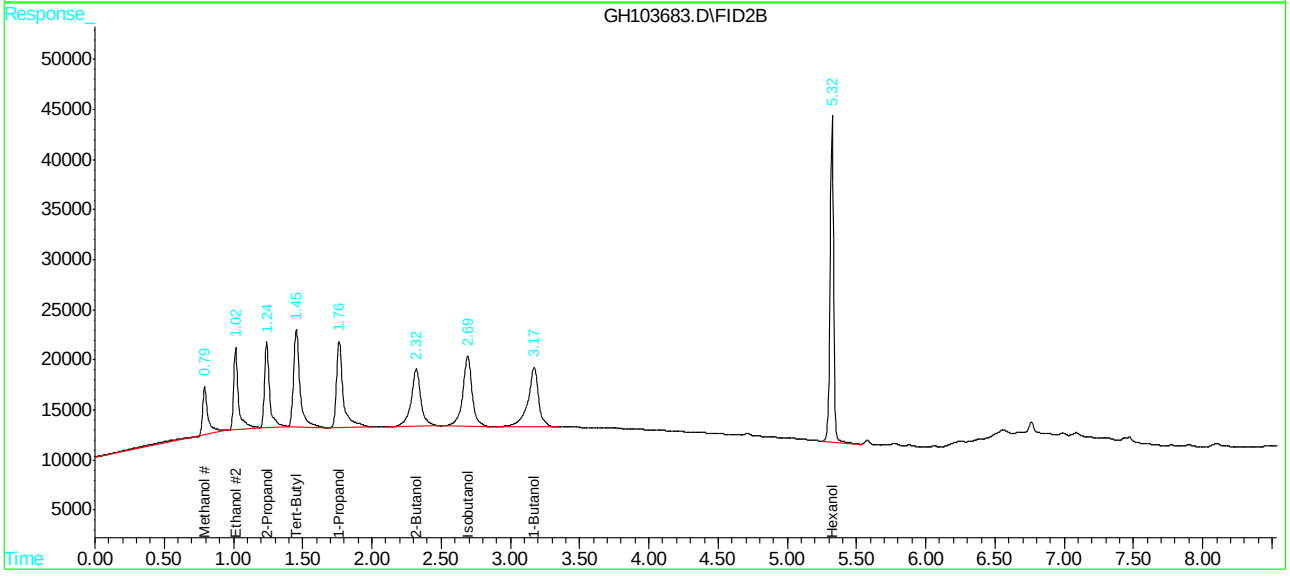
Data File : C:\HPCHEM\1\DATA\GH103683.D\FID1A.CH Vial: 95
Acq On : 11 Mar 2016 11:22 am Operator: XULIU
Sample : CC5193-10000 Inst : GCGH
Misc : GC47881,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103683.D\FID2B.CH Vial: 95
Acq On : 11 Mar 2016 11:42 am Operator: XULIU
Sample : CC5193-10000 Inst : GCGH
Misc : GC47881,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 11 13:27 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103694.D\FID1A.CH          Vial: 95
Acq On    : 11 Mar 2016   3:16 pm                     Operator: XULIU
Sample    : CC5193-5000                               Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103694.D\FID2B.CH          Vial: 95
Acq On    : 11 Mar 2016   3:30 pm                     Operator: XULIU
Sample    : CC5193-5000                               Inst    : GCGH
Misc      : GC47883,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:19 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.86	5.32	635704	629563	4984.285	4937.001
	Spiked Amount 5000.000			Recovery	=	99.69%	98.74%
	Target Compounds						
1)	Methanol	1.39	0.80	89260	95558	5114.418	5503.170
2)	Ethanol	1.82	1.02	120702	125054	5378.847	5668.355
3)	Tert-Butyl Alcoh	2.48	1.46	201239	176724	5902.795	5525.271
4)	1-Propanol	2.96	1.77	161892	152926	5569.857	5319.632
5)	2-Propanol	2.19	1.25	141540	130289	5758.371	5584.716
7)	Isobutanol	3.78	2.70	181326	166529	5358.446	5162.846
8)	1-Butanol	4.20	3.18	174330	170284	5215.466	4799.862
9)	2-Butanol	3.39	2.31	162064	152001	5277.946	5307.790

11.5.11

11

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

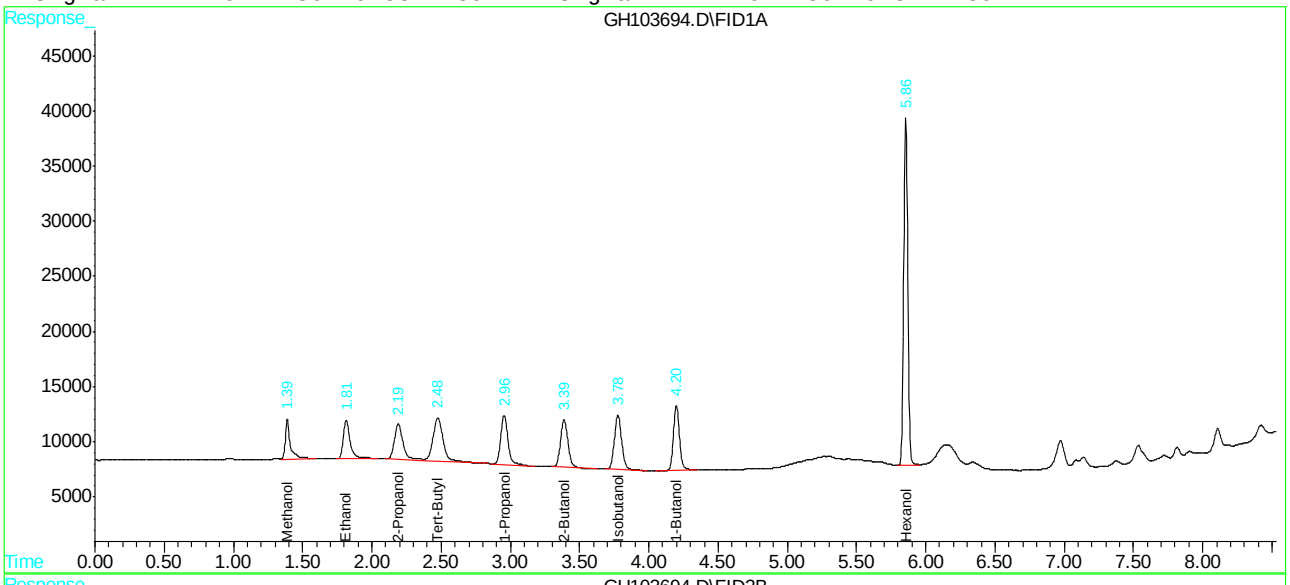
Quantitation Report (QT Reviewed)

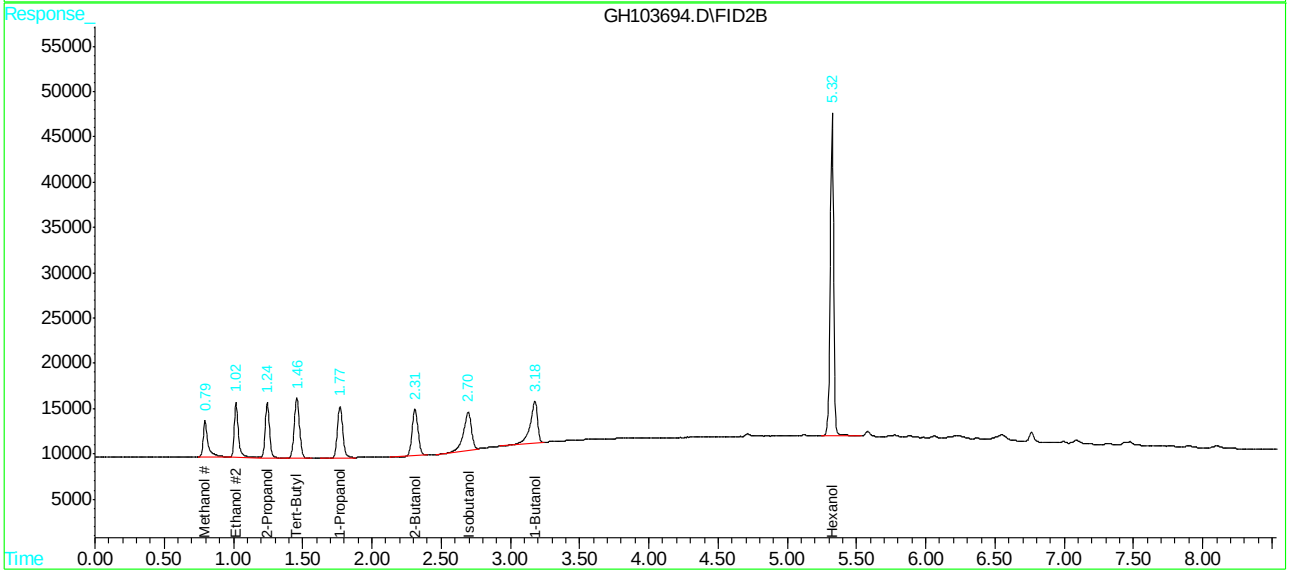
Data File : C:\HPCHEM\1\DATA\GH103694.D\FID1A.CH Vial: 95
Acq On : 11 Mar 2016 3:16 pm Operator: XULIU
Sample : CC5193-5000 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103694.D\FID2B.CH Vial: 95
Acq On : 11 Mar 2016 3:30 pm Operator: XULIU
Sample : CC5193-5000 Inst : GCGH
Misc : GC47883,GGH5205,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Mar 14 8:19 2016 Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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\GH103704.D\FID1A.CH          Vial: 9
Acq On    : 11 Mar 2016   6:16 pm                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103704.D\FID2B.CH          Vial: 9
Acq On    : 11 Mar 2016   6:31 pm                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:57 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Initial Calibration
DataAcq Meth : MGH5193.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						
10) S	Hexanol	5.86	5.32	646165	641637	5066.306	5031.683
	Spiked Amount 5000.000			Recovery	=	101.33%	100.63%
	Target Compounds						
1)	Methanol	1.39	0.80	166614	152918	9546.602	8806.575
2)	Ethanol	1.82	1.02	226903	221939	10111.521	10059.930
3)	Tert-Butyl Alcoh	2.48	1.46	336422	320836	9868.004	10030.925
4)	1-Propanol	2.96	1.77	300993	282379	10355.587	9822.721
5)	2-Propanol	2.20	1.24	242851	234889	9880.027	10068.274
7)	Isobutanol	3.78	2.69	347789	337709	10277.671	10469.866
8)	1-Butanol	4.20	3.18	324756	310344	9715.807	8747.773
9)	2-Butanol	3.40	2.32	301489	288891	9818.603	10087.945

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC15518

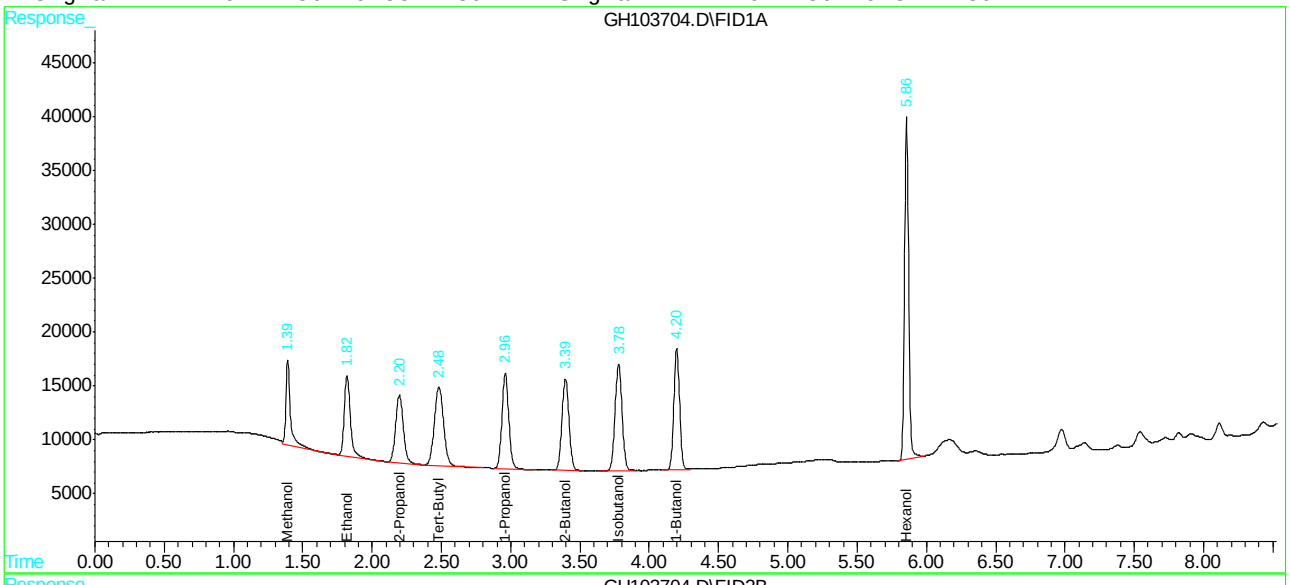
Quantitation Report (QT Reviewed)

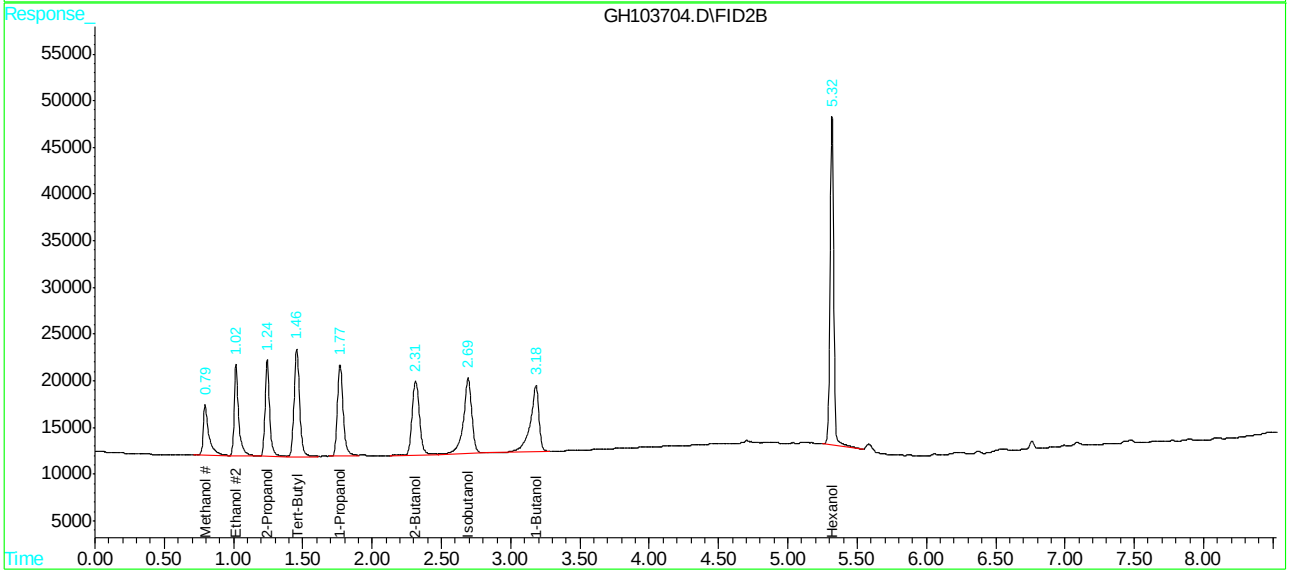
```
Data File : C:\HPCHEM\1\DATA\GH103704.D\FID1A.CH          Vial: 9
Acq On    : 11 Mar 2016   6:16 pm                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\HPCHEM\1\DATA\GH103704.D\FID2B.CH          Vial: 9
Acq On    : 11 Mar 2016   6:31 pm                     Operator: XULIU
Sample    : CC5193-10000                              Inst    : GCGH
Misc      : GC47905,GGH5205,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Mar 14  8:57 2016  Quant Results File: MGH5193.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5193.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri Mar 11 11:46:28 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5193.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 JC15518

ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5193

Print Analyst Name: Xulin

Analyst Signature:

Date: 2/28/16

Columns: 2B6 ug / RTX-1 (30m x0.53 mm x3um) (30m x0.32mm x3um)

Method 8015CACC

Initial Cal. Method MGH5193

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015GW0413	AEC Surr (3/15)	20000 ppm
215GW0414	AEC (2U) (3/15)	100 ppm
215GW0415	AEC MD(2) (3/15)	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:** 3/2/16

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
	GH103533	2B					1						✓ OK		
	103534	2C5193-100					1						RR	2nd signal NG	
	103535	2C5193-500					1						RR	1st signal NG	
	103536	2C5193-1000					1						✓ OK	10ml STD, 2ul surr/1ml dw	
	103537	2C5193-5000					1						RR	1st signal NG	
	103538	2C5193-10,000					1						✓ OK	100ul STD, 2.5ul surr/1ml dw	
	103539	2C5193-50,000					1						✓ OK	100ul STD, 3ul surr/1ml dw	
	103540	2C5193-100,000					1						✓ OK	100ul STD, 4ul surr/1ml dw	
	103541	2C5193-5000					1						✓ OK	10ul STD, 2.5ul surr/1ml dw	
	103542	2C5193-100					1						RR	1st signal NG	
	103543	2C5193-500					1						✓ OK	5ul STD, 1ul surr/1ml dw	
	103544	2C5193-100					1						✓ OK	10ul STD, 4ul surr/10ml dw	
	103545	2C5193-5000					1						✓ OK	50ul STD (2)/1ml dw	

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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Rev. Date: 2/14/2007

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SGS ACCUTEST JC15518

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: GGH5205 3/11

Print Analyst Name: Xulin

Date: 3/11/16

Analyst Signature:

Columns: 2B6 44 / RTX-1 (20m x 0.53mm x 2µm) (20m x 0.32mm x 2µm)

Method 8015C ALC

Initial Cal. Method MGH5193

Standard Data

Lot #	Description	Conc.
015W4113	All SNV	2000ppm
015W4114	All SND	100 ppm
015W4115	All SD(2)	100 ppm

Standard Data

Lot #	Description	Conc.

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: 3/15/16

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
	GM103669	2B					1					✓	OK		
	103670	CC5193-5000					1						Data not collected, and injector malfunction		
	103671	CC5193-5000					1						N/G	1st signal N/G 50µl SD/mlw	
	103672	MB1					1						not run		
	103673	CC5193-5000					1					✓	OK	50µl SD/mlw	
	103674	MB2					1					✓	OK		
	103675	BS					1					✓	OK	50µl SD(2)/mlw	
	103676	JC15593-1	47886 meth	W W	12		1					✓	OK		✓
	103677	JC15518-1	47883 CMA	W W	5		1					✓	OK		✓
	103678	JC15518-1MS	✓	W W	5		1					✓	OK	50µl SD(2)/mlsample	✓
	103679	JC15518-1MSD	✓	W W	5		1					✓	OK	50µl SD(2)/mlsample	✓
	103680	JC15082-1	47881 MOH	W W	3		1					✓	OK		9
	103681	JC15084-1	✓	W W	5		100µl/mlw 50µl/mlw	X10³				✓	OK	Turbidity + resin	9
	103682	JC15085-1	✓	W W	8		100µl/mlw 50µl/mlw	X10³				✓	OK	Turbidity + resin	6
	103683	CC5193-10,000					1					✓	OK	100µl SD/mlw	
	103684	MB3 3/11					1					✓	OK		
	103685	JC15086-1	47895 meth	W W	3		100µl/mlw 50µl/mlw	X10³				✓	OK	Turbidity + resin	6

3/11

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: OR001-9
Rev. Date: 2/14/2007

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ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5205 (w) 3/14

Print Analyst Name: Xu Lin

Analyst Signature:

Date: 3/11/16

Columns: ZB624 / RTX-1 (30m x0.53mm x3um) (30m x0.32mm x2um)

Method 8010/12 ACC

Initial Cal. Method MGH5193

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	Pg 199	

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: 3/15/16

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
	GH103686	JC15518-2	47883 CMA	G W	5		1					✓	ok		✓
	103687	JC15518-3	✓	G W	5		1					✓	ok		✓
	103688	JC15518-4	✓	G W	5		1					✓	ok ~~RR~~	(w) 3/16 ~~Meth?~~ (w) 3/16	✓
	103689	JC15518-5	✓	G W	5		1					✓	ok ~~RR~~	(w) 3/16 ~~Meth?~~ (w) 3/16	✓
	103690	JC15518-6	✓	G W	5		1					✓	ok ~~RR~~	(w) 3/16 ~~Meth?~~ (w) 3/16	✓
	103691	JC15518-7	✓	G W	5		1					✓	ok ~~RR~~	(w) 3/16 ~~Meth?~~ (w) 3/16	✓
	103692	JC15518-8	✓	G W	5		1					✓	ok		✓
	103693	CC5193-5000					1					✓	NG	1st signal NG sopdsoo/ml20	
	103694	CC5193-5000					1					✓	ok	sopdsoo/ml20	
	103695	JC (w) 2/14 M334	(w) 3/11				1					✓	ok		
	103696	JC15518-9	47883 CMA	W G	1		1					✓	ok		6
	103697	JC15883-1	47905 CMA	G W	19		1					✓	ok		✓
	103698	JC15883-1MS	✓	G W	19		1					✓	ok	sopdsoo(2)/ml sample	✓
	103699	JC15883-1MSD	✓	G W	19		1					✓	ok	sopdsoo(2)/ml sample	✓
	103700	JC15883-2	✓	G W	3		1					✓	ok		✓
	103701	JC15883-3	✓	G W	3		1					✓	ok		✓
	103702	JC15883-4	✓	G W	3		1					✓	ok		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

ACCUTEST.

VOLATILE ANALYSIS LOG

Batch ID: GGH5205

Print Analyst Name: Xulin

Analyst Signature:

Date: 3/11/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3µm)

Method: 8015C ALL

Initial Cal. Method: MGH5793

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	Pg 199	

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: 3/11/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (m) or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GM103703	JC15883-5	4790S CMA	MT	3		1					✓	OK		✓
	103704	CC5193-10.000										✓	OK	100µg/ml/kg	

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MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-9
Rev. Date: 2/14/2007

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GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91903-MB1	4G65931.D	1	03/14/16	DS	03/09/16	OP91903	G4G1734

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	75%	26-132%
877-09-8	Tetrachloro-m-xylene	68%	26-132%
2051-24-3	Decachlorobiphenyl	86%	10-118%
2051-24-3	Decachlorobiphenyl	72%	10-118%

Method Blank Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91903-MB11	4G65936.D	1	03/14/16	DS	03/09/16	OP91903	G4G1734

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Result	RL	MDL	Units	Q
319-85-7	beta-BHC	ND	0.0010	0.00042	ug/l	
72-54-8	4,4'-DDD	ND	0.0010	0.00049	ug/l	
50-29-3	4,4'-DDT	ND	0.0010	0.00047	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	75%	26-132%
877-09-8	Tetrachloro-m-xylene	71%	26-132%
2051-24-3	Decachlorobiphenyl	59%	10-118%
2051-24-3	Decachlorobiphenyl	53%	10-118%

Blank Spike Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91903-BS1	4G66051.D	1	03/16/16	BP	03/09/16	OP91903	G4G1738

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
319-85-7	beta-BHC	0.25	0.26	104	55-137
72-54-8	4,4'-DDD	0.25	0.27	108	46-151
50-29-3	4,4'-DDT	0.25	0.29	116	53-158

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	86%	26-132%
877-09-8	Tetrachloro-m-xylene	92%	26-132%
2051-24-3	Decachlorobiphenyl	96%	10-118%
2051-24-3	Decachlorobiphenyl	108%	10-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91903-MS	6G32902.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
OP91903-MSD	6G32903.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
JC15423-2	6G32901.D	1	03/15/16	DS	03/09/16	OP91903	G6G958
JC15423-2	6G32974.D	50	03/17/16	BP	03/09/16	OP91903	G6G960

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC15518-1, JC15518-2, JC15518-3, JC15518-4, JC15518-5, JC15518-6, JC15518-7, JC15518-8

CAS No.	Compound	JC15423-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
319-85-7	beta-BHC	0.10		0.52	0.70	115	0.52	0.72	119	3	46-151/36
72-54-8	4,4'-DDD	7.1 [b]		0.52	8.4	250* [a]	0.52	10	557* [a]	17	40-161/36
50-29-3	4,4'-DDT	0.45		0.52	1.2	144	0.52	1.3	163	8	41-173/33

CAS No.	Surrogate Recoveries	MS	MSD	JC15423-2	JC15423-2	Limits
877-09-8	Tetrachloro-m-xylene	95%	112%	45%	0%* [c]	26-132%
877-09-8	Tetrachloro-m-xylene	100%	115%	83%	0%* [c]	26-132%
2051-24-3	Decachlorobiphenyl	52%	57%	29%	0%* [c]	10-118%
2051-24-3	Decachlorobiphenyl	49%	56%	32%	0%* [c]	10-118%

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

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* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1734-CC1719	**Injection Date:**	03/14/16
Lab File ID:	4G65929.D	**Injection Time:**	16:46
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	198812772	2.22	192890061	2.06
Upper Limit [a]	397625544	2.72	385780122	2.56
Lower Limit [b]	99406386	1.72	96445031	1.56

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP91903-MB1	213480221	2.23	210299297	2.06
JC15398-50A	204675394	2.23	213450246	2.06
ZZZZZZ	244348019	2.22	245204450	2.06
ZZZZZZ	189527973	2.22	208642987	2.06
OP91893-MB1	203208596	2.23	224243442	2.06

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1734-CC1719	**Injection Date:**	03/14/16
Lab File ID:	4G65934.D	**Injection Time:**	18:29
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	203321166	2.22	221276288	2.06
Upper Limit [a]	406642332	2.72	442552576	2.56
Lower Limit [b]	101660583	1.72	110638144	1.56

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP91903-MB11	235554042	2.23	235263648	2.07
OP92032-MB1 [c]	211548902	2.23	225755485	2.06
ZZZZZZ	207831640	2.23	221536480	2.06
ZZZZZZ	203151272	2.23	206042681	2.06
JC15597-4	214714163	2.23	237574965	2.06
ZZZZZZ	215798848	2.23	232183450	2.06
ZZZZZZ	217083522	2.23	217213657	2.06

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.
(c) corr-raw data

Semivolatile Internal Standard Area Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G958-CC957	**Injection Date:**	03/15/16
Lab File ID:	6G32896.D	**Injection Time:**	17:32
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	42871380	1.59	79896752	1.32
Upper Limit [a]	85742760	2.09	159793504	1.82
Lower Limit [b]	21435690	1.09	39948376	0.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP91918-LB22	44801453	1.59	86212829	1.32
ZZZZZZ	46130625	1.59	85740511	1.32
JC15423-2	46660652	1.59	95190834	1.32
OP91903-MS	48435526	1.59	83301719	1.32
OP91903-MSD	46114694	1.59	80893903	1.32
ZZZZZZ	45760192	1.59	88537600	1.32
ZZZZZZ	48969948	1.59	95518425	1.32
ZZZZZZ	50139671	1.59	98725654	1.32
ZZZZZZ	44988508	1.59	79116318	1.32
ZZZZZZ	50189719	1.59	98753076	1.32
JC15518-1	48526531	1.59	98126527	1.32
JC15518-2	48785915	1.59	98870484	1.32
JC15518-3	47048083	1.59	85484625	1.32
JC15518-4	52925100	1.59	111268973	1.32
JC15518-5	51445584	1.59	101924468	1.32
JC15518-6	48316653	1.59	96389331	1.32
JC15518-7	53426644	1.59	106985758	1.32
JC15518-8	52079008	1.59	97678360	1.32

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1719-DDT
Lab File ID: 4G65293.D
Instrument ID: GC4G
Injection Date: 02/25/16
Injection Time: 15:59

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	10378951	4530748
4,4'-DDE	3252874	3549512
4,4'-DDT	496609797	565803569
DDT Breakdown [a]	2.7 %	1.4 %
Endrin aldehyde	3898446	3964440
Endrin ketone	11917296	13330035
Endrin	345402117	320286415
Endrin Breakdown [b]	4.4 %	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
G4G1719-IC1719	4G65295.D	02/25/16	16:31	00:32	Initial cal 1
G4G1719-IC1719	4G65296.D	02/25/16	16:45	00:46	Initial cal 2
G4G1719-IC1719	4G65297.D	02/25/16	17:00	01:01	Initial cal 5
G4G1719-IC1719	4G65298.D	02/25/16	17:15	01:16	Initial cal 10
G4G1719-ICC1719	4G65299.D	02/25/16	17:30	01:31	Initial cal 25
G4G1719-IC1719	4G65300.D	02/25/16	17:44	01:45	Initial cal 50
G4G1719-IC1719	4G65301.D	02/25/16	17:59	02:00	Initial cal 75
G4G1719-IC1719	4G65302.D	02/25/16	18:14	02:15	Initial cal 100
G4G1719-IC1719	4G65303.D	02/25/16	18:28	02:29	Initial cal 500
G4G1719-IC1719	4G65304.D	02/25/16	18:43	02:44	Initial cal 500
G4G1719-ICV1719	4G65305.D	02/25/16	18:58	02:59	Initial cal verification 25
G4G1719-ICV1719	4G65306.D	02/25/16	19:12	03:13	Initial cal verification 25
G4G1719-ICV1719	4G65307.D	02/25/16	19:27	03:28	Initial cal verification 500
G4G1719-ICV1719	4G65308.D	02/25/16	19:42	03:43	Initial cal verification 500

DDT/Endrin Breakdown Check

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1734-DDT
Lab File ID: 4G65928.D
Instrument ID: GC4G
Injection Date: 03/14/16
Injection Time: 16:32

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	17346132	10538338
4,4'-DDE	3524922	3984923
4,4'-DDT	527027111	561585664
DDT Breakdown [a]	3.8 %	2.5 %
Endrin aldehyde	4348988	5881084
Endrin ketone	14322755	14666185
Endrin	373526654	343749984
Endrin Breakdown [b]	4.8 %	5.6 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G1734-CC1719	4G65929.D	03/14/16	16:46	00:14	Continuing cal 25
OP91903-MB1	4G65931.D	03/14/16	17:15	00:43	Method Blank
JC15398-50A	4G65932.D	03/14/16	17:30	00:58	(used for QC only; not part of job JC15518)
ZZZZZZ	4G65933.D	03/14/16	17:45	01:13	(unrelated sample)
ZZZZZZ	4G65946.D	03/14/16	17:59	01:27	(unrelated sample)
OP91893-MB1	4G65933A.D	03/14/16	18:14	01:42	Method Blank
G4G1734-CC1719	4G65934.D	03/14/16	18:29	01:57	Continuing cal 50
OP91903-MB11	4G65936.D	03/14/16	18:58	02:26	Method Blank
OP92032-MB1	4G65938.D	03/14/16	19:28	02:56	Method Blank
ZZZZZZ	4G65949.D	03/14/16	21:54	05:22	(unrelated sample)
ZZZZZZ	4G65950.D	03/14/16	22:09	05:37	(unrelated sample)
JC15597-4	4G65951.D	03/14/16	22:24	05:52	(used for QC only; not part of job JC15518)
ZZZZZZ	4G65952.D	03/14/16	22:38	06:06	(unrelated sample)
ZZZZZZ	4G65953.D	03/14/16	22:53	06:21	(unrelated sample)
G4G1734-CC1719	4G65955.D	03/14/16	23:22	06:50	Continuing cal 25
ZZZZZZ	4G65957.D	03/14/16	23:52	07:20	(unrelated sample)
ZZZZZZ	4G65958.D	03/15/16	00:06	07:34	(unrelated sample)
ZZZZZZ	4G65959.D	03/15/16	00:21	07:49	(unrelated sample)
ZZZZZZ	4G65960.D	03/15/16	00:36	08:04	(unrelated sample)
ZZZZZZ	4G65961.D	03/15/16	00:50	08:18	(unrelated sample)
ZZZZZZ	4G65962.D	03/15/16	01:05	08:33	(unrelated sample)
ZZZZZZ	4G65963.D	03/15/16	01:20	08:48	(unrelated sample)
ZZZZZZ	4G65964.D	03/15/16	01:34	09:02	(unrelated sample)
ZZZZZZ	4G65965.D	03/15/16	01:49	09:17	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G4G1738-DDT	**Injection Date:**	03/16/16
Lab File ID:	4G66034A.D	**Injection Time:**	09:11
Instrument ID:	GC4G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	12185817	14173762
4,4'-DDE	3046253	3557479
4,4'-DDT	946409596	843089409
DDT Breakdown [a]	1.6 %	2.1 %
Endrin aldehyde	5342327	4675320
Endrin ketone	20068250	20801734
Endrin	517650142	462269240
Endrin Breakdown [b]	4.7 %	5.2 %

(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
ZZZZZZ	4G66038.D	03/16/16	10:42	01:31	(unrelated sample)
ZZZZZZ	4G66039.D	03/16/16	10:57	01:46	(unrelated sample)
ZZZZZZ	4G66040.D	03/16/16	11:12	02:01	(unrelated sample)
ZZZZZZ	4G66041.D	03/16/16	11:26	02:15	(unrelated sample)
ZZZZZZ	4G66044.D	03/16/16	12:10	02:59	(unrelated sample)
ZZZZZZ	4G66045.D	03/16/16	12:25	03:14	(unrelated sample)
OP92043-MS	4G66049.D	03/16/16	13:24	04:13	Matrix Spike
OP92043-MSD	4G66050.D	03/16/16	13:38	04:27	Matrix Spike Duplicate
OP91903-BS1	4G66051.D	03/16/16	13:53	04:42	Blank Spike

DDT/Endrin Breakdown Check

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G957-DDT
Lab File ID: 6G32875.D
Instrument ID: GC6G
Injection Date: 03/15/16
Injection Time: 11:35

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	736782	399675
4,4'-DDE	1110515	221821
4,4'-DDT	169037056	66347523
DDT Breakdown [a]	1.1 %	0.9 %
Endrin aldehyde	886396	421387
Endrin ketone	4095878	1564254
Endrin	80881943	32725230
Endrin Breakdown [b]	5.8 %	5.7 %

(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
G6G957-IC957	6G32877.D	03/15/16	12:08	00:33	Initial cal 1
G6G957-IC957	6G32878.D	03/15/16	12:24	00:49	Initial cal 2
G6G957-IC957	6G32879.D	03/15/16	12:40	01:05	Initial cal 5
G6G957-IC957	6G32880.D	03/15/16	12:57	01:22	Initial cal 10
G6G957-ICC957	6G32881.D	03/15/16	13:13	01:38	Initial cal 25
G6G957-IC957	6G32882.D	03/15/16	13:30	01:55	Initial cal 50
G6G957-IC957	6G32883.D	03/15/16	13:46	02:11	Initial cal 75
G6G957-IC957	6G32884.D	03/15/16	14:03	02:28	Initial cal 100
G6G957-IC957	6G32885.D	03/15/16	14:19	02:44	Initial cal 500
G6G957-IC957	6G32886.D	03/15/16	14:35	03:00	Initial cal 500
G6G957-ICV957	6G32887.D	03/15/16	14:52	03:17	Initial cal verification 25
G6G957-ICV957	6G32889.D	03/15/16	15:25	03:50	Initial cal verification 500
G6G957-ICV957	6G32890.D	03/15/16	15:41	04:06	Initial cal verification 500
G6G958-CC957	6G32891.D	03/15/16	16:10	04:35	Continuing cal 50
OP91913-MB1	6G32893.D	03/15/16	16:43	05:08	Method Blank
OP91913-BS1	6G32894.D	03/15/16	16:59	05:24	Blank Spike
ZZZZZZ	6G32895.D	03/15/16	17:16	05:41	(unrelated sample)
G6G958-CC957	6G32896.D	03/15/16	17:32	05:57	Continuing cal 25
OP91918-LB22	6G32898.D	03/15/16	18:05	06:30	Leachate Blank
ZZZZZZ	6G32900.D	03/15/16	18:38	07:03	(unrelated sample)
JC15423-2	6G32901.D	03/15/16	18:54	07:19	(used for QC only; not part of job JC15518)
OP91903-MS	6G32902.D	03/15/16	19:11	07:36	Matrix Spike
OP91903-MSD	6G32903.D	03/15/16	19:27	07:52	Matrix Spike Duplicate
ZZZZZZ	6G32904.D	03/15/16	19:44	08:09	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G957-DDT
Lab File ID: 6G32875.D
Instrument ID: GC6G
Injection Date: 03/15/16
Injection Time: 11:35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6G32905.D	03/15/16	20:00	08:25	(unrelated sample)
ZZZZZZ	6G32906.D	03/15/16	20:16	08:41	(unrelated sample)
ZZZZZZ	6G32907.D	03/15/16	20:33	08:58	(unrelated sample)
ZZZZZZ	6G32908.D	03/15/16	20:50	09:15	(unrelated sample)
JC15518-1	6G32909.D	03/15/16	21:06	09:31	VP-2
JC15518-2	6G32910.D	03/15/16	21:22	09:47	VP-1
JC15518-3	6G32911.D	03/15/16	21:39	10:04	A-1R4
JC15518-4	6G32912.D	03/15/16	21:55	10:20	A-2R2
JC15518-5	6G32913.D	03/15/16	22:12	10:37	S-35
JC15518-6	6G32914.D	03/15/16	22:28	10:53	S-35D
JC15518-7	6G32915.D	03/15/16	22:44	11:09	S-34
JC15518-8	6G32916.D	03/15/16	23:01	11:26	S-33

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:		**Injection Date:**	
Lab File ID:		**Injection Time:**	
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP91903-BS1	**Injection Date:**	03/16/16
Lab File ID:	4G66051.D	**Injection Time:**	13:53
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1 [a]	3.41		0.26		ug/l	14.3
beta-BHC	2	4.15		0.30		ug/l	
4,4'-DDD	1 [a]	6.13		0.27		ug/l	10.5
4,4'-DDD	2	7.63		0.30		ug/l	
4,4'-DDT	1	6.55		0.29		ug/l	0.0
4,4'-DDT	2 [a]	8.17		0.29		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G958-CC957	**Injection Date:**	03/15/16
Lab File ID:	6G32896.D	**Injection Time:**	17:32
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP91903-MS	**Injection Date:**	03/15/16
Lab File ID:	6G32902.D	**Injection Time:**	19:11
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	2.91	2.91	1.1		ug/l	44.4
beta-BHC	2 [a]	3.75	3.75	0.70		ug/l	
4,4'-DDD	1	5.85	5.85	10.7	E	ug/l	24.1
4,4'-DDD	2 [a]	7.53	7.53	8.4	E	ug/l	
4,4'-DDT	1 [a]	6.30	6.30	1.2		ug/l	20.2
4,4'-DDT	2	8.12	8.11	0.98		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G958-CC957	**Injection Date:**	03/15/16
Lab File ID:	6G32896.D	**Injection Time:**	17:32
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP91903-MSD	**Injection Date:**	03/15/16
Lab File ID:	6G32903.D	**Injection Time:**	19:27
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	2.91	2.91	1.2		ug/l	50.0
beta-BHC	2 [a]	3.75	3.75	0.72		ug/l	
4,4'-DDD	1	5.85	5.85	12.4	E	ug/l	21.4
4,4'-DDD	2 [a]	7.53	7.53	10	E	ug/l	
4,4'-DDT	1 [a]	6.30	6.30	1.3		ug/l	16.7
4,4'-DDT	2	8.11	8.11	1.1		ug/l	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC15518
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]
JC15518-1	6G32909.D	80	80	76	88
JC15518-2	6G32910.D	94	99	91	100
JC15518-3	6G32911.D	79	77	41	40
JC15518-4	6G32912.D	74	643* [c]	76	83
JC15518-5	6G32913.D	82	84	54	59
JC15518-6	6G32914.D	65	68	52	57
JC15518-7	6G32915.D	93	96	76	87
JC15518-8	6G32916.D	91	85	52	58
OP91903-BS1	4G66051.D	86	92	96	108
OP91903-MB1	4G65931.D	75	68	86	72
OP91903-MB11	4G65936.D	75	71	59	53
OP91903-MS	6G32902.D	95	100	52	49
OP91903-MSD	6G32903.D	112	115	57	56

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
(c) Outside control limits due to matrix interference.

12.7.1

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GC Surrogate Retention Time Summary

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G958-CC957	**Injection Date:**	03/15/16
Lab File ID:	6G32896.D	**Injection Time:**	17:32
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.00	2.49	9.97	11.80

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP91918-LB22	6G32898.D	03/15/16	18:05	2.00	2.49	9.97	11.81
ZZZZZZ	6G32900.D	03/15/16	18:38	2.00	2.49	9.97	11.80
JC15423-2	6G32901.D	03/15/16	18:54	2.00	2.49	9.97	11.80
OP91903-MS	6G32902.D	03/15/16	19:11	2.00	2.49	9.97	11.81
OP91903-MSD	6G32903.D	03/15/16	19:27	2.00	2.49	9.97	11.81
ZZZZZZ	6G32904.D	03/15/16	19:44	2.00	2.49	9.97	11.80
ZZZZZZ	6G32905.D	03/15/16	20:00	2.00	2.49	9.97	11.81
ZZZZZZ	6G32906.D	03/15/16	20:16	2.00	2.49	9.97	11.80
ZZZZZZ	6G32907.D	03/15/16	20:33	2.00	2.49	9.97	11.80
ZZZZZZ	6G32908.D	03/15/16	20:50	2.00	2.49	9.97	11.81
JC15518-1	6G32909.D	03/15/16	21:06	2.00	2.49	9.97	11.80
JC15518-2	6G32910.D	03/15/16	21:22	2.00	2.49	9.97	11.80
JC15518-3	6G32911.D	03/15/16	21:39	2.00	2.49	9.97	11.80
JC15518-4	6G32912.D	03/15/16	21:55	2.00	2.50	9.97	11.80
JC15518-5	6G32913.D	03/15/16	22:12	2.00	2.49	9.97	11.80
JC15518-6	6G32914.D	03/15/16	22:28	2.00	2.49	9.97	11.80
JC15518-7	6G32915.D	03/15/16	22:44	2.00	2.49	9.97	11.80
JC15518-8	6G32916.D	03/15/16	23:01	2.00	2.49	9.97	11.80

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1734-CC1719	**Injection Date:**	03/14/16
Lab File ID:	4G65929.D	**Injection Time:**	16:46
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.60	3.00	9.82	11.23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP91903-MB1	4G65931.D	03/14/16	17:15	2.60	3.00	9.82	11.23
JC15398-50A	4G65932.D	03/14/16	17:30	2.61	3.01	9.82	11.23
ZZZZZZ	4G65933.D	03/14/16	17:45	2.60	3.00	9.82	11.23
ZZZZZZ	4G65946.D	03/14/16	17:59	2.61	3.00	9.82	11.23
OP91893-MB1	4G65933A.D	03/14/16	18:14	2.61	3.01	9.82	11.24

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1734-CC1719	**Injection Date:**	03/14/16
Lab File ID:	4G65934.D	**Injection Time:**	18:29
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.60	3.00	9.82	11.23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP91903-MB11	4G65936.D	03/14/16	18:58	2.61	3.01	9.81	11.23
OP92032-MB1	4G65938.D	03/14/16	19:28	2.61	3.01	9.82	11.23
ZZZZZZ	4G65949.D	03/14/16	21:54	2.61	3.01	9.81	11.23
ZZZZZZ	4G65950.D	03/14/16	22:09	2.61	3.01	9.81	11.23
JC15597-4	4G65951.D	03/14/16	22:24	2.61	3.01	9.81	11.23
ZZZZZZ	4G65952.D	03/14/16	22:38	2.61	3.01	9.81	11.23
ZZZZZZ	4G65953.D	03/14/16	22:53	2.61	3.01	9.81	11.23

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: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1719-ICC1719
Lab FileID: 4G65299.D

Response Factor Report GC4G

Method : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Fri Feb 26 08:59:21 2016
Response via : Initial Calibration

Calibration Files
2 =4g65296.D 5 =4g65297.D 10 =4g65298.D 25 =4g65299.D
50 =4g65300.D 100 =4g65302.D 1 =4g65295.D 75 =4g65301.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	----------ISTD----------									
2) Tetrachloro-	0.921	0.864	0.888	0.928	0.907	0.891	0.909	0.940	0.906	2.70
3) alpha-BHC	1.162	1.139	1.156	1.249	1.285	1.261	1.140	1.335	1.216	6.23
4) gamma-BHC	1.057	1.020	1.058	1.108	1.135	1.106	1.134	1.171	1.099	4.55
5) Heptachlor	0.899	0.896	0.936	1.053	1.104	1.083	0.820	1.145	0.992	11.95
6) beta-BHC	0.688	0.572	0.526	0.576	0.562	0.519	0.650	0.566	0.582	10.01
7) delta-BHC	0.721	0.703	0.748	0.815	0.848	0.847	0.769	0.884	0.792	8.36
8) Aldrin	1.139	1.039	1.075	1.105	1.130	1.089	1.265	1.160	1.125	6.07
9) Heptachlor E	1.025	0.935	0.987	1.022	1.032	0.983	0.953	1.051	0.998	4.08
10) gamma-Chlord	0.866	0.864	0.917	0.974	1.001	0.974	0.860	1.030	0.936	7.24
11) alpha-Chlord	1.178	0.916	0.957	0.985	1.002	0.960	1.169	1.021	1.023	9.56
12) Endosulfan I	1.051	0.934	1.013	1.043	1.072	1.002	0.942	1.075	1.016	5.39
13) 4,4'-DDE	0.851	0.726	0.775	0.826	0.870	0.871	0.769	0.910	0.825	7.59
14) Dieldrin	0.920	0.895	0.947	1.008	1.043	1.023	0.922	1.083	0.980	6.95
15) Endrin	0.829	0.850	0.866	0.926	0.952	0.929	0.824	0.985	0.895	6.78
16) 4,4'-DDD	0.670	0.672	0.729	0.778	0.803	0.787	0.657	0.836	0.741	9.31
17) Endosulfan I	0.798	0.803	0.880	0.943	0.962	0.928	0.796	0.989	0.887	8.96
18) 4,4'-DDT	0.232	0.260	0.331	0.449	0.518	0.569	0.250	0.571	0.398	36.70
----- Quadratic regression ----- Coefficient = 0.9986										
Response Ratio = -0.02048 + 0.50078 *A + 0.04293 *A^2										
19) Endrin Aldeh	0.662	0.684	0.690	0.756	0.735	0.716	0.622	0.763	0.704	6.87
20) Endosulfan S	0.677	0.669	0.710	0.753	0.795	0.767	0.691	0.817	0.735	7.63
21) Methoxychlor	0.189	0.180	0.217	0.269	0.271	0.278	0.230	0.290	0.241	17.62
22) Mirex	0.688	0.696	0.731	0.742	0.753	0.696	0.713	0.754	0.722	3.71
23) Endrin Keton	0.692	0.721	0.785	0.835	0.876	0.853	0.663	0.907	0.792	11.47
24) Decachlorobi	0.941	0.906	0.957	0.954	0.942	0.875	0.937	0.946	0.932	3.00
25) I 1-bromo-2-nitrobenzen	----------ISTD----------									
26) Toxaphene{A}					0.025				0.025	0.00
27) Toxaphene{B}					0.027				0.027	0.00
28) Toxaphene{C}					0.036				0.036	0.00
29) Toxaphene{D}					0.021				0.021	0.00
30) Toxaphene{E}					0.014				0.014	0.00
31) I 1-bromo-2-nitrobenzen	----------ISTD----------									
32) Chlordane {A					0.029				0.029	0.00
33) Chlordane {B					0.039				0.039	0.00
34) Chlordane {C					0.125				0.125	0.00
35) Chlordane {D					0.197				0.197	0.00
36) Chlordane {E					0.028				0.028	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen ----------ISTD----------

12.9.1 12

Initial Calibration Summary

Job Number: JC15518 **Sample:** G4G1719-ICC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65299.D
Project: BMSMC, Building 5 Area, PR

2)	Tetrachloro-	0.991	0.964	0.952	0.952	0.921	0.987	0.959	0.947	0.959	2.35
3)	alpha-BHC	1.165	1.181	1.213	1.283	1.297	1.449	1.177	1.370	1.267	8.10
4)	gamma-BHC	1.022	1.031	1.089	1.150	1.157	1.286	1.009	1.218	1.120	8.93
5)	Heptachlor	1.057	1.023	1.070	1.111	1.095	1.200	1.061	1.146	1.095	5.14
6)	beta-BHC	0.538	0.517	0.531	0.531	0.507	0.546	0.560	0.525	0.532	3.09
7)	delta-BHC	0.960	0.959	1.011	1.067	1.089	1.215	0.987	1.155	1.055	8.91
8)	Aldrin	1.145	1.060	1.084	1.119	1.113	1.221	1.126	1.163	1.129	4.35
9)	Heptachlor E	1.024	0.984	1.012	1.036	1.011	1.094	0.981	1.046	1.024	3.53
10)	gamma-Chlord	1.077	1.001	1.018	1.038	1.019	1.107	1.014	1.056	1.041	3.49
11)	alpha-Chlord	1.114	1.005	1.008	1.017	0.994	1.072	1.007	1.028	1.031	4.01
12)	Endosulfan I	1.109	0.971	0.973	0.978	0.952	1.027	1.021	0.985	1.002	5.00
13)	4,4'-DDE	0.943	0.893	0.936	0.982	0.982	1.089	0.944	1.032	0.975	6.33
14)	Dieldrin	0.976	0.961	0.996	1.032	1.027	1.124	0.966	1.070	1.019	5.55
15)	Endrin	0.931	0.896	0.912	0.941	0.924	1.006	0.887	0.954	0.931	4.02
16)	4,4'-DDD	0.821	0.759	0.793	0.823	0.818	0.913	0.828	0.858	0.827	5.45
17)	Endosulfan I	0.909	0.879	0.903	0.918	0.895	0.975	0.892	0.931	0.913	3.26
18)	4,4'-DDT	0.532	0.541	0.641	0.709	0.719	0.815	0.446	0.764	0.646	19.91
19)	Endrin Aldeh	0.825	0.750	0.736	0.727	0.702	0.753	0.817	0.726	0.755	5.83
20)	Endosulfan S	0.829	0.793	0.809	0.807	0.774	0.820	0.815	0.789	0.805	2.24
21)	Methoxychlor	0.378	0.399	0.421	0.448	0.435	0.464	0.379	0.448	0.421	7.85
22)	Mirex	0.815	0.759	0.770	0.744	0.702	0.729	0.802	0.706	0.753	5.50
23)	Endrin Keton	0.822	0.854	0.888	0.927	0.918	0.978	0.868	0.938	0.899	5.62
24)	Decachlorobi	0.815	0.793	0.771	0.748	0.701	0.719	0.824	0.705	0.760	6.42

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.019	0.019	0.00
27)	Toxaphene{B}	0.024	0.024	0.00
28)	Toxaphene{C}	0.040	0.040	0.00
29)	Toxaphene{D}	0.025	0.025	0.00
30)	Toxaphene{E}	0.021	0.021	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.034	0.034	0.00
33)	Chlordane {B	0.038	0.038	0.00
34)	Chlordane {C	0.131	0.131	0.00
35)	Chlordane {D	0.216	0.216	0.00
36)	Chlordane {E	0.032	0.032	0.00

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

4PST1719.M Fri Feb 26 09:02:50 2016 RPT1

12.9.1

12

Initial Calibration Verification

Job Number: JC15518 **Sample:** G4G1719-ICV1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65305.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1719\4g65305.D\ECD1A.ch  Vial: 13
Signal #2 : C:\msdchem\1\DATA\4G1719\4g65305.D\ECD2B.ch
Acq On    : 25 Feb 2016   6:58 pm                    Operator: yvelandd
Sample    : icv1719-25                               Inst    : GC4G
Misc      : op91373,g4g1719,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Fri Feb 26 08:59:21 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	100	0.00	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.906	0.888	2.0	96	0.00	2.59- 2.65
3	A	alpha-BHC	1.216	1.210	0.5	97	0.00	3.03- 3.09
4	MA	gamma-BHC	1.099	1.065	3.1	96	0.00	3.32- 3.38
5	MA	Heptachlor	0.992	1.079	-8.8	103	0.00	3.60- 3.66
6	B	beta-BHC	0.582	0.565	2.9	98	0.01	3.41- 3.47
7	B	delta-BHC	0.792	0.815	-2.9	100	0.00	3.80- 3.86
8	MB	Aldrin	1.125	1.071	4.8	97	0.00	4.14- 4.20
9	B	Heptachlor Epoxide	0.998	0.996	0.2	98	0.00	4.84- 4.90
10	B	gamma-Chlordane	0.936	0.979	-4.6	101	0.00	5.01- 5.07
11	B	alpha-Chlordane	1.023	0.957	6.5	97	0.00	5.18- 5.24
12	A	Endosulfan I	1.016	1.048	-3.1	101	0.00	5.36- 5.42
13	B	4,4'-DDE	0.825	0.753	8.7	91	0.00	5.31- 5.37
14	MA	Dieldrin	0.980	0.981	-0.1	98	0.00	5.68- 5.74
15	MA	Endrin	0.895	0.893	0.2	97	0.00	6.01- 6.07
16	A	4,4'-DDD	0.741	0.744	-0.4	96	0.01	6.16- 6.22
17	B	Endosulfan II	0.887	0.921	-3.8	98	0.00	6.34- 6.40
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	22.224	11.1	94	0.00	6.56- 6.62
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.704	0.720	-2.3	95	0.00	6.96- 7.02
20	B	Endosulfan Sulfate	0.735	0.719	2.2	96	0.00	7.64- 7.70
21	A	Methoxychlor	0.241	0.223	7.5	83	0.01	7.35- 7.41
23	B	Endrin Ketone	0.792	0.817	-3.2	98	0.00	8.09- 8.15
24	SA	Decachlorobiphenyl	0.932	0.894	4.1	94	0.00	9.81- 9.87

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	2.20- 2.26
2	SAB	Tetrachloro-m-xylene	0.959	0.913	4.8	95	0.00	2.99- 3.05
3	A	alpha-BHC	1.267	1.259	0.6	97	0.00	3.63- 3.69
4	MA	gamma-BHC	1.120	1.145	-2.2	99	0.00	4.06- 4.12
5	MA	Heptachlor	1.095	1.087	0.7	97	0.00	4.64- 4.70
6	B	beta-BHC	0.532	0.533	-0.2	100	0.00	4.14- 4.20
7	B	delta-BHC	1.055	1.094	-3.7	102	0.00	4.54- 4.60
8	MB	Aldrin	1.129	1.098	2.7	97	0.00	5.09- 5.15
9	B	Heptachlor Epoxide	1.024	1.027	-0.3	98	0.00	5.91- 5.97

Initial Calibration Verification

Job Number: JC15518 **Sample:** G4G1719-ICV1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65305.D
Project: BMSMC, Building 5 Area, PR

10	B	gamma-Chlordane	1.041	1.037	0.4	99	0.00	6.20- 6.26
11	B	alpha-Chlordane	1.031	1.008	2.2	98	0.00	6.43- 6.49
12	A	Endosulfan I	1.002	0.942	6.0	96	0.00	6.53- 6.59
13	B	4,4'-DDE	0.975	0.980	-0.5	99	0.00	6.67- 6.73
14	MA	Dieldrin	1.019	1.024	-0.5	98	0.00	6.96- 7.02
15	MA	Endrin	0.931	0.941	-1.1	99	0.00	7.48- 7.54
16	A	4,4'-DDD	0.827	0.849	-2.7	102	0.00	7.63- 7.69
17	B	Endosulfan II	0.913	0.913	0.0	99	0.00	7.83- 7.89
18	MA	4,4'-DDT	0.646	0.669	-3.6	94	0.00	8.17- 8.23
19	B	Endrin Aldehyde	0.755	0.756	-0.1	103	0.00	8.40- 8.46
20	B	Endosulfan Sulfate	0.805	0.807	-0.2	99	0.00	8.87- 8.93
21	A	Methoxychlor	0.421	0.431	-2.4	95	0.00	9.39- 9.45
23	B	Endrin Ketone	0.899	0.894	0.6	96	0.00	9.76- 9.82
24	SA	Decachlorobiphenyl	0.760	0.684	10.0	91	0.00	11.22-11.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65299.D 4PST1719.M Fri Feb 26 09:05:18 2016 RPT1

12.9.2
12

Initial Calibration Verification

Job Number: JC15518 **Sample:** G4G1719-ICV1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65306.D
Project: BMSMC, Building 5 Area, PR

```
                    Evaluate Continuing Calibration Report

 Signal #1 : C:\msdchem\1\DATA\4G1719\4g65306.D\ECD1A.ch  Vial: 14
 Signal #2 : C:\msdchem\1\DATA\4G1719\4g65306.D\ECD2B.ch
 Acq On    : 25 Feb 2016   7:12 pm                    Operator: yvelandd
 Sample    : icv1719-25                               Inst    : GC4G
 Misc      : op91373,g4g1719,180,,,10,1               Multiplr: 1.00
 IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

 Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
 Title        : PEST/PCB
 Last Update  : Fri Feb 26 08:59:21 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
 ---------------------------------------------------------------------------
22     Mirex                   0.722   0.668      7.5  104   0.00    7.52- 7.58

*****  Signal #2   *****

22     Mirex                   0.753   0.777     -3.2  112   0.00    9.72- 9.78

---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    4g65299.D  4PST1719.M       Fri Feb 26 09:05:20 2016   RPT1
```

12.9.3

12

Initial Calibration Verification

Job Number: JC15518 **Sample:** G4G1719-ICV1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65307.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1719\4g65307.D\ECD1A.ch  Vial: 15
Signal #2 : C:\msdchem\1\DATA\4G1719\4g65307.D\ECD2B.ch
Acq On    : 25 Feb 2016   7:27 pm                    Operator: yvelandd
Sample    : icv1719-500                              Inst    : GC4G
Misc      : op91373,g4g1719,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Fri Feb 26 08:59:21 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.97- 2.17
32	Chlordane {A}	0.029	0.035	-20.7#	119	0.00	3.64- 3.84
33	Chlordane {B}	0.039	0.041	-5.1	106	0.00	4.21- 4.41
34	Chlordane {C}	0.125	0.122	2.4	98	0.00	4.94- 5.14
35	Chlordane {D}	0.197	0.195	1.0	99	0.00	5.10- 5.30
36	Chlordane {E}	0.028	0.025	10.7	91	0.00	6.18- 6.38

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	2.13- 2.33
32	Chlordane {A}	0.034	0.040	-17.6	117	0.00	4.37- 4.57
33	Chlordane {B}	0.038	0.041	-7.9	106	0.00	5.21- 5.41
34	Chlordane {C}	0.131	0.130	0.8	98	0.00	6.13- 6.33
35	Chlordane {D}	0.216	0.215	0.5	98	0.00	6.36- 6.56
36	Chlordane {E}	0.032	0.034	-6.3	102	0.00	7.84- 8.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65304.D 4PST1719.M Fri Feb 26 09:05:33 2016 RPT1

12.9.4 12

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1719-ICV1719
Lab FileID: 4G65308.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1719\4g65308.D\ECD1A.ch  Vial: 16
Signal #2 : C:\msdchem\1\DATA\4G1719\4g65308.D\ECD2B.ch
Acq On    : 25 Feb 2016   7:42 pm                    Operator: yvelandd
Sample    : icv1719-500                              Inst    : GC4G
Misc      : op91373,g4g1719,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Fri Feb 26 08:59:21 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.97- 2.17
26	L8	Toxaphene{A}	0.025	0.025	0.0	95	0.00	5.99- 6.19
27	L8	Toxaphene{B}	0.027	0.028	-3.7	98	0.00	6.26- 6.46
28	L8	Toxaphene{C}	0.036	0.033	8.3	86	0.00	6.42- 6.62
29	L8	Toxaphene{D}	0.021	0.020	4.8	91	0.00	6.77- 6.97
30	L8	Toxaphene{E}	0.014	0.015	-7.1	97	0.00	7.43- 7.63

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	2.13- 2.33
26	L8	Toxaphene{A}	0.019	0.018	5.3	88	0.00	6.86- 7.06
27	L8	Toxaphene{B}	0.024	0.025	-4.2	95	0.00	7.73- 7.93
28	L8	Toxaphene{C}	0.040	0.041	-2.5	95	0.00	7.89- 8.09
29	L8	Toxaphene{D}	0.025	0.026	-4.0	96	0.00	8.32- 8.52
30	L8	Toxaphene{E}	0.021	0.022	-4.8	98	0.00	9.24- 9.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65304.D 4PST1719.M Fri Feb 26 09:05:35 2016 RPT1

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65929.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1734\4g65929.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1734\4g65929.D\ECD2B.ch
Acq On    : 14 Mar 2016   4:46 pm                    Operator: dharas
Sample    : cc1719-25                                Inst    : GC4G
Misc      : op91919,g4g1734,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 10:05:29 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	77	0.00	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.906	1.144	-26.3#	95	0.00	2.57- 2.63
3	A	alpha-BHC	1.216	1.581	-30.0#	98	0.00	3.01- 3.07
4	MA	gamma-BHC	1.099	1.421	-29.3#	99	0.00	3.30- 3.36
5	MA	Heptachlor	0.992	1.311	-32.2#	96	0.00	3.57- 3.63
6	B	beta-BHC	0.582	0.658	-13.1	88	0.00	3.38- 3.44
7	B	delta-BHC	0.792	1.252	-58.1#	119	0.00	3.79- 3.85
8	MB	Aldrin	1.125	1.409	-25.2#	99	0.00	4.12- 4.18
9	B	Heptachlor Epoxide	0.998	1.297	-30.0#	98	0.00	4.82- 4.88
10	B	gamma-Chlordane	0.936	1.248	-33.3#	99	0.00	4.99- 5.05
11	B	alpha-Chlordane	1.023	1.243	-21.5#	98	0.00	5.16- 5.22
12	A	Endosulfan I	1.016	1.307	-28.6#	97	0.00	5.34- 5.40
13	B	4,4'-DDE	0.825	1.080	-30.9#	101	0.00	5.27- 5.33
14	MA	Dieldrin	0.980	1.275	-30.1#	98	0.00	5.66- 5.72
15	MA	Endrin	0.895	1.173	-31.1#	98	0.00	5.98- 6.04
16	A	4,4'-DDD	0.741	1.030	-39.0#	102	0.01	6.12- 6.18
17	B	Endosulfan II	0.887	1.142	-28.7#	94	0.00	6.31- 6.37
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	28.088	-12.4	95	0.00	6.53- 6.59
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.704	0.943	-33.9#	96	0.00	6.93- 6.99
20	B	Endosulfan Sulfate	0.735	0.977	-32.9#	100	0.00	7.60- 7.66
21	A	Methoxychlor	0.241	0.341	-41.5#	98	0.00	7.32- 7.38
22		Mirex	0.722	0.950	-31.6#	99	0.00	7.49- 7.55
23	B	Endrin Ketone	0.792	1.058	-33.6#	98	0.00	8.06- 8.12
24	SA	Decachlorobiphenyl	0.932	1.145	-22.9#	93	0.00	9.79- 9.85

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	86	0.00	2.19- 2.25
2	SAB	Tetrachloro-m-xylene	0.959	1.074	-12.0	97	0.00	2.97- 3.03
3	A	alpha-BHC	1.267	1.468	-15.9	99	0.00	3.61- 3.67
4	MA	gamma-BHC	1.120	1.315	-17.4	98	0.00	4.04- 4.10
5	MA	Heptachlor	1.095	1.266	-15.6	98	0.00	4.62- 4.68
6	B	beta-BHC	0.532	0.596	-12.0	97	0.00	4.12- 4.18
7	B	delta-BHC	1.055	1.252	-18.7	101	0.00	4.52- 4.58
8	MB	Aldrin	1.129	1.280	-13.4	98	0.00	5.07- 5.13
9	B	Heptachlor Epoxide	1.024	1.163	-13.6	97	0.00	5.89- 5.95

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65929.D
Project: BMSMC, Building 5 Area, PR

10	B	gamma-Chlordane	1.041	1.178	-13.2	98	0.00	6.18- 6.24
11	B	alpha-Chlordane	1.031	1.149	-11.4	97	0.00	6.40- 6.46
12	A	Endosulfan I	1.002	1.098	-9.6	97	0.00	6.50- 6.56
13	B	4,4'-DDE	0.975	1.098	-12.6	96	0.00	6.65- 6.71
14	MA	Dieldrin	1.019	1.161	-13.9	97	0.00	6.94- 7.00
15	MA	Endrin	0.931	1.069	-14.8	98	0.00	7.45- 7.51
16	A	4,4'-DDD	0.827	0.922	-11.5	96	0.00	7.61- 7.67
17	B	Endosulfan II	0.913	1.022	-11.9	96	0.00	7.80- 7.86
18	MA	4,4'-DDT	0.646	0.685	-6.0	83	0.00	8.14- 8.20
19	B	Endrin Aldehyde	0.755	0.815	-7.9	97	0.00	8.37- 8.43
20	B	Endosulfan Sulfate	0.805	0.910	-13.0	97	0.00	8.84- 8.90
21	A	Methoxychlor	0.421	0.406	3.6	78	0.00	9.37- 9.43
22		Mirex	0.753	0.807	-7.2	93	0.00	9.69- 9.75
23	B	Endrin Ketone	0.899	1.087	-20.9#	101	0.00	9.74- 9.80
24	SA	Decachlorobiphenyl	0.760	0.790	-3.9	91	0.00	11.20-11.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65299.D 4PST1719.M Mon Mar 14 18:54:30 2016 RPT1

12.9.6
12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65934.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1734\4g65934.D\ECD1A.ch  Vial: 7
Signal #2 : C:\msdchem\1\DATA\4G1734\4g65934.D\ECD2B.ch
Acq On    : 14 Mar 2016   6:29 pm                    Operator: dharas
Sample    : cc1719-50                                Inst    : GC4G
Misc      : op91955,g4g1734,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 10:05:29 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	90	0.00	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.906	1.051	-16.0	104	0.00	2.57- 2.63
3	A	alpha-BHC	1.216	1.495	-22.9#	104	0.00	3.02- 3.08
4	MA	gamma-BHC	1.099	1.317	-19.8	104	0.00	3.30- 3.36
5	MA	Heptachlor	0.992	1.310	-32.1#	106	0.01	3.58- 3.64
6	B	beta-BHC	0.582	0.654	-12.4	104	0.01	3.39- 3.45
7	B	delta-BHC	0.792	1.197	-51.1#	126	0.00	3.79- 3.85
8	MB	Aldrin	1.125	1.300	-15.6	103	0.00	4.12- 4.18
9	B	Heptachlor Epoxide	0.998	1.179	-18.1	102	0.00	4.82- 4.88
10	B	gamma-Chlordane	0.936	1.182	-26.3#	106	0.00	4.99- 5.05
11	B	alpha-Chlordane	1.023	1.158	-13.2	103	0.00	5.16- 5.22
12	A	Endosulfan I	1.016	1.250	-23.0#	104	0.00	5.34- 5.40
13	B	4,4'-DDE	0.825	0.954	-15.6	98	0.01	5.28- 5.34
14	MA	Dieldrin	0.980	1.195	-21.9#	103	0.00	5.66- 5.72
15	MA	Endrin	0.895	1.067	-19.2	100	0.00	5.99- 6.05
16	A	4,4'-DDD	0.741	0.903	-21.9#	101	0.02	6.12- 6.18
17	B	Endosulfan II	0.887	1.067	-20.3#	99	0.00	6.31- 6.37
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	50.000	57.079	-14.2	105	0.00	6.53- 6.59
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.704	0.867	-23.2#	106	0.00	6.93- 6.99
20	B	Endosulfan Sulfate	0.735	0.910	-23.8#	102	0.00	7.61- 7.67
21	A	Methoxychlor	0.241	0.327	-35.7#	108	0.01	7.32- 7.38
22		Mirex	0.722	0.863	-19.5	103	0.00	7.50- 7.56
23	B	Endrin Ketone	0.792	1.037	-30.9#	106	0.00	8.06- 8.12
24	SA	Decachlorobiphenyl	0.932	1.027	-10.2	98	0.00	9.79- 9.85

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	86	0.00	2.19- 2.25
2	SAB	Tetrachloro-m-xylene	0.959	1.085	-13.1	101	0.00	2.97- 3.03
3	A	alpha-BHC	1.267	1.543	-21.8#	102	0.00	3.62- 3.68
4	MA	gamma-BHC	1.120	1.383	-23.5#	103	0.00	4.04- 4.10
5	MA	Heptachlor	1.095	1.310	-19.6	103	0.00	4.62- 4.68
6	B	beta-BHC	0.532	0.601	-13.0	102	0.00	4.12- 4.18
7	B	delta-BHC	1.055	1.314	-24.5#	104	0.00	4.52- 4.58
8	MB	Aldrin	1.129	1.336	-18.3	103	0.00	5.07- 5.13

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65934.D
Project: BMSMC, Building 5 Area, PR

9	B	Heptachlor Epoxide	1.024	1.217	-18.8	103	0.00	5.89- 5.95
10	B	gamma-Chlordane	1.041	1.219	-17.1	103	0.00	6.18- 6.24
11	B	alpha-Chlordane	1.031	1.193	-15.7	103	0.00	6.40- 6.46
12	A	Endosulfan I	1.002	1.137	-13.5	103	0.00	6.50- 6.56
13	B	4,4'-DDE	0.975	1.157	-18.7	101	0.00	6.65- 6.71
14	MA	Dieldrin	1.019	1.222	-19.9	102	0.00	6.94- 7.00
15	MA	Endrin	0.931	1.076	-15.6	100	0.00	7.45- 7.51
16	A	4,4'-DDD	0.827	0.956	-15.6	101	0.00	7.61- 7.67
17	B	Endosulfan II	0.913	1.045	-14.5	100	0.00	7.80- 7.86
18	MA	4,4'-DDT	0.646	0.763	-18.1	91	0.00	8.14- 8.20
19	B	Endrin Aldehyde	0.755	0.835	-10.6	102	0.00	8.37- 8.43
20	B	Endosulfan Sulfate	0.805	0.925	-14.9	103	0.00	8.84- 8.90
21	A	Methoxychlor	0.421	0.429	-1.9	85	0.00	9.37- 9.43
22		Mirex	0.753	0.813	-8.0	100	0.00	9.69- 9.75
23	B	Endrin Ketone	0.899	1.144	-27.3#	107	0.00	9.74- 9.80
24	SA	Decachlorobiphenyl	0.760	0.780	-2.6	96	0.00	11.20-11.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65304.D 4PST1719.M Tue Mar 15 11:48:48 2016 RPT1

12.9.7
12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65955.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1734\4g65955.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1734\4g65955.D\ECD2B.ch
Acq On    : 14 Mar 2016  11:22 pm                    Operator: dharas
Sample    : cc1719-25                                Inst    : GC4G
Misc      : op91765,g4g1734,15.7,,,10,2              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1719.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 10:05:29 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	95	0.00	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.906	1.069	-18.0	110	0.00	2.58- 2.64
3	A	alpha-BHC	1.216	1.430	-17.6	109	0.00	3.02- 3.08
4	MA	gamma-BHC	1.099	1.260	-14.6	108	0.00	3.31- 3.37
5	MA	Heptachlor	0.992	1.269	-27.9#	115	0.01	3.58- 3.64
6	B	beta-BHC	0.582	0.653	-12.2	108	0.00	3.39- 3.45
7	B	delta-BHC	0.792	1.189	-50.1#	139	0.00	3.79- 3.85
8	MB	Aldrin	1.125	1.232	-9.5	106	0.00	4.12- 4.18
9	B	Heptachlor Epoxide	0.998	1.124	-12.6	105	0.00	4.82- 4.88
10	B	gamma-Chlordane	0.936	1.122	-19.9	110	0.00	4.99- 5.05
11	B	alpha-Chlordane	1.023	1.096	-7.1	106	0.00	5.16- 5.22
12	A	Endosulfan I	1.016	1.150	-13.2	105	0.00	5.34- 5.40
13	B	4,4'-DDE	0.825	0.901	-9.2	104	0.00	5.27- 5.33
14	MA	Dieldrin	0.980	1.106	-12.9	105	0.00	5.66- 5.72
15	MA	Endrin	0.895	0.969	-8.3	100	0.00	5.99- 6.05
16	A	4,4'-DDD	0.741	0.876	-18.2	107	0.00	6.11- 6.17
17	B	Endosulfan II	0.887	0.966	-8.9	98	0.00	6.31- 6.37
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	25.128	-0.5	103	0.00	6.53- 6.59
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.704	0.809	-14.9	102	0.00	6.93- 6.99
20	B	Endosulfan Sulfate	0.735	0.770	-4.8	98	0.00	7.60- 7.66
21	A	Methoxychlor	0.241	0.303	-25.7#	107	0.00	7.32- 7.38
22		Mirex	0.722	0.751	-4.0	97	0.00	7.50- 7.56
23	B	Endrin Ketone	0.792	0.962	-21.5#	110	0.00	8.06- 8.12
24	SA	Decachlorobiphenyl	0.932	0.927	0.5	93	0.00	9.79- 9.85

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	2.20- 2.26
2	SAB	Tetrachloro-m-xylene	0.959	1.111	-15.8	105	0.00	2.98- 3.04
3	A	alpha-BHC	1.267	1.494	-17.9	105	0.00	3.62- 3.68
4	MA	gamma-BHC	1.120	1.349	-20.4#	105	0.00	4.04- 4.10
5	MA	Heptachlor	1.095	1.297	-18.4	105	0.00	4.62- 4.68
6	B	beta-BHC	0.532	0.620	-16.5	105	0.00	4.12- 4.18
7	B	delta-BHC	1.055	1.268	-20.2#	107	0.00	4.52- 4.58
8	MB	Aldrin	1.129	1.310	-16.0	105	0.00	5.07- 5.13

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G4G1734-CC1719
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G65955.D
Project: BMSMC, Building 5 Area, PR

9	B	Heptachlor Epoxide	1.024	1.211	-18.3	105	0.00	5.89- 5.95
10	B	gamma-Chlordane	1.041	1.205	-15.8	104	0.00	6.18- 6.24
11	B	alpha-Chlordane	1.031	1.185	-14.9	105	0.00	6.40- 6.46
12	A	Endosulfan I	1.002	1.111	-10.9	102	0.00	6.50- 6.56
13	B	4,4'-DDE	0.975	1.035	-6.2	95	0.00	6.65- 6.71
14	MA	Dieldrin	1.019	1.161	-13.9	101	0.00	6.94- 7.00
15	MA	Endrin	0.931	1.026	-10.2	98	0.00	7.45- 7.51
16	A	4,4'-DDD	0.827	0.992	-20.0	108	0.00	7.61- 7.67
17	B	Endosulfan II	0.913	1.044	-14.3	102	0.00	7.80- 7.86
18	MA	4,4'-DDT	0.646	0.612	5.3	77	0.00	8.14- 8.20
19	B	Endrin Aldehyde	0.755	0.755	0.0	93	0.00	8.37- 8.43
20	B	Endosulfan Sulfate	0.805	0.947	-17.6	105	0.00	8.84- 8.90
21	A	Methoxychlor	0.421	0.356	15.4	71	0.00	9.37- 9.43
22		Mirex	0.753	0.842	-11.8	101	0.00	9.69- 9.75
23	B	Endrin Ketone	0.899	1.061	-18.0	103	0.00	9.74- 9.80
24	SA	Decachlorobiphenyl	0.760	0.819	-7.8	98	0.00	11.20-11.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g65299.D 4PST1719.M Tue Mar 15 11:54:09 2016 RPT1

12.9.8

12

Initial Calibration Summary

Job Number: JC15518 **Sample:** G6G957-ICC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32881.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration

Calibration Files
2 =6g32878.D 5 =6g32879.D 10 =6g32880.D 25 =6g32881.D
50 =6g32882.D 100 =6g32884.D 1 =6g32877.D 75 =6g32883.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.300	1.347	1.370	1.404	1.385	1.424	1.389	1.386	1.376	2.76
3) alpha-BHC	1.281	1.298	1.331	1.402	1.436	1.531	1.383	1.483	1.393	6.33
4) gamma-BHC	1.165	1.172	1.200	1.246	1.261	1.324	1.353	1.290	1.252	5.55
5) Heptachlor	1.180	1.173	1.177	1.197	1.185	1.219	1.306	1.201	1.205	3.61
6) beta-BHC	0.633	0.625	0.610	0.611	0.595	0.598	0.758	0.595	0.628	8.64
7) delta-BHC	1.192	1.221	1.225	1.229	1.304	1.379	1.328	1.343	1.278	5.42
8) Aldrin	1.276	1.319	1.338	1.401	1.425	1.504	1.433	1.465	1.395	5.57
9) Heptachlor E	1.146	1.170	1.182	1.202	1.197	1.228	1.203	1.206	1.192	2.11
10) gamma-Chlord	1.241	1.286	1.283	1.321	1.324	1.380	1.349	1.347	1.317	3.39
11) alpha-Chlord	1.346	1.293	1.320	1.342	1.335	1.387	1.408	1.358	1.349	2.70
12) Endosulfan I	1.166	1.167	1.171	1.198	1.196	1.239	1.155	1.214	1.188	2.41
13) 4,4'-DDE	1.215	1.166	1.172	1.204	1.221	1.284	1.385	1.251	1.237	5.74
14) Dieldrin	1.123	1.143	1.139	1.175	1.177	1.226	1.165	1.199	1.168	2.87
15) Endrin	0.941	0.938	0.935	0.991	0.993	1.015	0.994	0.999	0.976	3.31
16) 4,4'-DDD	0.871	0.923	0.843	0.896	0.885	0.903	0.975	0.891	0.898	4.33
17) Endosulfan I	1.065	1.098	1.098	1.126	1.115	1.148	1.234	1.131	1.127	4.45
18) 4,4'-DDT	0.984	0.937	0.939	0.971	0.966	0.995	0.947	0.976	0.964	2.20
19) Endrin Aldeh	0.875	0.875	0.878	0.859	0.851	0.895	0.951	0.895	0.885	3.48
20) Endosulfan S	1.055	1.047	1.040	1.047	1.058	1.074	1.020	1.071	1.052	1.66
21) Methoxychlor	0.538	0.516	0.502	0.504	0.489	0.478	0.532	0.482	0.505	4.45
22) Mirex	1.042	1.019	1.016	1.008	0.971	0.947	1.068	0.945	1.002	4.41
23) Endrin Keton	1.142	1.122	1.158	1.148	1.135	1.145	1.156	1.133	1.142	1.08
24) Decachlorobi	1.335	1.268	1.271	1.228	1.175	1.156	1.334	1.164	1.241	5.83
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.011				0.011	0.00
27) Toxaphene{B}					0.027				0.027	0.00
28) Toxaphene{C}					0.042				0.042	0.00
29) Toxaphene{D}					0.026				0.026	0.00
30) Toxaphene{E}					0.030				0.030	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.040				0.040	0.00
33) Chlordane {B					0.050				0.050	0.00
34) Chlordane {C					0.180				0.180	0.00
35) Chlordane {D					0.279				0.279	0.00
36) Chlordane {E					0.043				0.043	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.156	1.141	1.130	1.147	1.098	1.107	1.327	1.092	1.150	6.56
3) alpha-BHC	1.281	1.296	1.317	1.357	1.345	1.377	1.392	1.355	1.340	2.90
4) gamma-BHC	1.151	1.189	1.194	1.213	1.193	1.206	1.231	1.193	1.196	1.92

Initial Calibration Summary

Job Number: JC15518 **Sample:** G6G957-ICC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32881.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.254	1.223	1.206	1.199	1.145	1.139	1.285	1.130	1.198	4.69
6)	beta-BHC	0.628	0.596	0.574	0.575	0.551	0.535	0.667	0.538	0.583	7.90
7)	delta-BHC	1.233	1.200	1.194	1.171	1.204	1.224	1.342	1.206	1.222	4.26
8)	Aldrin	1.206	1.215	1.216	1.227	1.204	1.238	1.221	1.202	1.216	1.02
9)	Heptachlor E	1.088	1.036	1.055	1.063	1.018	1.016	1.135	1.004	1.052	4.16
10)	gamma-Chlord	1.104	1.076	1.071	1.089	1.049	1.053	1.112	1.046	1.075	2.33
11)	alpha-Chlord	1.132	1.082	1.083	1.080	1.031	1.026	1.355	1.024	1.101	9.89
12)	Endosulfan I	1.059	1.014	1.016	1.017	0.973	0.961	1.177	0.960	1.022	6.96
13)	4,4'-DDE	1.021	0.990	0.996	1.025	0.995	1.010	1.021	0.999	1.007	1.38
14)	Dieldrin	1.076	1.015	1.017	1.021	0.979	0.975	1.087	0.963	1.017	4.49
15)	Endrin	0.928	0.851	0.842	0.842	0.846	0.799	0.885	0.792	0.848	5.16
16)	4,4'-DDD	0.825	0.783	0.785	0.778	0.762	0.745	0.879	0.733	0.786	5.94
17)	Endosulfan I	0.994	0.938	0.940	0.915	0.890	0.863	0.985	0.858	0.923	5.55
18)	4,4'-DDT	0.848	0.831	0.832	0.844	0.824	0.802	0.856	0.795	0.829	2.61
19)	Endrin Aldeh	0.717	0.693	0.674	0.664	0.655	0.644	0.654	0.639	0.667	3.97
20)	Endosulfan S	0.966	0.843	0.846	0.832	0.809	0.780	0.824	0.774	0.834	7.13
21)	Methoxychlor	0.454	0.450	0.442	0.453	0.438	0.418	0.519	0.418	0.449	7.05
22)	Mirex	0.745	0.728	0.730	0.724	0.689	0.645	0.770	0.641	0.709	6.59
23)	Endrin Keton	0.968	0.895	0.898	0.885	0.844	0.823	0.958	0.811	0.885	6.54
24)	Decachlorobi	0.687	0.710	0.701	0.685	0.639	0.613	0.759	0.615	0.676	7.45

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.007	0.007	0.00
27)	Toxaphene{B}	0.022	0.022	0.00
28)	Toxaphene{C}	0.040	0.040	0.00
29)	Toxaphene{D}	0.025	0.025	0.00
30)	Toxaphene{E}	0.022	0.022	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.037	0.037	0.00
33)	Chlordane {B	0.039	0.039	0.00
34)	Chlordane {C	0.130	0.130	0.00
35)	Chlordane {D	0.215	0.215	0.00
36)	Chlordane {E	0.034	0.034	0.00

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

6PST957.M Tue Mar 15 16:08:36 2016

12.9.9

12

Initial Calibration Verification

Job Number: JC15518 **Sample:** G6G957-ICV957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32887.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\957\6g32887.D\ECD1A.CH     Vial: 13
Signal #2 : C:\msdchem\1\DATA\957\6g32887.D\ECD2B.CH
Acq On    : 15 Mar 2016   2:52 pm                    Operator: dharas
Sample    : icv957-25                                Inst    : HP G1530A
Misc      : op91919,g6g957,100,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Mar 15 16:07:51 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	86	0.00	1.29- 1.35
2	SAB	Tetrachloro-m-xylene	1.376	1.382	-0.4	85	0.00	1.97- 2.03
3	A	alpha-BHC	1.393	1.412	-1.4	87	0.00	2.49- 2.55
4	MA	gamma-BHC	1.252	1.275	-1.8	88	0.00	2.80- 2.86
5	MA	Heptachlor	1.205	1.220	-1.2	88	0.00	3.33- 3.39
6	B	beta-BHC	0.628	0.625	0.5	88	0.00	2.88- 2.94
7	B	delta-BHC	1.278	1.377	-7.7	97	0.00	3.08- 3.14
8	MB	Aldrin	1.395	1.405	-0.7	87	0.00	3.68- 3.75
9	B	Heptachlor Epoxide	1.192	1.224	-2.7	88	0.00	4.44- 4.50
10	B	gamma-Chlordane	1.317	1.358	-3.1	89	0.00	4.62- 4.68
11	B	alpha-Chlordane	1.349	1.361	-0.9	87	0.00	4.80- 4.86
12	A	Endosulfan I	1.188	1.191	-0.3	86	0.00	4.99- 5.05
13	B	4,4'-DDE	1.237	1.219	1.5	87	0.00	4.93- 4.99
14	MA	Dieldrin	1.168	1.208	-3.4	89	0.00	5.33- 5.39
15	MA	Endrin	0.976	0.980	-0.4	85	0.00	5.68- 5.74
16	A	4,4'-DDD	0.898	0.874	2.7	84	0.00	5.82- 5.88
17	B	Endosulfan II	1.127	1.141	-1.2	87	0.00	6.02- 6.08
18	MA	4,4'-DDT	0.964	0.981	-1.8	87	0.00	6.27- 6.33
19	B	Endrin Aldehyde	0.885	0.956	-8.0	96	0.00	6.70- 6.76
20	B	Endosulfan Sulfate	1.052	1.110	-5.5	91	0.00	7.44- 7.50
21	A	Methoxychlor	0.505	0.507	-0.4	87	0.00	7.13- 7.19
23	B	Endrin Ketone	1.142	1.191	-4.3	90	0.00	7.91- 7.97
24	SAB	Decachlorobiphenyl	1.241	1.320	-6.4	93	0.00	9.94-10.00

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.56- 1.62
2	SAB	Tetrachloro-m-xylene	1.150	1.211	-5.3	92	0.00	2.46- 2.52
3	A	alpha-BHC	1.340	1.348	-0.6	86	0.00	3.17- 3.23
4	MA	gamma-BHC	1.196	1.221	-2.1	88	0.00	3.63- 3.69
5	MA	Heptachlor	1.198	1.189	0.8	86	0.00	4.24- 4.30
6	B	beta-BHC	0.583	0.581	0.3	88	0.00	3.72- 3.78
7	B	delta-BHC	1.222	1.284	-5.1	95	0.00	4.14- 4.20
8	MB	Aldrin	1.216	1.236	-1.6	88	0.00	4.73- 4.79
9	B	Heptachlor Epoxide	1.052	1.089	-3.5	89	0.00	5.61- 5.67
10	B	gamma-Chlordane	1.075	1.132	-5.3	91	0.00	5.92- 5.98
11	B	alpha-Chlordane	1.101	1.111	-0.9	90	0.00	6.17- 6.23
12	A	Endosulfan I	1.022	1.023	-0.1	88	0.00	6.26- 6.32

Initial Calibration Verification

Job Number: JC15518 **Sample:** G6G957-ICV957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32887.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	1.007	1.051	-4.4	89	0.00	6.46- 6.52
14	MA	Dieldrin	1.017	1.064	-4.6	91	0.00	6.74- 6.80
15	MA	Endrin	0.848	0.933	-10.0	96	0.00	7.28- 7.34
16	A	4,4'-DDD	0.786	0.833	-6.0	93	0.00	7.50- 7.56
17	B	Endosulfan II	0.923	0.962	-4.2	91	0.00	7.67- 7.73
18	MA	4,4'-DDT	0.829	0.879	-6.0	91	0.00	8.09- 8.15
19	B	Endrin Aldehyde	0.667	0.756	-13.3	99	0.00	8.30- 8.36
20	B	Endosulfan Sulfate	0.834	0.900	-7.9	94	0.00	8.82- 8.88
21	A	Methoxychlor	0.449	0.466	-3.8	90	0.00	9.47- 9.53
23	B	Endrin Ketone	0.885	0.931	-5.2	92	0.00	9.87- 9.93
24	SAB	Decachlorobiphenyl	0.676	0.739	-9.3	94	0.00	11.78-11.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g32881.D 6PST957.M Tue Mar 15 16:15:14 2016

12.9.10
12

Initial Calibration Verification

Job Number: JC15518 **Sample:** G6G957-ICV957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32889.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\957\6g32889.D\ECD1A.CH     Vial: 15
Signal #2 : C:\msdchem\1\DATA\957\6g32889.D\ECD2B.CH
Acq On    : 15 Mar 2016   3:25 pm                    Operator: dharas
Sample    : icv957-500                               Inst    : HP G1530A
Misc      : op91919,g6g957,100,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Mar 15 16:07:51 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	82	0.00	1.29- 1.35
32	Chlordane {A}	0.068	0.060	11.8	71	0.00	3.26- 3.46
33	Chlordane {B}	0.050	0.054	-8.0	87	0.00	3.77- 3.97
34	Chlordane {C}	0.180	0.187	-3.9	85	0.00	4.55- 4.75
35	Chlordane {D}	0.279	0.298	-6.8	87	0.00	4.73- 4.93
36	Chlordane {E}	0.043	0.044	-2.3	83	0.00	5.85- 6.05

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.49- 1.69
32	Chlordane {A}	0.067	0.064	4.5	78	0.00	4.17- 4.37
33	Chlordane {B}	0.039	0.045	-15.4	94	0.00	4.87- 5.07
34	Chlordane {C}	0.130	0.142	-9.2	89	0.00	5.85- 6.05
35	Chlordane {D}	0.215	0.240	-11.6	91	0.00	6.09- 6.29
36	Chlordane {E}	0.034	0.036	-5.9	87	0.00	7.68- 7.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g32885.D 6PST957.M Tue Mar 15 16:14:57 2016

Initial Calibration Verification

Job Number: JC15518
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G957-ICV957
Lab FileID: 6G32890.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\957\6g32890.D\ECD1A.CH     Vial: 16
Signal #2 : C:\msdchem\1\DATA\957\6g32890.D\ECD2B.CH
Acq On    : 15 Mar 2016   3:41 pm                    Operator: dharas
Sample    : icv957-500                               Inst    : HP G1530A
Misc      : op91919,g6g957,100,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Mar 15 16:07:51 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	0.00	1.29- 1.35
26	L8	Toxaphene{A}	0.011	0.012	-9.1	92	0.00	5.27- 5.47
27	L8	Toxaphene{B}	0.027	0.029	-7.4	88	0.00	5.67- 5.87
28	L8	Toxaphene{C}	0.042	0.046	-9.5	91	0.00	5.94- 6.14
29	L8	Toxaphene{D}	0.026	0.027	-3.8	87	0.00	6.50- 6.70
30	L8	Toxaphene{E}	0.030	0.032	-6.7	88	0.00	7.20- 7.40

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	0.00	1.56- 1.62
26	L8	Toxaphene{A}	0.007	0.008	-14.3	90	0.00	6.63- 6.83
27	L8	Toxaphene{B}	0.022	0.022	0.0	82	0.00	7.56- 7.77
28	L8	Toxaphene{C}	0.040	0.038	5.0	80	0.00	7.74- 7.94
29	L8	Toxaphene{D}	0.025	0.025	0.0	83	0.00	8.23- 8.43
30	L8	Toxaphene{E}	0.022	0.023	-4.5	89	0.00	9.21- 9.41

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g32885.D 6PST957.M Tue Mar 15 16:14:59 2016

12.9.12 12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G6G958-CC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32896.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\958\6g32896.D\ECD1A.CH     Vial: 7
Signal #2 : C:\msdchem\1\DATA\958\6g32896.D\ECD2B.CH
Acq On    : 15 Mar 2016   5:32 pm                    Operator: dharas
Sample    : cc957-25                                 Inst    : HP G1530A
Misc      : op91913,g6g958,980,,,5,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Mar 15 16:07:51 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	84	0.00	1.29- 1.35
2	SAB	Tetrachloro-m-xylene	1.376	1.594	-15.8	95	0.00	1.97- 2.03
3	A	alpha-BHC	1.393	1.665	-19.5	100	0.00	2.49- 2.55
4	MA	gamma-BHC	1.252	1.498	-19.6	101	0.00	2.80- 2.86
5	MA	Heptachlor	1.205	1.411	-17.1	99	0.00	3.33- 3.39
6	B	beta-BHC	0.628	0.744	-18.5	102	0.00	2.88- 2.94
7	B	delta-BHC	1.278	1.533	-20.0	105	0.00	3.08- 3.14
8	MB	Aldrin	1.395	1.633	-17.1	98	0.00	3.68- 3.75
9	B	Heptachlor Epoxide	1.192	1.426	-19.6	100	0.00	4.44- 4.50
10	B	gamma-Chlordane	1.317	1.555	-18.1	99	0.00	4.62- 4.68
11	B	alpha-Chlordane	1.349	1.578	-17.0	99	0.00	4.80- 4.86
12	A	Endosulfan I	1.188	1.409	-18.6	99	0.00	4.99- 5.05
13	B	4,4'-DDE	1.237	1.389	-12.3	97	0.00	4.93- 4.99
14	MA	Dieldrin	1.168	1.384	-18.5	99	0.00	5.33- 5.39
15	MA	Endrin	0.976	1.097	-12.4	93	0.00	5.68- 5.74
16	A	4,4'-DDD	0.898	0.993	-10.6	93	0.00	5.82- 5.88
17	B	Endosulfan II	1.127	1.322	-17.3	99	0.00	6.02- 6.08
18	MA	4,4'-DDT	0.964	1.124	-16.6	97	0.00	6.27- 6.33
19	B	Endrin Aldehyde	0.885	1.045	-18.1	102	0.00	6.70- 6.76
20	B	Endosulfan Sulfate	1.052	1.249	-18.7	100	0.00	7.44- 7.50
21	A	Methoxychlor	0.505	0.570	-12.9	95	0.00	7.13- 7.19
22		Mirex	1.002	1.224	-22.2#	102	0.00	7.27- 7.33
23	B	Endrin Ketone	1.142	1.396	-22.2#	102	0.00	7.91- 7.97
24	SAB	Decachlorobiphenyl	1.241	1.445	-16.4	99	0.00	9.94-10.00
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.29- 1.35
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	84	0.00	1.29- 1.35
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

12.9.13 12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G6G958-CC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32896.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.56- 1.62
2	SAB	Tetrachloro-m-xylene	1.150	1.339	-16.4	101	0.00	2.46- 2.52
3	A	alpha-BHC	1.340	1.577	-17.7	101	0.00	3.17- 3.23
4	MA	gamma-BHC	1.196	1.416	-18.4	101	0.00	3.63- 3.69
5	MA	Heptachlor	1.198	1.358	-13.4	98	0.00	4.24- 4.30
6	B	beta-BHC	0.583	0.682	-17.0	103	0.00	3.72- 3.78
7	B	delta-BHC	1.222	1.427	-16.8	106	0.00	4.14- 4.20
8	MB	Aldrin	1.216	1.428	-17.4	101	0.00	4.72- 4.79
9	B	Heptachlor Epoxide	1.052	1.216	-15.6	99	0.00	5.61- 5.67
10	B	gamma-Chlordane	1.075	1.245	-15.8	99	0.00	5.92- 5.98
11	B	alpha-Chlordane	1.101	1.231	-11.8	99	0.00	6.16- 6.22
12	A	Endosulfan I	1.022	1.168	-14.3	100	0.00	6.26- 6.32
13	B	4,4'-DDE	1.007	1.172	-16.4	99	0.00	6.46- 6.52
14	MA	Dieldrin	1.017	1.155	-13.6	98	0.00	6.74- 6.80
15	MA	Endrin	0.848	0.961	-13.3	99	0.00	7.28- 7.34
16	A	4,4'-DDD	0.786	0.904	-15.0	101	0.00	7.50- 7.56
17	B	Endosulfan II	0.923	1.072	-16.1	102	0.00	7.67- 7.73
18	MA	4,4'-DDT	0.829	0.958	-15.6	98	0.00	8.08- 8.14
19	B	Endrin Aldehyde	0.667	0.807	-21.0#	105	0.00	8.30- 8.36
20	B	Endosulfan Sulfate	0.834	0.972	-16.5	101	0.00	8.81- 8.87
21	A	Methoxychlor	0.449	0.503	-12.0	96	0.00	9.47- 9.53
22		Mirex	0.709	0.852	-20.2#	102	0.00	9.79- 9.85
23	B	Endrin Ketone	0.885	1.033	-16.7	101	0.00	9.87- 9.93
24	SAB	Decachlorobiphenyl	0.676	0.800	-18.3	101	0.00	11.77-11.83
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.56- 1.62
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.49- 1.69
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g32881.D 6PST957.M Wed Mar 16 08:29:50 2016

12.9.13 12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G6G959-CC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32918.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\959\6g32918.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\959\6g32918.D\ECD2B.CH
Acq On    : 16 Mar 2016   9:37 am                    Operator: brittanp
Sample    : cc957-50                                 Inst    : HP G1530A
Misc      : op91919,g6g959,100,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST957.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Mar 15 16:03:35 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	1.29- 1.35
2	SAB	Tetrachloro-m-xylene	1.376	1.353	1.7	94	0.00	1.97- 2.03
3	A	alpha-BHC	1.393	1.558	-11.8	105	0.00	2.49- 2.55
4	MA	gamma-BHC	1.252	1.396	-11.5	107	0.00	2.81- 2.87
5	MA	Heptachlor	1.205	1.280	-6.2	104	0.00	3.34- 3.40
6	B	beta-BHC	0.628	0.654	-4.1	106	0.00	2.88- 2.94
7	B	delta-BHC	1.278	1.448	-13.3	107	0.00	3.08- 3.14
8	MB	Aldrin	1.395	1.489	-6.7	101	0.00	3.69- 3.76
9	B	Heptachlor Epoxide	1.192	1.307	-9.6	106	0.00	4.45- 4.51
10	B	gamma-Chlordane	1.317	1.408	-6.9	103	0.00	4.62- 4.68
11	B	alpha-Chlordane	1.349	1.413	-4.7	102	0.00	4.80- 4.86
12	A	Endosulfan I	1.188	1.288	-8.4	104	0.00	4.99- 5.05
13	B	4,4'-DDE	1.237	1.294	-4.6	102	0.00	4.93- 4.99
14	MA	Dieldrin	1.168	1.304	-11.6	107	0.00	5.33- 5.39
15	MA	Endrin	0.976	1.086	-11.3	106	0.00	5.68- 5.74
16	A	4,4'-DDD	0.898	0.945	-5.2	103	0.00	5.82- 5.88
17	B	Endosulfan II	1.127	1.226	-8.8	106	0.00	6.02- 6.08
18	MA	4,4'-DDT	0.964	1.048	-8.7	105	0.00	6.27- 6.33
19	B	Endrin Aldehyde	0.885	0.987	-11.5	112	0.00	6.70- 6.76
20	B	Endosulfan Sulfate	1.052	1.158	-10.1	106	0.00	7.44- 7.50
21	A	Methoxychlor	0.505	0.532	-5.3	105	0.00	7.13- 7.19
22		Mirex	1.002	1.069	-6.7	106	0.00	7.28- 7.34
23	B	Endrin Ketone	1.142	1.307	-14.4	111	0.00	7.91- 7.97
24	SAB	Decachlorobiphenyl	1.241	1.259	-1.5	104	0.00	9.94-10.00
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.29- 1.35
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.29- 1.35
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

12.9.14 12

Continuing Calibration Summary

Job Number: JC15518 **Sample:** G6G959-CC957
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G32918.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	89	0.00	1.56- 1.62
2	SAB	Tetrachloro-m-xylene	1.150	1.173	-2.0	95	0.00	2.47- 2.53
3	A	alpha-BHC	1.340	1.430	-6.7	95	0.00	3.18- 3.24
4	MA	gamma-BHC	1.196	1.258	-5.2	94	0.00	3.63- 3.69
5	MA	Heptachlor	1.198	1.118	6.7	87	0.00	4.24- 4.30
6	B	beta-BHC	0.583	0.585	-0.3	95	0.00	3.72- 3.78
7	B	delta-BHC	1.222	1.279	-4.7	95	0.00	4.14- 4.20
8	MB	Aldrin	1.216	1.272	-4.6	94	0.00	4.72- 4.78
9	B	Heptachlor Epoxide	1.052	1.077	-2.4	94	0.00	5.61- 5.67
10	B	gamma-Chlordane	1.075	1.119	-4.1	95	0.00	5.92- 5.98
11	B	alpha-Chlordane	1.101	1.099	0.2	95	0.00	6.16- 6.22
12	A	Endosulfan I	1.022	1.032	-1.0	95	0.00	6.26- 6.32
13	B	4,4'-DDE	1.007	1.081	-7.3	97	0.00	6.46- 6.52
14	MA	Dieldrin	1.017	1.013	0.4	92	0.00	6.74- 6.80
15	MA	Endrin	0.848	0.859	-1.3	91	0.00	7.28- 7.34
16	A	4,4'-DDD	0.786	0.775	1.4	91	0.00	7.50- 7.56
17	B	Endosulfan II	0.923	0.939	-1.7	94	0.00	7.67- 7.73
18	MA	4,4'-DDT	0.829	0.813	1.9	88	0.00	8.08- 8.14
19	B	Endrin Aldehyde	0.667	0.696	-4.3	95	0.00	8.30- 8.36
20	B	Endosulfan Sulfate	0.834	0.841	-0.8	93	0.00	8.81- 8.87
21	A	Methoxychlor	0.449	0.421	6.2	86	0.00	9.46- 9.52
22		Mirex	0.709	0.726	-2.4	94	0.00	9.78- 9.84
23	B	Endrin Ketone	0.885	0.912	-3.1	96	0.00	9.86- 9.92
24	SAB	Decachlorobiphenyl	0.676	0.776	-14.8	108	0.00	11.77-11.83
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.56- 1.62
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.49- 1.69
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g32882.D 6PST957.M Wed Mar 16 16:16:45 2016

12.9.14

12

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:06 pm
Operator : dharas
Sample : jc15518-1
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:59:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.317	1.589	98126527	48526531	50.000	50.000
25) I	1-bromo-2...	1.317	1.589	98126527	48526531	50.000	50.000
31) I	1-bromo-2...	1.317	1.589	98126527	48526531	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.492	86427495	35690376	32.015	31.986
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 80.04%	79.97%
24)	SAB Decachlor...	9.970	11.804	74325089	23069000	30.509	35.147
	Spiked Amount	40.000			Recovery	= 76.27%	87.87%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

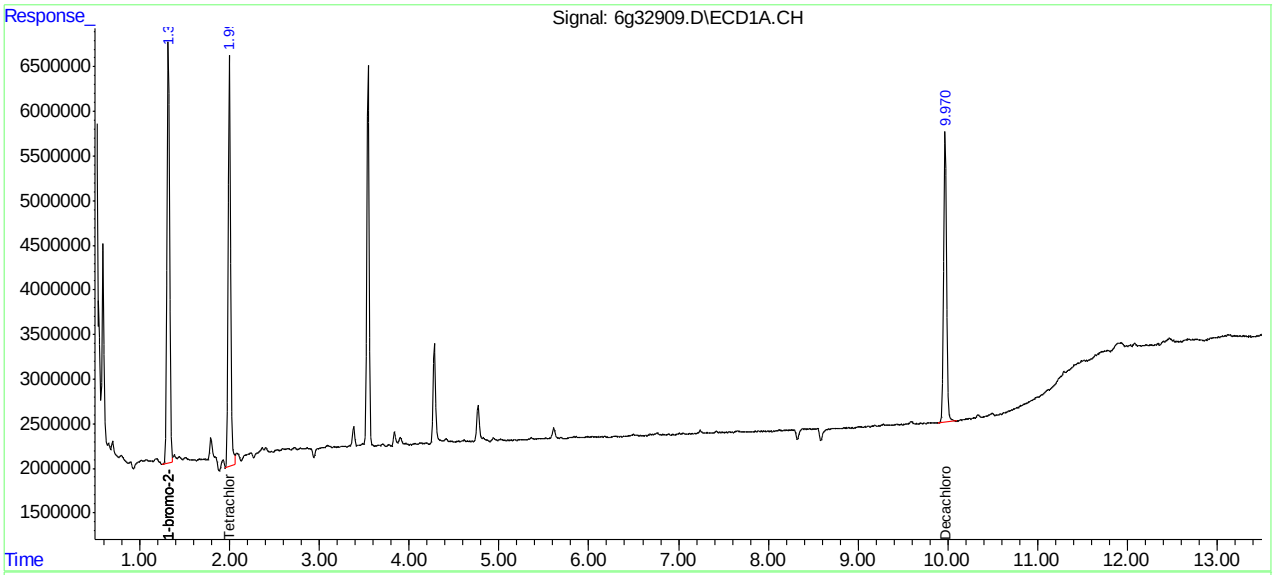
SGS ACCUTEST JC15518

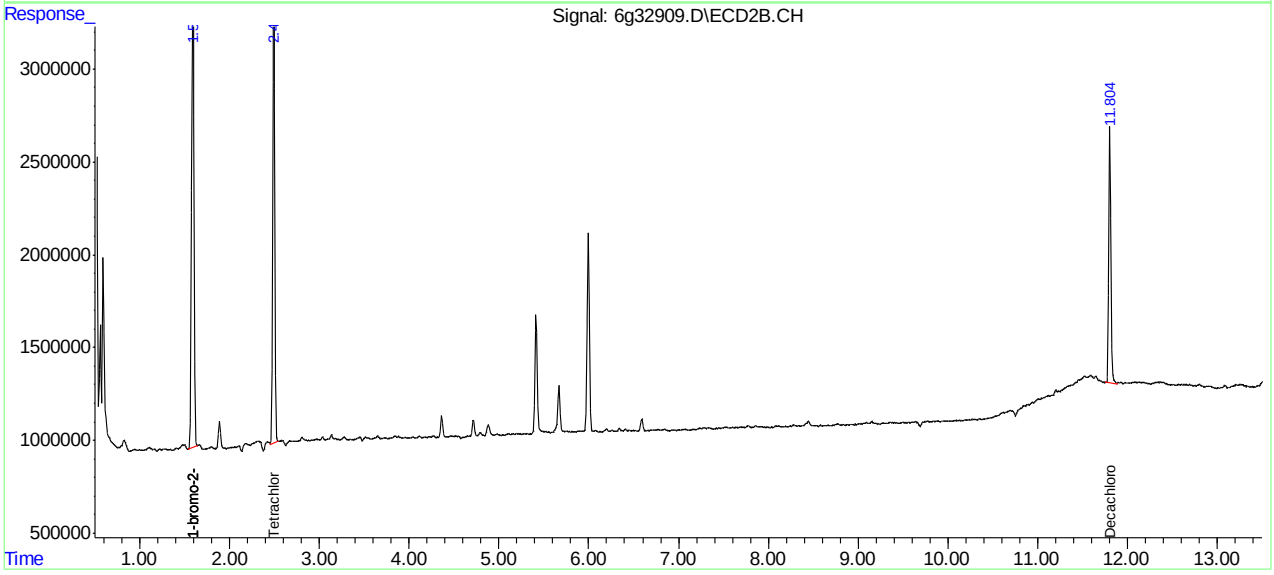
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:06 pm
Operator : dharas
Sample : jc15518-1
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:59:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:22 pm
Operator : dharas
Sample : jc15518-2
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:59:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.591	98870484	48785915	50.000	50.000
25) I	1-bromo-2...	1.318	1.591	98870484	48785915	50.000	50.000
31) I	1-bromo-2...	1.318	1.591	98870484	48785915	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.493	101.8E6	44197044	37.429	39.400
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 93.57%	98.50%
24)	SAB Decachlor...	9.970	11.803	89324864	26486413	36.391	40.139
	Spiked Amount	40.000			Recovery	= 90.98%	100.35%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

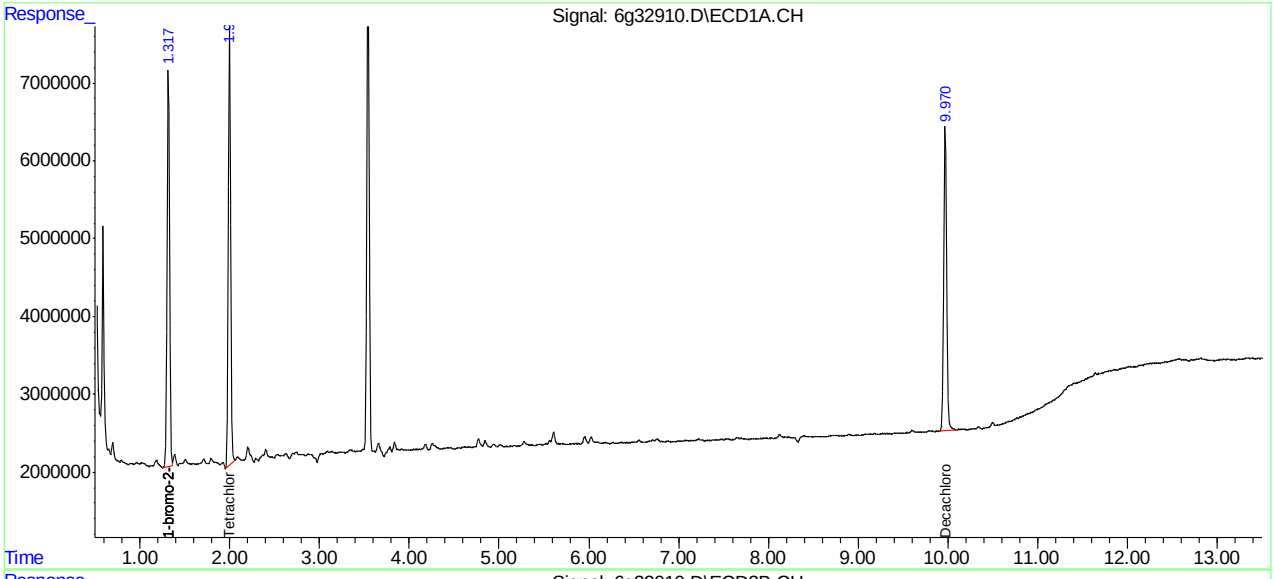
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

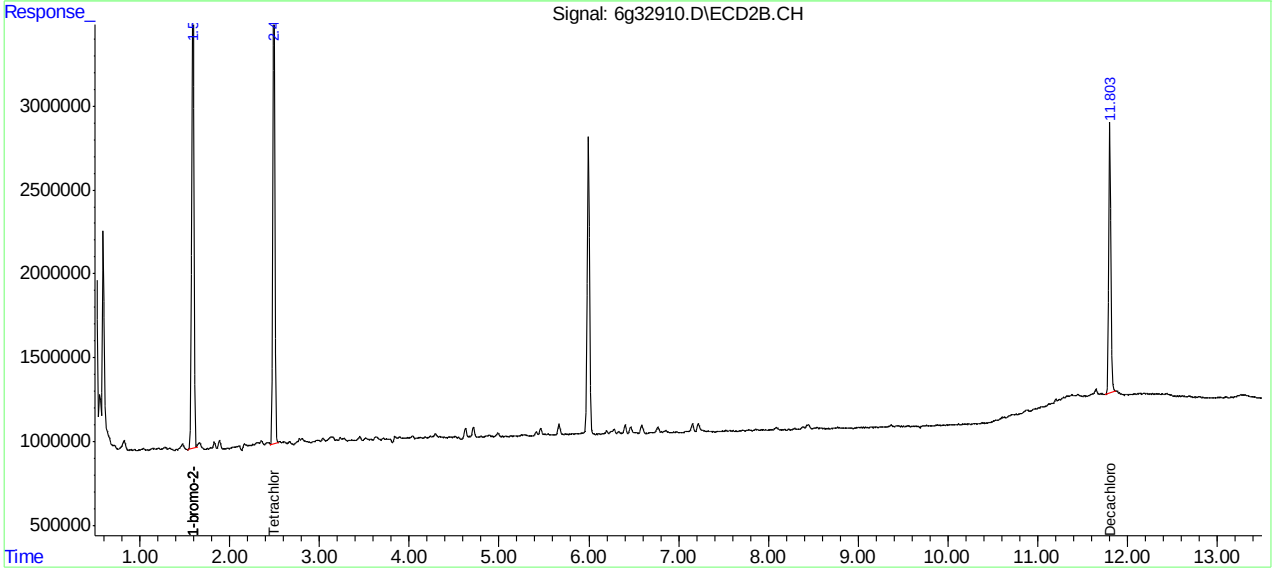
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:22 pm
Operator : dharas
Sample : jc15518-2
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:59:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 03/18/16 09:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:39 pm
Operator : dharas
Sample : jc15518-3
Misc : op91903,g6g958,900,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.591	85484625	47048083	50.000	50.000
25) I 1-bromo-2...	1.318	1.591	85484625	47048083	50.000	50.000
31) I 1-bromo-2...	1.318	1.591	85484625	47048083	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.999	2.493	73917267	33114496	31.430	30.610
Spiked Amount	40.000	Range	30 - 150	Recovery	= 78.57%	76.53%
24) SAB Decachlor...	9.968	11.802	34854733	10146473	16.423m	15.944m
Spiked Amount	40.000			Recovery	= 41.06%	39.86%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

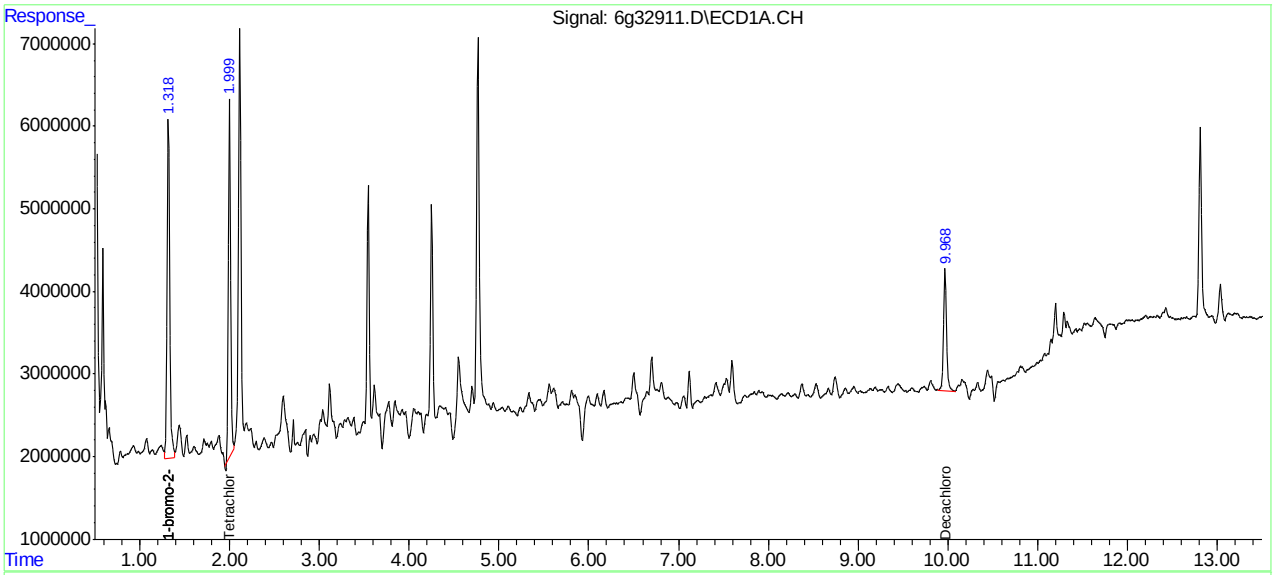
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

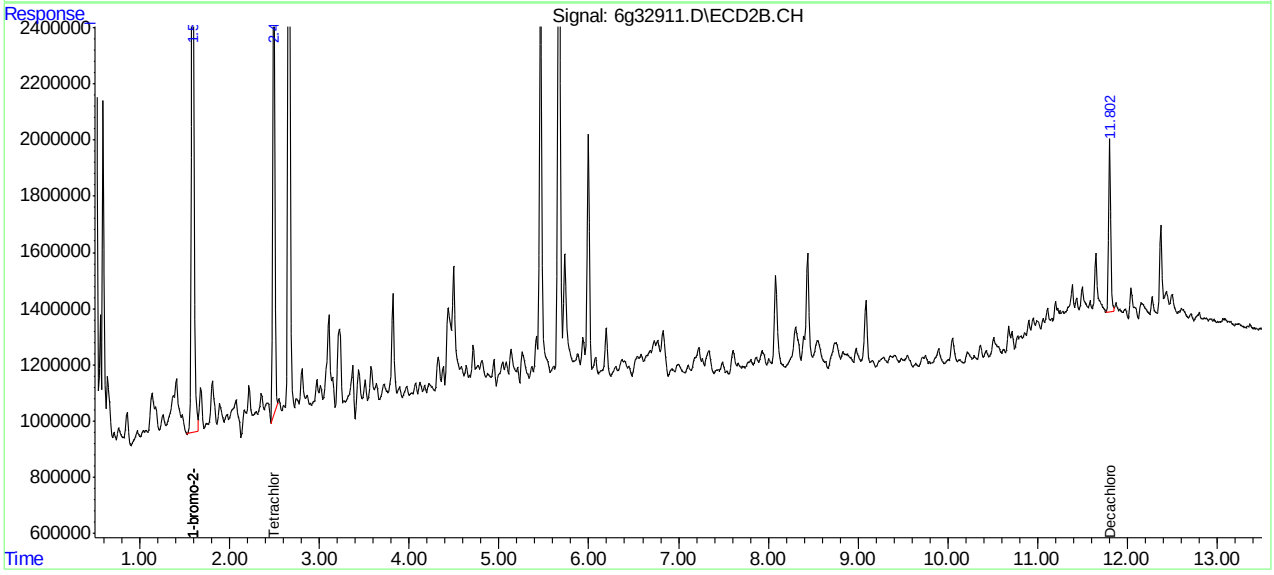
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:39 pm
Operator : dharas
Sample : jc15518-3
Misc : op91903,g6g958,900,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	JC15518-3	**Method:**	SW846 8081B
Lab FileID:	6G32911.D	**Analyst approved:**	03/16/16 09:09 Owen McKenna
Injection Time:	03/15/16 21:39	**Supervisor approved:**	03/18/16 09:25 Gwendolyn Burns

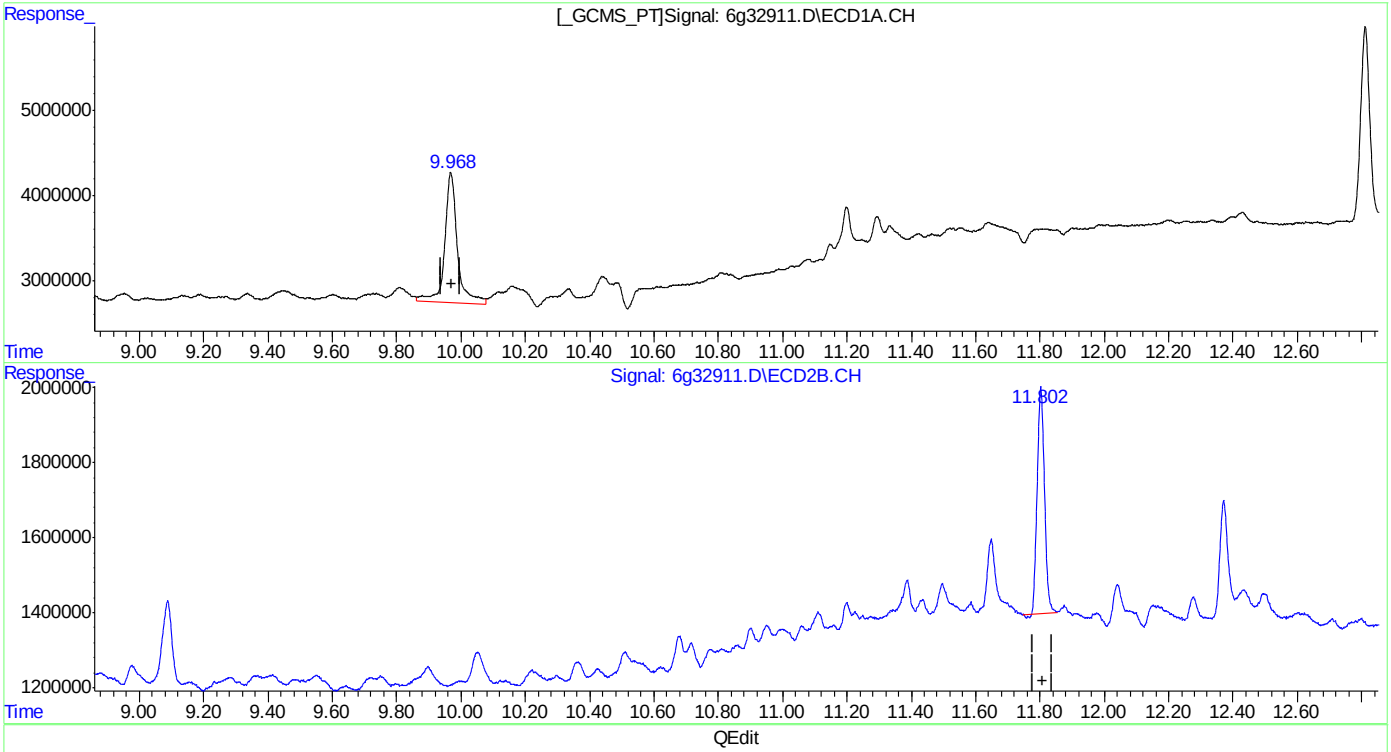
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	9.97	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.80	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:39 pm
Operator : dharas
Sample : jc15518-3
Misc : op91903,g6g958,900,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:00:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
9.968min 20.024PPB
response 42497554

(24) Decachlorobiphenyl #2 (SAB)
11.803min 15.008PPB
response 9550546

(+) = Expected Retention Time

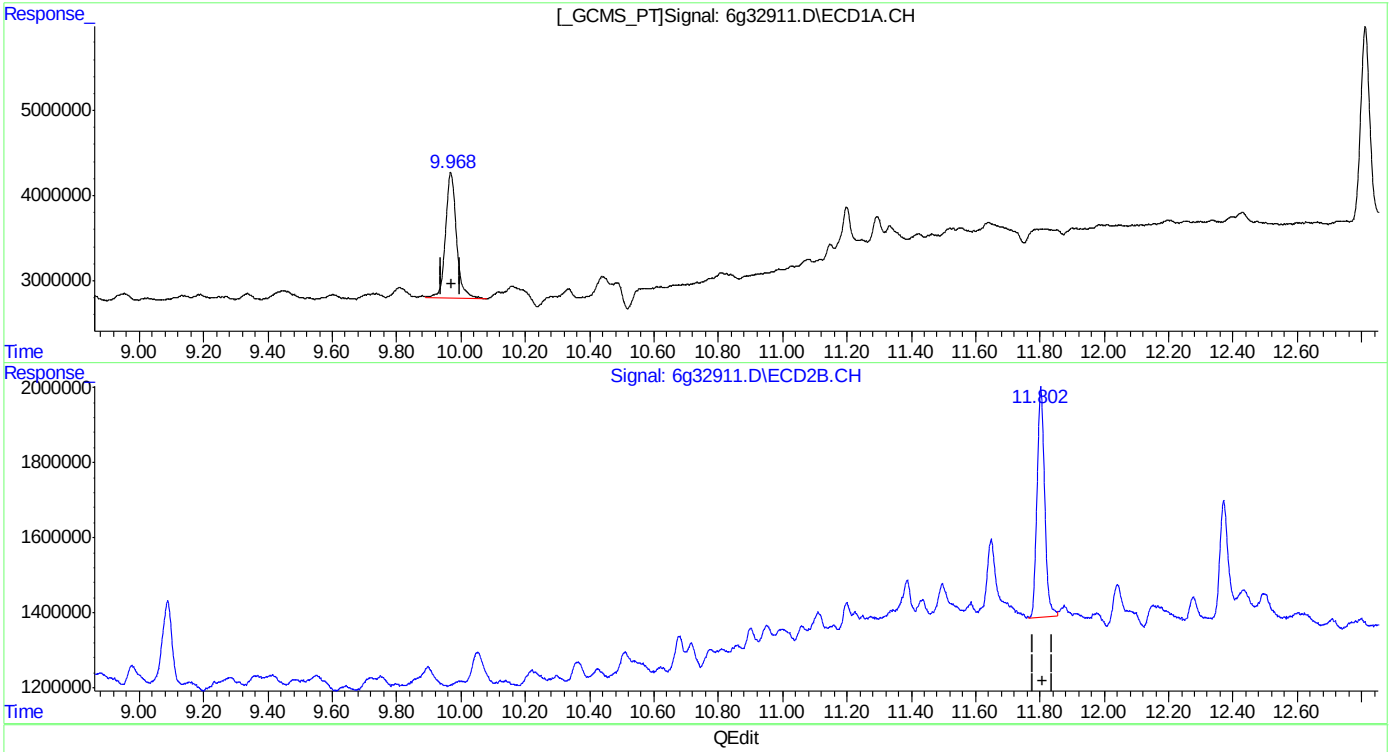
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:39 pm
Operator : dharas
Sample : jc15518-3
Misc : op91903,g6g958,900,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:00:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
9.968min 16.423PPB m
response 34854733

(24) Decachlorobiphenyl #2 (SAB)
11.802min 15.944PPB m
response 10146473

(+) = Expected Retention Time
6PST957.M Wed Mar 16 09:00:40 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:55 pm
Operator : dharas
Sample : jc15518-4
Misc : op91903,g6g958,990,,,10,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:01:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.591	111.3E6	52925100	50.000	50.000
25) I	1-bromo-2...	1.319	1.591	111.3E6	52925100	50.000	50.000
31) I	1-bromo-2...	1.319	1.591	111.3E6	52925100	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.498	91073940	313.2E6	29.751	257.371 #
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 74.38%	643.43%#
24)	SAB Decachlor...	9.969	11.803	83488375	23844046	30.223	33.308
	Spiked Amount	40.000			Recovery	= 75.56%	83.27%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

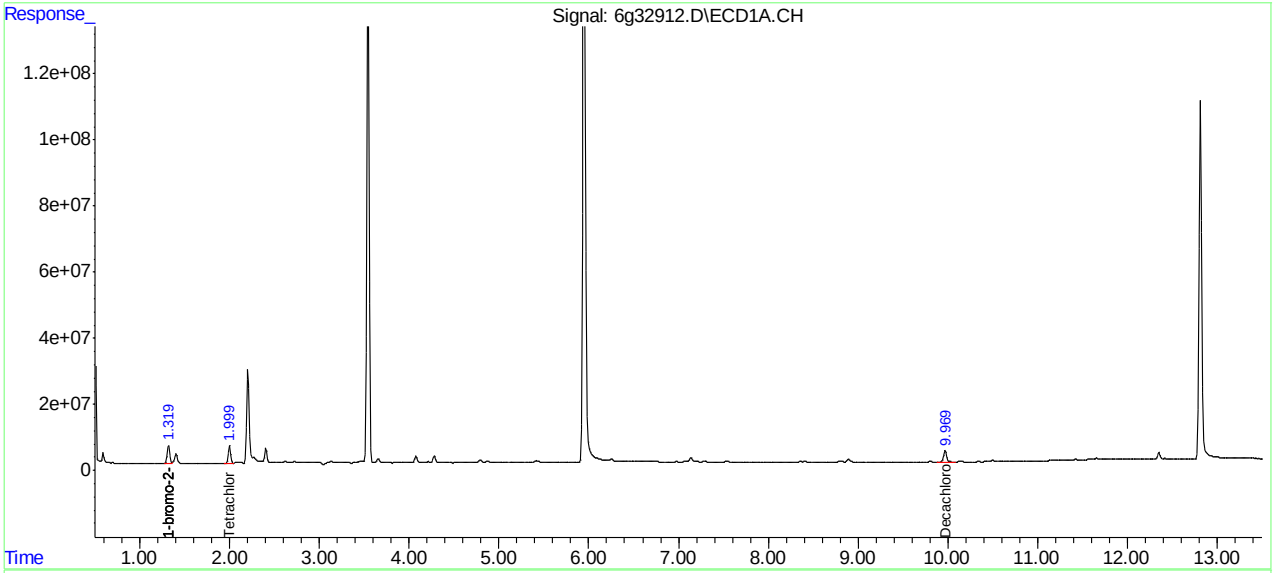
SGS ACCUTEST JC15518

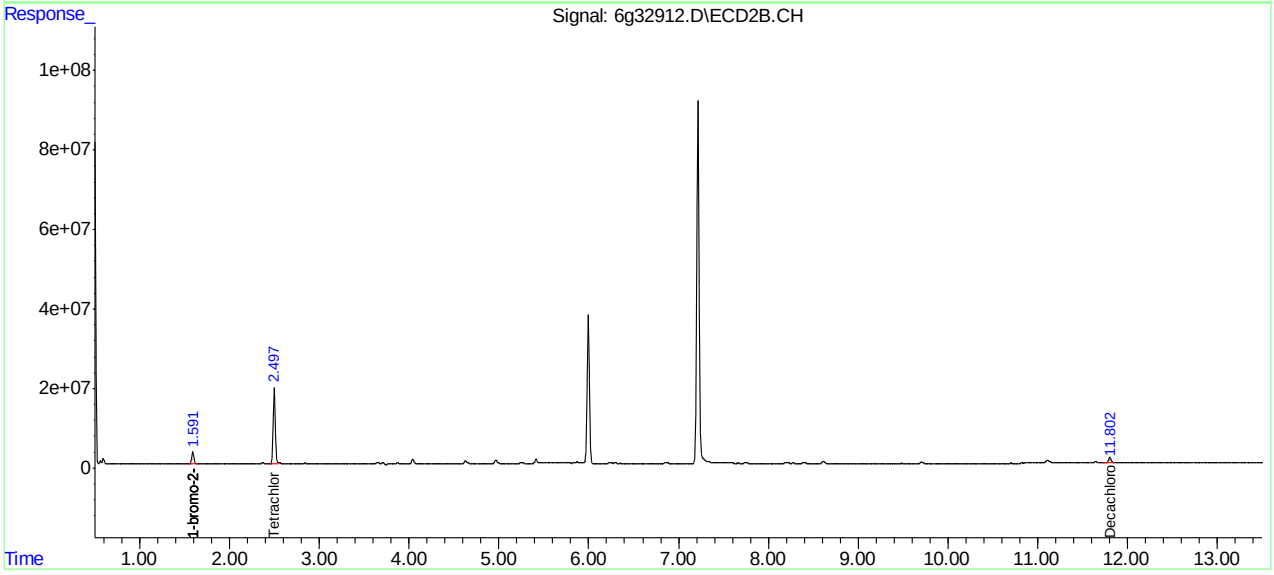
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 9:55 pm
Operator : dharas
Sample : jc15518-4
Misc : op91903,g6g958,990,,,10,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:01:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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\958\
Data File : 6g32913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:12 pm
Operator : dharas
Sample : jc15518-5
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:01:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.317	1.589	101.9E6	51445584	50.000	50.000
25) I	1-bromo-2...	1.317	1.589	101.9E6	51445584	50.000	50.000
31) I	1-bromo-2...	1.317	1.589	101.9E6	51445584	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.493	91970873	39930285	32.799	33.756
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 82.00%	84.39%
24)	SAB Decachlor...	9.967	11.802	55072012	16559076	21.764	23.797
	Spiked Amount	40.000			Recovery	= 54.41%	59.49%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

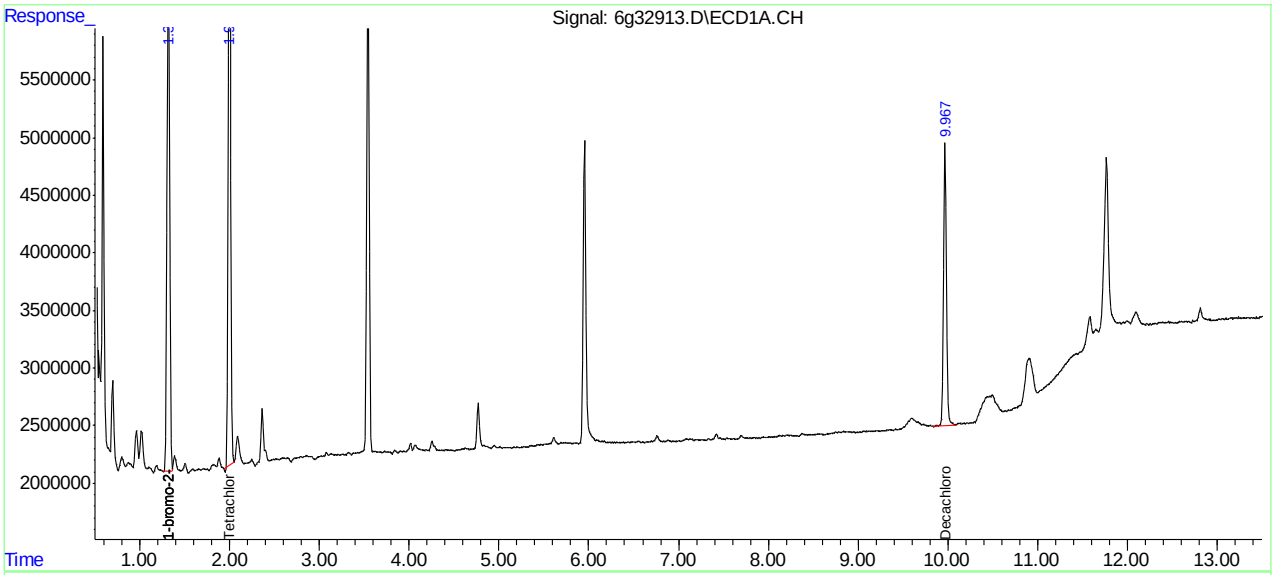
SGS ACCUTEST JC15518

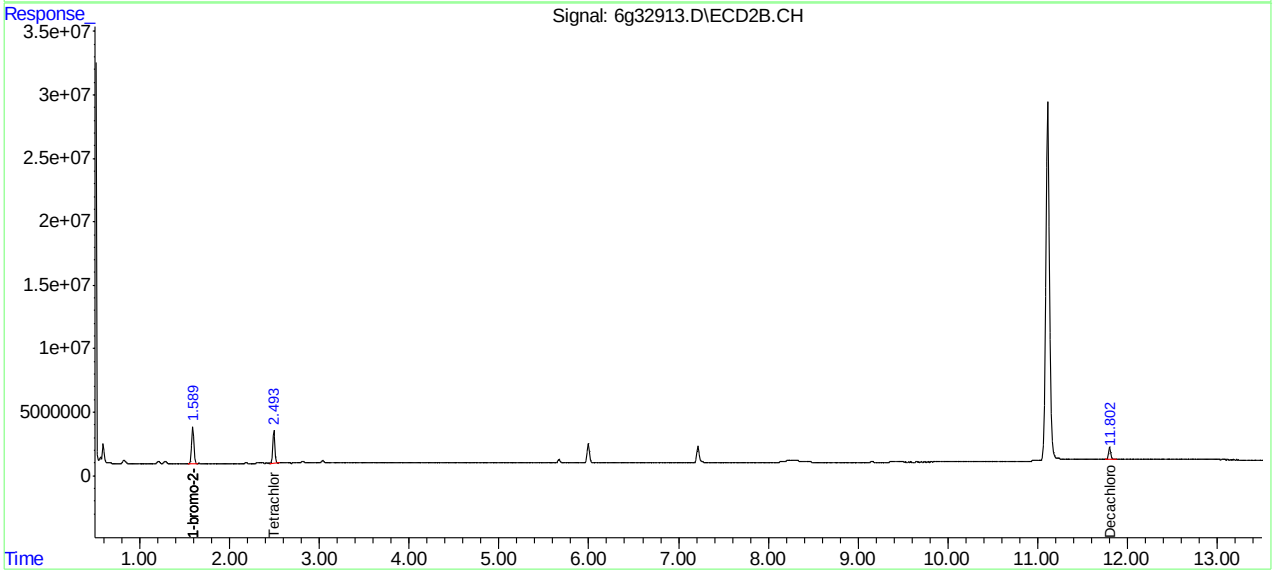
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:12 pm
Operator : dharas
Sample : jc15518-5
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:01:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:28 pm
Operator : dharas
Sample : jc15518-6
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.317	1.588	96389331	48316653	50.000	50.000
25) I	1-bromo-2...	1.317	1.588	96389331	48316653	50.000	50.000
31) I	1-bromo-2...	1.317	1.588	96389331	48316653	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.492	69254448	30060612	26.116	27.058
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 65.29%	67.64%
24)	SAB Decachlor...	9.967	11.803	49364622	14935451	20.629	22.854
	Spiked Amount	40.000			Recovery	= 51.57%	57.14%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

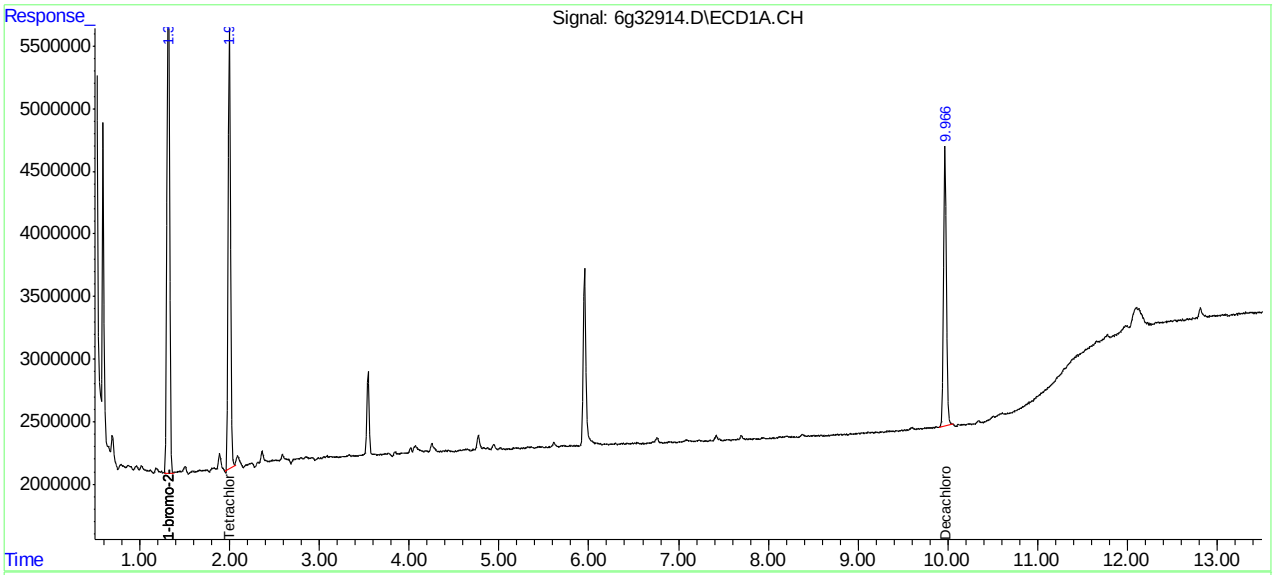
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

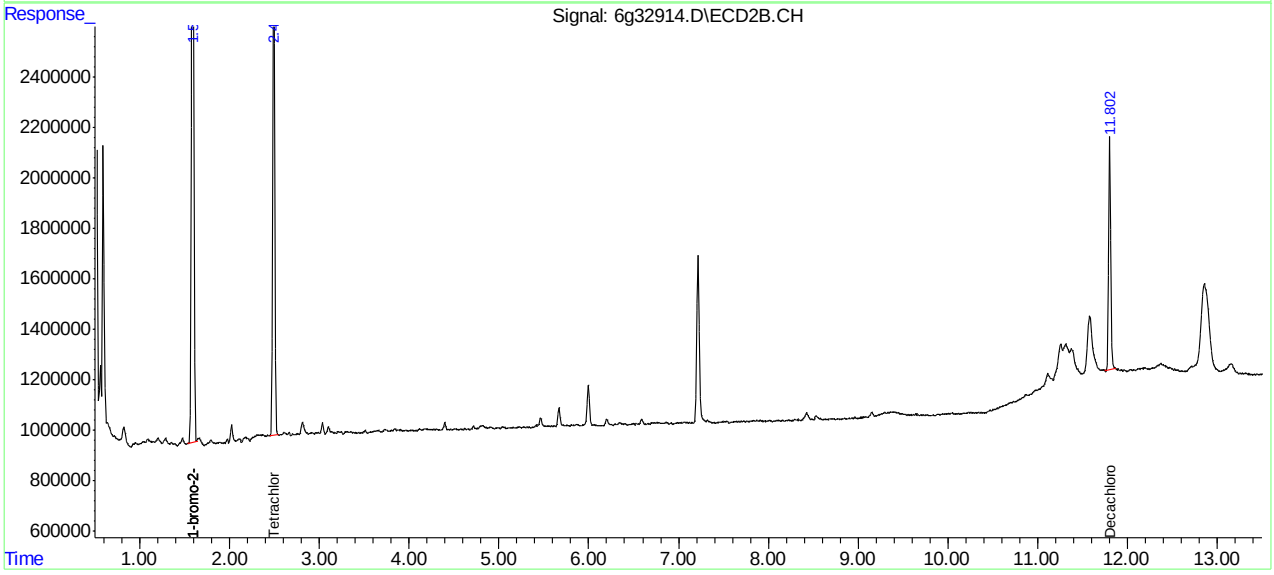
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:28 pm
Operator : dharas
Sample : jc15518-6
Misc : op91903,g6g958,1000,,,10,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 03/18/16 09:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:44 pm
Operator : dharas
Sample : jc15518-7
Misc : op91903,g6g958,910,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.591	107.0E6	53426644	50.000	50.000
25) I	1-bromo-2...	1.319	1.591	107.0E6	53426644	50.000	50.000
31) I	1-bromo-2...	1.319	1.591	107.0E6	53426644	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.493	109.2E6	46997233	37.111	38.257
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 92.78%	95.64%
24)	SAB Decachlor...	9.968	11.802	80253537	25211543	30.215m	34.888
	Spiked Amount	40.000			Recovery	= 75.54%	87.22%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

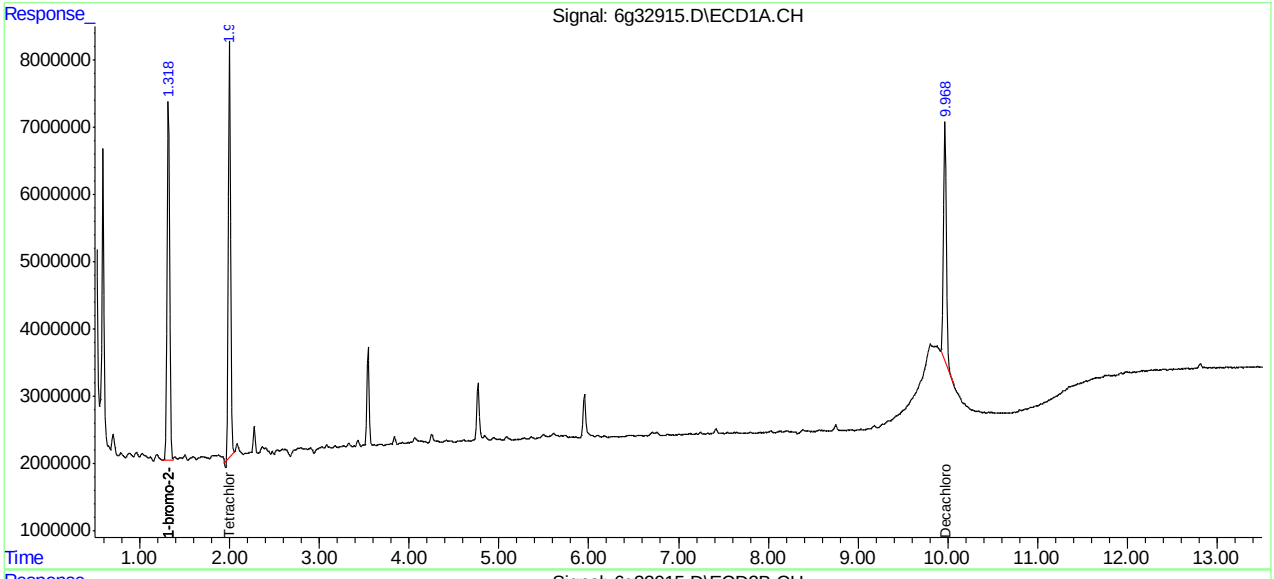
SGS ACCUTEST JC15518

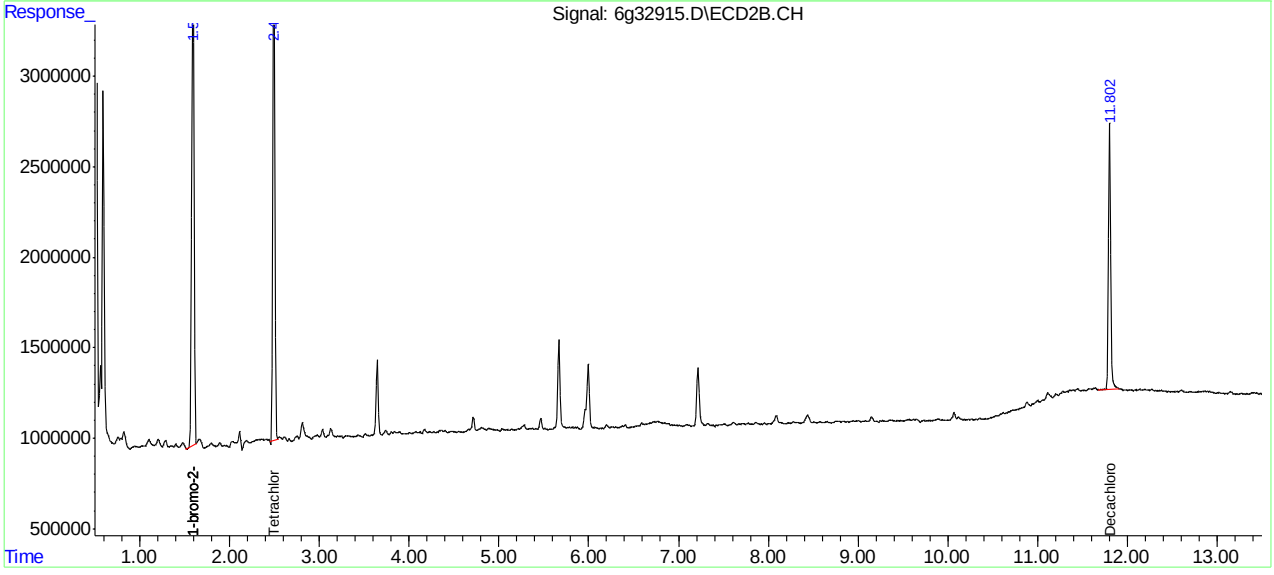
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:44 pm
Operator : dharas
Sample : jc15518-7
Misc : op91903,g6g958,910,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number:	JC15518-7	**Method:**	SW846 8081B
Lab FileID:	6G32915.D	**Analyst approved:**	03/16/16 09:09 Owen McKenna
Injection Time:	03/15/16 22:44	**Supervisor approved:**	03/18/16 09:25 Gwendolyn Burns

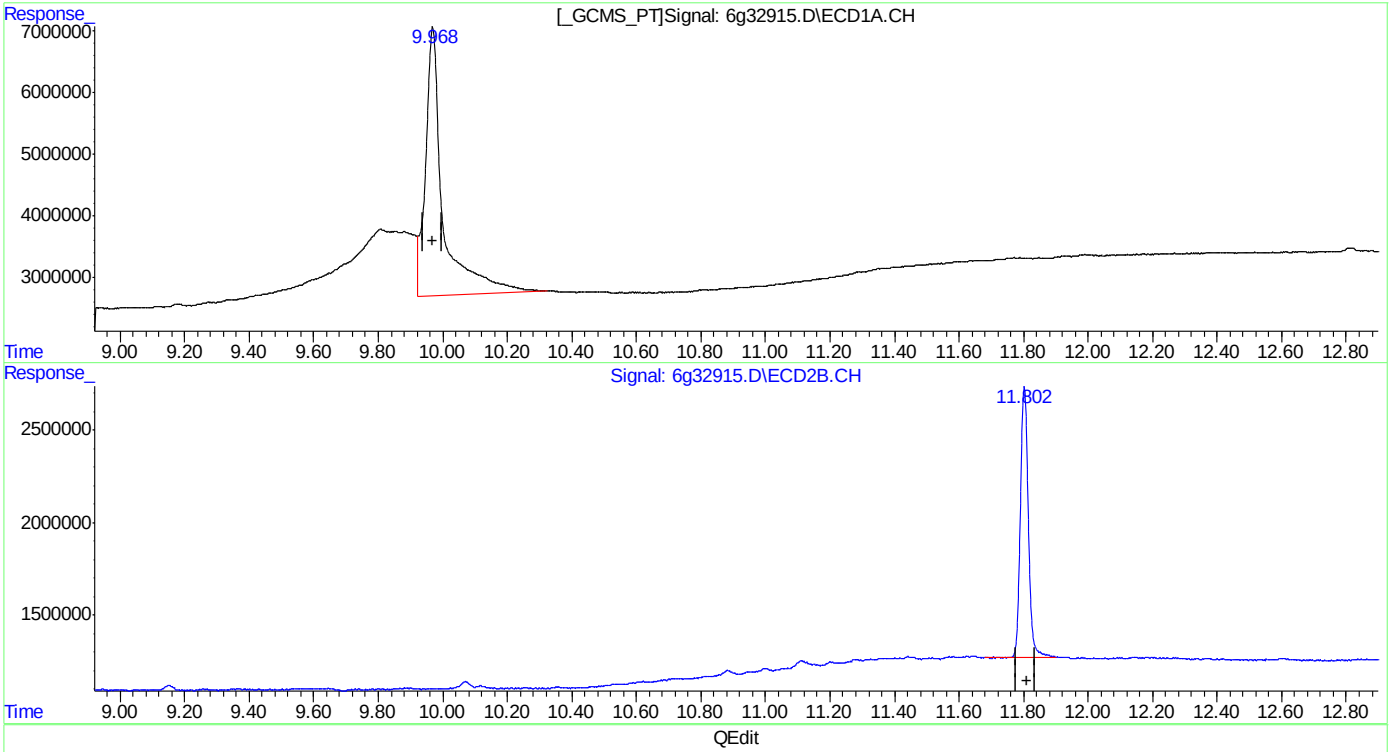
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	9.97	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:44 pm
Operator : dharas
Sample : jc15518-7
Misc : op91903,g6g958,910,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
9.968min 63.030PPB
response 167412483

(24) Decachlorobiphenyl #2 (SAB)
11.802min 34.888PPB
response 25211543

(+) = Expected Retention Time
6PST957.M Wed Mar 16 09:02:20 2016

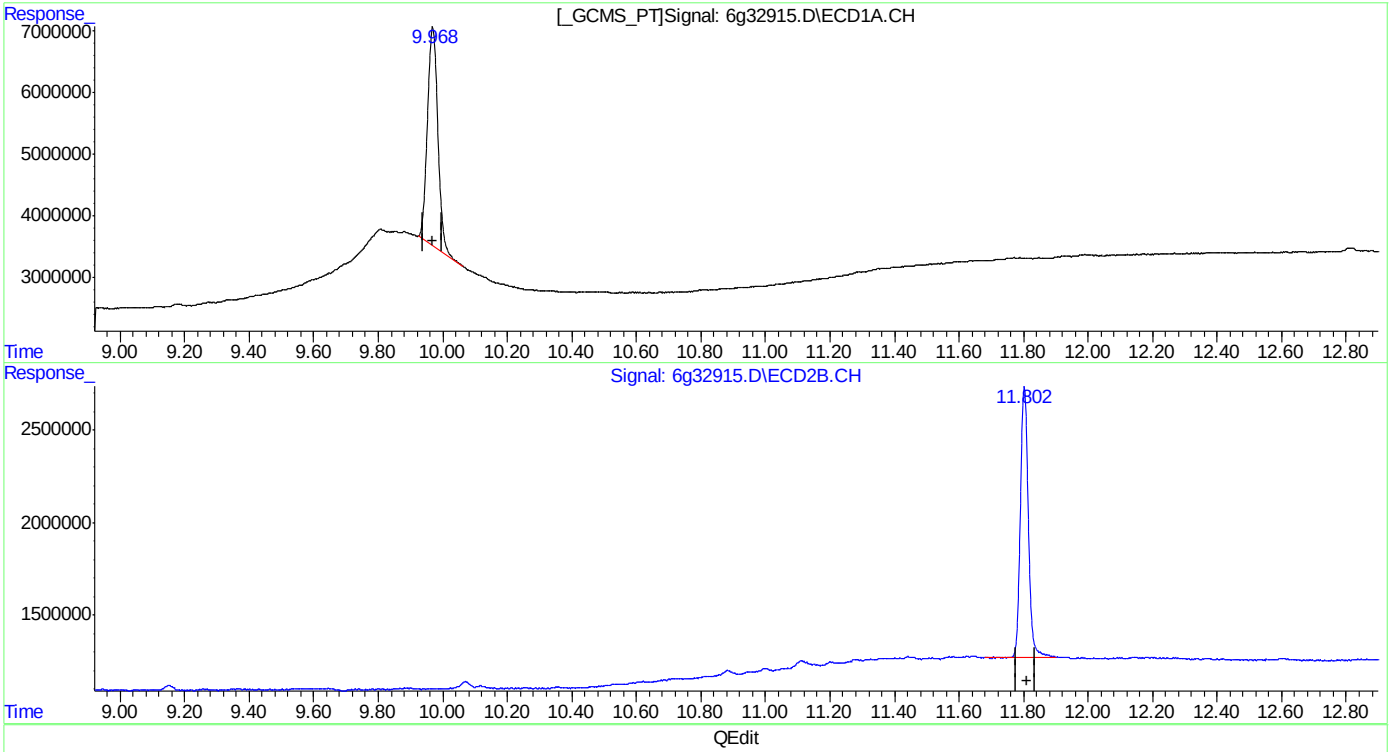
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 10:44 pm
Operator : dharas
Sample : jc15518-7
Misc : op91903,g6g958,910,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
9.968min 30.215PPB m
response 80253537

(24) Decachlorobiphenyl #2 (SAB)
11.802min 34.888PPB
response 25211543

(+) = Expected Retention Time
6PST957.M Wed Mar 16 09:02:25 2016

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:01 pm
Operator : dharas
Sample : jc15518-8
Misc : op91903,g6g958,950,,,10,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.316	1.588	97678360	52079008	50.000	50.000
25) I	1-bromo-2...	1.316	1.588	97678360	52079008	50.000	50.000
31) I	1-bromo-2...	1.316	1.588	97678360	52079008	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.997	2.492	97312800	40606512	36.212	33.910
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 90.53%	84.77%
24)	SAB Decachlor...	9.967	11.802	50720980	16221082	20.916	23.028
	Spiked Amount	40.000			Recovery	= 52.29%	57.57%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

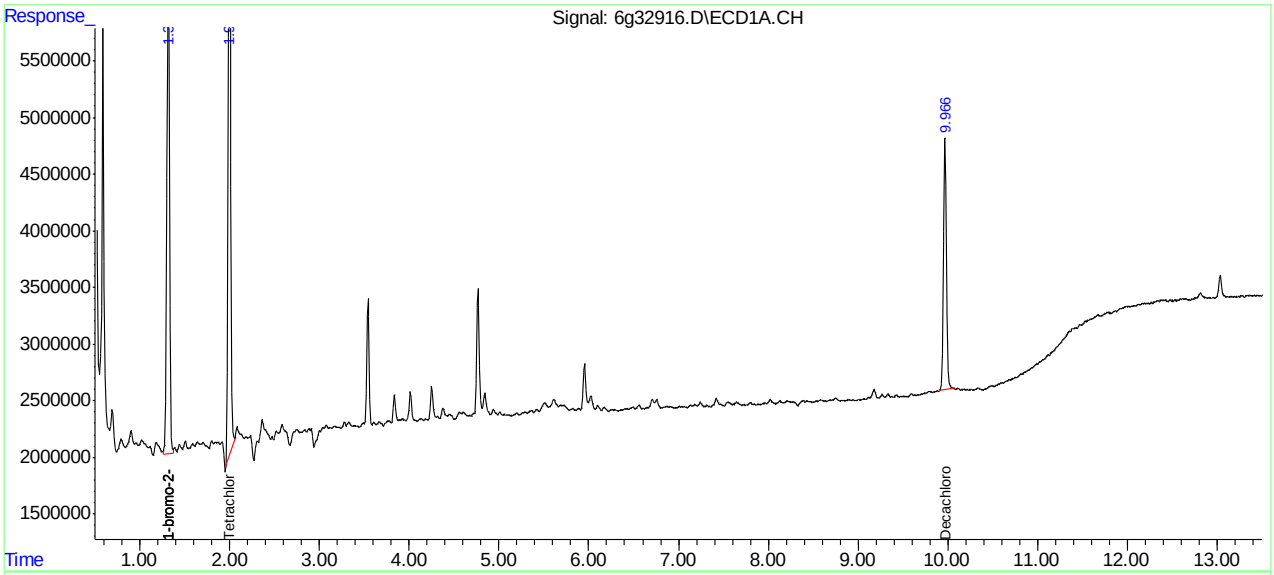
SGS ACCUTEST JC15518

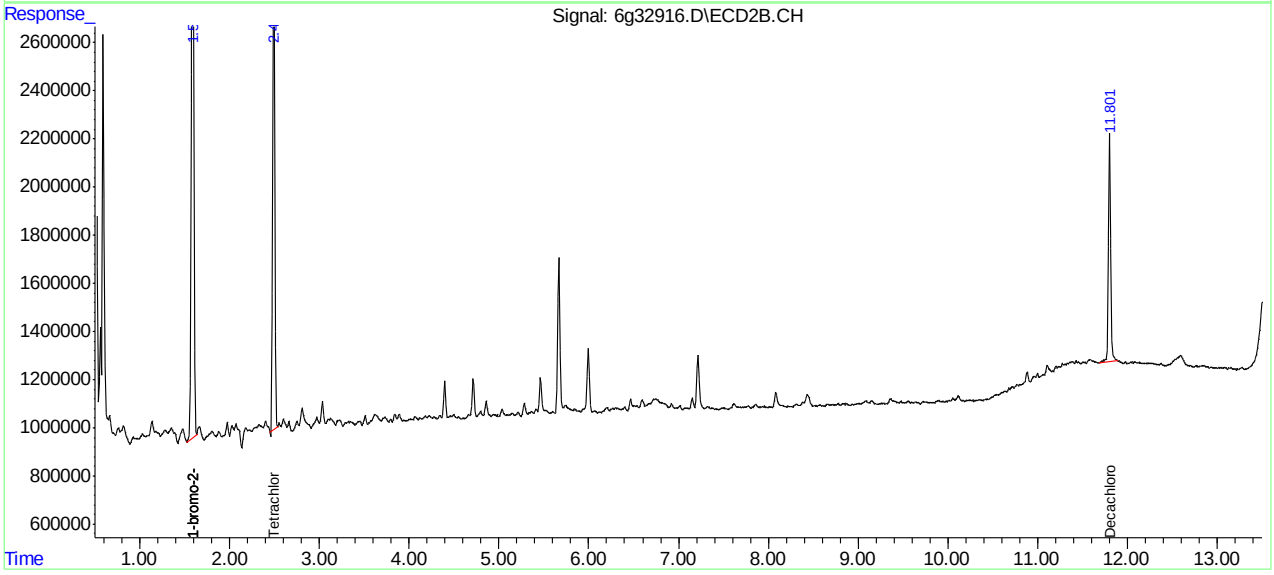
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:01 pm
Operator : dharas
Sample : jc15518-8
Misc : op91903,g6g958,950,,,10,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 09:02:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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\4G1734\
Data File : 4g65931.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 5:15 pm
Operator : dharas
Sample : op91903-mb1
Misc : op91903,g4g1734,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.061	2.225	210.3E6	213.5E6	50.000	50.000
25) I	1-bromo-2...	2.061	2.225	210.3E6	213.5E6	50.000	50.000
31) I	1-bromo-2...	2.061	2.225	210.3E6	213.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.605	3.004	114.9E6	111.5E6	30.157	27.216
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 75.39%	68.04%
24) SA	Decachlor...	9.817	11.234	134.3E6	93674352	34.250	28.884
	Spiked Amount	40.000			Recovery	= 85.63%	72.21%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

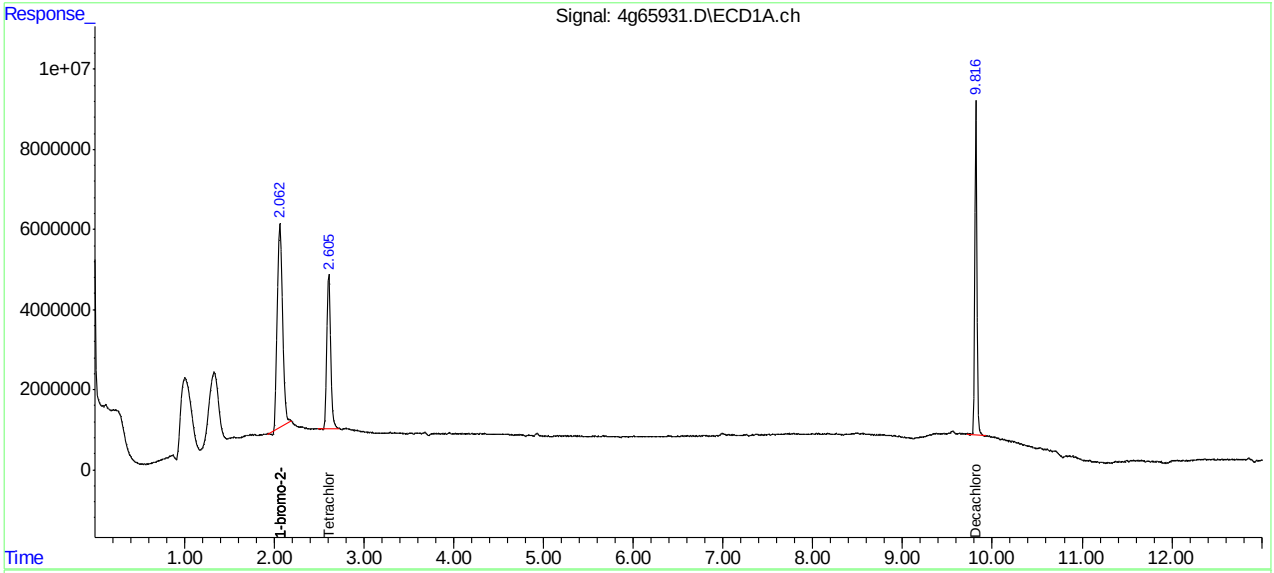
SGS ACCUTEST JC15518

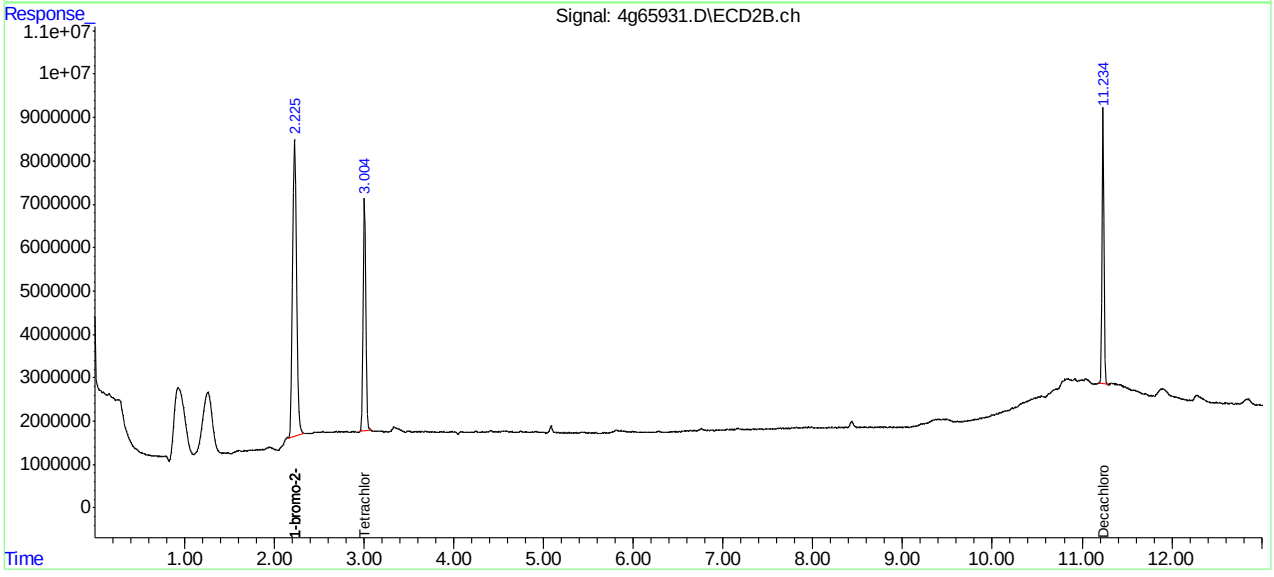
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65931.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 5:15 pm
Operator : dharas
Sample : op91903-mb1
Misc : op91903,g4g1734,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/18/16 09:25

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65936.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   6:58 pm
Operator  : dharas
Sample    : op91903-mb11
Misc      : op91903,g4g1734,1000,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 12:38:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   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...	2.067	2.229	235.3E6	235.6E6	50.000	50.000
25) I	1-bromo-2...	2.067	2.229	235.3E6	235.6E6	50.000	50.000
31) I	1-bromo-2...	2.067	2.229	235.3E6	235.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.607	3.006	1277.1E6	1275.8E6	299.602	282.347
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	749.00%#	705.87%#
24) SA	Decachlor...	9.815	11.233	1032.1E6	764.5E6	235.307m	213.654
	Spiked Amount 40.000			Recovery	=	588.27%	534.13%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

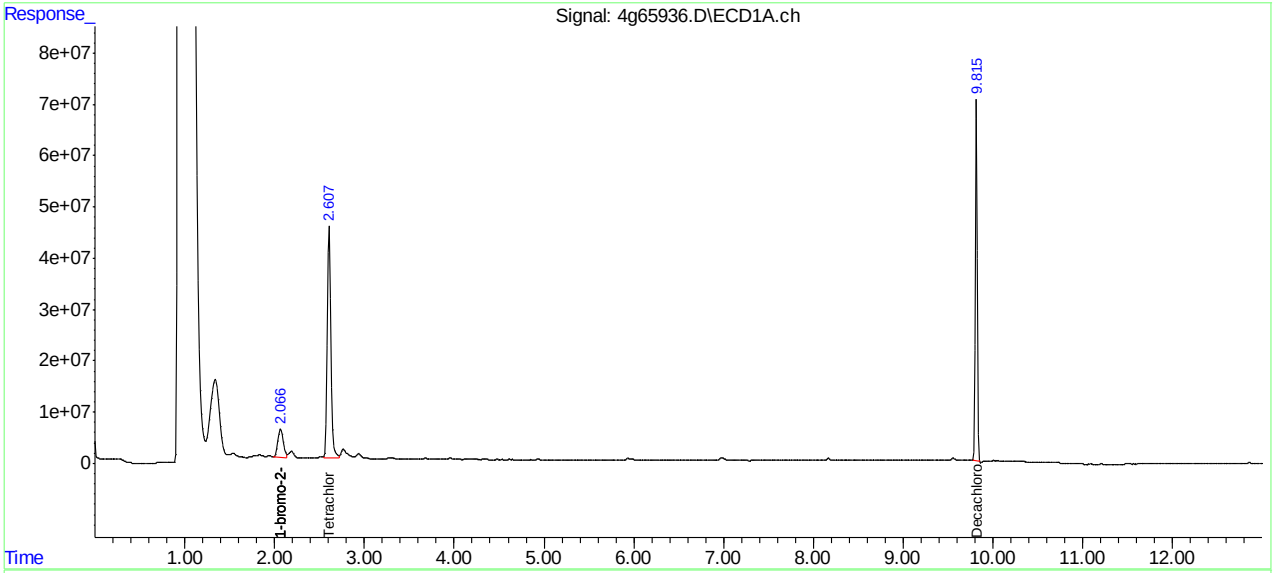
SGS ACCUTEST JC15518

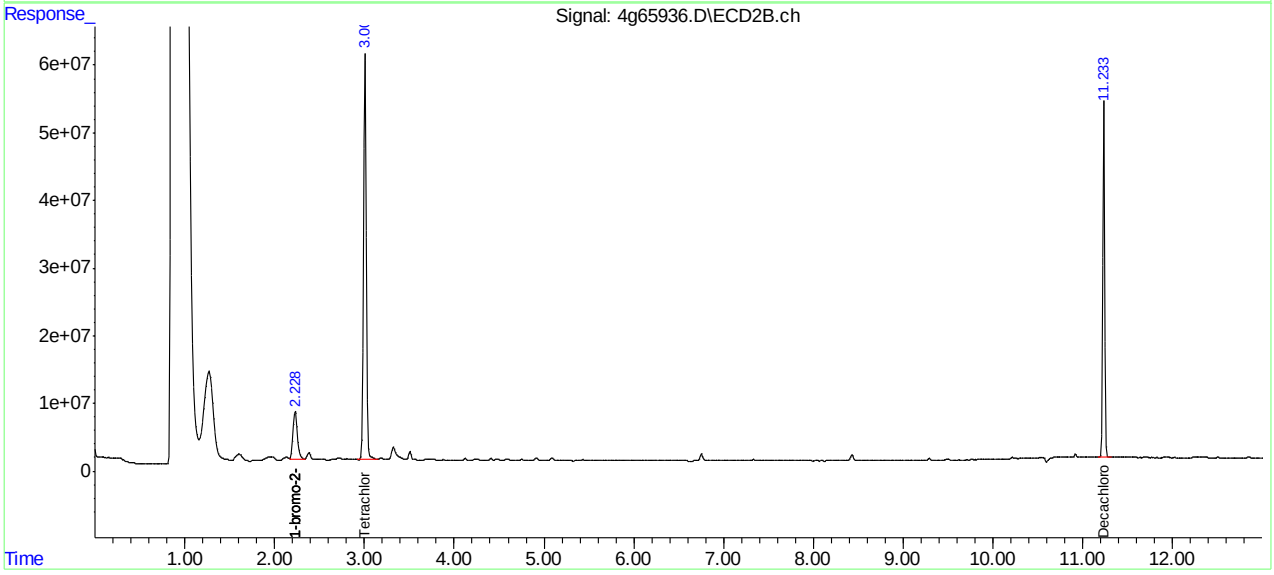
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65936.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 6:58 pm
Operator : dharas
Sample : op91903-mb11
Misc : op91903,g4g1734,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 12:38:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integration Approval Summary

Sample Number:	OP91903-MB11	**Method:**	SW846 8081B
Lab FileID:	4G65936.D	**Analyst approved:**	03/15/16 12:45 Brittany Piercy
Injection Time:	03/14/16 18:58	**Supervisor approved:**	03/18/16 09:25 Gwendolyn Burns

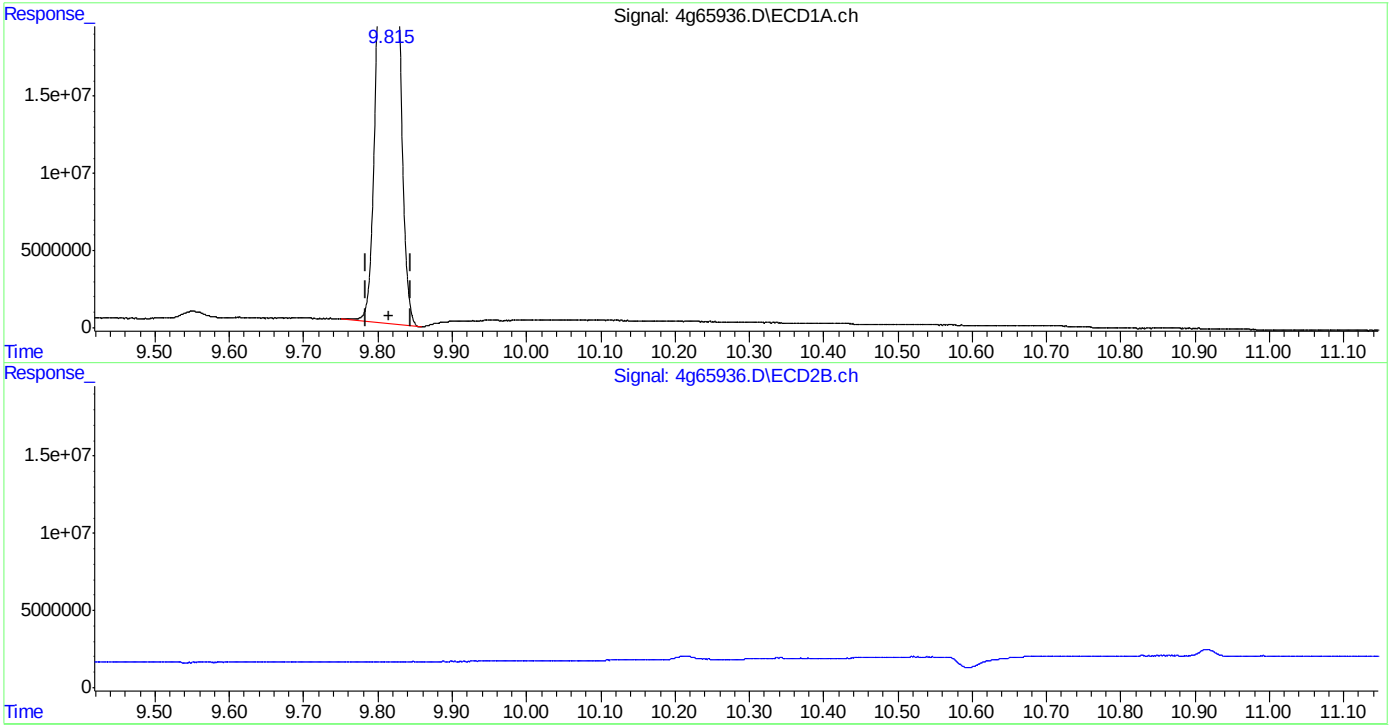
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	9.81	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65936.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   6:58 pm
Operator  : dharas
Sample    : op91903-mb11
Misc      : op91955,g4g1734,1000,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 12:36:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(24) Decachlorobiphenyl (SA)

9.815min 238.242 PPB

response 1044988870

(24) Decachlorobiphenyl #2 (SA)

11.233min 213.654 PPB

response 764546570

(+) = Expected Retention Time

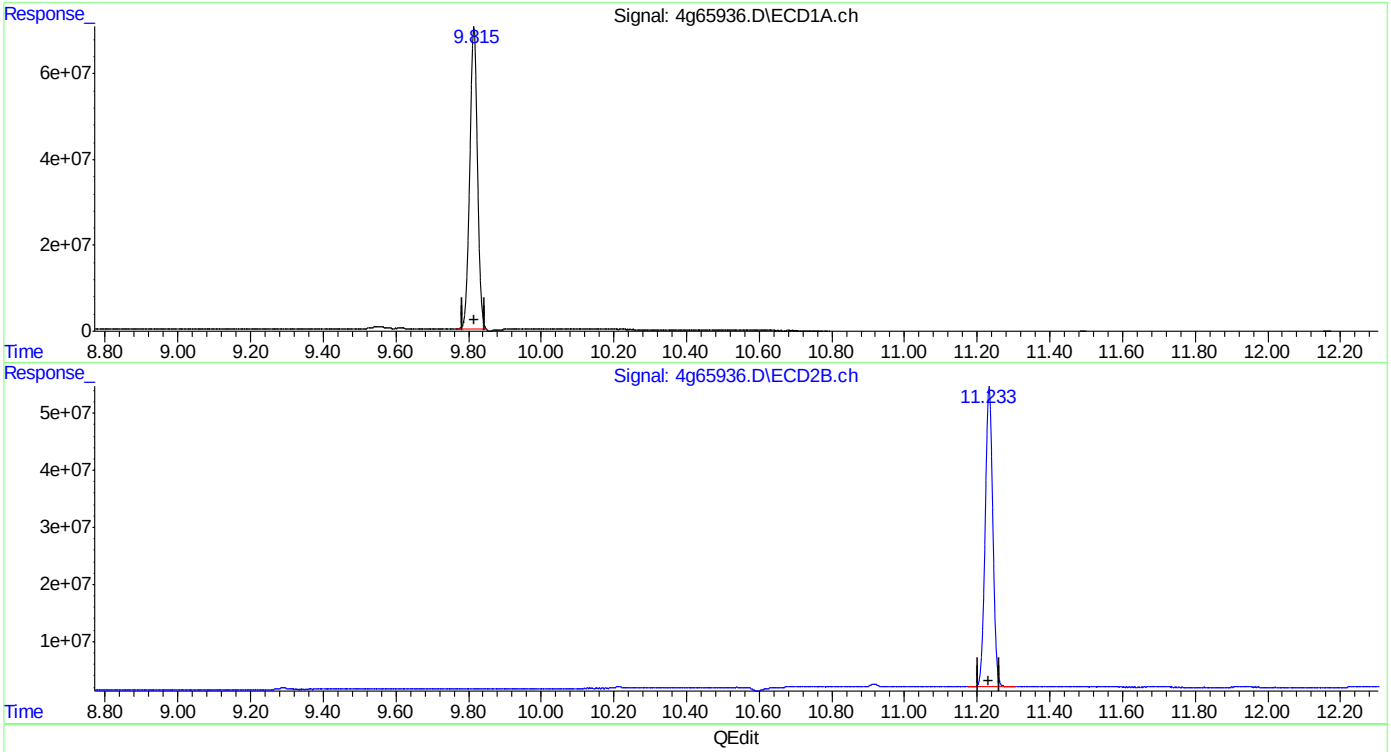
4PST1719.M Tue Mar 15 12:37:40 2016 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65936.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   6:58 pm
Operator  : dharas
Sample    : op91903-mb11
Misc      : op91955,g4g1734,1000,,,1,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 12:36:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(24) Decachlorobiphenyl (SA)

9.815min 235.307 PPB m

response 1032113961

(24) Decachlorobiphenyl #2 (SA)

11.233min 213.654 PPB

response 764546570

(+) = Expected Retention Time

4PST1719.M Tue Mar 15 12:37:47 2016 RPT1

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66051.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 1:53 pm
Operator : brittanp
Sample : op91903-bs1
Misc : op91903,g4g1738,1000,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 17:29:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.054	2.223	233.3E6	201.8E6	50.000	50.000	
25) I	1-bromo-2...	2.054	2.223	233.3E6	201.8E6	50.000	50.000	
31) I	1-bromo-2...	2.054	2.223	233.3E6	201.8E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.602	3.005	147.4E6	144.9E6	34.477	36.716	
	Spiked Amount	40.000	Range	30 - 150	Recovery	=	86.19%	91.79%
24) SA	Decachlor...	9.811	11.226	170.7E6	123.4E6	38.389	43.312	
	Spiked Amount	40.000			Recovery	=	95.97%	108.28%
	Target Compounds							
3) A	alpha-BHC	3.046	3.646	148.5E6	140.9E6	23.924	26.576	
4) MA	gamma-BHC	3.331	4.069	140.4E6	130.5E6	25.787	27.442	
5) MA	Heptachlor	3.596	4.645	143.6E6	126.1E6	27.262	26.530	
6) B	beta-BHC	3.409	4.150	70303658	63525804	25.919	29.647	
7) B	delta-BHC	3.818	4.547	130.2E6	134.9E6	24.876	31.480	#
8) MB	Aldrin	4.152	5.100	123.5E6	115.5E6	22.413	24.763	
9) B	Heptachlo...	4.851	5.918	130.7E6	126.4E6	26.483	29.625	
10) B	gamma-Chl...	5.019	6.203	129.7E6	123.5E6	26.804	28.525	
11) B	alpha-Chl...	5.189	6.427	127.1E6	120.8E6	26.501	28.576	
12) A	Endosulfan I	5.365	6.530	128.9E6	112.2E6	24.213	26.497	
13) B	4,4'-DDE	5.297	6.676	110.6E6	105.1E6	27.490	25.808	
14) MA	Dieldrin	5.686	6.965	132.2E6	124.4E6	26.604	29.154	
15) MA	Endrin	6.011	7.473	124.8E6	116.0E6	27.127	30.319	
16) A	4,4'-DDD	6.134f	7.630	102.5E6	103.6E6	27.308	30.139	
17) B	Endosulfa...	6.335	7.824	115.7E6	111.1E6	26.068	29.760	
18) MA	4,4'-DDT	6.549	8.166	81983987	79897531	28.556	29.391	
19) B	Endrin Al...	6.950	8.395	100.4E6	91087851	28.588	31.532	
20) B	Endosulfa...	7.627	8.865	101.3E6	101.9E6	27.971	30.967	
21) A	Methoxychlor	7.336f	9.393	48770876	46920018	33.385	33.120	
23) B	Endrin Ke...	8.080	9.764	119.1E6	120.5E6	28.618	32.754	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

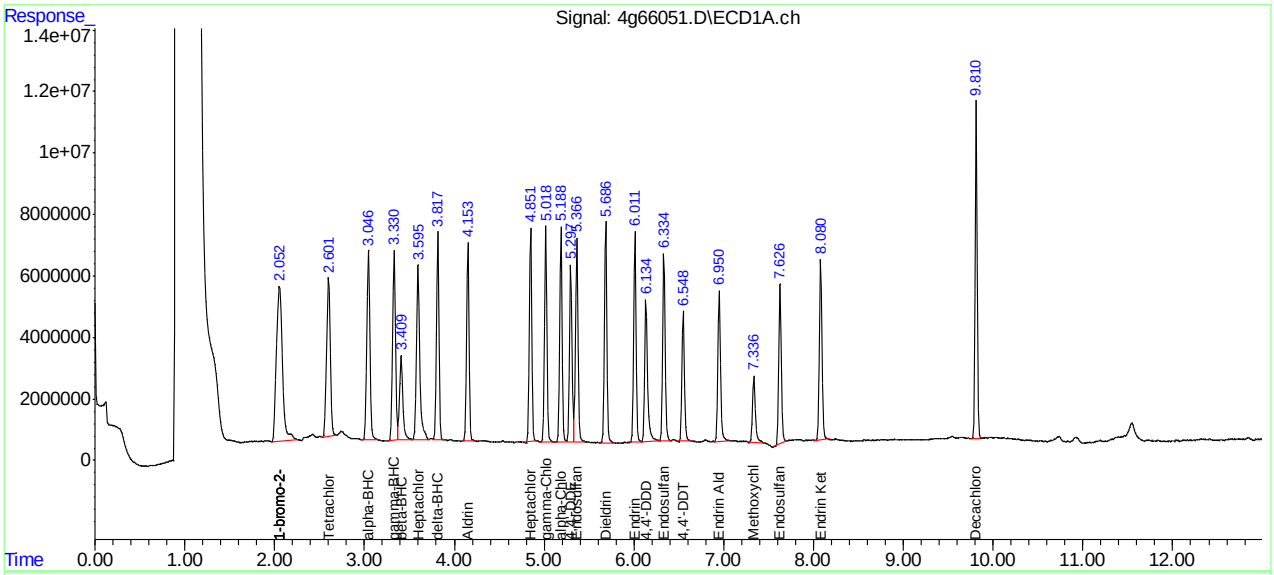
SGS ACCUTEST JC15518

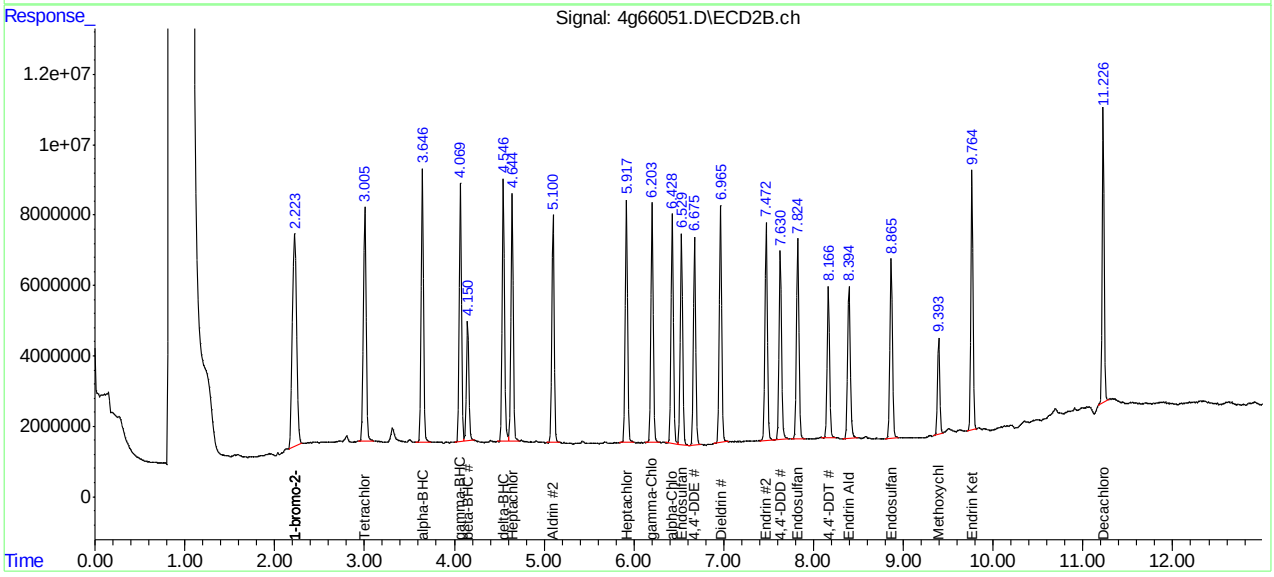
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66051.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 1:53 pm
Operator : brittanp
Sample : op91903-bs1
Misc : op91903,g4g1738,1000,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 17:29:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/21/16 08:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:49:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.317	1.589	83301719	48435526	50.000	50.000
25) I	1-bromo-2...	1.317	1.589	83301719	48435526	50.000	50.000
31) I	1-bromo-2...	1.317	1.589	83301719	48435526	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.999	2.493	86683223	44598819	37.824	40.045
Spiked Amount		40.000	Range	30 - 150	Recovery	= 94.56%	100.11%
24) SAB	Decachlor...	9.970	11.806	43290404	12927020	20.933	19.732
Spiked Amount		40.000			Recovery	= 52.33%	49.33%
	Target Compounds						
3) A	alpha-BHC	2.517	3.204	89866311	44250049	38.720	34.092
4) MA	gamma-BHC	2.834	3.658	75081070	52676953	36.007m	45.455m#
5) MA	Heptachlor	3.365	4.273	56078127	31564663	27.942m	27.203m
6) B	beta-BHC	2.913	3.749	55104464	18943541	52.664m	33.548m#
7) B	delta-BHC	3.108	4.170	149.5E6	65620888	70.248m	55.435m
8) MB	Aldrin	3.719	4.756	57856260	28557809	24.890	24.243m
9) B	Heptachlo...	4.483	5.642	1218.5E6	31959258	613.788	31.367m#
10) B	gamma-Chl...	4.642	5.999f	163.0E6	7415.3E6	74.305	7120.180m#
11) B	alpha-Chl...	4.832	6.196	68867104	28561586	30.648	26.768m
12) A	Endosulfan I	5.017	6.293	54020174	31766773	27.284	32.089m
13) B	4,4'-DDE	4.958	6.494	5217.4E6	2216.8E6	2531.459	2271.971m
14) MA	Dieldrin	5.363	6.768	64512944	27044611	33.142	27.464m
15) MA	Endrin	5.707	7.314	64011053	24012027	39.380	29.233 #
16) A	4,4'-DDD	5.848	7.529	770.5E6	305.4E6	514.775	401.064
17) B	Endosulfa...	6.049	7.699	64915376	25687628	34.570	28.738
18) MA	4,4'-DDT	6.303	8.115	89482508	37749569	55.710	47.002
19) B	Endrin Al...	6.725	8.330	35873016	12750213	24.333m	19.719
20) B	Endosulfa...	7.469	8.845	72952866	25951159	41.637	32.115
21) A	Methoxychlor	7.156	9.498	25392529	14053813	30.180	32.317
23) B	Endrin Ke...	7.943	9.899	79911424	33918373	41.988m	39.549

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

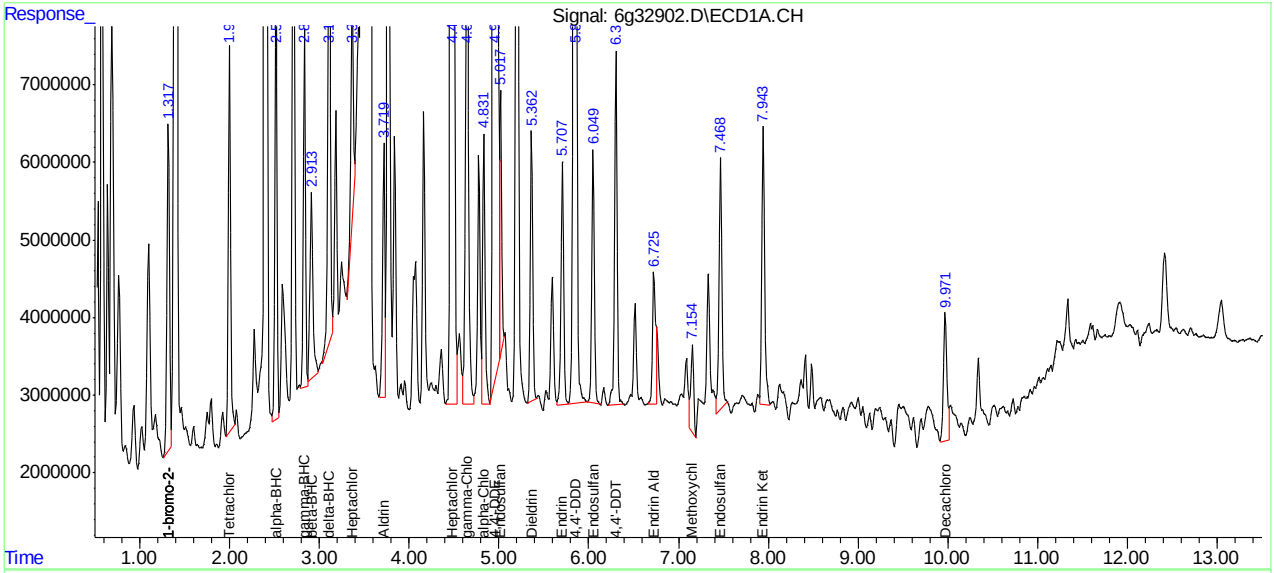
SGS ACCUTEST JC15518

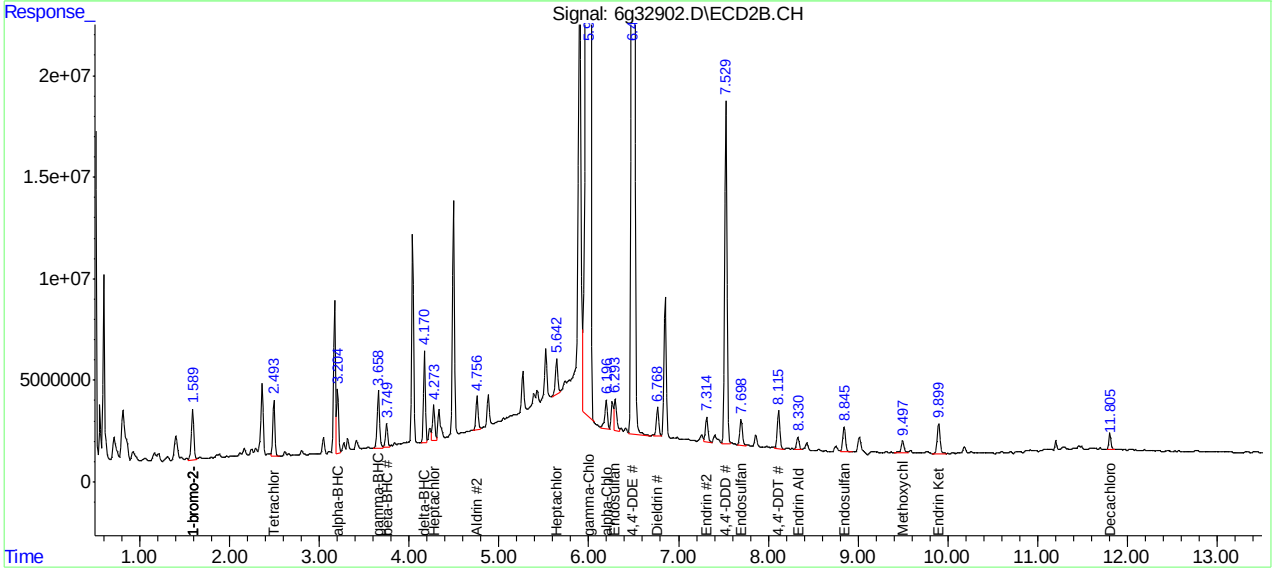
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:49:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number:	OP91903-MS	**Method:**	SW846 8081B
Lab FileID:	6G32902.D	**Analyst approved:**	03/16/16 09:09 Owen McKenna
Injection Time:	03/15/16 19:11	**Supervisor approved:**	03/21/16 08:29 Gwendolyn Burns

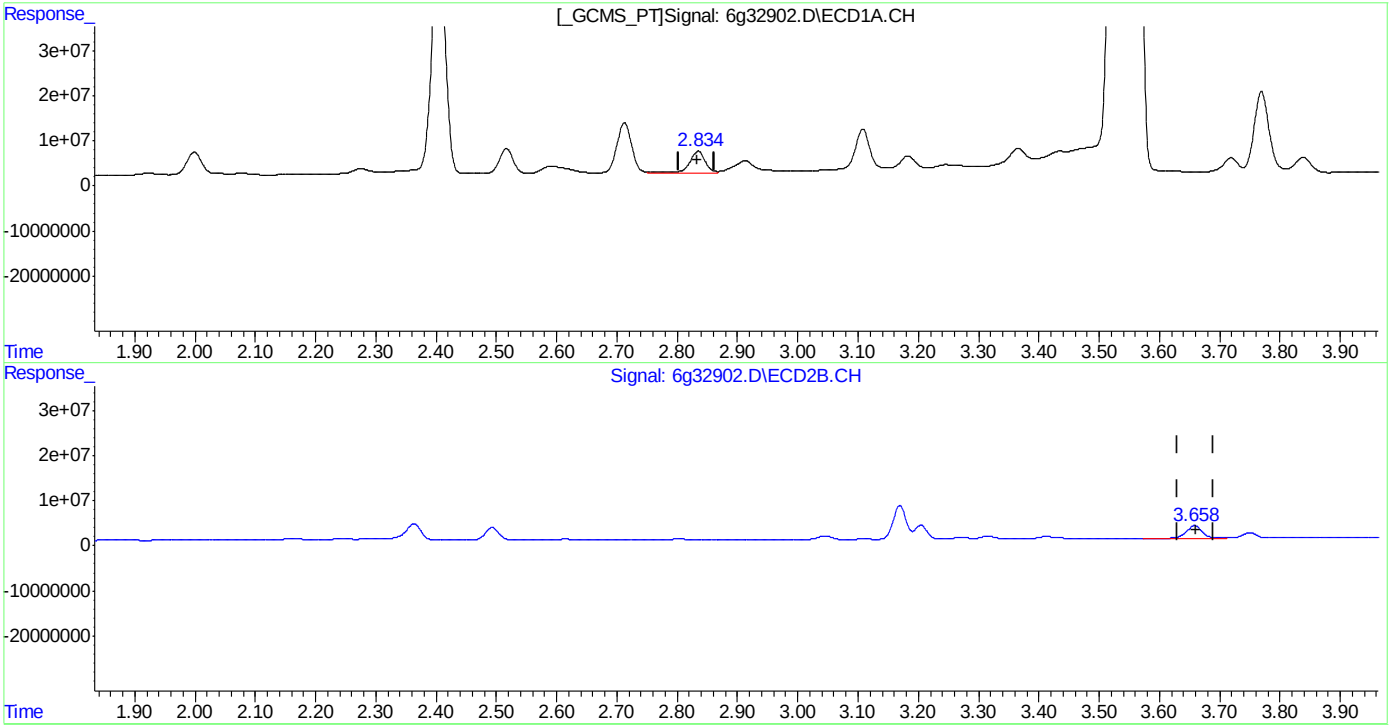
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	1	2.83	Poorly defined baseline
beta-BHC	319-85-7	1	2.91	Poorly defined baseline
delta-BHC	319-86-8	1	3.11	Poorly defined baseline
Heptachlor	76-44-8	1	3.36	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	2	3.66	Poorly defined baseline
beta-BHC	319-85-7	2	3.75	Poorly defined baseline
delta-BHC	319-86-8	2	4.17	Poorly defined baseline
Heptachlor	76-44-8	2	4.27	Poorly defined baseline
Aldrin	309-00-2	2	4.76	Poorly defined baseline
Heptachlor epoxide	1024-57-3	2	5.64	Poorly defined baseline
gamma-Chlordane	5103-74-2	2	6.00	Poorly defined baseline
alpha-Chlordane	5103-71-9	2	6.20	Poorly defined baseline
Endosulfan-I	959-98-8	2	6.29	Poorly defined baseline
4,4'-DDE	72-55-9	2	6.49	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	6.72	Poorly defined baseline
Dieldrin	60-57-1	2	6.77	Poorly defined baseline
Endrin ketone	53494-70-5	1	7.94	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(4) gamma-BHC (MA)
2.835min 44.273PPB
response 92316169

(4) gamma-BHC #2 (MA)
3.658min 56.956PPB
response 66005578

(+) = Expected Retention Time

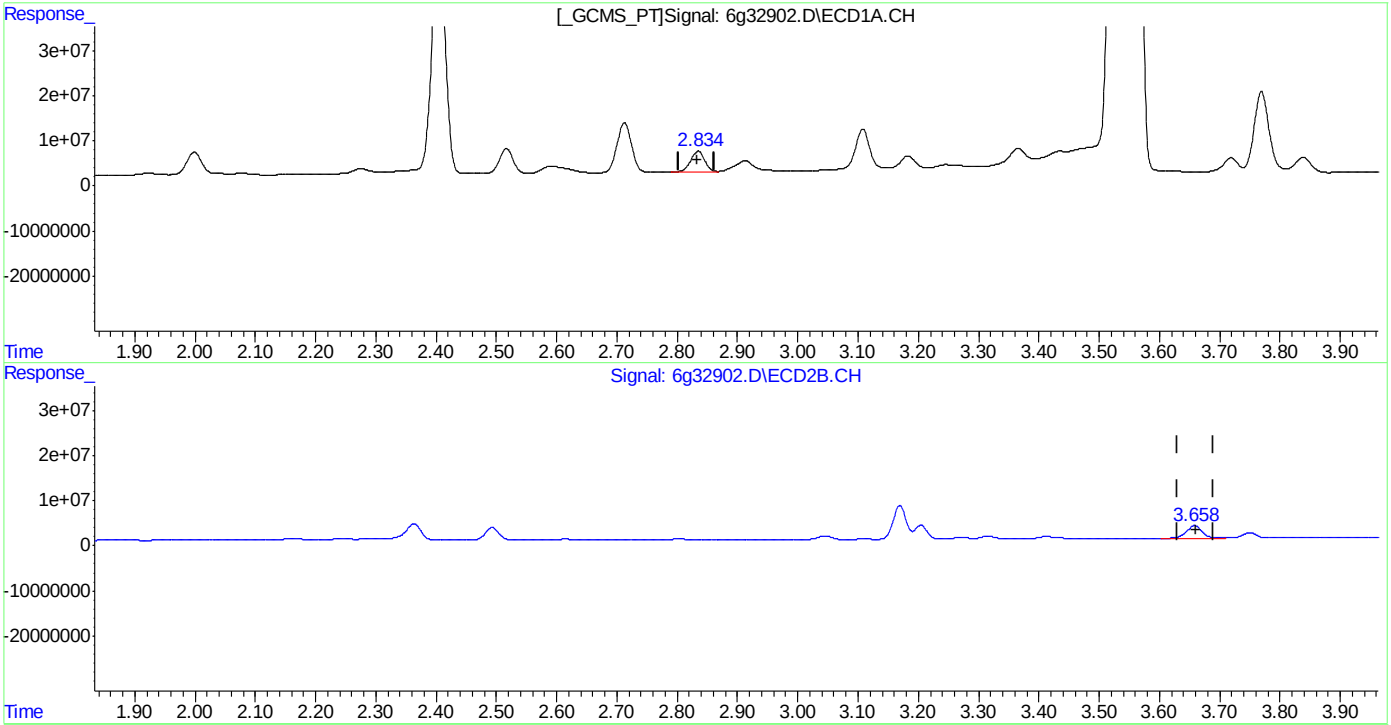
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(4) gamma-BHC (MA)
2.834min 36.007PPB m
response 75081070

(4) gamma-BHC #2 (MA)
3.658min 45.455PPB m
response 52676953

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:37:52 2016

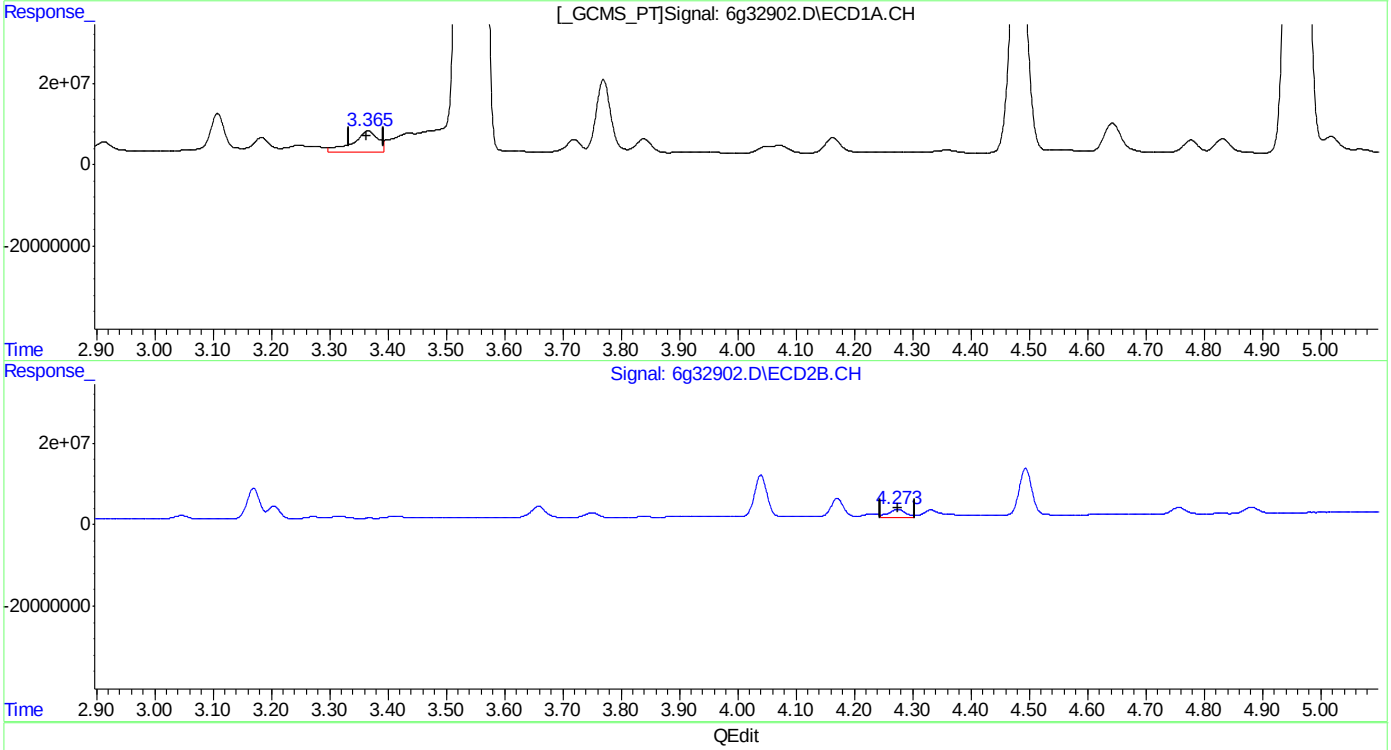
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(5) Heptachlor (MA)
3.365min 76.972PPB
response 154479354

(5) Heptachlor #2 (MA)
4.274min 38.843PPB
response 45071186

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:38:01 2016

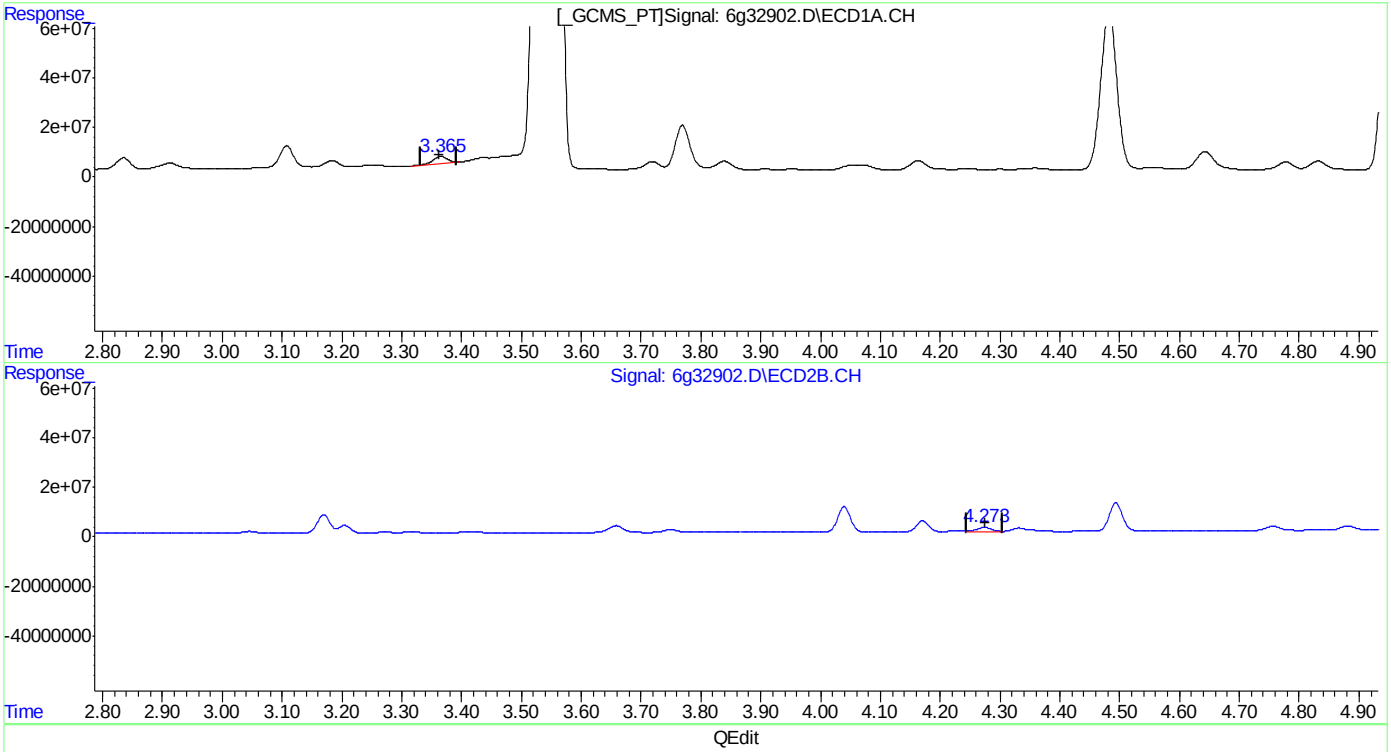
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(5) Heptachlor (MA)
3.365min 27.942PPB m
response 56078127

(5) Heptachlor #2 (MA)
4.273min 27.203PPB m
response 31564663

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:38:18 2016

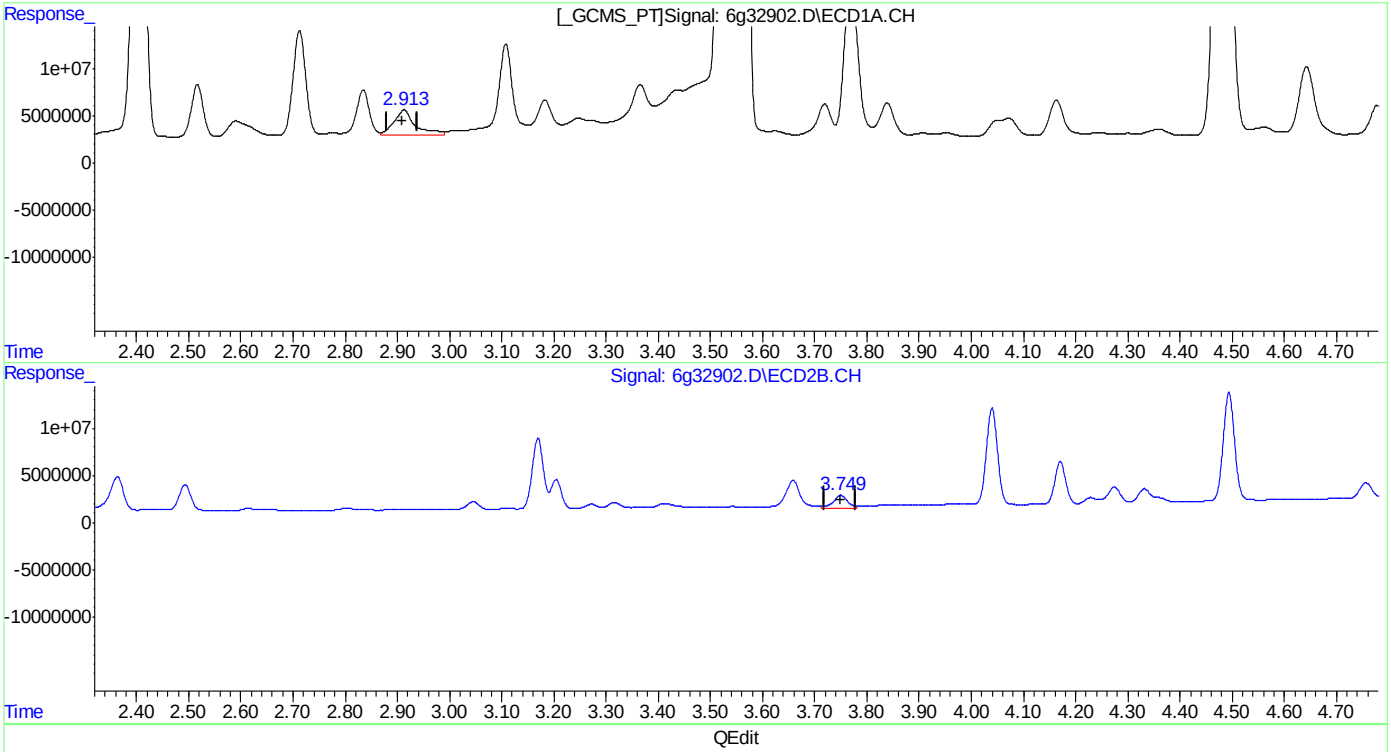
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
2.913min 74.068PPB
response 77500134

(6) beta-BHC #2 (B)
3.750min 48.546PPB
response 27412128

(+) = Expected Retention Time

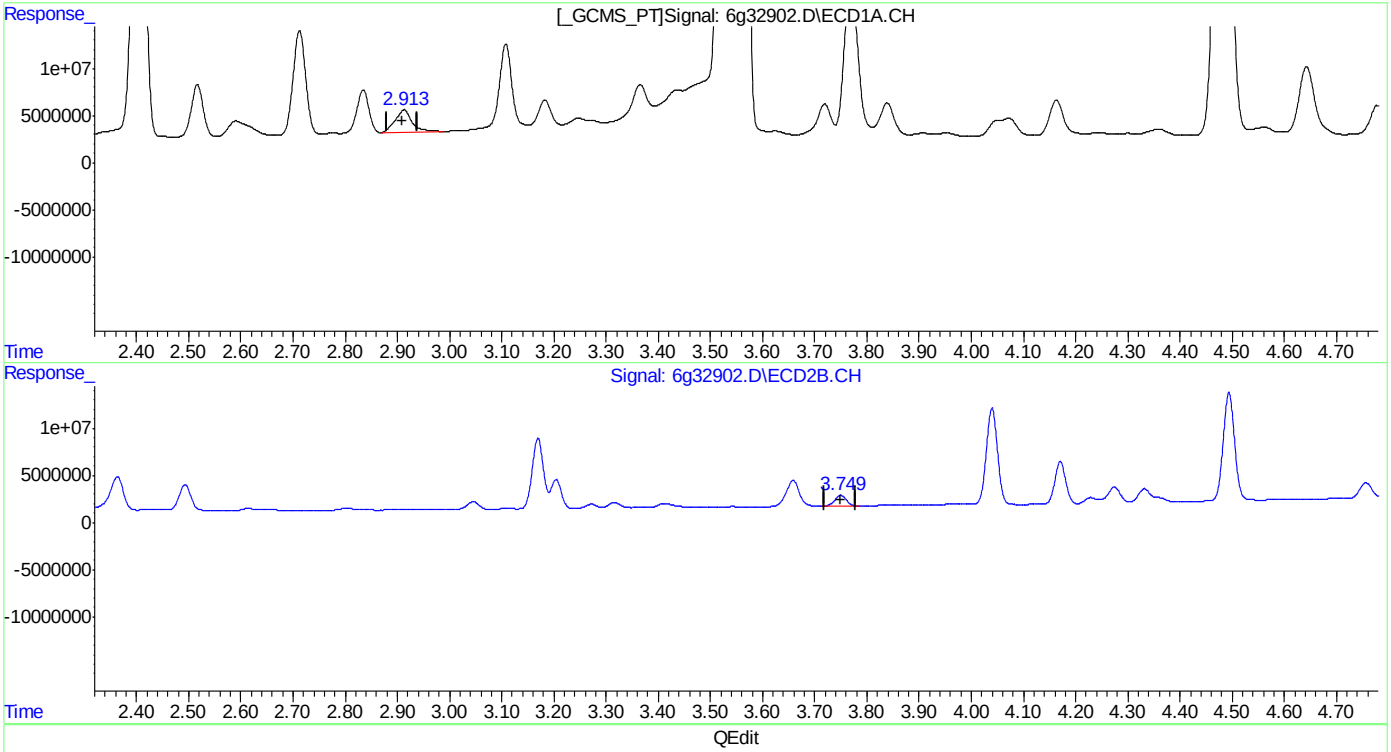
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
2.913min 52.664PPB m
response 55104464

(6) beta-BHC #2 (B)
3.749min 33.548PPB m
response 18943541

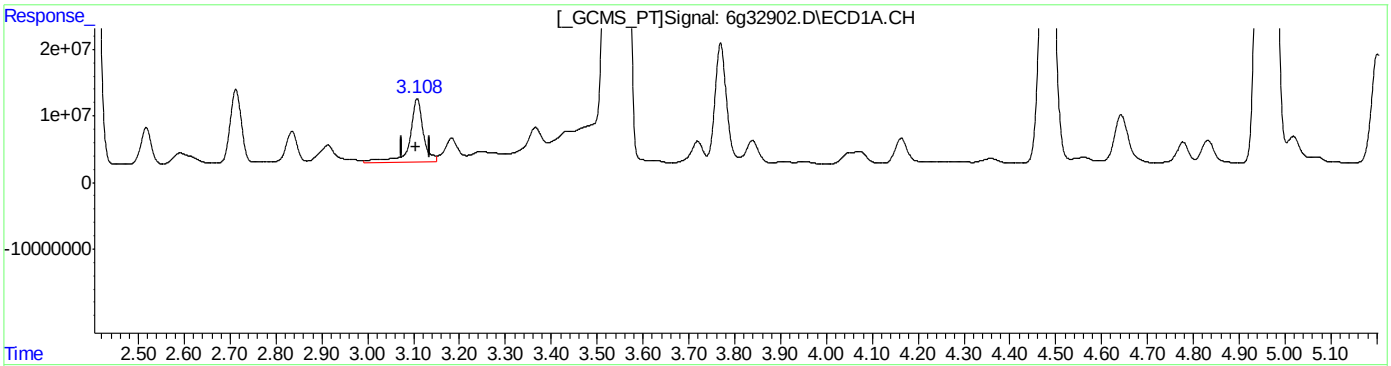
(+) = Expected Retention Time

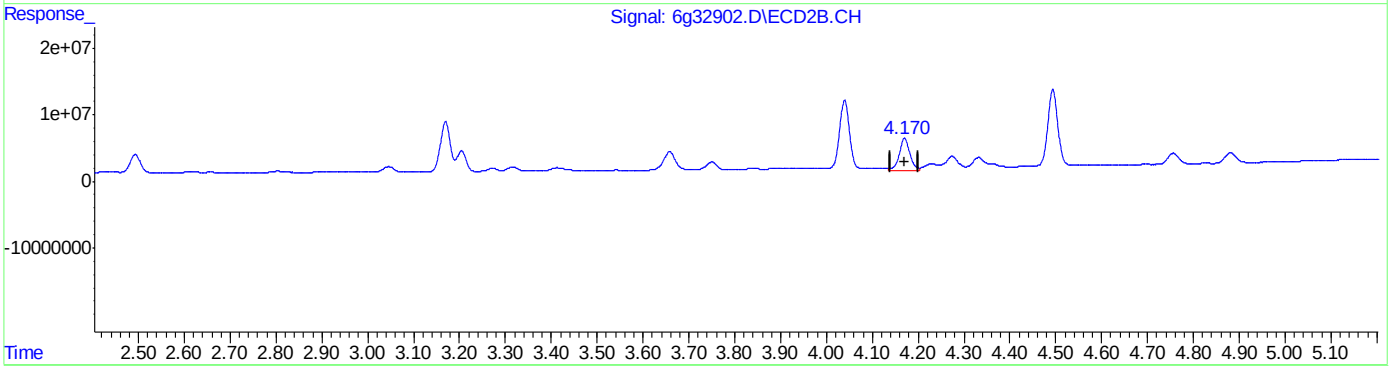
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(7) delta-BHC (B)
3.108min 94.255PPB
response 200642384

(7) delta-BHC #2 (B)
4.170min 67.664PPB
response 80096010

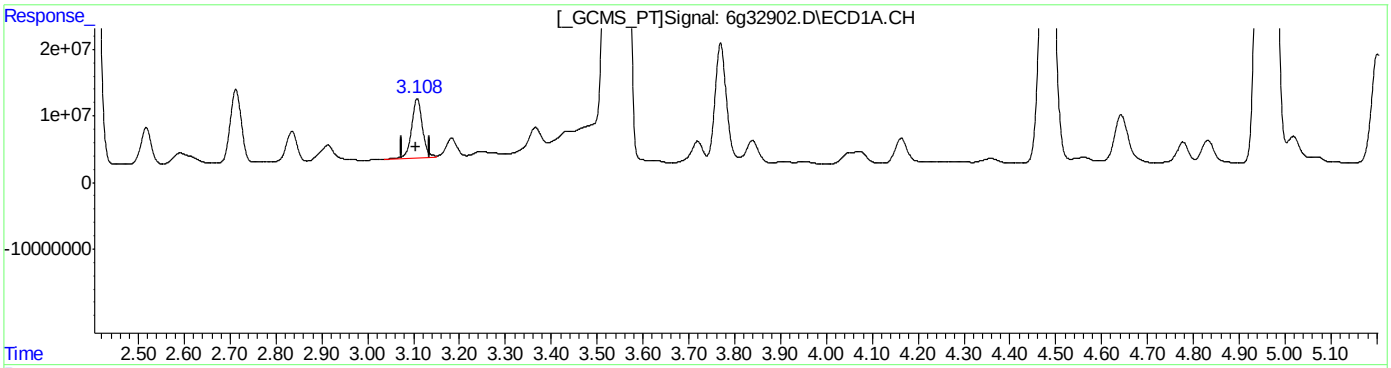
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:38:41 2016

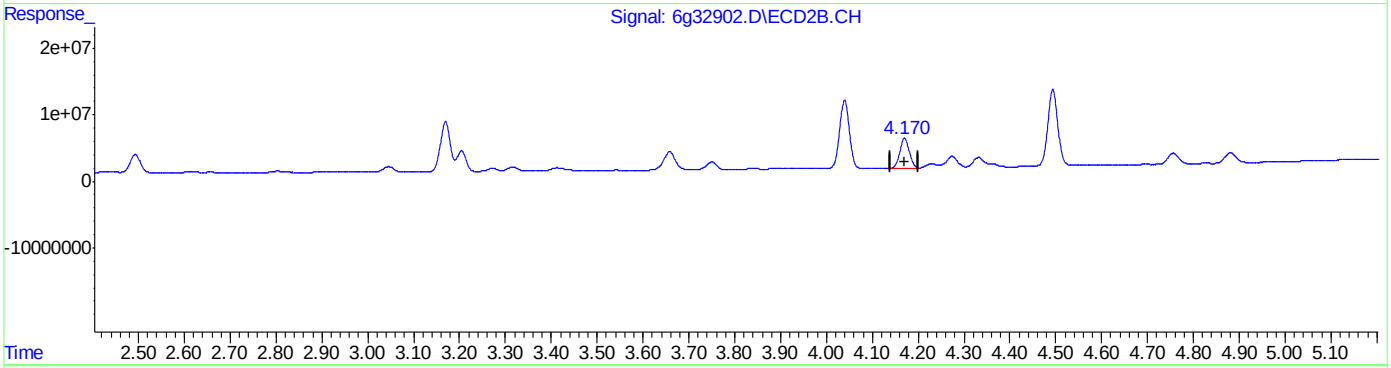
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(7) delta-BHC (B)
3.108min 70.248PPB m
response 149537198

(7) delta-BHC #2 (B)
4.170min 55.435PPB m
response 65620888

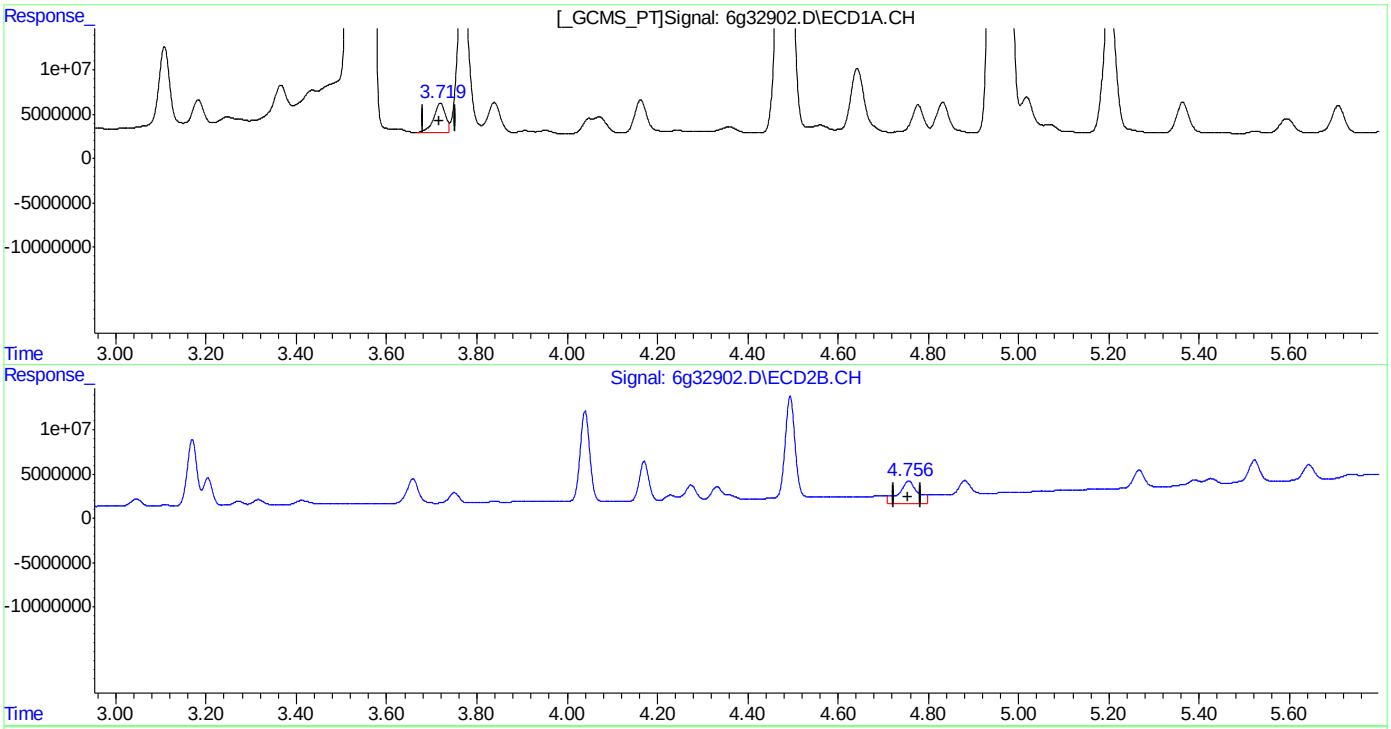
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:38:52 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(8) Aldrin (MB)
3.719min 24.890PPB
response 57856260

(8) Aldrin #2 (MB)
4.756min 62.163PPB
response 73226596

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:38:59 2016

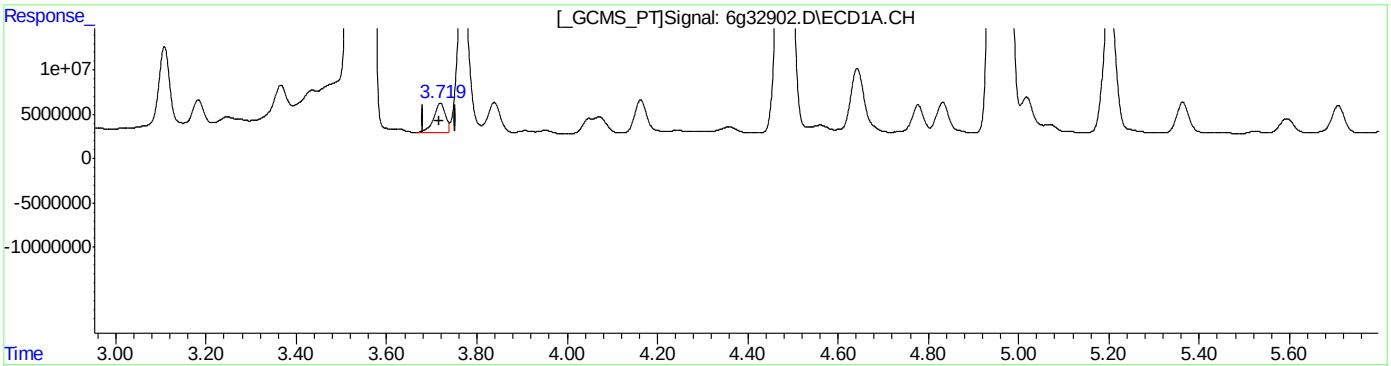
SGS ACCUTEST JC15518

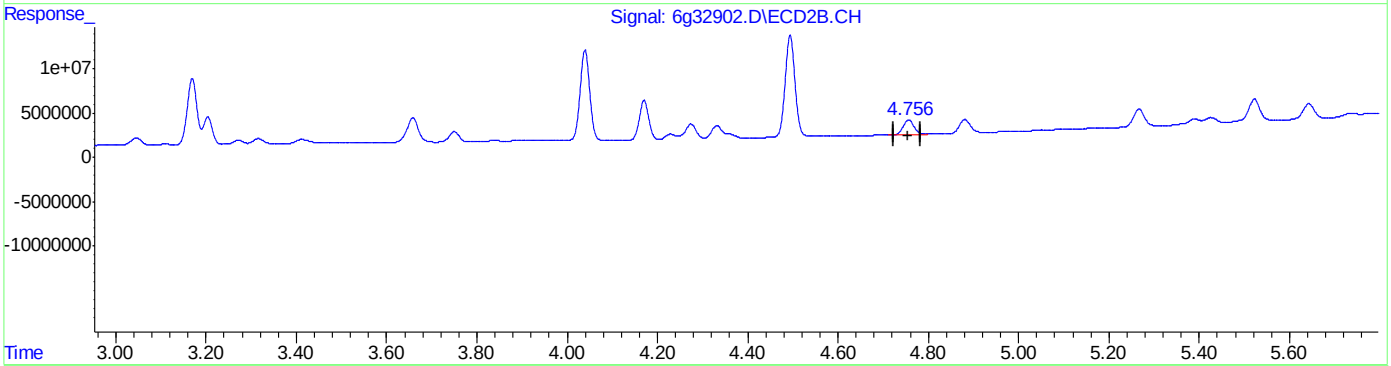
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(8) Aldrin (MB)
3.719min 24.890PPB
response 57856260

(8) Aldrin #2 (MB)
4.756min 24.243PPB m
response 28557809

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:04 2016

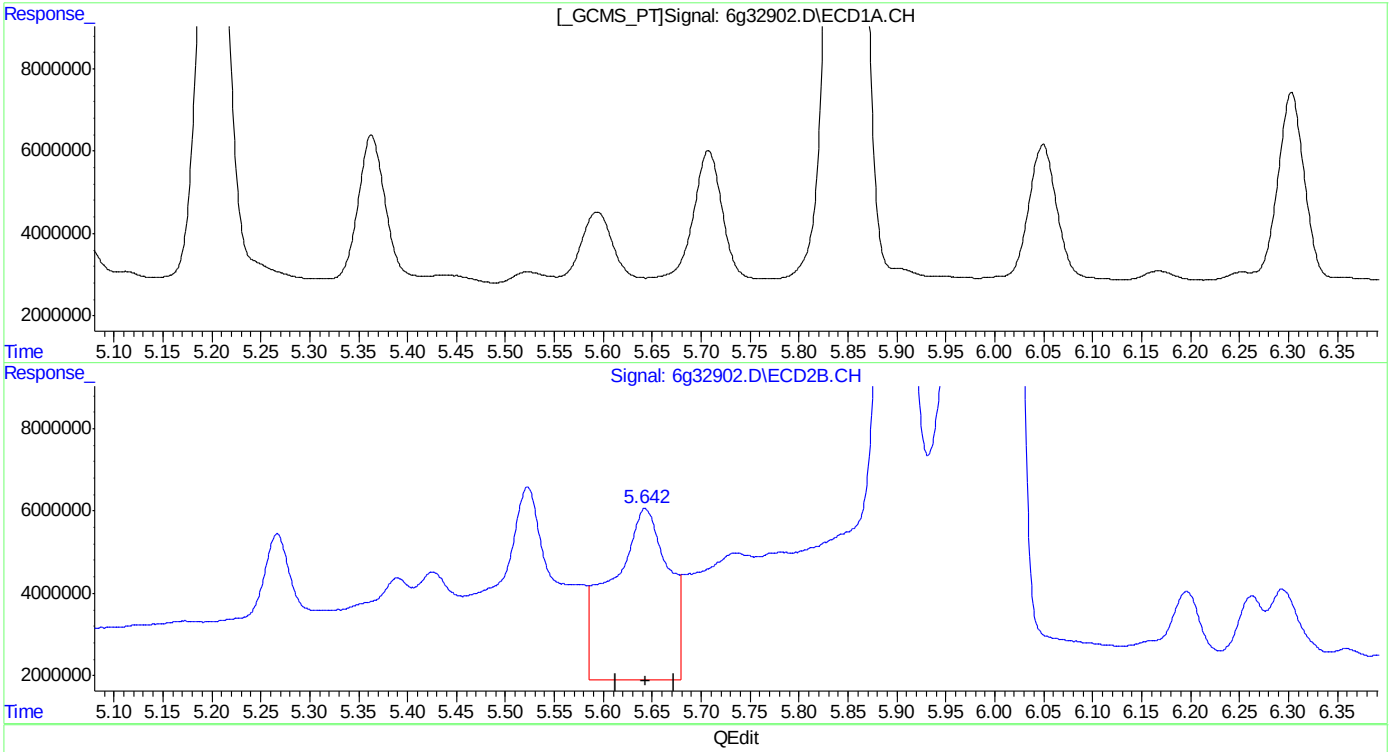
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:11 pm
Operator  : dharas
Sample    : op91903-ms
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 12   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)

4.483min 613.788PPB

response 1218535284

(9) Heptachlor Epoxide #2 (B)

5.643min 164.001PPB

response 167100408

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:39:10 2016

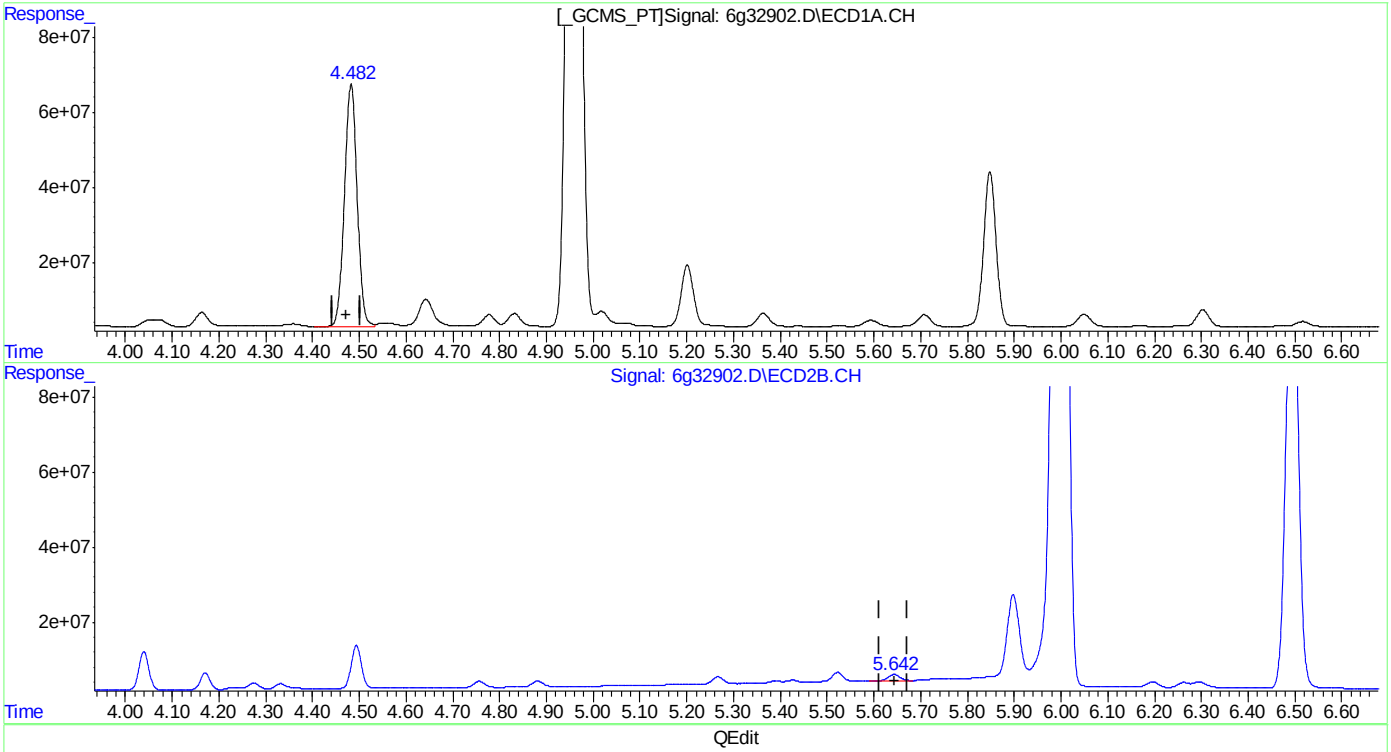
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:11 pm
Operator  : dharas
Sample    : op91903-ms
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 12   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



(9) Heptachlor Epoxide (B)

4.483min 613.788PPB

response 1218535284

(9) Heptachlor Epoxide #2 (B)

5.642min 31.367PPB m

response 31959258

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:39:16 2016

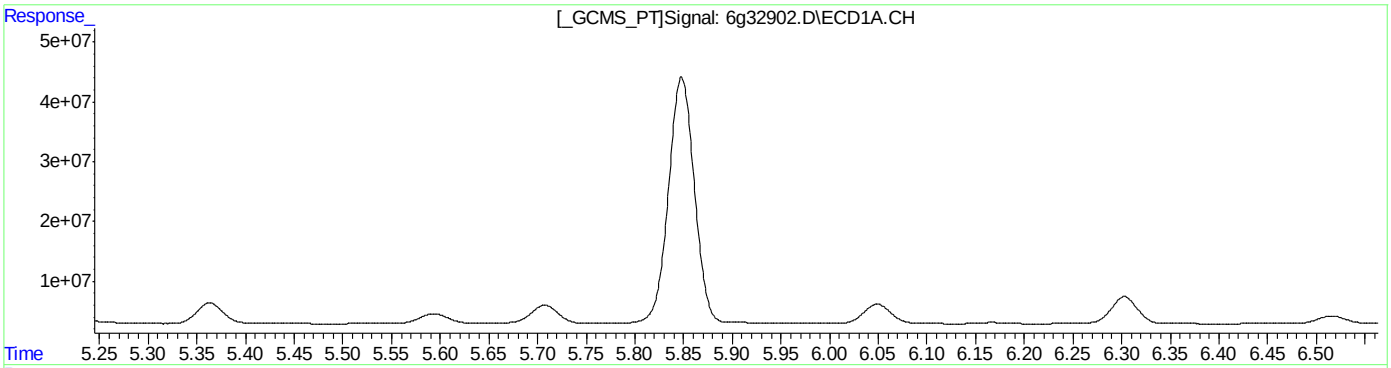
SGS ACCUTEST JC15518

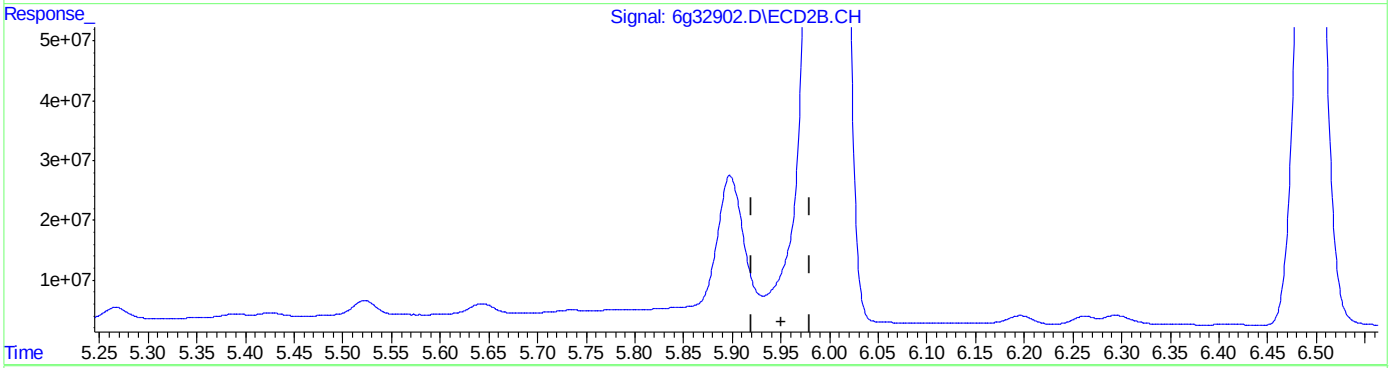
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
4.642min 74.305PPB
response 162984936

(10) gamma-Chlordane #2 (B)
0.000min 0.000PPB
response 0

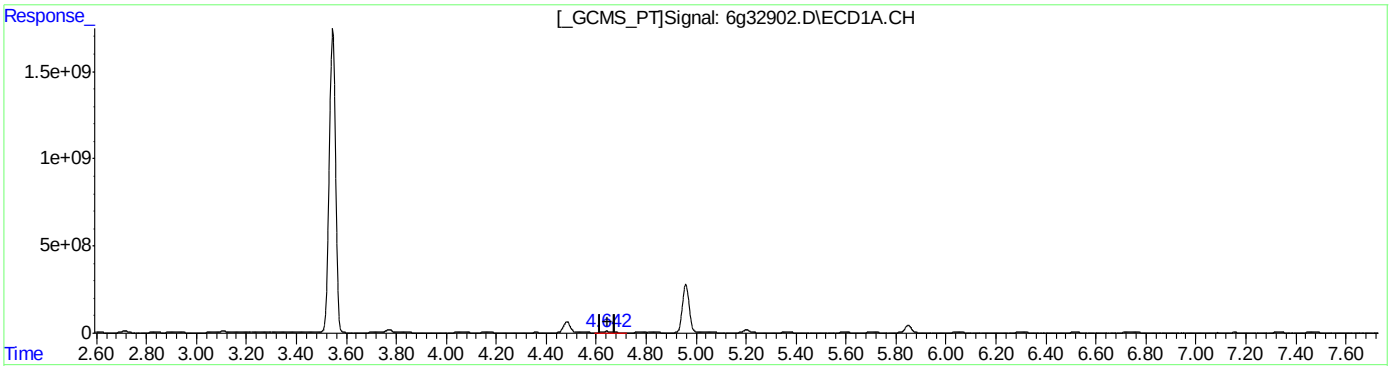
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:27 2016

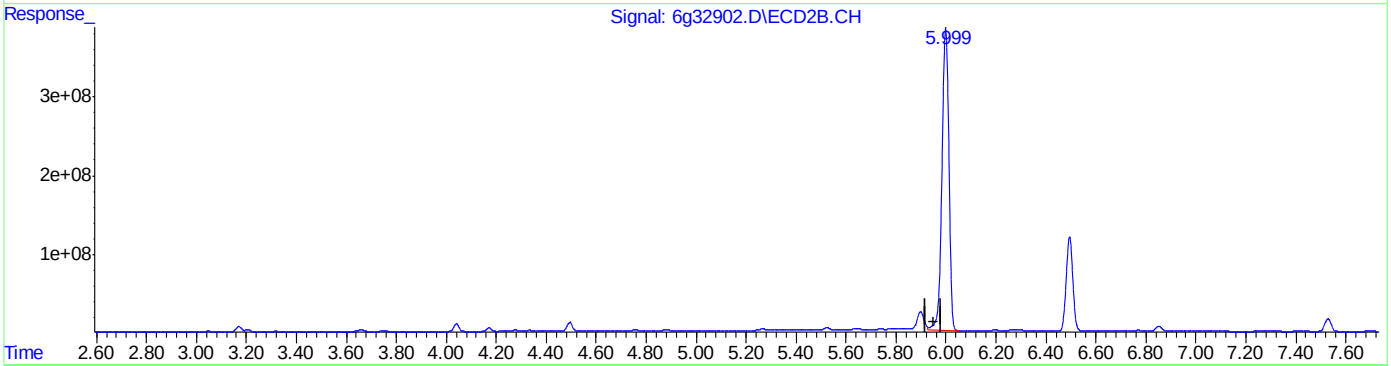
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:11 pm
Operator  : dharas
Sample    : op91903-ms
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 12   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(10) gamma-Chlordane (B)

4.642min 74.305PPB

response 162984936

(10) gamma-Chlordane #2 (B)

5.999min 7120.180PPB m

response 7415260894

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:39:32 2016

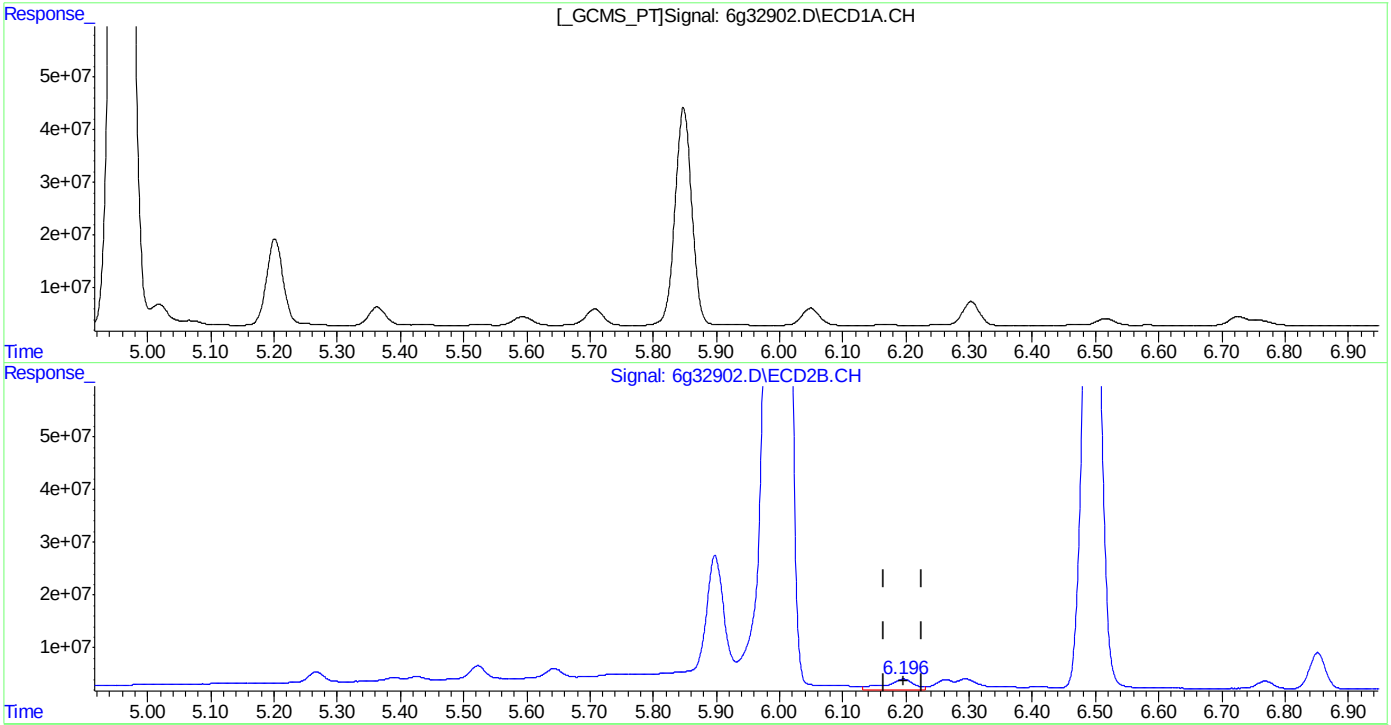
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.832min 30.648PPB
response 68867104

(11) alpha-Chlordane #2 (B)
6.196min 61.070PPB
response 65162541

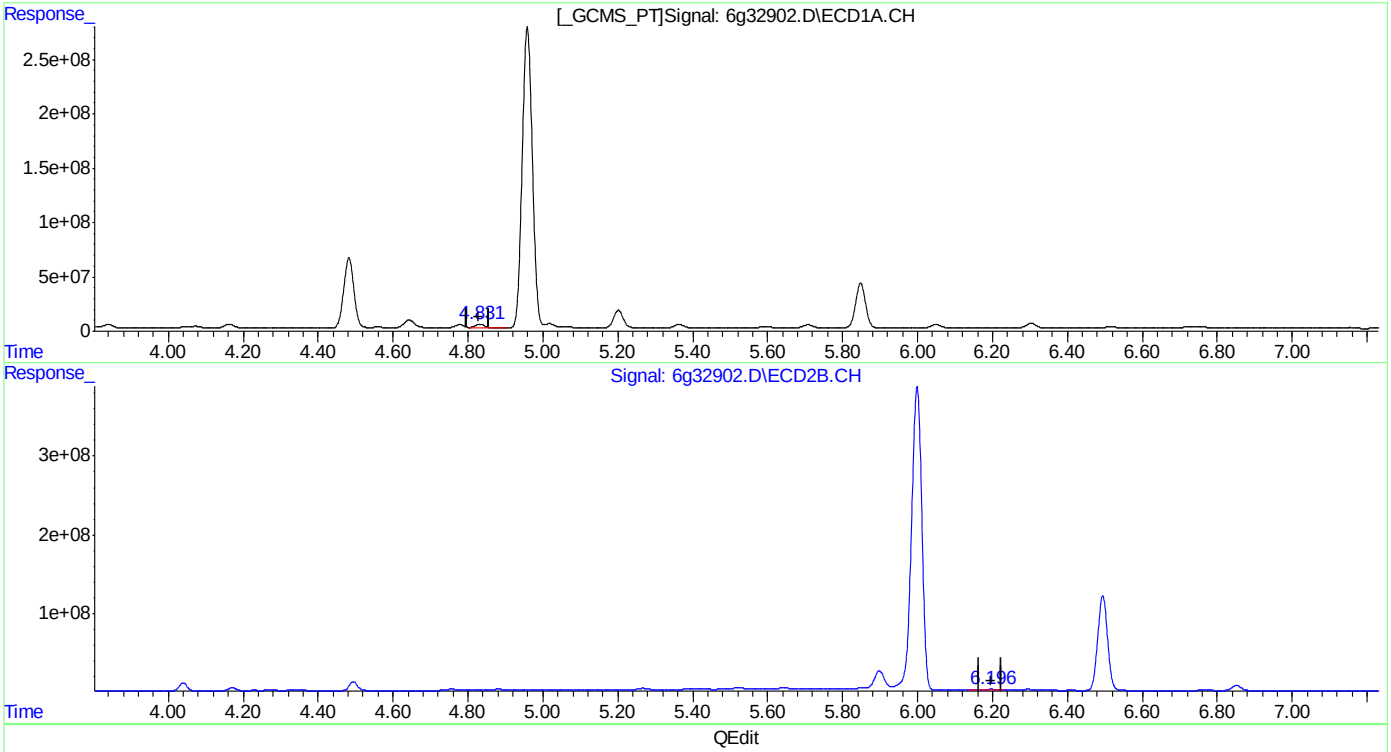
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:38 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.832min 30.648PPB
response 68867104

(11) alpha-Chlordane #2 (B)
6.196min 26.768PPB m
response 28561586

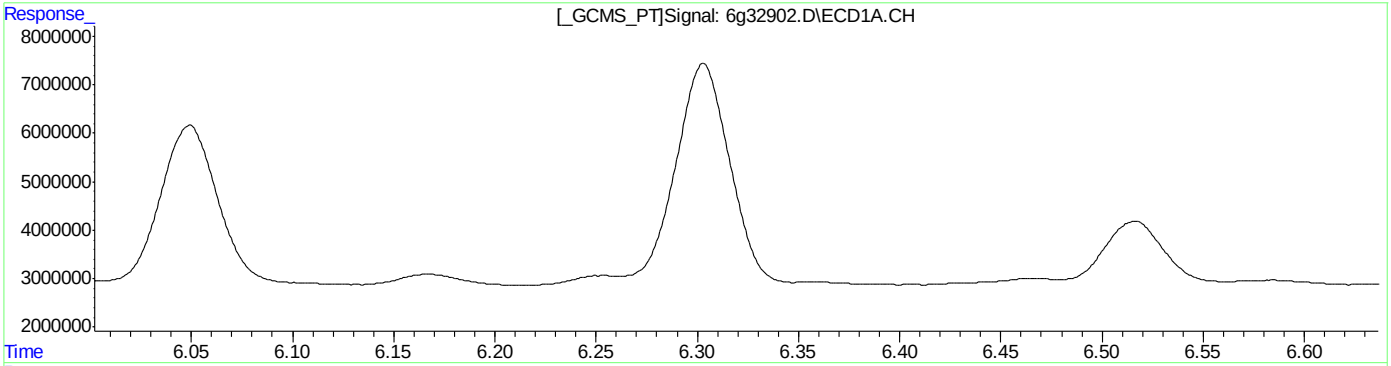
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:46 2016

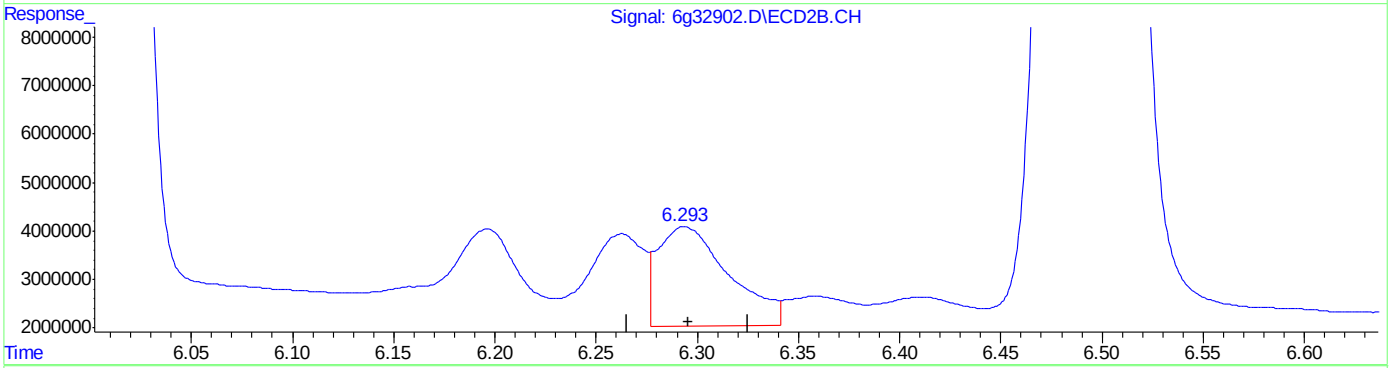
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(12) Endosulfan I (A)
5.017min 27.284PPB
response 54020174

(12) Endosulfan I #2 (A)
6.293min 51.056PPB
response 50543383

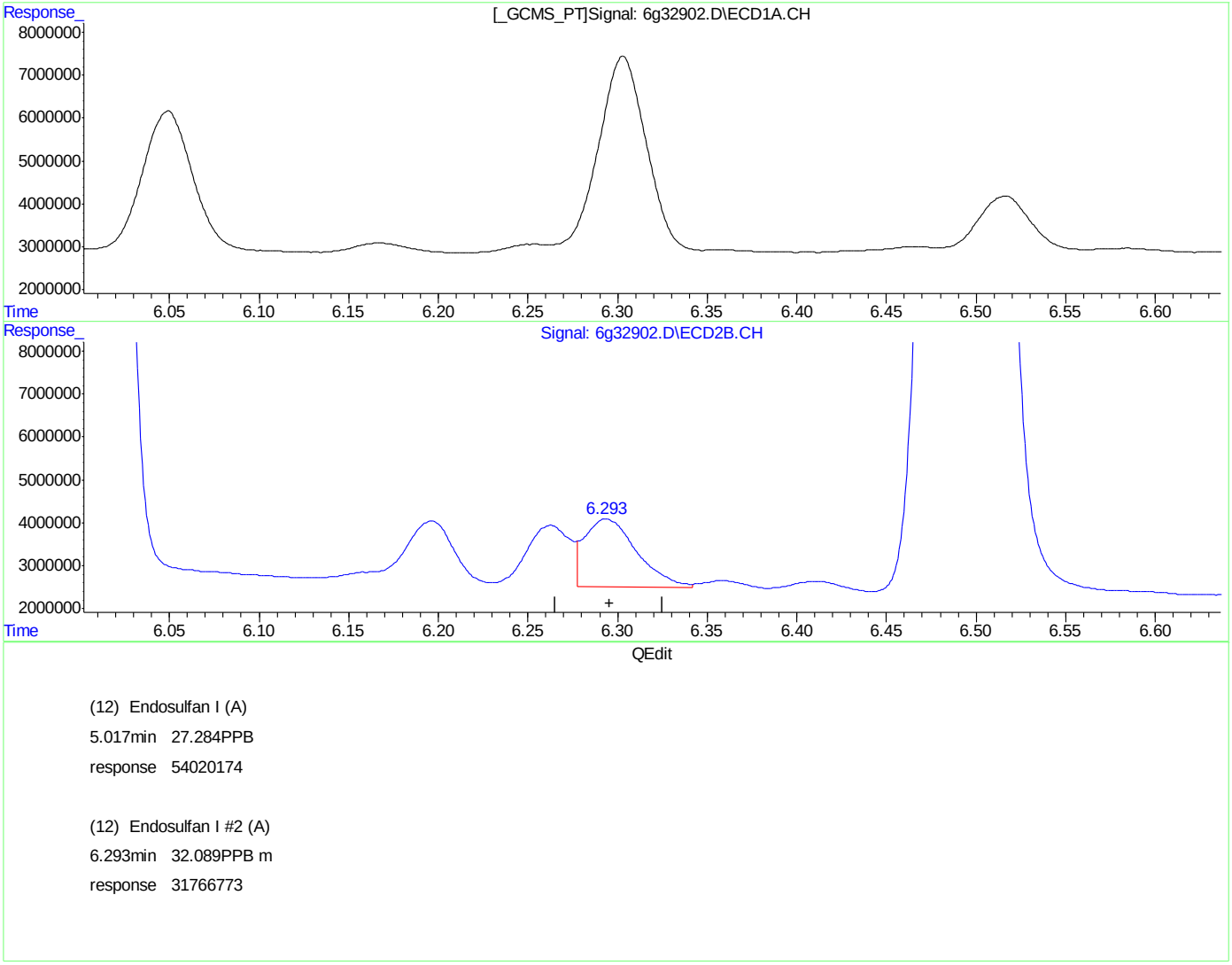
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:51 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(12) Endosulfan I (A)
5.017min 27.284PPB
response 54020174

(12) Endosulfan I #2 (A)
6.293min 32.089PPB m
response 31766773

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:39:57 2016

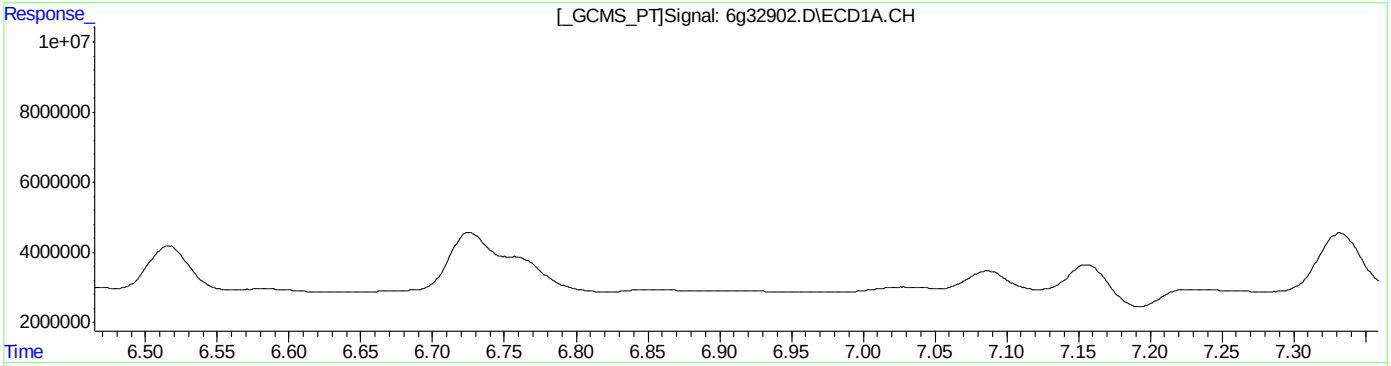
SGS ACCUTEST JC15518

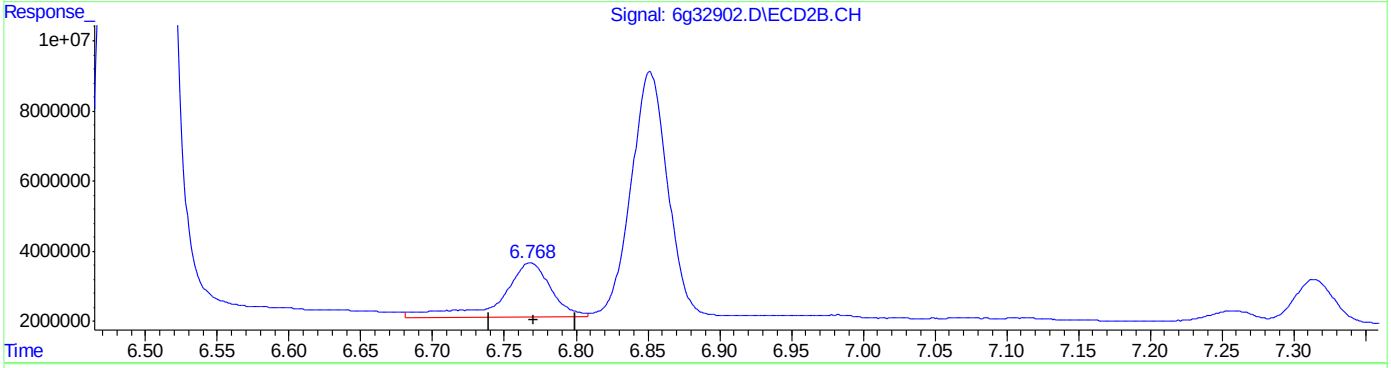
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
5.363min 33.142PPB
response 64512944

(14) Dieldrin #2 (MA)
6.768min 37.615PPB
response 37040357

(+) = Expected Retention Time

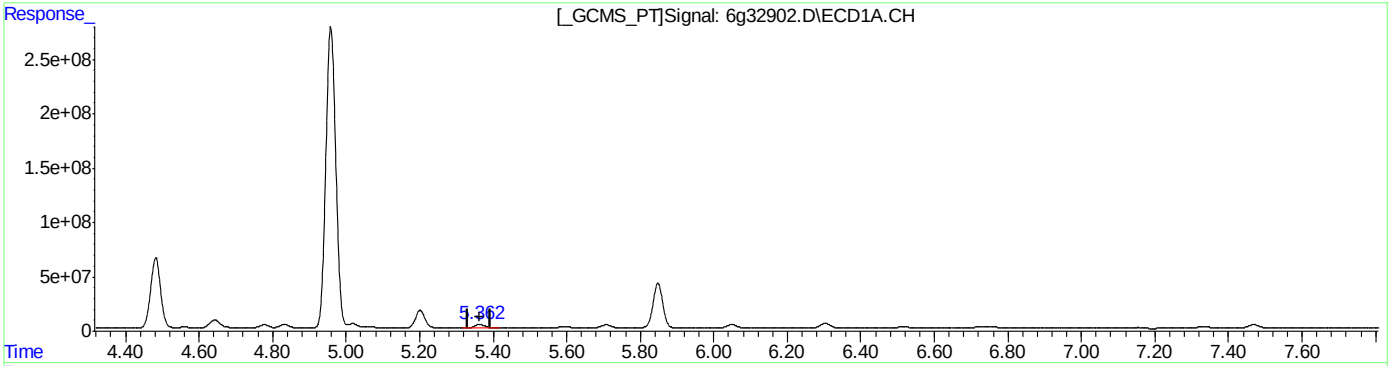
SGS ACCUTEST JC15518

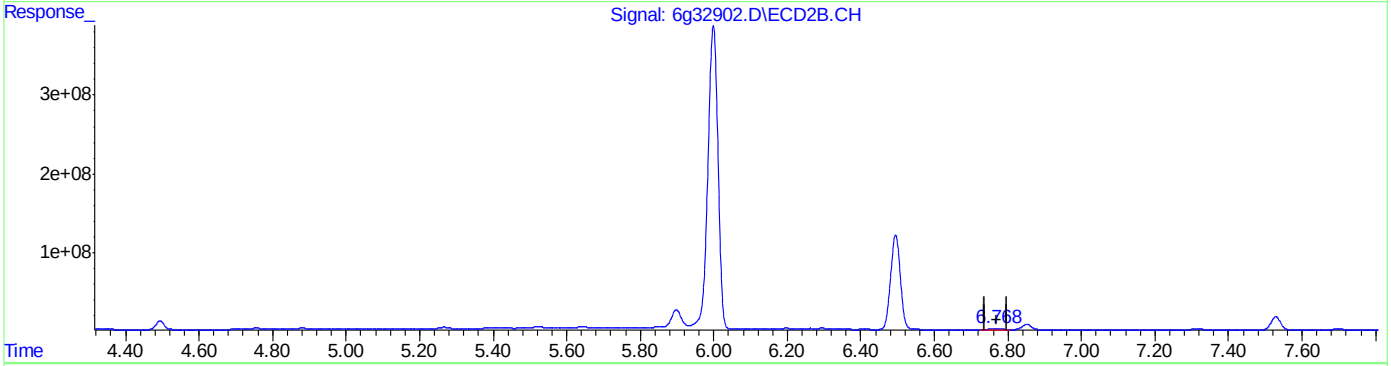
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
5.363min 33.142PPB
response 64512944

(14) Dieldrin #2 (MA)
6.768min 27.464PPB m
response 27044611

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:40:12 2016

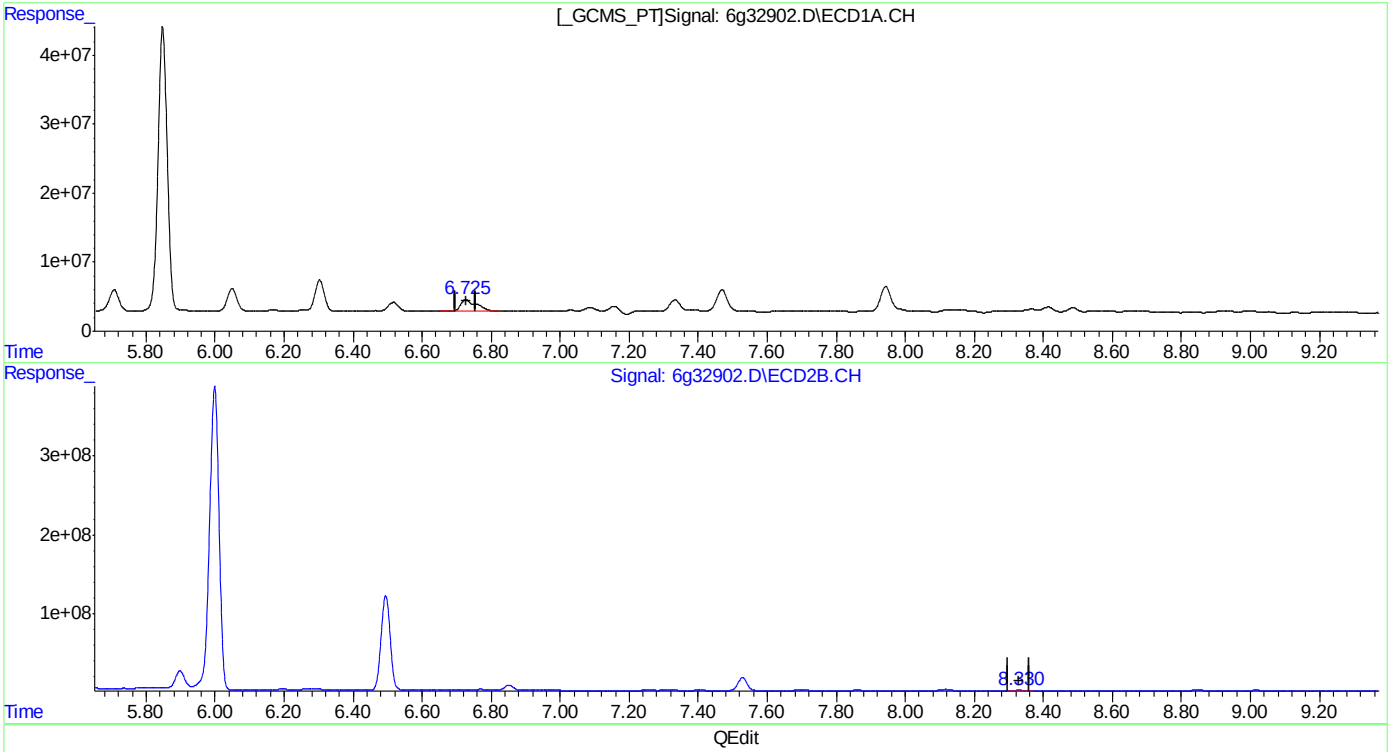
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:11 pm
Operator  : dharas
Sample    : op91903-ms
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 12   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(19) Endrin Aldehyde (B)

6.726min 36.929PPB

response 54442229

(19) Endrin Aldehyde #2 (B)

8.330min 19.719PPB

response 12750213

(+) = Expected Retention Time

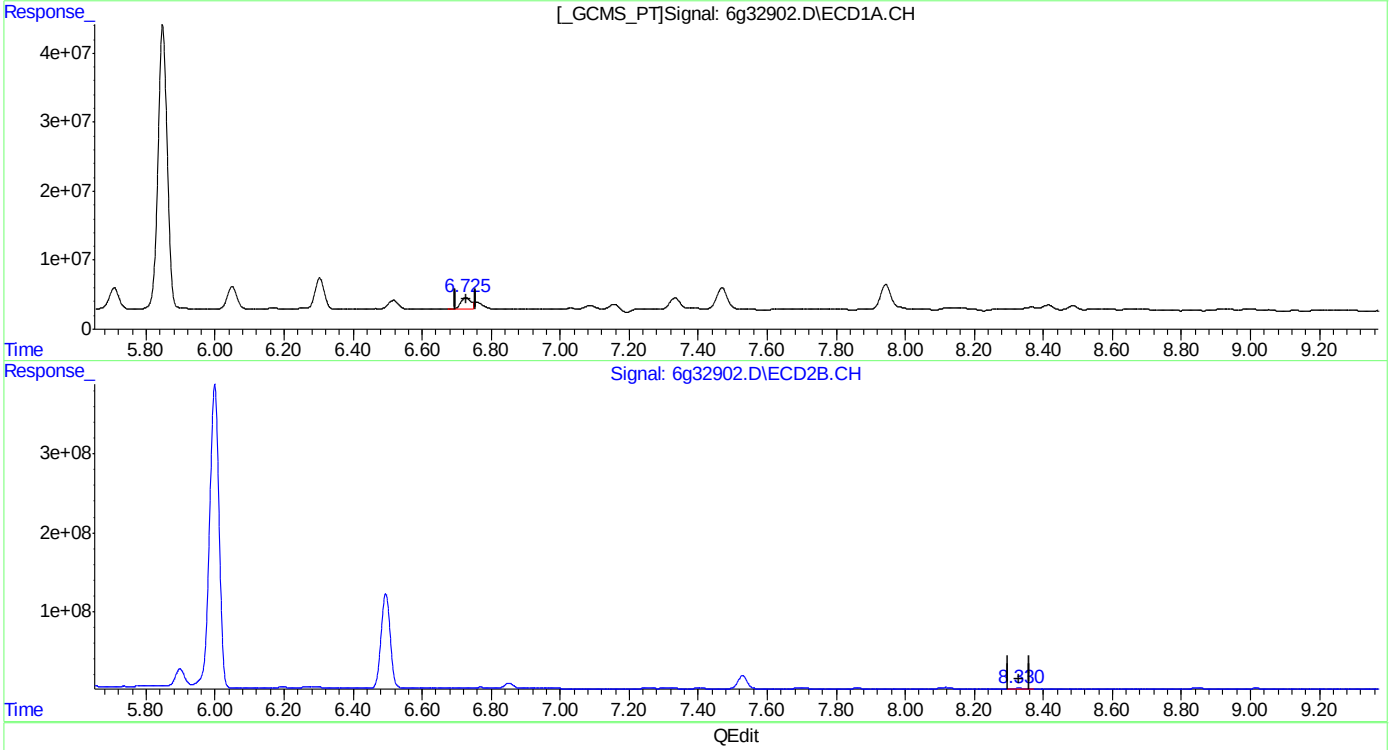
6PST957.M Wed Mar 16 08:40:30 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.725min 24.333PPB m
response 35873016

(19) Endrin Aldehyde #2 (B)
8.330min 19.719PPB
response 12750213

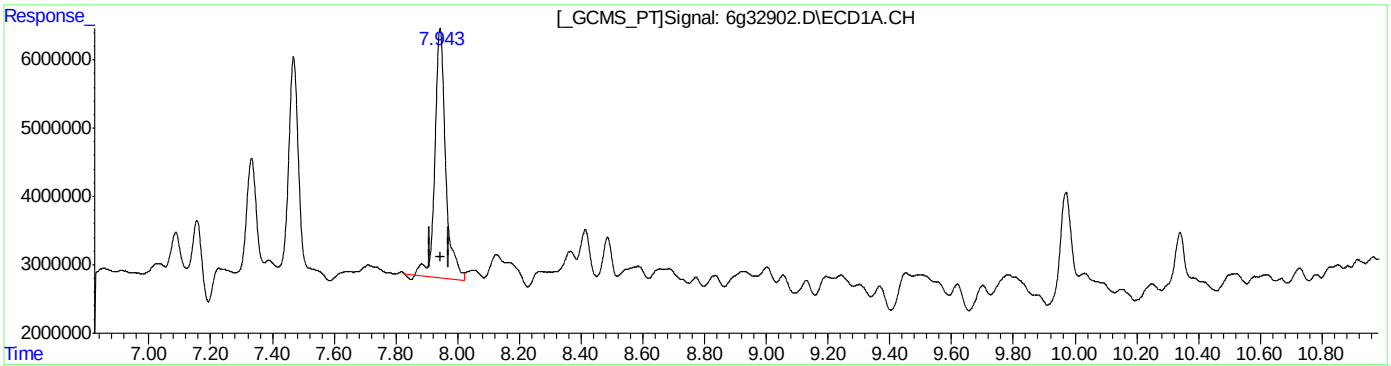
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:40:36 2016

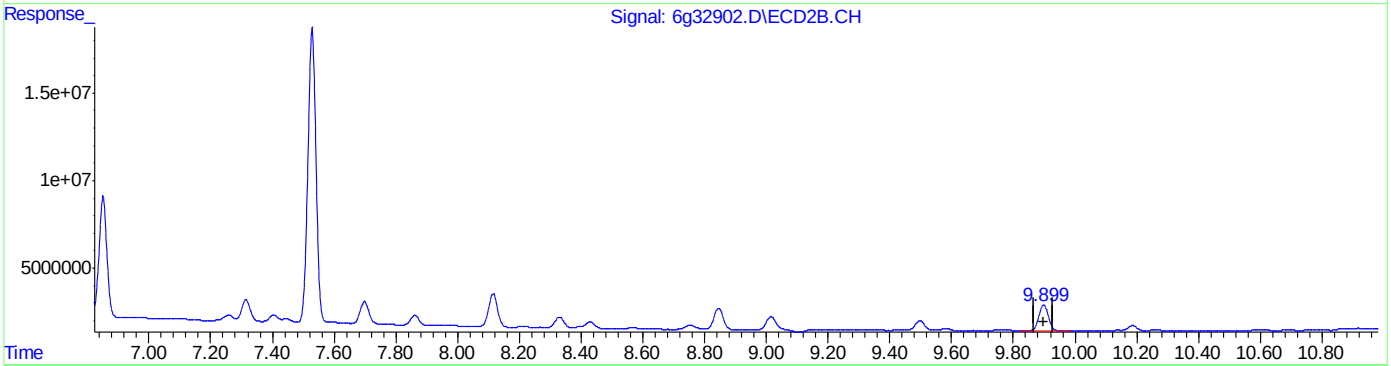
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
7.943min 46.052PPB
response 87645748

(23) Endrin Ketone #2 (B)
9.899min 39.549PPB
response 33918373

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:40:51 2016

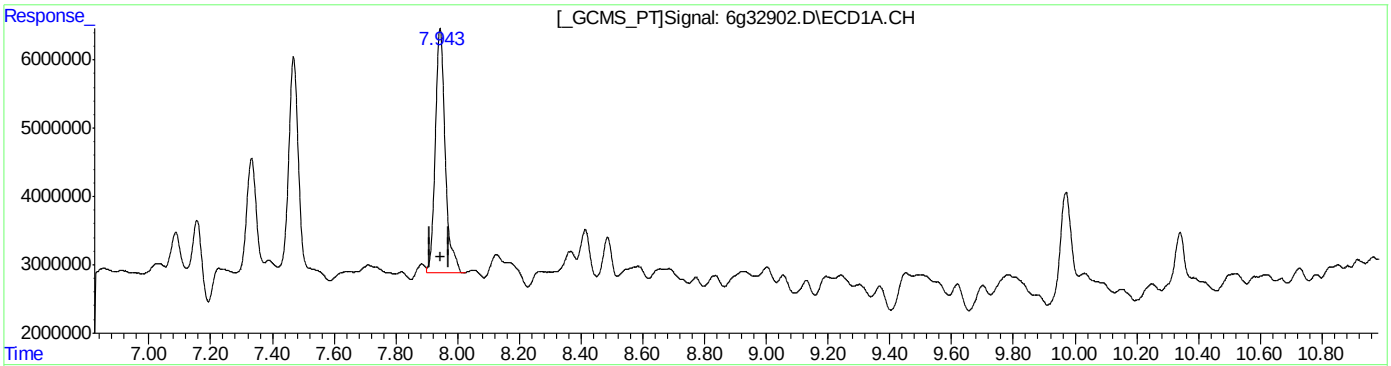
SGS ACCUTEST JC15518

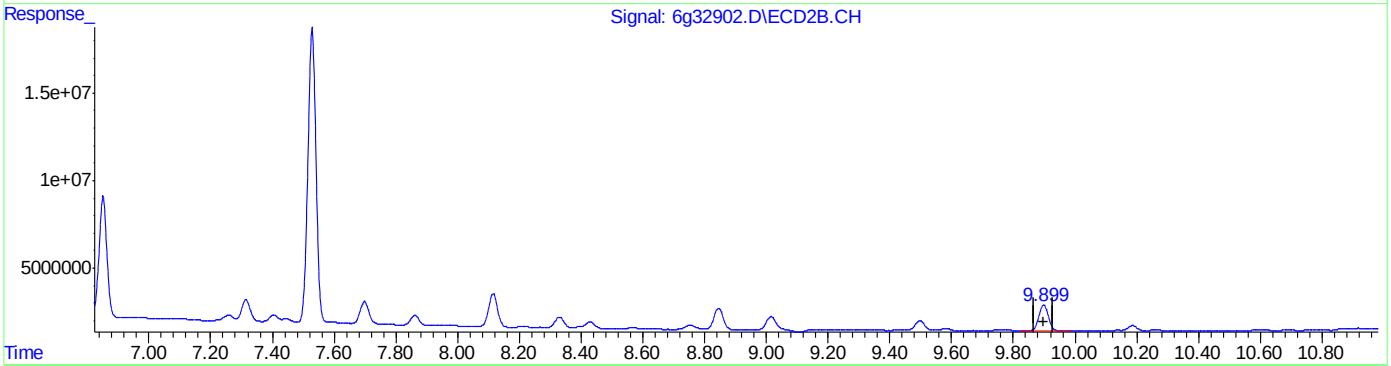
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:37:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
7.943min 41.988PPB m
response 79911424

(23) Endrin Ketone #2 (B)
9.899min 39.549PPB
response 33918373

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:40:55 2016

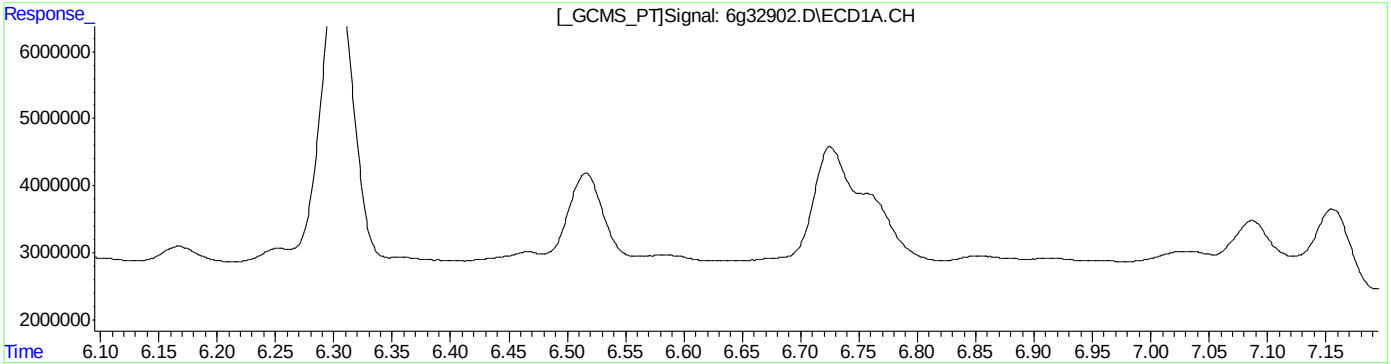
SGS ACCUTEST JC15518

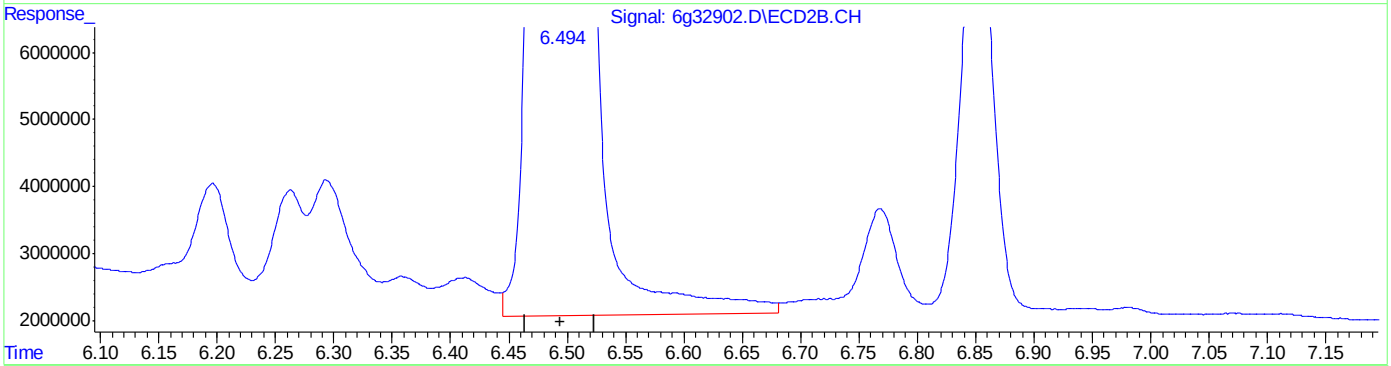
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.958min 2531.459PPB
response 5217432458

(13) 4,4'-DDE #2 (B)
6.494min 2302.101PPB
response 2246181308

(+) = Expected Retention Time

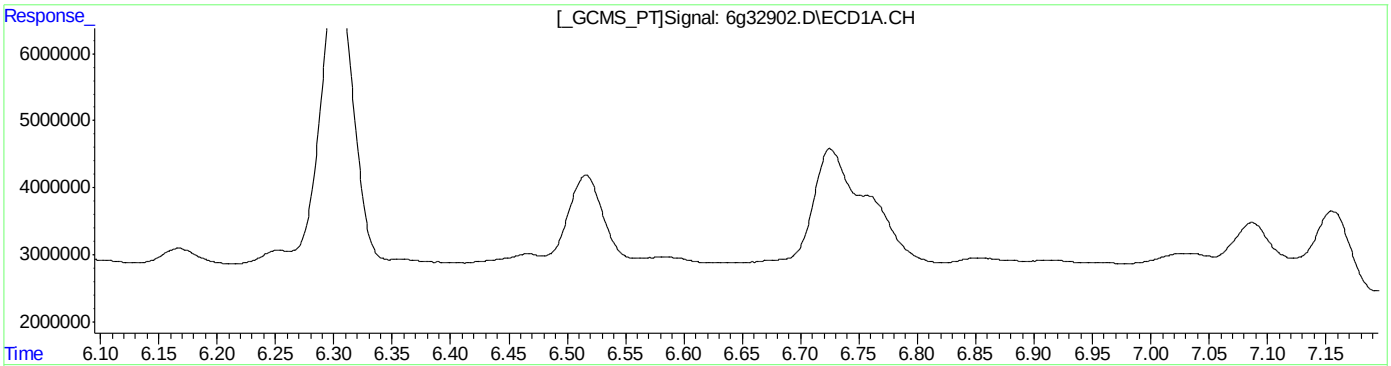
SGS ACCUTEST JC15518

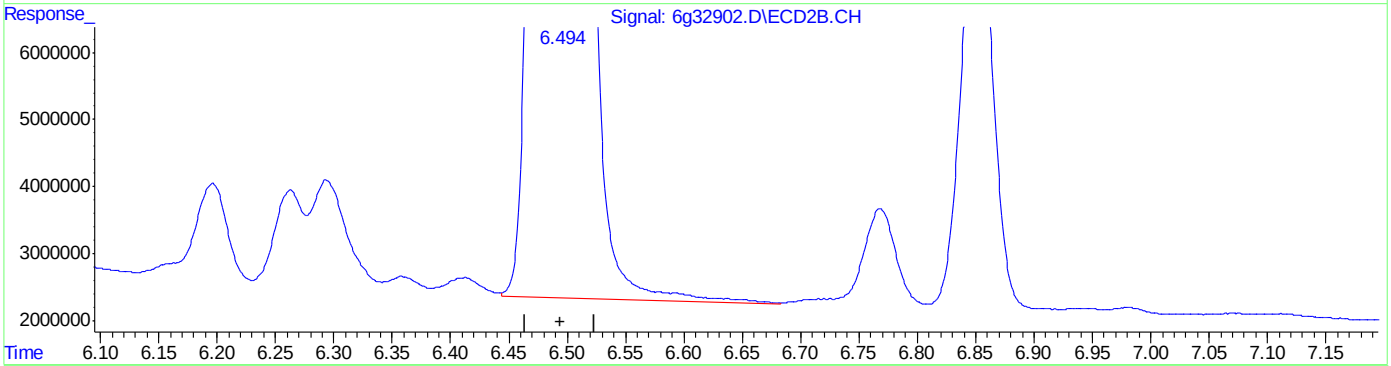
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:11 pm
Operator : dharas
Sample : op91903-ms
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.958min 2531.459PPB
response 5217432458

(13) 4,4'-DDE #2 (B)
6.494min 2271.971PPB m
response 2216783183

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/21/16 08:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:48:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.590	80893903	46114694	50.000	50.000
25) I	1-bromo-2...	1.319	1.590	80893903	46114694	50.000	50.000
31) I	1-bromo-2...	1.319	1.590	80893903	46114694	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.999	2.493	99867515	48614495	44.874	45.848m
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	112.19%	114.62%
24) SAB	Decachlor...	9.968	11.806	46086449	14059385	22.948	22.540
	Spiked Amount 40.000			Recovery	=	57.37%	56.35%
	Target Compounds						
3) A	alpha-BHC	2.517	3.204	93999358	45177662	41.706m	36.559m
4) MA	gamma-BHC	2.834	3.657	79136593	57637047	39.082m	52.238m#
5) MA	Heptachlor	3.364	4.273	60468311	28799575	31.026m	26.069m
6) B	beta-BHC	2.913	3.748	58288140	18601219	57.365m	34.600m#
7) B	delta-BHC	3.108	4.170	153.3E6	70266668	74.154m	62.347m
8) MB	Aldrin	3.719	4.755	60260693	29428365	26.696m	26.239m
9) B	Heptachlo...	4.481	5.643	1375.6E6	31385602	713.521	32.354m#
10) B	gamma-Chl...	4.641	5.997f	173.2E6	8278.0E6	81.325	8348.579m#
11) B	alpha-Chl...	4.830	6.193	69732837	31321650	31.957	30.832m
12) A	Endosulfan I	5.016	6.294	53388218	32942452	27.767	34.951m#
13) B	4,4'-DDE	4.959	6.493	5919.1E6	2544.3E6	2957.404	2738.895m
14) MA	Dieldrin	5.362	6.768	66889325	28522571	35.386	30.423m
15) MA	Endrin	5.707	7.313	63555303	23936823	40.263	30.608m
16) A	4,4'-DDD	5.848	7.526	864.7E6	346.6E6	594.937	478.054m
17) B	Endosulfa...	6.048	7.697	64951087	25447229	35.619	29.902m
18) MA	4,4'-DDT	6.303	8.113	97177764	40387996	62.302	52.818m
19) B	Endrin Al...	6.726	8.328	38226097	12415474	26.701m	20.168m
20) B	Endosulfa...	7.468	8.844	65685333	27156642	38.605m	35.298
21) A	Methoxychlor	7.155	9.494	25696049	11114234	31.449	26.844m
23) B	Endrin Ke...	7.943	9.897	87987571	35009075	47.608	42.876m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

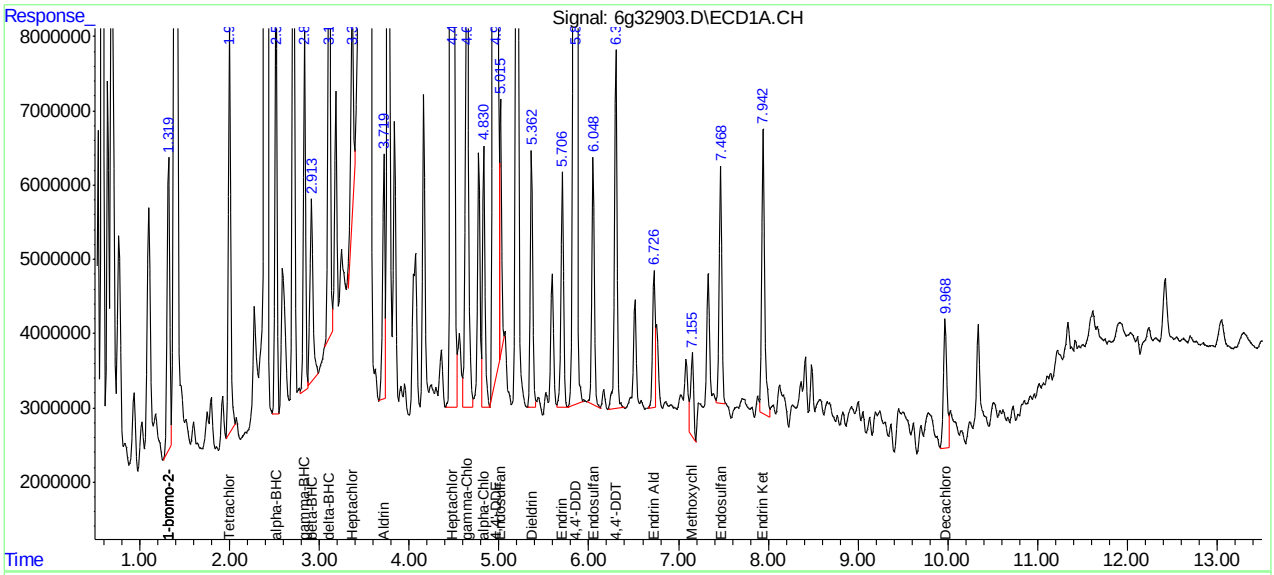
SGS ACCUTEST JC15518

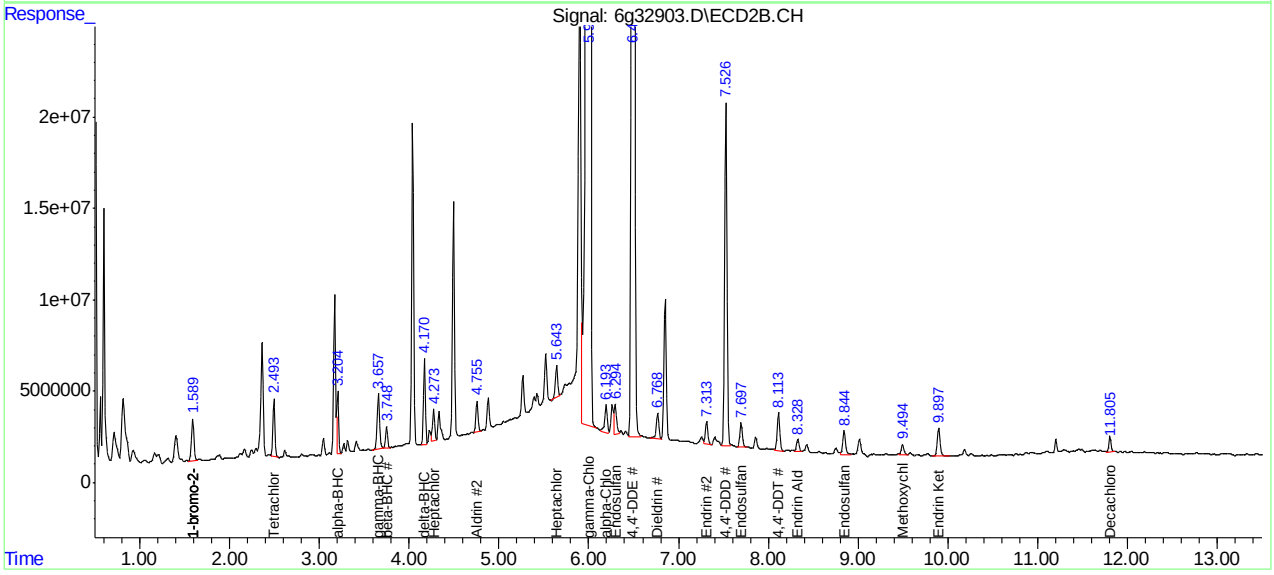
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:48:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number: OP91903-MSD
Lab FileID: 6G32903.D
Injection Time: 03/15/16 19:27
Method: SW846 8081B
Analyst approved: 03/16/16 09:09 Owen McKenna
Supervisor approved: 03/21/16 08:29 Gwendolyn Burns

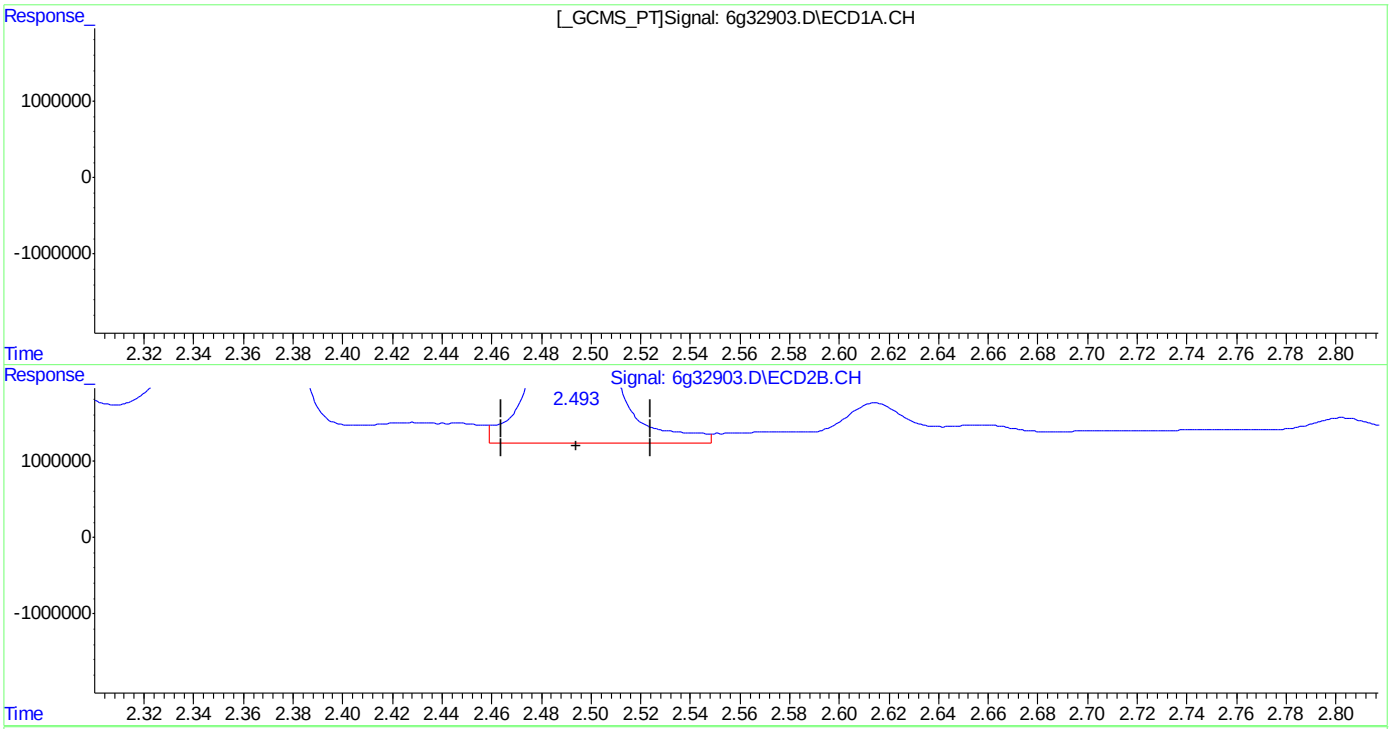
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	2.49	Poorly defined baseline
alpha-BHC	319-84-6	1	2.52	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	1	2.83	Poorly defined baseline
beta-BHC	319-85-7	1	2.91	Poorly defined baseline
delta-BHC	319-86-8	1	3.11	Poorly defined baseline
alpha-BHC	319-84-6	2	3.20	Poorly defined baseline
Heptachlor	76-44-8	1	3.36	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	2	3.66	Poorly defined baseline
Aldrin	309-00-2	1	3.72	Poorly defined baseline
beta-BHC	319-85-7	2	3.75	Poorly defined baseline
delta-BHC	319-86-8	2	4.17	Poorly defined baseline
Heptachlor	76-44-8	2	4.27	Poorly defined baseline
Aldrin	309-00-2	2	4.75	Poorly defined baseline
Heptachlor epoxide	1024-57-3	2	5.64	Poorly defined baseline
gamma-Chlordane	5103-74-2	2	6.00	Poorly defined baseline
alpha-Chlordane	5103-71-9	2	6.19	Poorly defined baseline
Endosulfan-I	959-98-8	2	6.29	Poorly defined baseline
4,4'-DDE	72-55-9	2	6.49	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	6.73	Poorly defined baseline
Dieldrin	60-57-1	2	6.77	Poorly defined baseline
Endrin	72-20-8	2	7.31	Poorly defined baseline
Endosulfan sulfate	1031-07-8	1	7.47	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.53	Poorly defined baseline
Endosulfan-II	33213-65-9	2	7.70	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.11	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.33	Poorly defined baseline
Methoxychlor	72-43-5	2	9.49	Poorly defined baseline
Endrin ketone	53494-70-5	2	9.90	Poorly defined baseline

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)

1.999min 44.874PPB

response 99867515

(2) Tetrachloro-m-xylene #2 (SAB)

2.494min 53.891PPB

response 57142775

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:43:20 2016

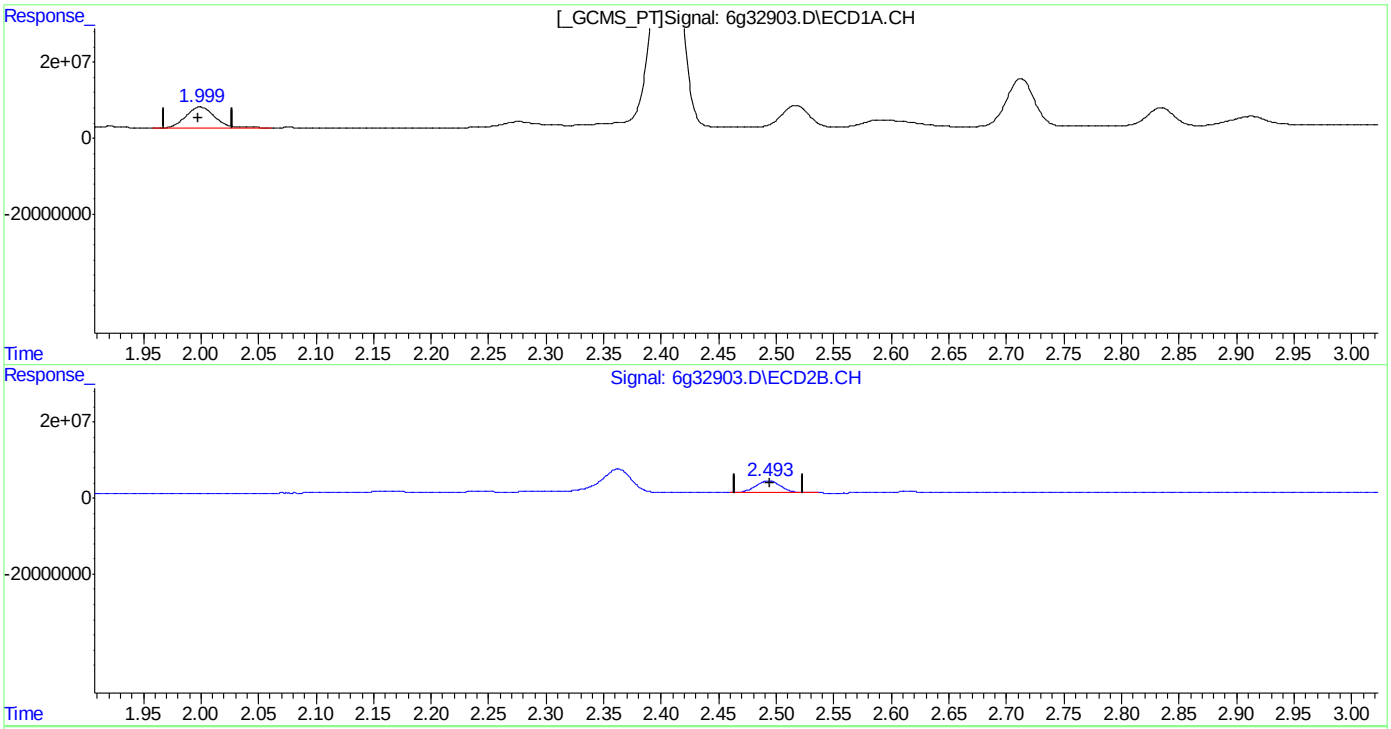
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
1.999min 44.874PPB
response 99867515

(2) Tetrachloro-m-xylene #2 (SAB)
2.493min 45.848PPB m
response 48614495

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:43:27 2016

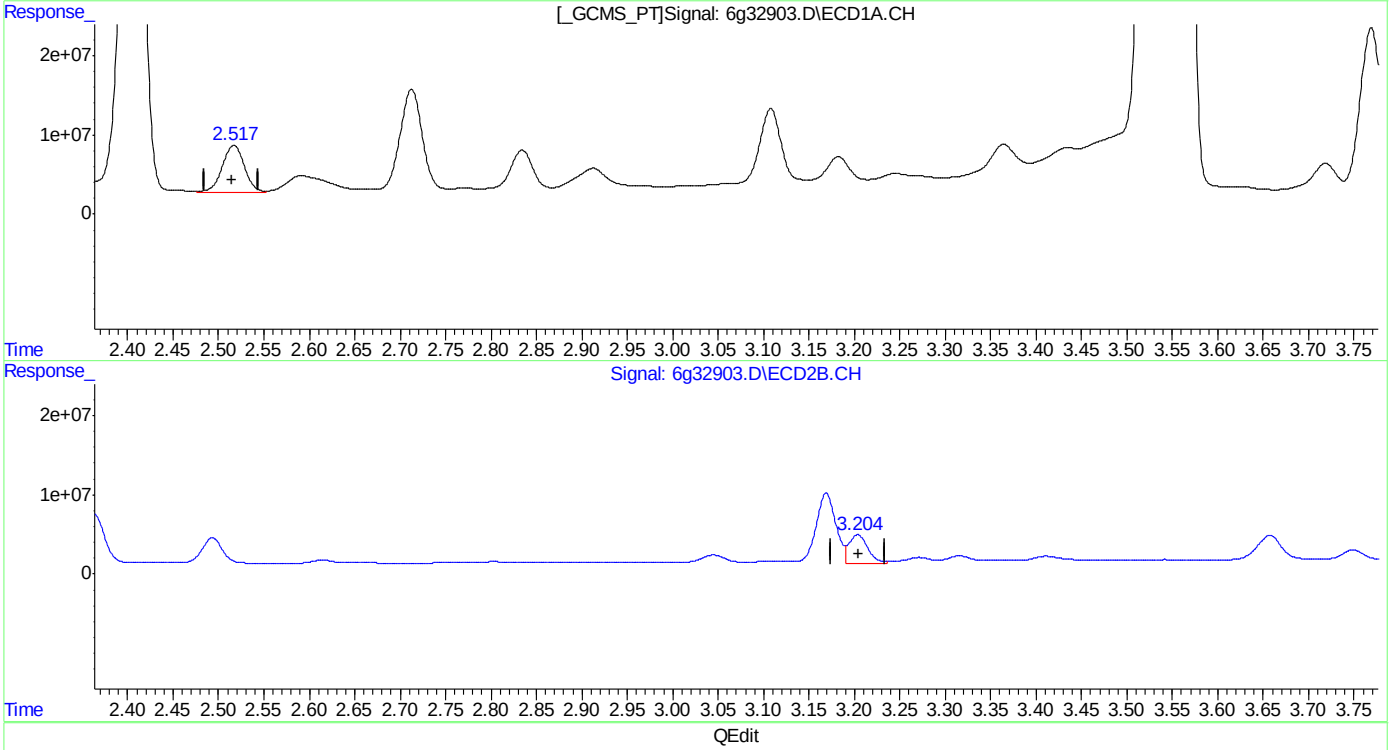
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)
2.517min 46.420PPB
response 104623428

(3) alpha-BHC #2 (A)
3.204min 44.334PPB
response 54786355

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:43:37 2016

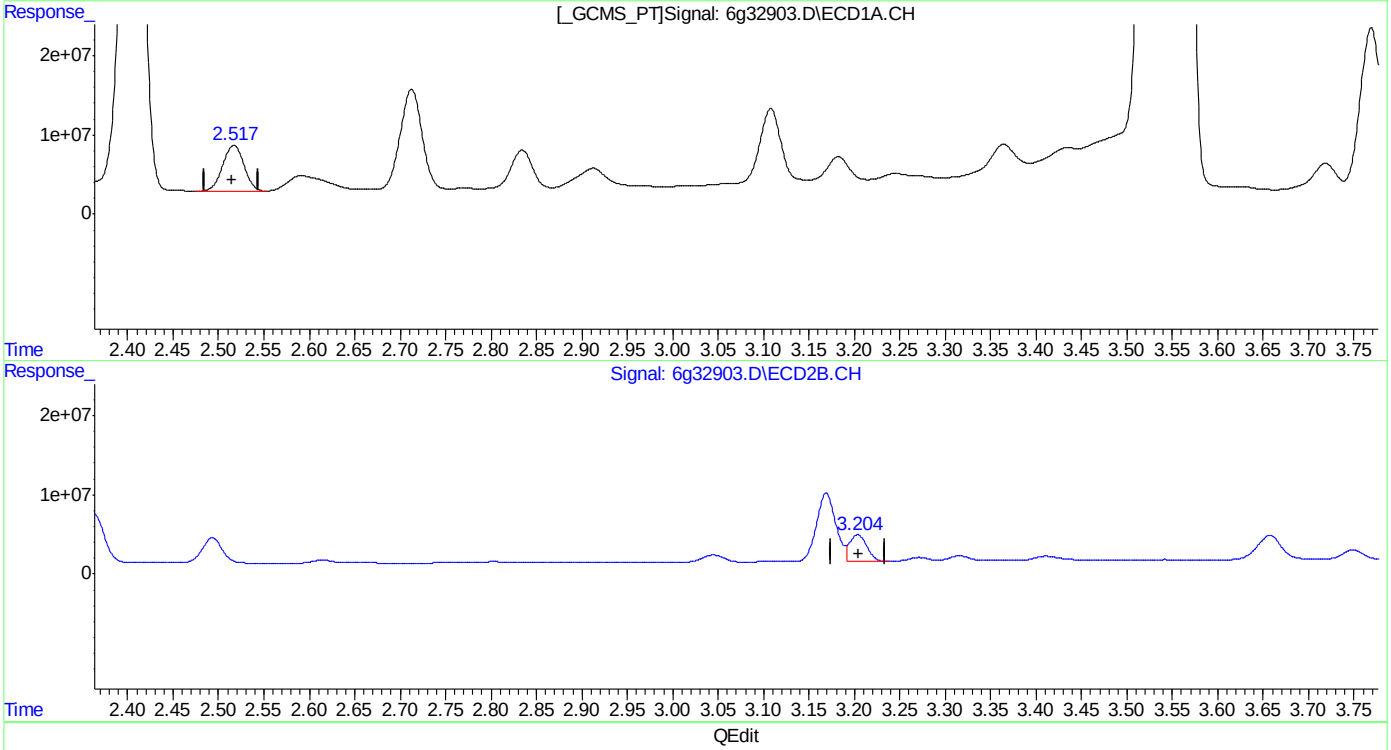
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)
2.517min 41.706PPB m
response 93999358

(3) alpha-BHC #2 (A)
3.204min 36.559PPB m
response 45177662

(+) = Expected Retention Time

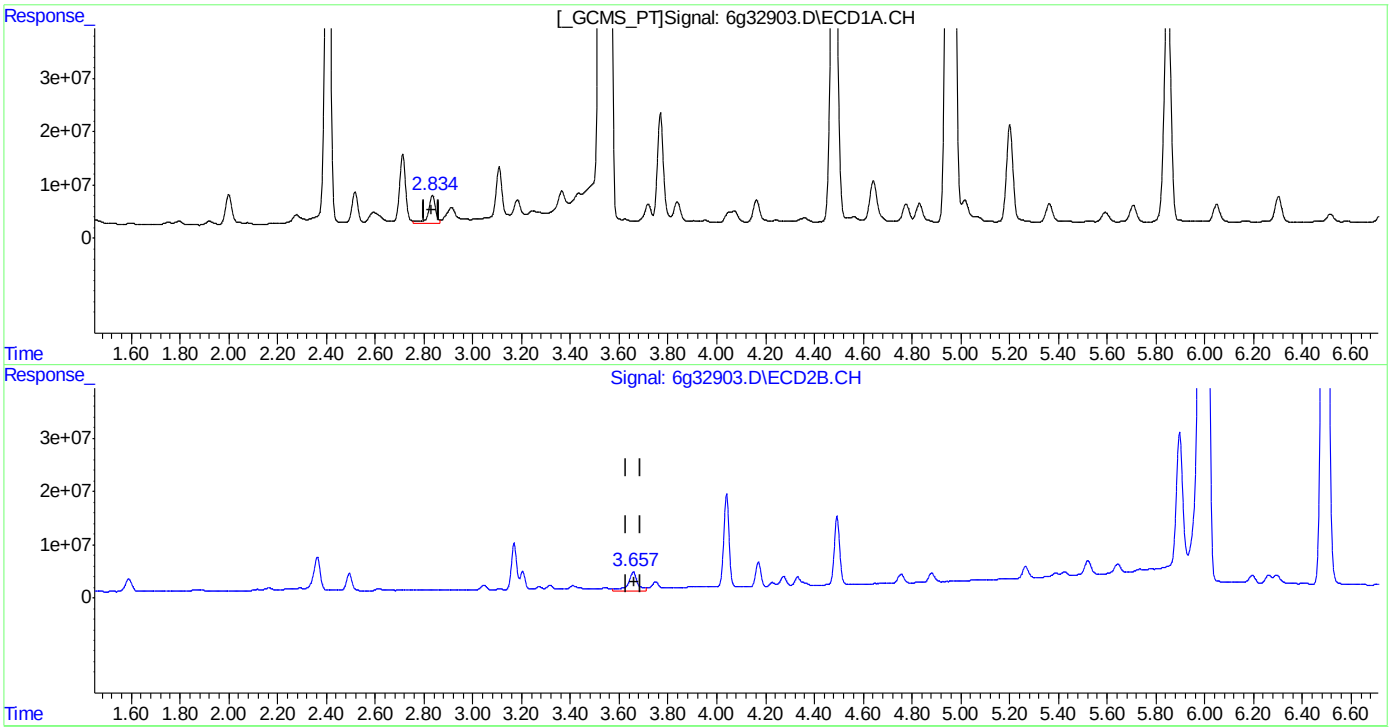
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(4) gamma-BHC (MA)
2.834min 54.525PPB
response 110407356

(4) gamma-BHC #2 (MA)
3.658min 91.688PPB
response 101164068

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:44:06 2016

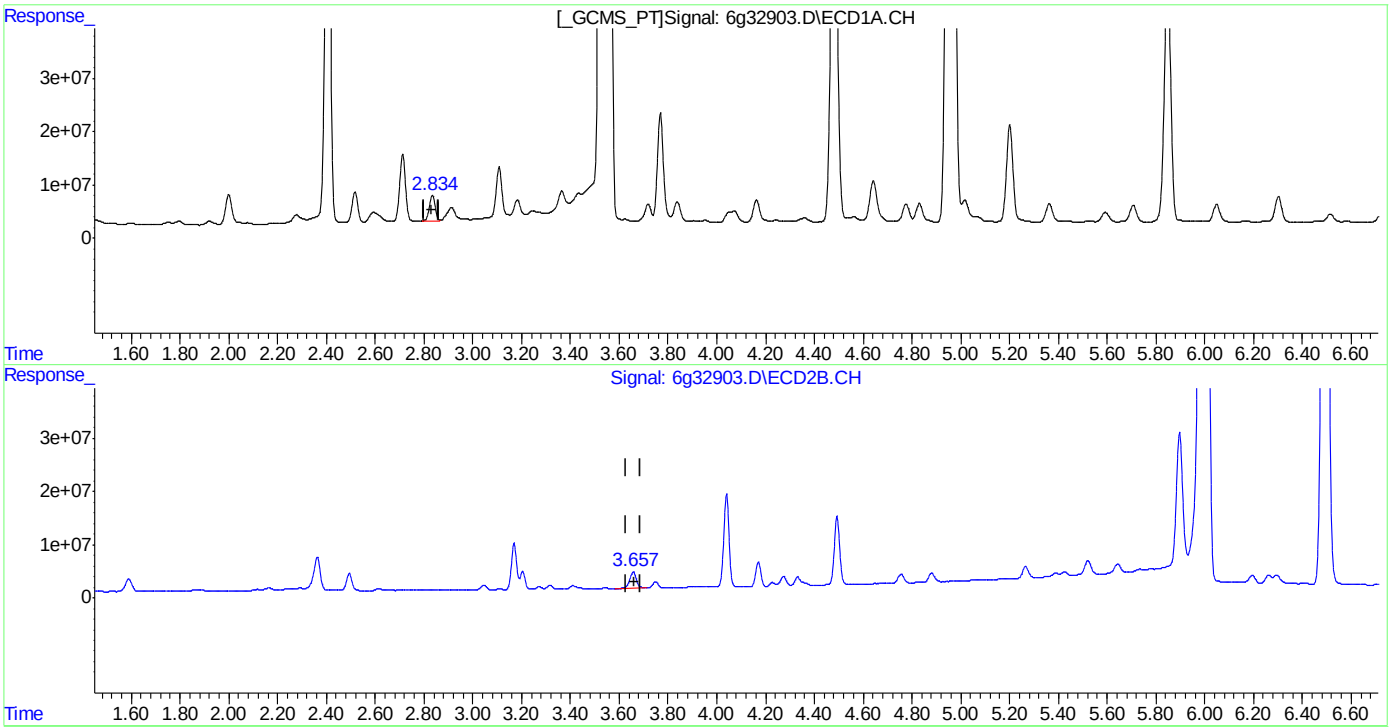
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(4) gamma-BHC (MA)
2.834min 39.082PPB m
response 79136593

(4) gamma-BHC #2 (MA)
3.657min 52.238PPB m
response 57637047

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:44:16 2016

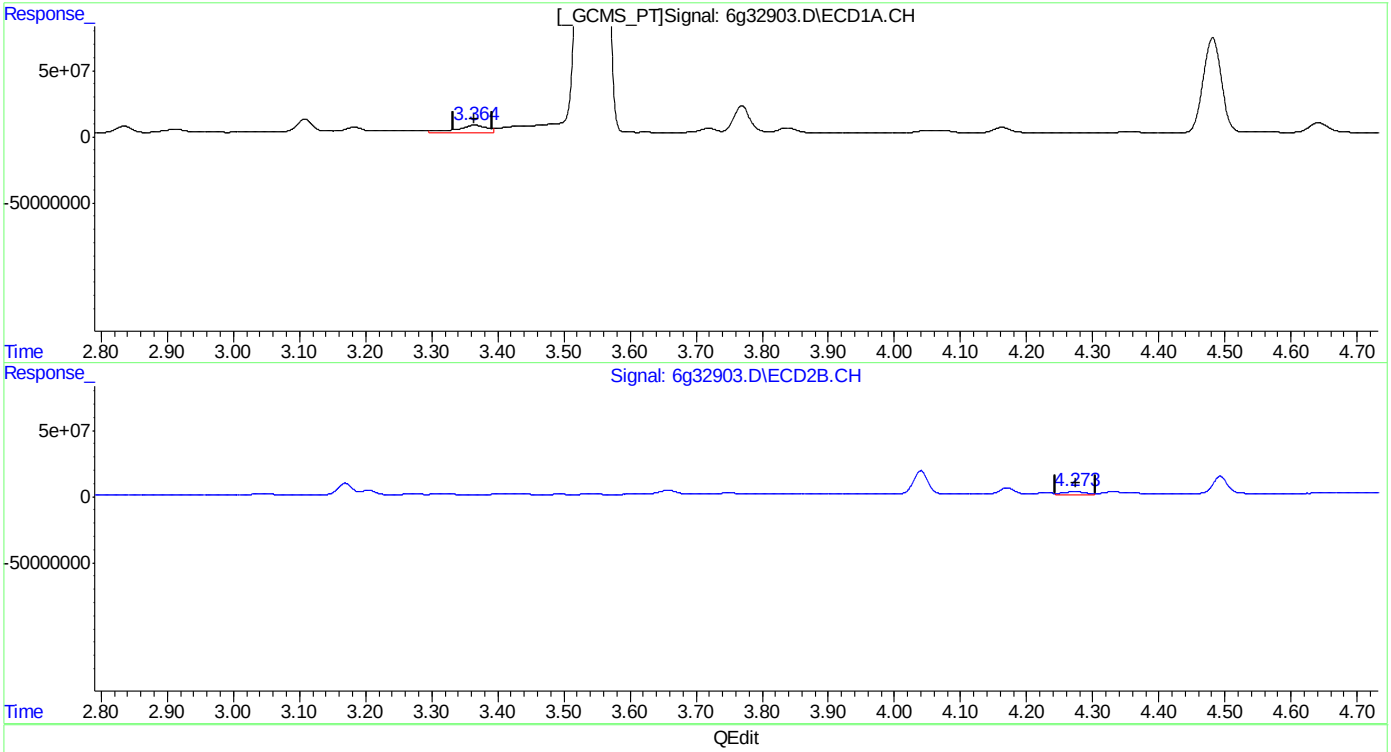
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(5) Heptachlor (MA)
3.365min 101.842PPB
response 198483682

(5) Heptachlor #2 (MA)
4.274min 56.724PPB
response 62665079

(+) = Expected Retention Time

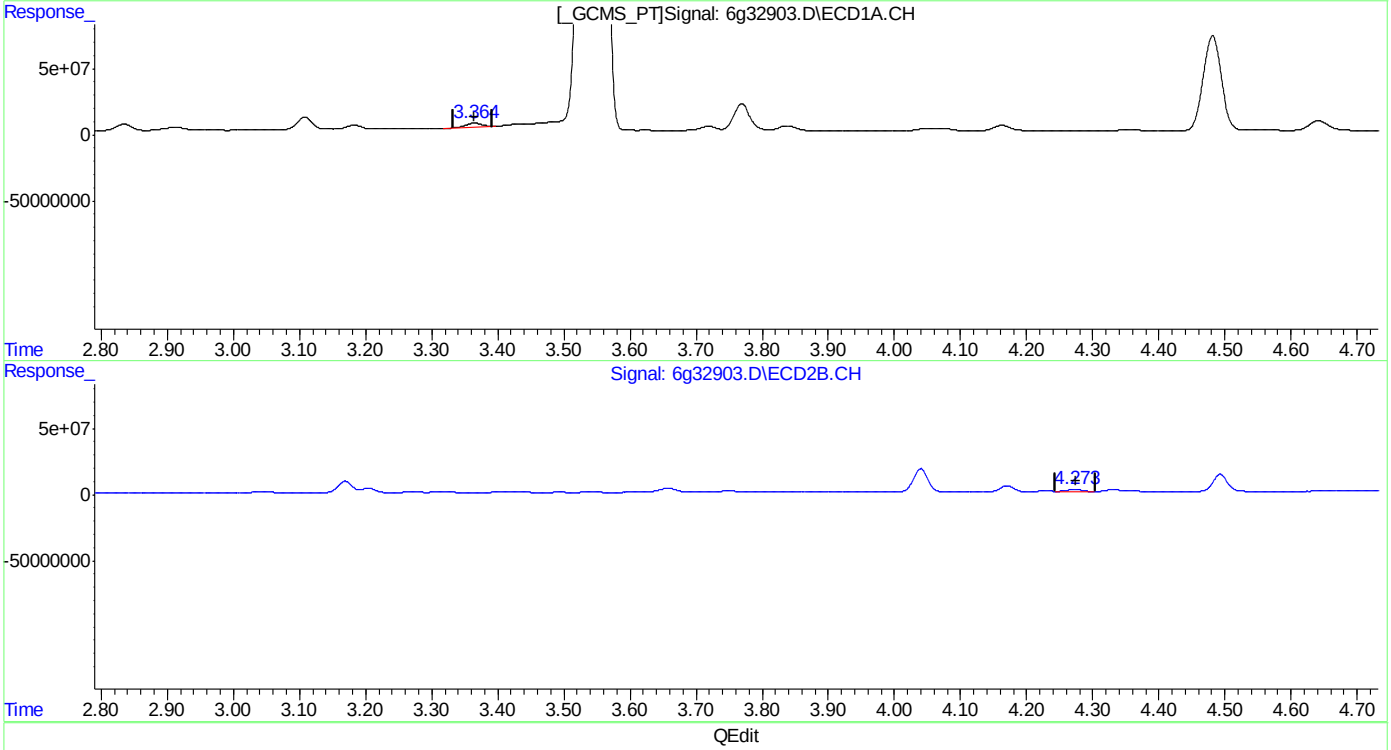
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(5) Heptachlor (MA)
3.364min 31.026PPB m
response 60468311

(5) Heptachlor #2 (MA)
4.273min 26.069PPB m
response 28799575

(+) = Expected Retention Time

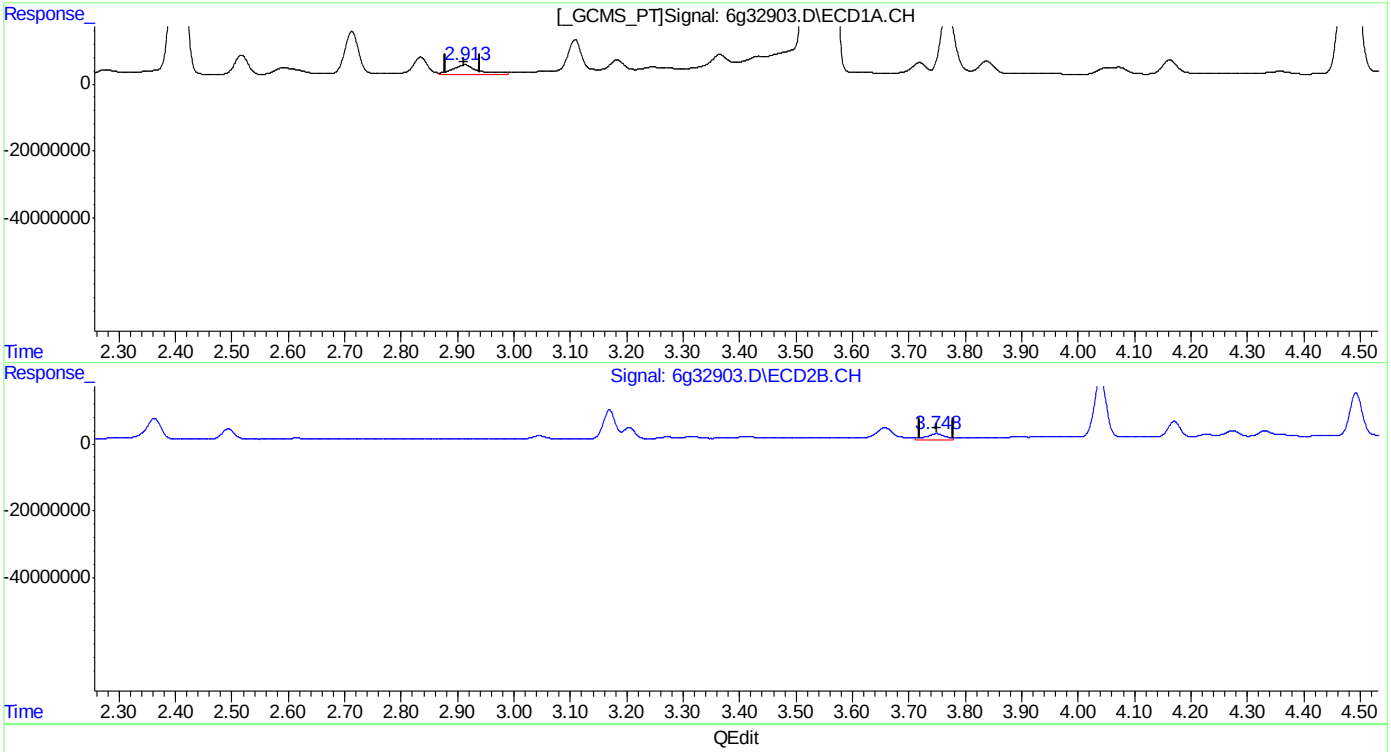
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(6) beta-BHC (B)
2.913min 98.677PPB
response 100264604

(6) beta-BHC #2 (B)
3.749min 77.635PPB
response 41737591

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:44:44 2016

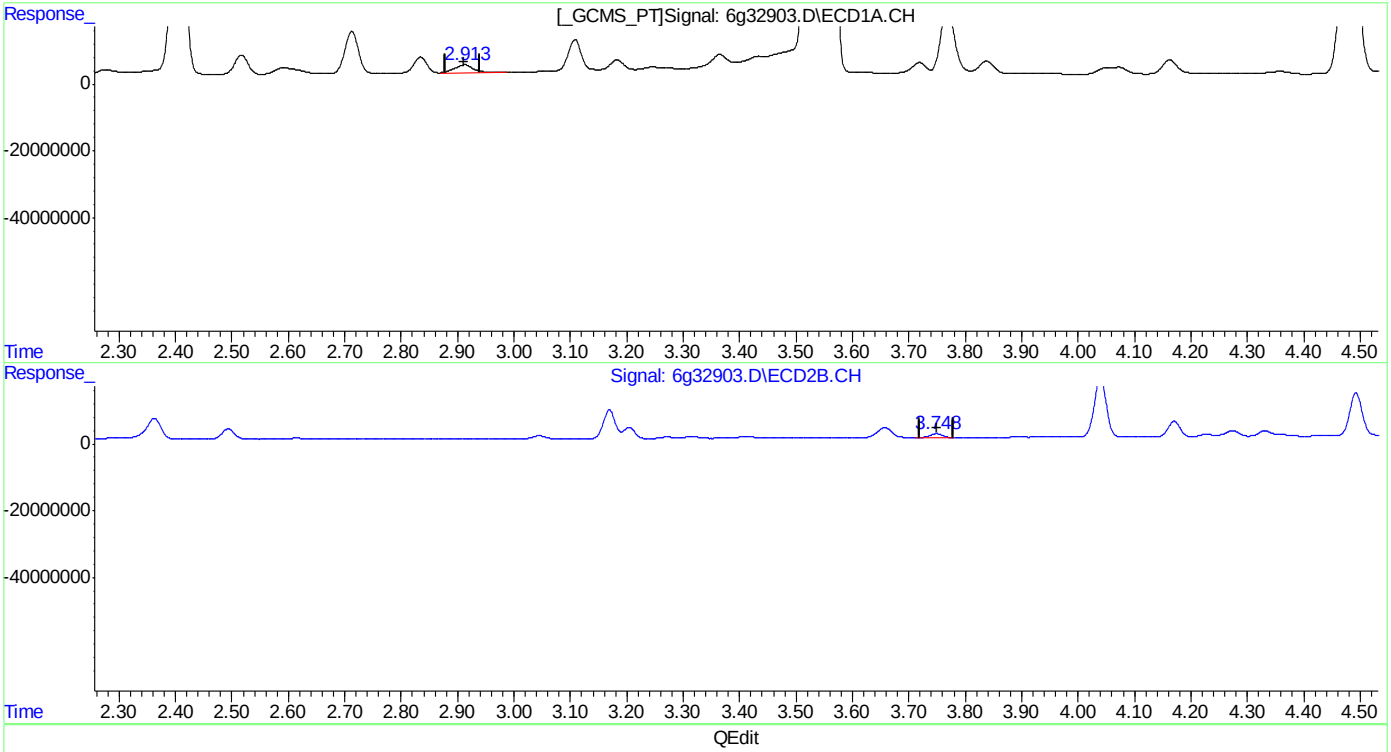
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(6) beta-BHC (B)
2.913min 57.365PPB m
response 58288140

(6) beta-BHC #2 (B)
3.748min 34.600PPB m
response 18601219

(+) = Expected Retention Time

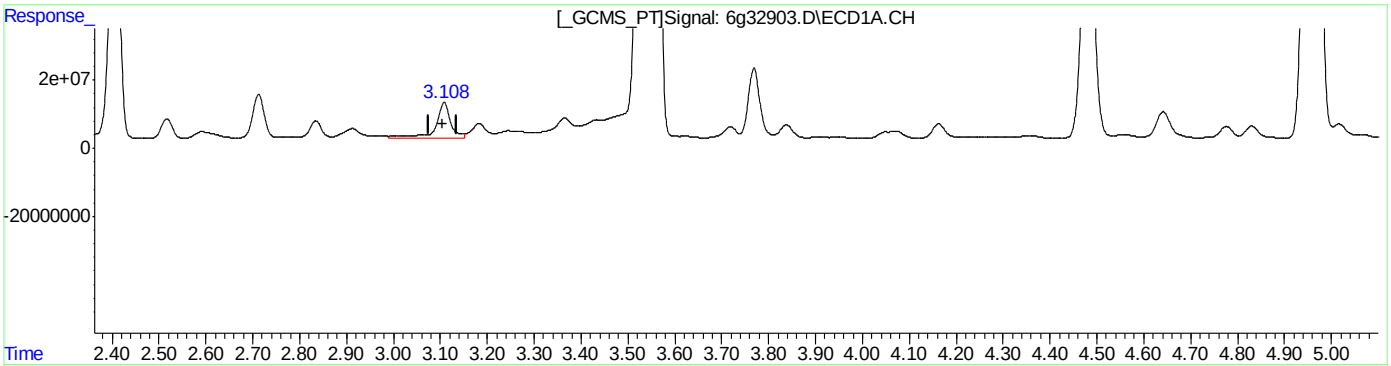
SGS ACCUTEST JC15518

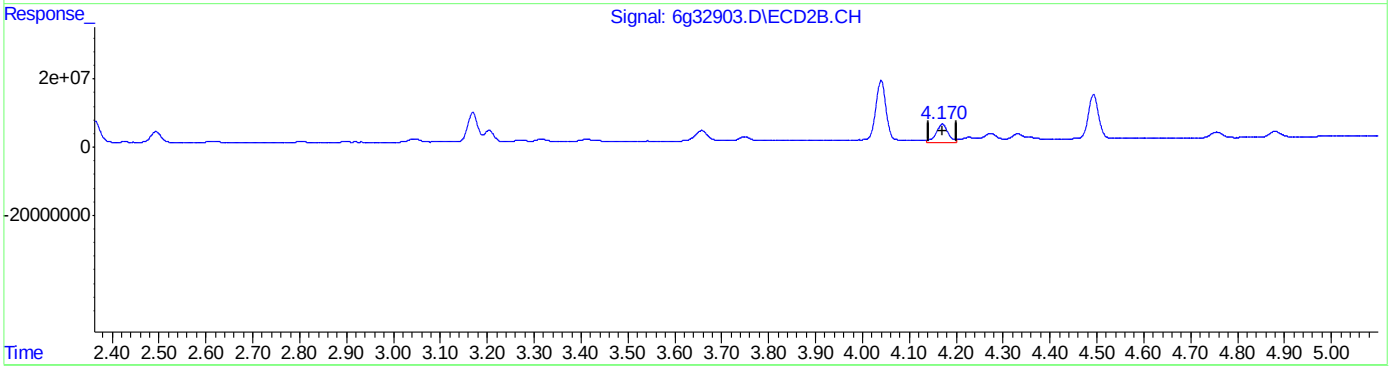
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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

(7) delta-BHC (B)
3.108min 118.685PPB
response 245344704

(7) delta-BHC #2 (B)
4.170min 88.953PPB
response 100251537

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:45:02 2016

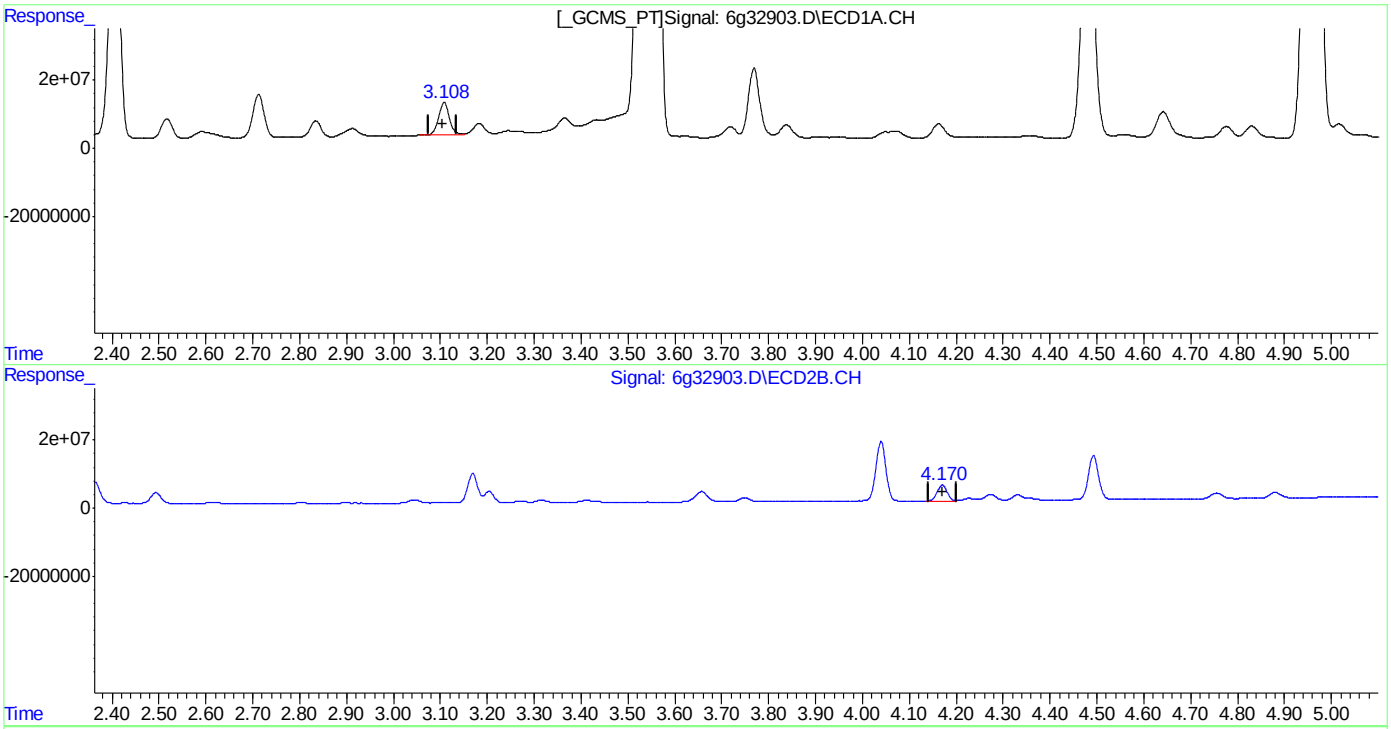
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(7) delta-BHC (B)
3.108min 74.154PPB m
response 153291157

(7) delta-BHC #2 (B)
4.170min 62.347PPB m
response 70266668

(+) = Expected Retention Time

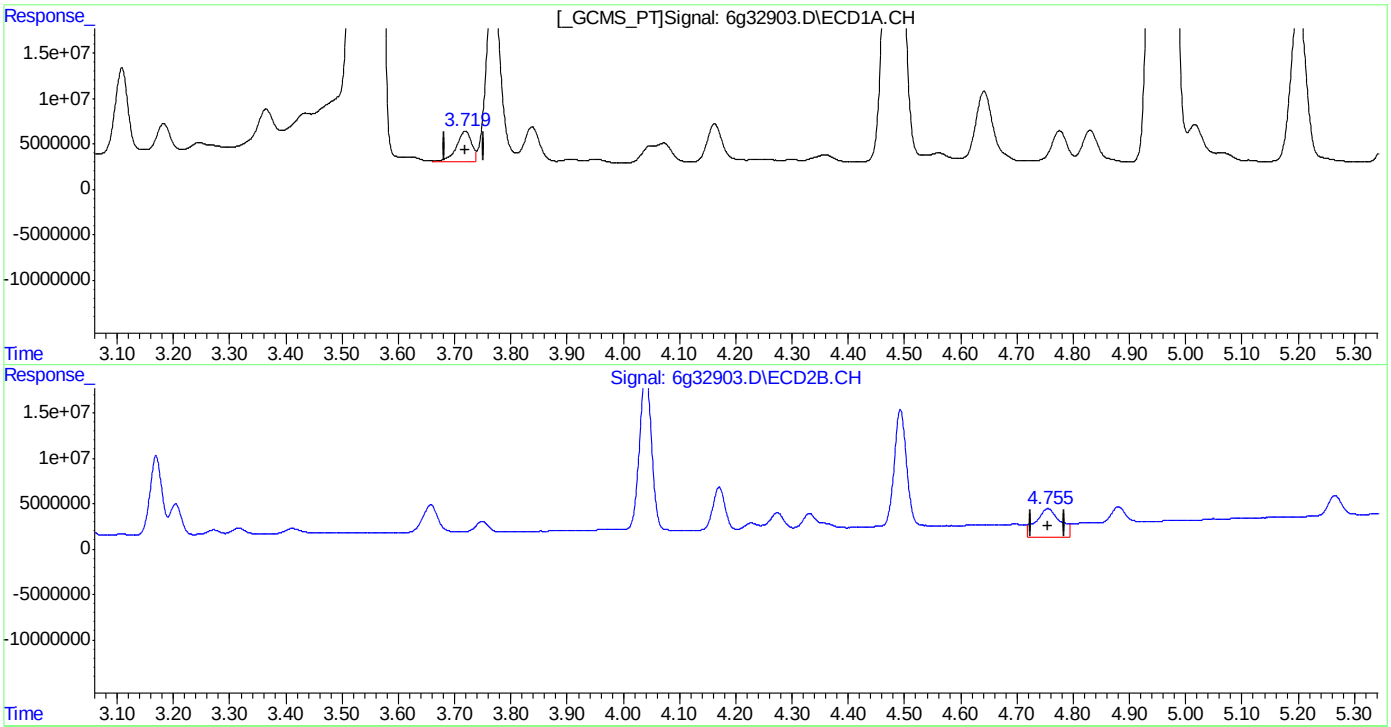
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(8) Aldrin (MB)
3.719min 28.277PPB
response 63828101

(8) Aldrin #2 (MB)
4.755min 83.441PPB
response 93582183

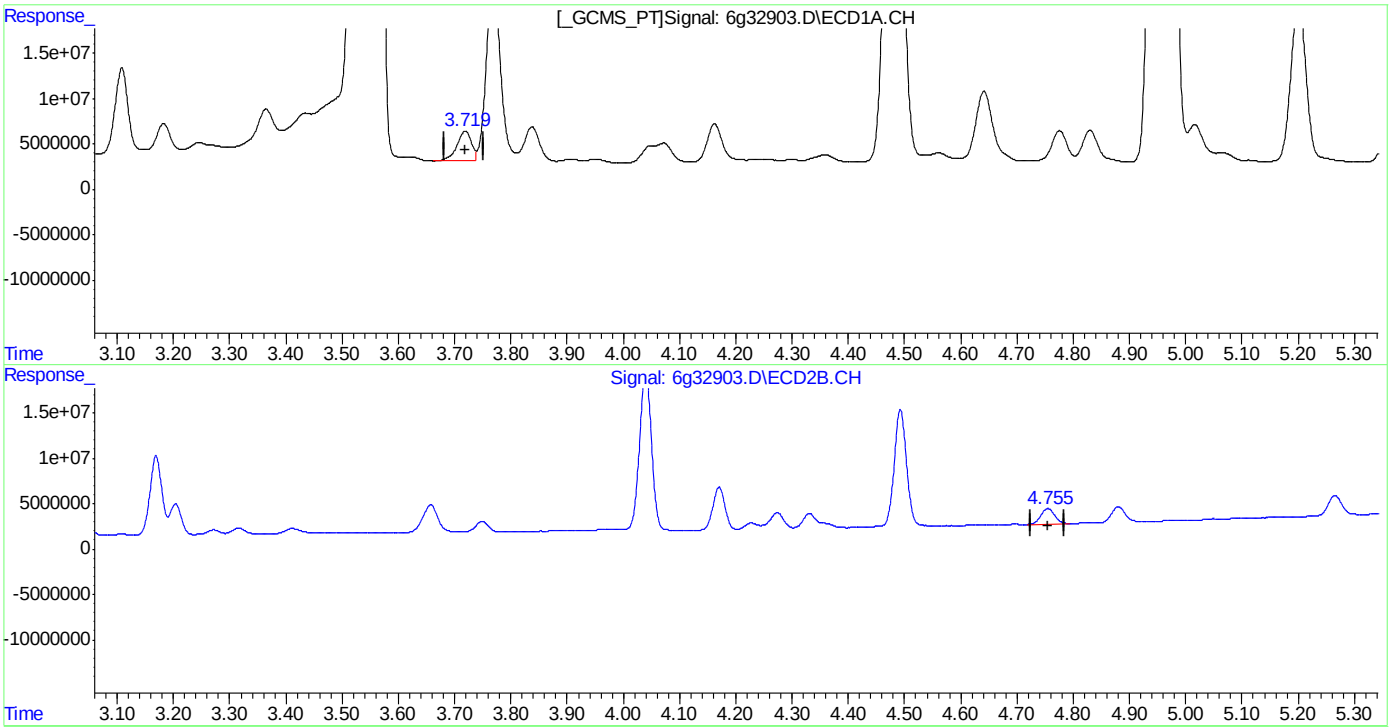
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(8) Aldrin (MB)
3.719min 26.696PPB m
response 60260693

(8) Aldrin #2 (MB)
4.755min 26.239PPB m
response 29428365

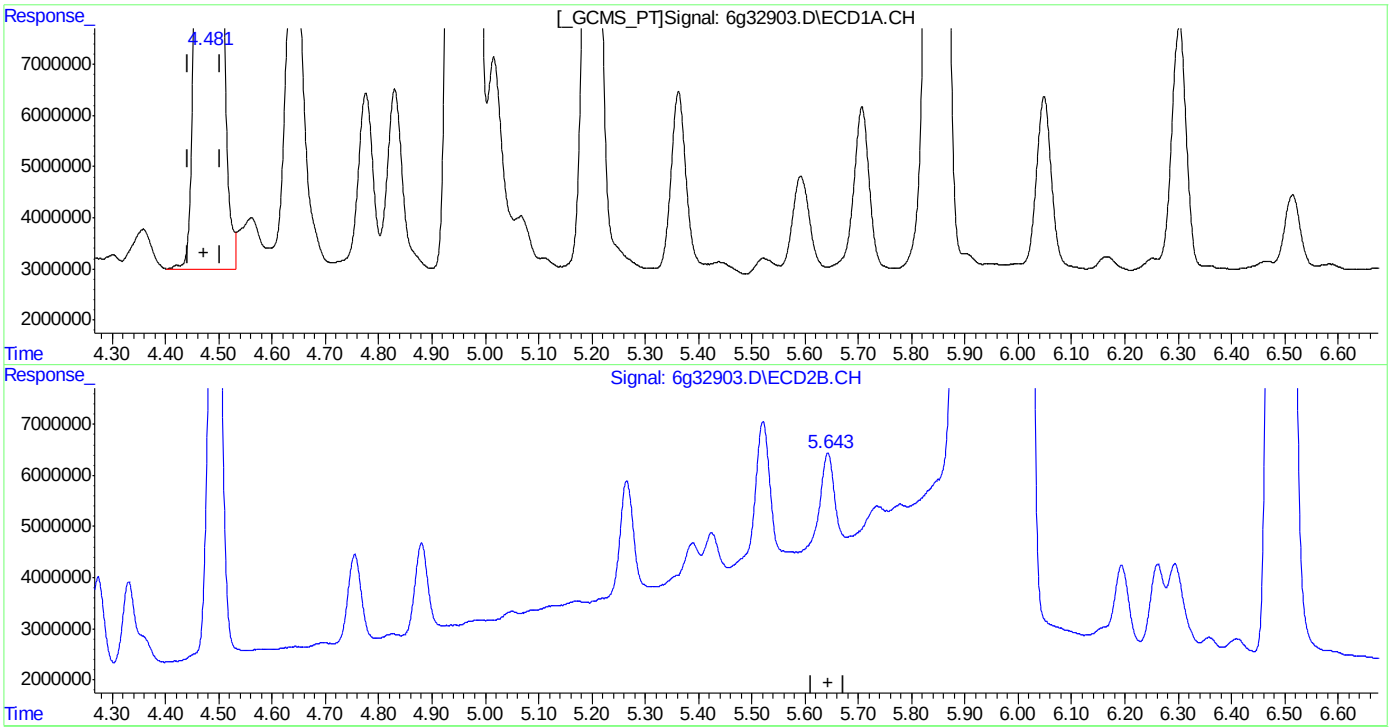
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:45:31 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.481min 713.521PPB
response 1375588313

(9) Heptachlor Epoxide #2 (B)
5.643min 211.548PPB
response 205218087

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:45:40 2016

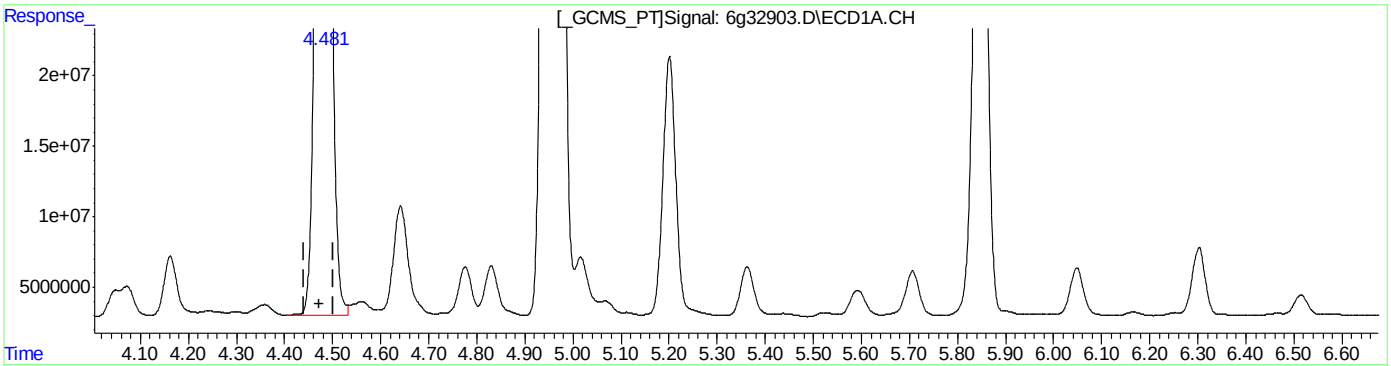
SGS ACCUTEST JC15518

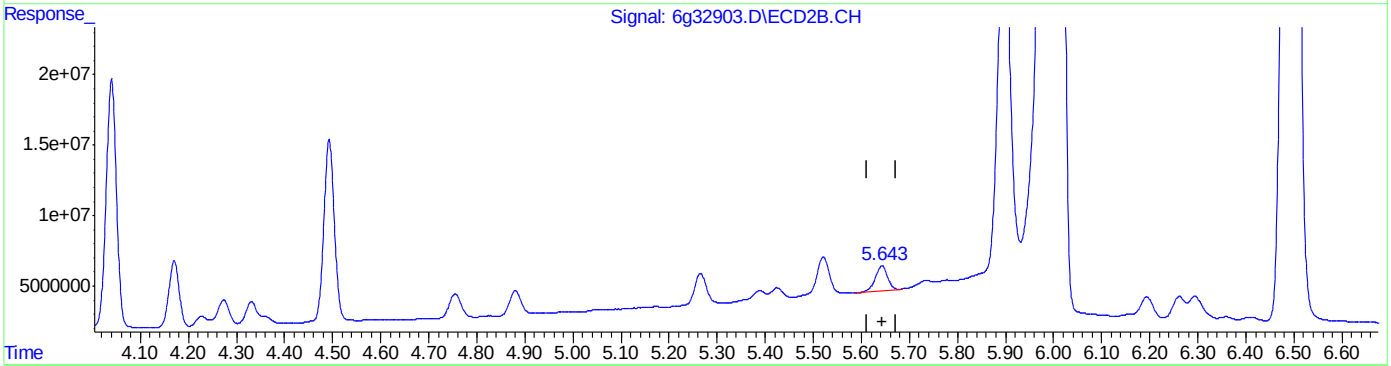
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.481min 713.521PPB
response 1375588313

(9) Heptachlor Epoxide #2 (B)
5.643min 32.354PPB m
response 31385602

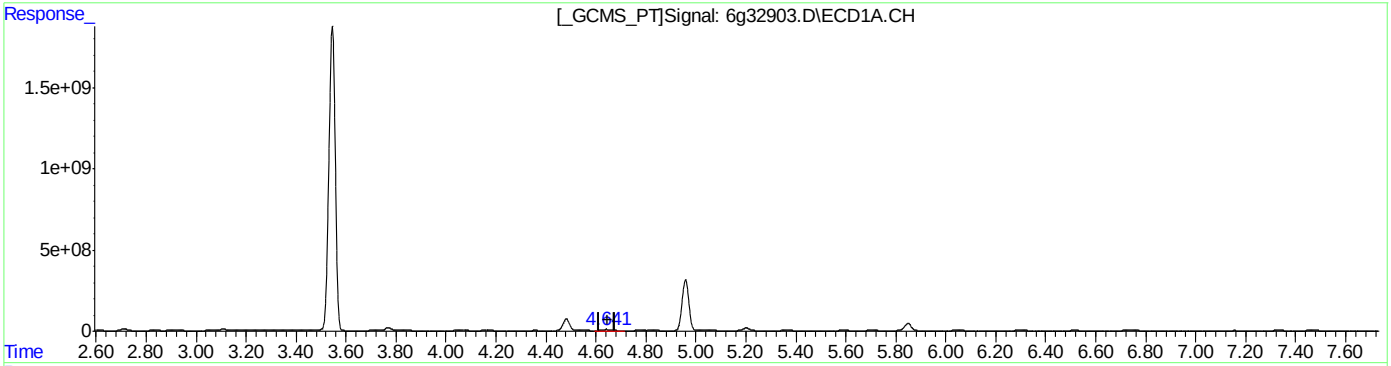
(+) = Expected Retention Time

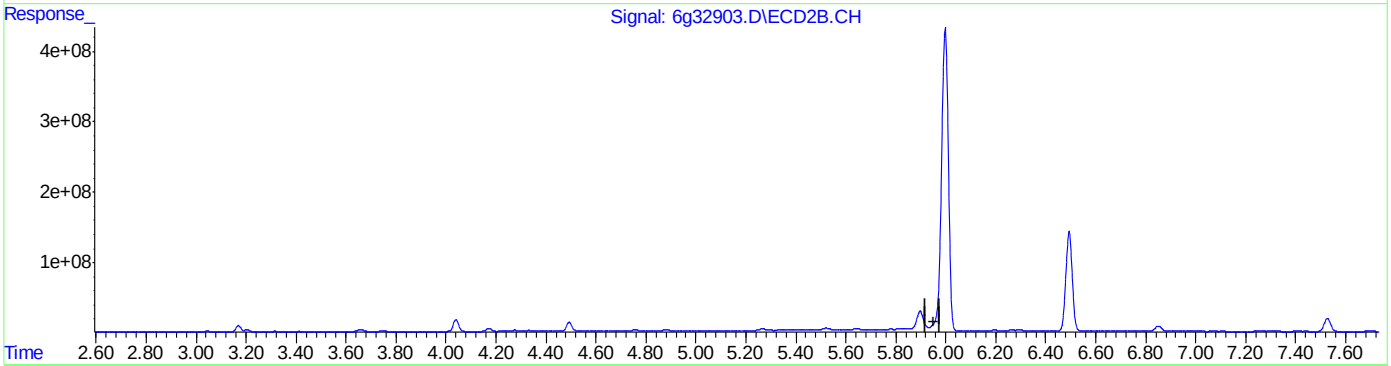
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(10) gamma-Chlordane (B)

4.641min 81.325PPB

response 173228730

(10) gamma-Chlordane #2 (B)

0.000min 0.000PPB

response 0

(+) = Expected Retention Time

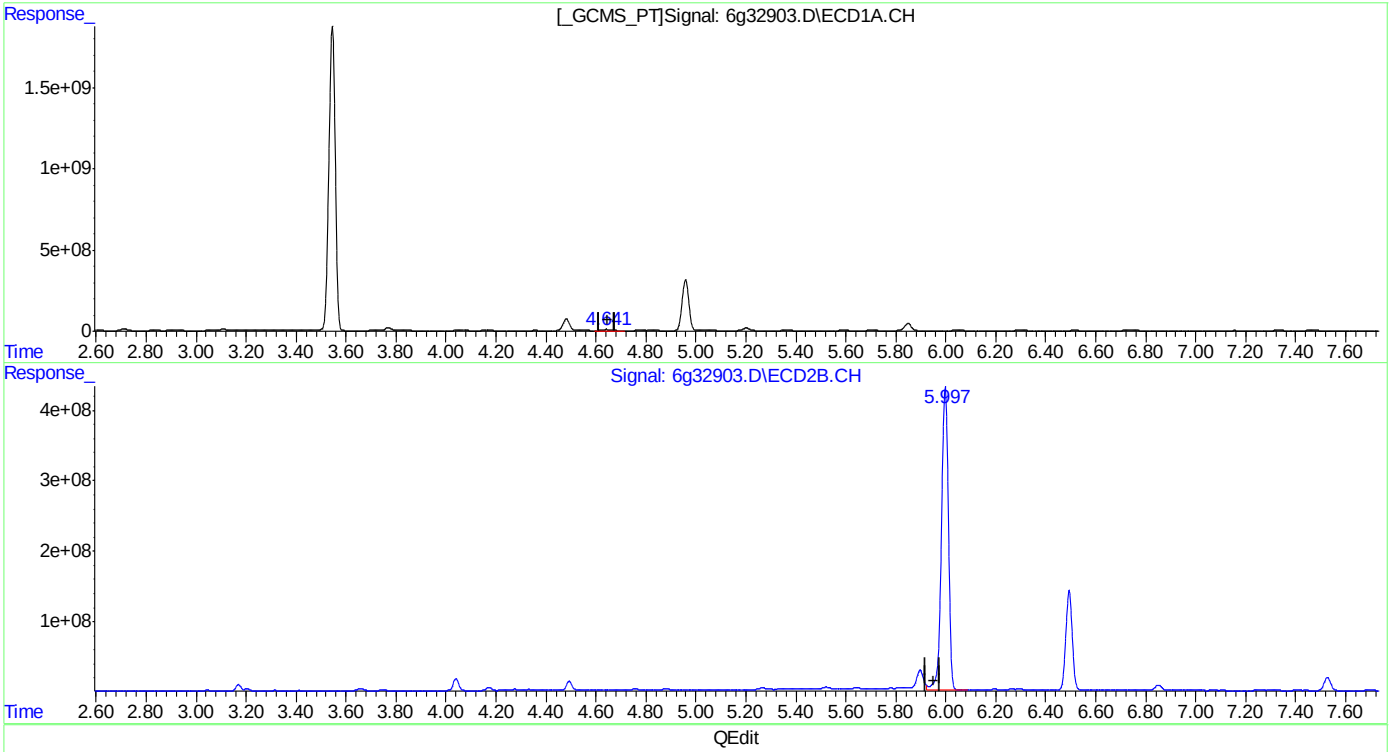
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(10) gamma-Chlordane (B)
4.641min 81.325PPB
response 173228730

(10) gamma-Chlordane #2 (B)
5.997min 8348.579PPB m
response 8277959707

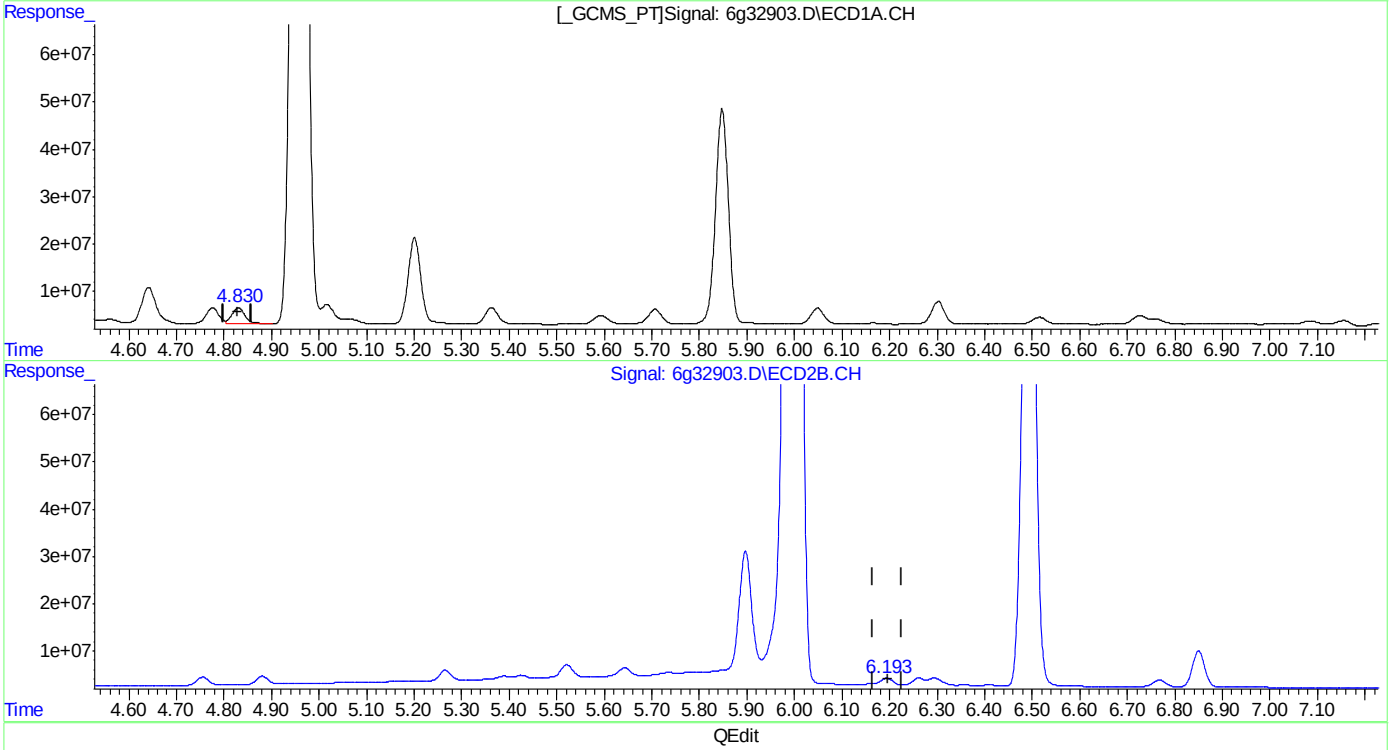
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:45:59 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.830min 31.957PPB
response 69732837

(11) alpha-Chlordane #2 (B)
6.194min 112.489PPB
response 114276221

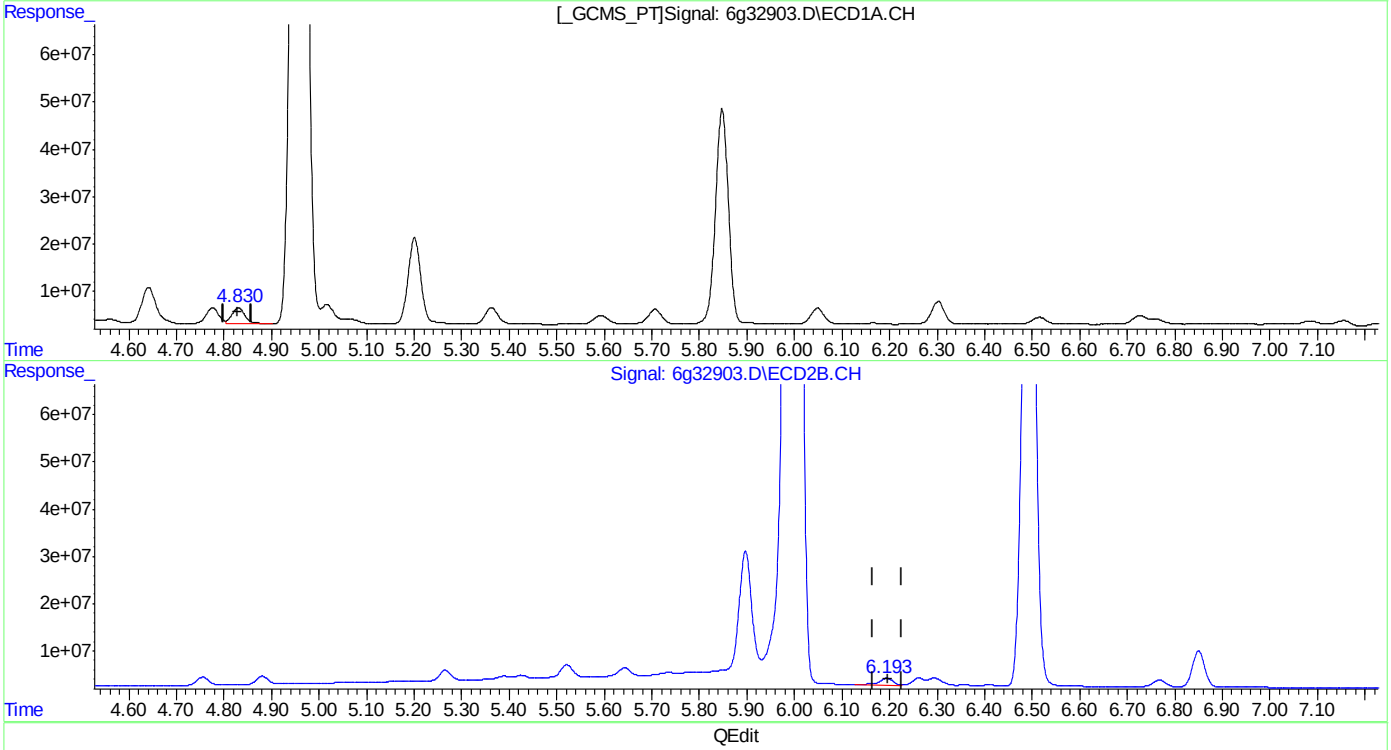
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:46:26 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.830min 31.957PPB
response 69732837

(11) alpha-Chlordane #2 (B)
6.193min 30.832PPB m
response 31321650

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:46:31 2016

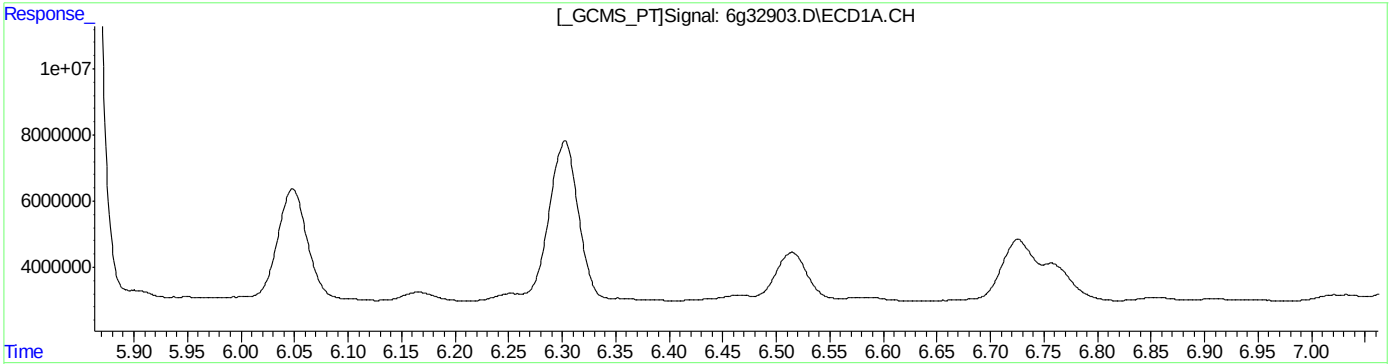
SGS ACCUTEST JC15518

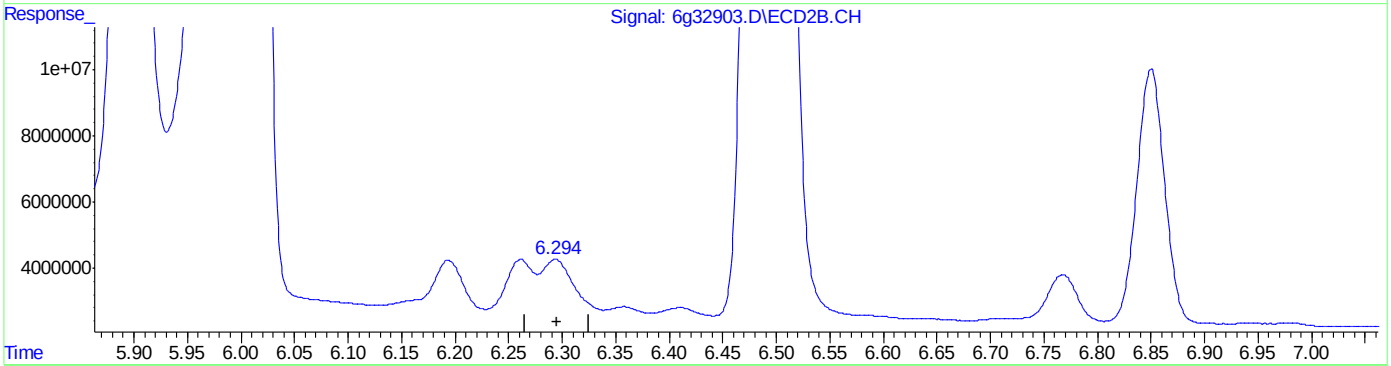
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(12) Endosulfan I (A)
5.016min 27.767PPB
response 53388218

(12) Endosulfan I #2 (A)
6.294min 83.418PPB
response 78623412

(+) = Expected Retention Time

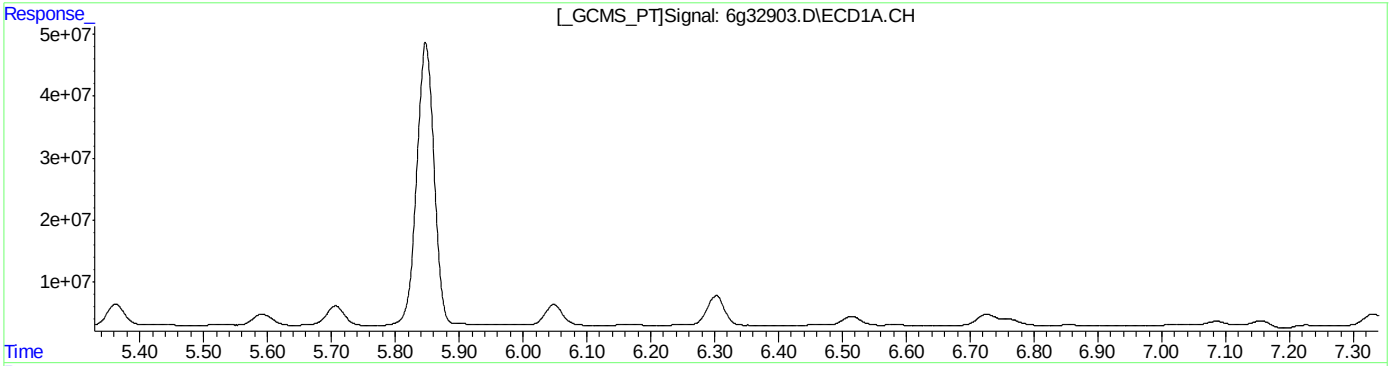
SGS ACCUTEST JC15518

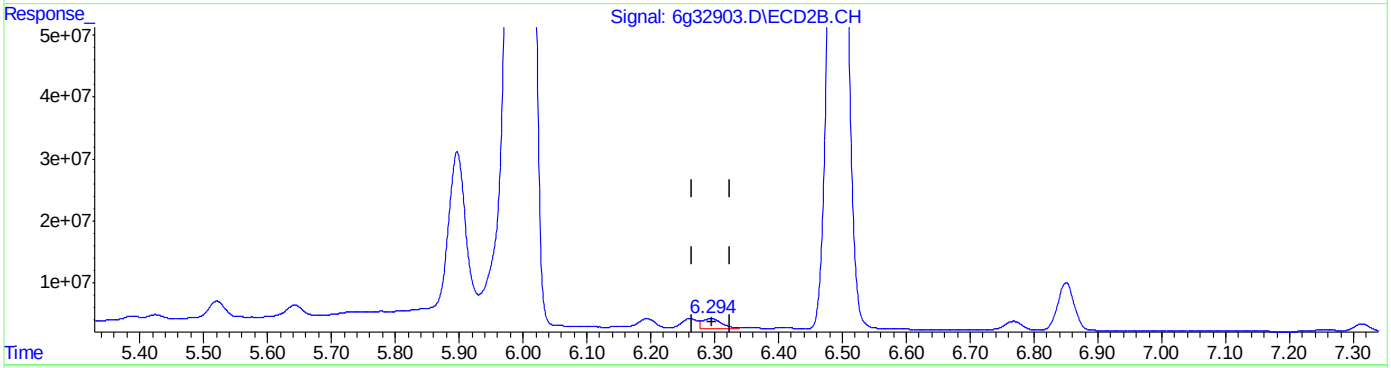
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(12) Endosulfan I (A)
5.016min 27.767PPB
response 53388218

(12) Endosulfan I #2 (A)
6.294min 34.951PPB m
response 32942452

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:46:43 2016

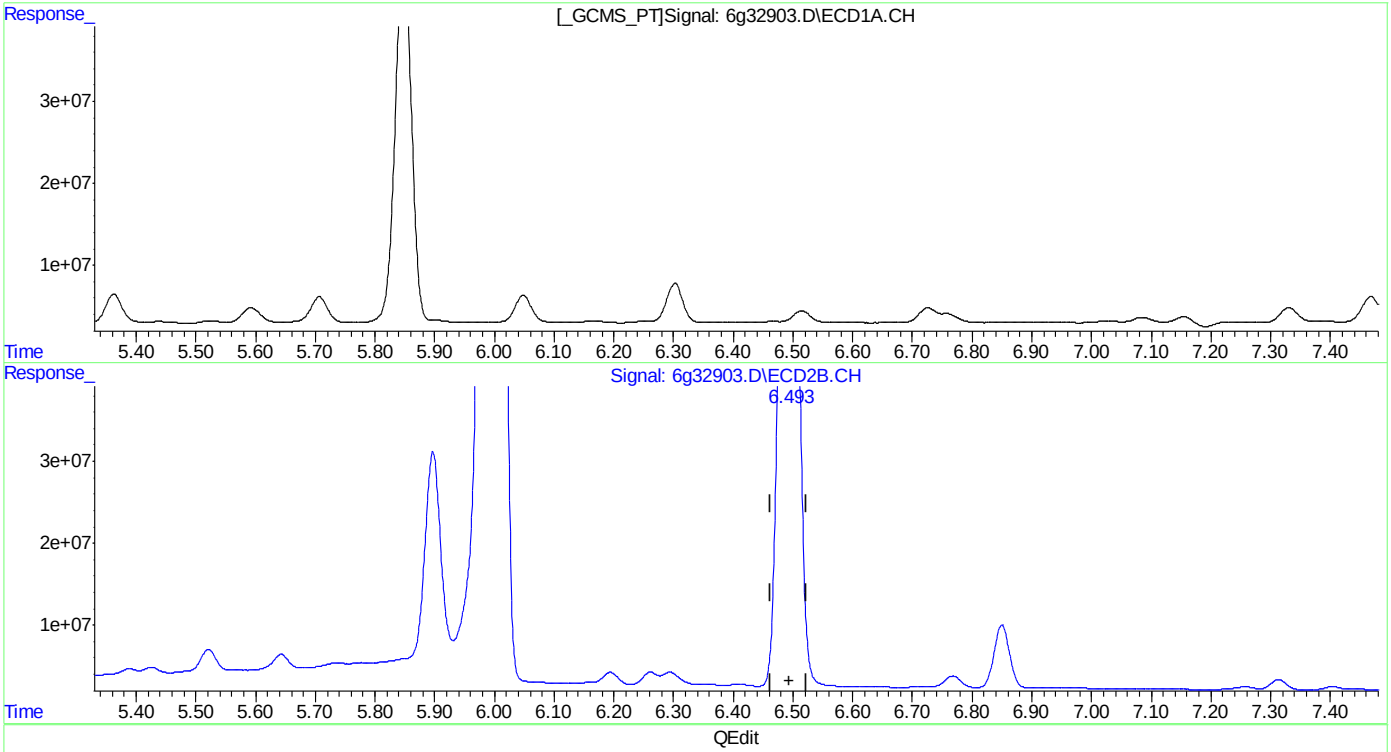
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.959min 2957.404PPB
response 5919136422

(13) 4,4'-DDE #2 (B)
6.494min 2904.630PPB
response 2698276881

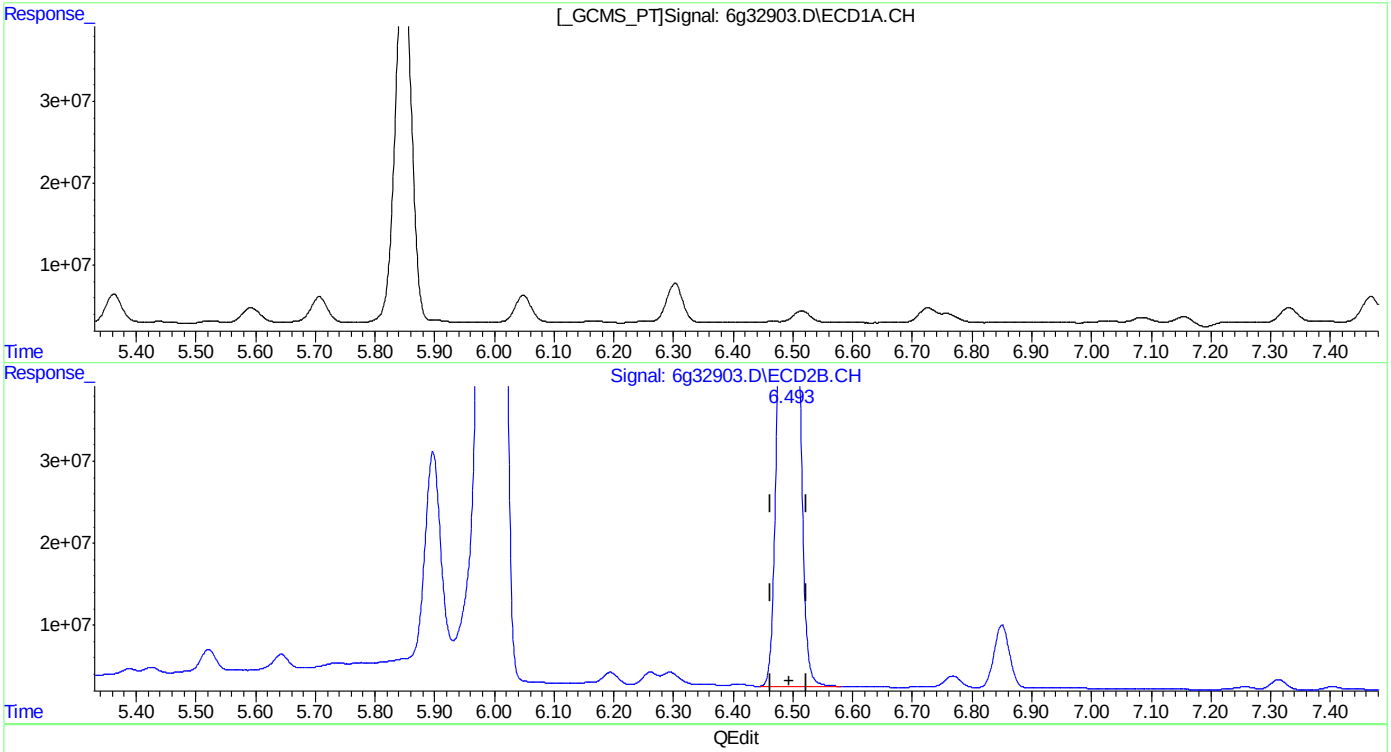
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.959min 2957.404PPB
response 5919136422

(13) 4,4'-DDE #2 (B)
6.493min 2738.895PPB m
response 2544315988

(+) = Expected Retention Time

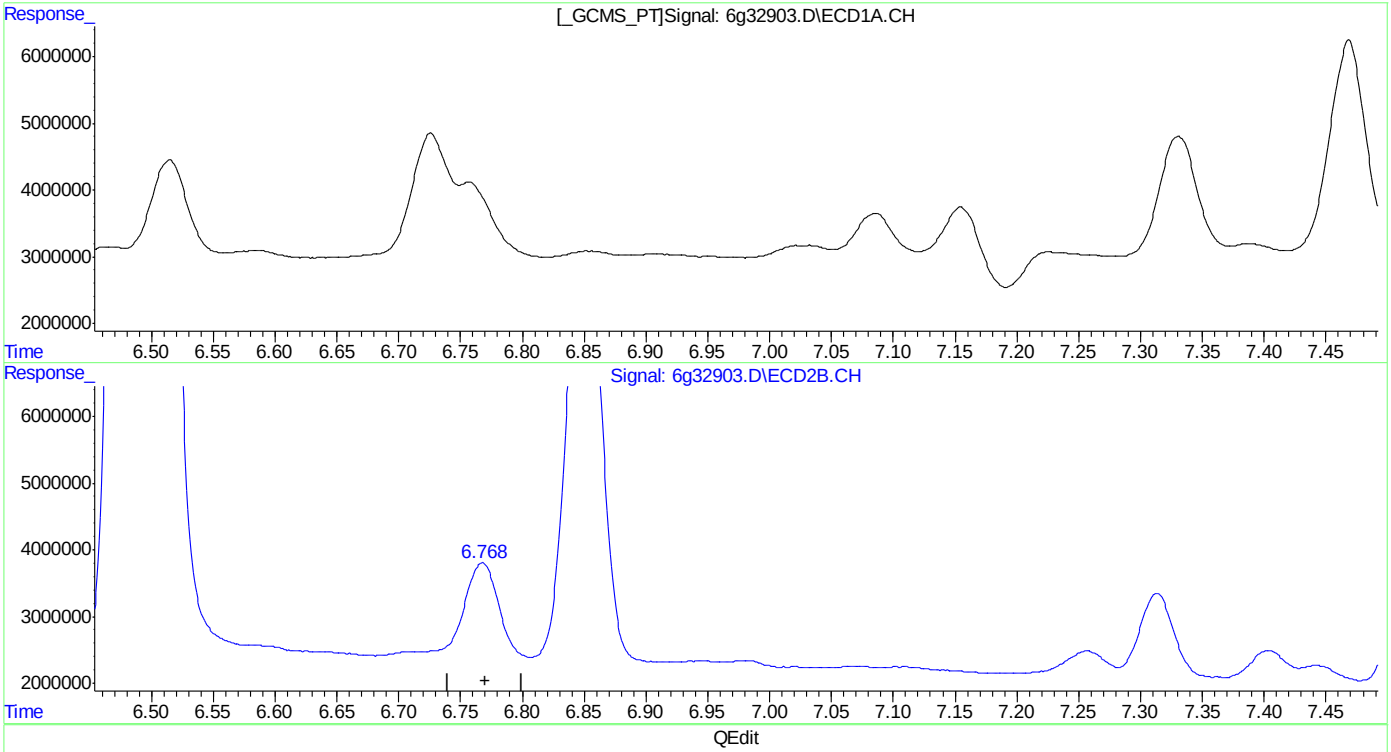
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(14) Dieldrin (MA)
5.362min 35.386PPB
response 66889325

(14) Dieldrin #2 (MA)
6.768min 107.352PPB
response 100647255

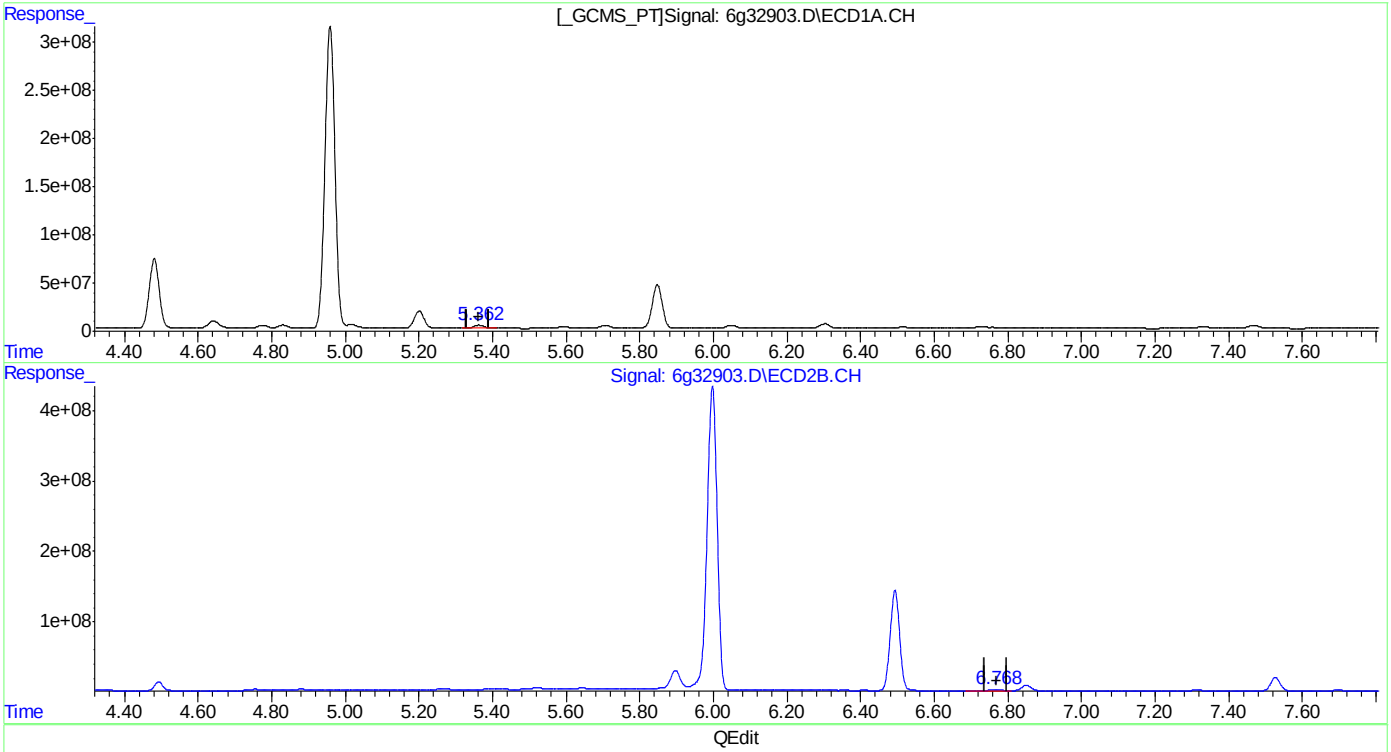
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(14) Dieldrin (MA)
5.362min 35.386PPB
response 66889325

(14) Dieldrin #2 (MA)
6.768min 30.423PPB m
response 28522571

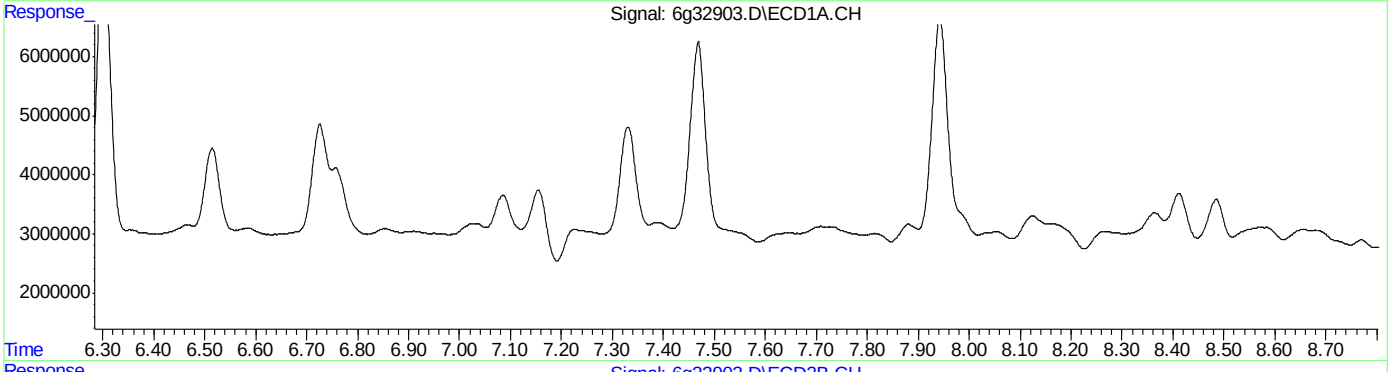
(+) = Expected Retention Time

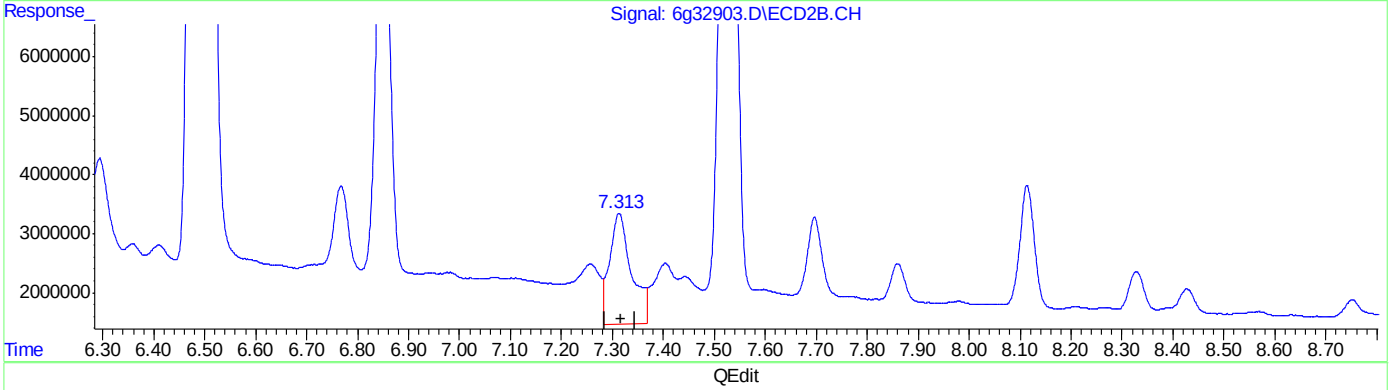
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(15) Endrin (MA)
5.707min 40.263PPB
response 63555303

(15) Endrin #2 (MA)
7.313min 72.031PPB
response 56330771

(+) = Expected Retention Time

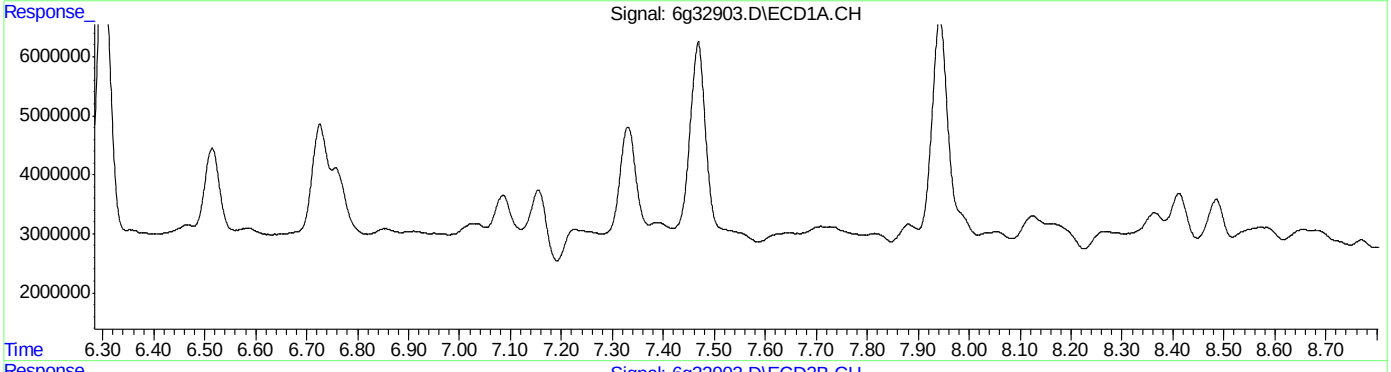
SGS ACCUTEST JC15518

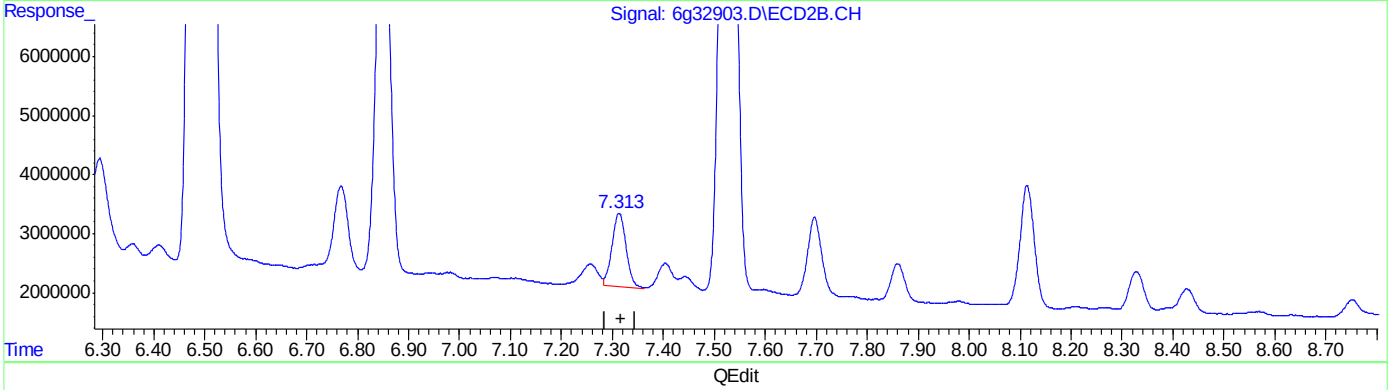
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(15) Endrin (MA)
5.707min 40.263PPB
response 63555303

(15) Endrin #2 (MA)
7.313min 30.608PPB m
response 23936823

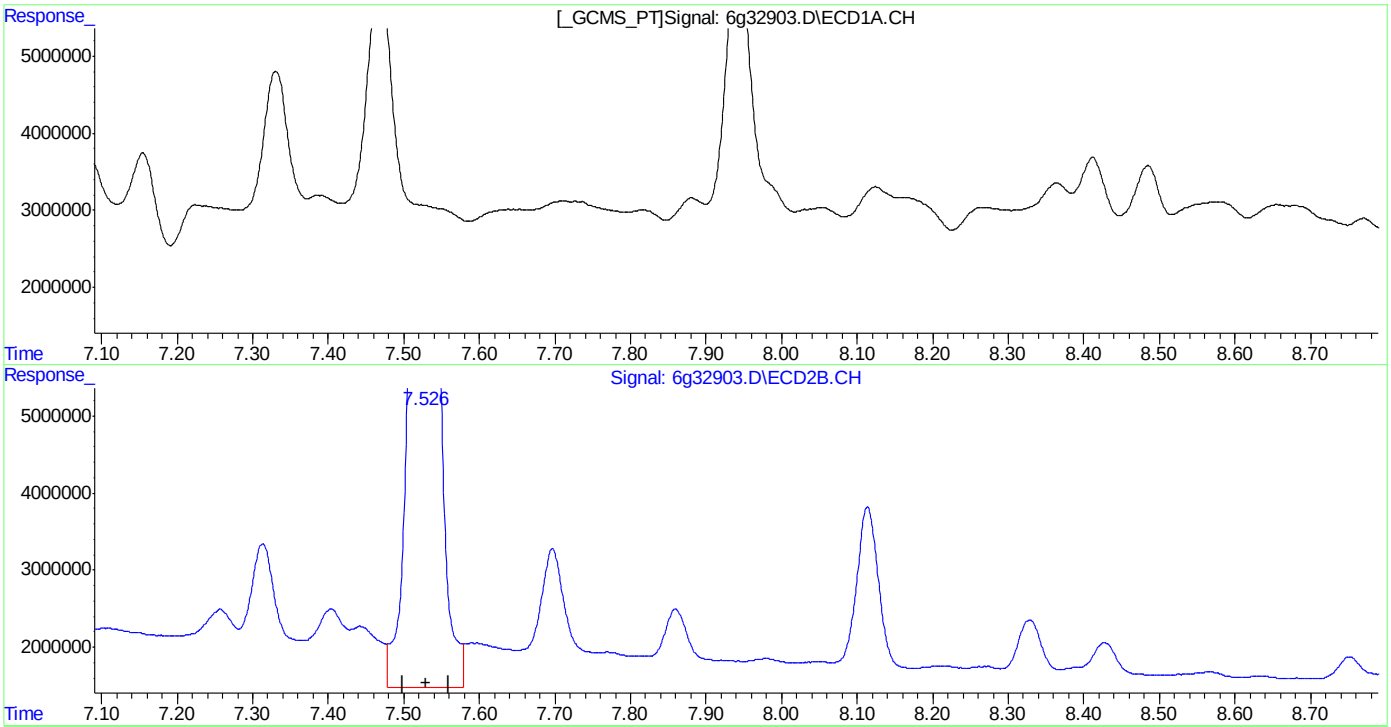
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(16) 4,4'-DDD (A)
5.848min 594.937PPB
response 864692288

(16) 4,4'-DDD #2 (A)
7.527min 522.667PPB
response 378974818

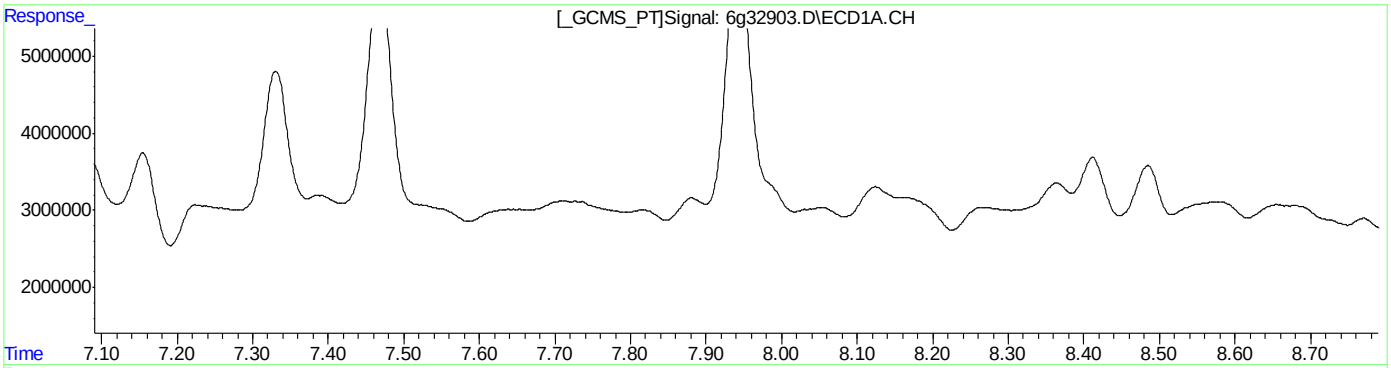
(+) = Expected Retention Time

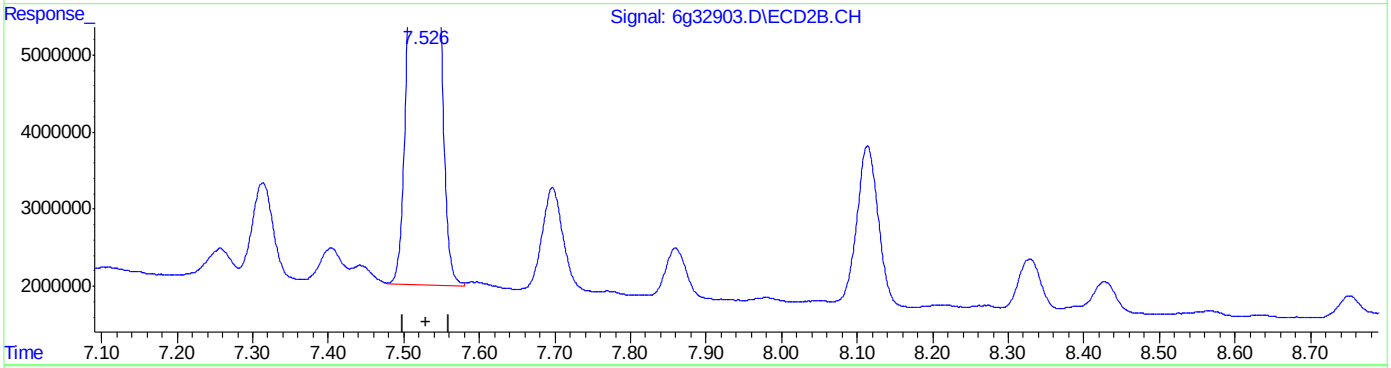
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
5.848min 594.937PPB
response 864692288

(16) 4,4'-DDD #2 (A)
7.526min 478.054PPB m
response 346627083

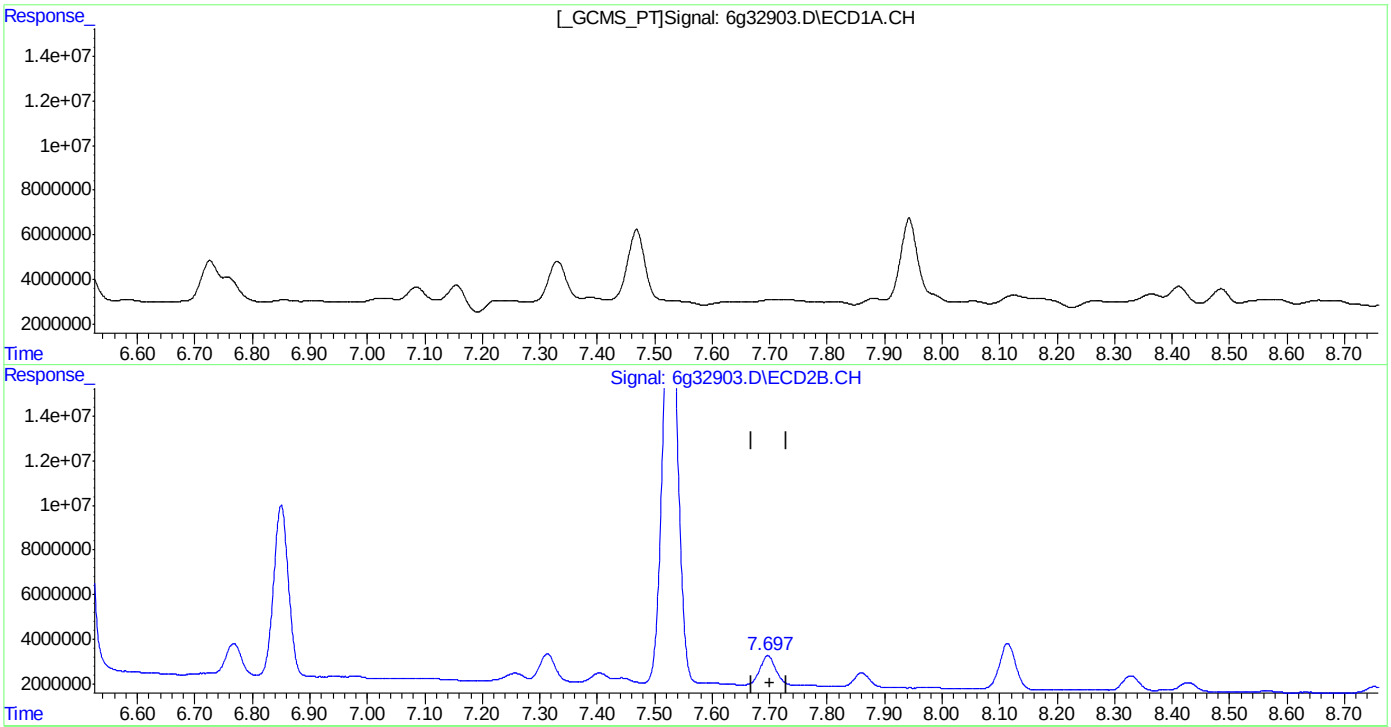
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(17) Endosulfan II (B)
6.048min 35.619PPB
response 64951087

(17) Endosulfan II #2 (B)
7.697min 64.548PPB
response 54932543

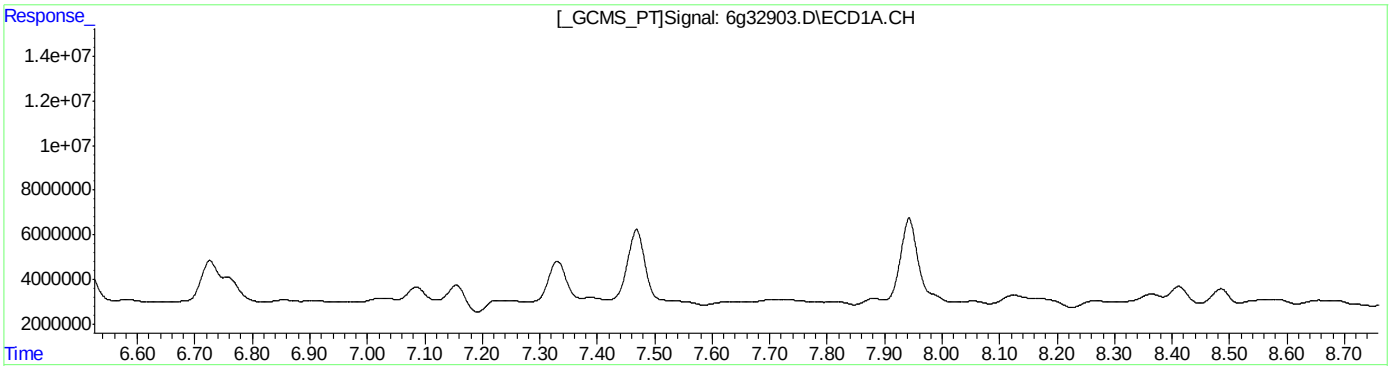
(+) = Expected Retention Time

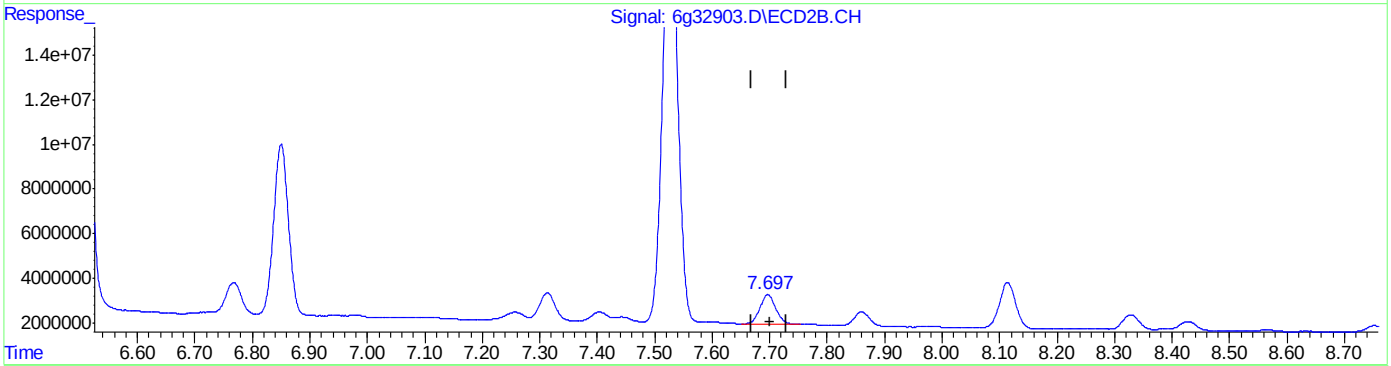
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(17) Endosulfan II (B)
6.048min 35.619PPB
response 64951087

(17) Endosulfan II #2 (B)
7.697min 29.902PPB m
response 25447229

(+) = Expected Retention Time

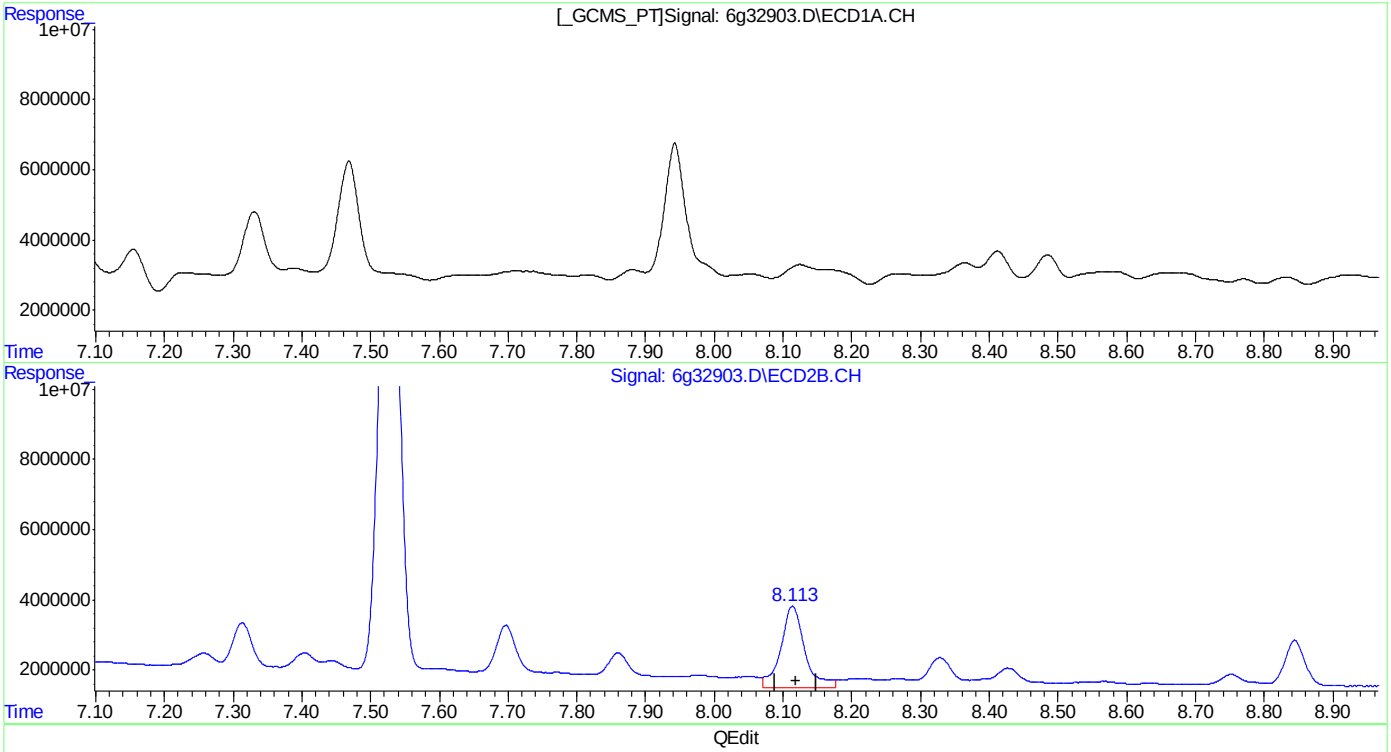
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.303min 62.302PPB
response 97177764

(18) 4,4'-DDT #2 (MA)
8.114min 72.940PPB
response 55774302

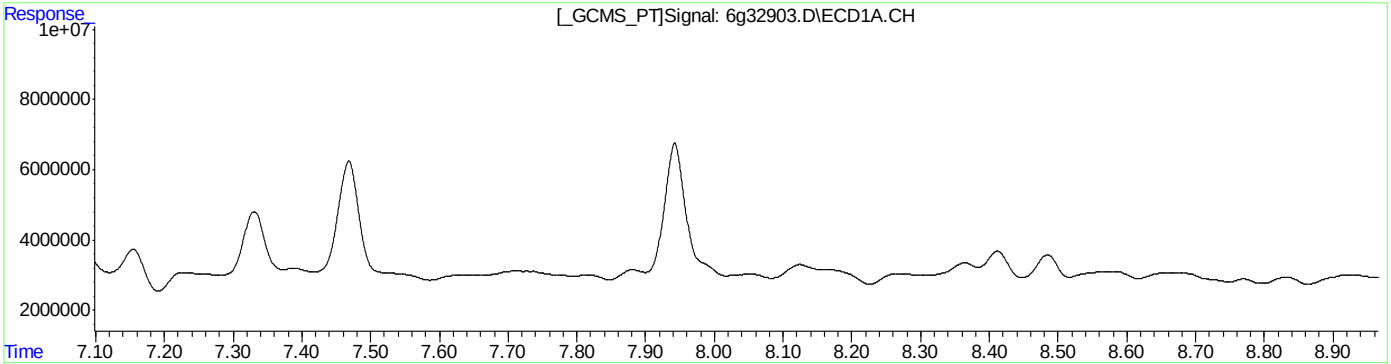
(+) = Expected Retention Time

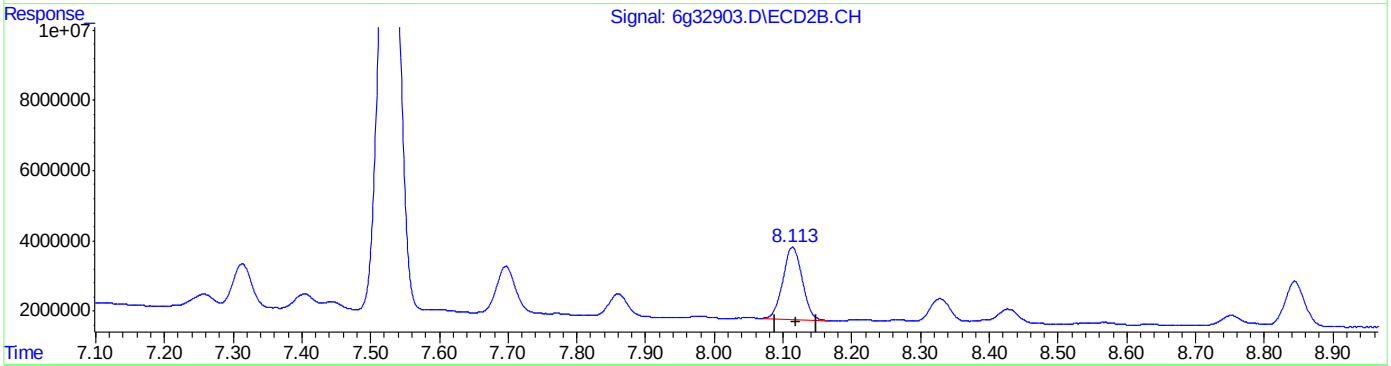
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(18) 4,4'-DDT (MA)
6.303min 62.302PPB
response 97177764

(18) 4,4'-DDT #2 (MA)
8.113min 52.818PPB m
response 40387996

(+) = Expected Retention Time

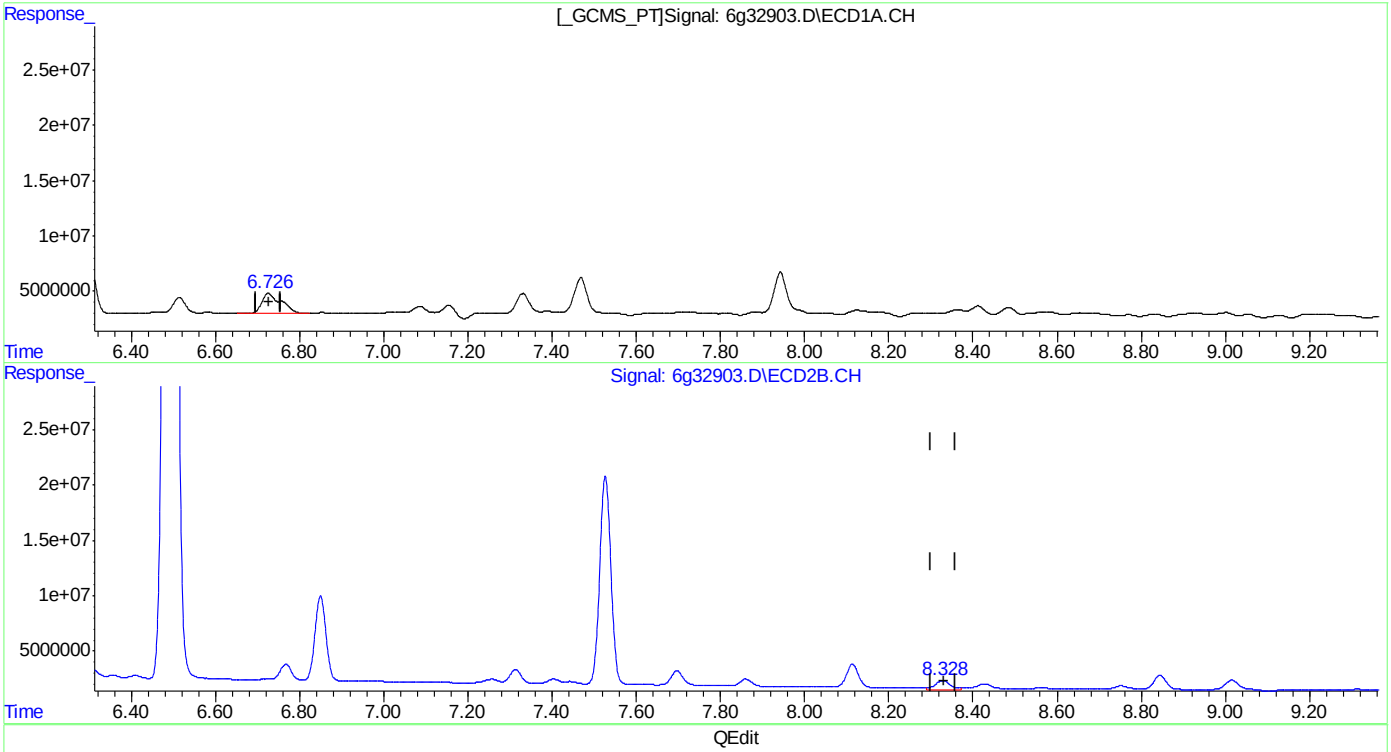
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.726min 41.786PPB
response 59822040

(19) Endrin Aldehyde #2 (B)
8.328min 36.030PPB
response 22180089

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:48:00 2016

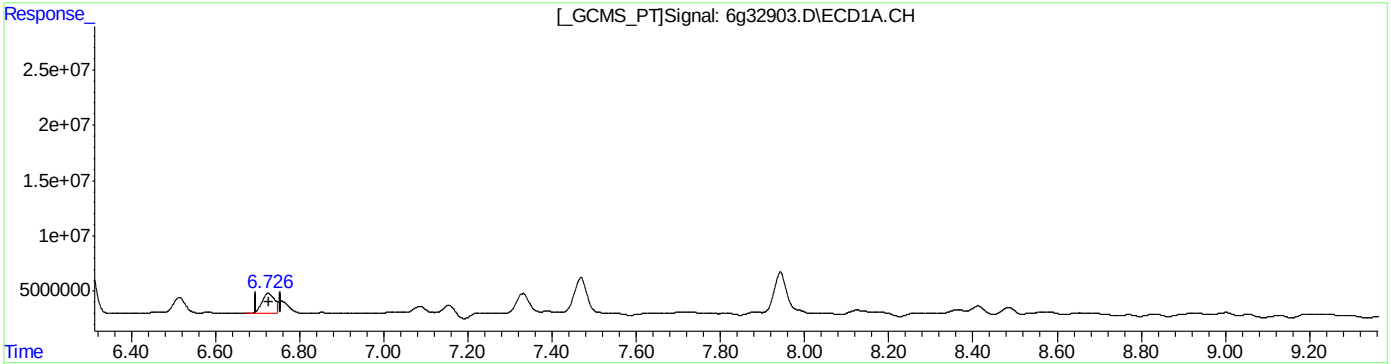
SGS ACCUTEST JC15518

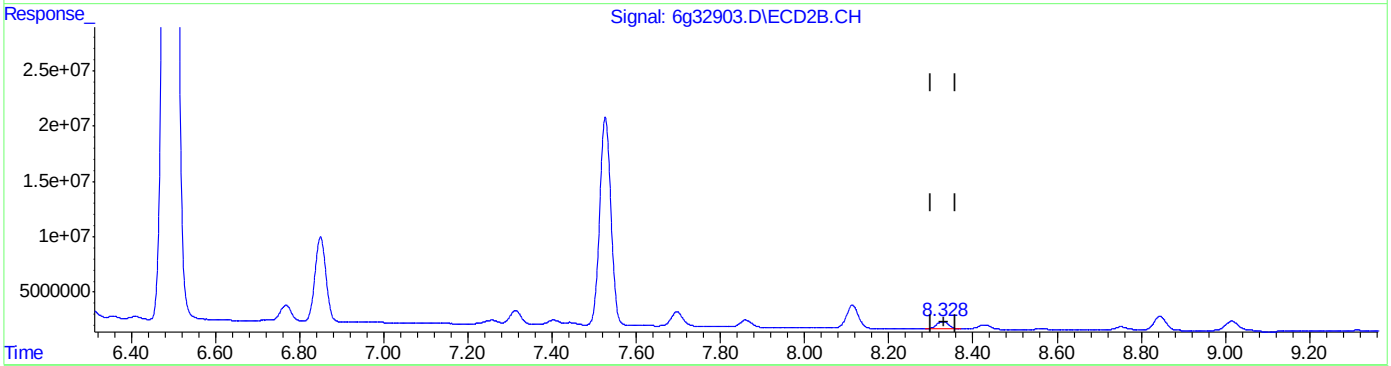
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
6.726min 26.701PPB m
response 38226097

(19) Endrin Aldehyde #2 (B)
8.328min 20.168PPB m
response 12415474

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:48:09 2016

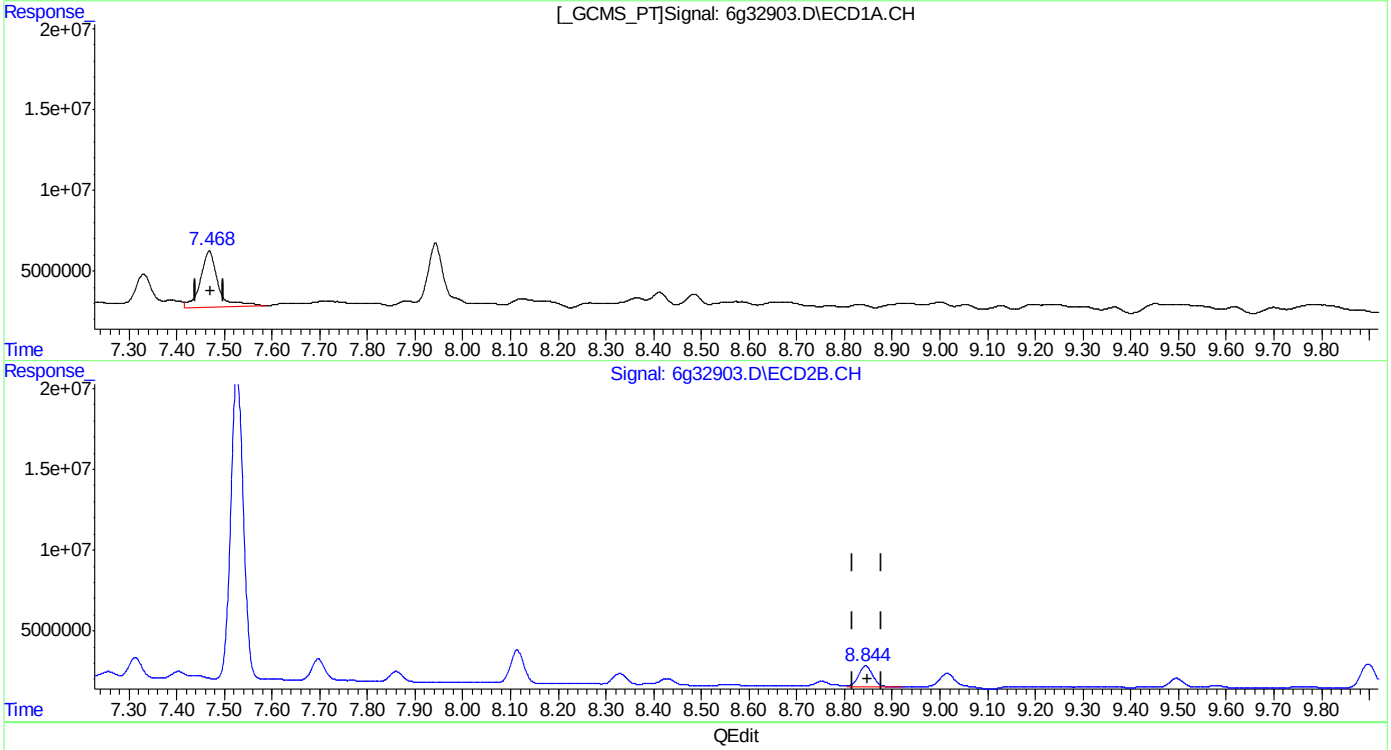
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(20) Endosulfan Sulfate (B)
7.468min 53.122PPB
response 90385177

(20) Endosulfan Sulfate #2 (B)
8.844min 35.298PPB
response 27156642

(+) = Expected Retention Time

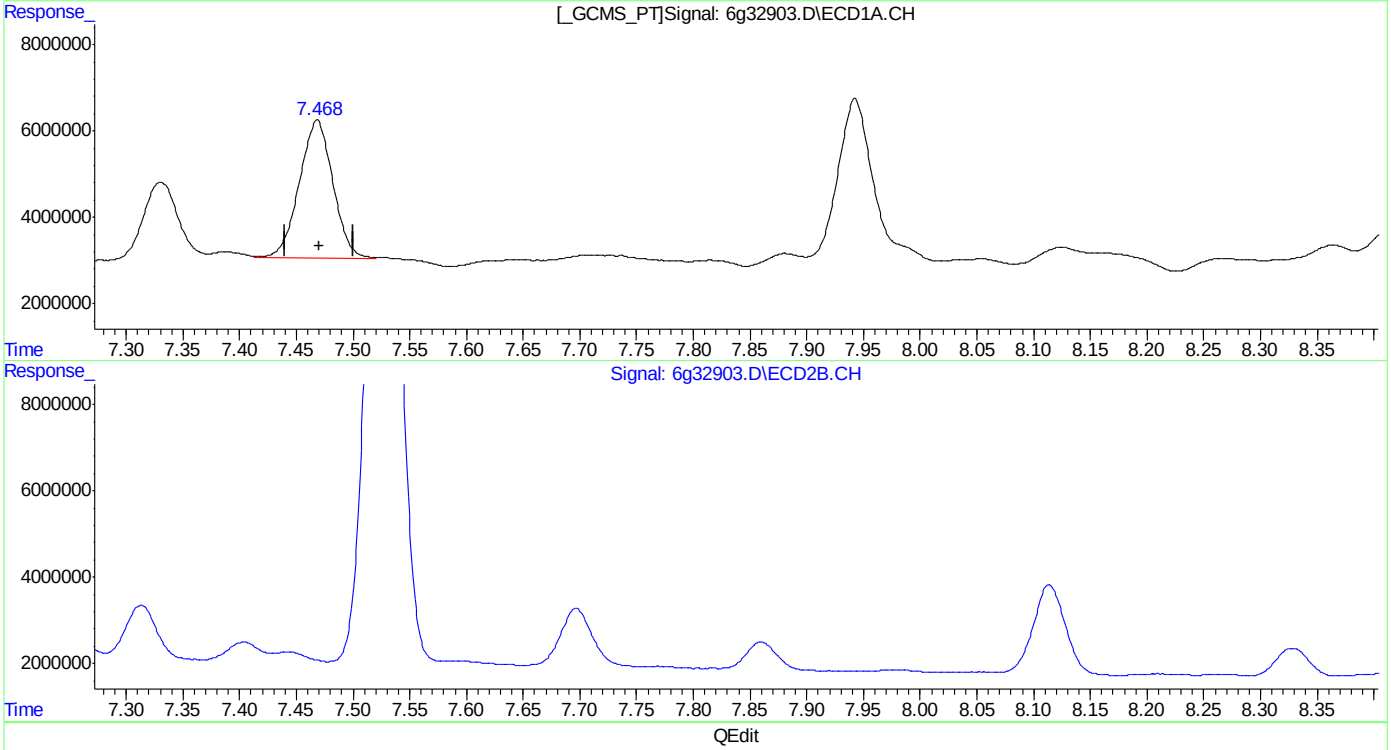
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016   7:27 pm
Operator  : dharas
Sample    : op91903-msd
Misc      : op91903,g6g958,480,,,10,1
ALS Vial  : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(20) Endosulfan Sulfate (B)

7.468min 38.605PPB m

response 65685333

(20) Endosulfan Sulfate #2 (B)

8.844min 35.298PPB

response 27156642

(+) = Expected Retention Time

6PST957.M Wed Mar 16 08:48:22 2016

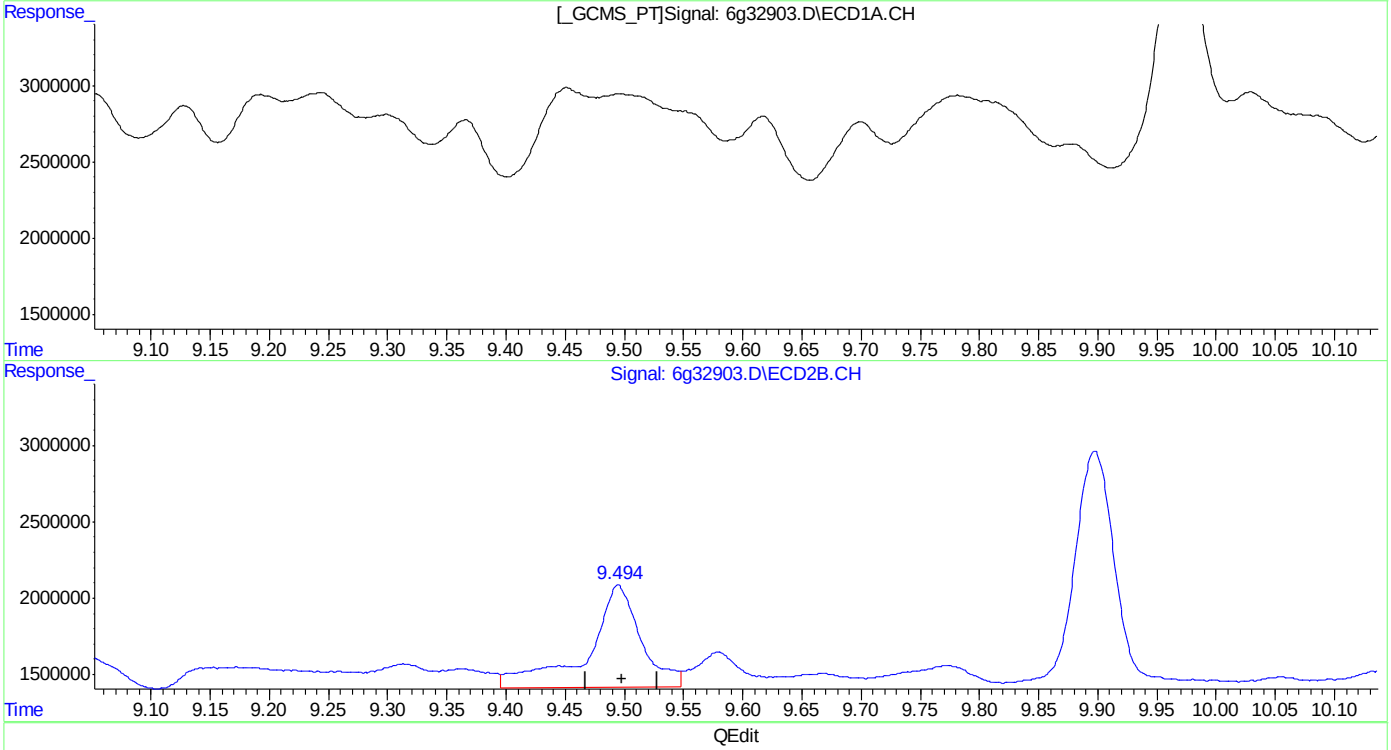
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.155min 31.449PPB
response 25696049

(21) Methoxychlor #2 (A)
9.495min 50.362PPB
response 20851875

(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:48:28 2016

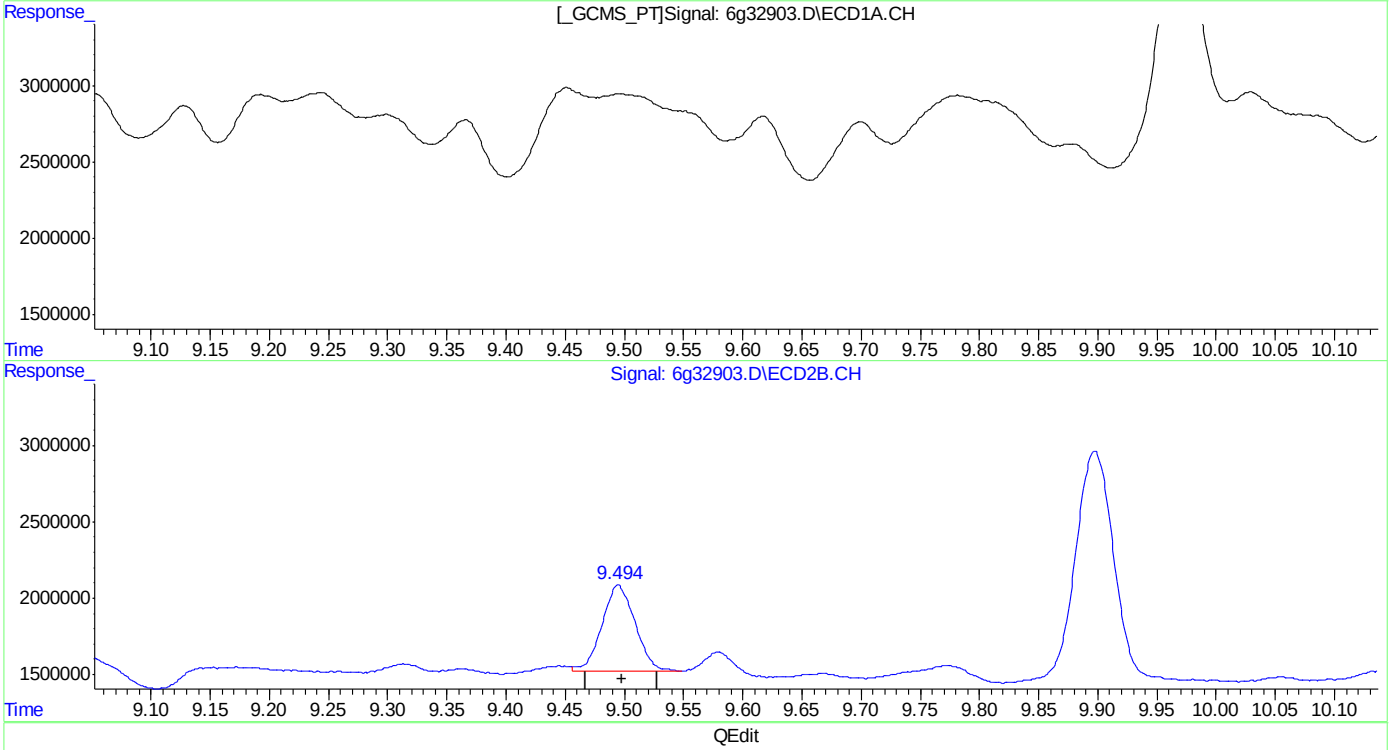
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.155min 31.449PPB
response 25696049

(21) Methoxychlor #2 (A)
9.494min 26.844PPB m
response 11114234

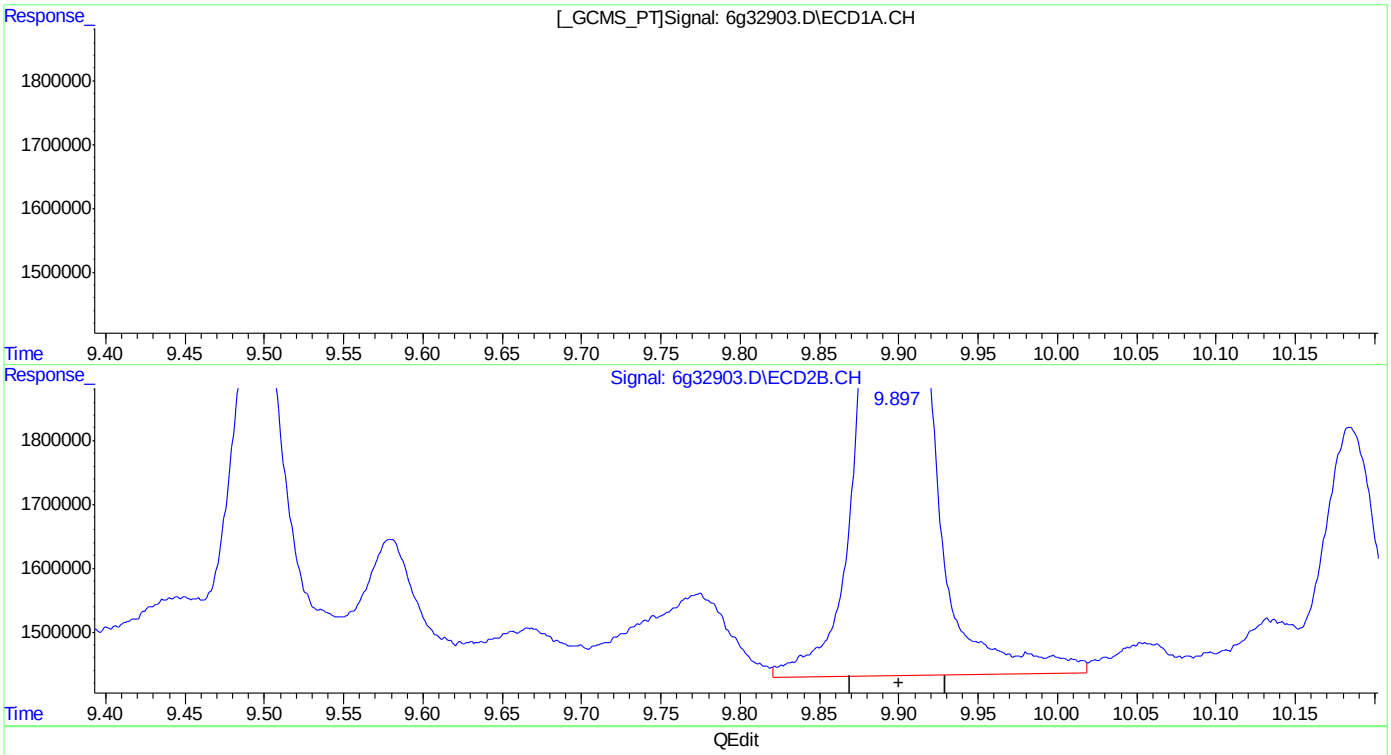
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(23) Endrin Ketone (B)
7.943min 47.608PPB
response 87987571

(23) Endrin Ketone #2 (B)
9.898min 44.954PPB
response 36705845

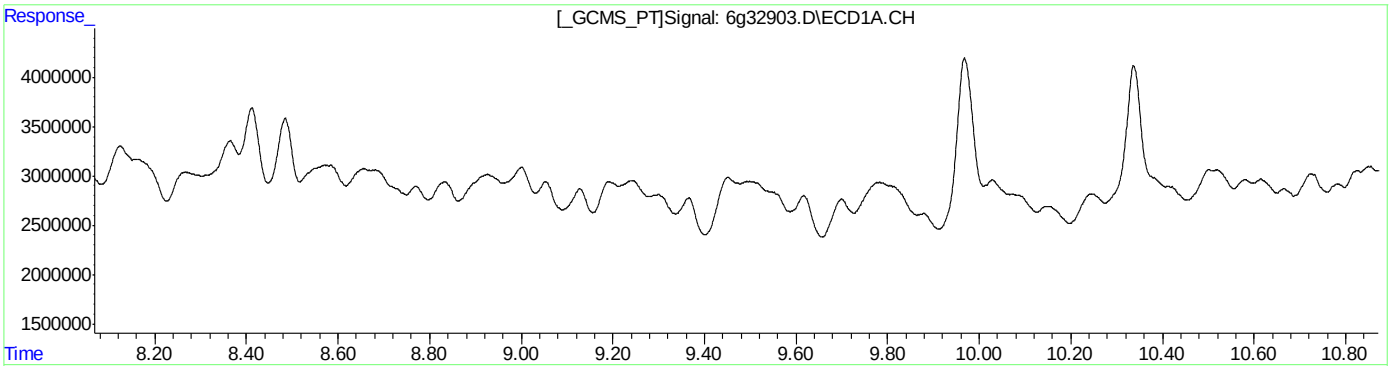
(+) = Expected Retention Time
6PST957.M Wed Mar 16 08:48:41 2016

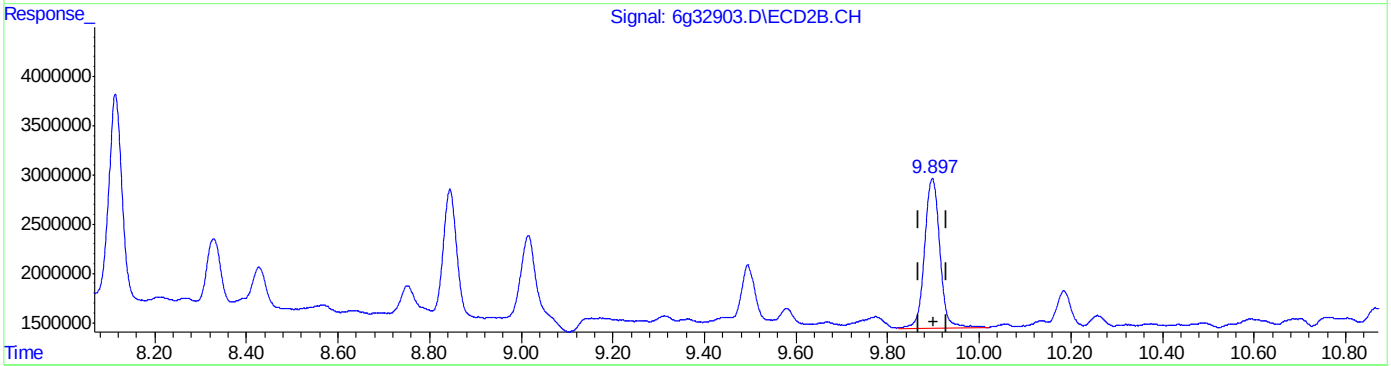
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 7:27 pm
Operator : dharas
Sample : op91903-msd
Misc : op91903,g6g958,480,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:42:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
7.943min 47.608PPB
response 87987571

(23) Endrin Ketone #2 (B)
9.897min 42.876PPB m
response 35009075

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
02/26/16 15:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65293.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 3:59 pm
Operator : yvelandd
Sample : ddt
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:08:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.074	2.238	315.4E6	330.4E6	50.000	50.000	
25) I	1-bromo-2...	2.074	2.238	315.4E6	330.4E6	50.000	50.000	
31) I	1-bromo-2...	2.074	2.238	315.4E6	330.4E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.623	3.018	123.5E6	121.2E6	21.601	19.125	
	Spiked Amount	40.000	Range	30 - 150	Recovery	=	54.00%	47.81%
24) SA	Decachlor...	9.839	11.252	132.4E6	96646471	22.521	19.256	
	Spiked Amount	40.000			Recovery	=	56.30%	48.14%
	Target Compounds							
3) A	alpha-BHC	3.066	3.662	88342564	82142833	11.515	9.815	
4) MA	gamma-BHC	3.353	4.086	75113832	74648774	10.837	10.085	
6) B	beta-BHC	3.434	4.166	35925658	34248711	9.778	9.748	
13) B	4,4'-DDE	5.332	6.705	3252874	3549512	0.625	0.551	
15) MA	Endrin	6.046	7.505	345.4E6	320.3E6	61.175	52.043	
16) A	4,4'-DDD	6.213f	7.664	10378951	4530748	2.219m	0.830	#
18) MA	4,4'-DDT	6.581	8.198	496.6E6	565.8E6	130.181	132.567	
19) B	Endrin Al...	6.989	8.428	3898446	3964440	0.878	0.795	
21) A	Methoxychlor	7.363	9.422	660.5E6	841.5E6	435.269	302.212	#
23) B	Endrin Ke...	8.120	9.792	11917296	13330035	2.387	2.244	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

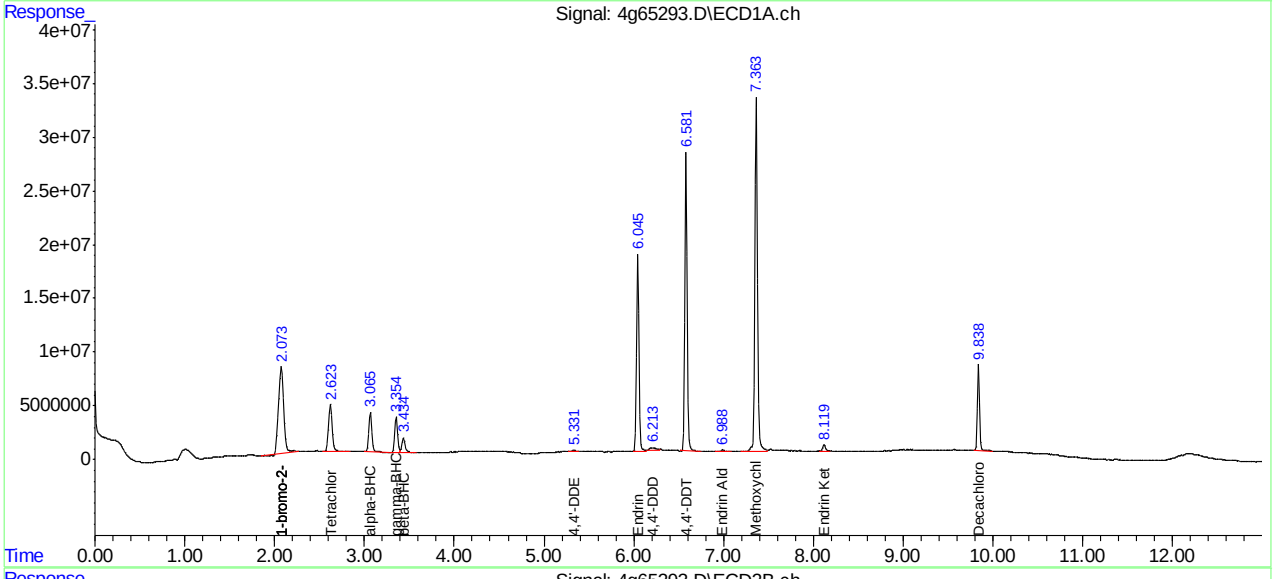
13.5.1
13

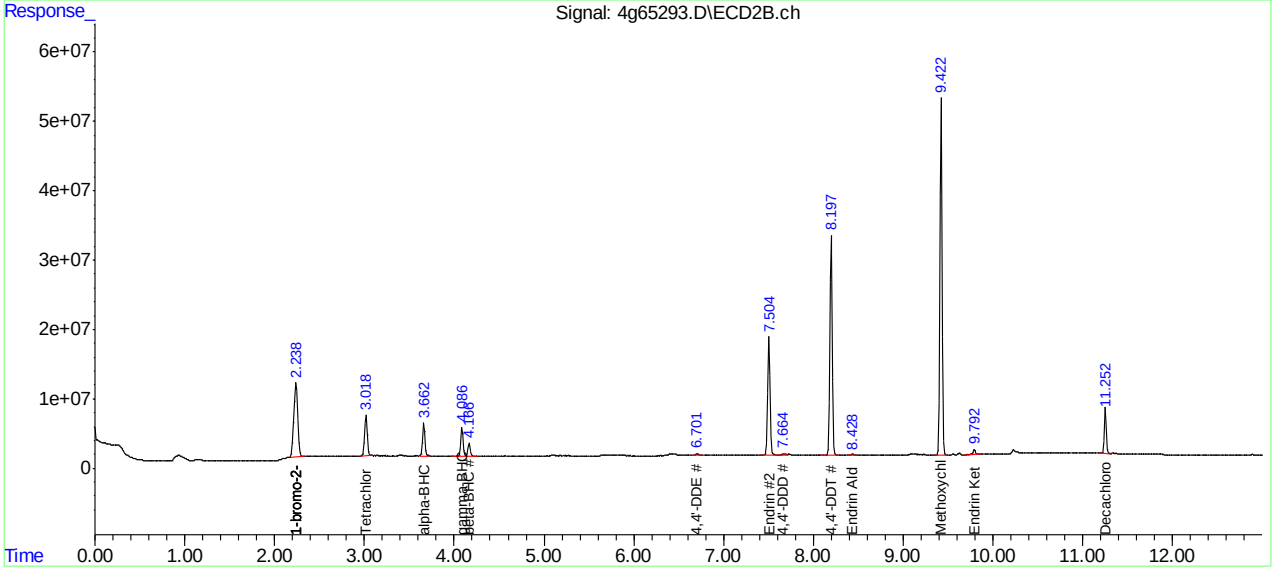
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65293.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 3:59 pm
Operator : yvelandd
Sample : ddt
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:08:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integration Approval Summary

Sample Number:	G4G1719-DDT	**Method:**	SW846 8081B
Lab FileID:	4G65293.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 15:59	**Supervisor approved:**	02/26/16 15:33 Gwendolyn Burns

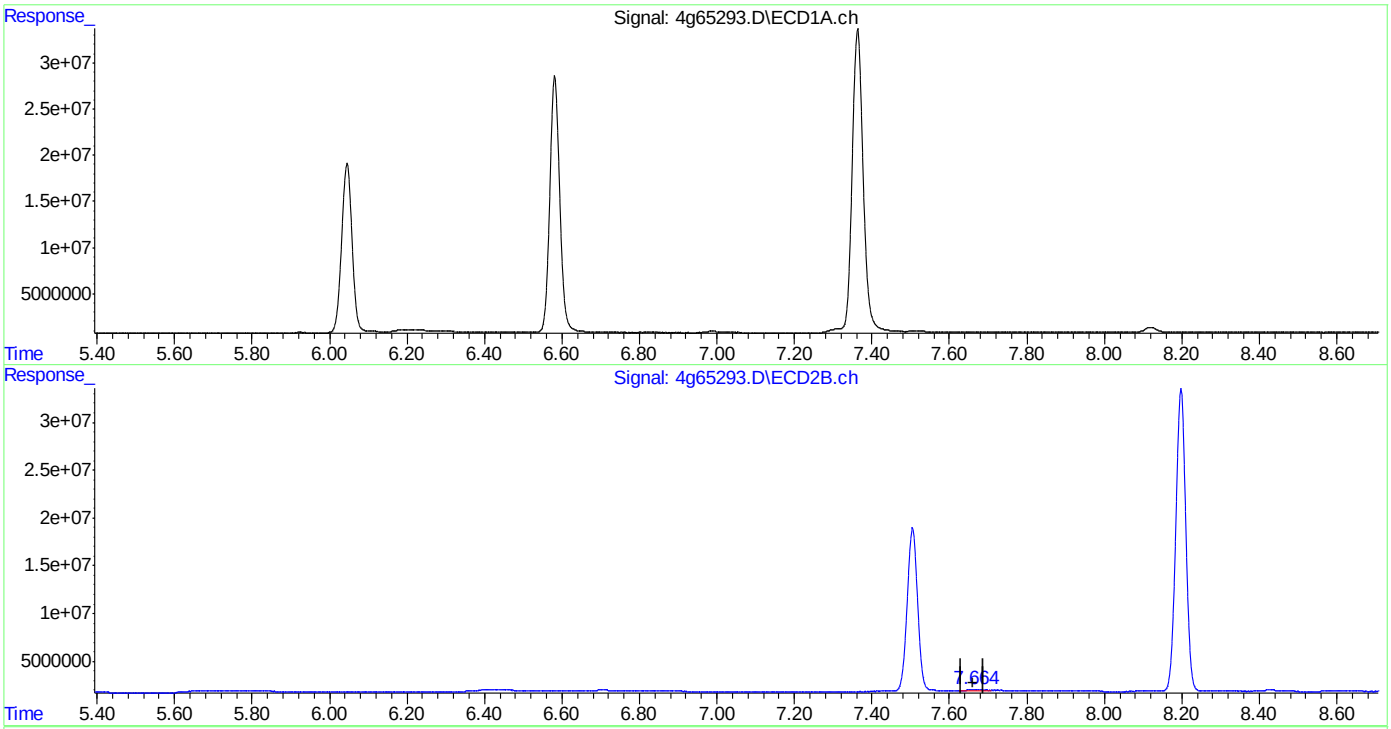
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	6.21	Poorly defined baseline

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65293.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   3:59 pm
Operator  : yvelandd
Sample    : ddt
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:07:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(16) 4,4'-DDD (A)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
7.664min 0.830 PPB
response 4530748

(+) = Expected Retention Time

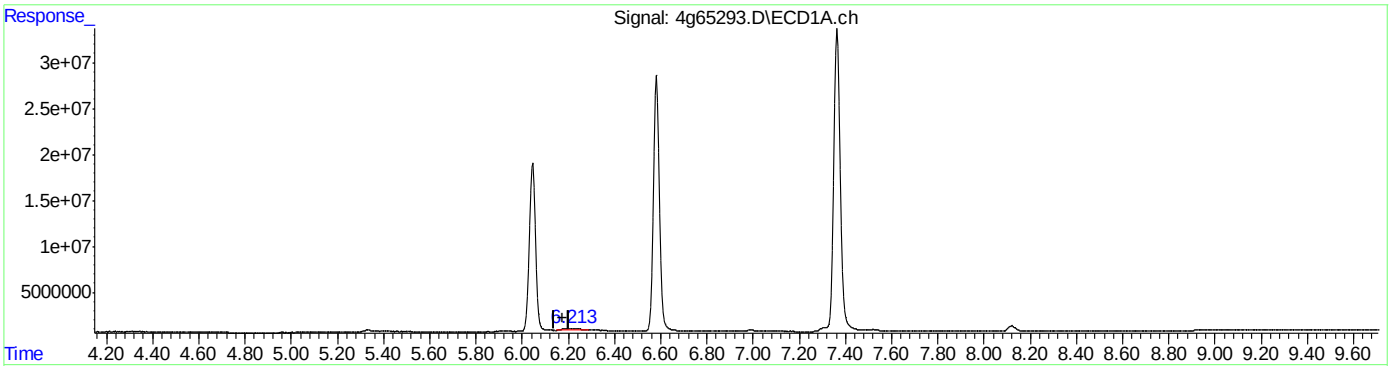
SGS ACCUTEST JC15518

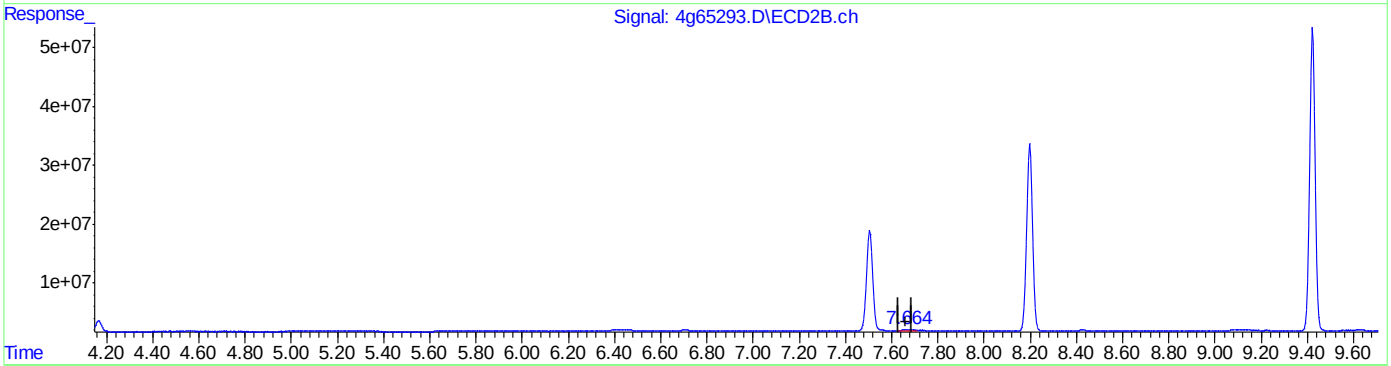
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65293.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   3:59 pm
Operator  : yvelandd
Sample    : ddt
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:07:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(16) 4,4'-DDD (A)

6.213min 2.219 PPB m

response 10378951

(16) 4,4'-DDD #2 (A)

7.664min 0.830 PPB

response 4530748

(+) = Expected Retention Time

4PST1719.M Fri Feb 26 09:08:18 2016 RPT1

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 12:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:53:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.059	2.225	316.5E6	317.5E6	50.000	50.000
25) I	1-bromo-2...	2.059	2.225	316.5E6	317.5E6	50.000	50.000
31) I	1-bromo-2...	2.059	2.225	316.5E6	317.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.599f	3.003	135.2E6	131.1E6	23.569	21.522
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 58.92%	53.80%
24) SA	Decachlor...	9.811f	11.228f	138.4E6	98482006	23.457	20.421
	Spiked Amount	40.000			Recovery	= 58.64%	51.05%
	Target Compounds						
13) B	4,4'-DDE	5.298f	6.680f	3524922	3984923	0.675m	0.644m
15) MA	Endrin	6.008f	7.478f	373.5E6	343.7E6	65.932m	58.132
16) A	4,4'-DDD	6.166	7.638f	17346132	10538338	3.696m	2.008m#
18) MA	4,4'-DDT	6.546f	8.170f	527.0E6	561.6E6	136.401m	136.940
19) B	Endrin Al...	6.949f	8.400f	4348988	5881084	0.976m	1.228m#
23) B	Endrin Ke...	8.081f	9.769f	14322755	14666185	2.858m	2.569

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

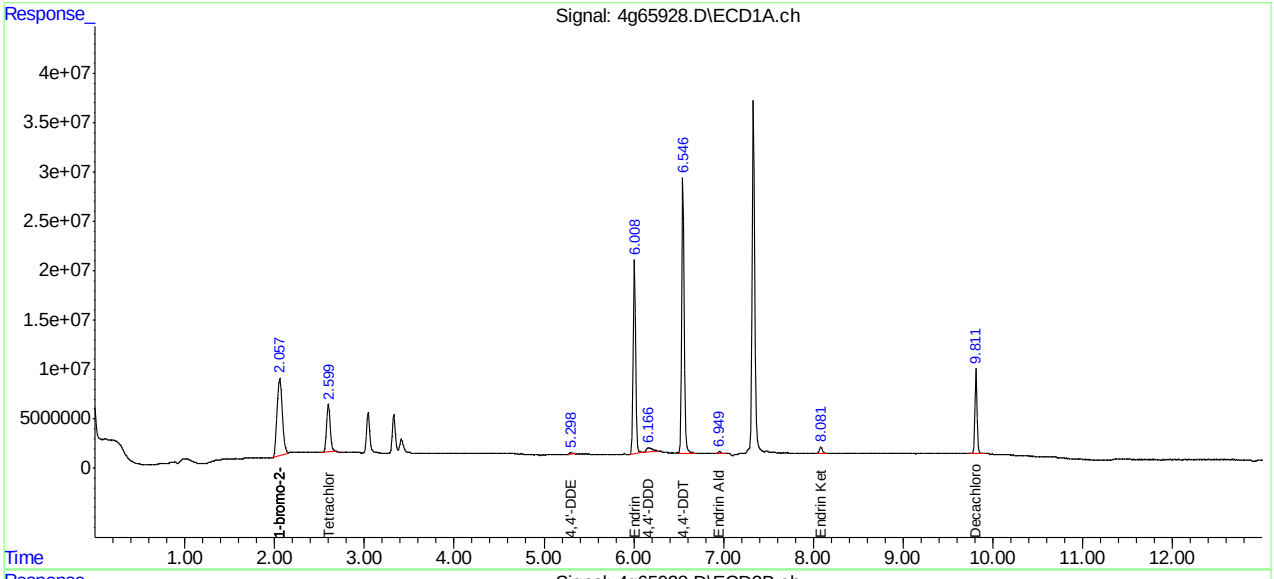
13.5.2 13

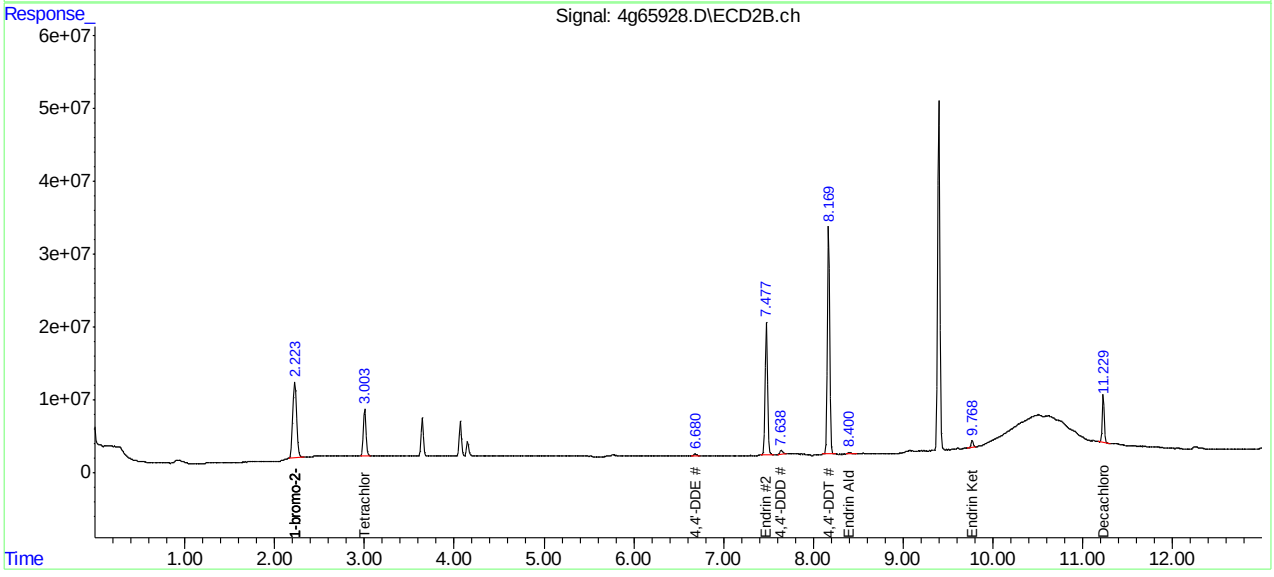
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:53:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1734-DDT	**Method:**	SW846 8081B
Lab FileID:	4G65928.D	**Analyst approved:**	03/14/16 18:56 Joseph Ravino
Injection Time:	03/14/16 16:32	**Supervisor approved:**	03/15/16 12:49 Gwendolyn Burns

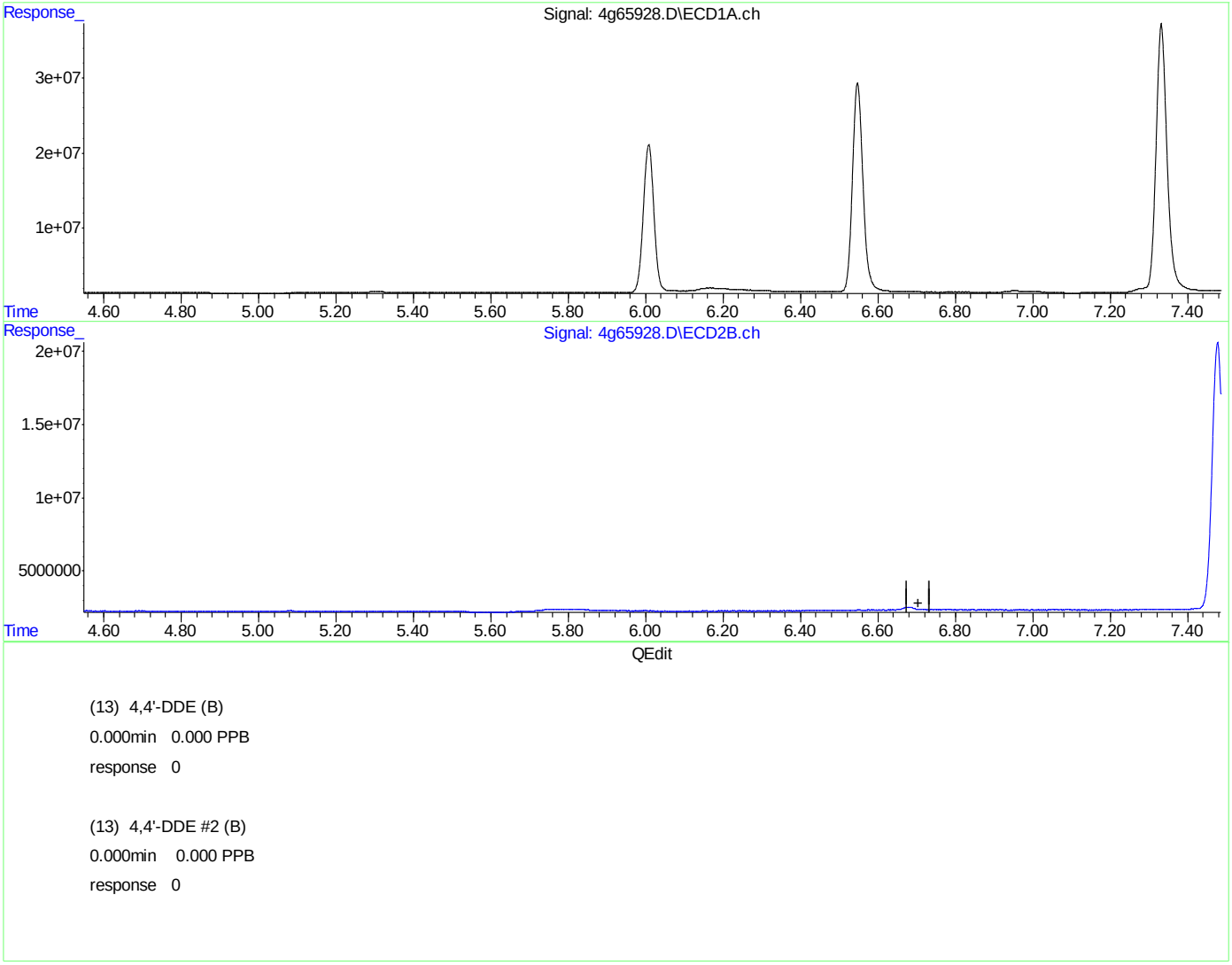
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.30	Poorly defined baseline
Endrin	72-20-8	1	6.01	Poorly defined baseline
4,4'-DDD	72-54-8	1	6.17	Poorly defined baseline
4,4'-DDT	50-29-3	1	6.55	Poorly defined baseline
4,4'-DDE	72-55-9	2	6.68	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	6.95	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.64	Poorly defined baseline
Endrin ketone	53494-70-5	1	8.08	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.40	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

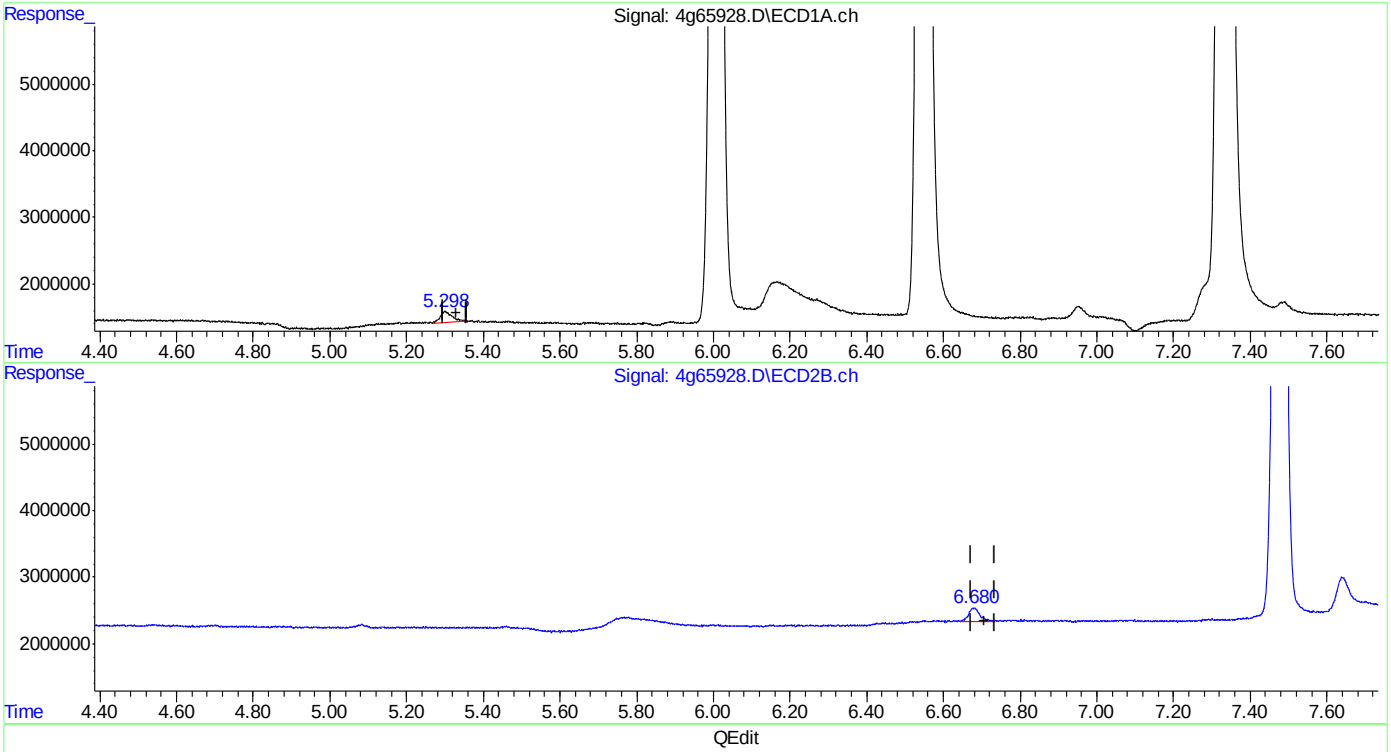
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
5.298min 0.675 PPB m
response 3524922

(13) 4,4'-DDE #2 (B)
6.680min 0.644 PPB m
response 3984923

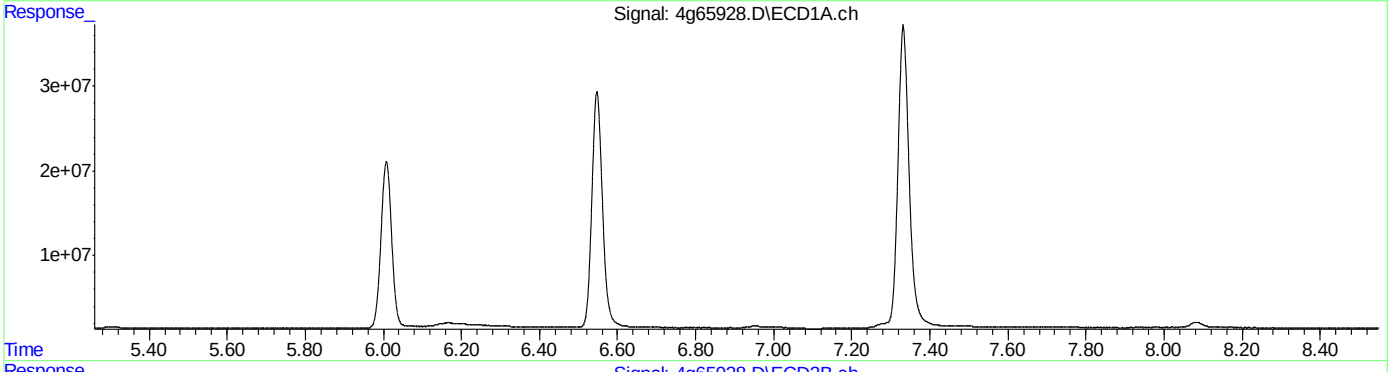
(+) = Expected Retention Time

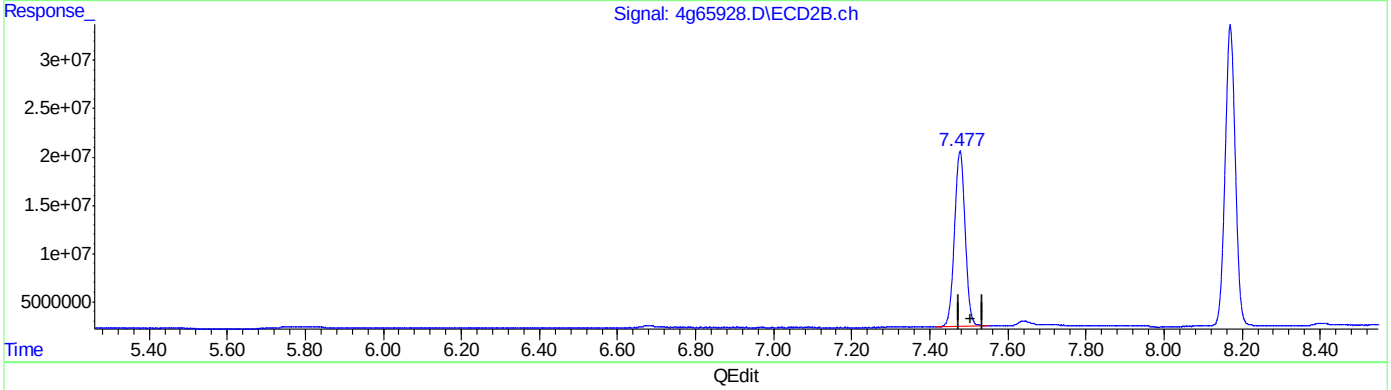
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:32 pm
Operator  : dharas
Sample    : ddt
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(15) Endrin (MA)
0.000min 0.000 PPB
response 0

(15) Endrin #2 (MA)
7.478min 58.132 PPB
response 343749984

(+) = Expected Retention Time

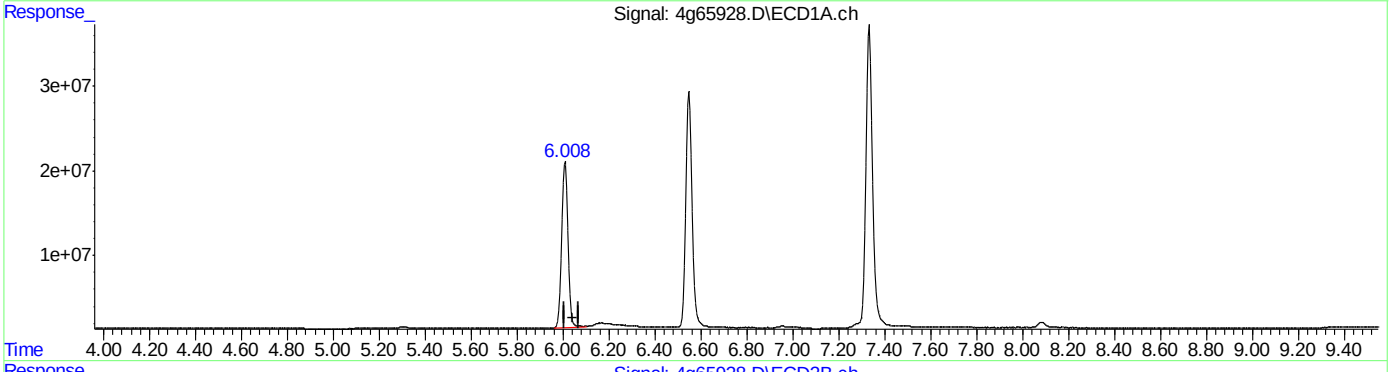
SGS ACCUTEST JC15518

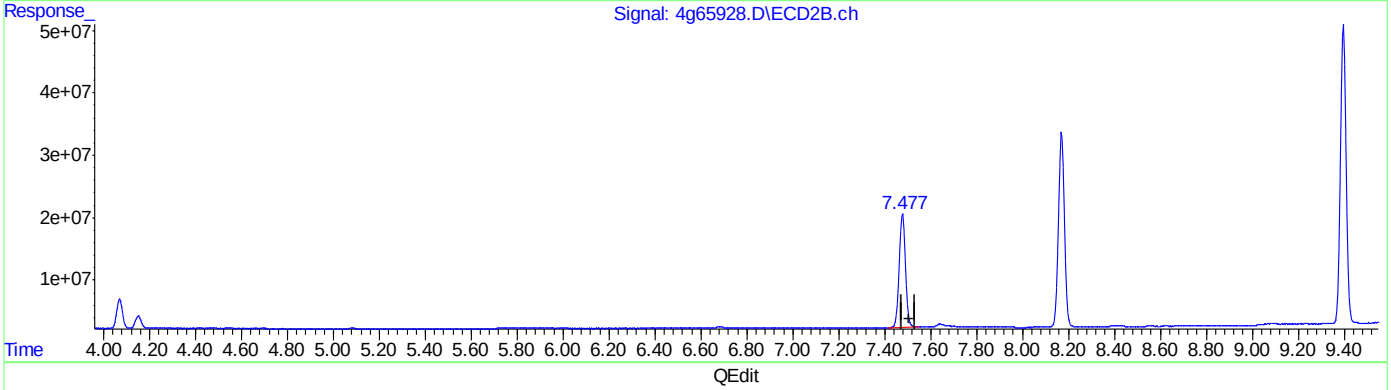
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(15) Endrin (MA)
6.008min 65.932 PPB m
response 373526654

(15) Endrin #2 (MA)
7.478min 58.132 PPB
response 343749984

(+) = Expected Retention Time
4PST1719.M Mon Mar 14 18:52:30 2016 RPT1

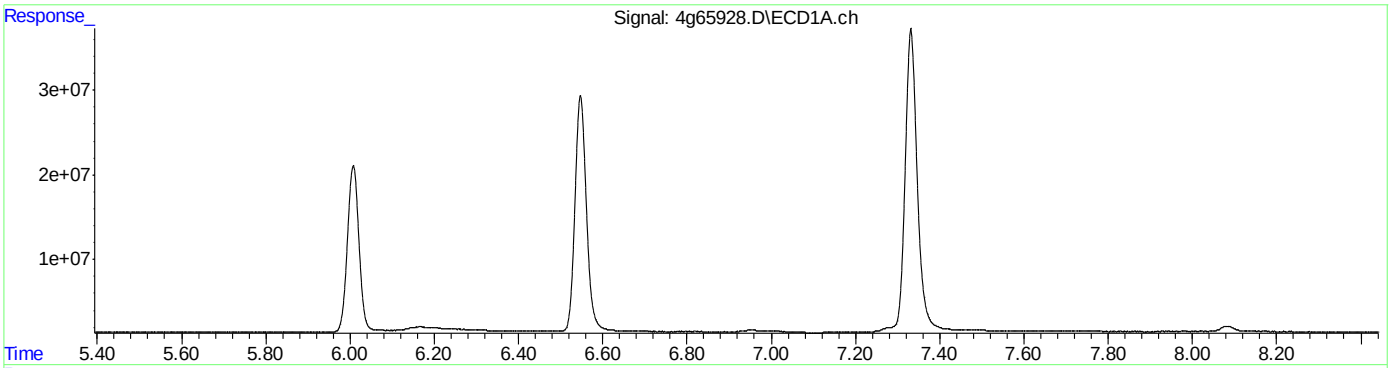
SGS ACCUTEST JC15518

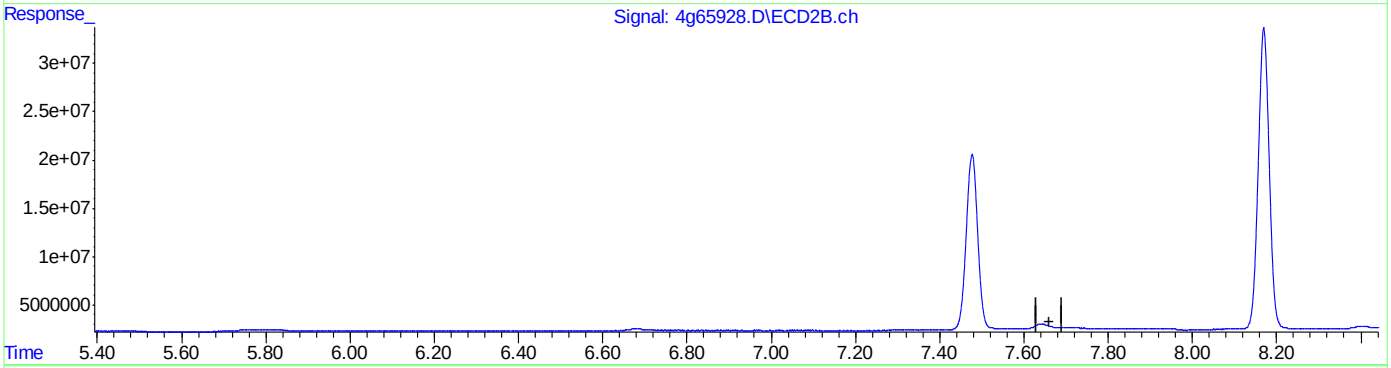
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:32 pm
Operator  : dharas
Sample    : ddt
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

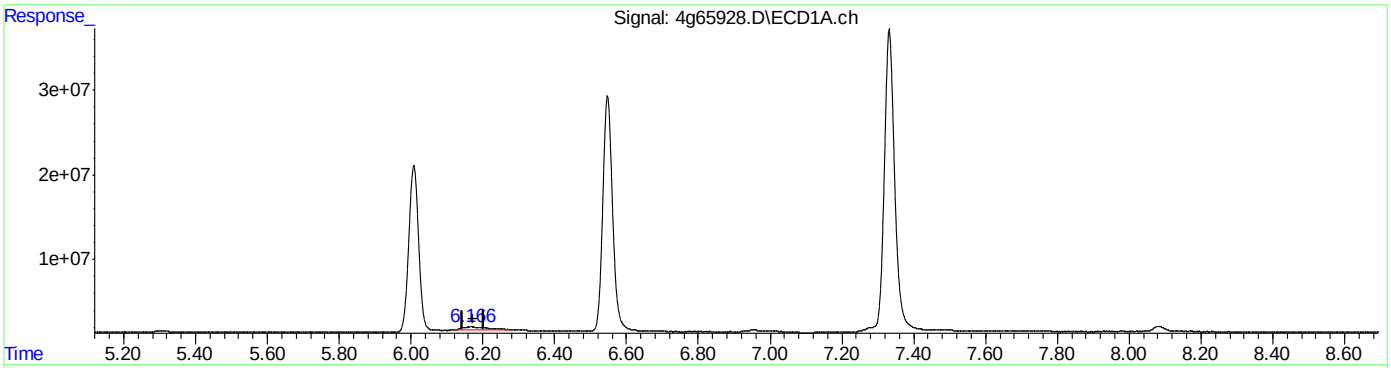
SGS ACCUTEST JC15518

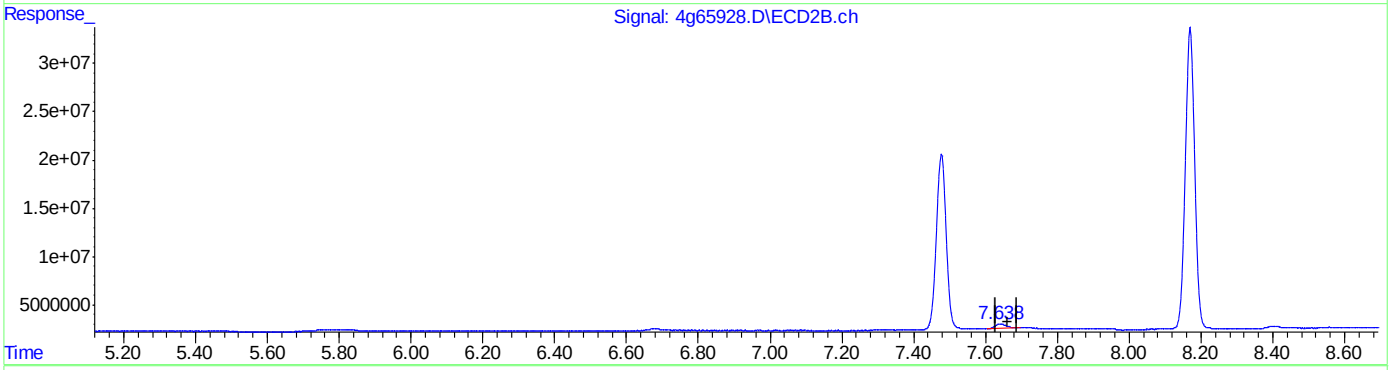
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
6.166min 3.696 PPB m
response 17346132

(16) 4,4'-DDD #2 (A)
7.638min 2.008 PPB m
response 10538338

(+) = Expected Retention Time

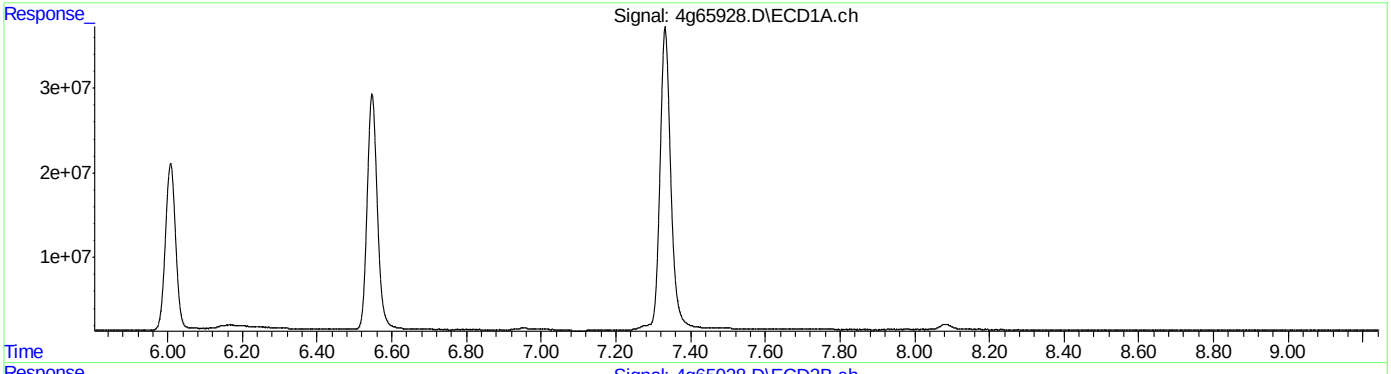
SGS ACCUTEST JC15518

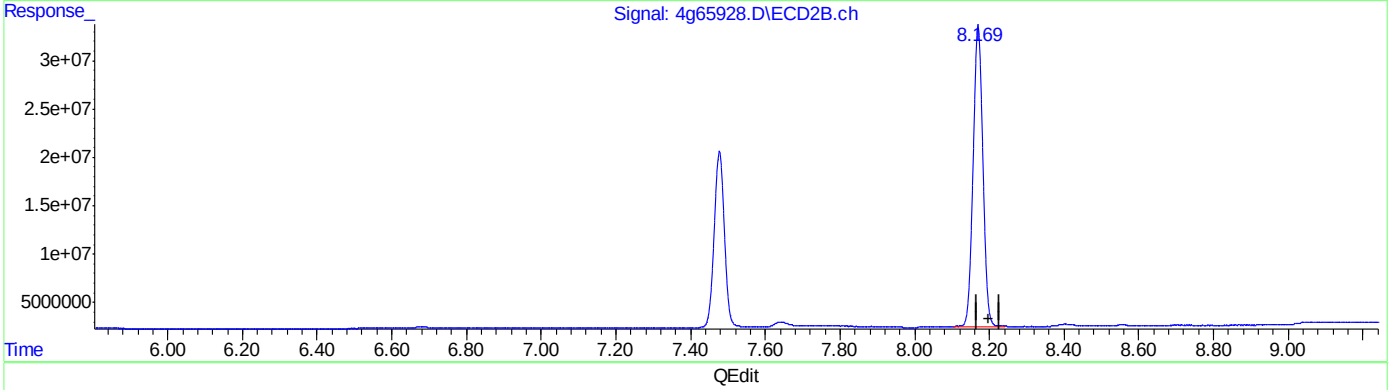
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
0.000min 0.000 PPB
response 0

(18) 4,4'-DDT #2 (MA)
8.170min 136.940 PPB
response 561585664

(+) = Expected Retention Time

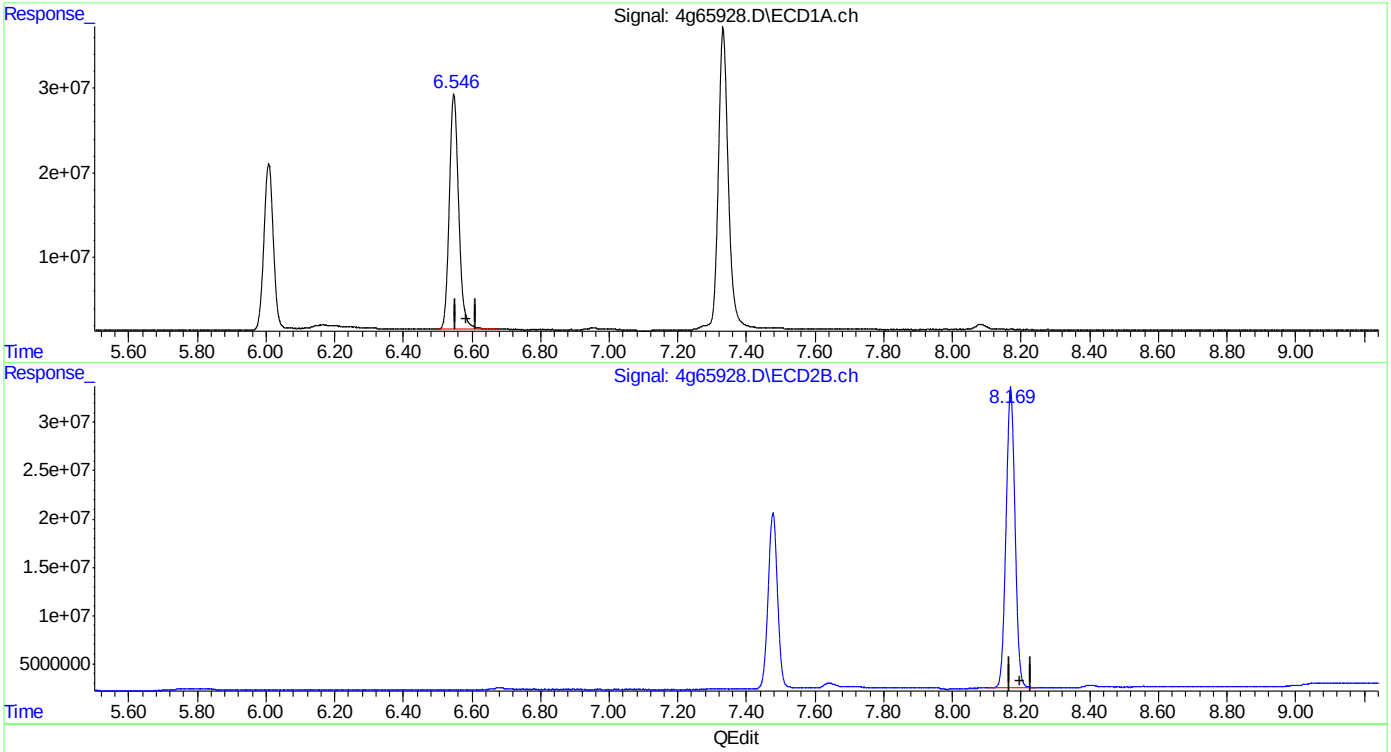
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.546min 136.401 PPB m
response 527027111

(18) 4,4'-DDT #2 (MA)
8.170min 136.940 PPB
response 561585664

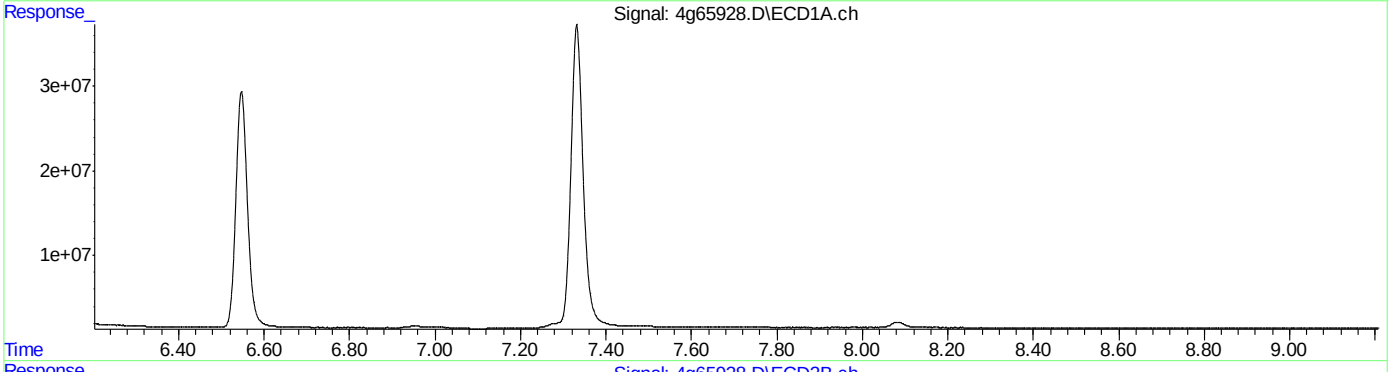
(+) = Expected Retention Time
4PST1719.M Mon Mar 14 18:53:02 2016 RPT1

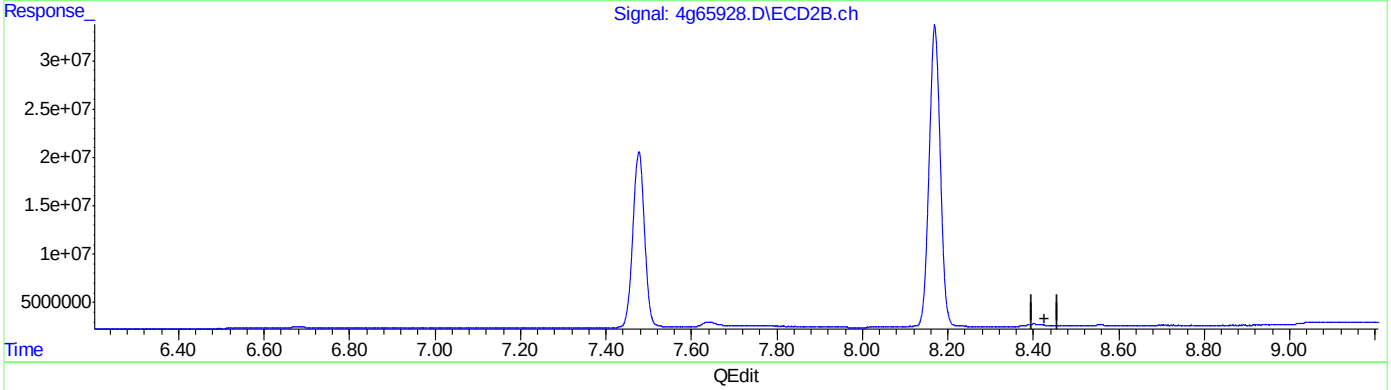
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:32 pm
Operator : dharas
Sample : ddt
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000 PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000 PPB
response 0

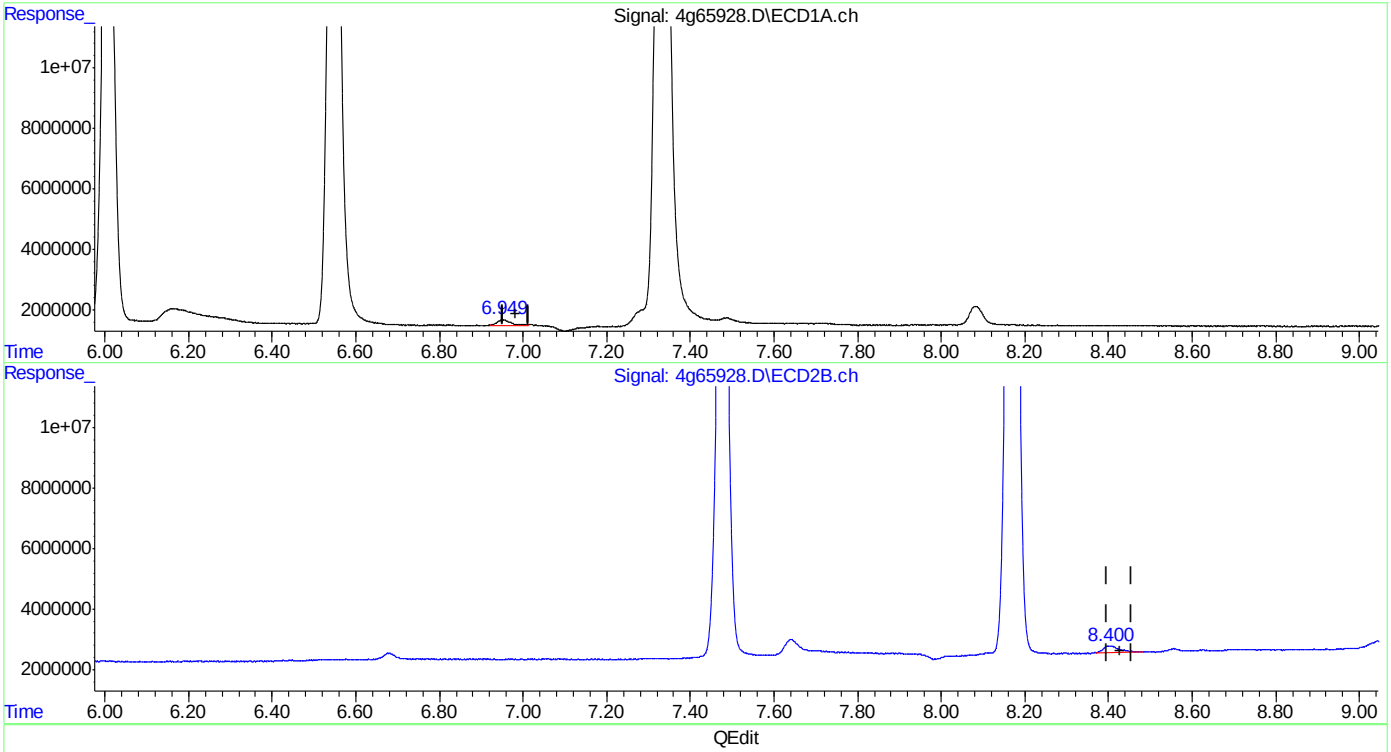
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:32 pm
Operator  : dharas
Sample    : ddt
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(19) Endrin Aldehyde (B)

6.949min 0.976 PPB m

response 4348988

(19) Endrin Aldehyde #2 (B)

8.400min 1.228 PPB m

response 5881084

(+) = Expected Retention Time

4PST1719.M Mon Mar 14 18:53:18 2016 RPT1

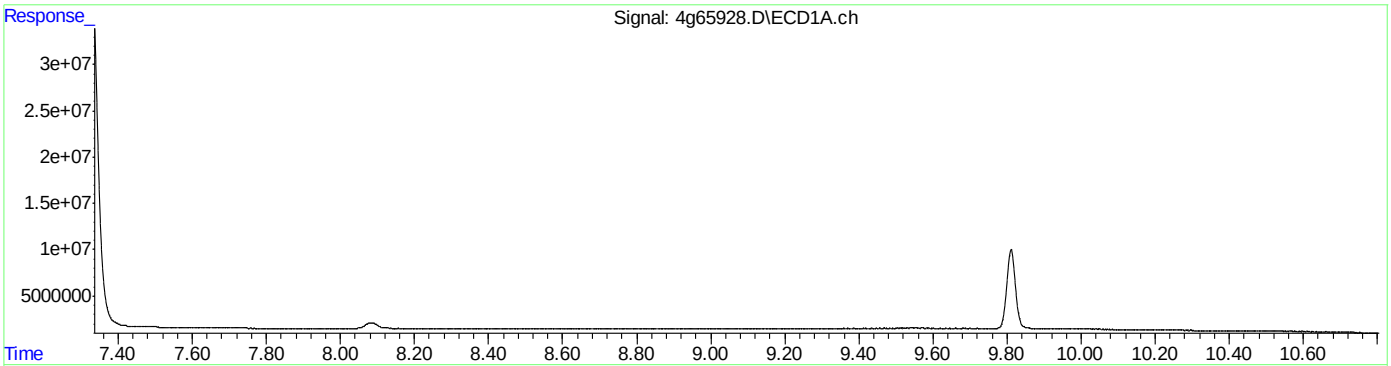
SGS ACCUTEST JC15518

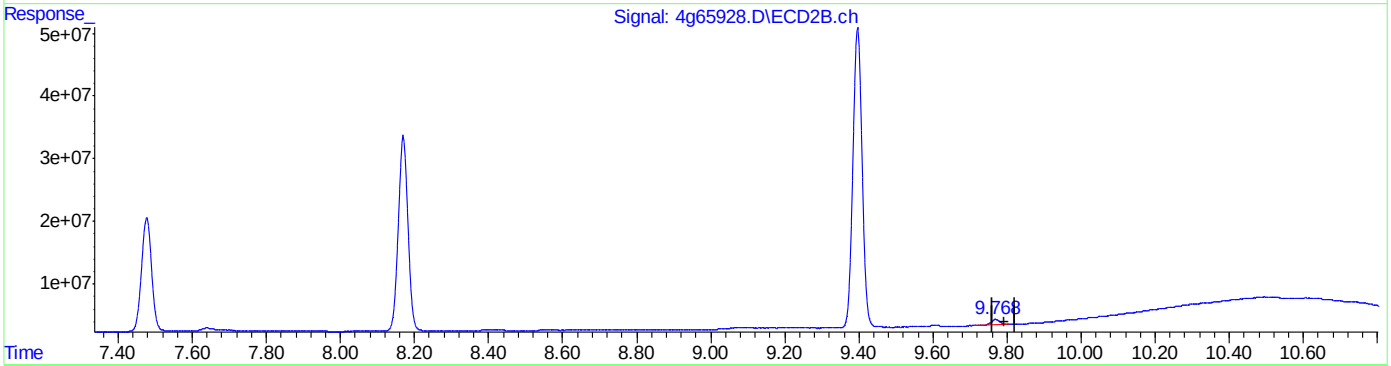
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:32 pm
Operator  : dharas
Sample    : ddt
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(23) Endrin Ketone (B)
0.000min 0.000 PPB
response 0

(23) Endrin Ketone #2 (B)
9.769min 2.569 PPB
response 14666185

(+) = Expected Retention Time

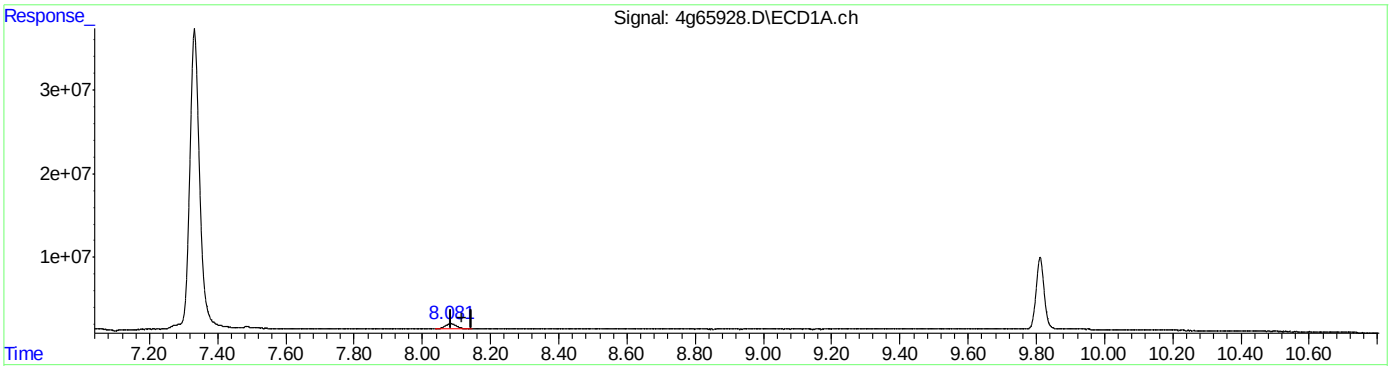
SGS ACCUTEST JC15518

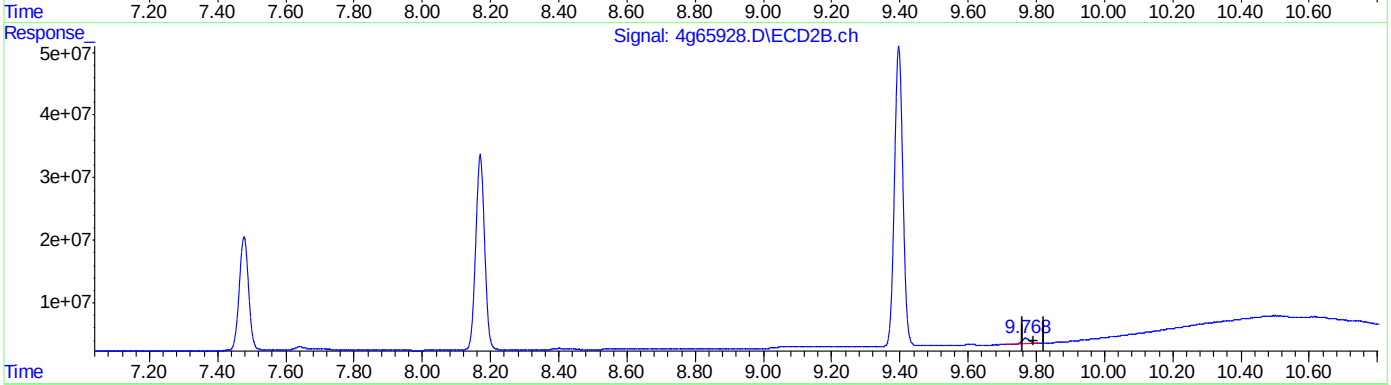
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65928.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:32 pm
Operator  : dharas
Sample    : ddt
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 18:51:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(23) Endrin Ketone (B)

8.081min 2.858 PPB m

response 14322755

(23) Endrin Ketone #2 (B)

9.769min 2.569 PPB

response 14666185

(+) = Expected Retention Time

4PST1719.M Mon Mar 14 18:53:31 2016 RPT1

SGS ACCUTEST JC15518

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
03/17/16 12:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 9:11 am
Operator : brittanp
Sample : ddt
Misc : op92043,g4g1737,16.7,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:41:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.048	2.216	417.2E6	438.2E6	50.000	50.000
25) I	1-bromo-2...	2.048	2.216	417.2E6	438.2E6	50.000	50.000
31) I	1-bromo-2...	2.048	2.216	417.2E6	438.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.596	3.000	166.4E6	165.5E6	21.749m	19.305
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	54.37%	48.26%
24) SA	Decachlor...	9.810	11.226	180.7E6	120.9E6	22.727	19.540
	Spiked Amount 40.000			Recovery	=	56.82%	48.85%
	Target Compounds						
13) B	4,4'-DDE	5.300	6.676	3046253	3557479	0.423m	0.402m
15) MA	Endrin	6.011	7.473	517.7E6	462.3E6	62.930	55.611
16) A	4,4'-DDD	6.135f	7.632	12185817	14173762	1.814	1.898
18) MA	4,4'-DDT	6.546	8.164	946.4E6	843.1E6	138.340	116.045
19) B	Endrin Al...	6.949	8.394	5342327	4675320	0.850m	0.745m
23) B	Endrin Ke...	8.079	9.764	20068250	20801734	2.697	2.604

SemiQuant Compounds - Not Calibrated on this Instrument

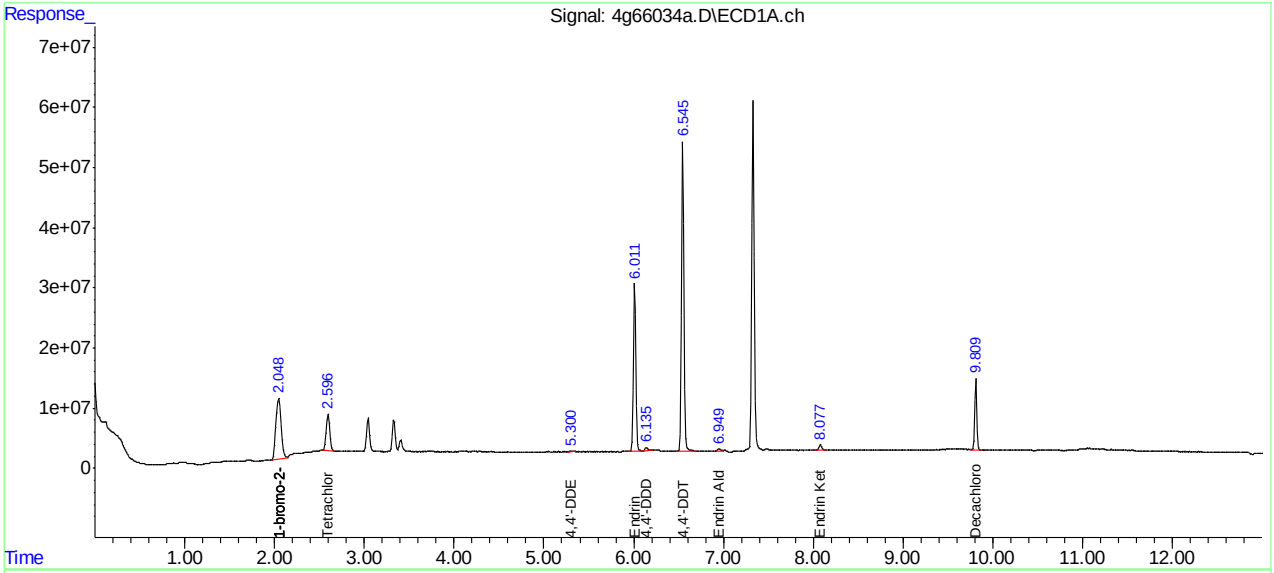
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

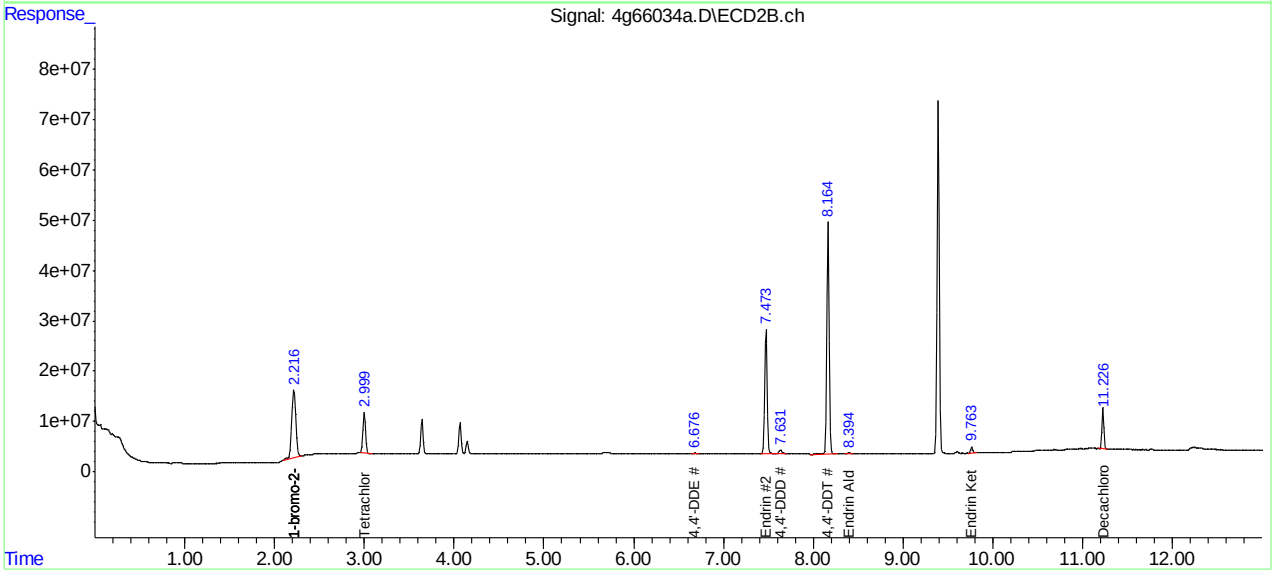
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 9:11 am
Operator : brittanp
Sample : ddt
Misc : op92043,g4g1737,16.7,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:41:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1738-DDT	**Method:**	SW846 8081B
Lab FileID:	4G66034A.D	**Analyst approved:**	03/16/16 17:32 Brittany Piercy
Injection Time:	03/16/16 09:11	**Supervisor approved:**	03/17/16 12:47 Owen McKenna

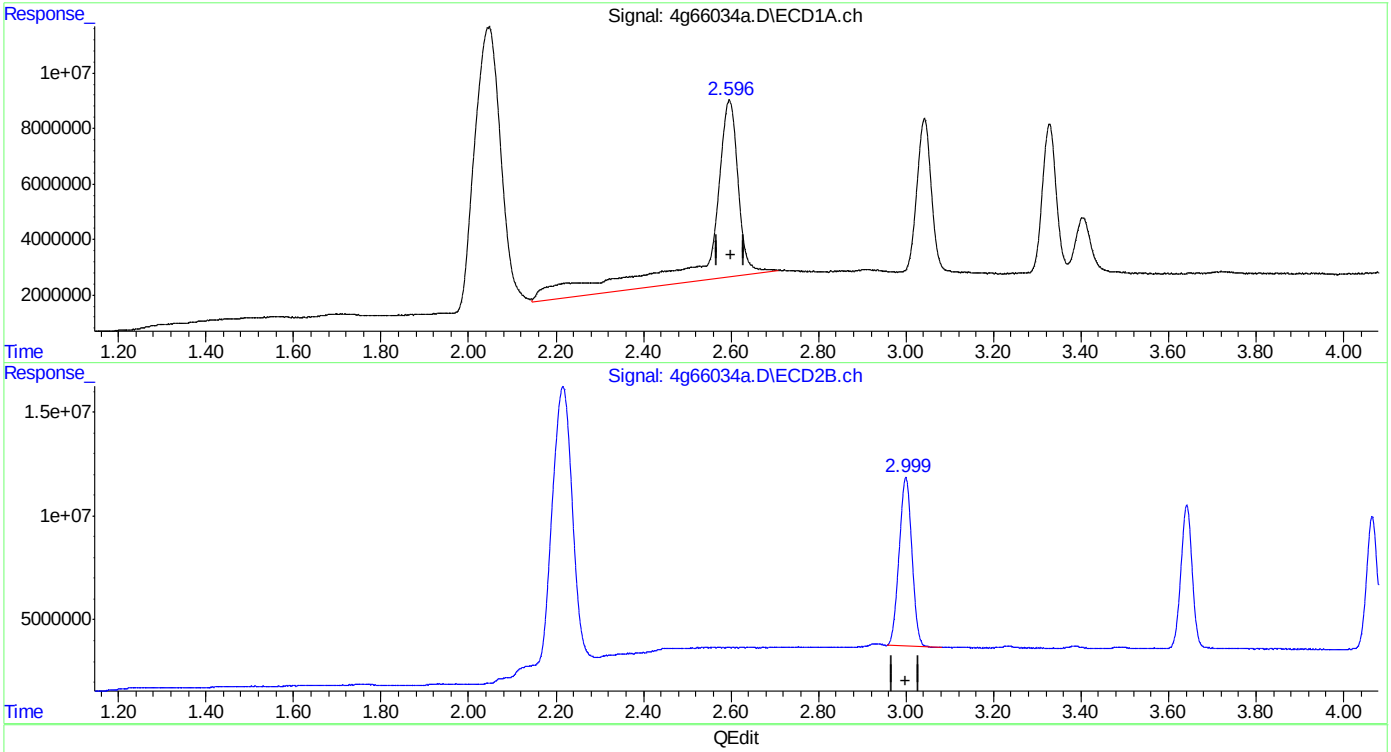
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.60	Poor instrument integration
4,4'-DDE	72-55-9	1	5.30	Poor instrument integration
4,4'-DDE	72-55-9	2	6.68	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.95	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.39	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 16 Mar 2016   9:11 am
Operator  : brittanp
Sample    : ddt
Misc      : op92043,g4g1737,16.7,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title  : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(2) Tetrachloro-m-xylene (SAB)

2.597min 39.193 PPB

response 299811367

(2) Tetrachloro-m-xylene #2 (SAB)

3.000min 19.305 PPB

response 165504071

(+) = Expected Retention Time

4PST1736.M Wed Mar 16 12:39:25 2016 RPT1

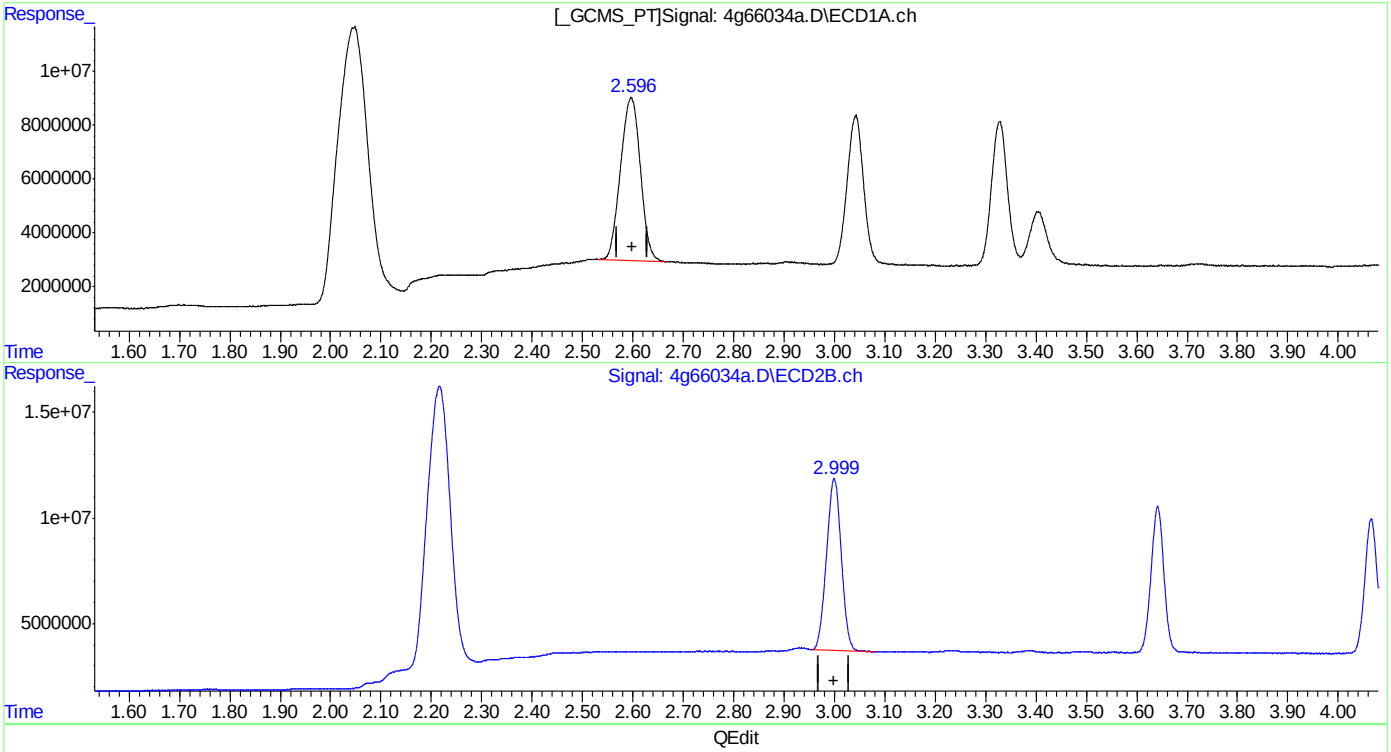
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 16 Mar 2016   9:11 am
Operator  : brittanp
Sample    : ddt
Misc      : op92043,g4g1737,16.7,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title  : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(2) Tetrachloro-m-xylene (SAB)

2.596min 21.749 PPB m

response 166370384

(2) Tetrachloro-m-xylene #2 (SAB)

3.000min 19.305 PPB

response 165504071

(+) = Expected Retention Time

4PST1736.M Wed Mar 16 12:39:31 2016 RPT1

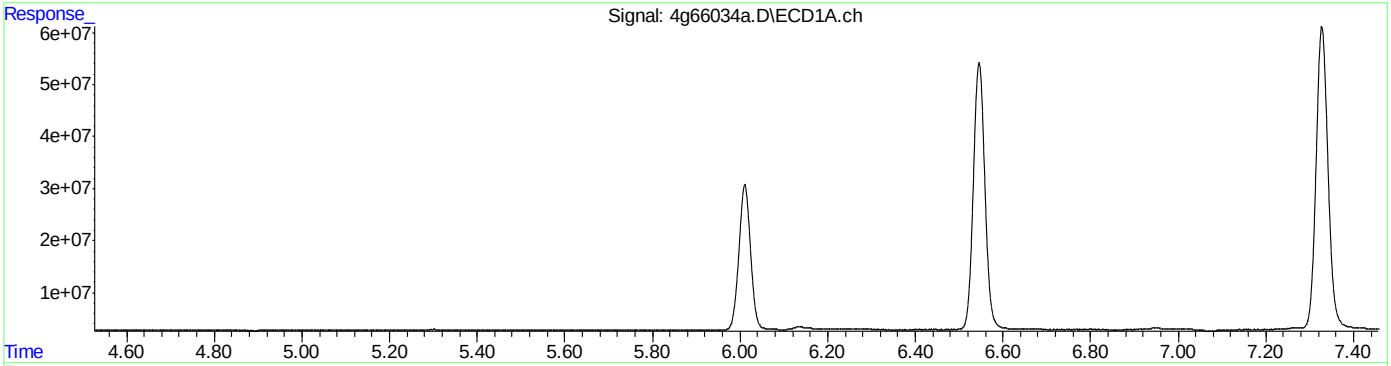
SGS ACCUTEST JC15518

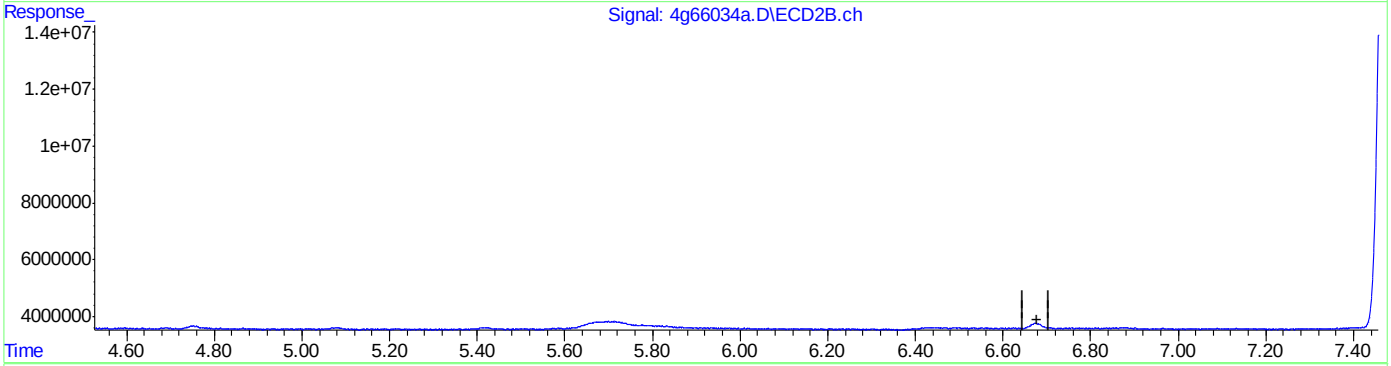
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 9:11 am
Operator : brittanp
Sample : ddt
Misc : op92043,g4g1737,16.7,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000 PPB
response 0

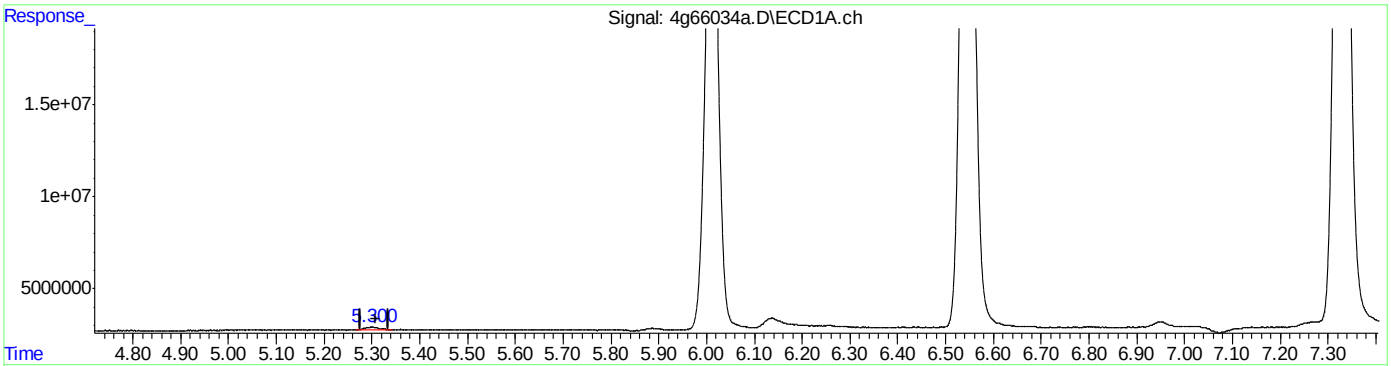
(+) = Expected Retention Time
4PST1736.M Wed Mar 16 12:39:51 2016 RPT1

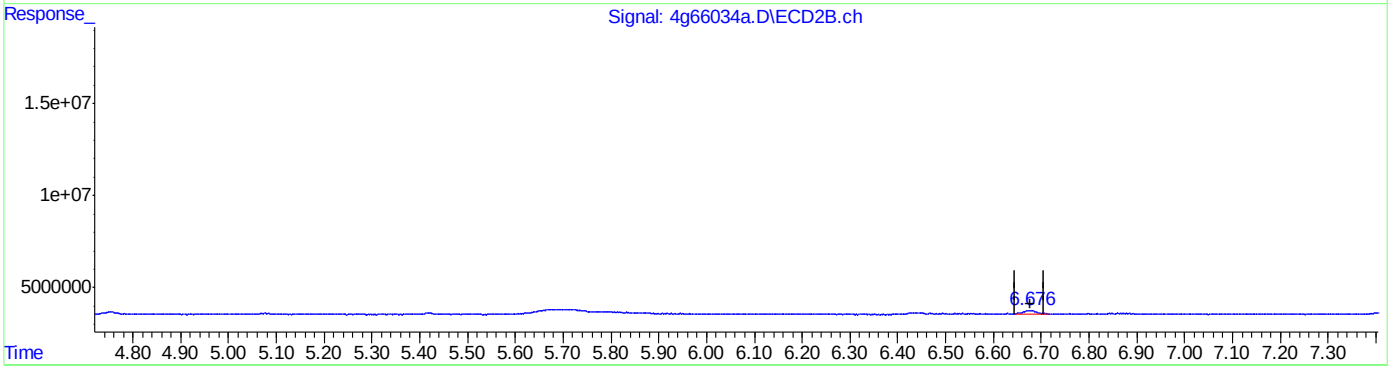
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 16 Mar 2016   9:11 am
Operator  : brittanp
Sample    : ddt
Misc      : op92043,g4g1737,16.7,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title  : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(13) 4,4'-DDE (B)
5.300min 0.423 PPB m
response 3046253

(13) 4,4'-DDE #2 (B)
6.676min 0.402 PPB m
response 3557479

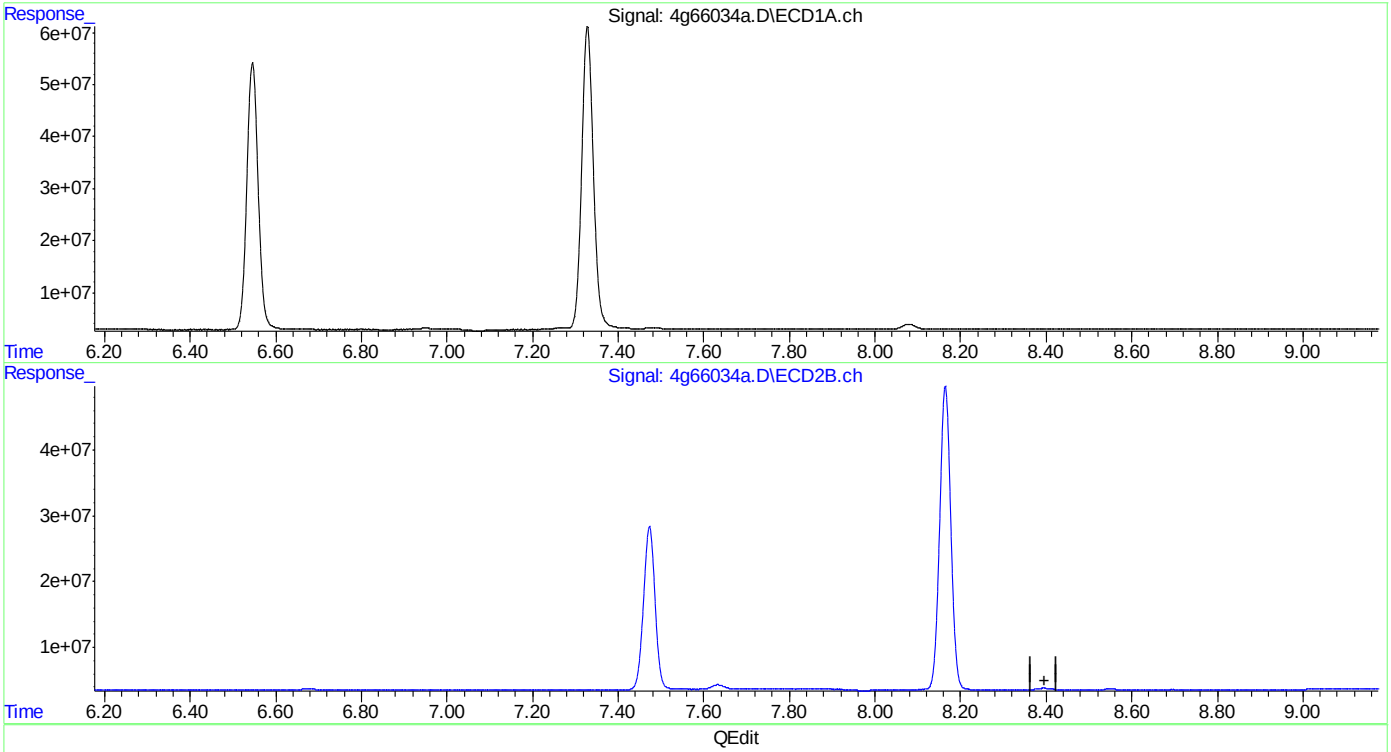
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 9:11 am
Operator : brittanp
Sample : ddt
Misc : op92043,g4g1737,16.7,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000 PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time
4PST1736.M Wed Mar 16 12:40:28 2016 RPT1

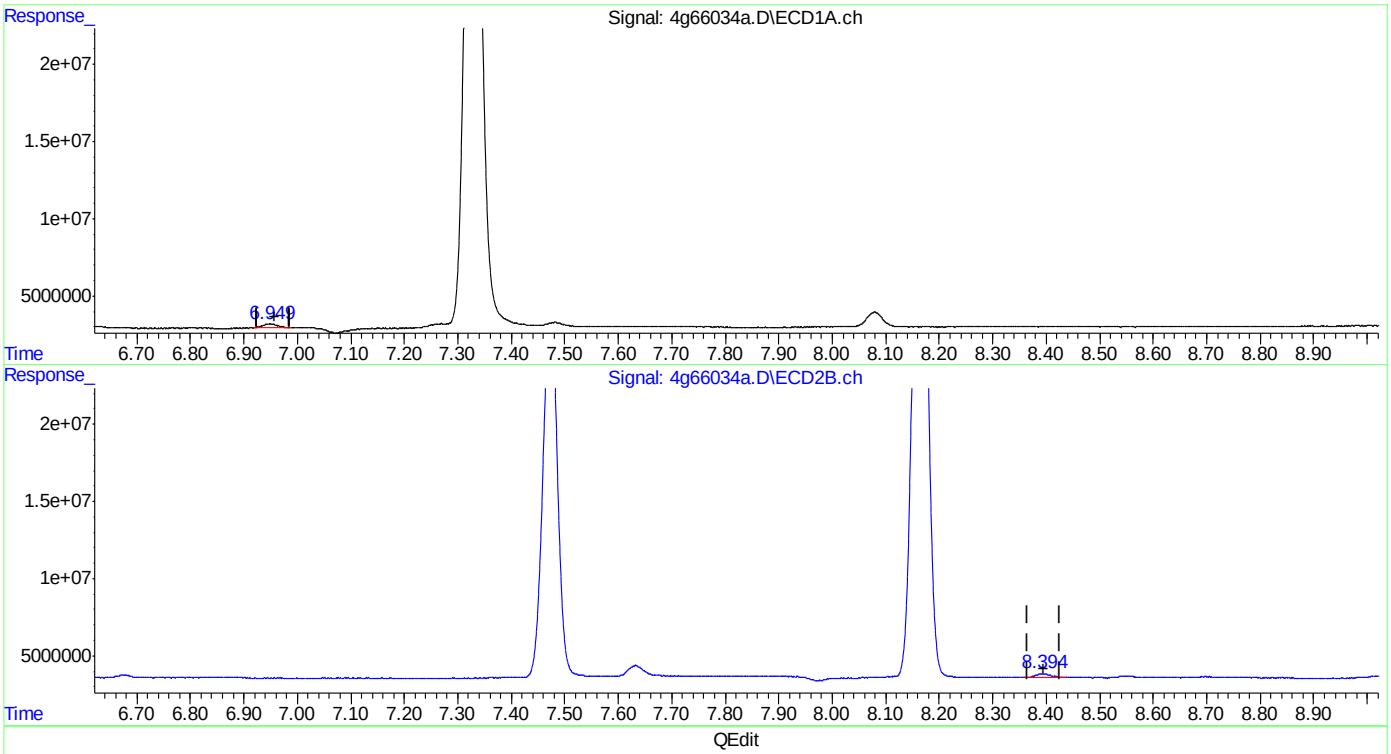
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1738\
Data File : 4g66034a.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Mar 2016 9:11 am
Operator : brittanp
Sample : ddt
Misc : op92043,g4g1737,16.7,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 12:39:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1736.M
Quant Title : PEST/PCB
QLast Update : Wed Mar 16 09:40:57 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.949min 0.850 PPB m
response 5342327

(19) Endrin Aldehyde #2 (B)
8.394min 0.745 PPB m
response 4675320

(+) = Expected Retention Time
4PST1736.M Wed Mar 16 12:40:45 2016 RPT1

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:13:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.325	1.591	72876564	38134792	50.000	50.000
25) I	1-bromo-2...	1.325	1.591	72876564	38134792	50.000	50.000
31) I	1-bromo-2...	1.325	1.591	72876564	38134792	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.006	2.495	44946764	20781755	22.418	23.700m
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	56.05%	59.25%
24)	SAB Decachlor...	9.982	11.811	42029936	12566386	23.230	24.363
	Spiked Amount 40.000			Recovery	=	58.07%	60.91%
	Target Compounds						
13) B	4,4'-DDE	4.969	6.498	1110515	221821	0.616m	0.289m#
15) MA	Endrin	5.718	7.320	80881943	32725230	56.877	50.603
16) A	4,4'-DDD	5.858	7.534	736782	399675	0.563m	0.667m
18) MA	4,4'-DDT	6.314	8.120	169.0E6	66347523	120.294	104.924
19) B	Endrin Al...	6.740	8.338	886396	421387	0.687m	0.828m
21) A	Methoxychlor	7.174	9.503	205.2E6	81211722	278.799	237.190
23) B	Endrin Ke...	7.955	9.904	4095878	1564254	2.460	2.317

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

13.5.4 13

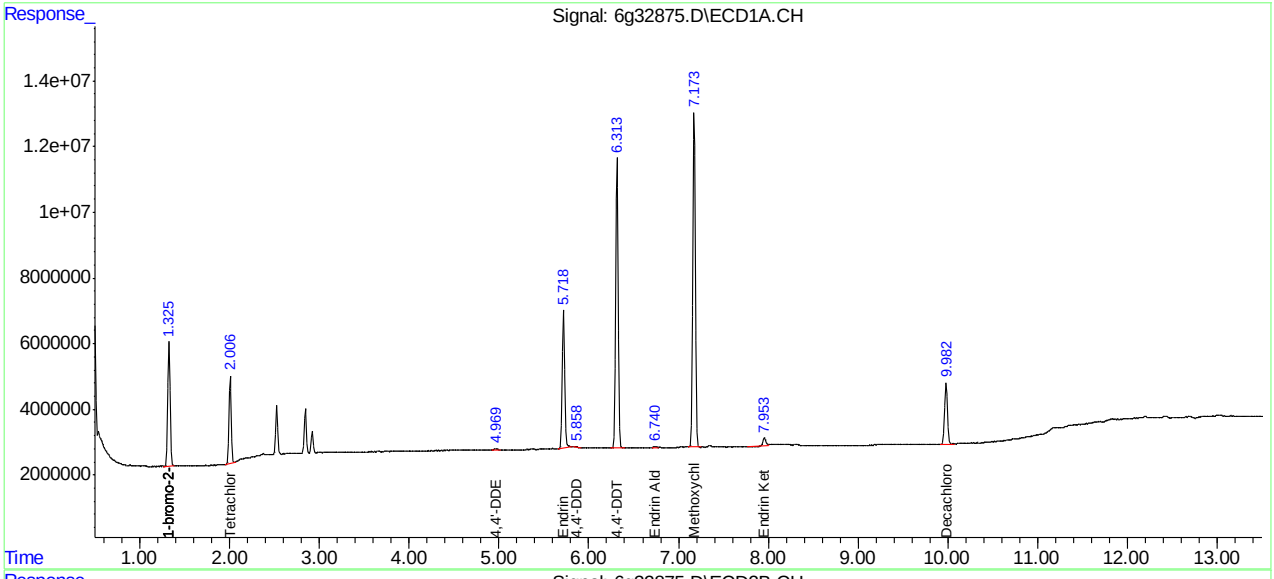
SGS ACCUTEST JC15518

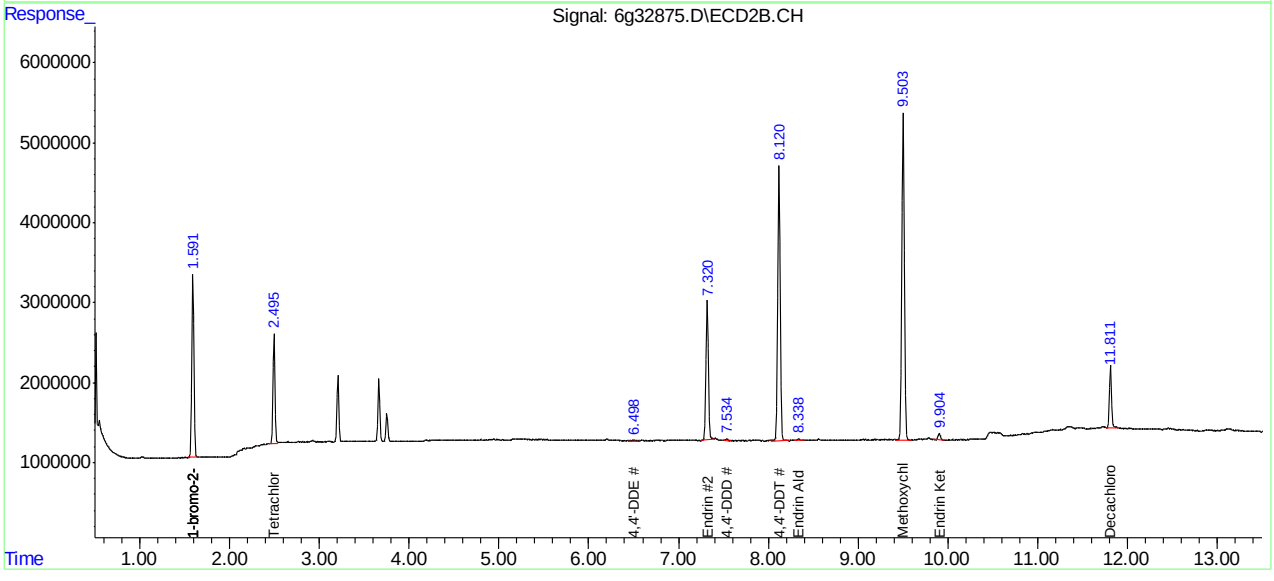
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:13:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G957-DDT	**Method:**	SW846 8081B
Lab FileID:	6G32875.D	**Analyst approved:**	03/15/16 16:16 Dhara Saparia
Injection Time:	03/15/16 11:35	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

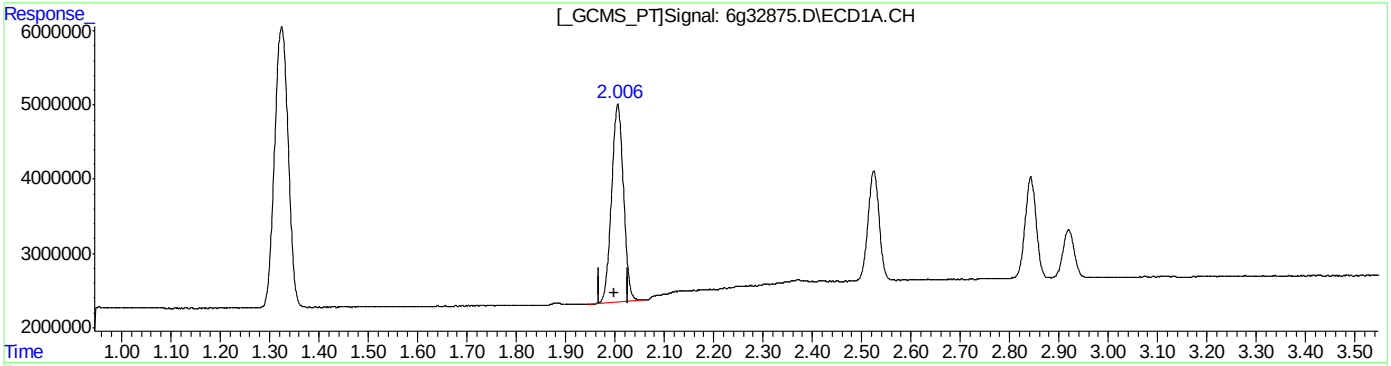
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	2.49	Poorly defined baseline
4,4'-DDE	72-55-9	1	4.97	Poorly defined baseline
4,4'-DDD	72-54-8	1	5.86	Poorly defined baseline
4,4'-DDE	72-55-9	2	6.50	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	6.74	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.53	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.34	Poorly defined baseline

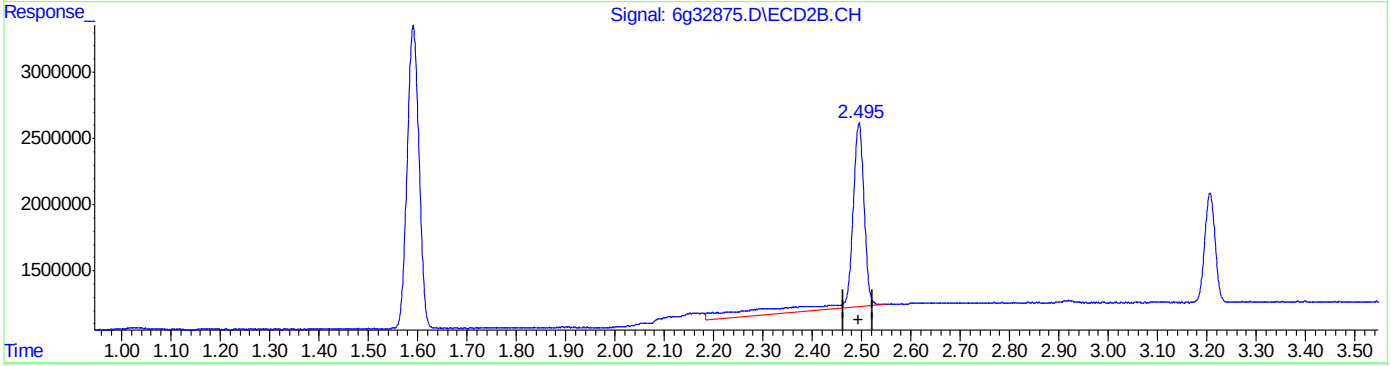
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
2.006min 22.418PPB
response 44946764

(2) Tetrachloro-m-xylene #2 (SAB)
2.495min 31.049PPB
response 27225673

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:12:25 2016

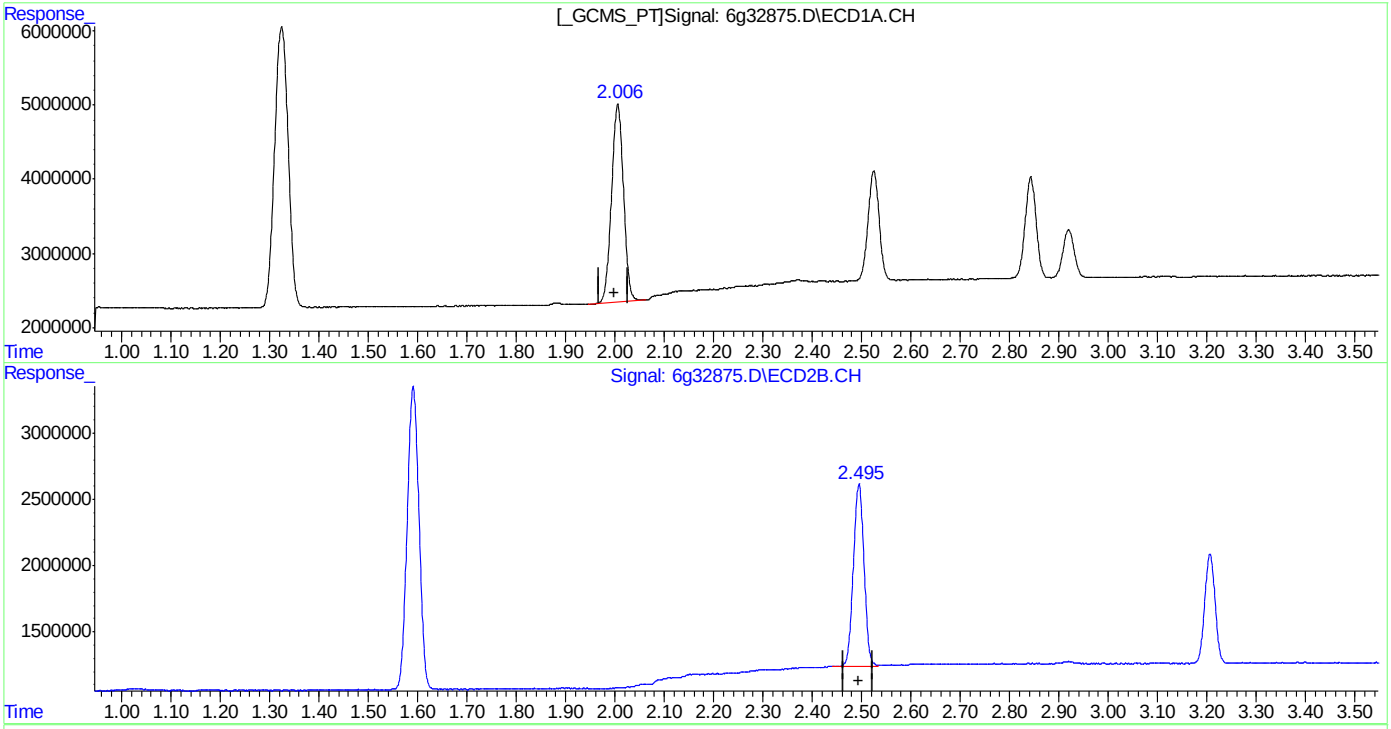
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016  11:35 am
Operator  : dharas
Sample    : ddt
Misc      : op91919,g6g957,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



(2) Tetrachloro-m-xylene (SAB)

2.006min 22.418PPB

response 44946764

(2) Tetrachloro-m-xylene #2 (SAB)

2.495min 23.700PPB m

response 20781755

(+) = Expected Retention Time

6PST957.M Tue Mar 15 16:12:29 2016

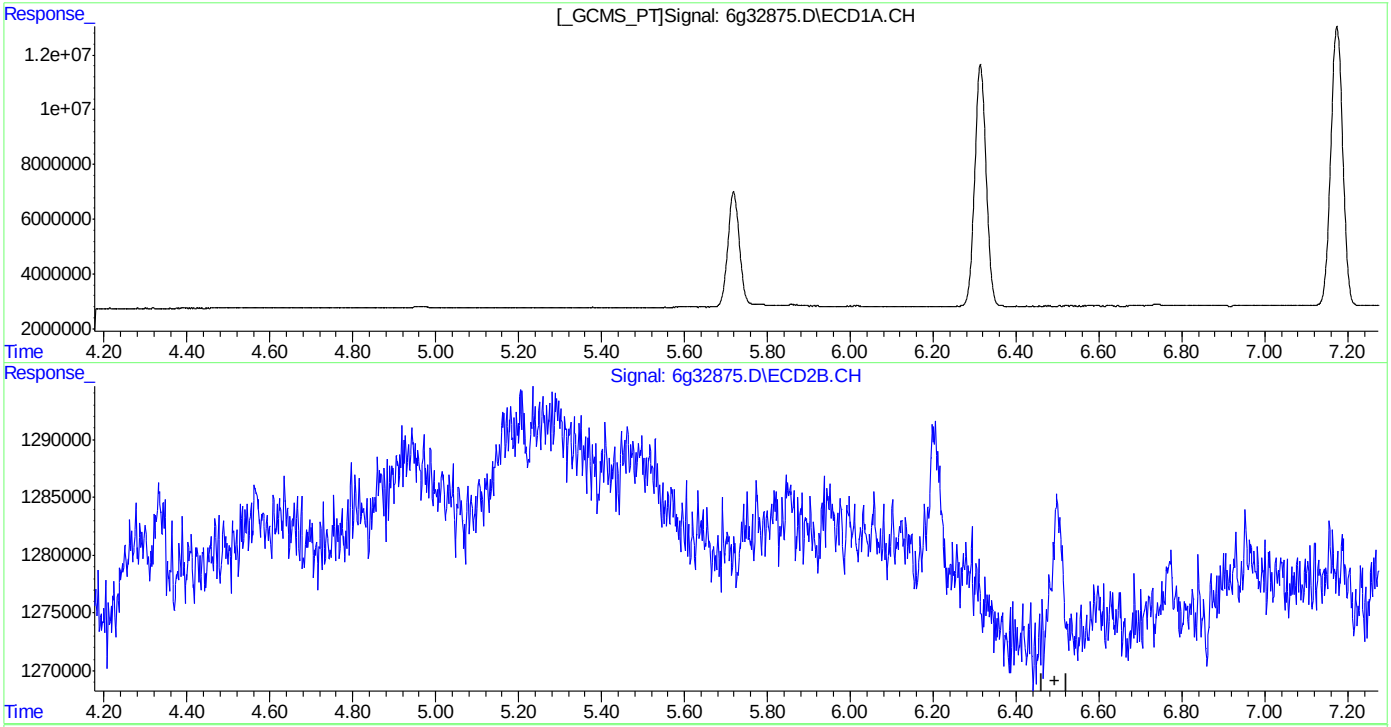
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:12:36 2016

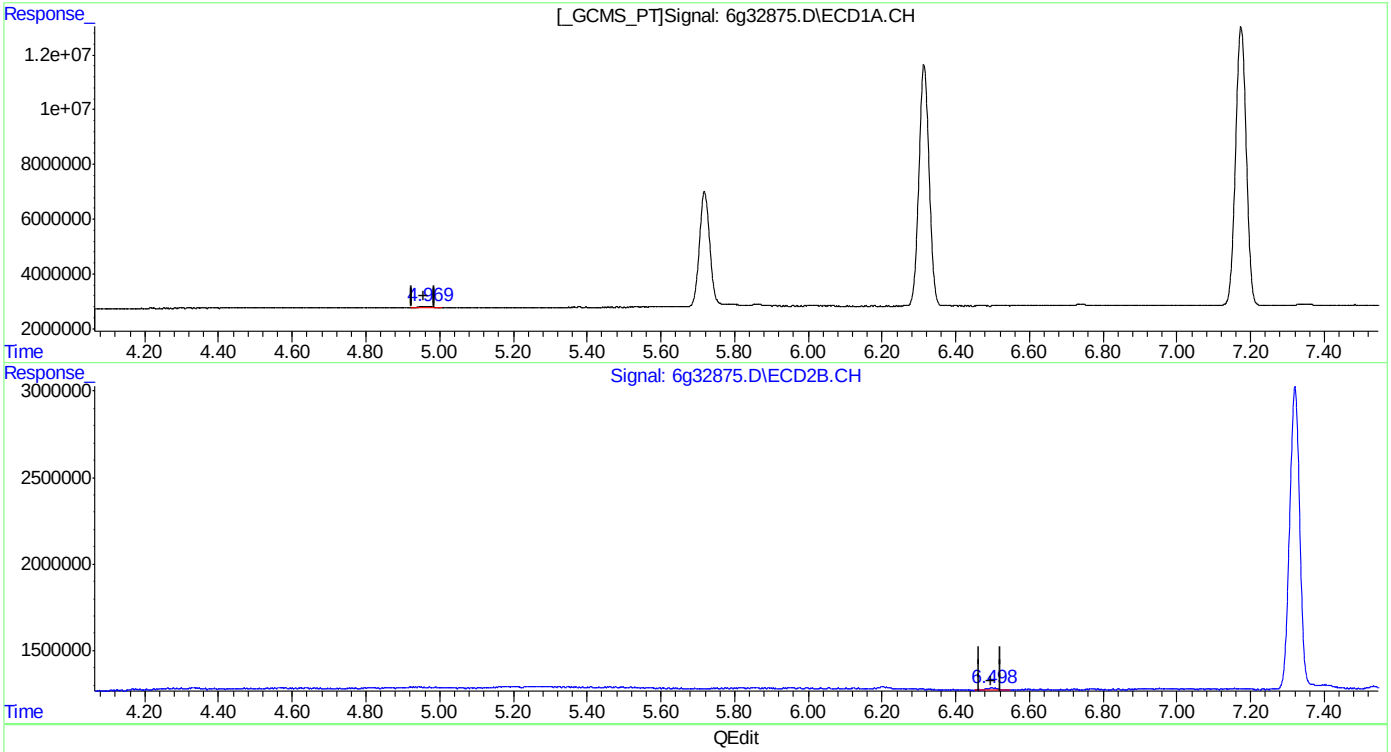
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.969min 0.616PPB m
response 1110515

(13) 4,4'-DDE #2 (B)
6.498min 0.289PPB m
response 221821

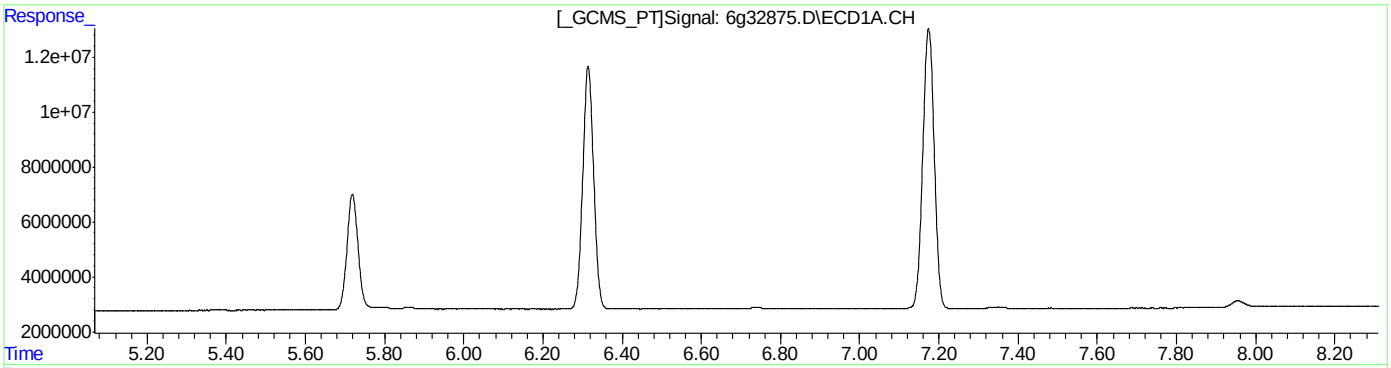
(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:12:47 2016

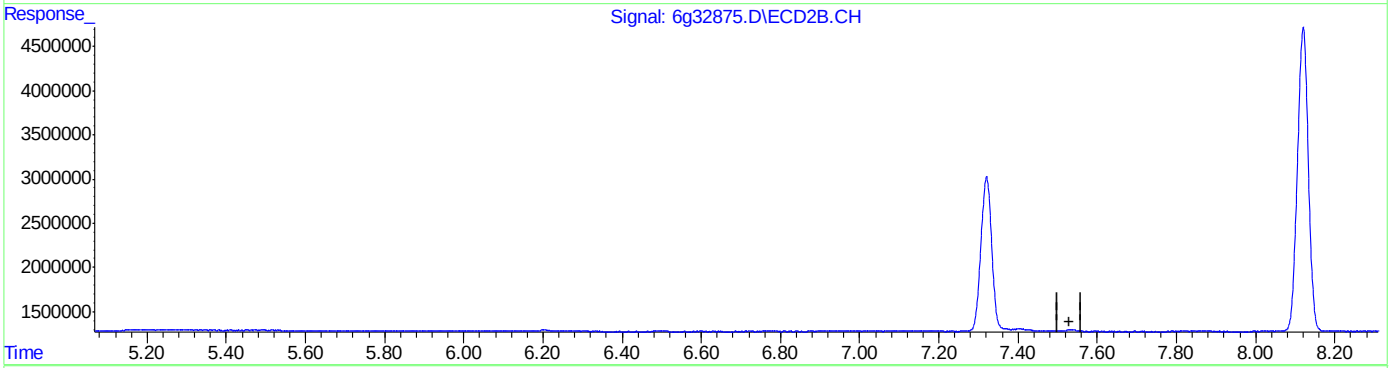
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

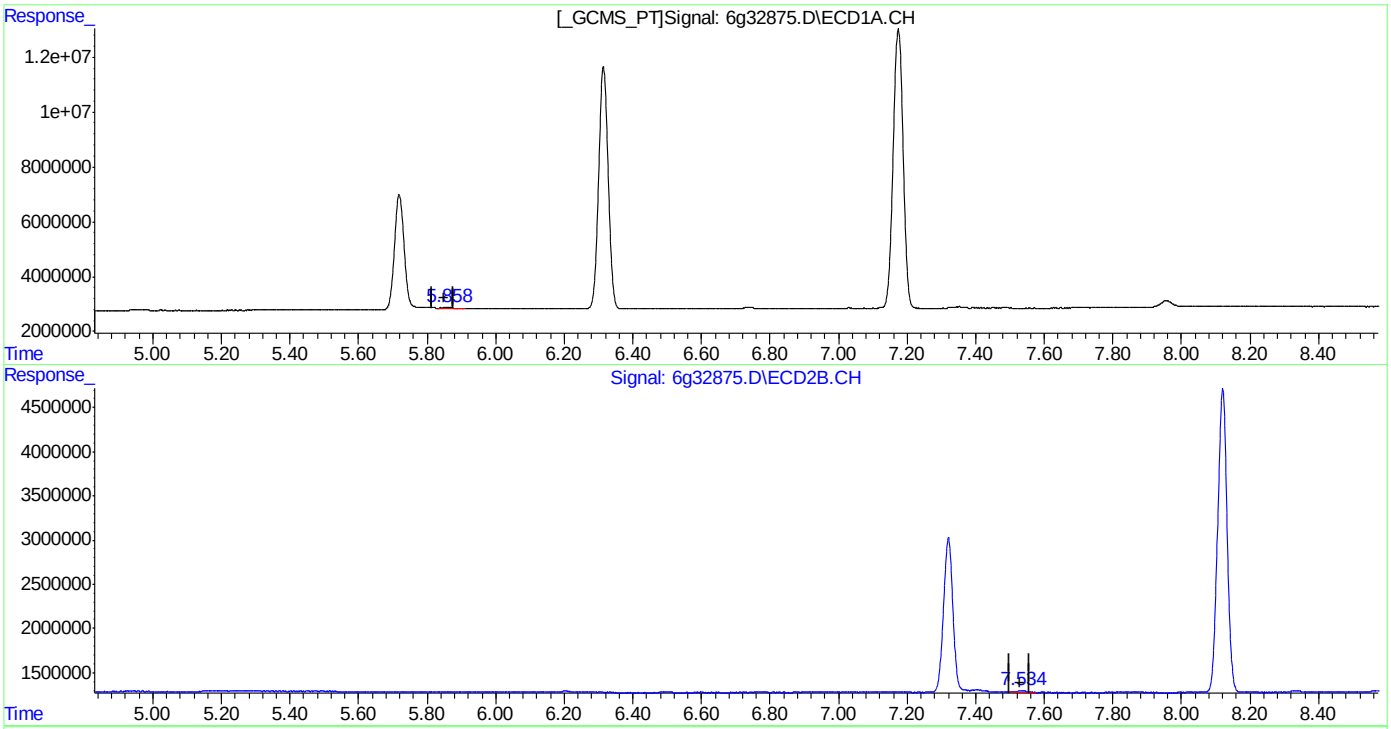
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
5.858min 0.563PPB m
response 736782

(16) 4,4'-DDD #2 (A)
7.534min 0.667PPB m
response 399675

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:13:03 2016

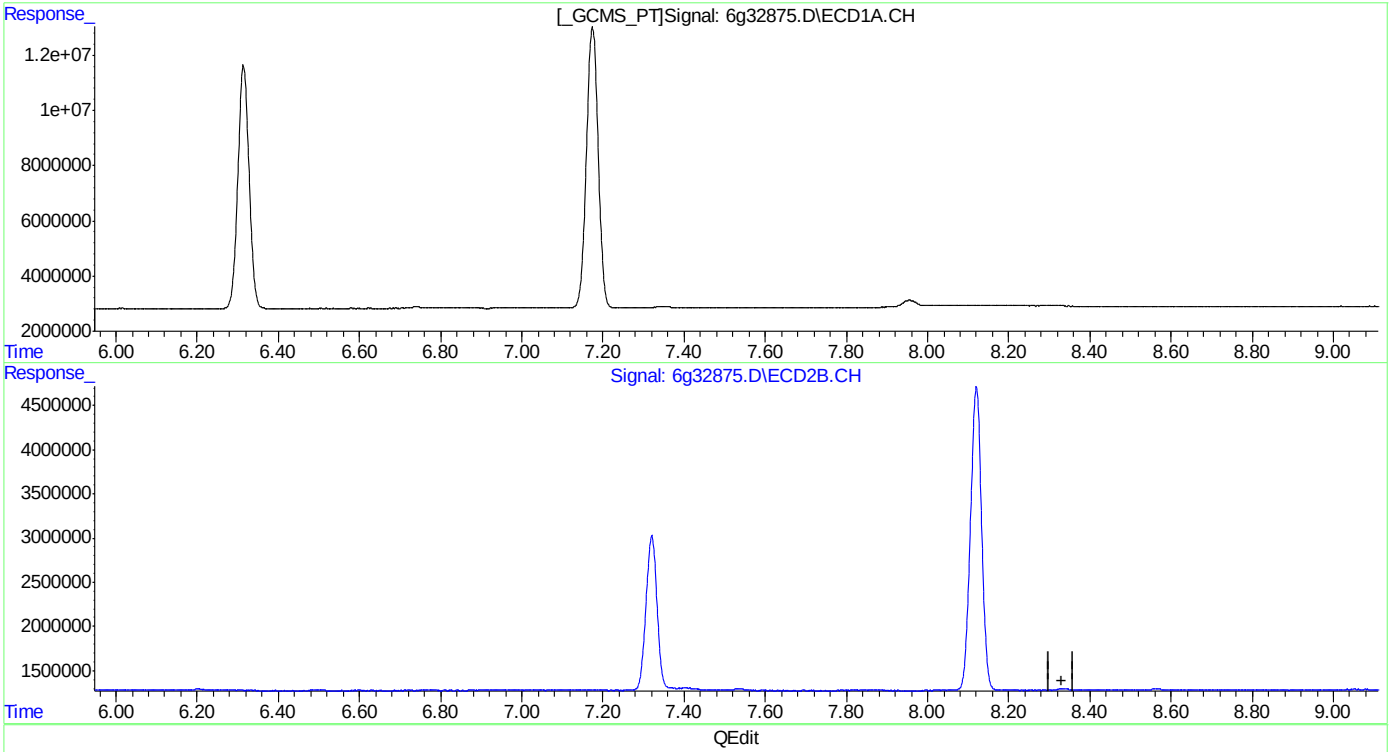
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

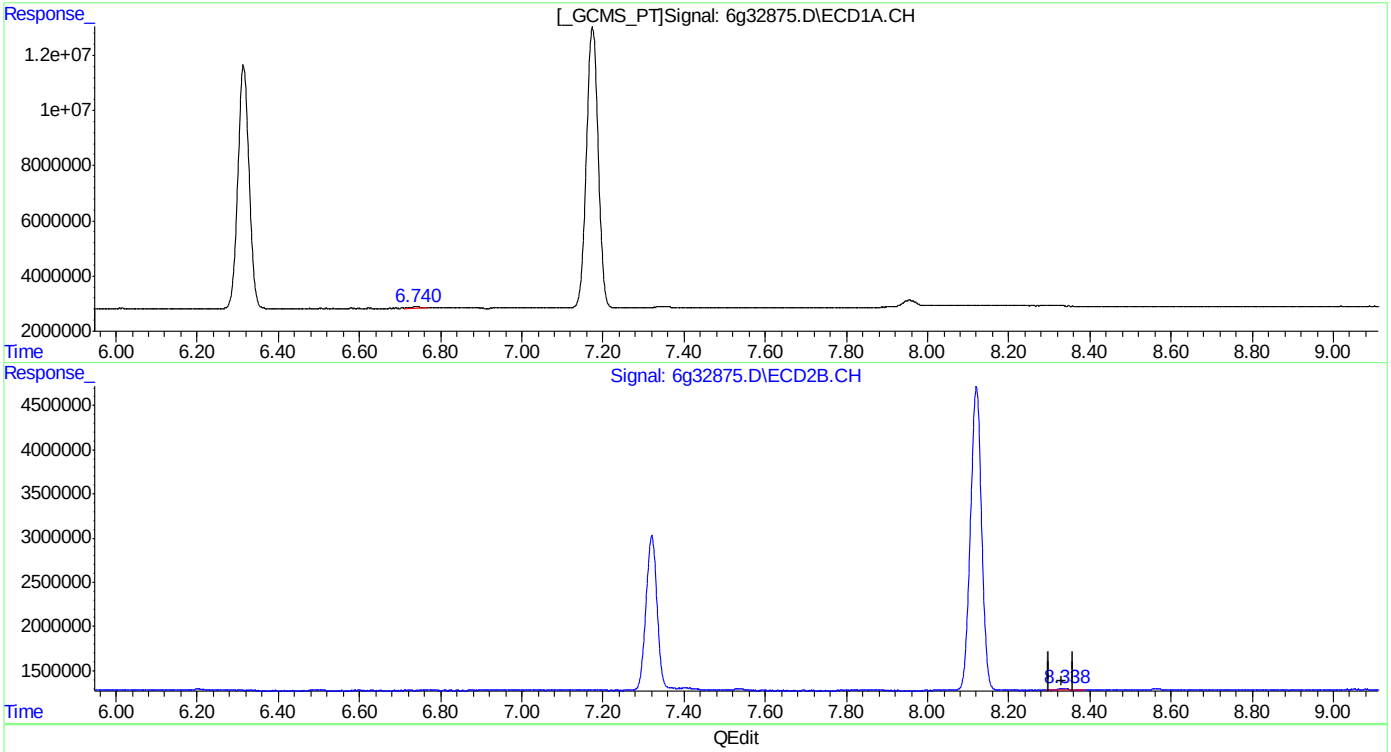
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32875.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 11:35 am
Operator : dharas
Sample : ddt
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:12:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
6.740min 0.687PPB m
response 886396

(19) Endrin Aldehyde #2 (B)
8.338min 0.828PPB m
response 421387

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:13:22 2016

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:49:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.063	2.231	254.2E6	228.6E6	50.000	50.000
25) I	1-bromo-2...	2.063	2.231	254.2E6	228.6E6	50.000	50.000
31) I	1-bromo-2...	2.063	2.231	254.2E6	228.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.614	3.014	4622289	4384180	0.994m	1.015
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 2.48%#	2.54%#
24) SA	Decachlor...	9.839	11.254	4761754	3767119	0.935	1.069
	Spiked Amount	40.000			Recovery	= 2.34%	2.67%
	Target Compounds						
3) A	alpha-BHC	3.058	3.659	5798842	5382101	0.890	0.918
4) MA	gamma-BHC	3.343	4.084	5764384	4616281	0.975m	0.860
5) MA	Heptachlor	3.620	4.664	4170673	4852888	0.768	0.912
6) B	beta-BHC	3.431	4.166	3304159	2560766	1.168m	1.039
7) B	delta-BHC	3.833	4.562	3910379	4515424	0.675	0.865 #
8) MB	Aldrin	4.168	5.122	6430604	5149600	1.113	1.002
9) B	Heptachlo...	4.872	5.942	4843673	4487387	0.864	0.940m
10) B	gamma-Chl...	5.041	6.229	4371044	4634810	0.800	0.954
11) B	alpha-Chl...	5.211	6.455	5942322	4606441	1.088	0.944
12) A	Endosulfan I	5.391	6.558	4787897	4668652	0.872	1.016
13) B	4,4'-DDE	5.328	6.705	3907978	4318427	0.766	0.935
14) MA	Dieldrin	5.713	6.992	4686098	4418755	0.809	0.902
15) MA	Endrin	6.040	7.503	4187691	4056499	0.780	0.845
16) A	4,4'-DDD	6.180	7.662	3339739	3787492	0.739	0.955 #
17) B	Endosulfa...	6.367	7.858	4046460	4079655	0.793	0.925
18) MA	4,4'-DDT	6.583	8.197	1273321	2041488	0.394m	0.582m#
19) B	Endrin Al...	6.985	8.428	3164726	3736818	0.816	1.096 #
20) B	Endosulfa...	7.666	8.898	3511448	3725375	0.792	0.980
21) A	Methoxychlor	7.376	9.425	1171363	1731453	0.561m	0.807m#
22)	Mirex	7.555	9.745	3627687	3666129	0.871	1.012m
23) B	Endrin Ke...	8.119	9.794	3370012	3970878	0.744	0.837

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

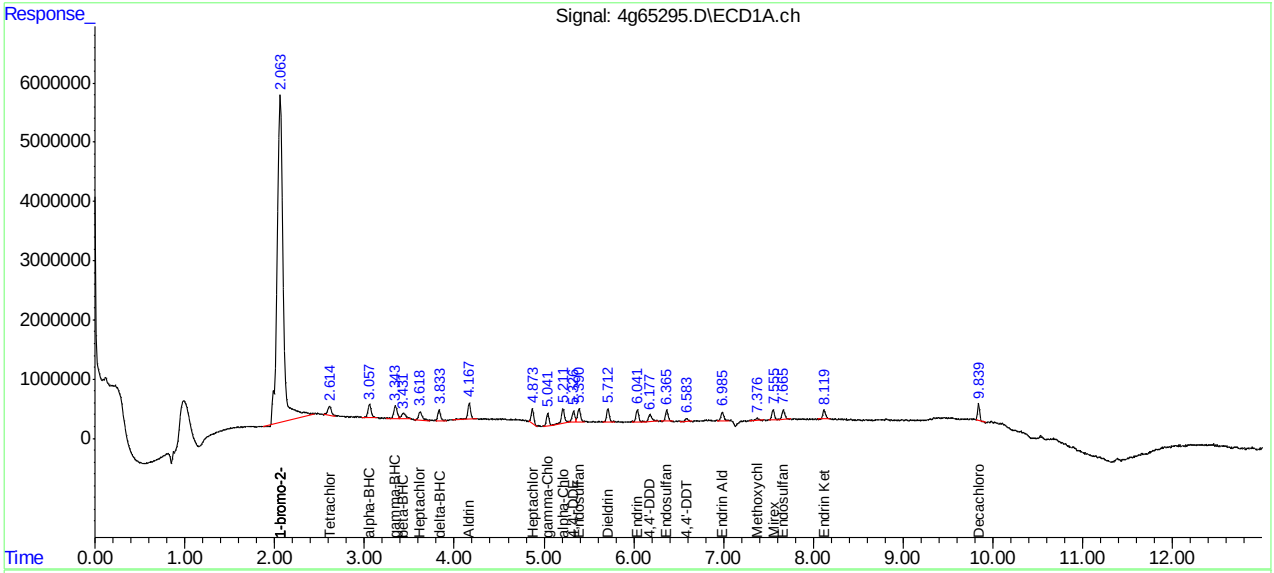
SGS ACCUTEST JC15518

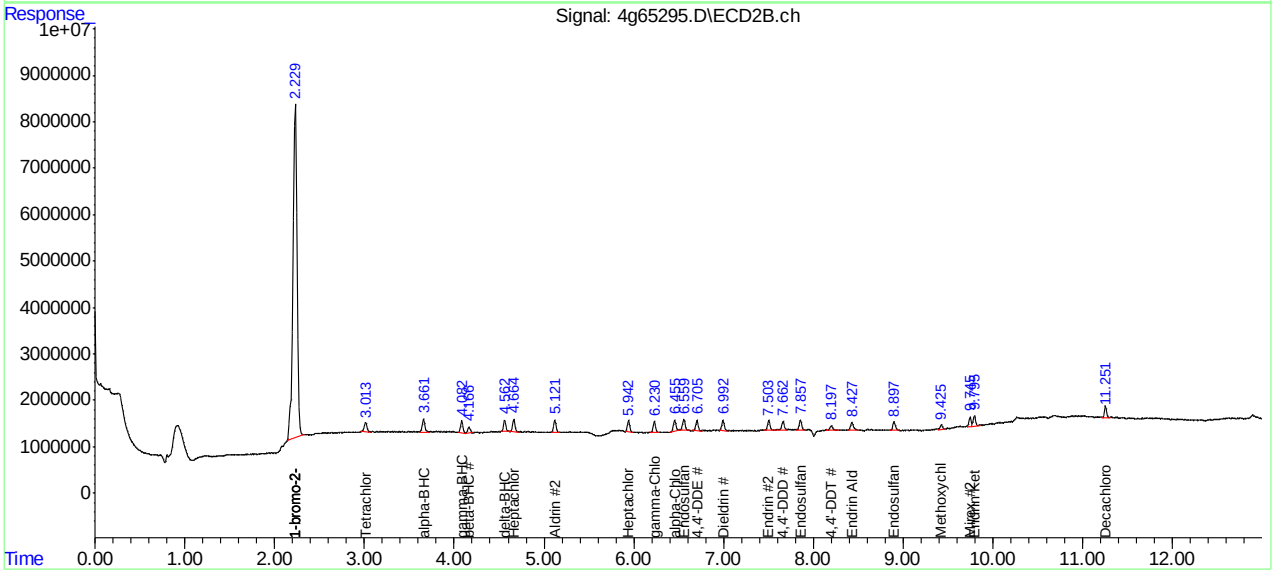
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:49:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65295.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 16:31	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

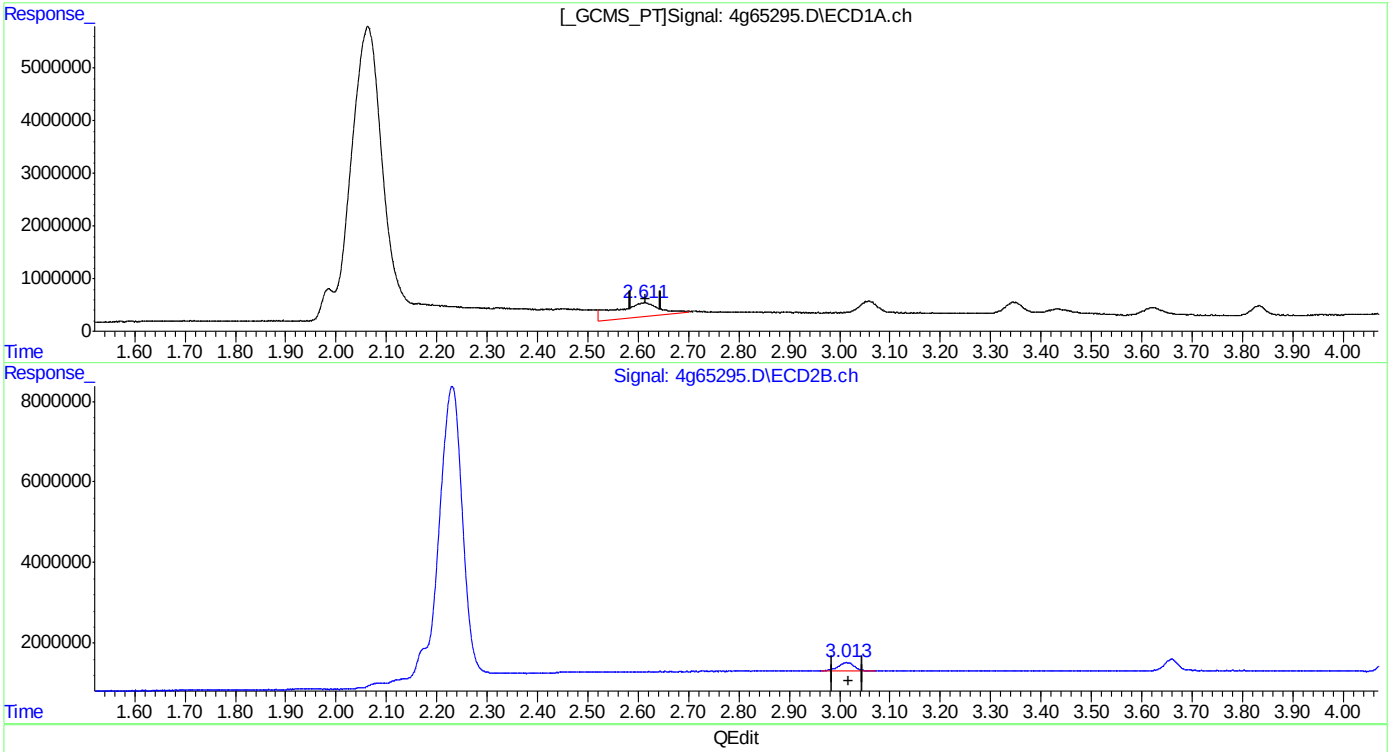
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.61	Poorly defined baseline
gamma-BHC (Lindane)	58-89-9	1	3.34	Poorly defined baseline
beta-BHC	319-85-7	1	3.43	Poorly defined baseline
Heptachlor epoxide	1024-57-3	2	5.94	Poorly defined baseline
4,4'-DDT	50-29-3	1	6.58	Poorly defined baseline
Methoxychlor	72-43-5	1	7.38	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.20	Poorly defined baseline
Methoxychlor	72-43-5	2	9.42	Poorly defined baseline
Mirex	2385-85-5	2	9.75	Poorly defined baseline

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(2) Tetrachloro-m-xylene (SAB)

2.613min 3.078 PPB

response 14308528

(2) Tetrachloro-m-xylene #2 (SAB)

3.014min 1.015 PPB

response 4384180

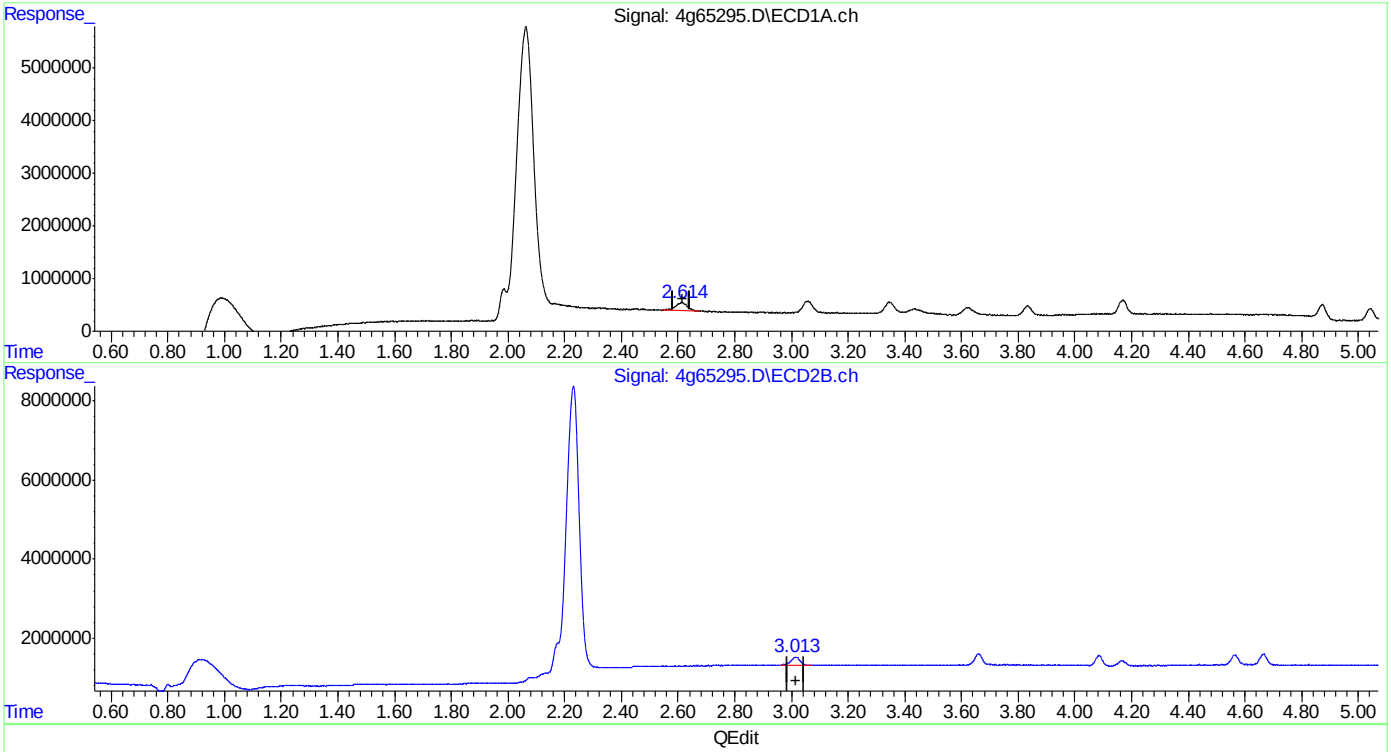
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(2) Tetrachloro-m-xylene (SAB)

2.614min 0.994 PPB m

response 4622289

(2) Tetrachloro-m-xylene #2 (SAB)

3.014min 1.015 PPB

response 4384180

(+) = Expected Retention Time

4PST1719.M Fri Feb 26 08:47:44 2016 RPT1

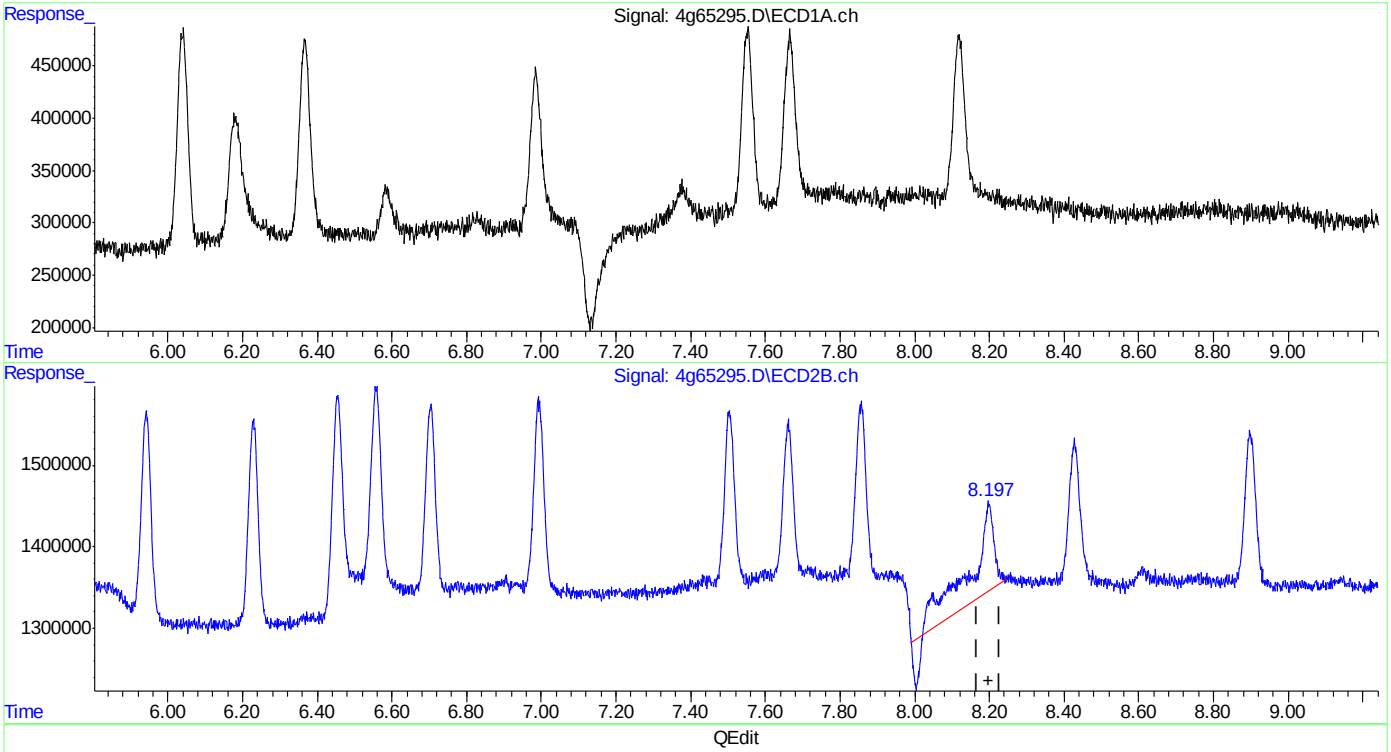
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(18) 4,4'-DDT (MA)
0.000min 0.000 PPB
response 0

(18) 4,4'-DDT #2 (MA)
8.197min 1.277 PPB
response 4480015

(+) = Expected Retention Time

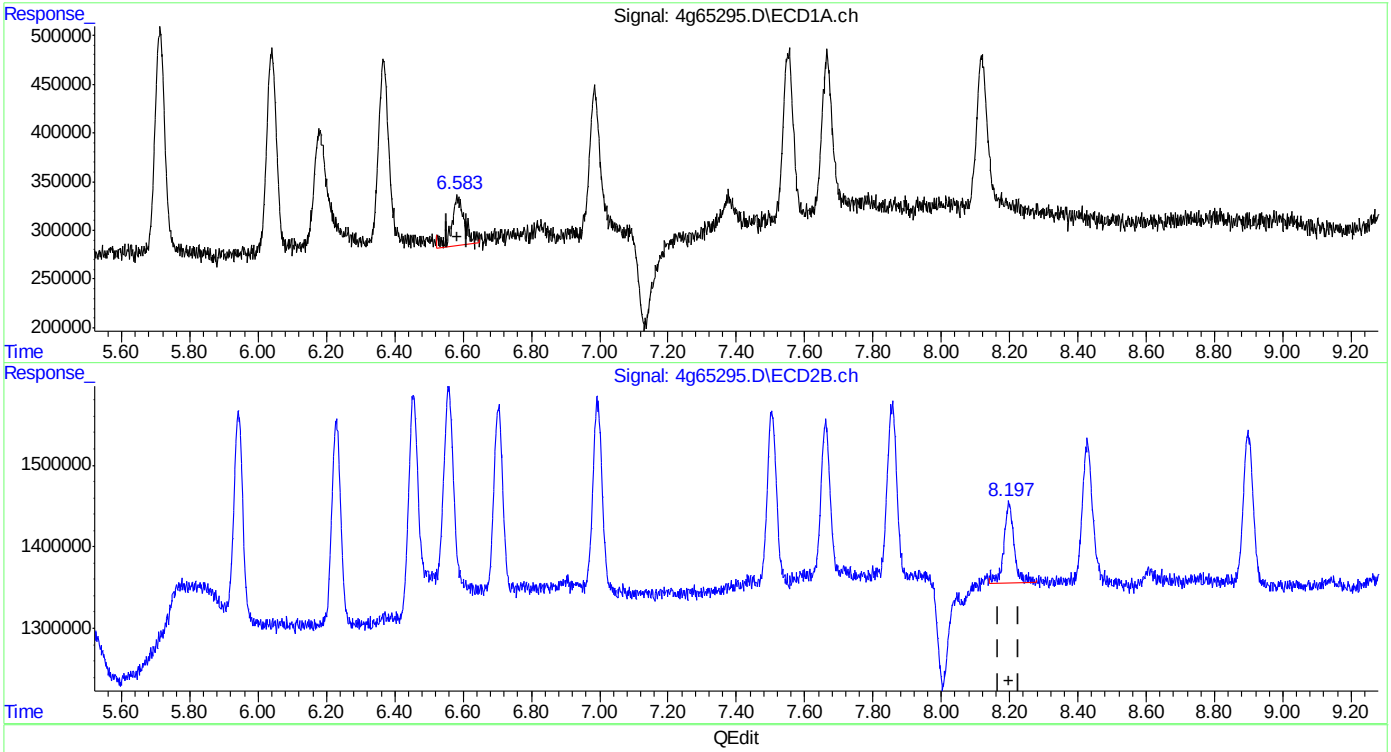
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.583min 0.394 PPB m
response 1273321

(18) 4,4'-DDT #2 (MA)
8.197min 0.582 PPB m
response 2041488

(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:48:17 2016 RPT1

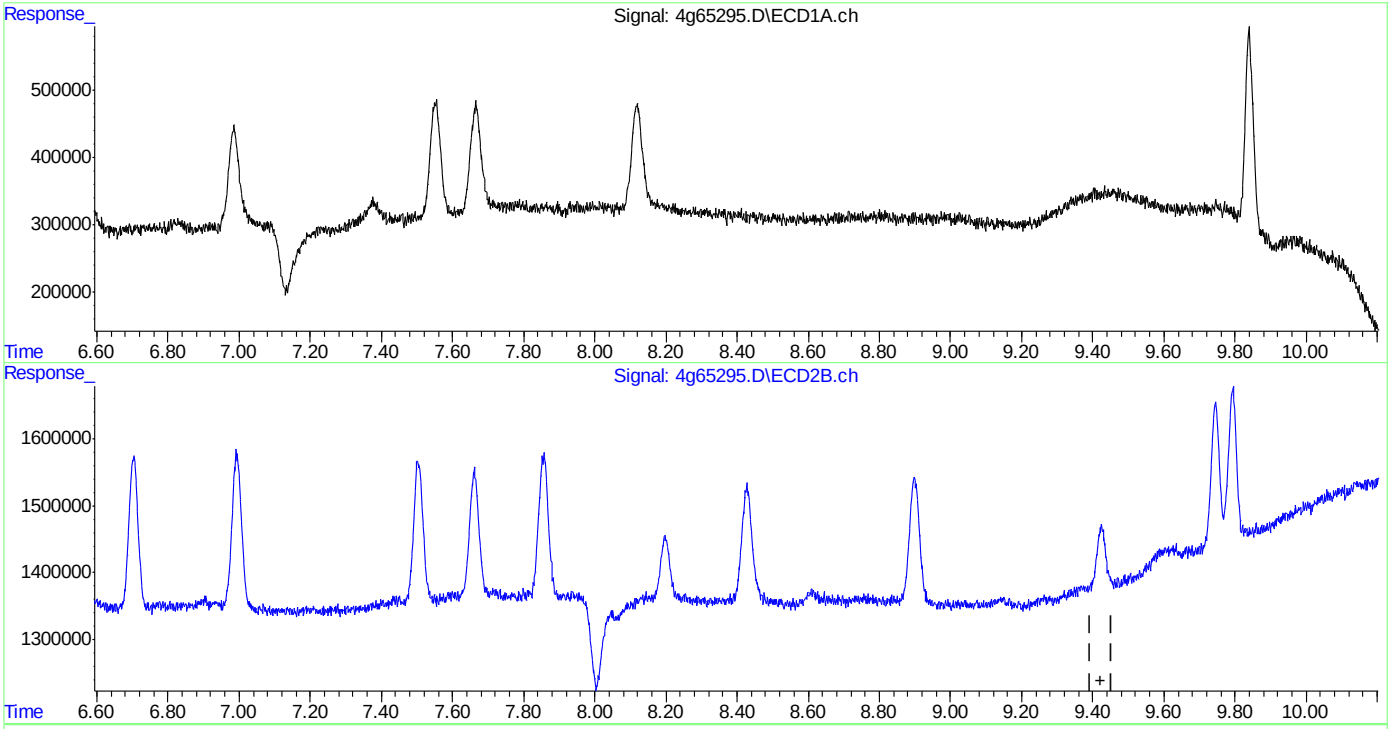
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
0.000min 0.000 PPB
response 0

(21) Methoxychlor #2 (A)
0.000min 0.000 PPB
response 0

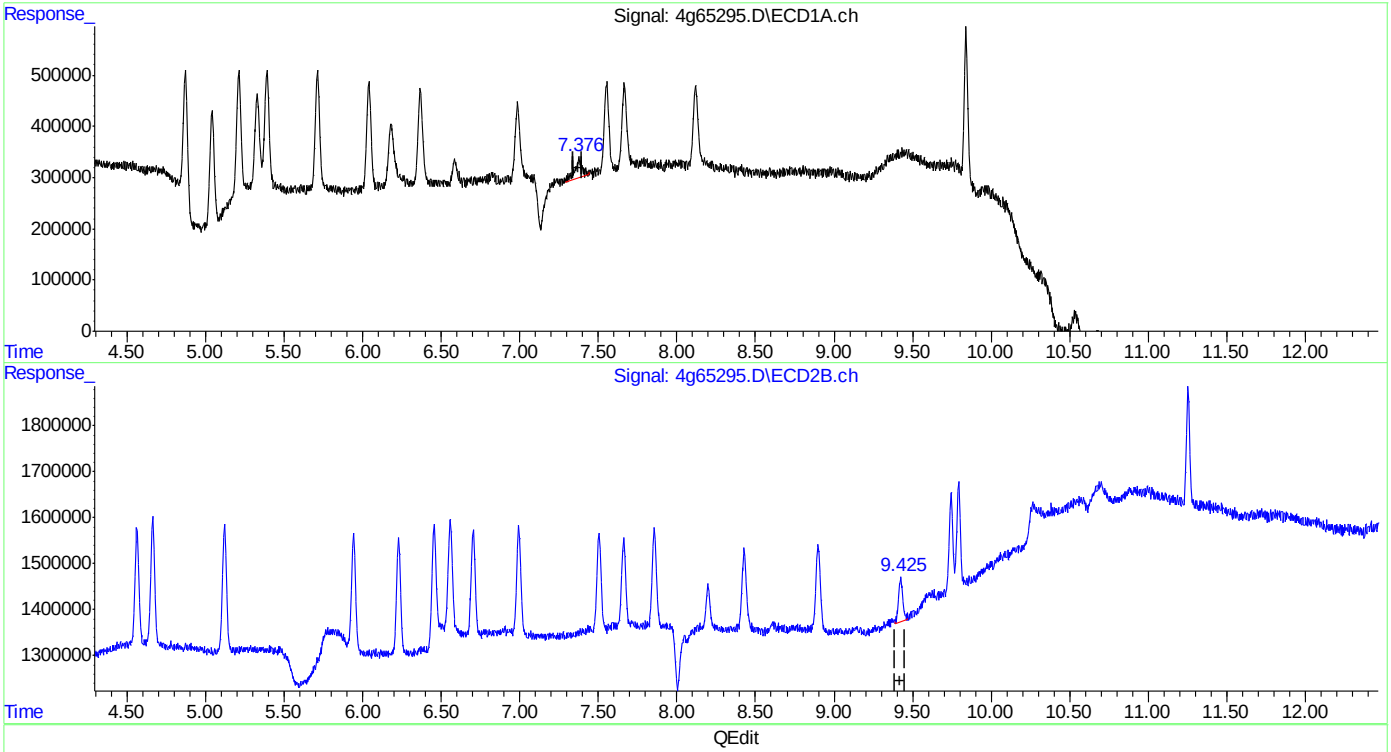
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(21) Methoxychlor (A)
7.376min 0.561 PPB m
response 1171363

(21) Methoxychlor #2 (A)
9.425min 0.807 PPB m
response 1731453

(+) = Expected Retention Time

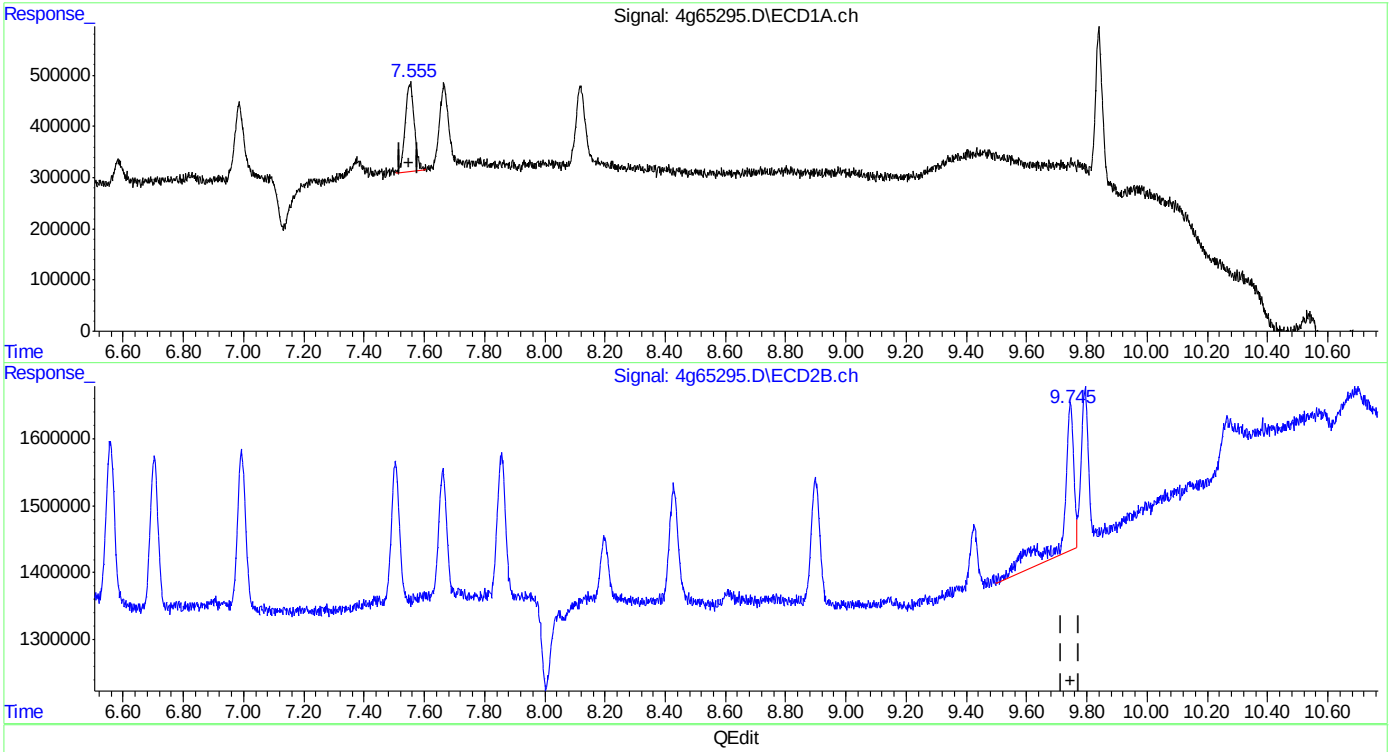
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(22) Mirex
7.555min 0.871 PPB
response 3627687

(22) Mirex #2
9.745min 1.537 PPB
response 5571947

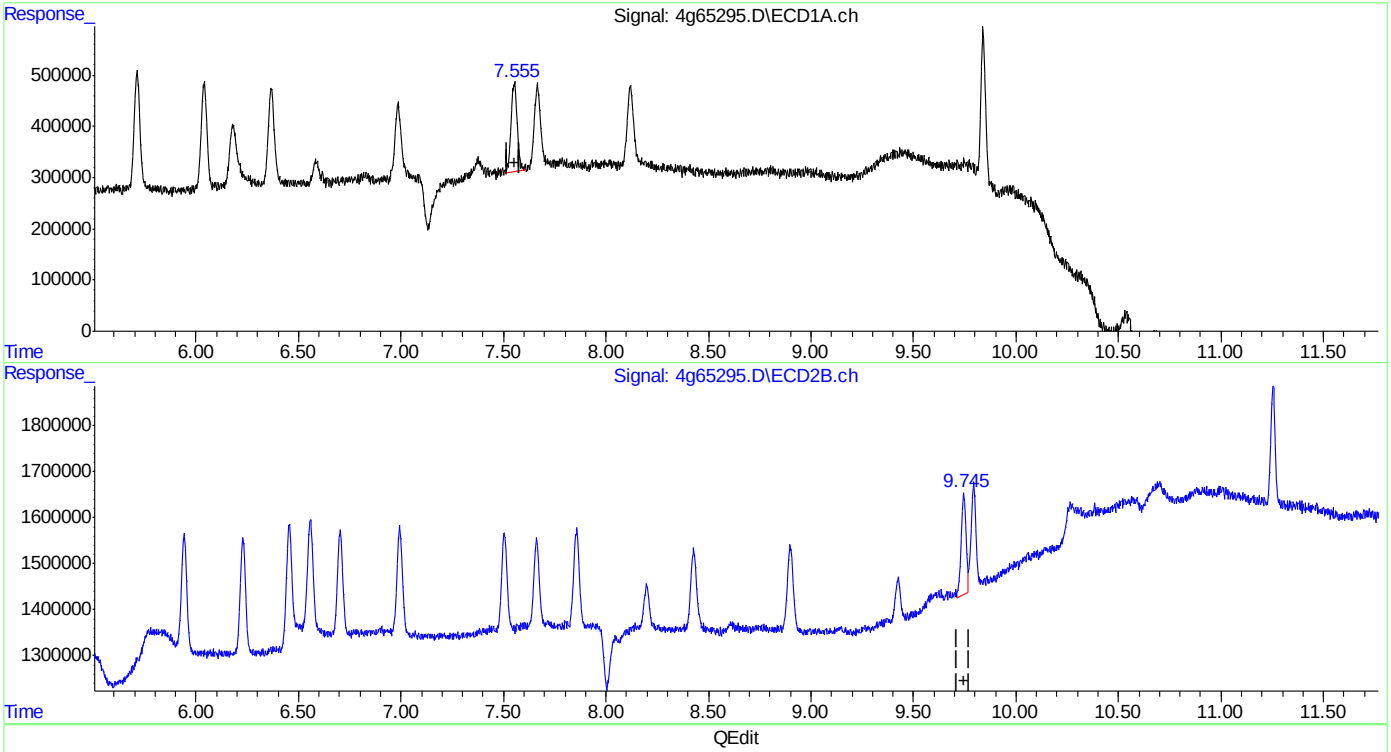
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(22) Mirex
7.555min 0.871 PPB
response 3627687

(22) Mirex #2
9.745min 1.012 PPB m
response 3666129

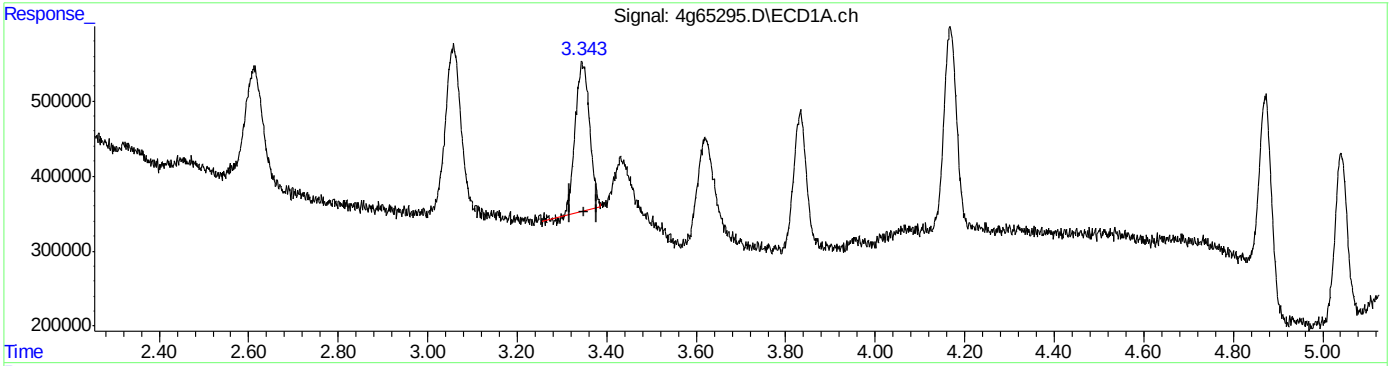
(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:48:50 2016 RPT1

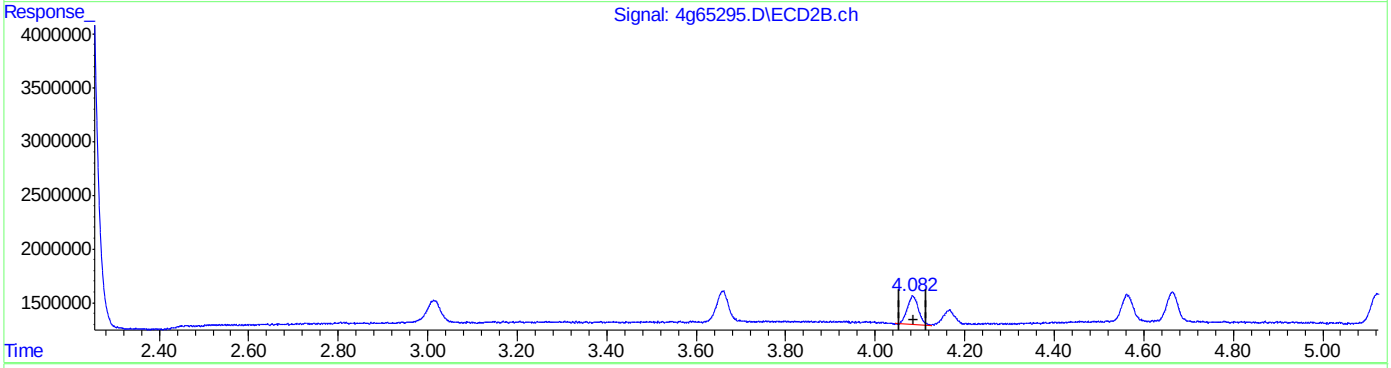
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(4) gamma-BHC (MA)
3.344min 0.738 PPB
response 4360083

(4) gamma-BHC #2 (MA)
4.084min 0.860 PPB
response 4616281

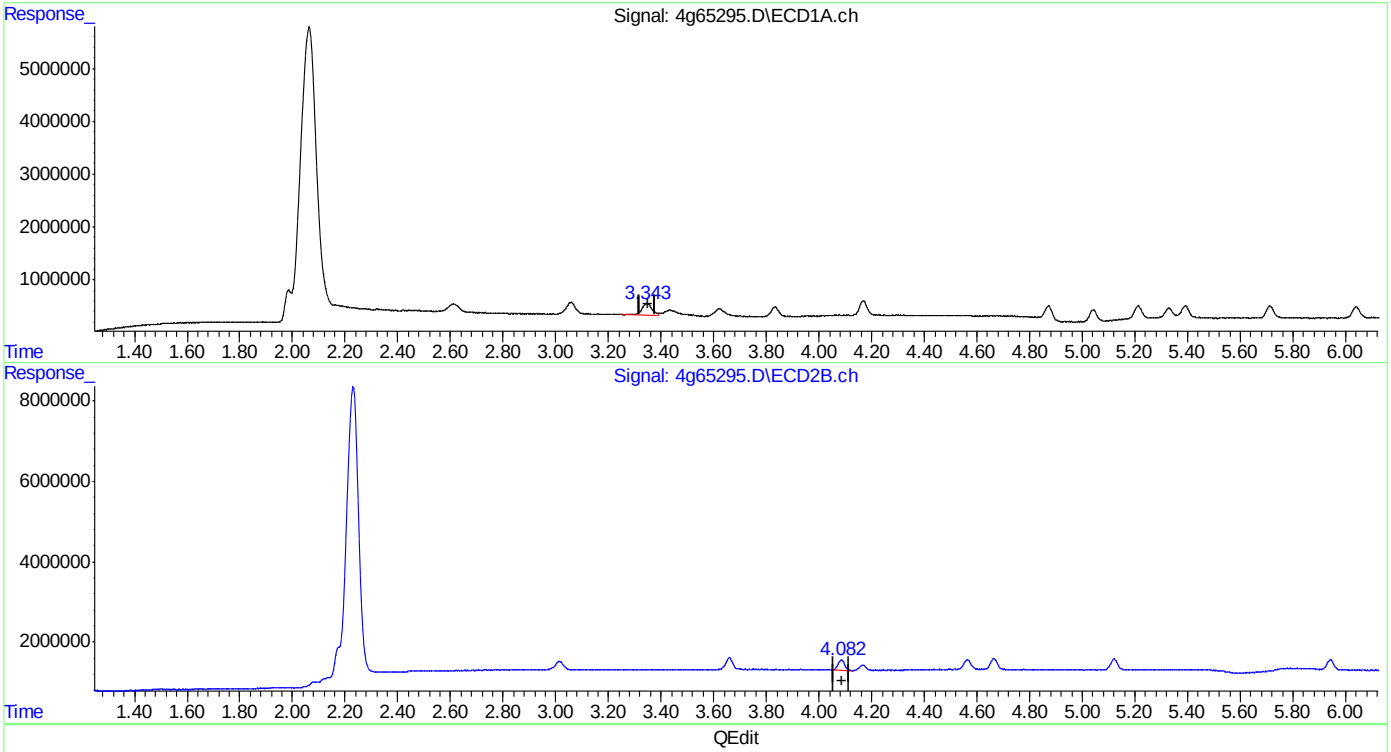
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(4) gamma-BHC (MA)
3.343min 0.975 PPB m
response 5764384

(4) gamma-BHC #2 (MA)
4.084min 0.860 PPB
response 4616281

(+) = Expected Retention Time

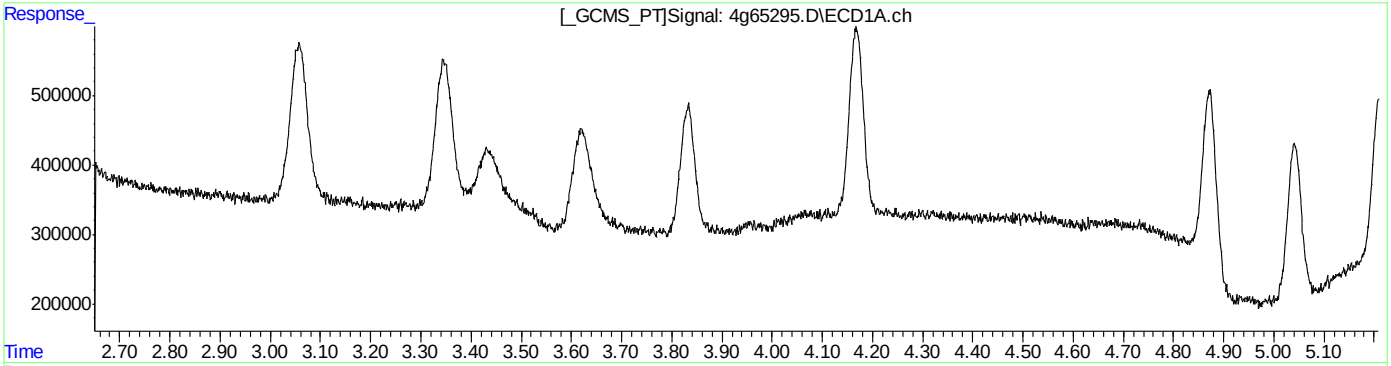
SGS ACCUTEST JC15518

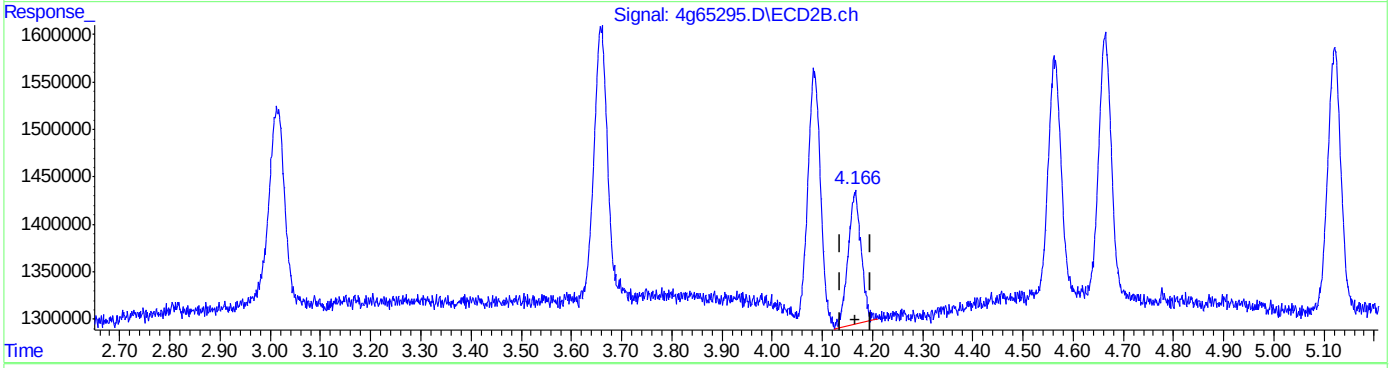
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(6) beta-BHC (B)
0.000min 0.000 PPB
response 0

(6) beta-BHC #2 (B)
4.166min 1.039 PPB
response 2560766

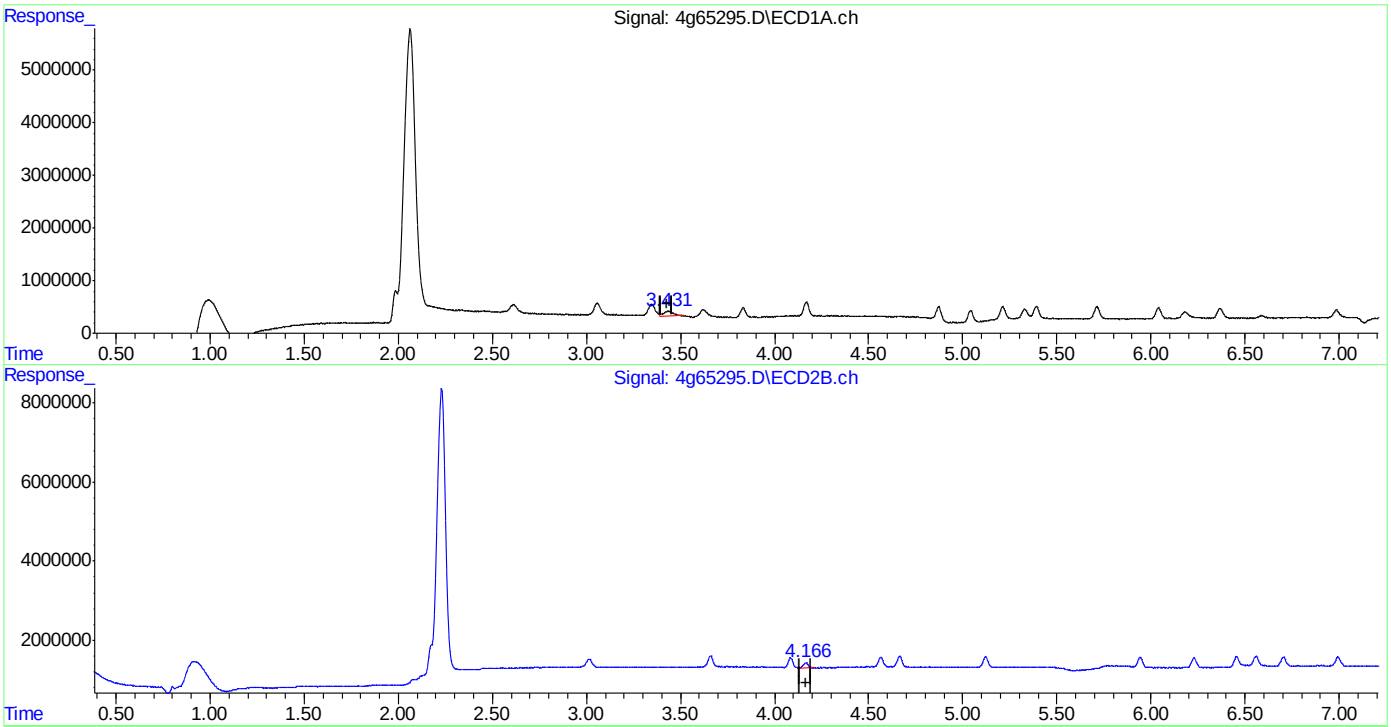
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:31 pm
Operator  : yvelandd
Sample    : ic1719-1
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(6) beta-BHC (B)

3.431min 1.168 PPB m

response 3304159

(6) beta-BHC #2 (B)

4.166min 1.039 PPB

response 2560766

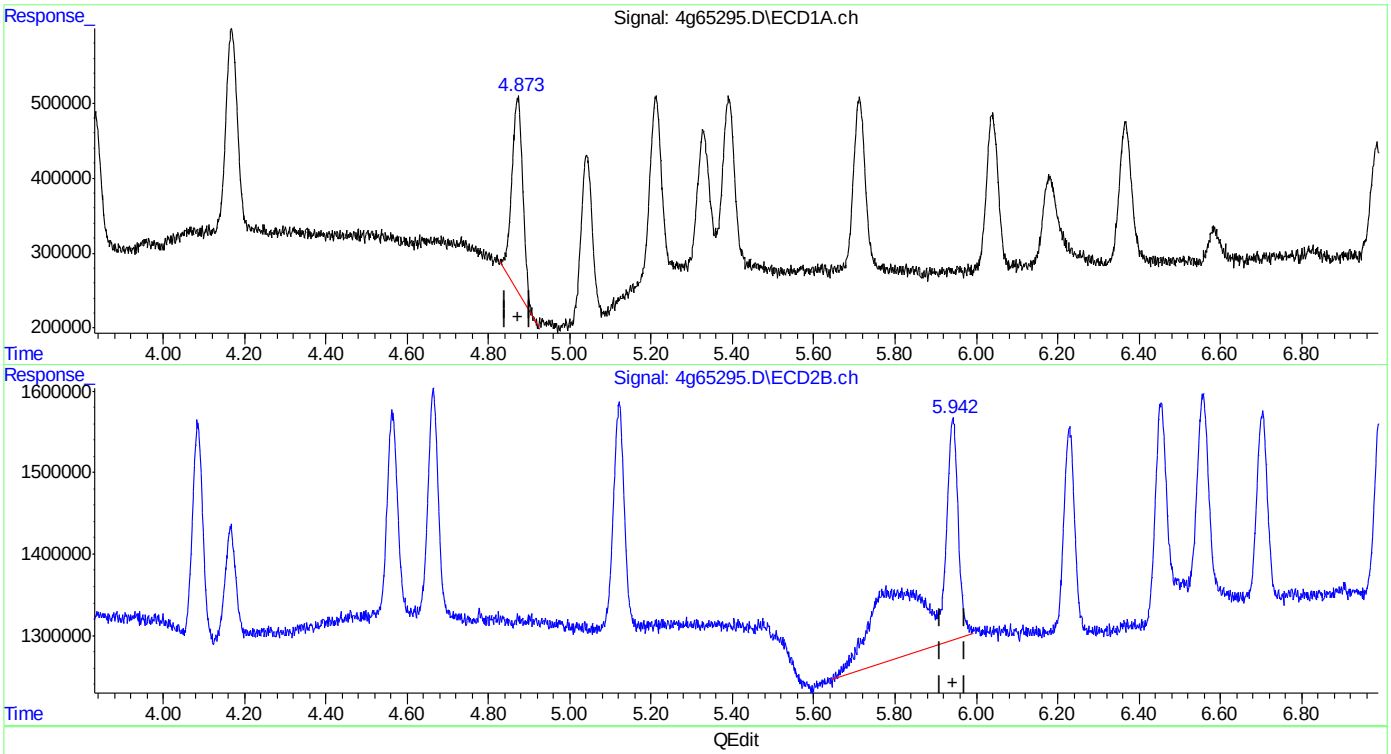
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(9) Heptachlor Epoxide (B)
4.872min 0.864 PPB
response 4843673

(9) Heptachlor Epoxide #2 (B)
5.942min 2.811 PPB
response 13412714

(+) = Expected Retention Time

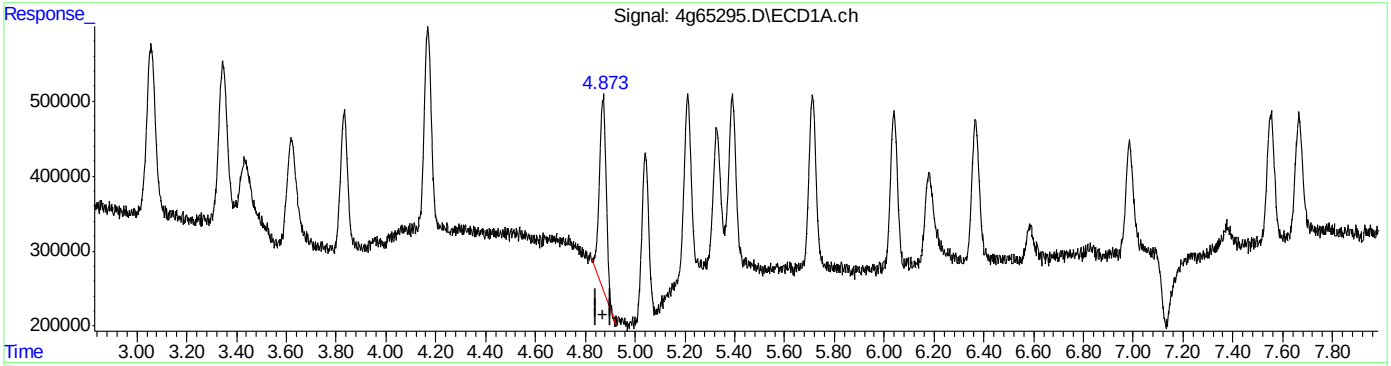
SGS ACCUTEST JC15518

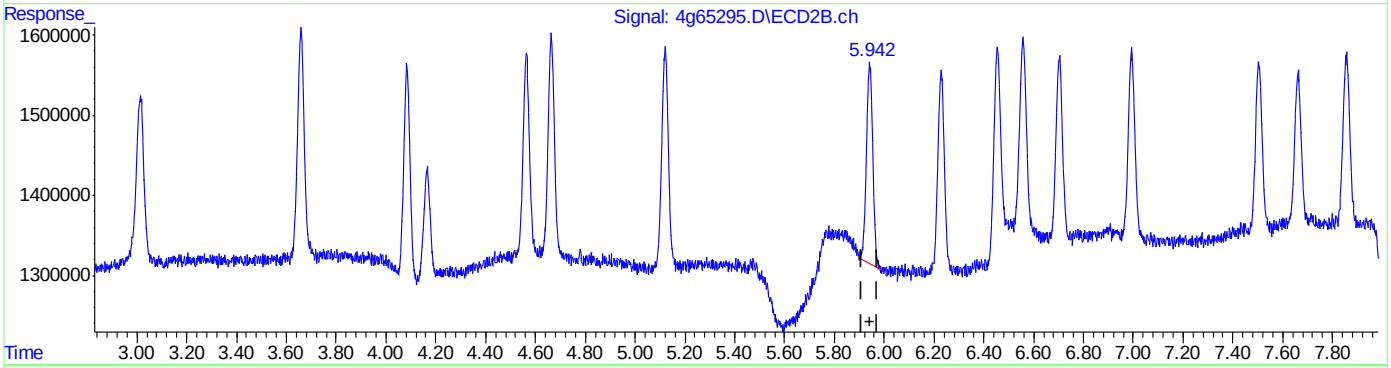
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65295.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:31 pm
Operator : yvelandd
Sample : ic1719-1
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:47:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(9) Heptachlor Epoxide (B)
4.872min 0.864 PPB
response 4843673

(9) Heptachlor Epoxide #2 (B)
5.942min 0.940 PPB m
response 4487387

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:45 pm
Operator : yvelandd
Sample : ic1719-2
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:46:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.081	2.245	263.9E6	235.8E6	50.000	50.000
25) I	1-bromo-2...	2.081	2.245	263.9E6	235.8E6	50.000	50.000
31) I	1-bromo-2...	2.081	2.245	263.9E6	235.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.625	3.023	9721518	9348931	2.015	2.100
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 5.04%#	5.25%#
24) SA	Decachlor...	9.839	11.252	9933783	7684709	1.880	2.116
	Spiked Amount	40.000			Recovery	= 4.70%	5.29%
	Target Compounds						
3) A	alpha-BHC	3.065	3.664	12268552	10981791	1.814	1.816
4) MA	gamma-BHC	3.353	4.089	11157169	9635001	1.818	1.741
5) MA	Heptachlor	3.628	4.667	9492456	9963125	1.685	1.817
6) B	beta-BHC	3.440	4.168	7262057	5069567	2.473	1.994
7) B	delta-BHC	3.837	4.567	7610465	9050587	1.266	1.681 #
8) MB	Aldrin	4.172	5.123	12022941	10792979	2.006	2.037
9) B	Heptachlo...	4.875	5.944	10816216	9661089	1.859	1.964
10) B	gamma-Chl...	5.045	6.230	9143443	10153062	1.613	2.027 #
11) B	alpha-Chl...	5.214	6.456	12435720	10505301	2.194	2.087
12) A	Endosulfan I	5.394	6.559	11097223	10454793	1.947	2.206
13) B	4,4'-DDE	5.332	6.704	8985263	8896898	1.698	1.868
14) MA	Dieldrin	5.715	6.996	9707209	9202670	1.614	1.822
15) MA	Endrin	6.041	7.505	8744941	8777622	1.569	1.773
16) A	4,4'-DDD	6.183	7.661	7074407	7742350	1.509	1.894 #
17) B	Endosulfa...	6.370	7.856	8419369	8570486	1.590	1.884
18) MA	4,4'-DDT	6.587	8.198	2452108	5015614	0.732m	1.387m#
19) B	Endrin Al...	6.986	8.427	6982327	7778026	1.734	2.212 #
20) B	Endosulfa...	7.666	8.900	7144272	7820207	1.553	1.994 #
21) A	Methoxychlor	7.379	9.422	1991998	3565271	0.919m	1.611m#
22)	Mirex	7.554	9.745	7264498	7686561	1.681	2.057
23) B	Endrin Ke...	8.120	9.793	7305084	7752750	1.554	1.585

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

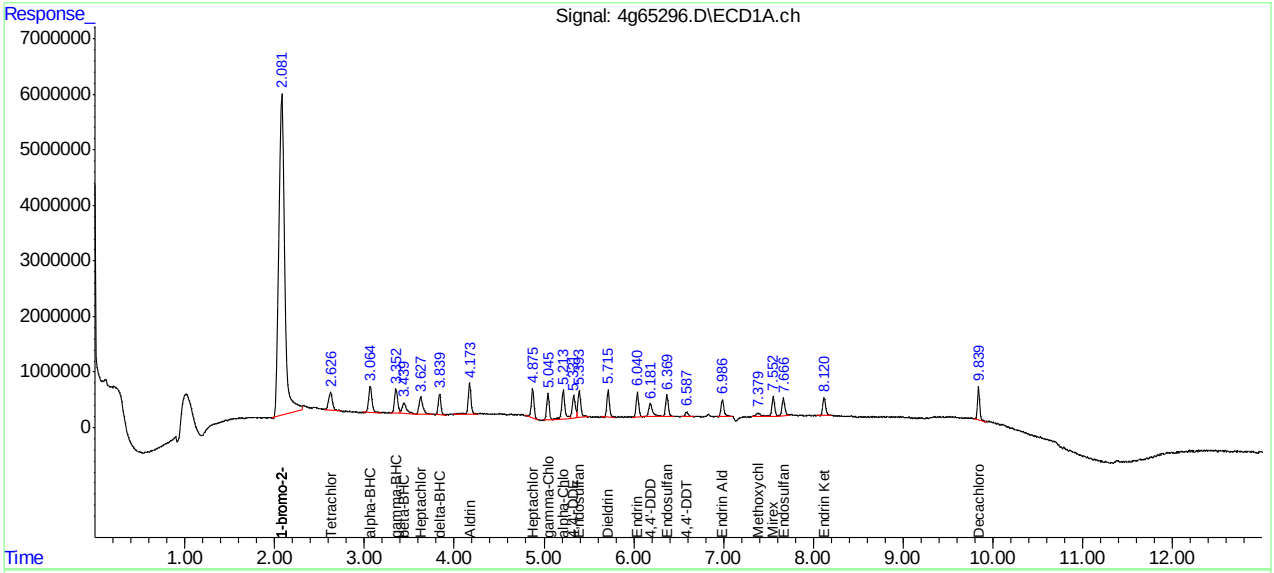
13.6.2 13

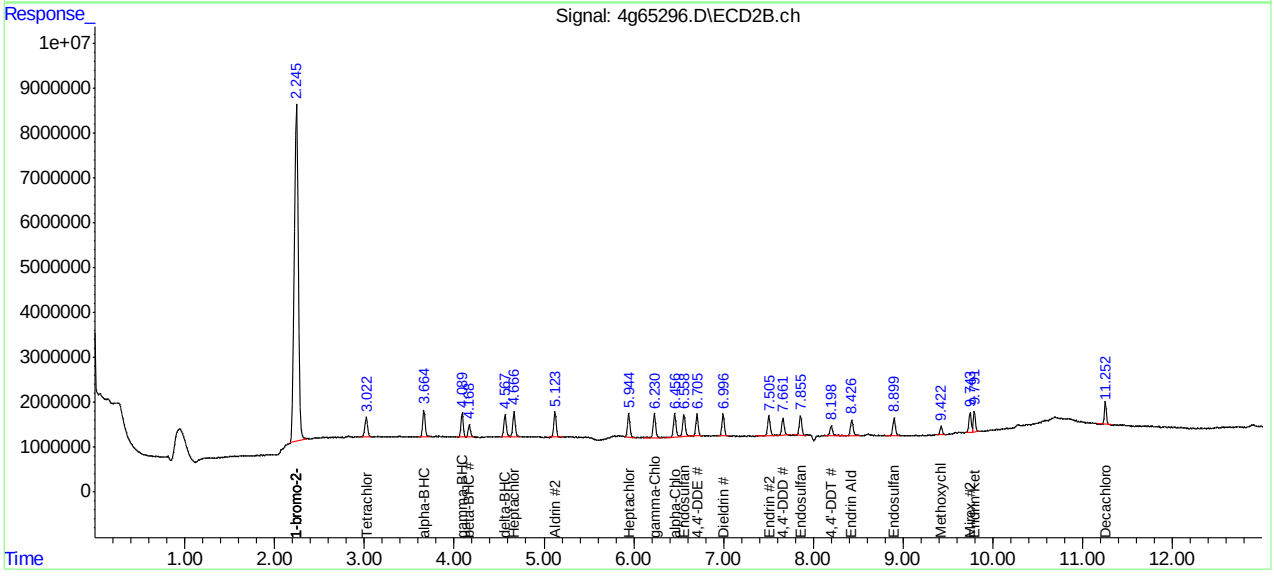
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:45 pm
Operator : yvelandd
Sample : ic1719-2
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:46:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65296.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 16:45	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

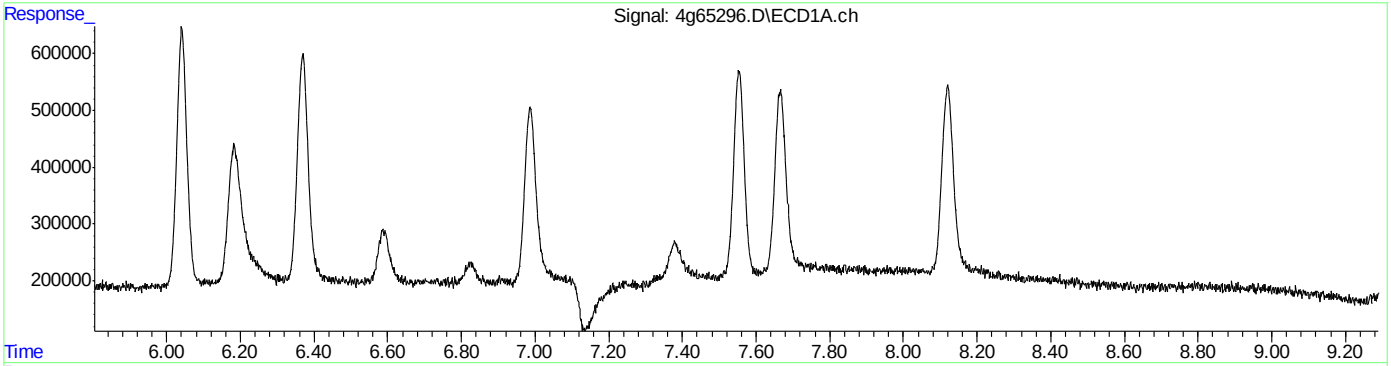
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	1	6.59	Poorly defined baseline
Methoxychlor	72-43-5	1	7.38	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.20	Poorly defined baseline
Methoxychlor	72-43-5	2	9.42	Poorly defined baseline

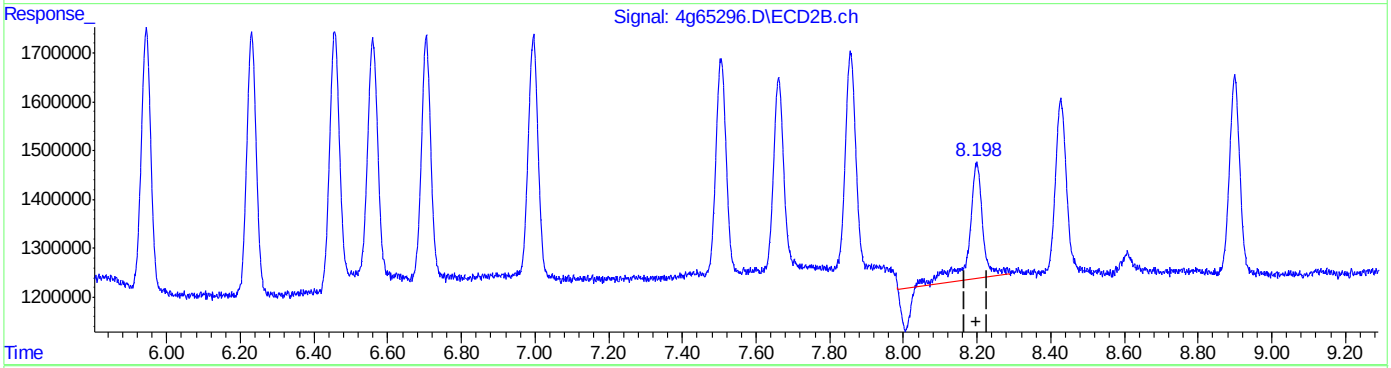
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:45 pm
Operator : yvelandd
Sample : ic1719-2
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
0.000min 0.000 PPB
response 0

(18) 4,4'-DDT #2 (MA)
8.199min 1.449 PPB
response 5238234

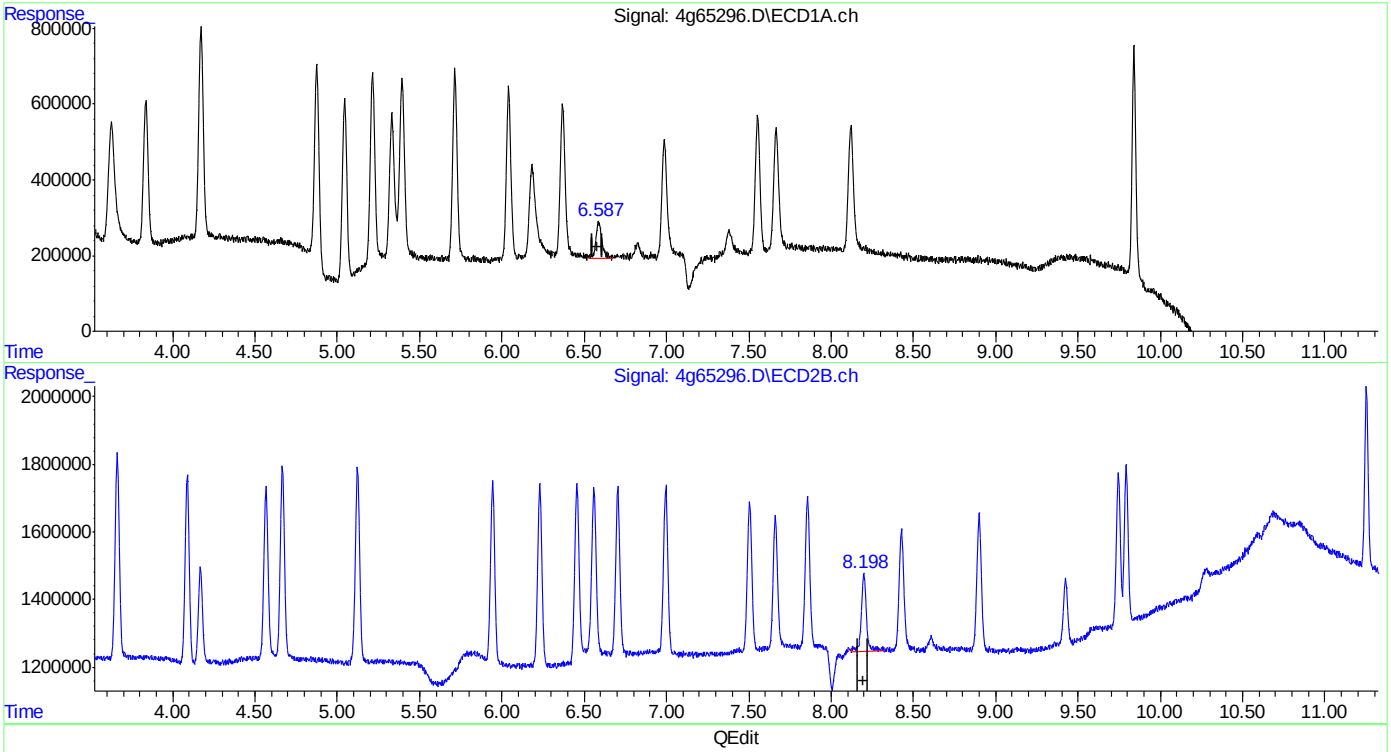
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:45 pm
Operator : yvelandd
Sample : ic1719-2
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.587min 0.732 PPB m
response 2452108

(18) 4,4'-DDT #2 (MA)
8.198min 1.387 PPB m
response 5015614

(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:46:24 2016 RPT1

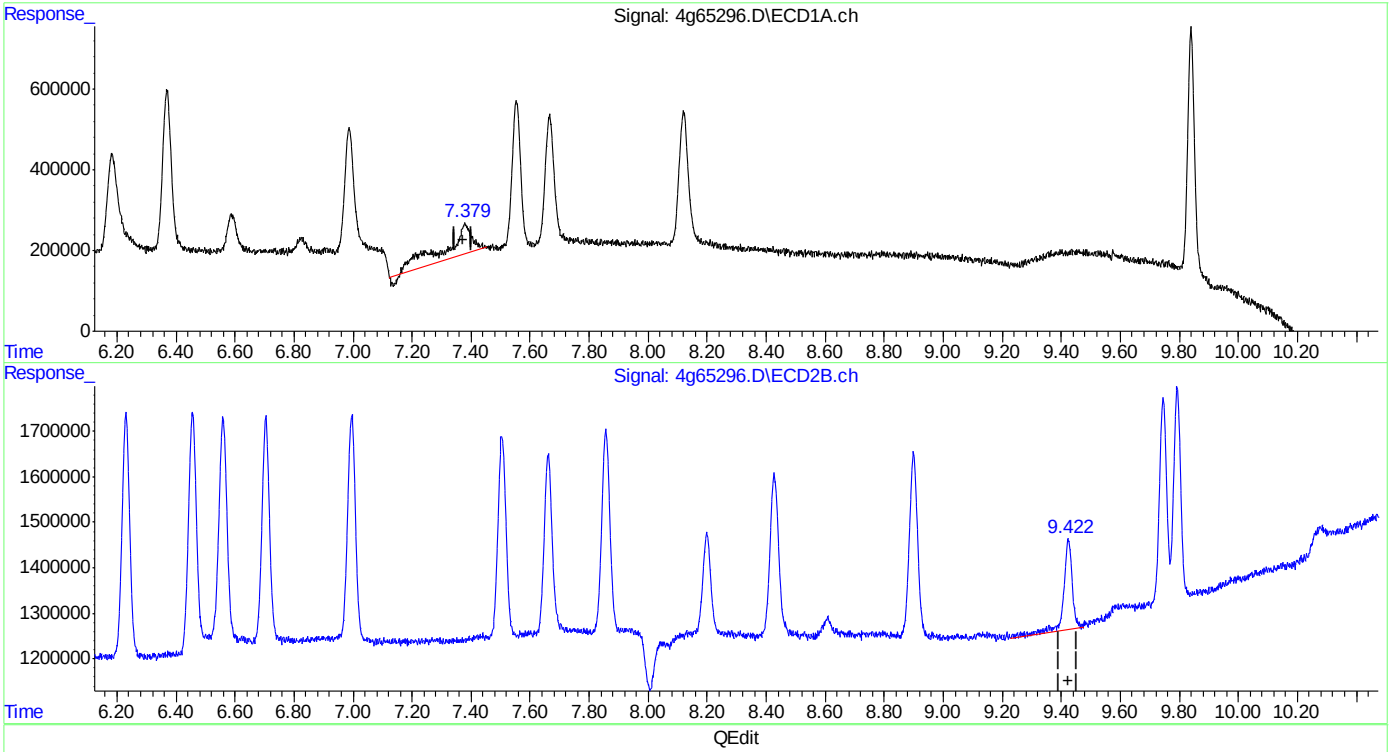
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   4:45 pm
Operator  : yvelandd
Sample    : ic1719-2
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 4   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(21) Methoxychlor (A)
7.380min 2.195 PPB
response 4756663

(21) Methoxychlor #2 (A)
9.424min 1.899 PPB
response 4203130

(+) = Expected Retention Time

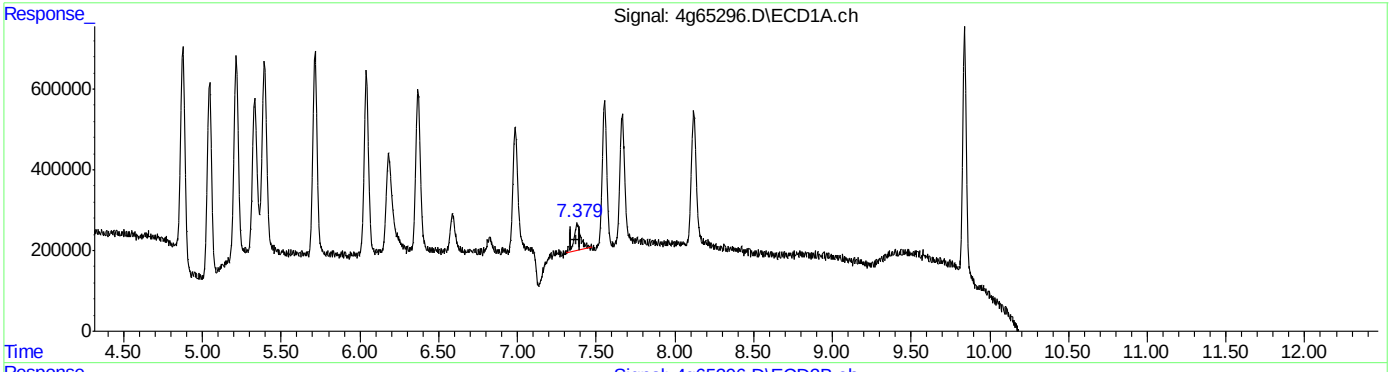
SGS ACCUTEST JC15518

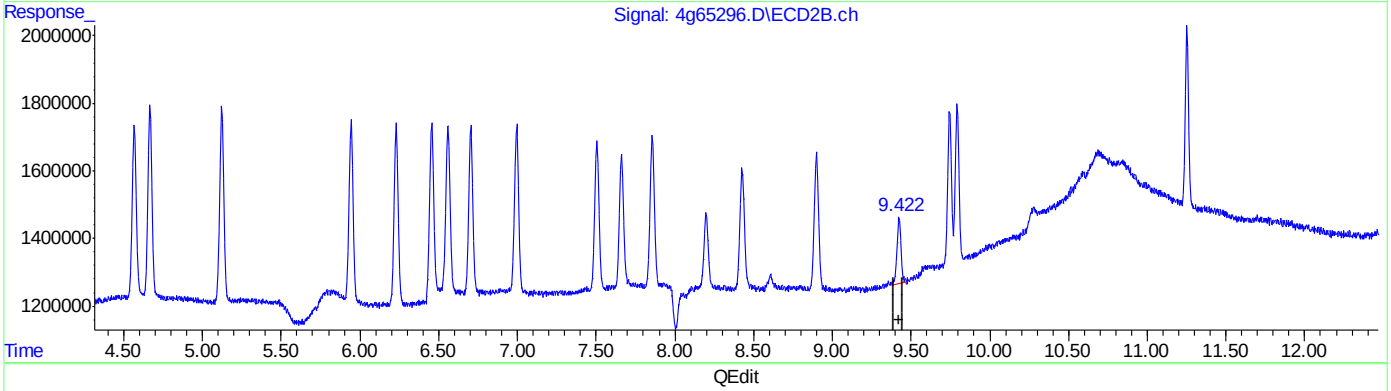
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65296.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 4:45 pm
Operator : yvelandd
Sample : ic1719-2
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.379min 0.919 PPB m
response 1991998

(21) Methoxychlor #2 (A)
9.422min 1.611 PPB m
response 3565271

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65297.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:00 pm
Operator : yvelandd
Sample : ic1719-5
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.067	2.232	263.7E6	236.0E6	50.000	50.000
25) I	1-bromo-2...	2.067	2.232	263.7E6	236.0E6	50.000	50.000
31) I	1-bromo-2...	2.067	2.232	263.7E6	236.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.614	3.014	22791179	22746970	4.726	5.105
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 11.82%#	12.76%#
24) SA	Decachlor...	9.840	11.254	23895501	18712788	4.524	5.147
	Spiked Amount	40.000			Recovery	= 11.31%	12.87%
	Target Compounds						
3) A	alpha-BHC	3.059	3.660	30032564	27858135	4.444	4.602
4) MA	gamma-BHC	3.348	4.085	26905323	24333075	4.388	4.394
5) MA	Heptachlor	3.623	4.664	23635687	24149408	4.198	4.400
6) B	beta-BHC	3.436	4.165	15094554	12210554	5.143	4.799
7) B	delta-BHC	3.833	4.564	18538066	22622235	3.085	4.197 #
8) MB	Aldrin	4.169	5.122	27390436	25023805	4.572	4.718
9) B	Heptachlo...	4.873	5.942	24668236	23229974	4.242	4.717
10) B	gamma-Chl...	5.043	6.229	22785839	23616584	4.023	4.710
11) B	alpha-Chl...	5.213	6.455	24165833	23710649	4.267	4.706
12) A	Endosulfan I	5.392	6.557	24634087	22901737	4.325	4.827
13) B	4,4'-DDE	5.331	6.703	19145360	21067579	3.620	4.420
14) MA	Dieldrin	5.713	6.994	23609094	22683221	3.929	4.488
15) MA	Endrin	6.040	7.504	22410275	21146645	4.022	4.268
16) A	4,4'-DDD	6.182	7.661	17708723	17903542	3.780	4.376
17) B	Endosulfa...	6.367	7.856	21183787	20731598	4.003	4.553
18) MA	4,4'-DDT	6.587	8.198	6851303	12769287	2.046	3.528m#
19) B	Endrin Al...	6.985	8.426	18035589	17703874	4.481	5.031
20) B	Endosulfa...	7.666	8.899	17644593	18703943	3.837	4.766
21) A	Methoxychlor	7.379	9.424	4753485	9403645	2.194	4.245 #
22)	Mirex	7.552	9.745	18361058	17901938	4.252	4.787
23) B	Endrin Ke...	8.119	9.792	19002491	20147772	4.044	4.117

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

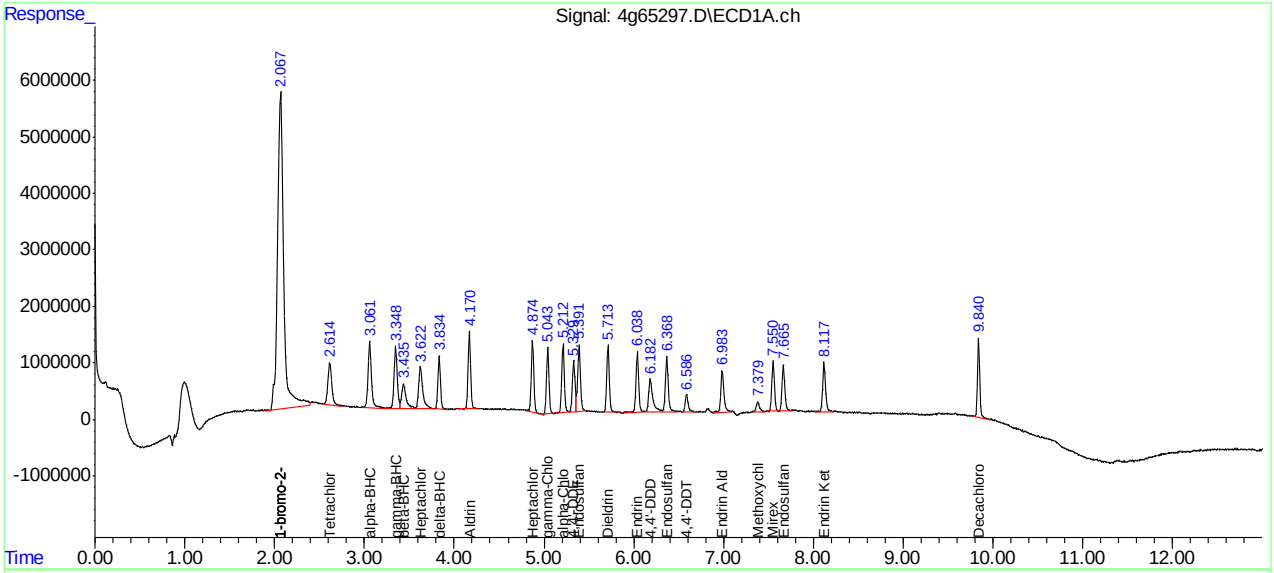
SGS ACCUTEST JC15518

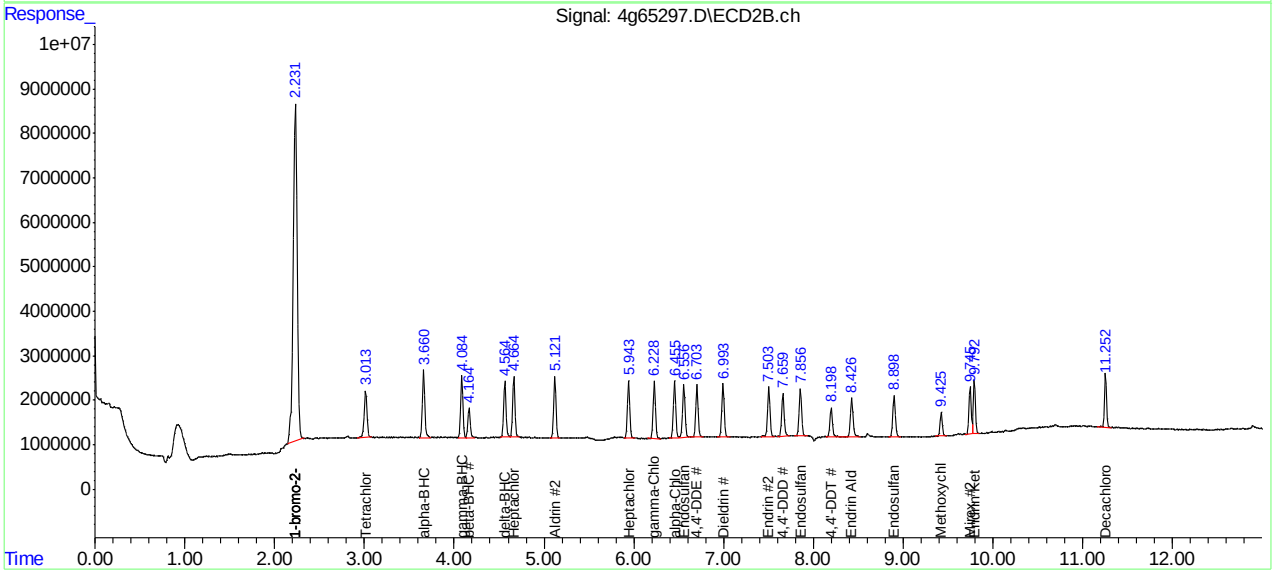
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65297.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:00 pm
Operator : yvelandd
Sample : ic1719-5
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:45:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65297.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 17:00	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

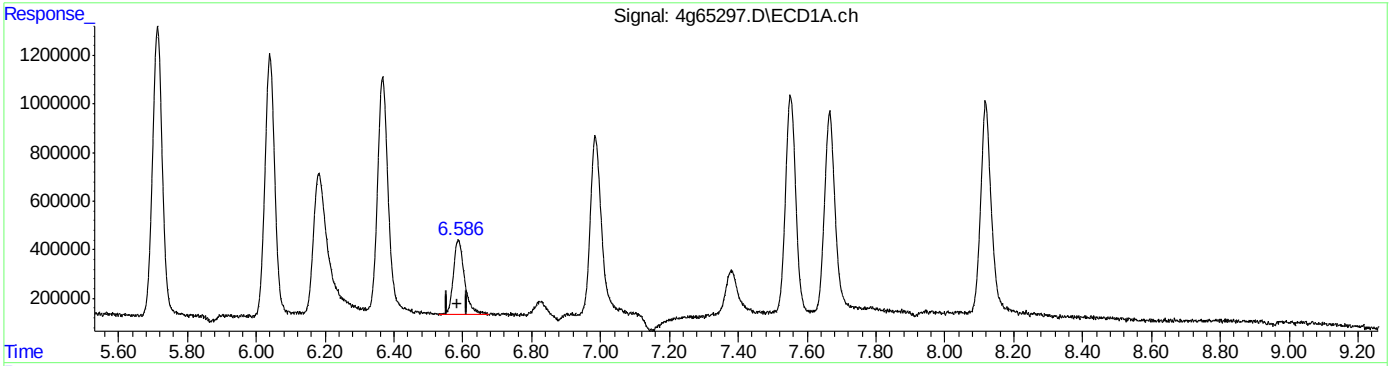
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	2	8.20	Poorly defined baseline

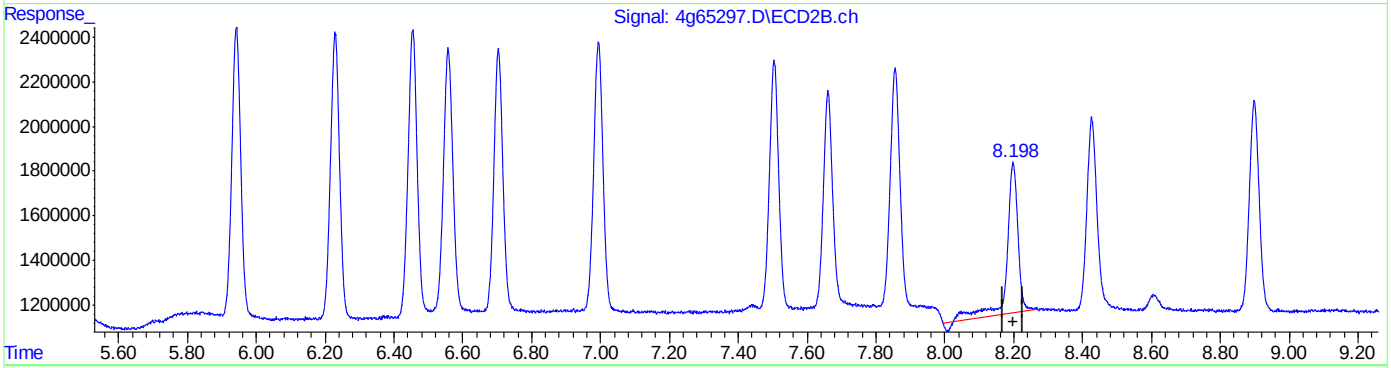
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65297.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:00 pm
Operator : yvelandd
Sample : ic1719-5
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
6.587min 2.046 PPB
response 6851303

(18) 4,4'-DDT #2 (MA)
8.198min 4.092 PPB
response 14810267

(+) = Expected Retention Time

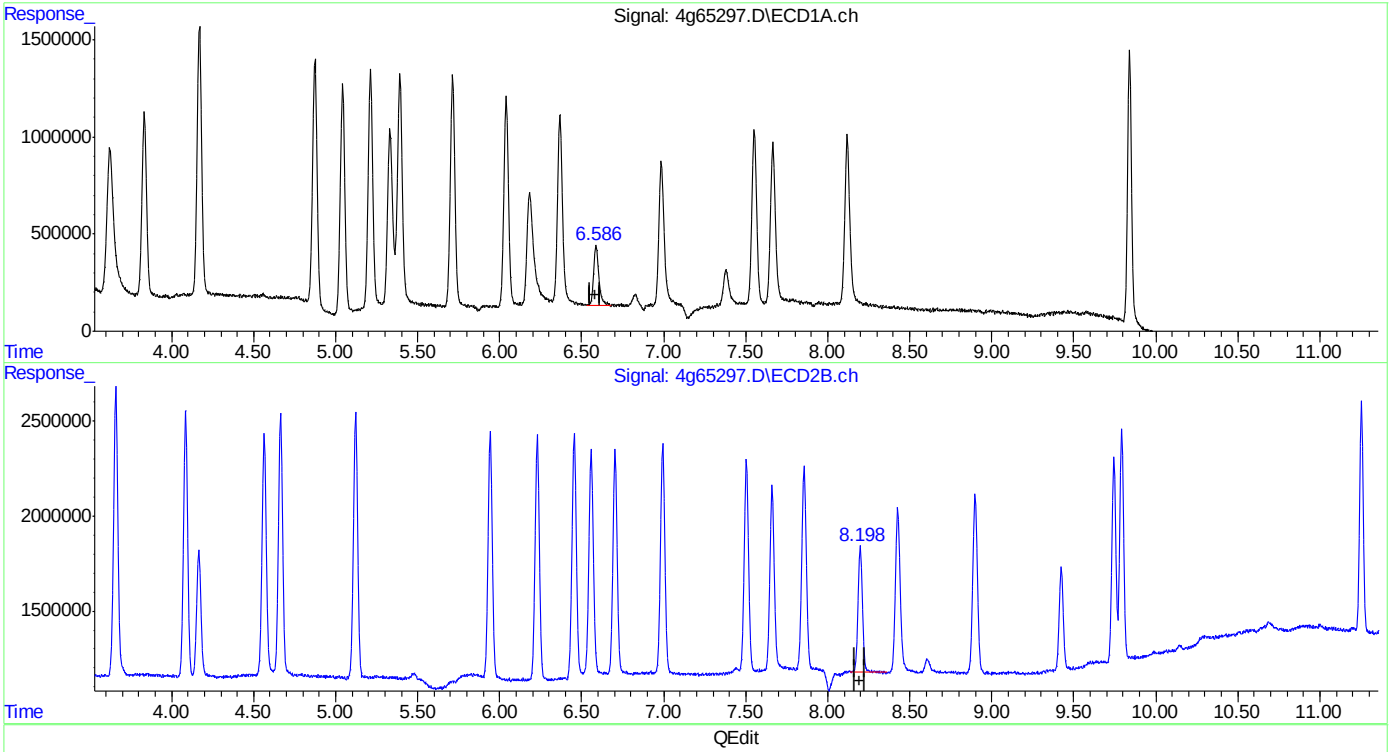
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65297.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:00 pm
Operator : yvelandd
Sample : ic1719-5
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.587min 2.046 PPB
response 6851303

(18) 4,4'-DDT #2 (MA)
8.198min 3.528 PPB m
response 12769287

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65298.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:15 pm
Operator : yvelandd
Sample : ic1719-10
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.066	2.231	272.6E6	251.1E6	50.000	50.000	
25) I	1-bromo-2...	2.066	2.231	272.6E6	251.1E6	50.000	50.000	
31) I	1-bromo-2...	2.066	2.231	272.6E6	251.1E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.613	3.015	48385825	47823569	9.708	10.087	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	24.27%#	25.22%#	
24) SA	Decachlor...	9.841	11.254	52143390	38736979	9.551	10.014	
Spiked Amount		40.000		Recovery	=	23.88%	25.03%	
	Target Compounds							
3) A	alpha-BHC	3.059	3.659	63040304	60886343	9.025	9.454	
4) MA	gamma-BHC	3.347	4.085	57674054	54690355	9.100	9.281	
5) MA	Heptachlor	3.621	4.665	51026471	53749074	8.768	9.204	
6) B	beta-BHC	3.433	4.165	28674873	26654249	9.454	9.845	
7) B	delta-BHC	3.833	4.564	40766049	50775351	6.565	8.854	#
8) MB	Aldrin	4.169	5.122	58601766	54437543	9.465	9.647	
9) B	Heptachlo...	4.873	5.943	53784768	50816443	8.949	9.699	
10) B	gamma-Chl...	5.041	6.230	50010613	51109185	8.543	9.580	
11) B	alpha-Chl...	5.212	6.455	52183632	50597759	8.915	9.439	
12) A	Endosulfan I	5.391	6.558	55209399	48832886	9.380	9.674	
13) B	4,4'-DDE	5.330	6.703	42243293	46994344	7.728	9.267	
14) MA	Dieldrin	5.713	6.994	51607544	50031631	8.309	9.304	
15) MA	Endrin	6.040	7.505	47226498	45804951	8.201	8.689	
16) A	4,4'-DDD	6.181	7.662	39711493	39841692	8.201	9.153	
17) B	Endosulfa...	6.368	7.857	47959831	45334824	8.769	9.358	
18) MA	4,4'-DDT	6.587	8.199	18063331	32166391	5.220	8.353	#
19) B	Endrin Al...	6.985	8.427	37633696	36954436	9.048m	9.870	
20) B	Endosulfa...	7.665	8.899	38698884	40613853	8.143	9.726	
21) A	Methoxychlor	7.378	9.425	11821441	21125742	5.280	8.962	#
22)	Mirex	7.552	9.745	39843470	38668176	8.927	9.717	
23) B	Endrin Ke...	8.118	9.793	42815535	44606418	8.817	8.566	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

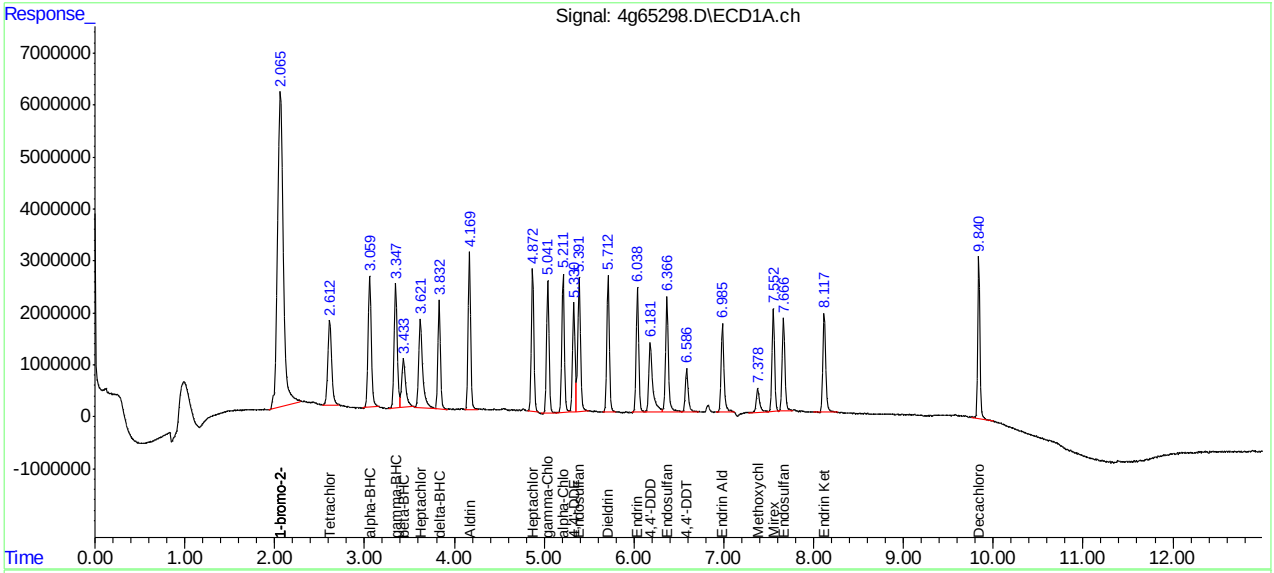
13.6.4 13

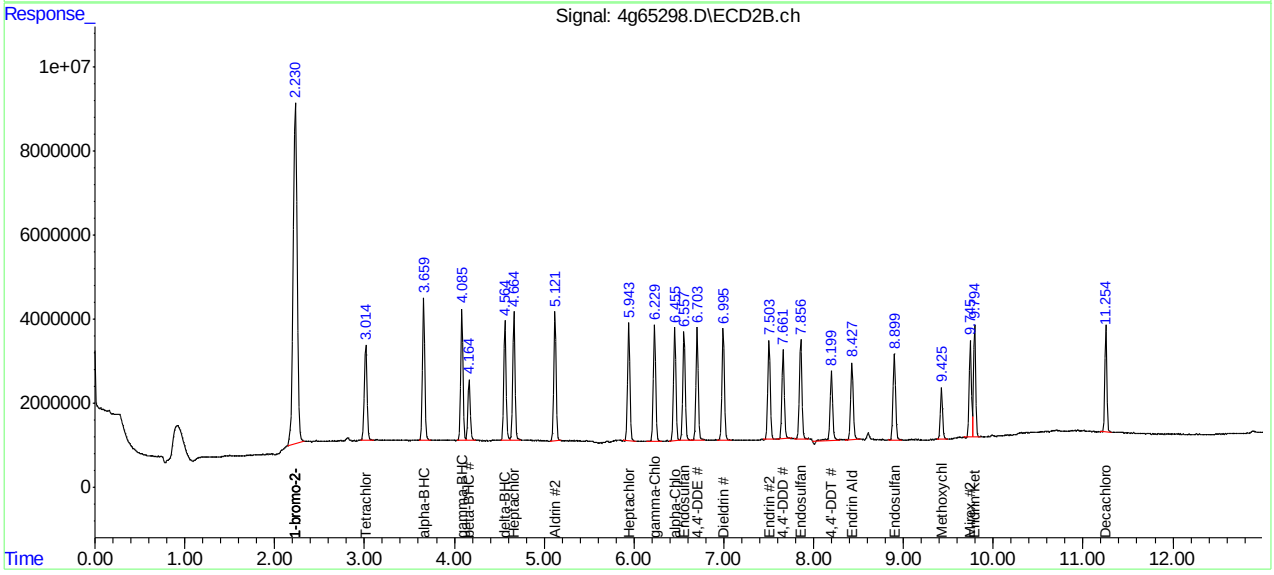
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65298.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:15 pm
Operator : yvelandd
Sample : ic1719-10
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65298.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 17:15	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

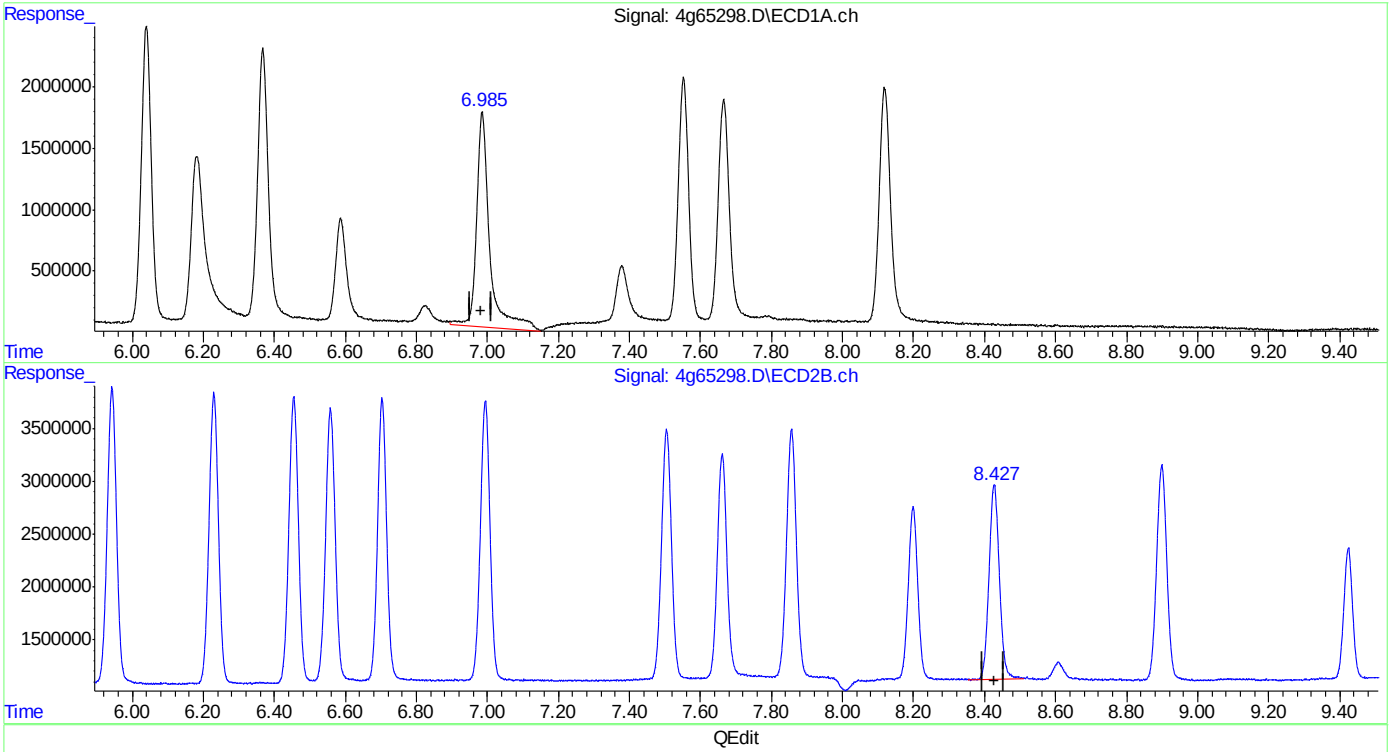
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	6.99	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65298.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:15 pm
Operator : yvelandd
Sample : ic1719-10
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
6.985min 10.729 PPB
response 44626348

(19) Endrin Aldehyde #2 (B)
8.427min 9.870 PPB
response 36954436

(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:43:38 2016 RPT1

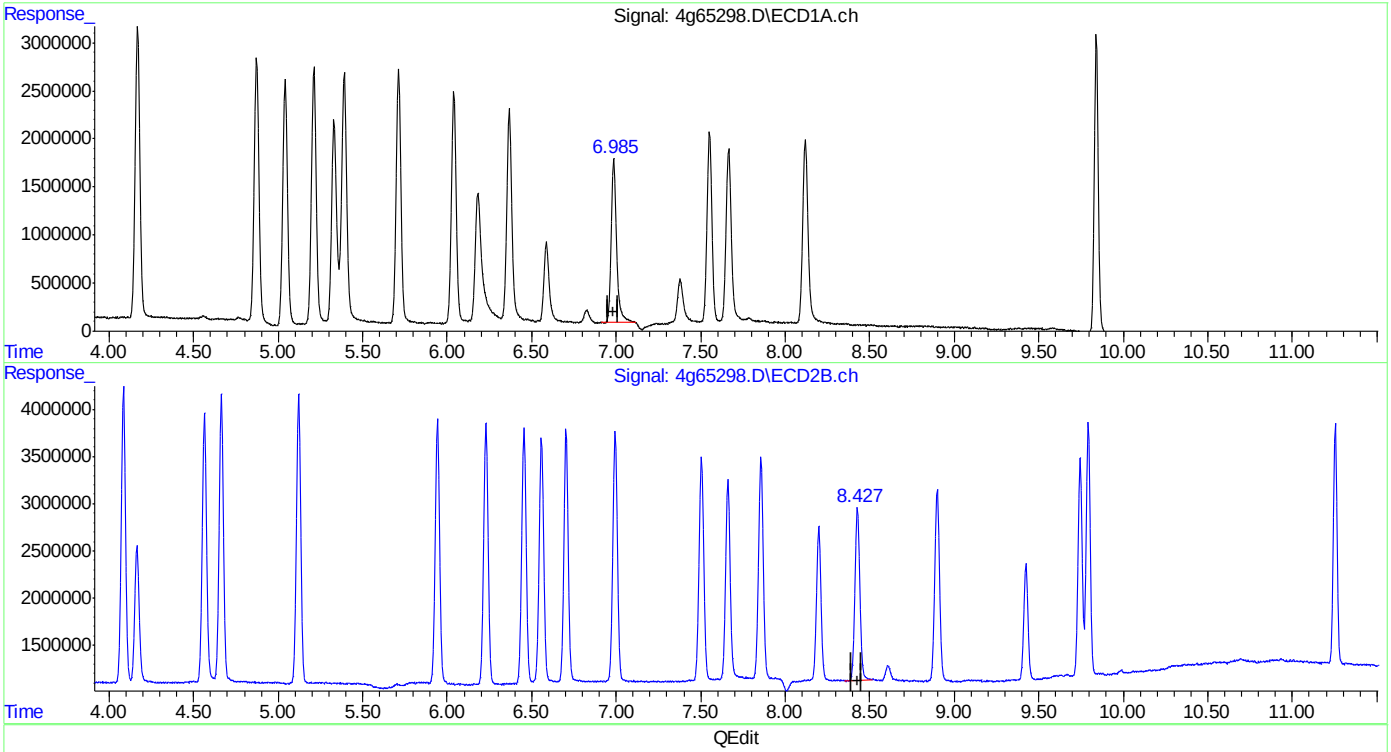
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65298.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:15 pm
Operator : yvelandd
Sample : ic1719-10
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
6.985min 9.048 PPB m
response 37633696

(19) Endrin Aldehyde #2 (B)
8.427min 9.870 PPB
response 36954436

(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:43:44 2016 RPT1

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65299.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:30 pm
Operator : yvelandd
Sample : icc1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.067	2.232	249.4E6	230.9E6	50.000	50.000	
25) I	1-bromo-2...	2.067	2.232	249.4E6	230.9E6	50.000	50.000	
31) I	1-bromo-2...	2.067	2.232	249.4E6	230.9E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.614	3.015	115.7E6	109.9E6	25.374	25.215	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 63.43%	63.04%	
24) SA	Decachlor...	9.840	11.255	119.0E6	86407609	23.817	24.289	
	Spiked Amount	40.000			Recovery	= 59.54%	60.72%	
	Target Compounds							
3) A	alpha-BHC	3.059	3.660	155.8E6	148.1E6	24.372	24.998	
4) MA	gamma-BHC	3.346	4.086	138.1E6	132.7E6	23.820	24.492	
5) MA	Heptachlor	3.621	4.665	131.3E6	128.2E6	24.664	23.873	
6) B	beta-BHC	3.432	4.166	71800554	61245545	25.871	24.598	
7) B	delta-BHC	3.834	4.564	101.6E6	123.2E6	17.881	23.360	#
8) MB	Aldrin	4.169	5.122	137.7E6	129.2E6	24.312	24.889	
9) B	Heptachlo...	4.873	5.943	127.5E6	119.6E6	23.178	24.827	
10) B	gamma-Chl...	5.043	6.230	121.4E6	119.8E6	22.664	24.420	
11) B	alpha-Chl...	5.212	6.455	122.8E6	117.4E6	22.920	23.806	
12) A	Endosulfan I	5.392	6.559	130.0E6	112.9E6	24.138	24.318	
13) B	4,4'-DDE	5.330	6.704	102.9E6	113.3E6	20.581	24.301	
14) MA	Dieldrin	5.713	6.995	125.6E6	119.1E6	22.109	24.091	
15) MA	Endrin	6.040	7.506	115.4E6	108.7E6	21.903	22.414	
16) A	4,4'-DDD	6.178	7.661	96962267	94971394	21.885	23.725	
17) B	Endosulfa...	6.367	7.857	117.6E6	106.0E6	23.492	23.794	
18) MA	4,4'-DDT	6.585	8.199	55954095	81884539	17.671	23.120	#
19) B	Endrin Al...	6.985	8.427	94232352	83951316	24.760	24.381	
20) B	Endosulfa...	7.664	8.900	93940635	93192385	21.602	24.268	
21) A	Methoxychlor	7.376	9.423	33526674	51766086	16.366	23.879	#
22)	Mirex	7.551	9.745	92476349	85905219	22.646	23.473	
23) B	Endrin Ke...	8.118	9.793	104.1E6	107.0E6	23.439	22.348	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

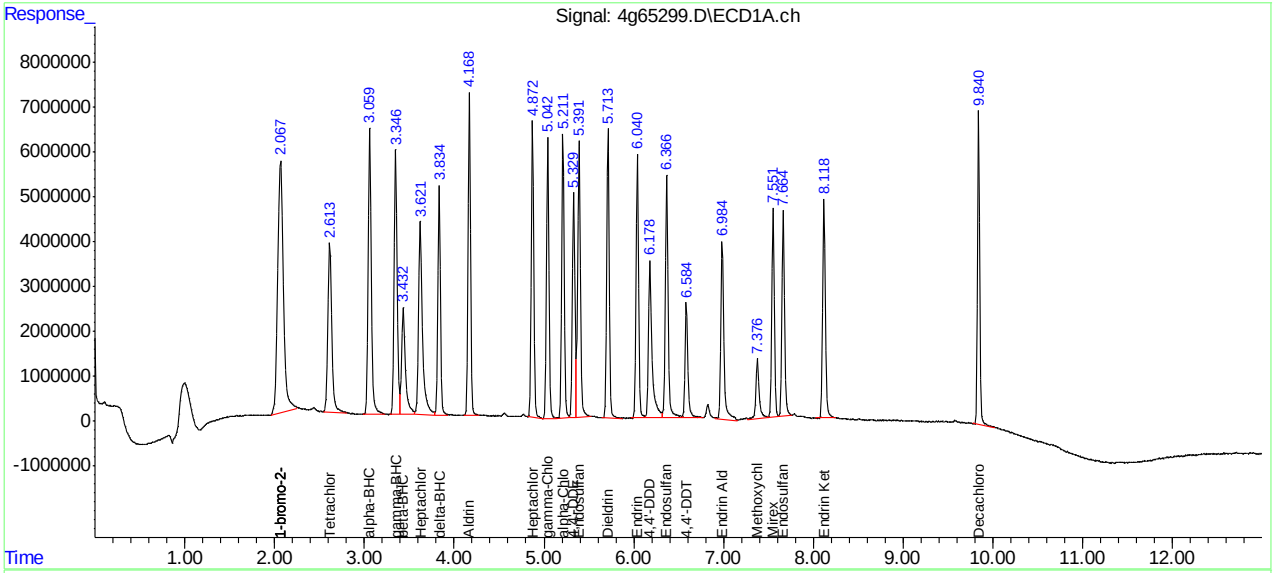
SGS ACCUTEST JC15518

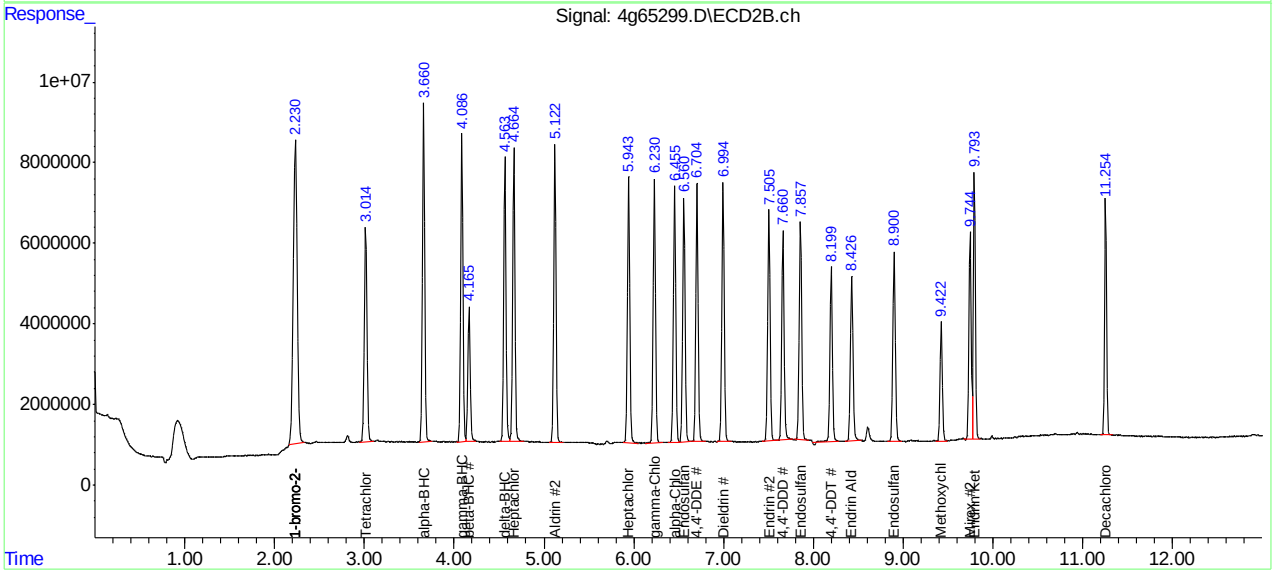
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65299.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:30 pm
Operator : yvelandd
Sample : icc1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:43:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65300.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:44 pm
Operator : yvelandd
Sample : ic1719-50
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:42:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.070	2.234	247.1E6	236.5E6	50.000	50.000	
25) I	1-bromo-2...	2.070	2.234	247.1E6	236.5E6	50.000	50.000	
31) I	1-bromo-2...	2.070	2.234	247.1E6	236.5E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.615	3.017	224.1E6	217.7E6	49.595	48.753	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	123.99%	121.88%	
24) SA	Decachlor...	9.839	11.255	232.9E6	165.8E6	47.049	45.500	
Spiked Amount		40.000		Recovery	=	117.62%	113.75%	
	Target Compounds							
3) A	alpha-BHC	3.060	3.662	317.7E6	306.6E6	50.160	50.544	
4) MA	gamma-BHC	3.348	4.086	280.6E6	273.7E6	48.829	49.304	
5) MA	Heptachlor	3.620	4.666	272.9E6	259.0E6	51.723	47.090	
6) B	beta-BHC	3.430	4.166	139.0E6	119.9E6	50.538	47.011	
7) B	delta-BHC	3.834	4.565	209.6E6	257.5E6	37.235	47.665	#
8) MB	Aldrin	4.169	5.123	279.2E6	263.2E6	49.732	49.510	
9) B	Heptachlo...	4.873	5.943	255.0E6	239.2E6	46.804	48.465	
10) B	gamma-Chl...	5.042	6.230	247.3E6	240.9E6	46.594	47.943	
11) B	alpha-Chl...	5.212	6.455	247.5E6	235.0E6	46.634	46.549	
12) A	Endosulfan I	5.392	6.558	264.9E6	225.2E6	49.631	47.351	
13) B	4,4'-DDE	5.328	6.704	214.9E6	232.3E6	43.352	48.640	
14) MA	Dieldrin	5.712	6.994	257.8E6	242.9E6	45.780	47.955	
15) MA	Endrin	6.039	7.505	235.2E6	218.5E6	45.048	43.993	
16) A	4,4'-DDD	6.174	7.660	198.3E6	193.5E6	45.170	47.191	
17) B	Endosulfa...	6.364	7.856	237.8E6	211.7E6	47.954	46.401	
18) MA	4,4'-DDT	6.584	8.198	128.1E6	170.0E6	40.825	46.863	
19) B	Endrin Al...	6.983	8.427	181.8E6	166.0E6	48.193	47.077	
20) B	Endosulfa...	7.664	8.899	196.5E6	183.1E6	45.595	46.555	
21) A	Methoxychlor	7.374	9.423	67031221	102.9E6	33.022	46.352	#
22)	Mirex	7.551	9.745	186.1E6	166.0E6	45.991	44.276	
23) B	Endrin Ke...	8.117	9.793	216.5E6	217.0E6	49.184	44.235	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

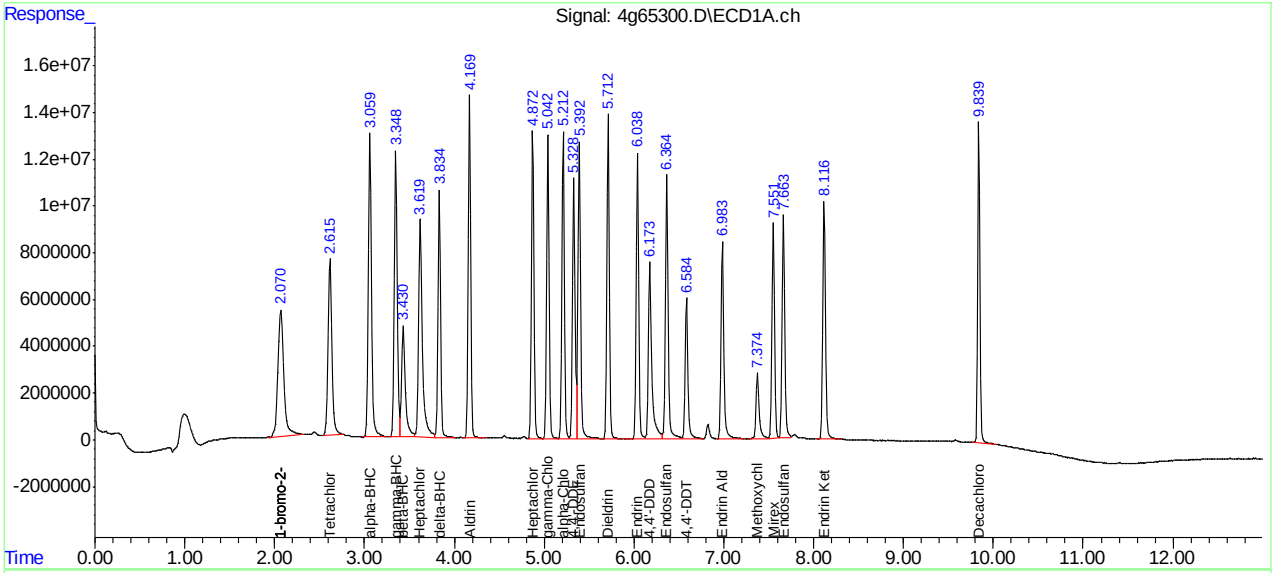
13.6.6 13

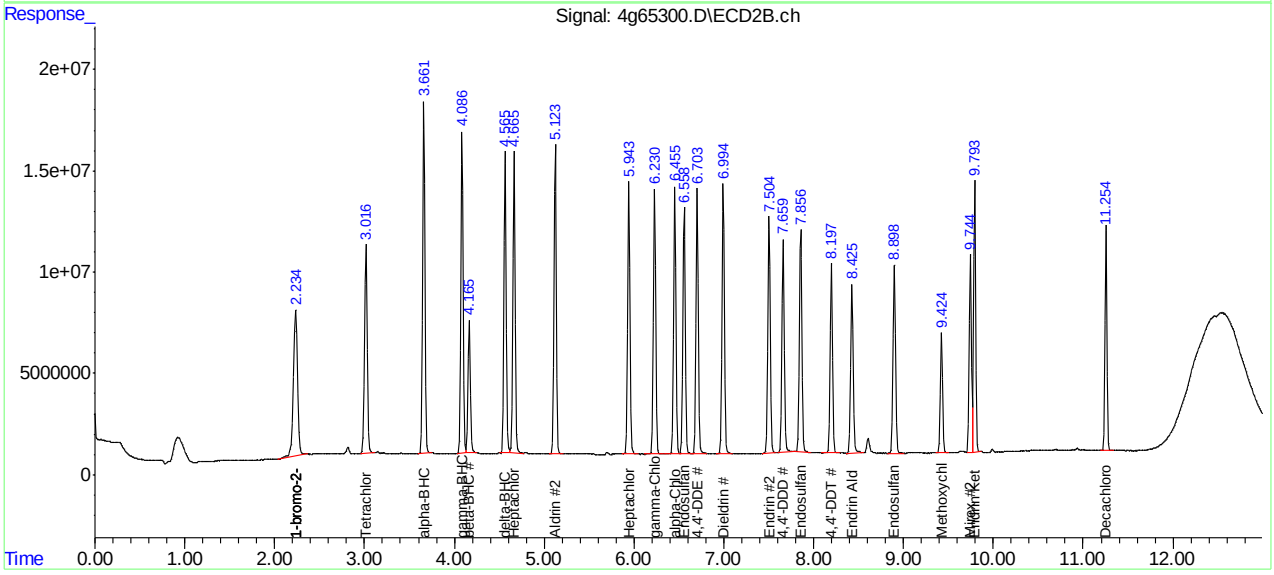
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65300.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:44 pm
Operator : yvelandd
Sample : ic1719-50
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:42:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65301.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:59 pm
Operator : yvelandd
Sample : ic1719-75
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:42:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.071	2.235	250.5E6	236.6E6	50.000	50.000	
25) I	1-bromo-2...	2.071	2.235	250.5E6	236.6E6	50.000	50.000	
31) I	1-bromo-2...	2.071	2.235	250.5E6	236.6E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.615	3.016	353.1E6	336.1E6	77.101	75.211	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	192.75%#	188.03%#	
24) SA	Decachlor...	9.840	11.256	355.4E6	250.2E6	70.847	68.636	
Spiked Amount		40.000		Recovery	=	177.12%	171.59%	
	Target Compounds							
3) A	alpha-BHC	3.060	3.661	501.5E6	486.2E6	78.123	80.098	
4) MA	gamma-BHC	3.347	4.086	440.0E6	432.3E6	75.537	77.841	
5) MA	Heptachlor	3.619	4.666	430.3E6	406.7E6	80.457	73.882	
6) B	beta-BHC	3.429	4.166	212.6E6	186.3E6	76.266	73.009	
7) B	delta-BHC	3.834	4.565	332.1E6	410.0E6	58.197	75.846	#
8) MB	Aldrin	4.170	5.123	435.6E6	412.8E6	76.563	77.610	
9) B	Heptachlo...	4.874	5.944	394.9E6	371.4E6	71.491	75.202	
10) B	gamma-Chl...	5.043	6.230	387.0E6	374.9E6	71.934	74.562	
11) B	alpha-Chl...	5.213	6.455	383.6E6	365.0E6	71.298	72.237	
12) A	Endosulfan I	5.392	6.559	403.8E6	349.5E6	74.653	73.449	
13) B	4,4'-DDE	5.329	6.705	341.8E6	366.3E6	68.046	76.643	
14) MA	Dieldrin	5.713	6.995	406.7E6	379.7E6	71.260	74.907	
15) MA	Endrin	6.040	7.506	370.1E6	338.5E6	69.930	68.116	
16) A	4,4'-DDD	6.174	7.661	314.1E6	304.6E6	70.580	74.235	
17) B	Endosulfa...	6.367	7.857	371.7E6	330.6E6	73.943	72.394	
18) MA	4,4'-DDT	6.584	8.199	214.5E6	271.3E6	67.458	74.732	
19) B	Endrin Al...	6.983	8.428	286.7E6	257.7E6	74.990	73.023	
20) B	Endosulfa...	7.664	8.900	306.9E6	280.1E6	70.272	71.170	
21) A	Methoxychlor	7.373	9.425	109.0E6	159.0E6	52.985	71.577	#
22)	Mirex	7.553	9.745	283.4E6	250.5E6	69.095	66.795	
23) B	Endrin Ke...	8.117	9.793	340.6E6	332.8E6	76.325	67.802	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

13.6.7 13

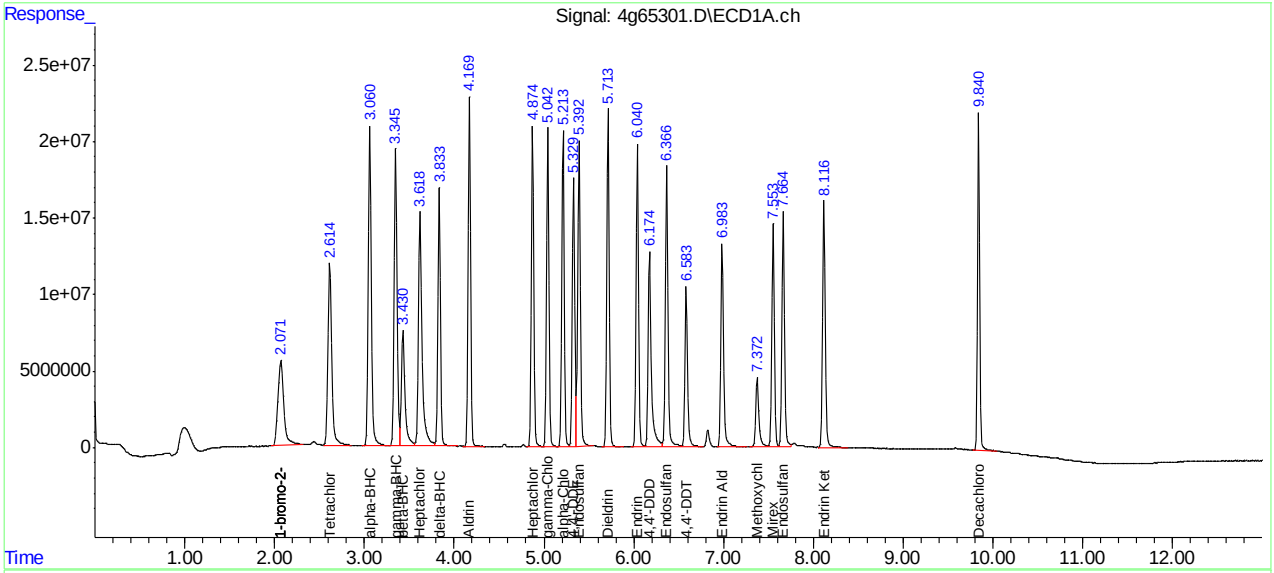
SGS ACCUTEST JC15518

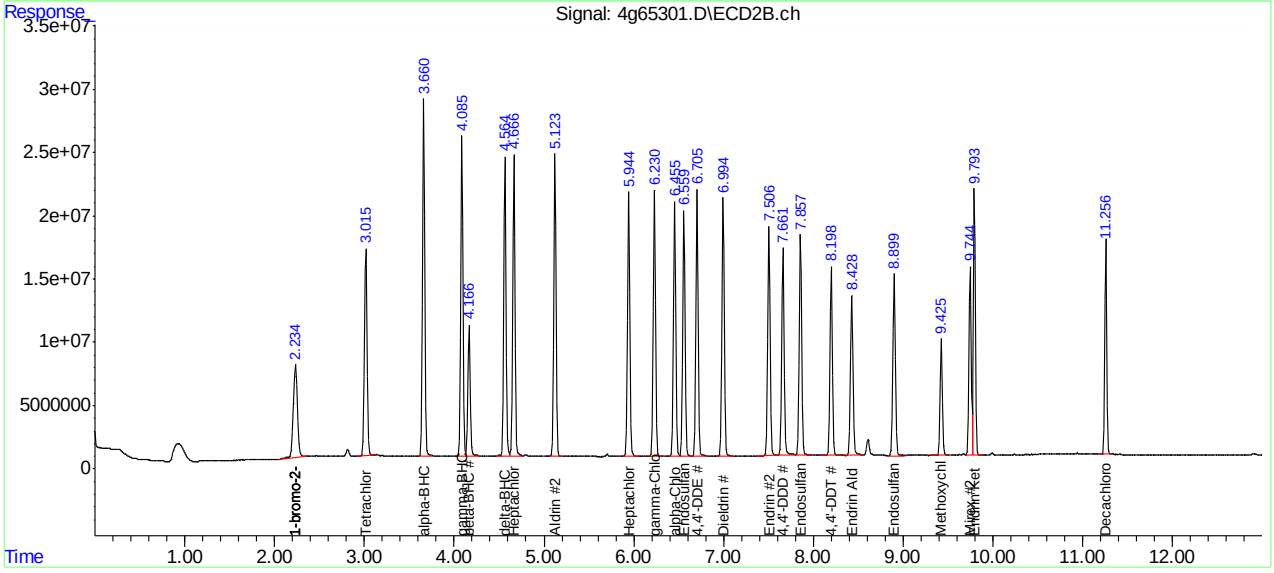
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65301.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 5:59 pm
Operator : yvelandd
Sample : ic1719-75
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:42:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Sat Jan 16 09:13:20 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65302.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:14 pm
Operator : yvelandd
Sample : ic1719-100
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:51:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:50:47 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.078	2.240	273.1E6	231.8E6	50.000	50.000
25) I	1-bromo-2...	2.078	2.240	273.1E6	231.8E6	50.000	50.000
31) I	1-bromo-2...	2.078	2.240	273.1E6	231.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.620	3.020	486.4E6	457.6E6	98.074	103.323
Spiked Amount		40.000 Range	30 - 150	Recovery	=	245.18%#	258.31%#
24) SA	Decachlor...	9.839	11.255	477.7E6	333.4E6	93.008	93.934
Spiked Amount		40.000		Recovery	=	232.52%	234.83%
	Target Compounds						
3) A	alpha-BHC	3.064	3.664	688.9E6	671.7E6	104.281	116.766
4) MA	gamma-BHC	3.352	4.088	604.1E6	596.1E6	100.787	117.227
5) MA	Heptachlor	3.621	4.667	591.3E6	556.5E6	110.562	111.086
6) B	beta-BHC	3.431	4.168	283.2E6	253.0E6	87.669	102.983
7) B	delta-BHC	3.837	4.567	462.8E6	563.6E6	108.092	117.715
8) MB	Aldrin	4.172	5.124	594.7E6	566.1E6	96.357	109.425
9) B	Heptachlo...	4.875	5.944	536.9E6	507.0E6	98.239	107.868
10) B	gamma-Chl...	5.044	6.231	531.9E6	513.3E6	104.697	107.296
11) B	alpha-Chl...	5.214	6.457	524.1E6	497.3E6	92.942	104.658
12) A	Endosulfan I	5.394	6.560	547.1E6	476.0E6	98.372	102.850
13) B	4,4'-DDE	5.329	6.705	475.5E6	505.2E6	106.449	113.612
14) MA	Dieldrin	5.714	6.996	558.5E6	521.3E6	105.011	111.969
15) MA	Endrin	6.041	7.506	507.4E6	466.6E6	104.386	109.288
16) A	4,4'-DDD	6.173	7.661	430.1E6	423.2E6	107.179	112.072
17) B	Endosulfa...	6.367	7.857	506.6E6	451.9E6	105.227	107.819
18) MA	4,4'-DDT	6.584	8.199	310.9E6	377.9E6	152.587	131.078
19) B	Endrin Al...	6.984	8.427	391.2E6	349.3E6	102.069	99.801
20) B	Endosulfa...	7.663	8.899	418.9E6	380.4E6	105.035	102.245
21) A	Methoxychlor	7.372	9.424	151.7E6	215.1E6	118.067	111.667
22)	Mirex	7.552	9.745	380.2E6	338.3E6	95.976	96.397
23) B	Endrin Ke...	8.117	9.793	466.0E6	453.5E6	109.027	110.160

SemiQuant Compounds - Not Calibrated on this Instrument

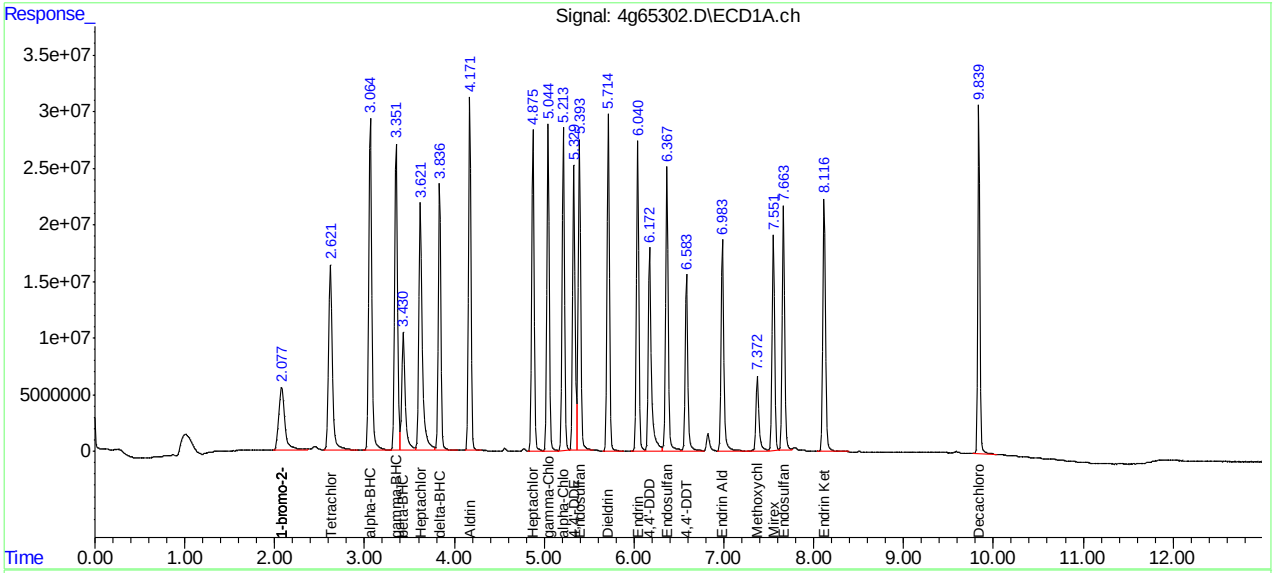
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

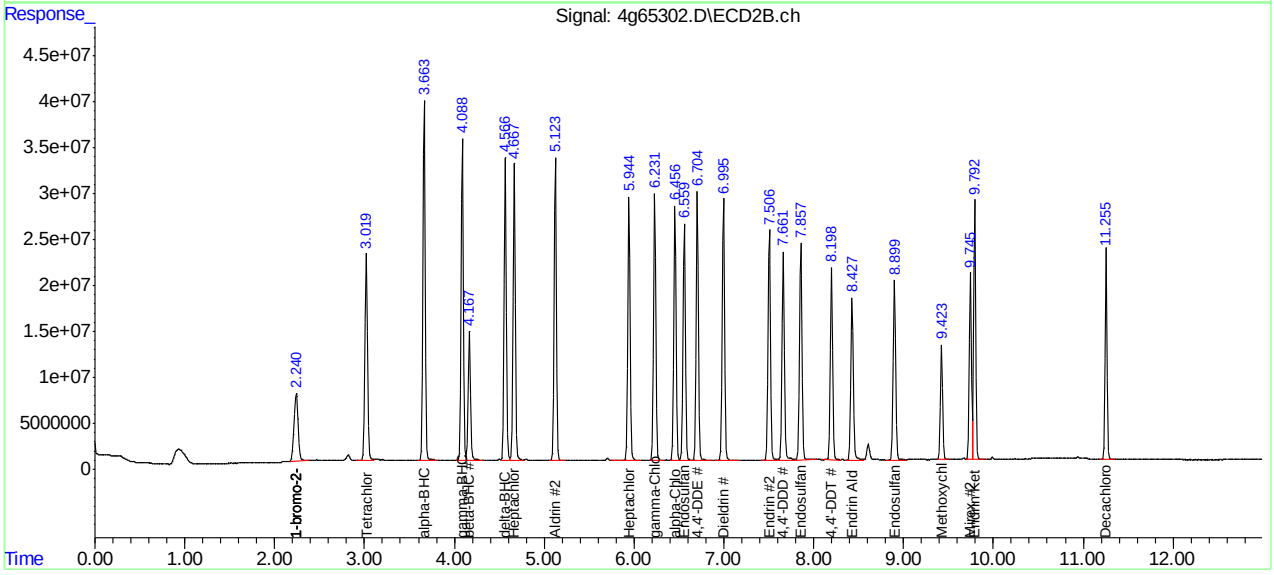
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65302.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:14 pm
Operator : yvelandd
Sample : ic1719-100
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:51:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:50:47 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65303.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:28 pm
Operator : yvelandd
Sample : ic1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:55:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:55:21 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.072	2.235	268.0E6	231.4E6	50.000	50.000
25) I	1-bromo-2...	2.072	2.235	268.0E6	231.4E6	50.000	50.000
31) I	1-bromo-2...	2.072	2.235	268.0E6	231.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.618	3.018	232.7E6	219.3E6	47.933	49.396
Spiked Amount		40.000	Range	30 - 150	Recovery	= 119.83%	123.49%
24) SA	Decachlor...	9.839	11.255	233.9E6	166.8E6	46.817	47.431
Spiked Amount		40.000			Recovery	= 117.04%	118.58%
	Target Compounds						
32)	Chlordane...	3.744	4.469	78425506	77760802	500.000	500.000
33)	Chlordane...	4.308	5.309	103.3E6	87781222	500.000	500.000
34)	Chlordane...	5.043	6.230	333.8E6	304.1E6	500.000	500.000
35)	Chlordane...	5.204	6.455	528.0E6	499.6E6	500.000	499.341m
36)	Chlordane...	6.279	7.937	74017013	75194767	500.000	500.000
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

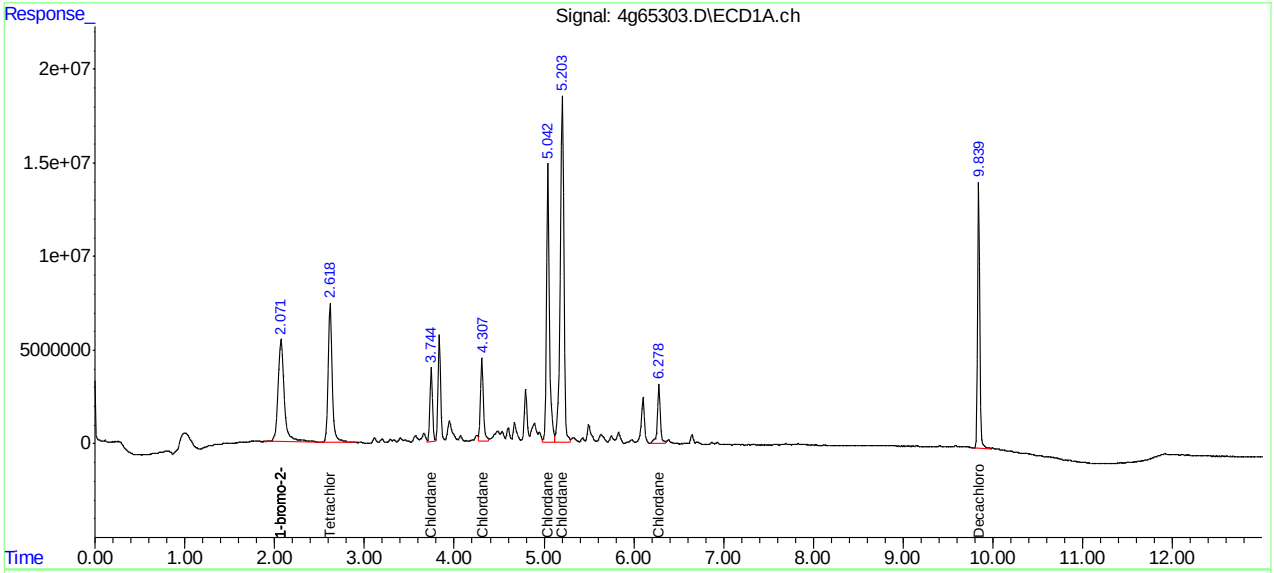
13.6.9
13

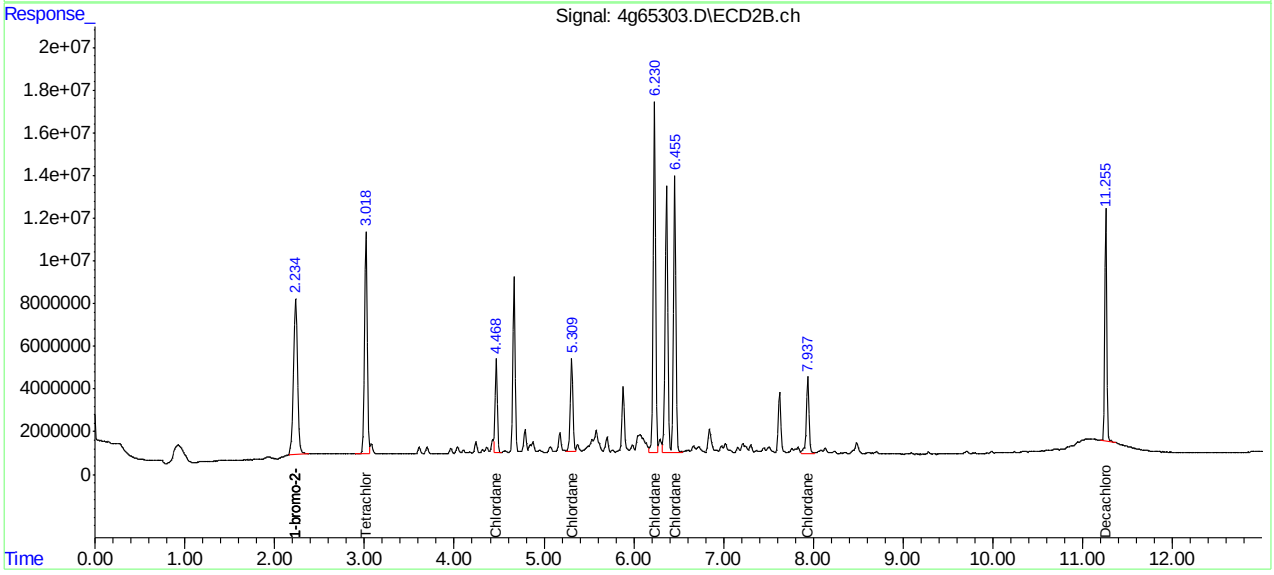
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65303.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:28 pm
Operator : yvelandd
Sample : ic1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:55:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:55:21 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC15518

Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65303.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 18:28	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

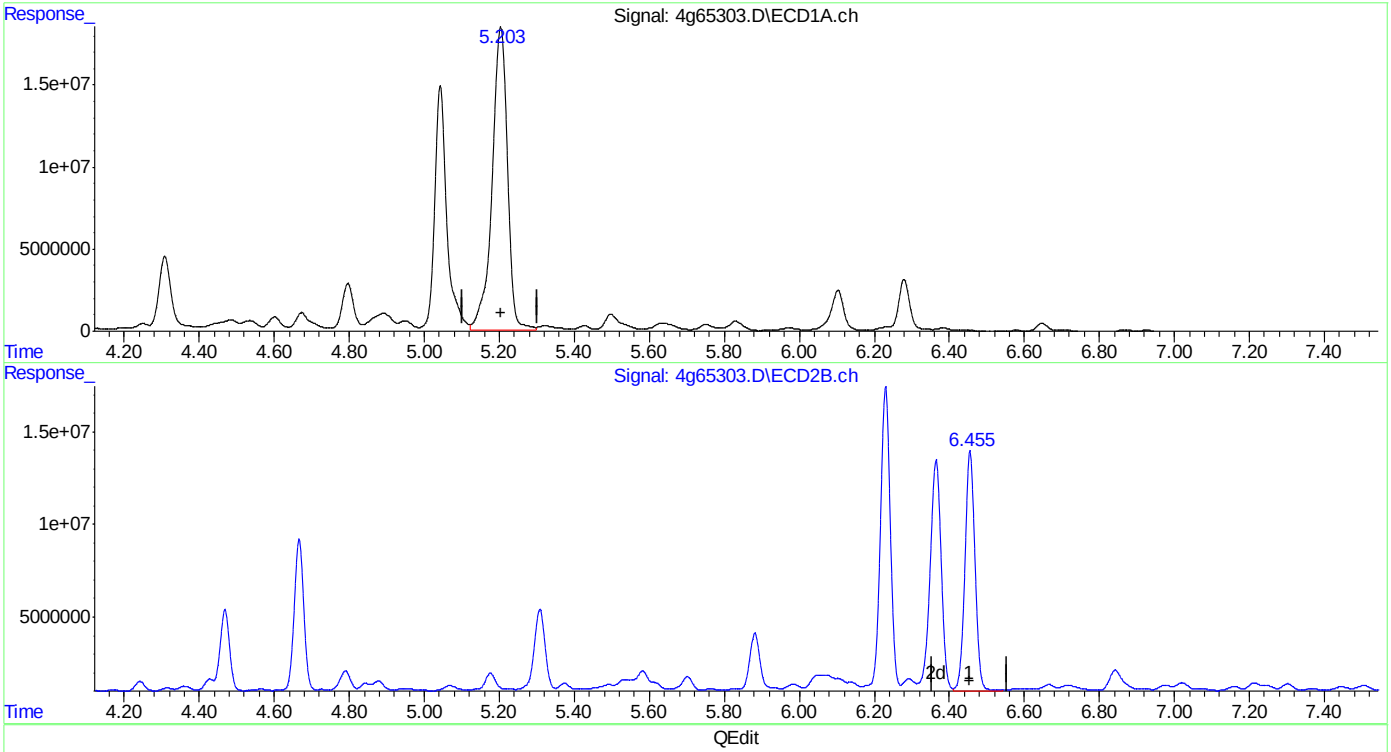
Parameter	CAS	Sig#	R.T. (min.)	Reason
1-Bromo-2-nitrobenzene	577-19-5	1	0.00	Poorly defined baseline
1-Bromo-2-nitrobenzene	577-19-5	2	0.00	Poorly defined baseline
Chlordane-D		2	6.45	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65303.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:28 pm
Operator : yvelandd
Sample : ic1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:55:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:55:21 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
5.204min 500.000 PPB
response 527996905

(35) Chlordane {D} #2
6.455min 240.405 PPB
response 240519794

(+) = Expected Retention Time
4PST1719.M Fri Feb 26 08:55:42 2016 RPT1

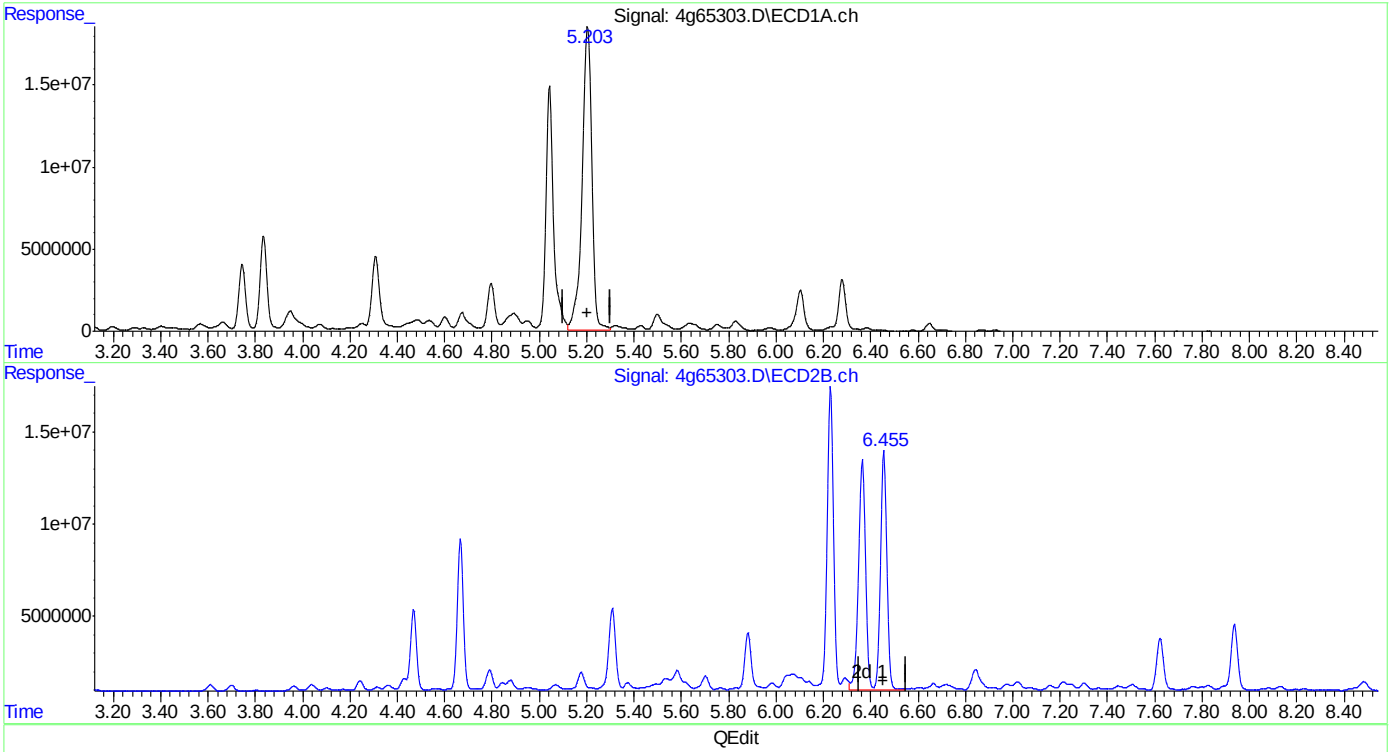
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65303.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 25 Feb 2016   6:28 pm
Operator  : yvelandd
Sample    : ic1719-500
Misc      : op91373,g4g1719,180,,,10,1
ALS Vial  : 11   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:55:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Fri Feb 26 08:55:21 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(35) Chlordane {D}
5.204min 500.000 PPB
response 527996905

(35) Chlordane {D} #2
6.455min 499.341 PPB m
response 499579295

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65304.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:43 pm
Operator : yvelandd
Sample : ic1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:58:52 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.069	2.233	281.5E6	241.6E6	50.000	50.000
25) I	1-bromo-2...	2.069	2.233	281.5E6	241.6E6	50.000	50.000
31) I	1-bromo-2...	2.069	2.233	281.5E6	241.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.617	3.016	237.8E6	223.5E6	46.622	48.224
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	116.56%	120.56%
24) SA	Decachlor...	9.841	11.255	238.1E6	168.6E6	45.369	45.929
	Spiked Amount 40.000			Recovery	=	113.42%	114.82%
	Target Compounds						
26) L8	Toxaphene{A}	6.089	6.956	69675373	46658116	500.000	500.000
27) L8	Toxaphene{B}	6.355	7.826	76663487	57950507	500.000	500.000
28) L8	Toxaphene{C}	6.518	7.989	101.7E6	97253219	500.000	500.000
29) L8	Toxaphene{D}	6.871	8.423	57772106	59696144	500.000	500.000
30) L8	Toxaphene{E}	7.532	9.337	40531930	49909790	500.000	500.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

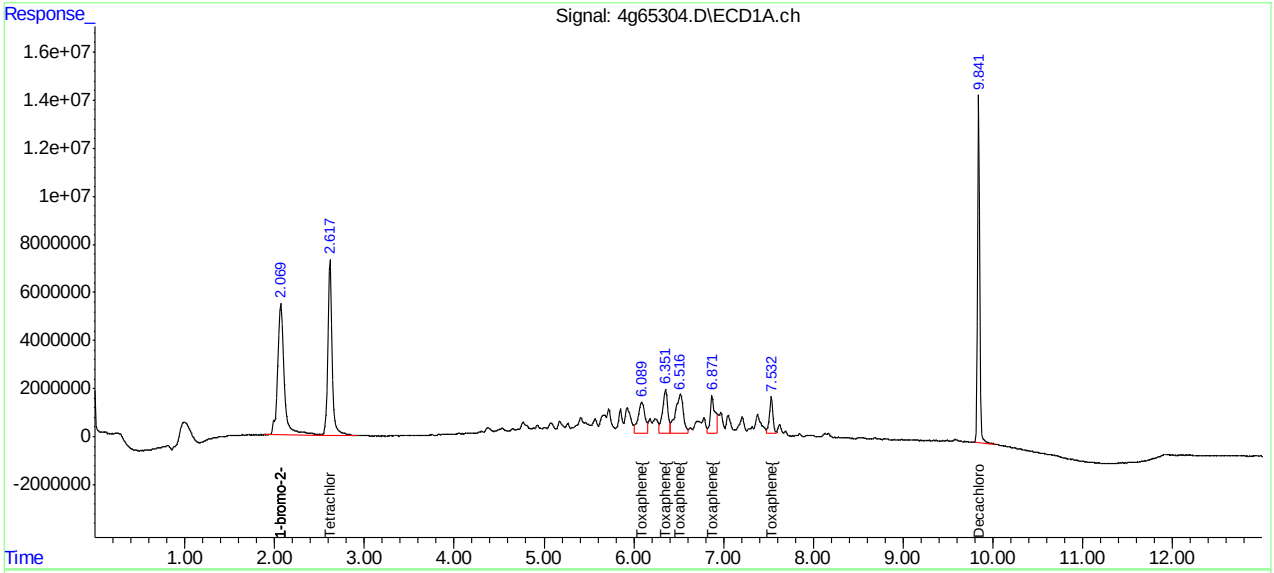
SGS ACCUTEST JC15518

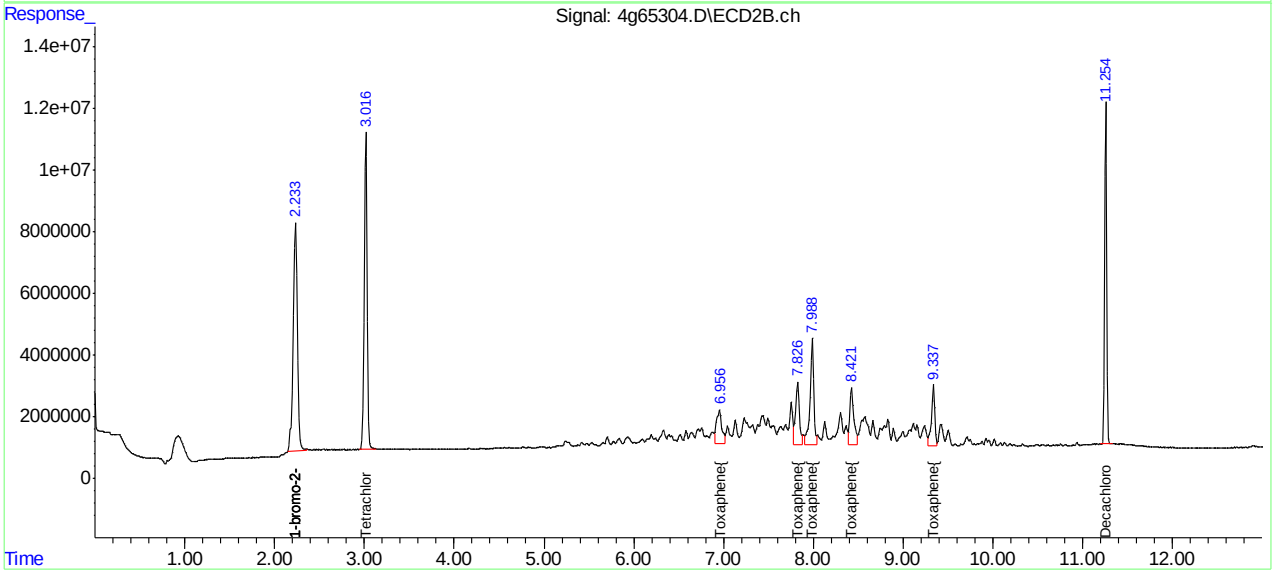
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65304.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:43 pm
Operator : yvelandd
Sample : ic1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:58:52 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-IC1719	**Method:**	SW846 8081B
Lab FileID:	4G65304.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 18:43	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

Parameter	CAS	Sig#	R.T. (min.)	Reason
1-Bromo-2-nitrobenzene	577-19-5	1	0.00	Poorly defined baseline
1-Bromo-2-nitrobenzene	577-19-5	2	0.00	Poorly defined baseline

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65305.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:58 pm
Operator : yvelandd
Sample : icv1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:53:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.072	2.235	249.8E6	229.0E6	50.000	50.000
25) I	1-bromo-2...	2.072	2.235	249.8E6	229.0E6	50.000	50.000
31) I	1-bromo-2...	2.072	2.235	249.8E6	229.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.620	3.017	110.9E6	104.6E6	24.513	23.805
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 61.28%	59.51%
24) SA	Decachlor...	9.841	11.254	111.6E6	78261482	23.974	22.499
	Spiked Amount	40.000			Recovery	= 59.94%	56.25%
	Target Compounds						
3) A	alpha-BHC	3.062	3.661	151.1E6	144.1E6	24.876	24.854
4) MA	gamma-BHC	3.351	4.087	133.0E6	131.1E6	24.228	25.559
5) MA	Heptachlor	3.628	4.665	134.7E6	124.4E6	27.187	24.801
6) B	beta-BHC	3.439	4.167	70559749	61059687	24.255	25.076
7) B	delta-BHC	3.835	4.566	101.7E6	125.3E6	25.712	25.924
8) MB	Aldrin	4.171	5.123	133.8E6	125.7E6	23.809	24.307
9) B	Heptachlo...	4.875	5.944	124.4E6	117.6E6	24.942	25.083
10) B	gamma-Chl...	5.044	6.231	122.2E6	118.7E6	26.146	24.896
11) B	alpha-Chl...	5.213	6.455	119.5E6	115.4E6	23.372	24.452
12) A	Endosulfan I	5.393	6.559	130.9E6	107.9E6	25.776	23.516
13) B	4,4'-DDE	5.335	6.704	94010912	112.2E6	22.824	25.122
14) MA	Dieldrin	5.715	6.995	122.6E6	117.2E6	25.040	25.118
15) MA	Endrin	6.041	7.505	111.5E6	107.7E6	24.947	25.251
16) A	4,4'-DDD	6.186	7.662	92959150	97179334	25.103	25.672
17) B	Endosulfa...	6.369	7.857	115.0E6	104.5E6	25.950	24.997
18) MA	4,4'-DDT	6.589	8.199	52595906	76602361	22.224	25.897
19) B	Endrin Al...	6.987	8.428	89911837	86578137	25.582	25.055
20) B	Endosulfa...	7.667	8.899	89840170	92419858	24.474	25.085
21) A	Methoxychlor	7.384	9.425	27883505	49324787	23.207	25.559
23) B	Endrin Ke...	8.120	9.794	102.0E6	102.3E6	25.807	24.852

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

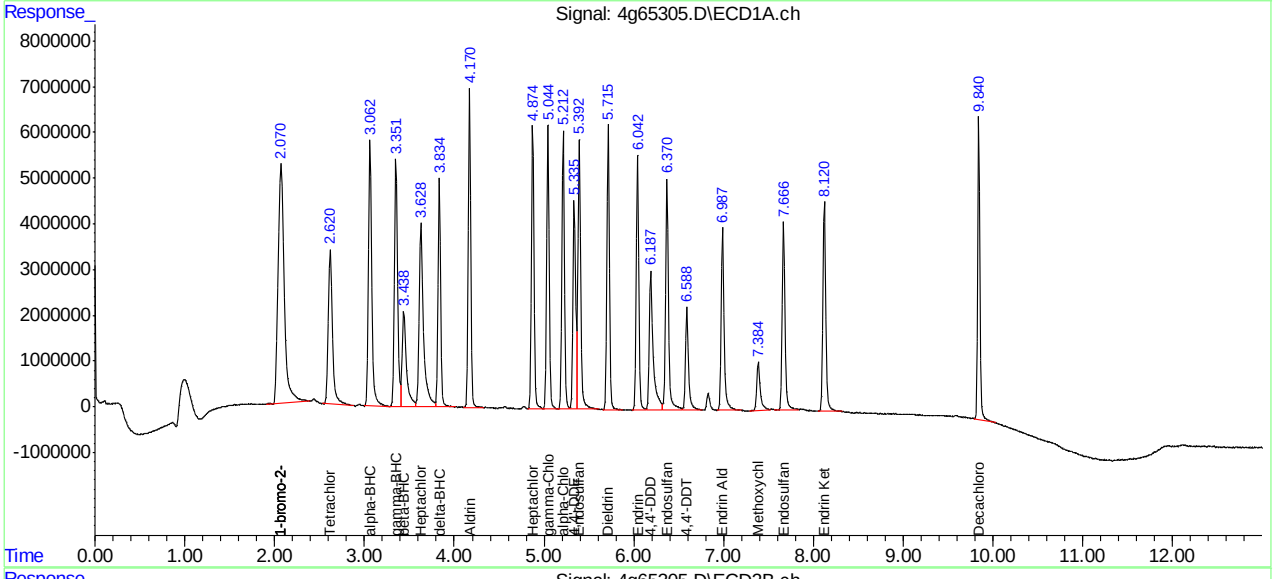
SGS ACCUTEST JC15518

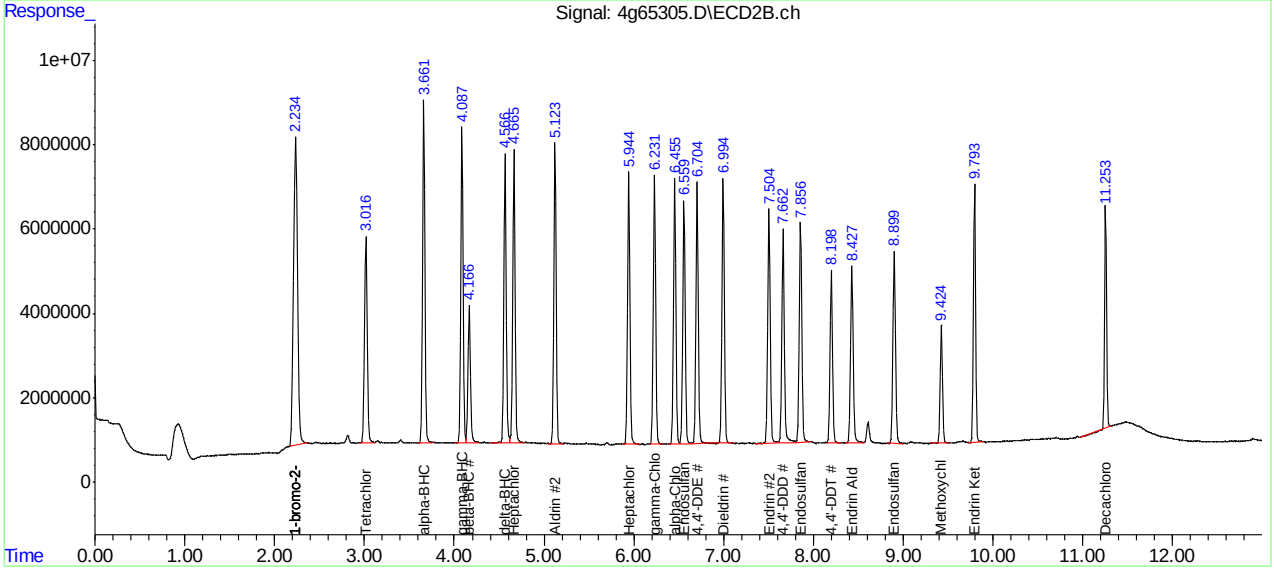
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65305.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 6:58 pm
Operator : yvelandd
Sample : icv1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:53:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:51:16 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65306.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:12 pm
Operator : yvelandd
Sample : icv1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.082	2.243	288.3E6	248.0E6	50.000	50.000
25) I	1-bromo-2...	2.082	2.243	288.3E6	248.0E6	50.000	50.000
31) I	1-bromo-2...	2.082	2.243	288.3E6	248.0E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	7.554	9.746	96223143	96314824	23.124	25.775
	SemiQuant Compounds - Not Calibrated on this Instrument						

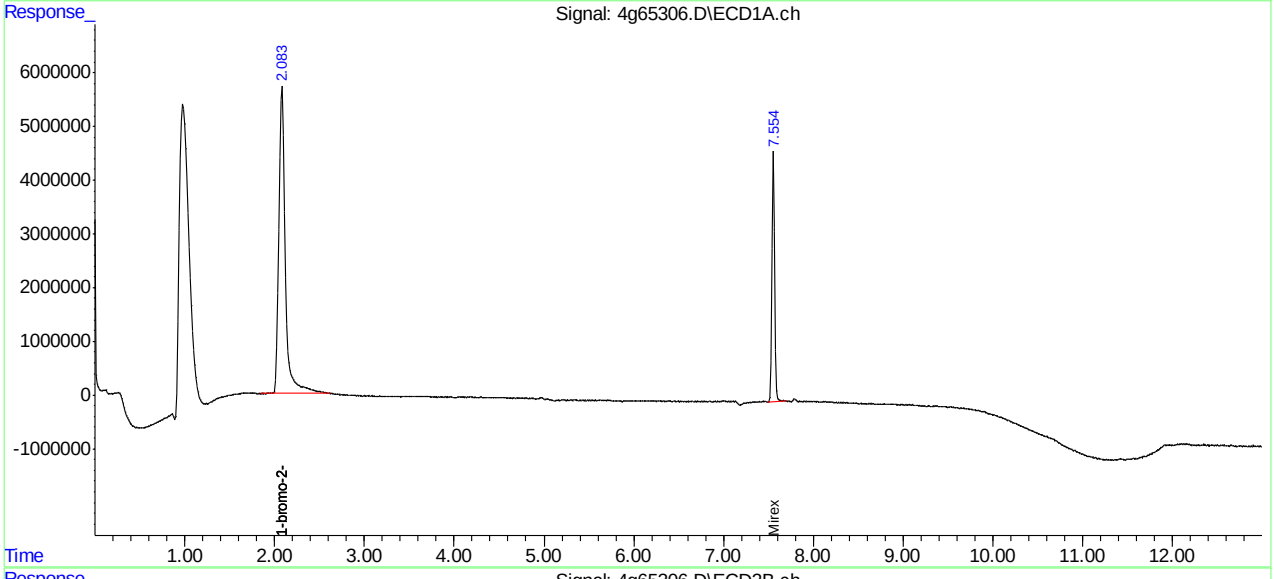
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

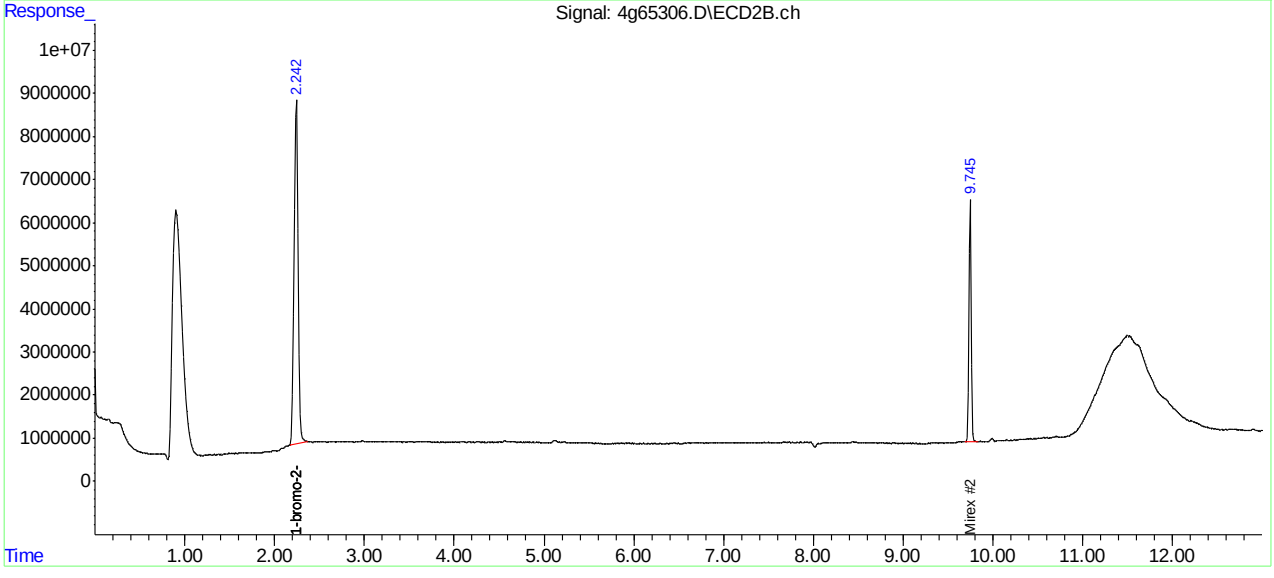
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65306.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:12 pm
Operator : yvelandd
Sample : icv1719-25
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65307.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:27 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:00:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.070	2.234	269.7E6	228.5E6	50.000	50.000
25) I	1-bromo-2...	2.070	2.234	269.7E6	228.5E6	50.000	50.000
31) I	1-bromo-2...	2.070	2.234	269.7E6	228.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.618	3.017	232.4E6	219.2E6	47.566	50.010
Spiked Amount		40.000	Range	30 - 150	Recovery	= 118.92%	125.02%
24) SA	Decachlor...	9.840	11.255	231.7E6	162.7E6	46.084	46.885
Spiked Amount		40.000			Recovery	= 115.21%	117.21%
	Target Compounds						
32)	Chlordane...	3.743	4.468	93162600	90638724	590.123	590.334
33)	Chlordane...	4.308	5.307	109.7E6	93250932	527.606	538.017
34)	Chlordane...	5.042	6.229	328.5E6	297.0E6	488.866	494.781
35)	Chlordane...	5.205	6.456	524.6E6	491.1E6	493.603	497.873m
36)	Chlordane...	6.280	7.937	67038080	76690456	449.934	516.533

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

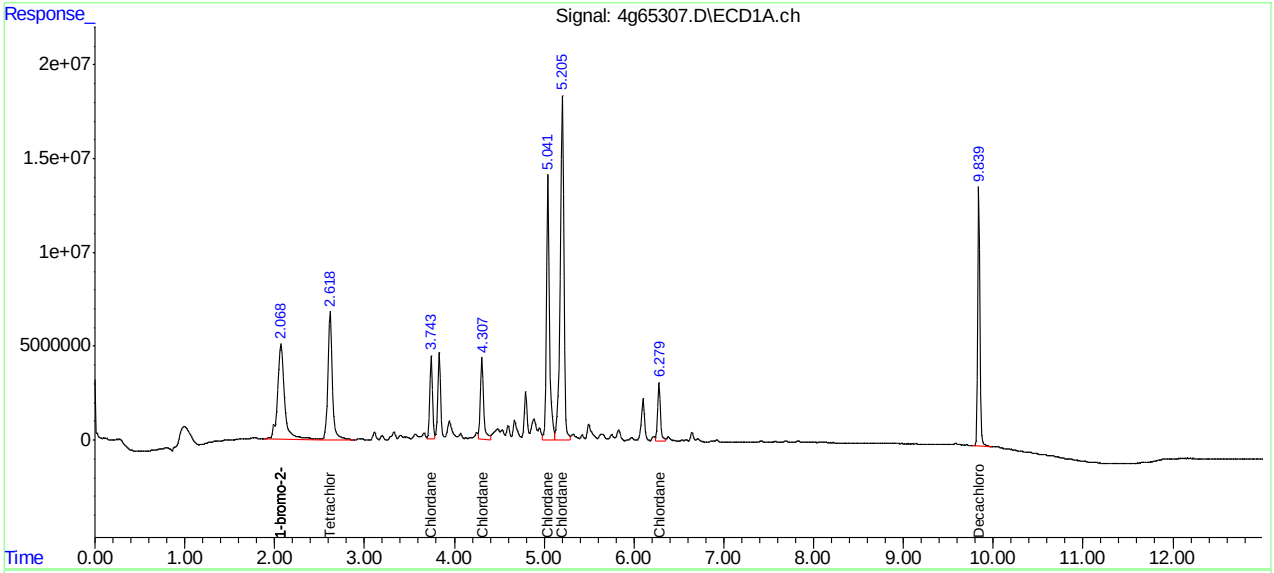
13.6.13
13

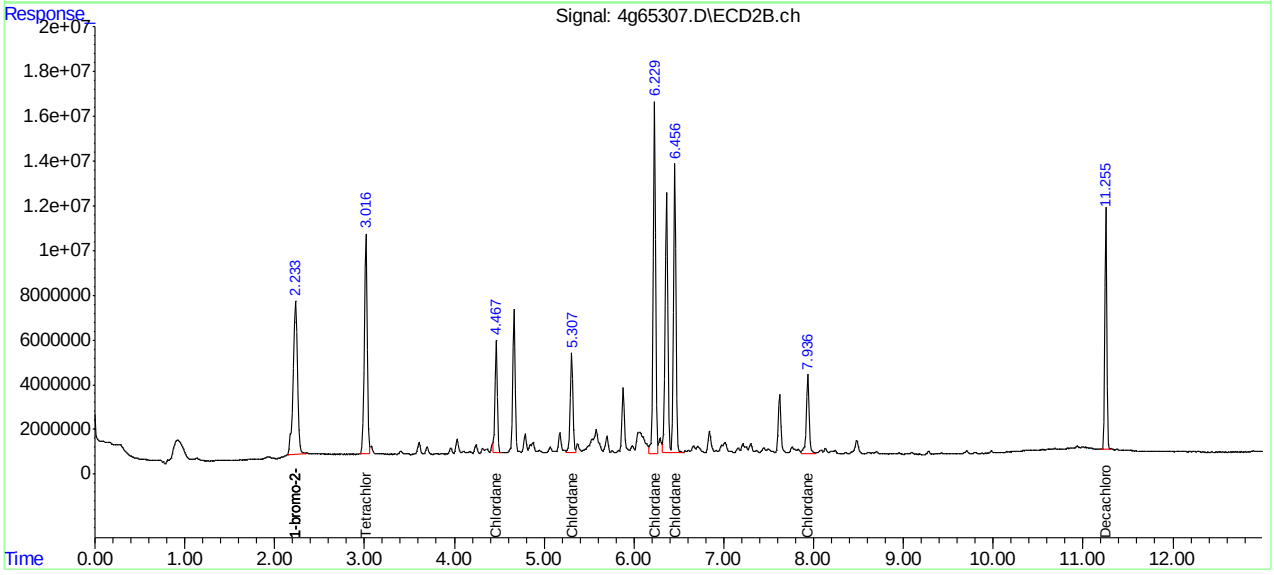
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65307.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:27 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:00:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-ICV1719	**Method:**	SW846 8081B
Lab FileID:	4G65307.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 19:27	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

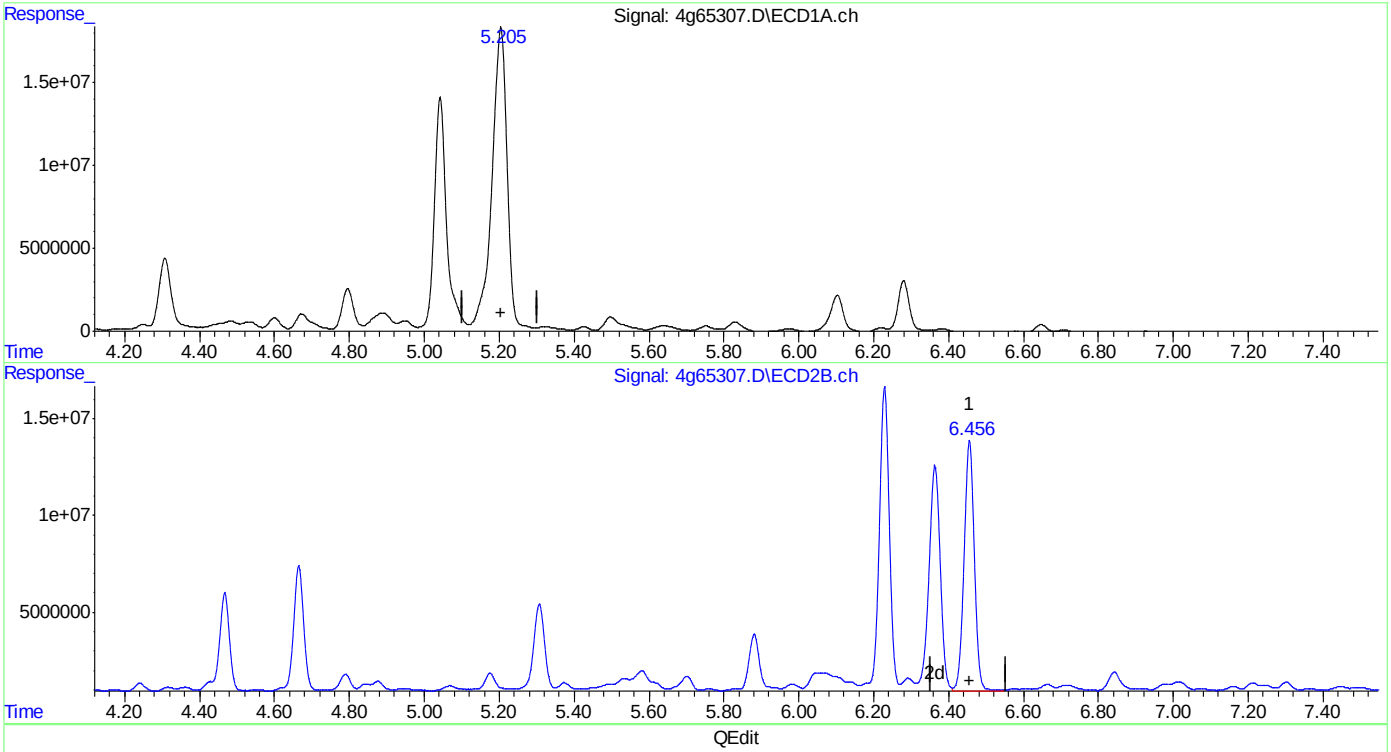
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.46	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65307.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:27 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
5.205min 493.603 PPB
response 524627427

(35) Chlordane {D} #2
6.456min 249.869 PPB
response 246474573

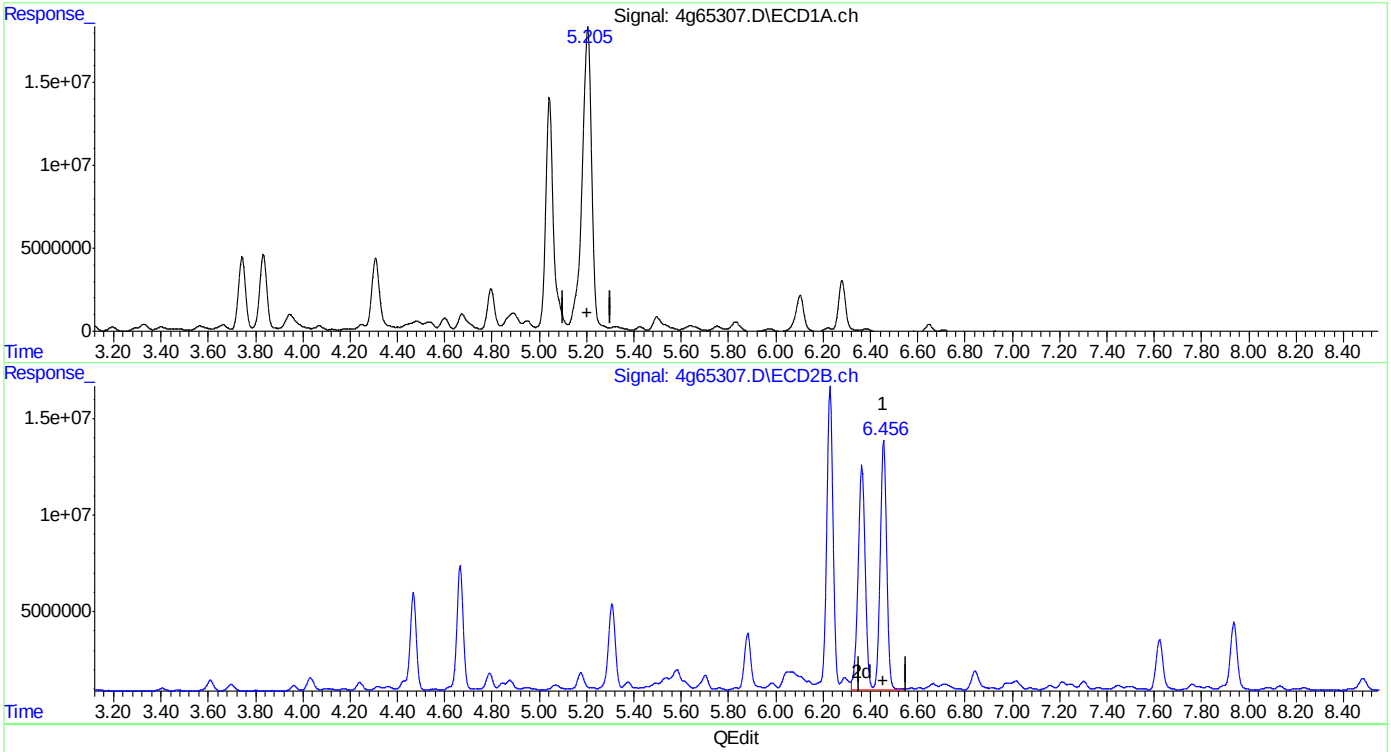
(+) = Expected Retention Time
4PST1719.M Fri Feb 26 09:00:18 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65307.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:27 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 08:59:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
5.205min 493.603 PPB
response 524627427

(35) Chlordane {D} #2
6.456min 497.873 PPB m
response 491109714

(+) = Expected Retention Time

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
03/04/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65308.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:42 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:01:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.073	2.234	266.3E6	223.9E6	50.000	50.000
25) I	1-bromo-2...	2.073	2.234	266.3E6	223.9E6	50.000	50.000
31) I	1-bromo-2...	2.073	2.234	266.3E6	223.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.619	3.017	209.9E6	197.6E6	43.497	46.022
Spiked Amount	40.000	Range	30 - 150	Recovery	=	108.74%	115.05%
24) SA	Decachlor...	9.841	11.254	210.1E6	151.0E6	42.326	44.383
Spiked Amount	40.000			Recovery	=	105.82%	110.96%
	Target Compounds						
26) L8	Toxaphene{A}	6.090	6.956	66338817	41065690	503.271	474.993m
27) L8	Toxaphene{B}	6.357	7.826	74758740	54989686	515.450	512.105
28) L8	Toxaphene{C}	6.519	7.988	87845632	92764566	456.491m	514.770
29) L8	Toxaphene{D}	6.872	8.424	52713267	57569742	482.297	520.455
30) L8	Toxaphene{E}	7.533	9.337	39189403	48957170	511.075	529.378
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

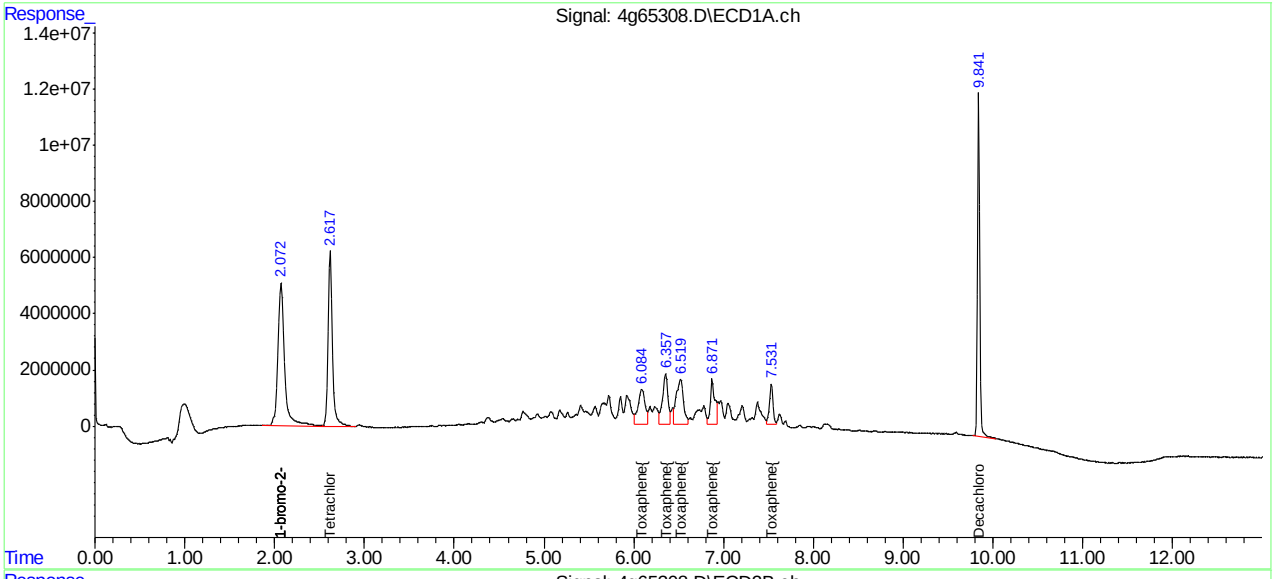
13.6.14
13

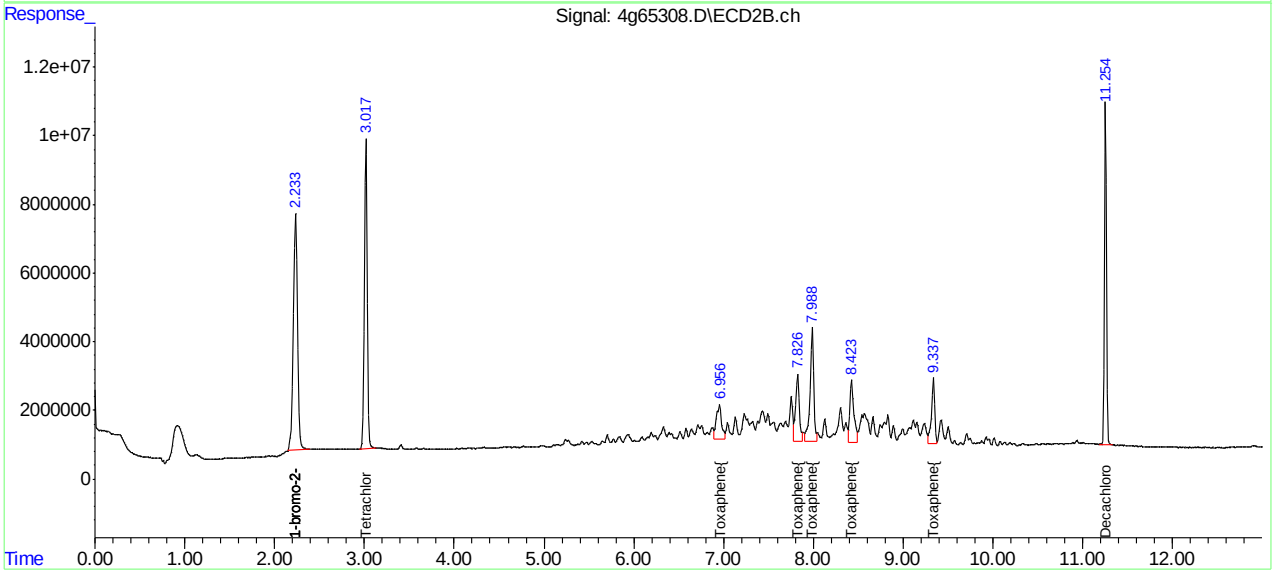
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65308.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:42 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:01:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1719-ICV1719	**Method:**	SW846 8081B
Lab FileID:	4G65308.D	**Analyst approved:**	02/26/16 09:10 Owen McKenna
Injection Time:	02/25/16 19:42	**Supervisor approved:**	03/04/16 15:44 Owen McKenna

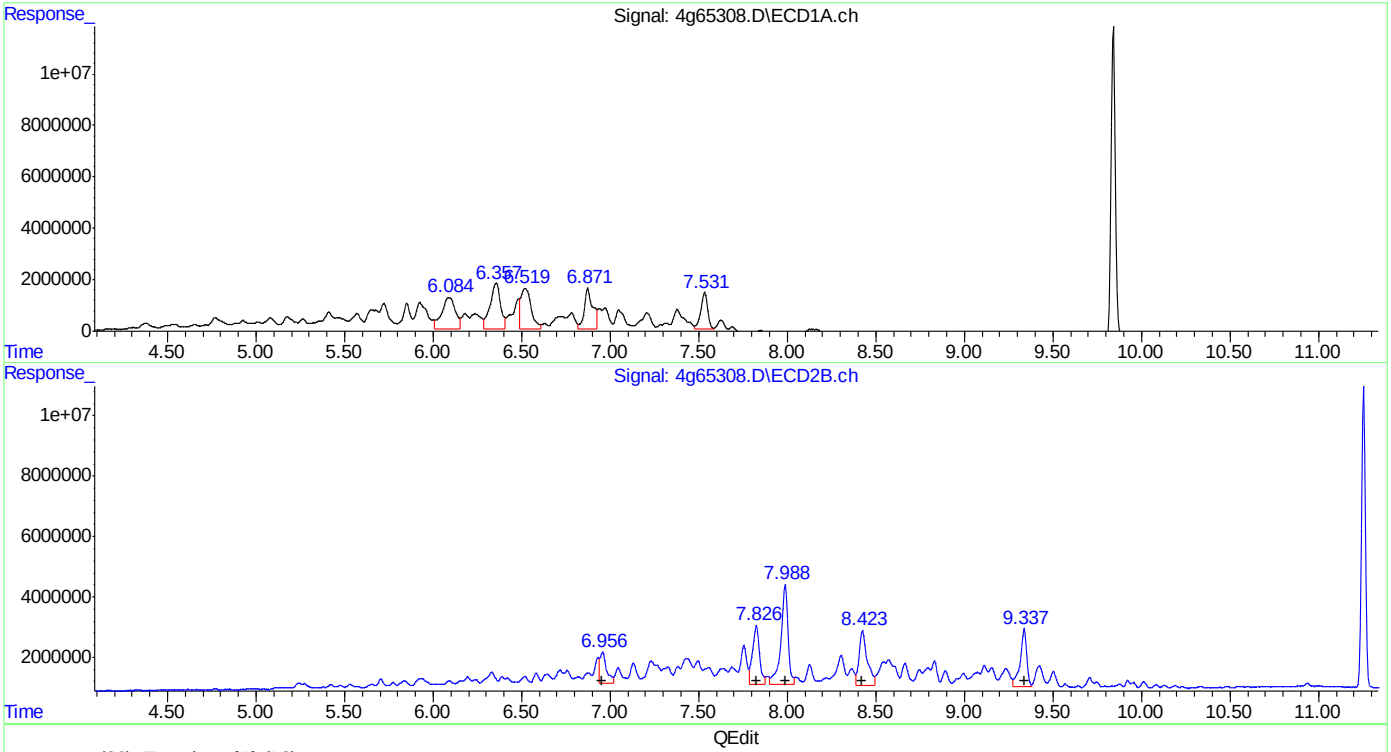
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		1	6.52	Poorly defined baseline
Toxaphene-A		2	6.96	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65308.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:42 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(26) Toxaphene{A} (L8)

R.T.	Response	Conc
6.09	66338817	503.27
6.36	74758740	515.45
6.52	65191222	338.77
6.87	52713267	482.30
7.53	39189403	511.07

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.96	26858918	310.67
7.83	54989686	512.11
7.99	92764566	514.77
8.42	57569742	520.46
9.34	48957170	529.38

(+) = Expected Retention Time

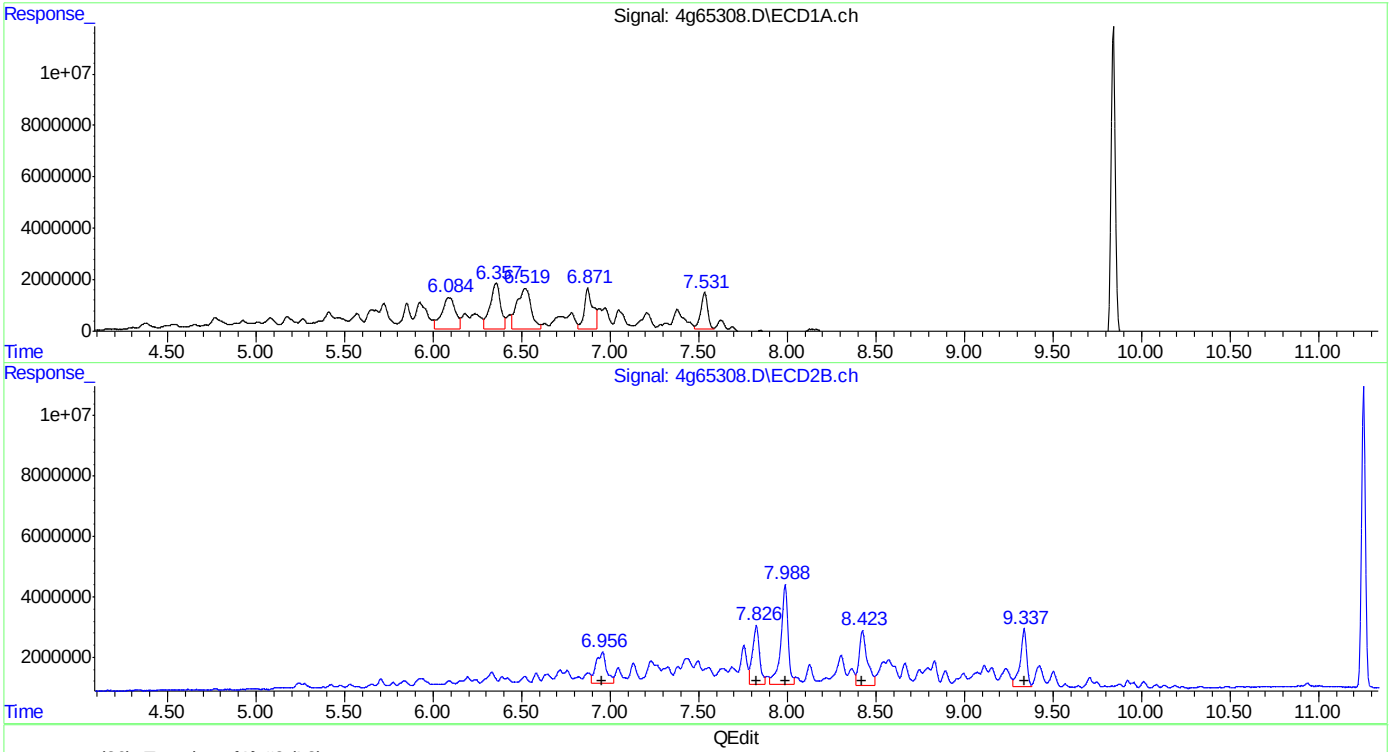
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1719\
Data File : 4g65308.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 25 Feb 2016 7:42 pm
Operator : yvelandd
Sample : icv1719-500
Misc : op91373,g4g1719,180,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 26 09:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Fri Feb 26 08:59:22 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.09	66338817	503.27
6.36	74758740	515.45
6.52	87845632	456.49
6.87	52713267	482.30
7.53	39189403	511.07

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.96	41065690	474.99
7.83	54989686	512.11
7.99	92764566	514.77
8.42	57569742	520.46
9.34	48957170	529.38

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 12:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:46 pm
Operator : dharas
Sample : cc1719-25
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:04:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.057	2.222	192.9E6	198.8E6	50.000	50.000	
25) I	1-bromo-2...	2.057	2.222	192.9E6	198.8E6	50.000	50.000	
31) I	1-bromo-2...	2.057	2.222	192.9E6	198.8E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.601	3.002	110.4E6	106.8E6	31.575	27.993	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	78.94%	69.98%	
24) SA	Decachlor...	9.816	11.233	110.4E6	78516291	30.699	25.996	
Spiked Amount		40.000		Recovery	=	76.75%	64.99%	
	Target Compounds							
3) A	alpha-BHC	3.044	3.645	152.5E6	145.9E6	32.502	28.969	
4) MA	gamma-BHC	3.330	4.069	137.0E6	130.7E6	32.325	29.343	
5) MA	Heptachlor	3.602	4.646	126.4E6	125.9E6	33.020	28.902	
6) B	beta-BHC	3.414	4.149	63465643	59222349	28.249	28.011	
7) B	delta-BHC	3.815	4.548	120.8E6	124.5E6	39.532	29.666	
8) MB	Aldrin	4.149	5.102	135.9E6	127.2E6	31.308	28.338	
9) B	Heptachlo...	4.849	5.920	125.1E6	115.6E6	32.482	28.406	
10) B	gamma-Chl...	5.018	6.206	120.4E6	117.1E6	33.351	28.286	
11) B	alpha-Chl...	5.188	6.430	119.9E6	114.2E6	30.375	27.864	
12) A	Endosulfan I	5.367	6.534	126.1E6	109.2E6	32.158	27.414	
13) B	4,4'-DDE	5.303	6.680	104.2E6	109.1E6	32.756	28.144	
14) MA	Dieldrin	5.687	6.969	123.0E6	115.4E6	32.525	28.478	
15) MA	Endrin	6.013	7.478	113.1E6	106.3E6	32.753	28.695	
16) A	4,4'-DDD	6.148	7.636	99291241	91639799	34.718	27.881	
17) B	Endosulfa...	6.340	7.830	110.1E6	101.6E6	32.177	27.995	
18) MA	4,4'-DDT	6.558	8.171	52927013	68051883	28.088	26.496	
19) B	Endrin Al...	6.956	8.400	90902265	81055876	33.490m	27.015	
20) B	Endosulfa...	7.634	8.871	94207086	90448606	33.230	28.273	
21) A	Methoxychlor	7.346	9.399	32892330	40335733	35.447m	24.071	#
22)	Mirex	7.524	9.719	91609768	80211287	32.900	26.778	
23) B	Endrin Ke...	8.088	9.770	102.0E6	108.1E6	33.407	30.232	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

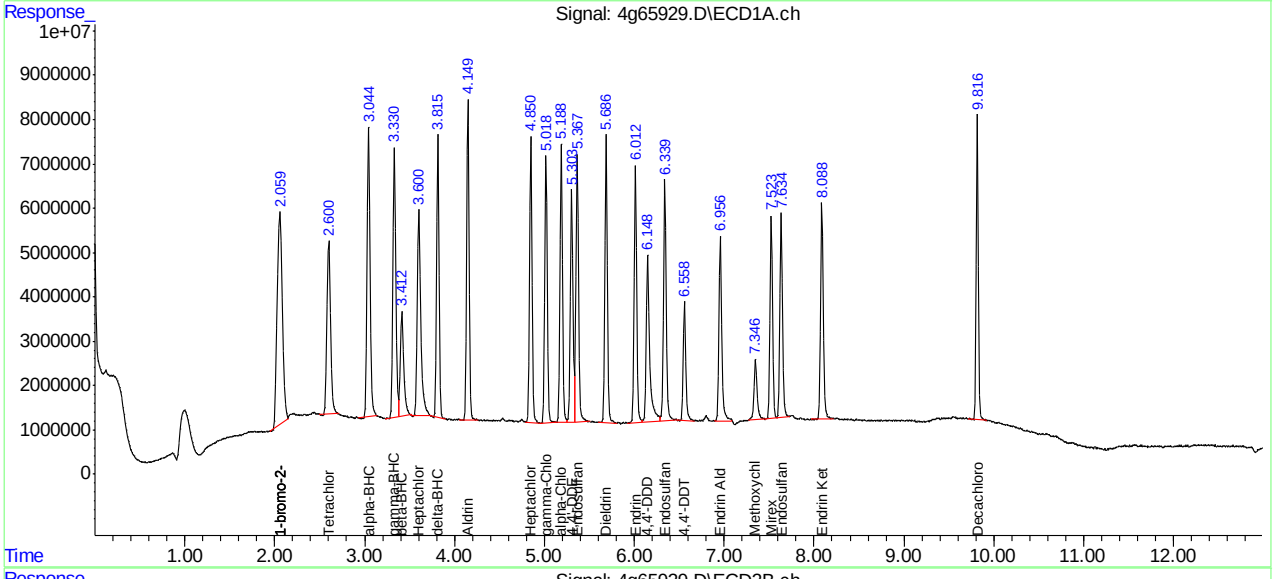
13.6.15 13

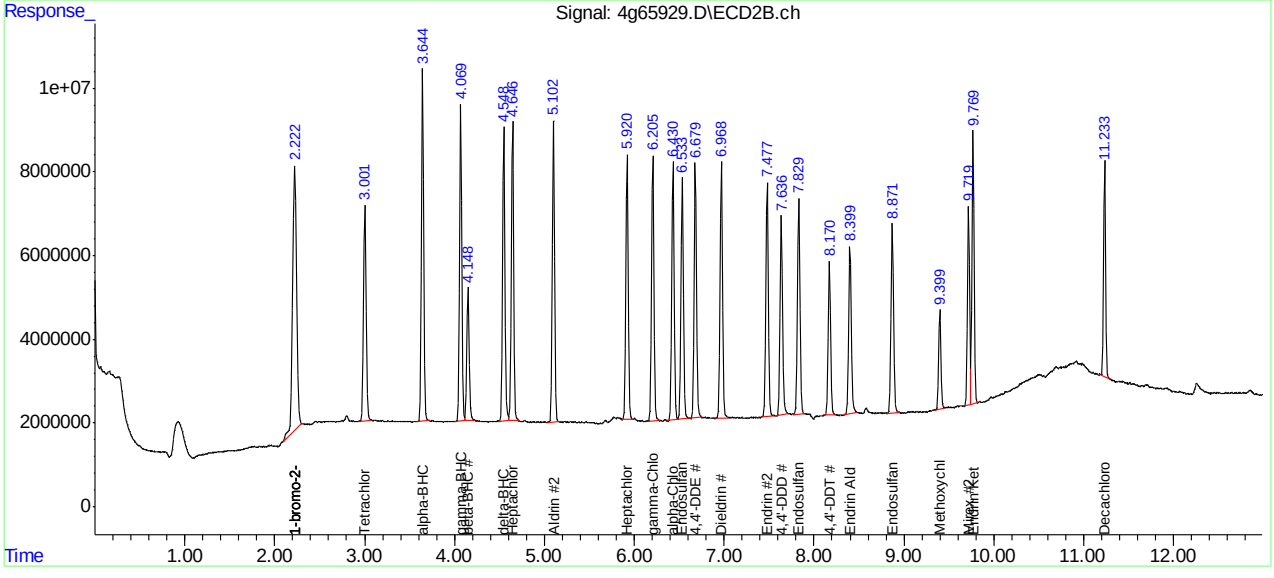
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:46 pm
Operator : dharas
Sample : cc1719-25
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:04:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1734-CC1719	**Method:**	SW846 8081B
Lab FileID:	4G65929.D	**Analyst approved:**	03/14/16 18:56 Joseph Ravino
Injection Time:	03/14/16 16:46	**Supervisor approved:**	03/15/16 12:49 Gwendolyn Burns

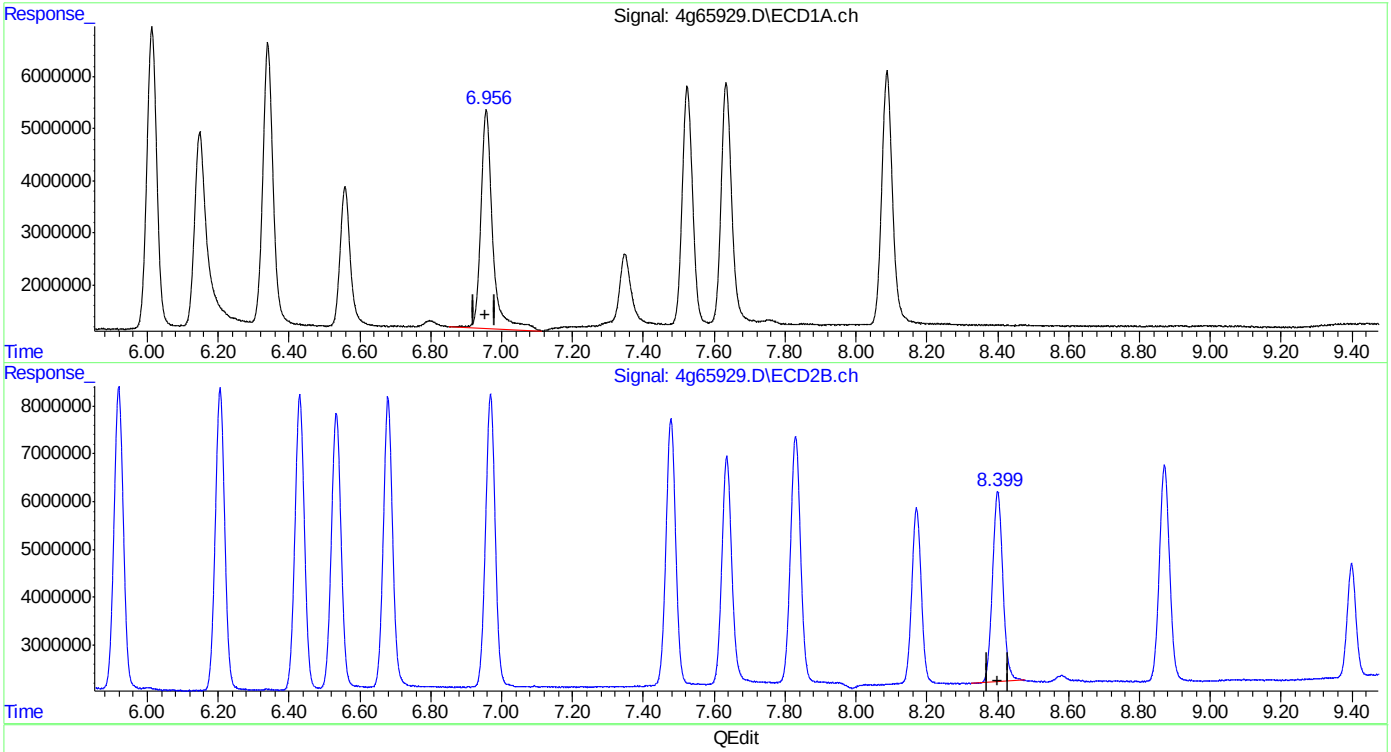
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	6.96	Poor instrument integration
Methoxychlor	72-43-5	1	7.35	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:46 pm
Operator : dharas
Sample : cc1719-25
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:03:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
6.957min 35.706 PPB
response 96918069

(19) Endrin Aldehyde #2 (B)
8.400min 27.015 PPB
response 81055876

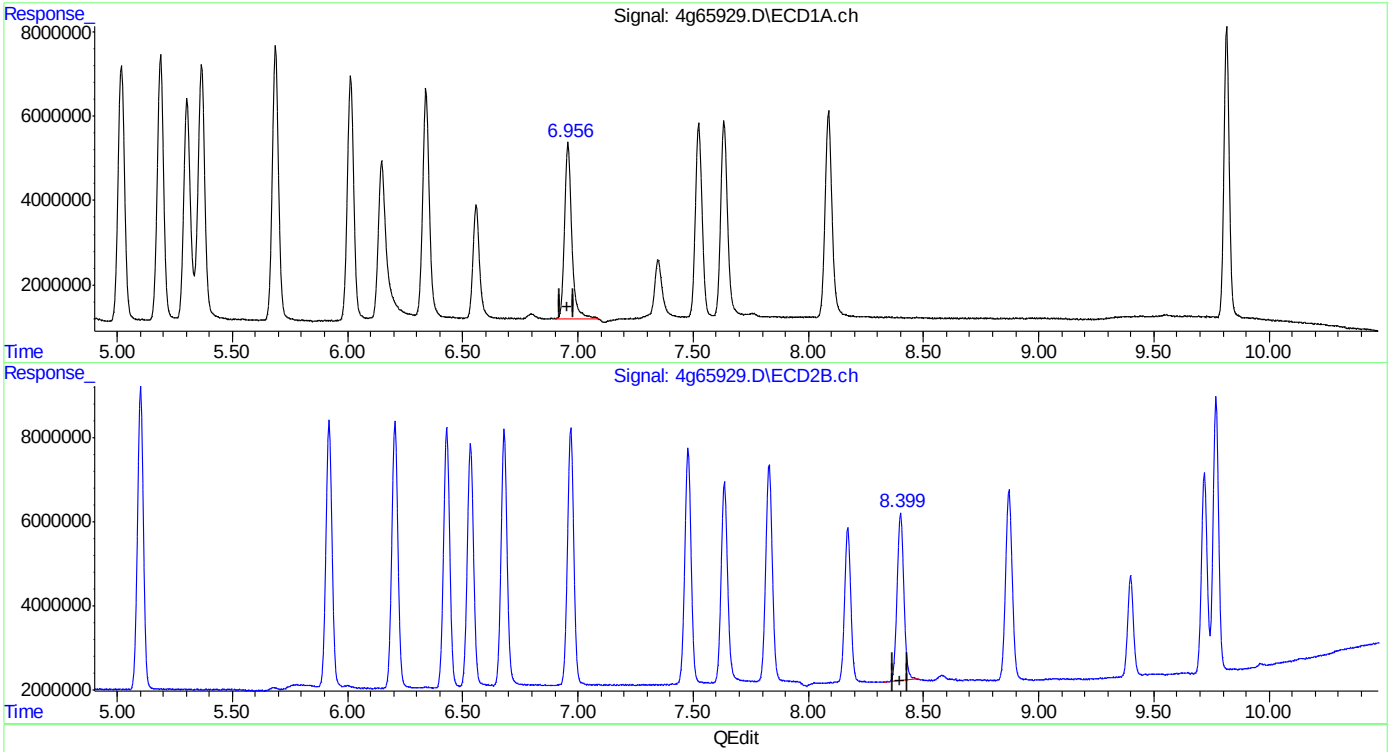
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:46 pm
Operator : dharas
Sample : cc1719-25
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:03:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.956min 33.490 PPB m
response 90902265

(19) Endrin Aldehyde #2 (B)
8.400min 27.015 PPB
response 81055876

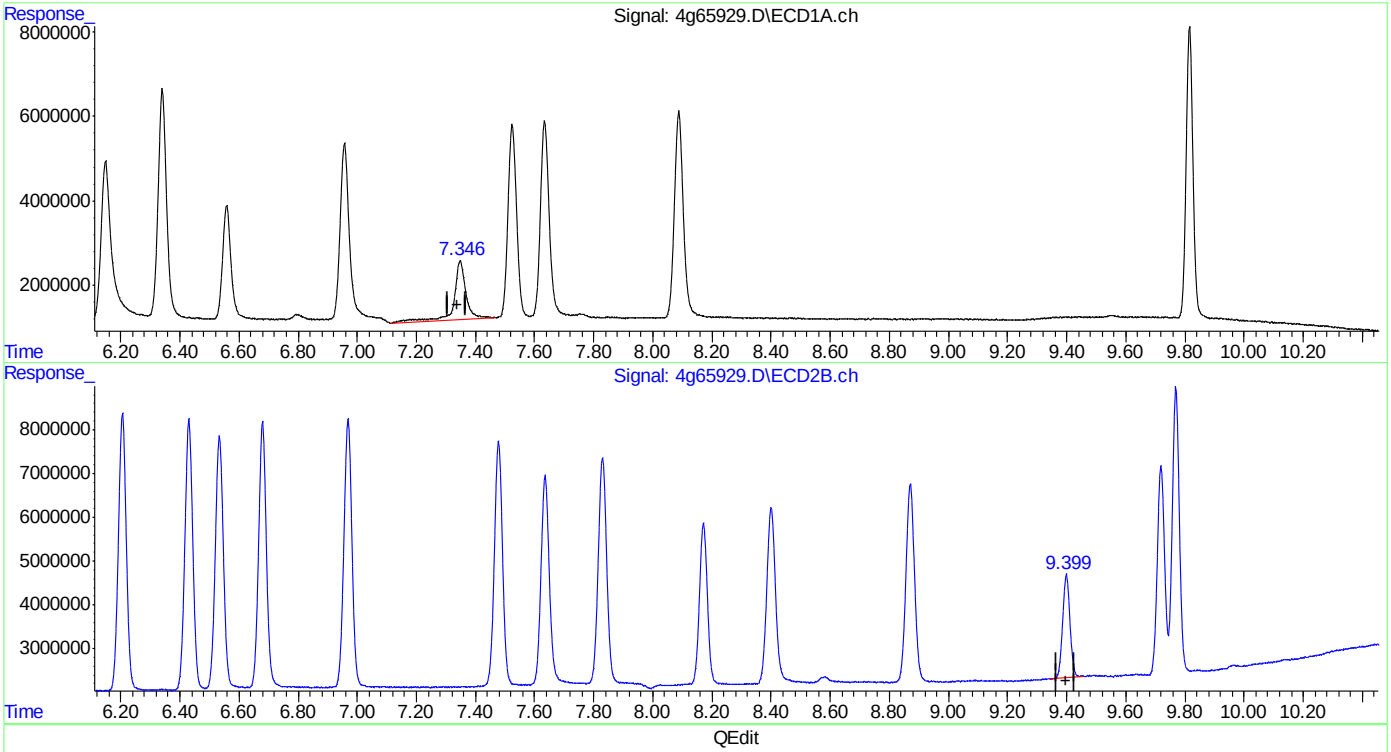
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 14 Mar 2016   4:46 pm
Operator  : dharas
Sample    : cc1719-25
Misc      : op91919,g4g1734,100,,,10,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:03:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title  : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(21) Methoxychlor (A)
7.348min 41.567 PPB
response 38571095

(21) Methoxychlor #2 (A)
9.399min 24.071 PPB
response 40335733

(+) = Expected Retention Time

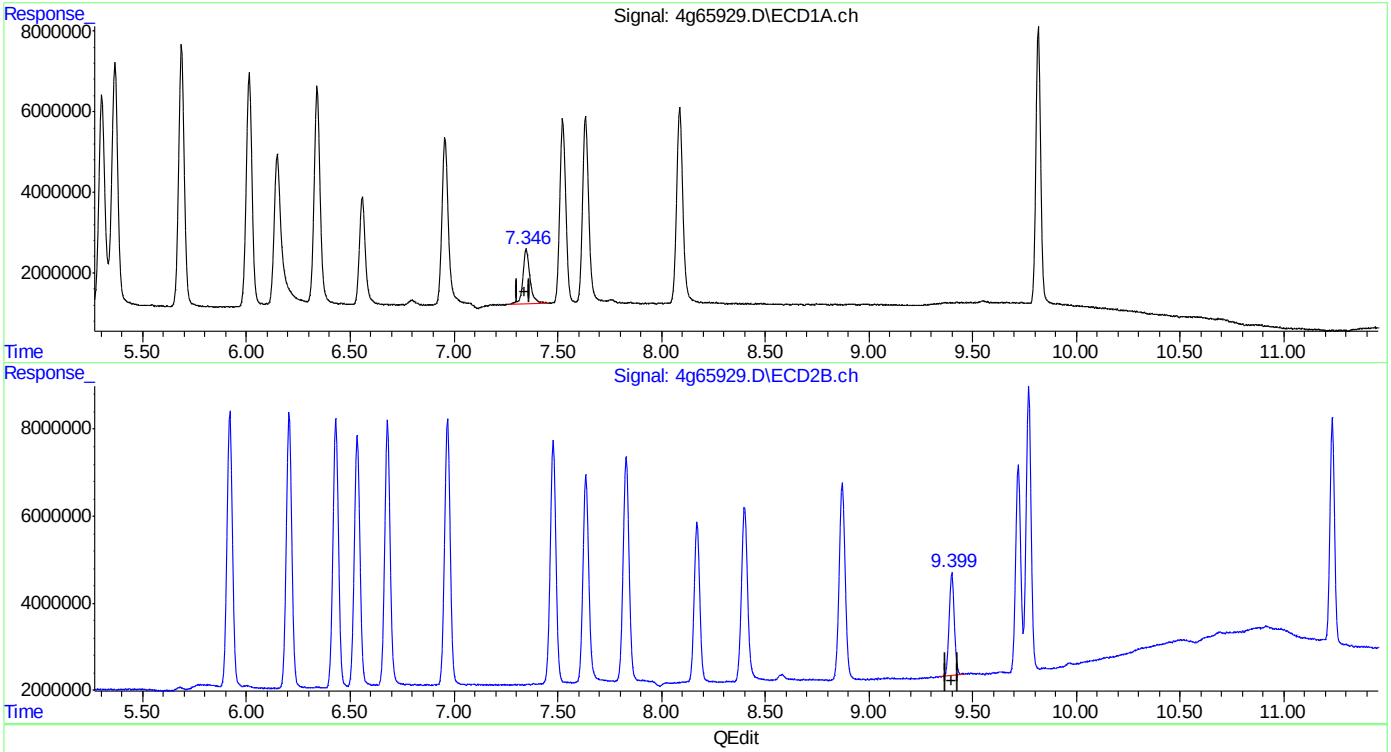
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65929.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 4:46 pm
Operator : dharas
Sample : cc1719-25
Misc : op91919,g4g1734,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 14 17:03:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.346min 35.447 PPB m
response 32892330

(21) Methoxychlor #2 (A)
9.399min 24.071 PPB
response 40335733

(+) = Expected Retention Time
4PST1719.M Mon Mar 14 17:03:42 2016 RPT1

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65934.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 6:29 pm
Operator : dharas
Sample : cc1719-50
Misc : op91955,g4g1734,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:14:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.061	2.223	221.3E6	203.3E6	50.000	50.000	
25) I	1-bromo-2...	2.061	2.223	221.3E6	203.3E6	50.000	50.000	
31) I	1-bromo-2...	2.061	2.223	221.3E6	203.3E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.604	3.003	232.6E6	220.6E6	58.022	56.566	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 145.06%	141.41%	
24) SA	Decachlor...	9.817	11.233	227.2E6	158.5E6	55.070	51.319	
	Spiked Amount	40.000			Recovery	= 137.67%	128.30%	
	Target Compounds							
3) A	alpha-BHC	3.047	3.646	330.9E6	313.8E6	61.478	60.921	
4) MA	gamma-BHC	3.333	4.070	291.3E6	281.3E6	59.918	61.747	
5) MA	Heptachlor	3.606	4.646	289.9E6	266.3E6	66.013	59.786	
6) B	beta-BHC	3.417	4.150	144.6E6	122.2E6	56.124	56.530	
7) B	delta-BHC	3.817	4.548	264.8E6	267.3E6	75.550	62.270	
8) MB	Aldrin	4.151	5.102	287.7E6	271.6E6	57.791	59.165	
9) B	Heptachlo...	4.851	5.920	260.8E6	247.4E6	59.027	59.420	
10) B	gamma-Chl...	5.021	6.206	261.5E6	247.8E6	63.148	58.529	
11) B	alpha-Chl...	5.191	6.431	256.1E6	242.5E6	56.552	57.872	
12) A	Endosulfan I	5.368	6.534	276.7E6	231.1E6	61.510	56.732	
13) B	4,4'-DDE	5.308	6.681	211.1E6	235.3E6	57.858	59.321	
14) MA	Dieldrin	5.689	6.969	264.5E6	248.5E6	60.983	59.972	
15) MA	Endrin	6.015	7.479	236.0E6	218.8E6	59.596	57.768	
16) A	4,4'-DDD	6.153f	7.637	199.9E6	194.5E6	60.927	57.853	
17) B	Endosulfa...	6.342	7.830	236.2E6	212.5E6	60.137	57.241	
18) MA	4,4'-DDT	6.561	8.172	134.3E6	155.2E6	57.079	59.069	
19) B	Endrin Al...	6.958	8.400	191.9E6	169.8E6	61.622	55.325	
20) B	Endosulfa...	7.637	8.872	201.4E6	188.1E6	61.916	57.498	
21) A	Methoxychlor	7.353	9.400	72357501	87287677	67.975	50.936	#
22)	Mirex	7.526	9.720	190.9E6	165.3E6	59.771	53.949	
23) B	Endrin Ke...	8.090	9.770	229.4E6	232.5E6	65.486	63.605	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

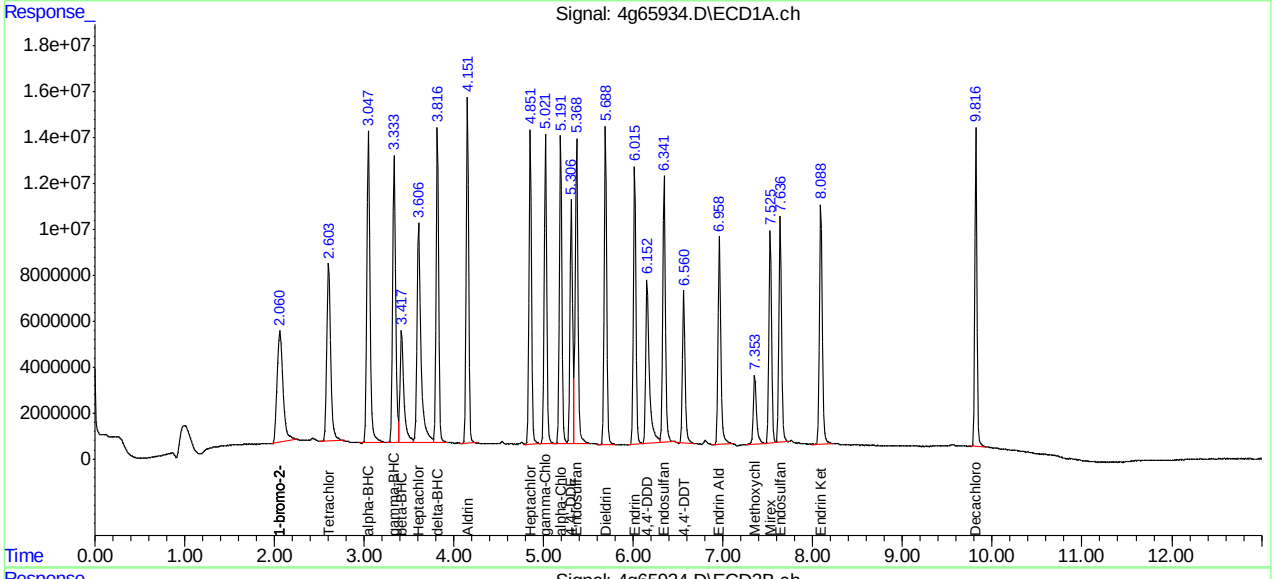
13.6.16 13

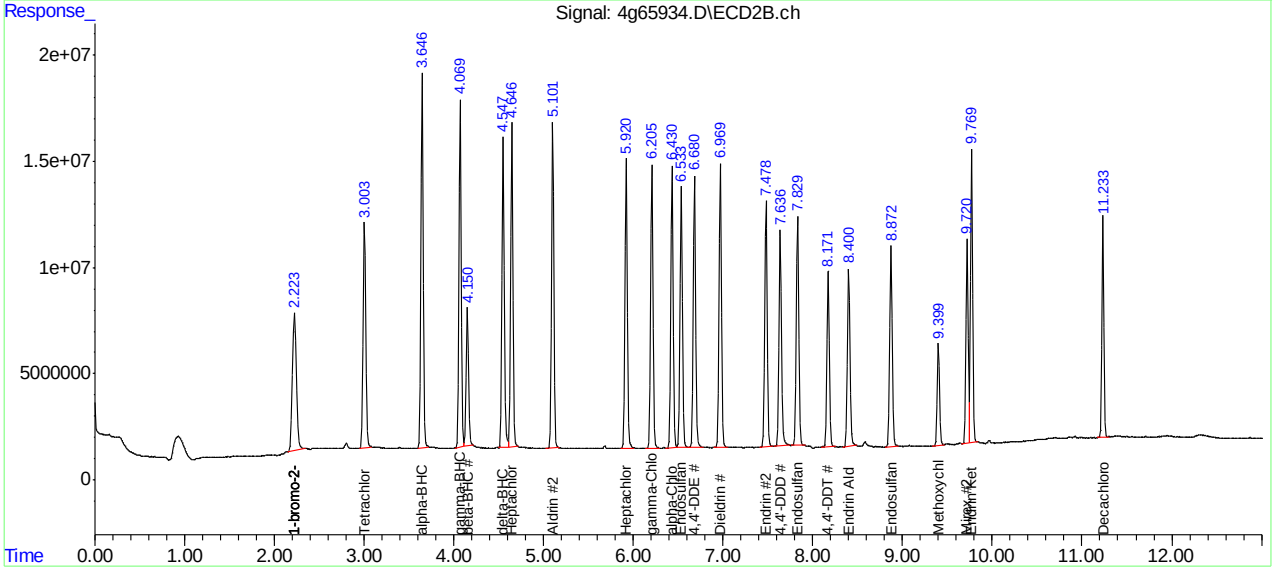
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65934.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 6:29 pm
Operator : dharas
Sample : cc1719-50
Misc : op91955,g4g1734,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:14:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





13.6.16
13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65955.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 11:22 pm
Operator : dharas
Sample : cc1719-25
Misc : op91765,g4g1734,15.7,,,10,2
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:25:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	2.064	2.228	237.8E6	207.1E6	50.000	50.000	
25) I	1-bromo-2...	2.064	2.228	237.8E6	207.1E6	50.000	50.000	
31) I	1-bromo-2...	2.064	2.228	237.8E6	207.1E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.608	3.009	127.1E6	115.1E6	29.499	28.968	
	Spiked Amount	40.000	Range	30 - 150	Recovery	=	73.75%	72.42%
24) SA	Decachlor...	9.816	11.233	110.2E6	84760594	24.859	26.941	
	Spiked Amount	40.000			Recovery	=	62.15%	67.35%
	Target Compounds							
3) A	alpha-BHC	3.051	3.649	170.1E6	154.7E6	29.406	29.499	
4) MA	gamma-BHC	3.336	4.072	149.8E6	139.7E6	28.671	30.101	
5) MA	Heptachlor	3.605	4.648	150.9E6	134.3E6	31.974	29.601	
6) B	beta-BHC	3.416	4.153	77585057	64237825	28.013	29.168	
7) B	delta-BHC	3.821	4.551	141.4E6	131.3E6	37.541	30.027	
8) MB	Aldrin	4.155	5.103	146.5E6	135.6E6	27.376	29.011	
9) B	Heptachlo...	4.854	5.921	133.7E6	125.4E6	28.154	29.579	
10) B	gamma-Chl...	5.023	6.207	133.4E6	124.7E6	29.975	28.930	
11) B	alpha-Chl...	5.192	6.431	130.3E6	122.7E6	26.767	28.746	
12) A	Endosulfan I	5.370	6.535	136.7E6	115.0E6	28.280	27.728	
13) B	4,4'-DDE	5.304	6.680	107.1E6	107.2E6	27.307	26.530	
14) MA	Dieldrin	5.690	6.969	131.5E6	120.2E6	28.211	28.481	
15) MA	Endrin	6.016	7.478	115.2E6	106.3E6	27.060	27.551	
16) A	4,4'-DDD	6.145	7.636	104.2E6	102.8E6	29.550	30.017	
17) B	Endosulfa...	6.340	7.829	114.9E6	108.1E6	27.227	28.594	
18) MA	4,4'-DDT	6.555	8.170	57553604	63365399	25.128	23.684	
19) B	Endrin Al...	6.956	8.400	96152812	78167210	28.735	25.009	
20) B	Endosulfa...	7.633	8.870	91602050	98058571	26.210	29.426	
21) A	Methoxychlor	7.345	9.399	36032811	36886945	31.500	21.132	#
22)	Mirex	7.526	9.719	89327522	87152265	26.023	27.930	
23) B	Endrin Ke...	8.088	9.770	114.4E6	109.9E6	30.382	29.508	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

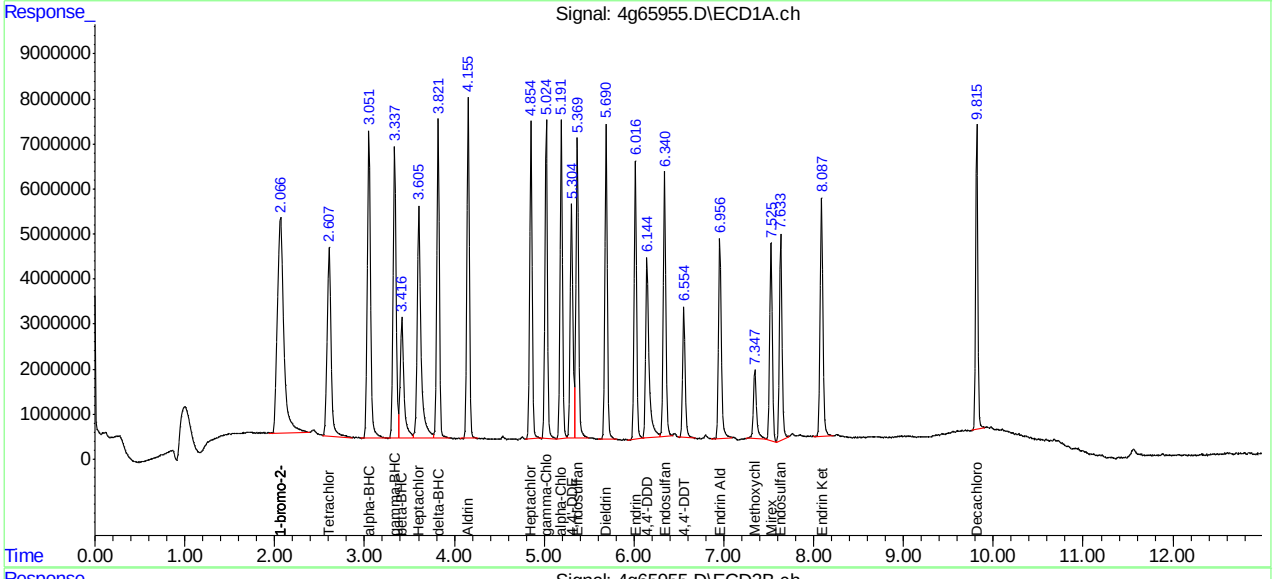
SGS ACCUTEST JC15518

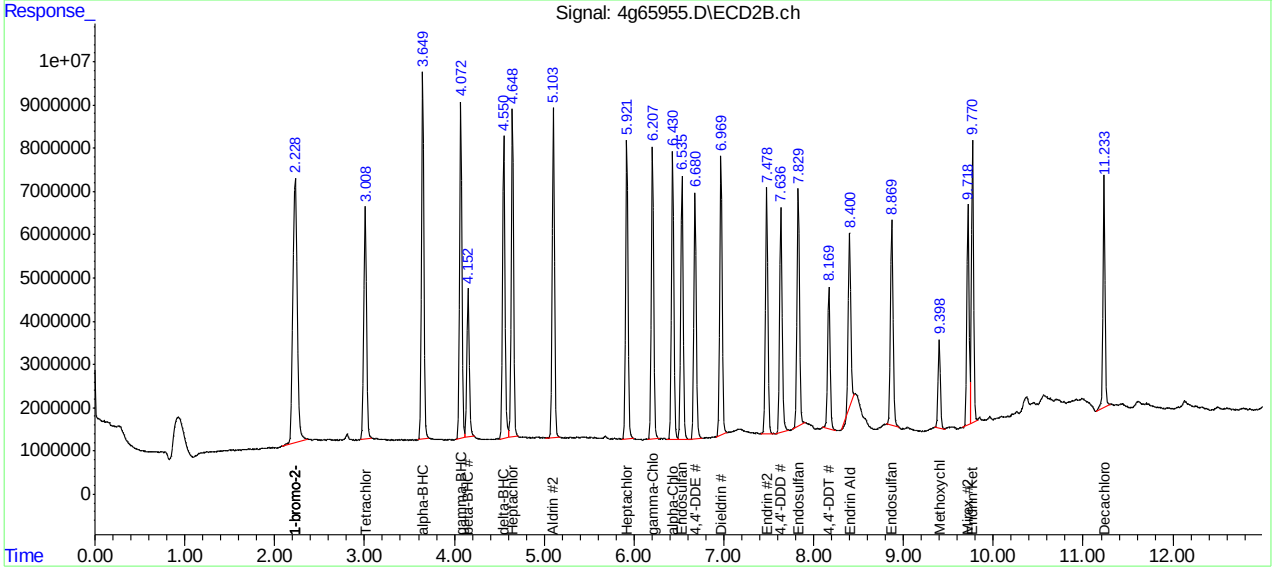
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1734\
Data File : 4g65955.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Mar 2016 11:22 pm
Operator : dharas
Sample : cc1719-25
Misc : op91765,g4g1734,15.7,,,10,2
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 10:25:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1719.M
Quant Title : PEST/PCB
QLast Update : Mon Mar 14 10:05:29 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:08 pm
Operator : dharas
Sample : ic957-1
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:53:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.591	88090368	45927694	50.000	50.000
25) I	1-bromo-2...	1.318	1.591	88090368	45927694	50.000	50.000
31) I	1-bromo-2...	1.318	1.591	88090368	45927694	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.997	2.493	2446848	1218917	0.989	1.157m
Spiked Amount		40.000 Range	30 - 150	Recovery	=	2.47%#	2.89%#
24) SAB	Decachlor...	9.971	11.807	2350054	697018	1.086	1.108
Spiked Amount		40.000		Recovery	=	2.71%	2.77%
	Target Compounds						
3) A	alpha-BHC	2.515	3.204	2436304	1278181	0.986	1.025
4) MA	gamma-BHC	2.833	3.660	2384601	1131000	1.086	1.015
5) MA	Heptachlor	3.364	4.275	2300626	1180168	1.091	1.071
6) B	beta-BHC	2.911	3.751	1335313	613125	1.241	1.161
7) B	delta-BHC	3.106	4.172	2340013	1232972	1.081	1.146
8) MB	Aldrin	3.719	4.757	2525512	1121395	1.023	0.995
9) B	Heptachlo...	4.474	5.644	2118679	1042693	1.001	1.067
10) B	gamma-Chl...	4.647	5.947	2377367	1021565	1.021	1.022
11) B	alpha-Chl...	4.833	6.195	2481172	1244657	1.049	1.255
12) A	Endosulfan I	5.017	6.297	2035113	1080697	0.964	1.156
13) B	4,4'-DDE	4.957	6.495	2439266	937941	1.150	0.996
14) MA	Dieldrin	5.363	6.769	2052412	998791	0.992	1.065
15) MA	Endrin	5.707	7.313	1751367	812741	1.003	1.051
16) A	4,4'-DDD	5.847	7.529	1717396	807042	1.088	1.129
17) B	Endosulfa...	6.049	7.697	2174864	904675	1.096	1.076
18) MA	4,4'-DDT	6.301	8.117	1668328	786206	0.975	1.014
19) B	Endrin Al...	6.727	8.331	1675648	600640	1.108	0.985
20) B	Endosulfa...	7.469	8.848	1797155	756780	0.974	0.990
21) A	Methoxychlor	7.161	9.499	937880	476478	1.056m	1.146
22)	Mirex	7.304	9.818	1882083	707469	1.060	1.064
23) B	Endrin Ke...	7.946	9.896	2036784	880134	1.007	1.082

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

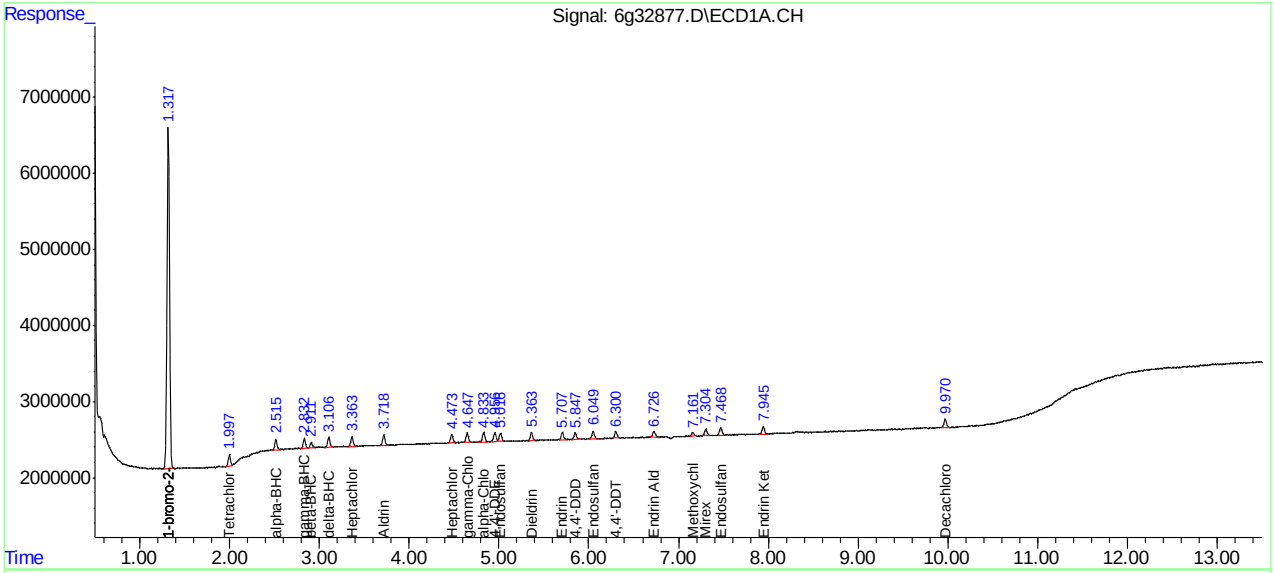
13.6.18 13

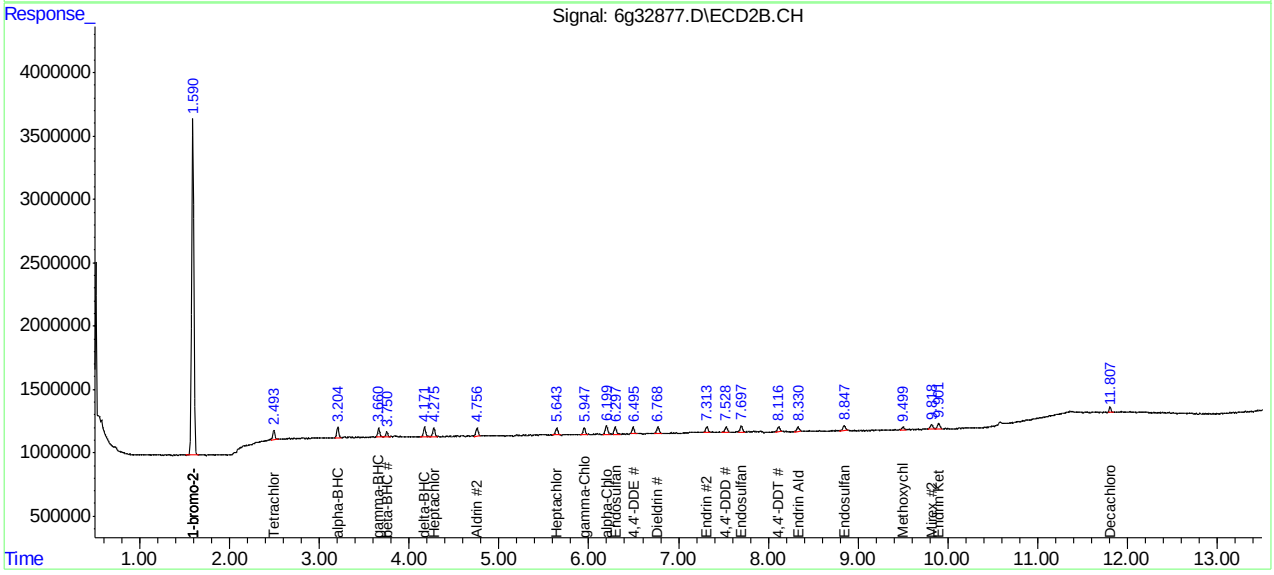
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:08 pm
Operator : dharas
Sample : ic957-1
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:53:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G957-IC957	**Method:**	SW846 8081B
Lab FileID:	6G32877.D	**Analyst approved:**	03/15/16 16:14 Dhara Saparia
Injection Time:	03/15/16 12:08	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

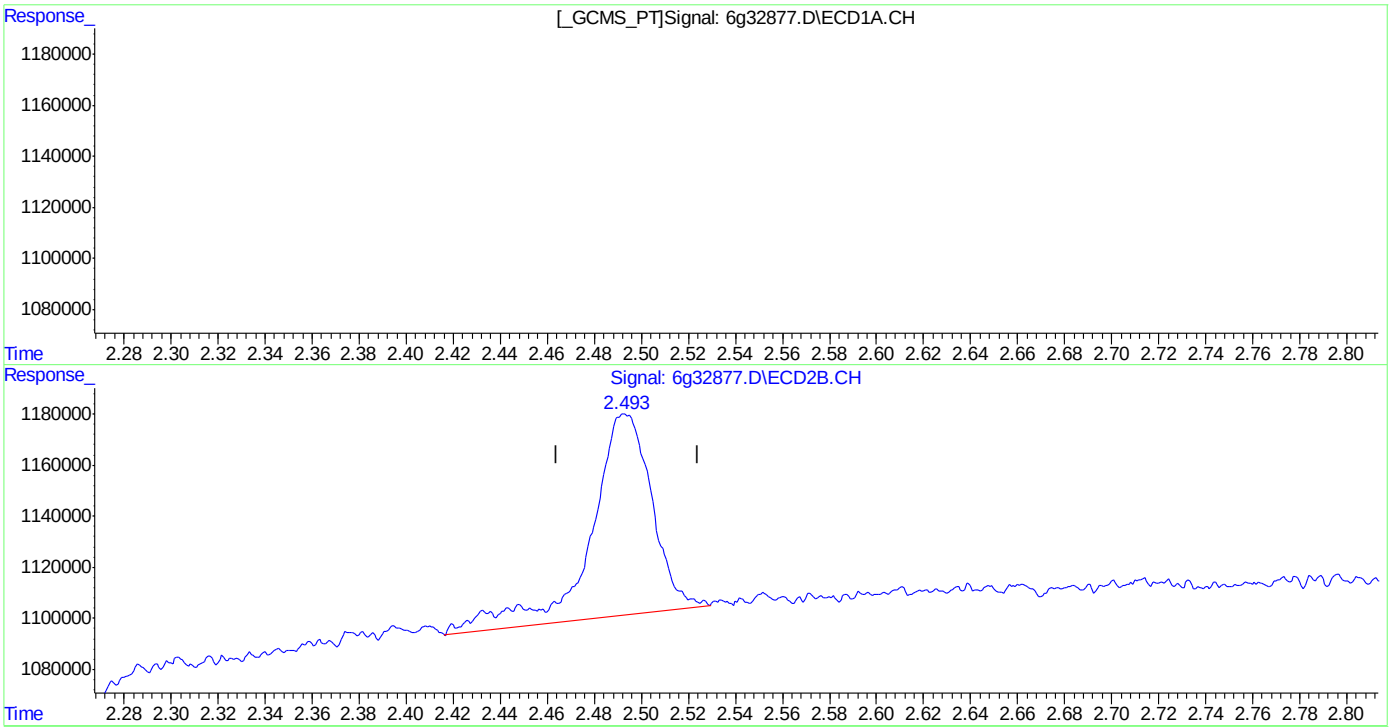
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	2.49	Poorly defined baseline
Methoxychlor	72-43-5	1	7.16	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:08 pm
Operator : dharas
Sample : ic957-1
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:52:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
1.997min 0.989PPB
response 2446848

(2) Tetrachloro-m-xylene #2 (SAB)
2.493min 1.369PPB
response 1442720

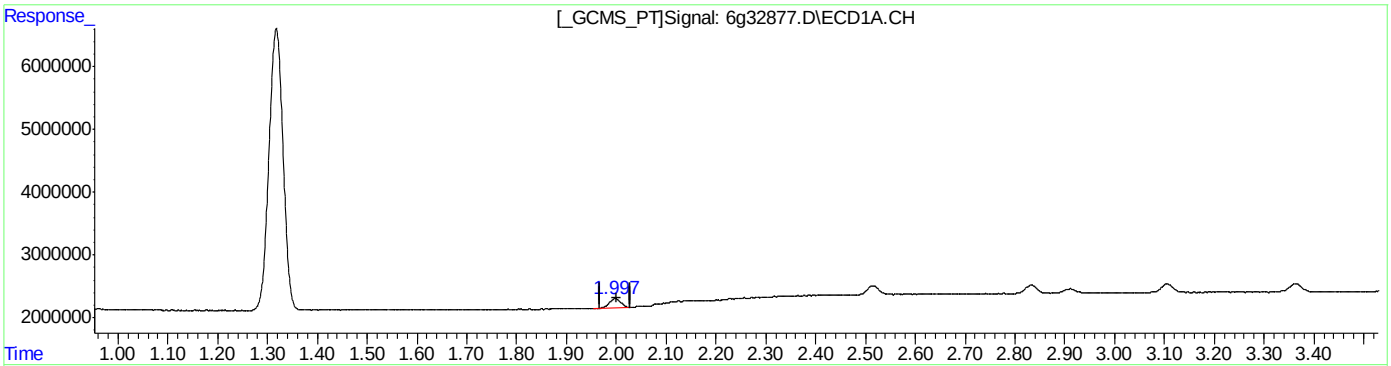
(+) = Expected Retention Time
6PST957.M Tue Mar 15 13:52:41 2016

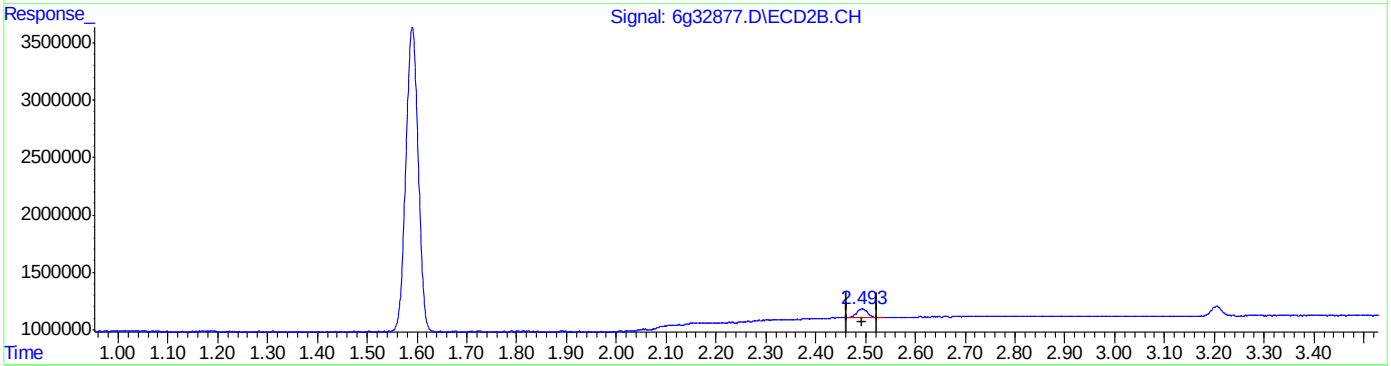
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 15 Mar 2016  12:08 pm
Operator  : dharas
Sample    : ic957-1
Misc      : op91919,g6g957,100,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:52:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title  : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)

1.997min 0.989PPB

response 2446848

(2) Tetrachloro-m-xylene #2 (SAB)

2.493min 1.157PPB m

response 1218917

(+) = Expected Retention Time

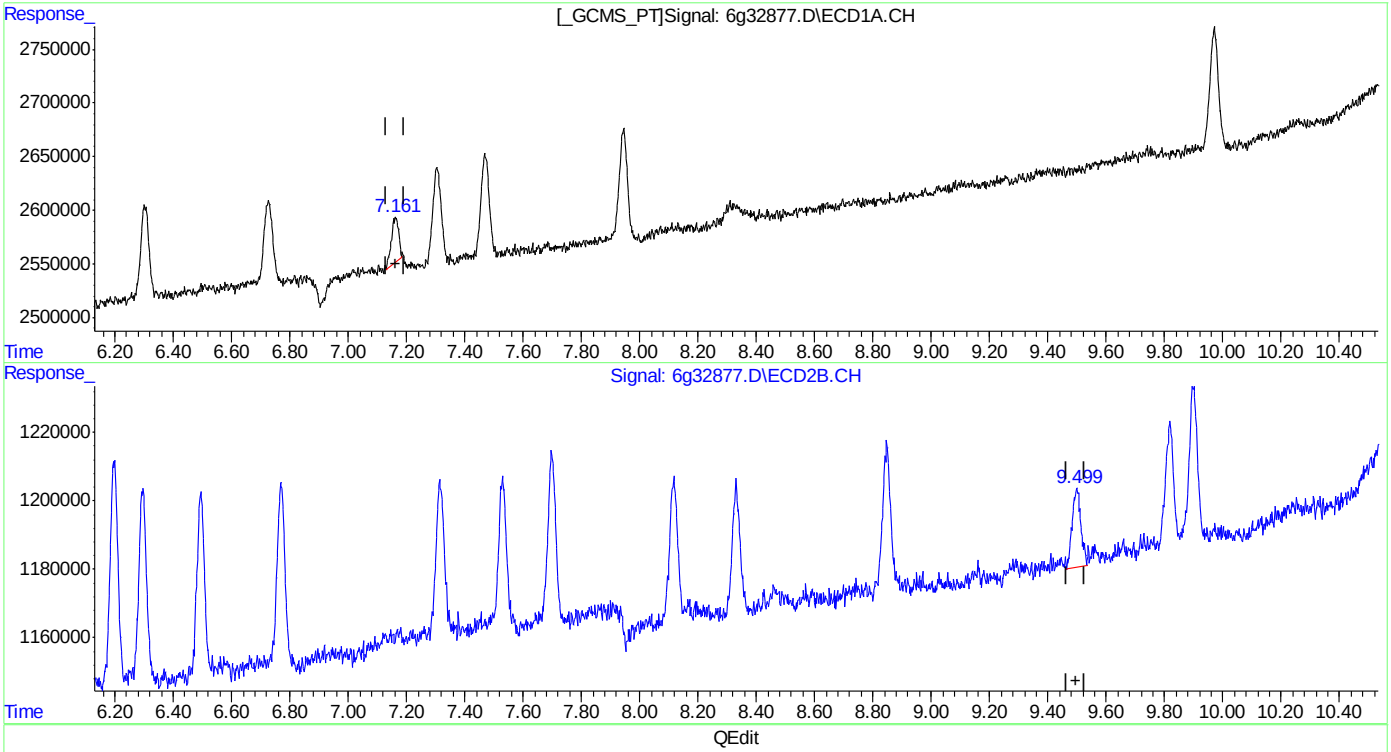
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:08 pm
Operator : dharas
Sample : ic957-1
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:52:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.162min 0.790PPB
response 701985

(21) Methoxychlor #2 (A)
9.499min 1.146PPB
response 476478

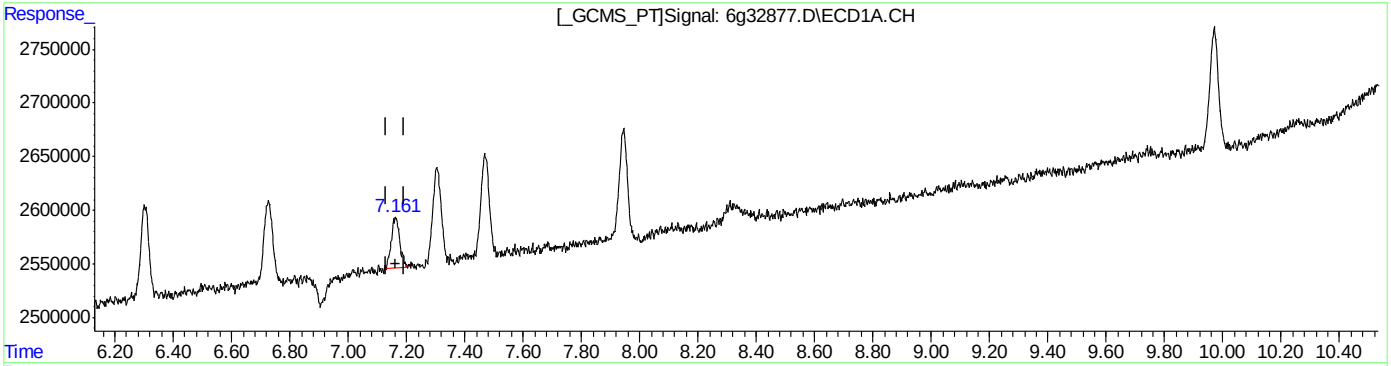
(+) = Expected Retention Time

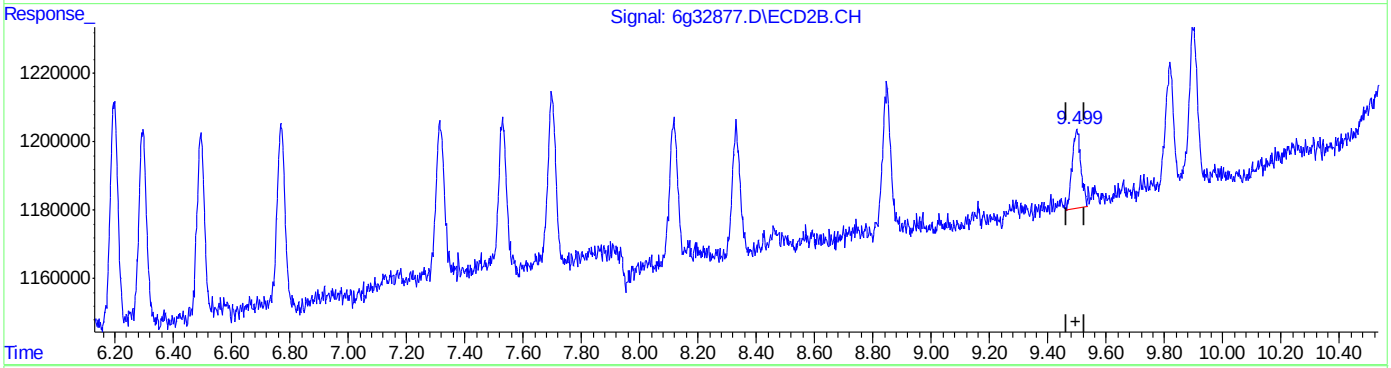
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32877.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:08 pm
Operator : dharas
Sample : ic957-1
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:52:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.161min 1.056PPB m
response 937880

(21) Methoxychlor #2 (A)
9.499min 1.146PPB
response 476478

(+) = Expected Retention Time
6PST957.M Tue Mar 15 13:53:27 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:03:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.590	92674624	47765404	50.000	50.000
25) I	1-bromo-2...	1.318	1.590	92674624	47765404	50.000	50.000
31) I	1-bromo-2...	1.318	1.590	92674624	47765404	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.494	4818114	2208720	1.852	2.016m
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 4.63%#	5.04%#
24)	SAB Decachlor...	9.970	11.809	4948327	1313229	2.174	2.008
	Spiked Amount	40.000			Recovery	= 5.43%	5.02%
	Target Compounds						
3) A	alpha-BHC	2.515	3.205	4748970	2446834	1.827	1.888
4) MA	gamma-BHC	2.833	3.661	4318837	2199578	1.869	1.899
5) MA	Heptachlor	3.363	4.275	4374309	2395772	1.972	2.091
6) B	beta-BHC	2.911	3.750	2344996	1199818	2.072	2.185
7) B	delta-BHC	3.106	4.172	4417534	2356632	1.939	2.106
8) MB	Aldrin	3.718	4.755	4731669	2304284	1.822	1.966
9) B	Heptachlo...	4.473	5.643	4247653	2078405	1.907	2.046
10) B	gamma-Chl...	4.647	5.950	4600428	2109698	1.878	2.029
11) B	alpha-Chl...	4.829	6.196	4989463	2162054	2.006	2.096
12) A	Endosulfan I	5.018	6.296	4323992	2022500	1.947	2.081
13) B	4,4'-DDE	4.957	6.494	4505472	1951219	2.019	1.992
14) MA	Dieldrin	5.363	6.770	4162992	2055649	1.912	2.108
15) MA	Endrin	5.707	7.316	3486977	1772653	1.898	2.204
16) A	4,4'-DDD	5.847	7.530	3227822	1576130	1.944	2.121
17) B	Endosulfa...	6.050	7.700	3949285	1898438	1.892	2.172
18) MA	4,4'-DDT	6.303	8.119	3645944	1620898	2.026	2.009m
19) B	Endrin Al...	6.727	8.331	3245281	1370395	2.039	2.161
20) B	Endosulfa...	7.471	8.849	3912300	1844908	2.016	2.320
21) A	Methoxychlor	7.161	9.498	1995089	866598	2.135m	2.004m
22)	Mirex	7.305	9.817	3863167	1423942	2.067	2.059
23) B	Endrin Ke...	7.944	9.900	4232471	1848834	1.990	2.186

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

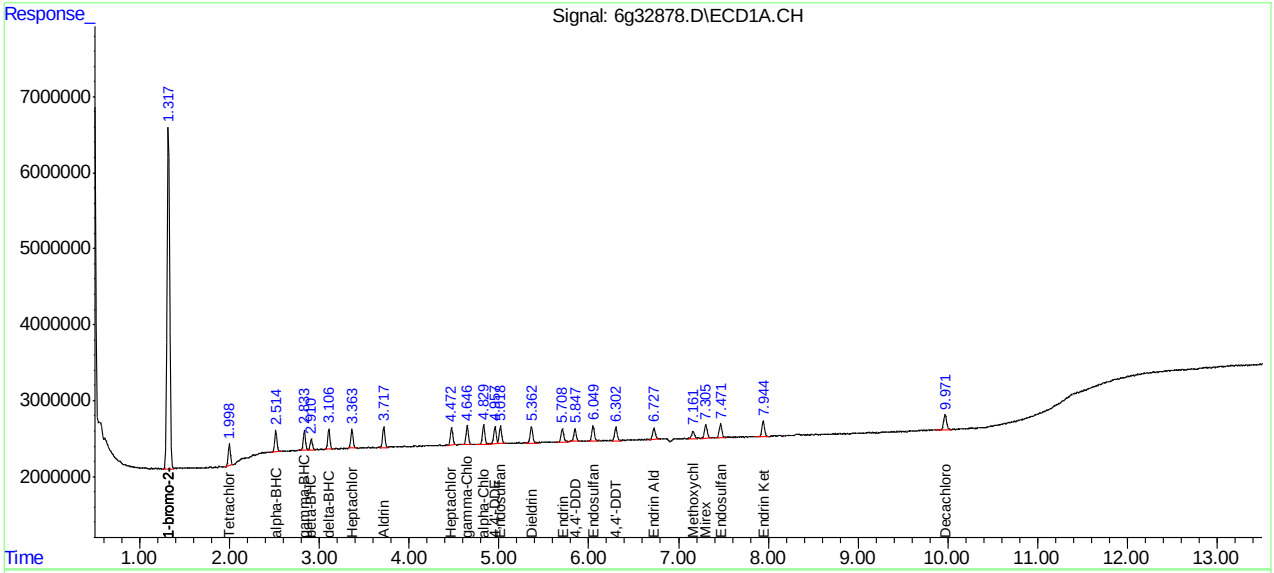
13.6.19 13

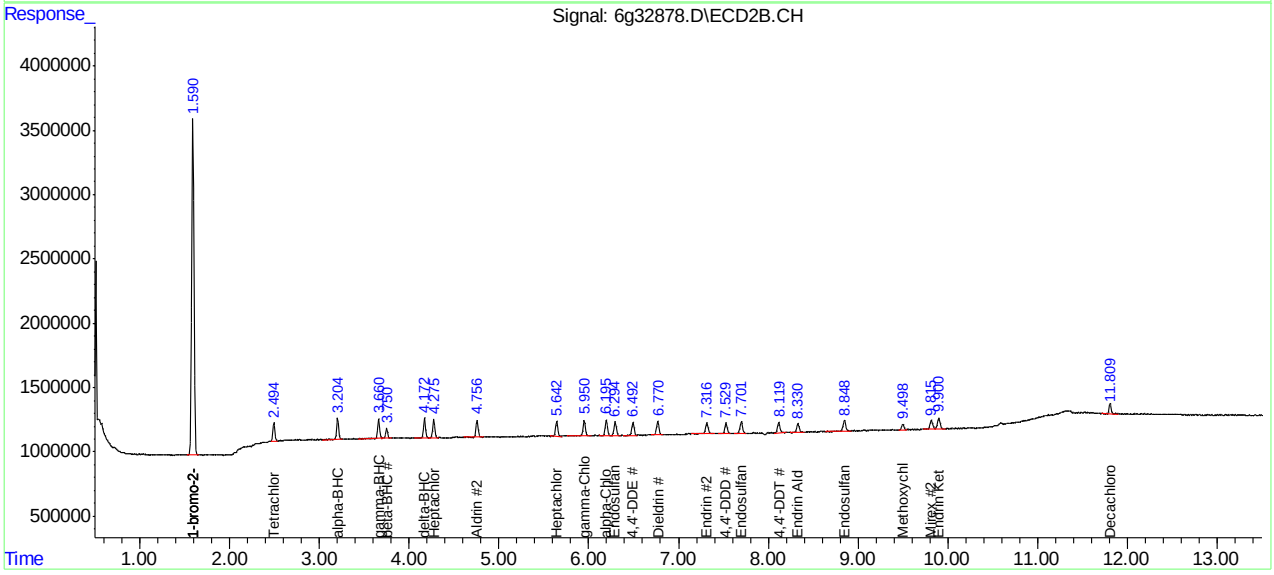
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:03:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

13.6.19 13

Manual Integration Approval Summary

Sample Number:	G6G957-IC957	**Method:**	SW846 8081B
Lab FileID:	6G32878.D	**Analyst approved:**	03/15/16 16:14 Dhara Saparia
Injection Time:	03/15/16 12:24	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

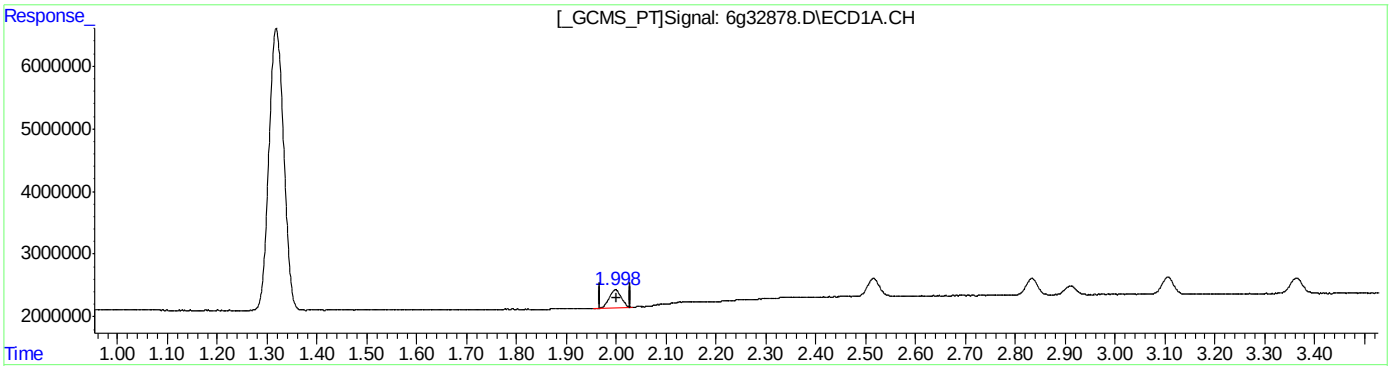
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	2.49	Poorly defined baseline
Methoxychlor	72-43-5	1	7.16	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.12	Poorly defined baseline
Methoxychlor	72-43-5	2	9.50	Poorly defined baseline

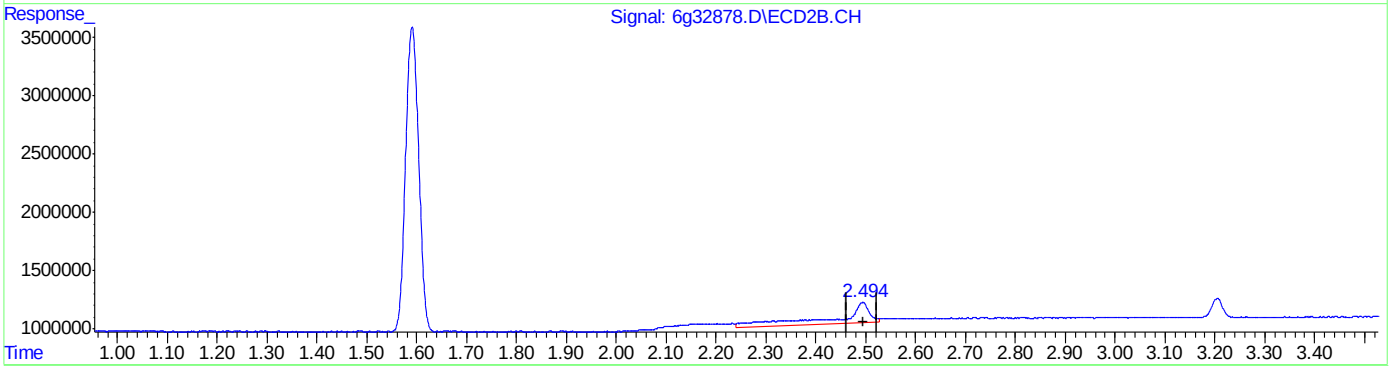
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:49:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
1.998min 1.852PPB
response 4818114

(2) Tetrachloro-m-xylene #2 (SAB)
2.494min 7.785PPB
response 8530182

(+) = Expected Retention Time

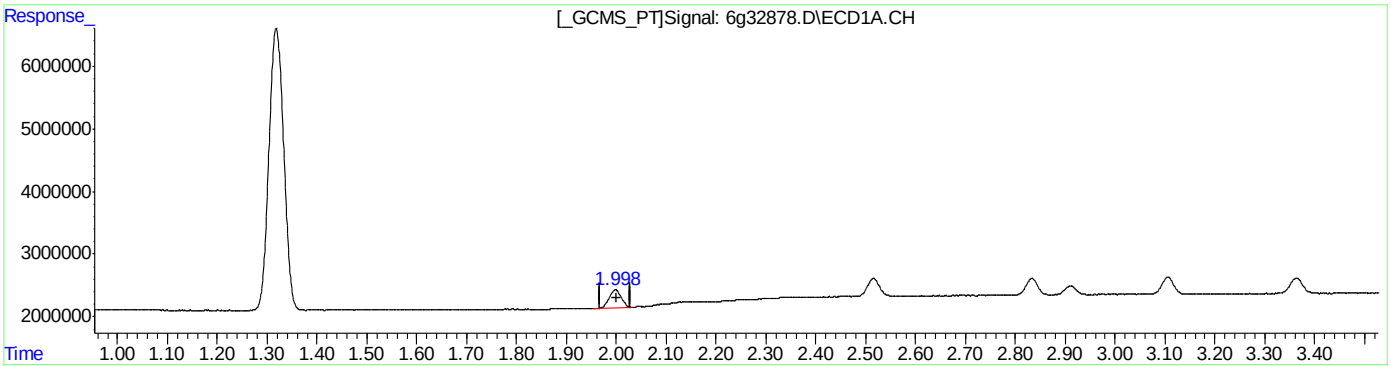
SGS ACCUTEST JC15518

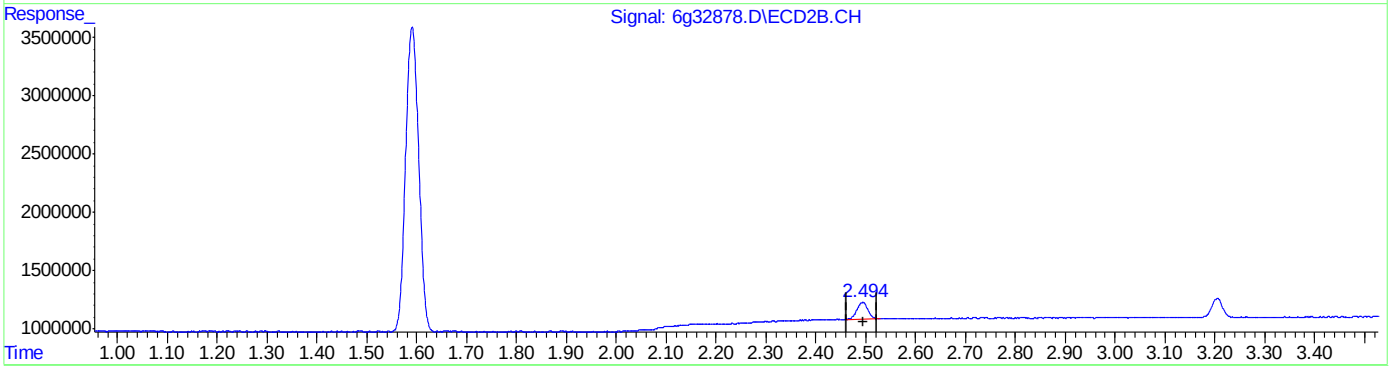
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:49:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
1.998min 1.852PPB
response 4818114

(2) Tetrachloro-m-xylene #2 (SAB)
2.494min 2.016PPB m
response 2208720

(+) = Expected Retention Time
6PST957.M Tue Mar 15 13:50:15 2016

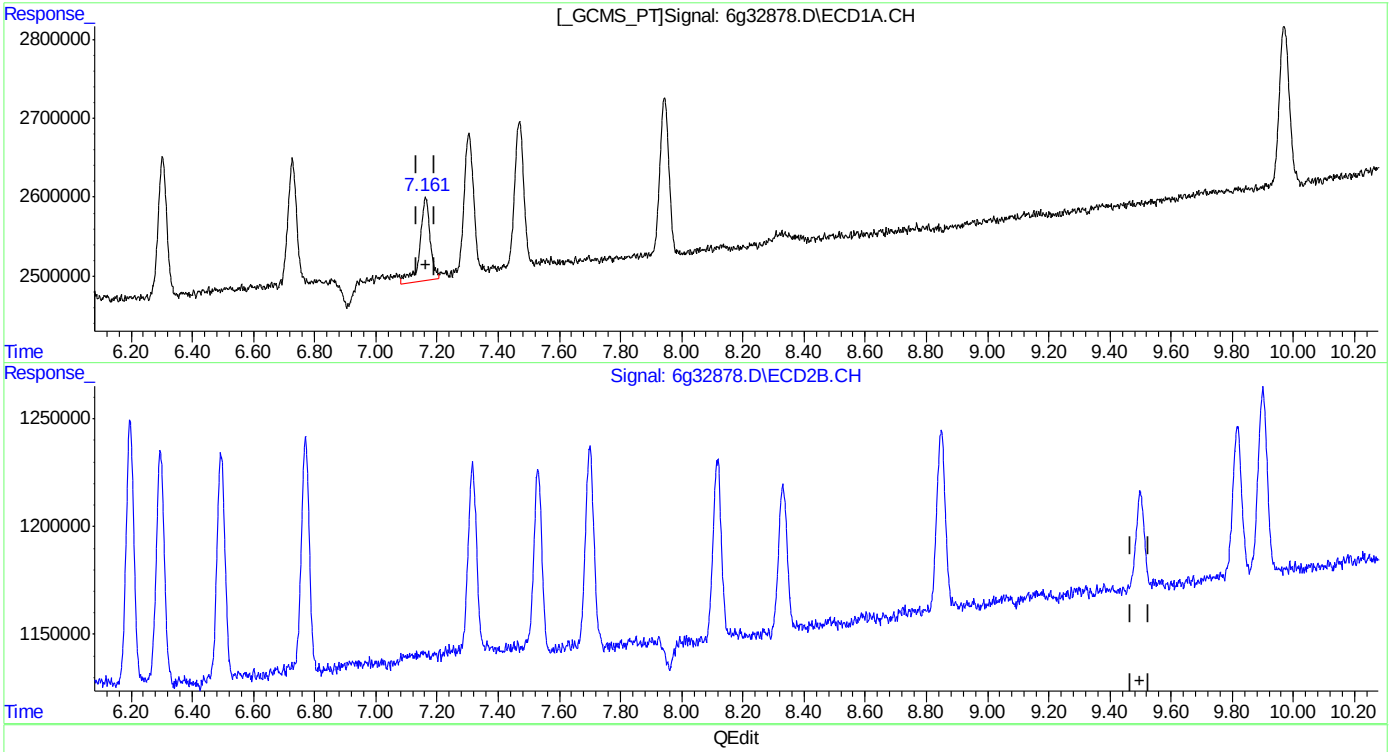
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:49:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.162min 2.643PPB
response 2469393

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

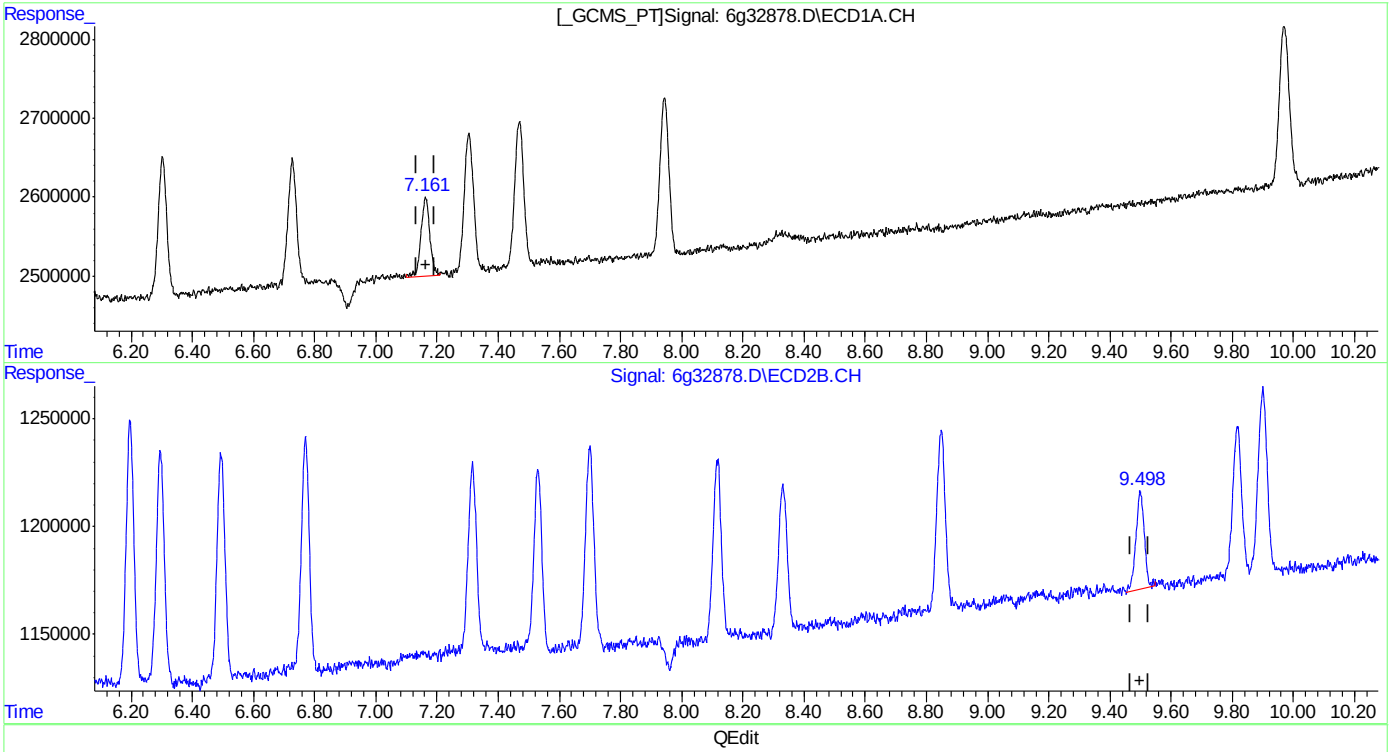
(+) = Expected Retention Time
6PST957.M Tue Mar 15 13:50:38 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:49:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.161min 2.135PPB m
response 1995089

(21) Methoxychlor #2 (A)
9.498min 2.004PPB m
response 866598

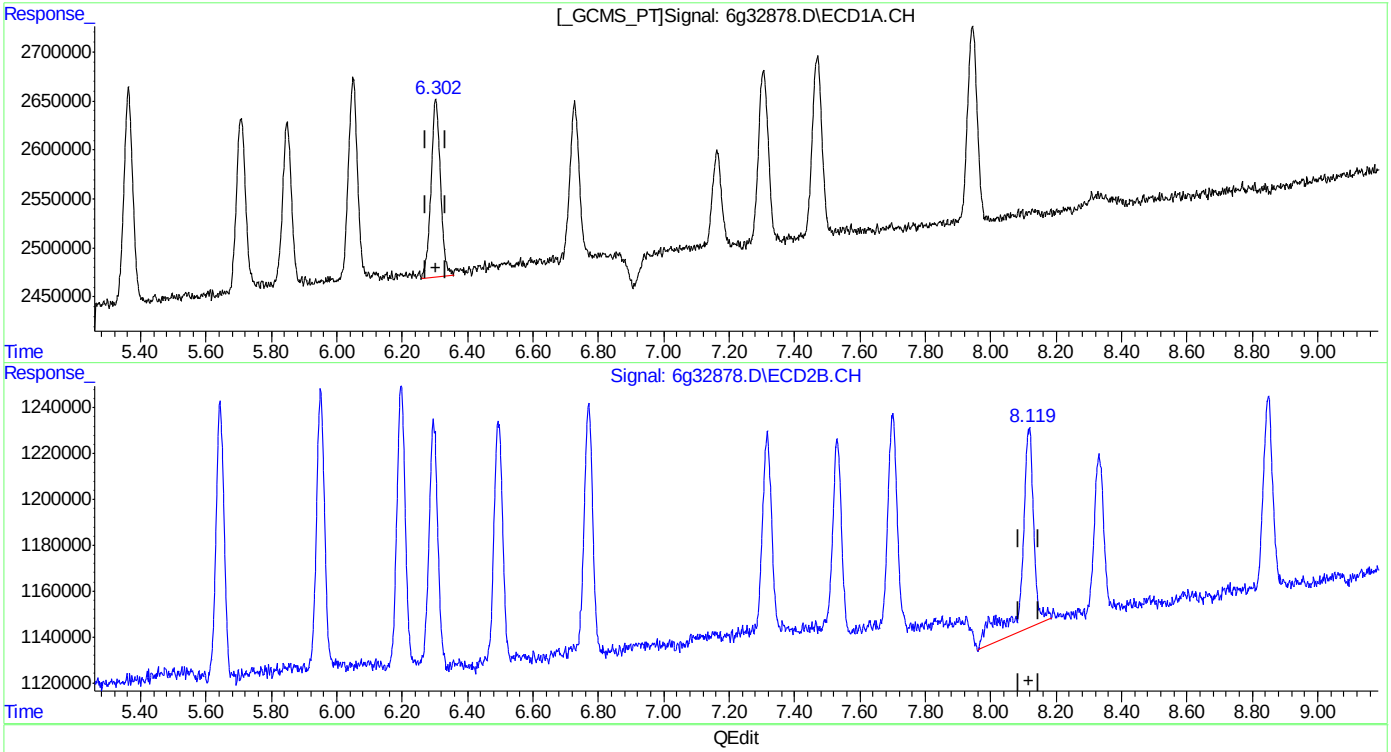
(+) = Expected Retention Time
6PST957.M Tue Mar 15 13:50:46 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:50:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.303min 2.026PPB
response 3645944

(18) 4,4'-DDT #2 (MA)
8.117min 2.858PPB
response 2305890

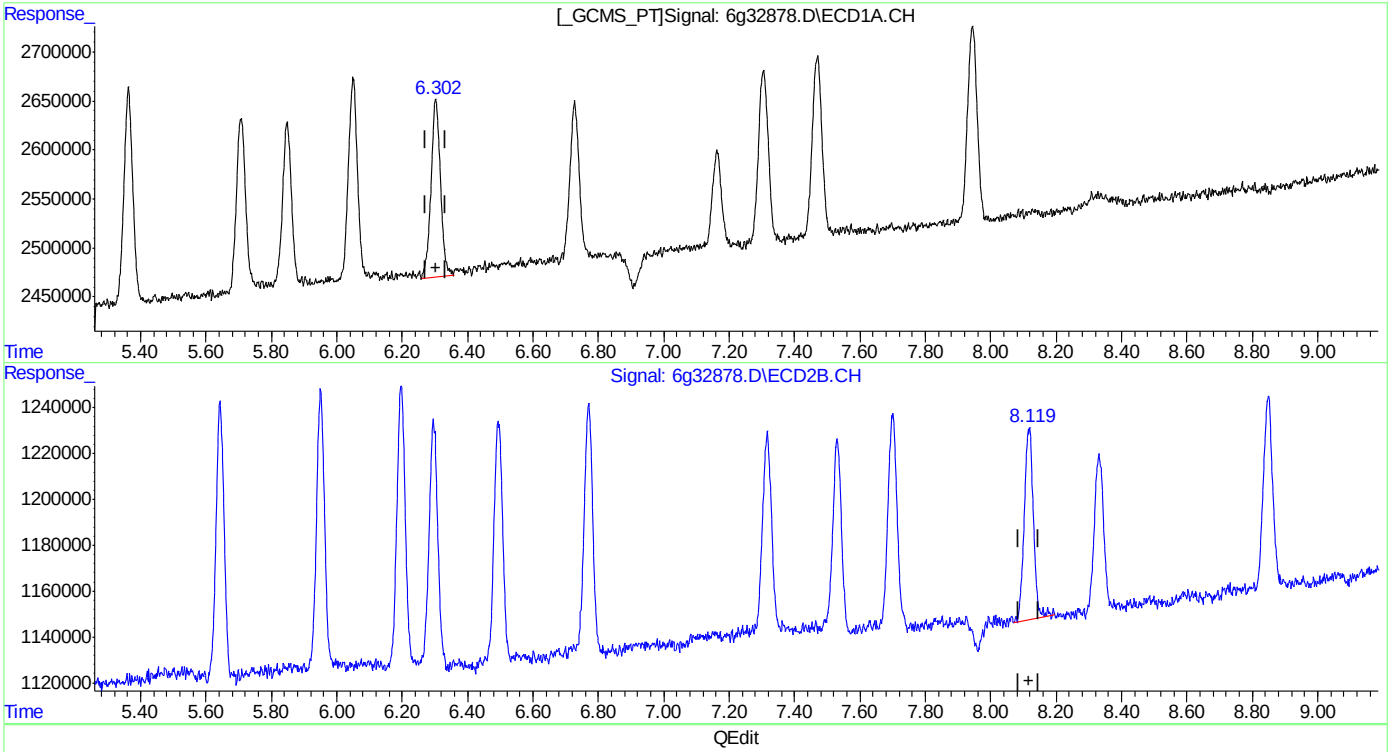
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32878.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:24 pm
Operator : dharas
Sample : ic957-2
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:50:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.303min 2.026PPB
response 3645944

(18) 4,4'-DDT #2 (MA)
8.119min 2.009PPB m
response 1620898

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32879.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:40 pm
Operator : dharas
Sample : ic957-5
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:48:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.592	91040602	47738200	50.000	50.000
25) I	1-bromo-2...	1.319	1.592	91040602	47738200	50.000	50.000
31) I	1-bromo-2...	1.319	1.592	91040602	47738200	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.493	12266590	5444860	4.799	4.972
	Spiked Amount 40.000 Range 30 - 150 Recovery = 12.00%# 12.43%#						
24)	SAB Decachlor...	9.970	11.807	11542078	3388882	5.163	5.183
	Spiked Amount 40.000 Recovery = 12.91% 12.96%						
	Target Compounds						
3) A	alpha-BHC	2.516	3.204	11819946	6186798	4.629	4.775
4) MA	gamma-BHC	2.834	3.660	10672245	5677188	4.702	4.904
5) MA	Heptachlor	3.363	4.274	10680246	5837848	4.901	5.098
6) B	beta-BHC	2.911	3.750	5692488	2842944	5.120	5.180
7) B	delta-BHC	3.106	4.171	11115932	5729671	4.968	5.123
8) MB	Aldrin	3.718	4.756	12010516	5798020	4.707	4.950
9) B	Heptachlo...	4.473	5.643	10649944	4944157	4.866	4.869
10) B	gamma-Chl...	4.647	5.950	11707928	5134742	4.866	4.940
11) B	alpha-Chl...	4.831	6.196	11769296	5164509	4.816	5.010
12) A	Endosulfan I	5.017	6.294	10622746	4840752	4.870	4.983
13) B	4,4'-DDE	4.957	6.493	10616646	4727864	4.843	4.831
14) MA	Dieldrin	5.363	6.768	10409608	4845740	4.866	4.973
15) MA	Endrin	5.706	7.315	8535100	4060304	4.729	5.052
16) A	4,4'-DDD	5.849	7.530	8407596	3738068	5.154	5.032
17) B	Endosulfa...	6.050	7.699	9996212	4475478	4.874	5.123
18) MA	4,4'-DDT	6.301	8.116	8528853	3965429	4.824	4.918
19) B	Endrin Al...	6.725	8.331	7965821	3308152	5.095	5.221
20) B	Endosulfa...	7.468	8.845	9532656	4022779	5.000	5.062
21) A	Methoxychlor	7.163	9.497	4695539	2149540	5.116	4.974
22)	Mirex	7.305	9.816	9281336	3474443	5.056	5.027
23) B	Endrin Ke...	7.944	9.898	10210364	4274411	4.886	5.058

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

13.6.20 13

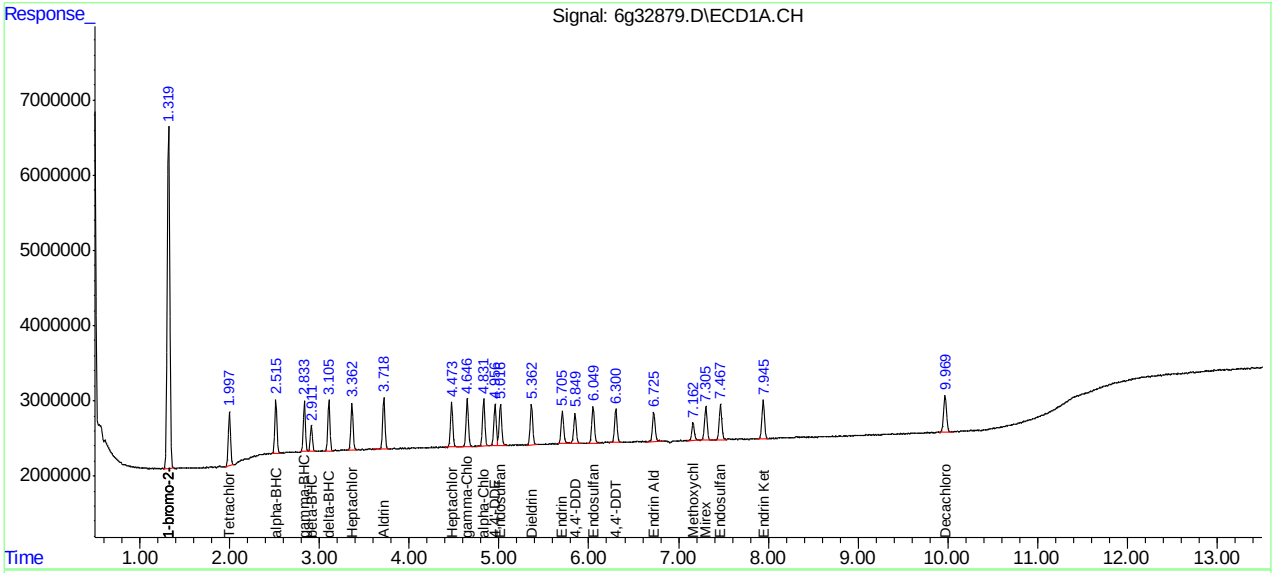
SGS ACCUTEST JC15518

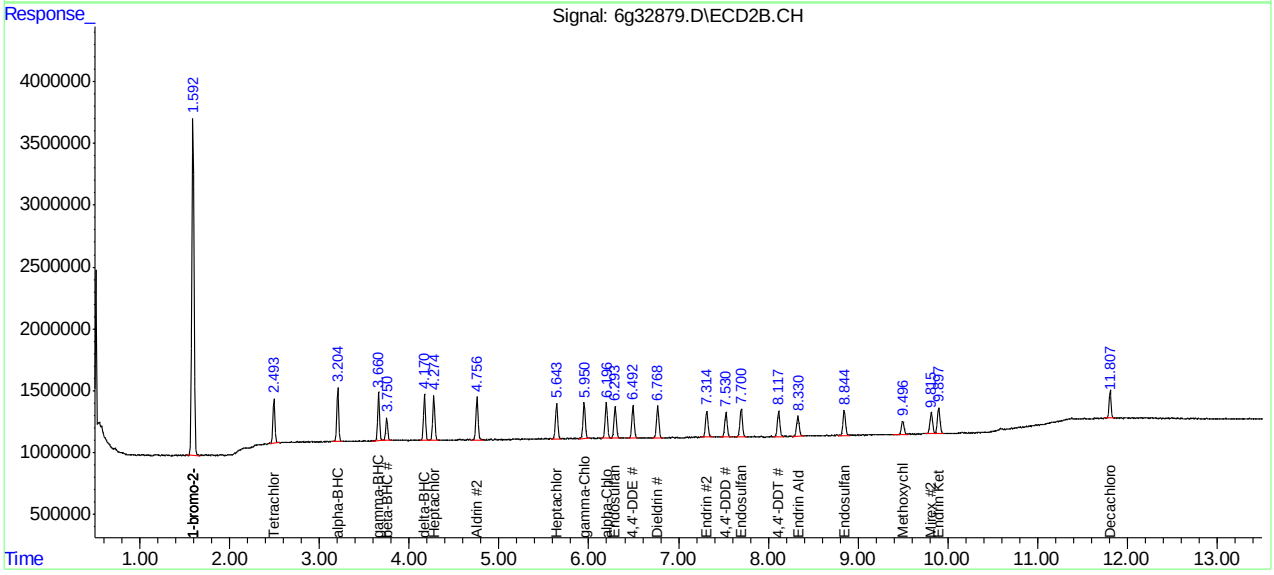
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32879.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:40 pm
Operator : dharas
Sample : ic957-5
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:48:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 1155 of 1210 ACCUTEST JC15518

13.6.20 13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32880.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:57 pm
Operator : dharas
Sample : ic957-10
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:47:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.321	1.592	91690002	47867569	50.000	50.000
25) I	1-bromo-2...	1.321	1.592	91690002	47867569	50.000	50.000
31) I	1-bromo-2...	1.321	1.592	91690002	47867569	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.000	2.495	25123140	10821978	9.760	9.855
	Spiked Amount 40.000 Range 30 - 150 Recovery = 24.40%# 24.64%#						
24)	SAB Decachlor...	9.971	11.809	23300006	6712892	10.349	10.240
	Spiked Amount 40.000 Recovery = 25.87% 25.60%						
	Target Compounds						
3) A	alpha-BHC	2.517	3.206	24402946	12608334	9.490	9.705
4) MA	gamma-BHC	2.835	3.661	22003291	11430188	9.626	9.846
5) MA	Heptachlor	3.365	4.276	21584937	11549255	9.835	10.059
6) B	beta-BHC	2.912	3.751	11186609	5490736	9.991	9.977
7) B	delta-BHC	3.107	4.172	22471715	11428572	9.972	10.191
8) MB	Aldrin	3.720	4.757	24530486	11636933	9.546	9.909
9) B	Heptachlo...	4.475	5.644	21673496	10099325	9.833	9.919
10) B	gamma-Chl...	4.649	5.951	23530168	10257715	9.711	9.842
11) B	alpha-Chl...	4.833	6.197	24213770	10364216	9.838	10.026
12) A	Endosulfan I	5.019	6.296	21478087	9723296	9.776	9.983
13) B	4,4'-DDE	4.959	6.495	21483483	9534839	9.731	9.716
14) MA	Dieldrin	5.364	6.770	20886140	9733370	9.695	9.962
15) MA	Endrin	5.709	7.316	17146208	8058668	9.433	10.000
16) A	4,4'-DDD	5.848	7.529	15453716	7516987	9.405	10.092
17) B	Endosulfa...	6.051	7.699	20142280	9002249	9.752	10.278
18) MA	4,4'-DDT	6.304	8.116	17216975	7968115	9.670	9.856
19) B	Endrin Al...	6.727	8.331	16096560	6454753	10.223	10.159
20) B	Endosulfa...	7.471	8.846	19069490	8098653	9.931	10.164
21) A	Methoxychlor	7.163	9.498	9199116	4234696	9.951	9.772
22)	Mirex	7.309	9.818	18625626	6984615	10.074	10.079
23) B	Endrin Ke...	7.945	9.901	21243072	8598704	10.093	10.147

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

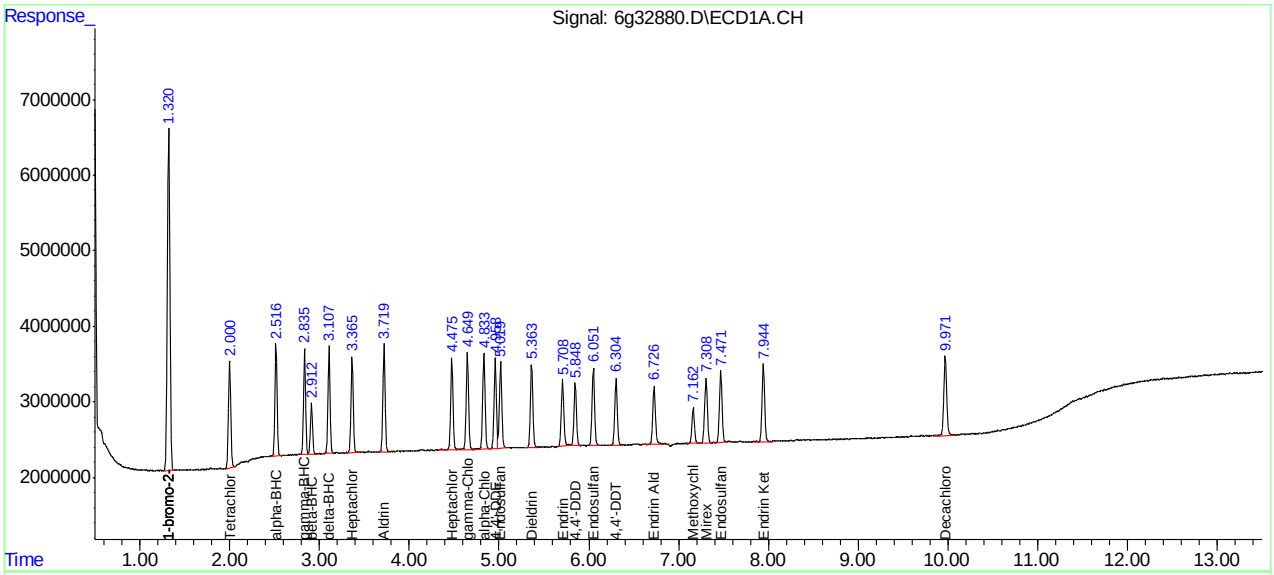
SGS ACCUTEST JC15518

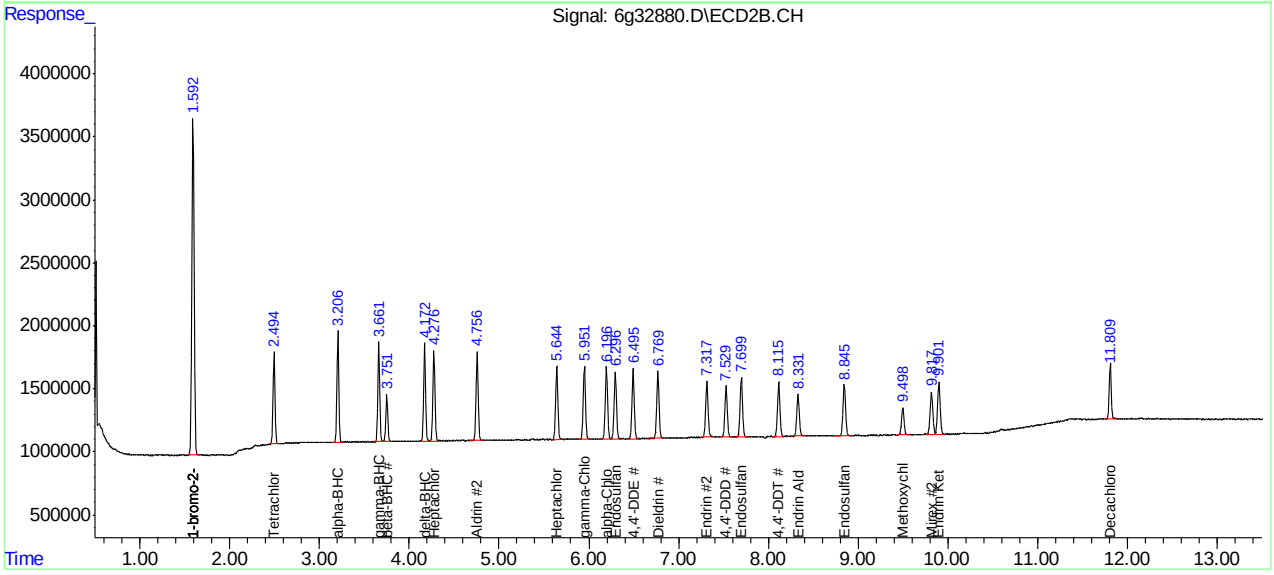
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32880.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 12:57 pm
Operator : dharas
Sample : ic957-10
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:47:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32881.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:13 pm
Operator : dharas
Sample : icc957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:46:21 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.321	1.592	95109921	49464937	50.000	50.000
25) I	1-bromo-2...	1.321	1.592	95109921	49464937	50.000	50.000
31) I	1-bromo-2...	1.321	1.592	95109921	49464937	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.000	2.494	66752841	28369201	40.101	36.173
Spiked Amount		40.000 Range	30 - 150	Recovery	=	100.25%	90.43%
24) SAB	Decachlor...	9.969	11.809	58386955	16935896	32.859	26.541
Spiked Amount		40.000		Recovery	=	82.15%	66.35%
	Target Compounds						
3) A	alpha-BHC	2.517	3.205	66684451	33561182	29.009	28.811
4) MA	gamma-BHC	2.834	3.661	59277140	29989735	28.682	27.950
5) MA	Heptachlor	3.364	4.275	56912744	29660992	28.643	29.640
6) B	beta-BHC	2.911	3.750	29035948	14217504	30.858	30.768
7) B	delta-BHC	3.107	4.171	58439040	28972199	27.883	27.183
8) MB	Aldrin	3.719	4.756	66641923	30339642	34.581	30.902
9) B	Heptachlo...	4.475	5.644	57158209	26302645	31.192	28.629
10) B	gamma-Chl...	4.647	5.950	62834247	26925632	35.292	28.690
11) B	alpha-Chl...	4.831	6.196	63823864	26705366	35.082	29.471
12) A	Endosulfan I	5.019	6.295	56973114	25162875	31.901	29.818
13) B	4,4'-DDE	4.958	6.494	57252442	25353417	32.931	27.971
14) MA	Dieldrin	5.364	6.769	55868851	25242195	31.516	26.421
15) MA	Endrin	5.708	7.315	47136594	20818022	28.740	24.624
16) A	4,4'-DDD	5.849	7.530	42608473	19242291	28.987	24.689
17) B	Endosulfa...	6.050	7.699	53560861	22628371	31.628	26.629
18) MA	4,4'-DDT	6.303	8.117	46172825	20886440	39.518	33.174
19) B	Endrin Al...	6.726	8.331	40833491	16414304	29.485	24.727
20) B	Endosulfa...	7.468	8.848	49797650	20584579	34.939	27.538
21) A	Methoxychlor	7.164	9.498	23972880	11195158	37.596	33.729
22)	Mirex	7.306	9.816	47944872	17902476	34.710	28.695
23) B	Endrin Ke...	7.945	9.899	54578338	21892398	32.621	25.512

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

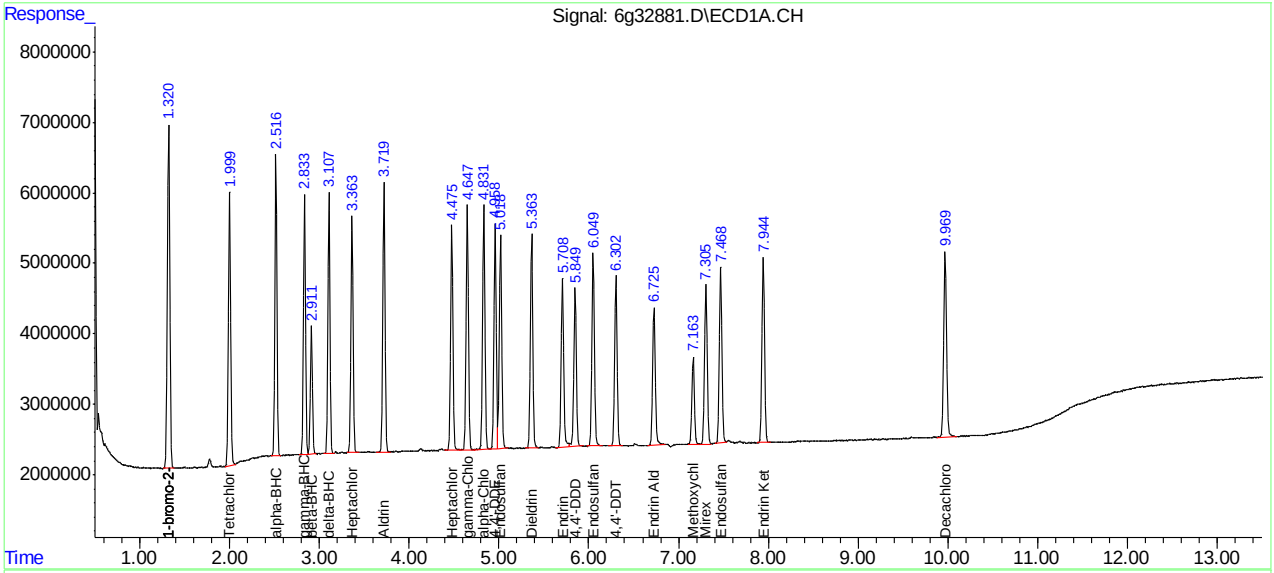
13.6.22 13

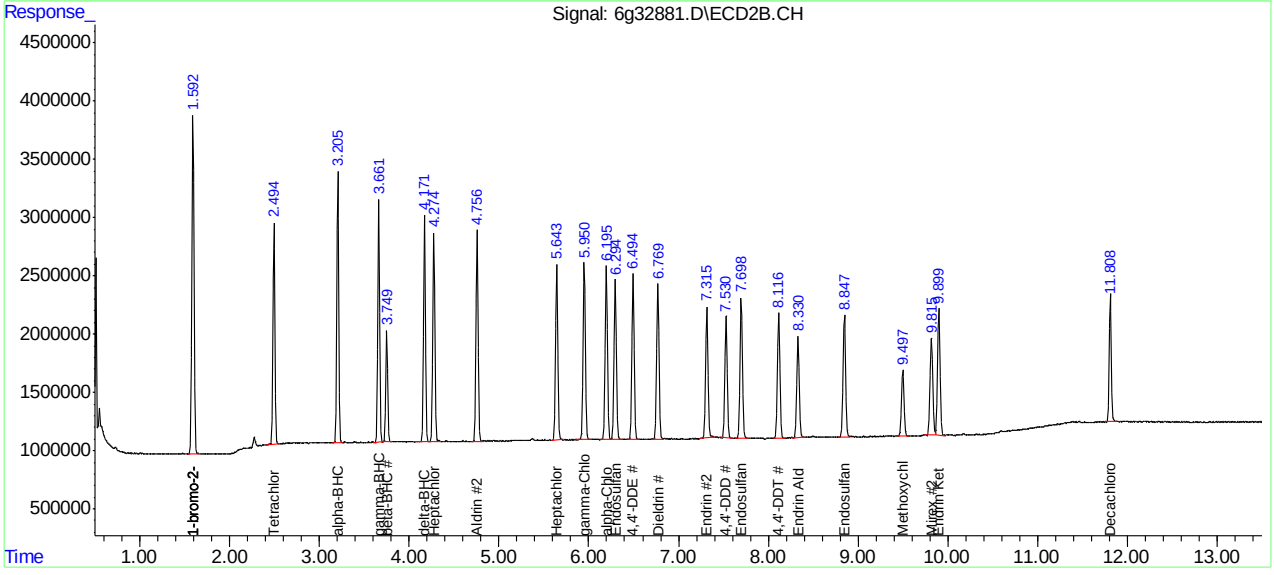
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32881.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:13 pm
Operator : dharas
Sample : icc957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 13:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:46:21 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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\957\
Data File : 6g32882.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:30 pm
Operator : dharas
Sample : ic957-50
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:02:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.320	1.592	97613640	50403484	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.494	135.2E6	55322996	49.347	47.845
	Spiked Amount 40.000 Range 30 - 150 Recovery = 123.37% 119.61%						
24)	SAB Decachlor...	9.970	11.807	114.7E6	32231024	47.854	46.692
	Spiked Amount 40.000 Recovery = 119.64% 116.73%						
	Target Compounds						
3) A	alpha-BHC	2.517	3.205	140.2E6	67802253	51.199	49.566
4) MA	gamma-BHC	2.834	3.661	123.1E6	60133964	50.574	49.195
5) MA	Heptachlor	3.364	4.275	115.7E6	57734848	49.506	47.756
6) B	beta-BHC	2.911	3.750	58085506	27791536	48.729	47.959
7) B	delta-BHC	3.107	4.171	127.3E6	60699881	53.068	51.402
8) MB	Aldrin	3.719	4.756	139.1E6	60687140	50.829	49.075
9) B	Heptachlo...	4.475	5.643	116.8E6	51292700	49.788	47.845
10) B	gamma-Chl...	4.647	5.950	129.3E6	52857968	50.118	48.164
11) B	alpha-Chl...	4.832	6.196	130.3E6	51943836	49.742	47.721
12) A	Endosulfan I	5.018	6.296	116.8E6	49033057	49.932	47.809
13) B	4,4'-DDE	4.958	6.495	119.2E6	50151977	50.704	48.532
14) MA	Dieldrin	5.363	6.770	114.9E6	49320307	50.114	47.938
15) MA	Endrin	5.707	7.316	96908649	42651221	50.079	50.265
16) A	4,4'-DDD	5.849	7.529	86339735	38421616	49.359	48.989
17) B	Endosulfa...	6.049	7.699	108.8E6	44855648	49.500	48.634
18) MA	4,4'-DDT	6.303	8.114	94254536	41546295	49.725	48.803
19) B	Endrin Al...	6.727	8.330	83093096	33023641	49.568	49.360
20) B	Endosulfa...	7.469	8.847	103.3E6	40755094	50.512	48.575
21) A	Methoxychlor	7.163	9.498	47706331	22087219	48.474	48.405
22)	Mirex	7.304	9.817	94814424	34721129	48.171	47.584
23) B	Endrin Ke...	7.945	9.898	110.8E6	42538290	49.430	47.672

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

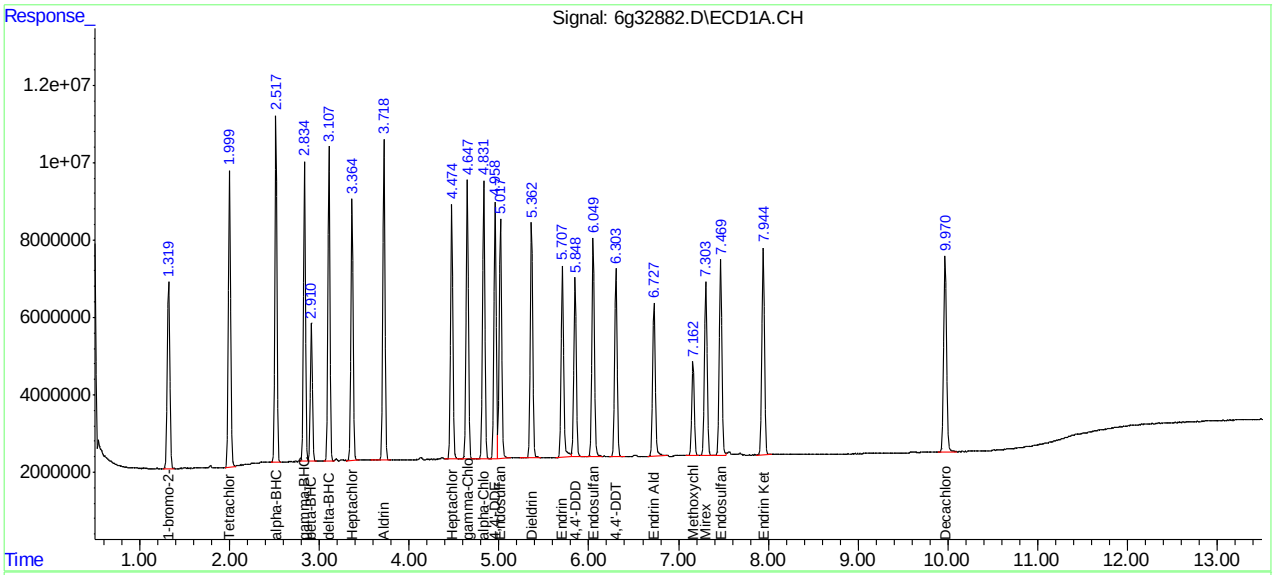
13.6.23 13

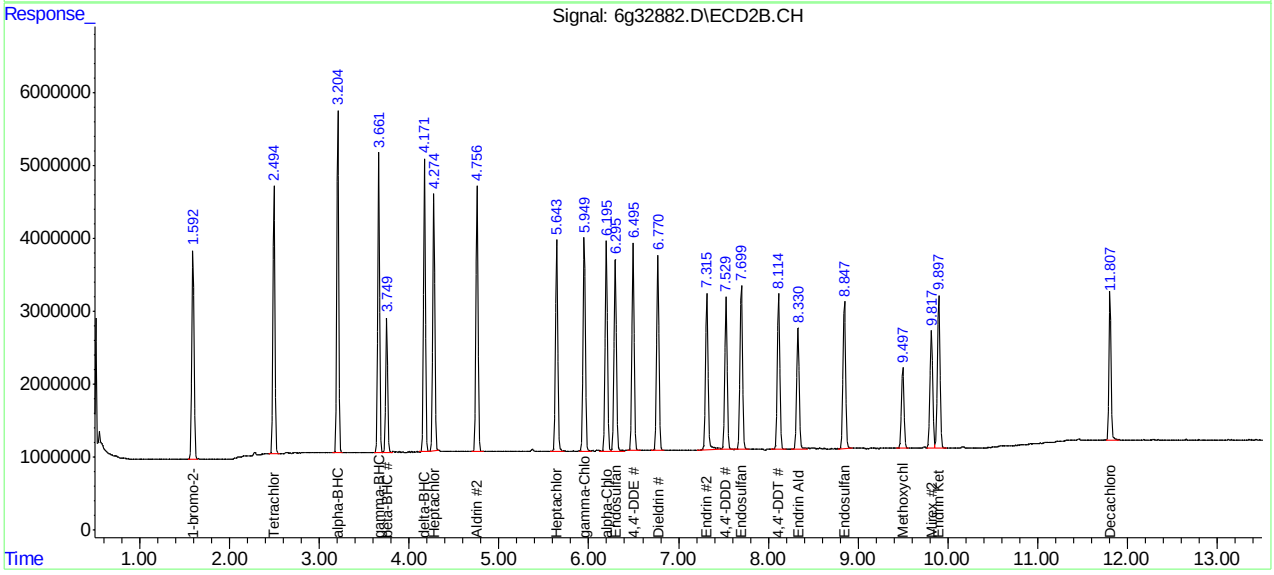
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32882.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:30 pm
Operator : dharas
Sample : ic957-50
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:02:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 13:47:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

13.6.23 13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32883.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:46 pm
Operator : dharas
Sample : ic957-75
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:56:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:38:06 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.592	93493290	48770578	50.000	50.000
25) I	1-bromo-2...	1.319	1.592	93493290	48770578	50.000	50.000
31) I	1-bromo-2...	1.319	1.592	93493290	48770578	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.494	194.4E6	79898061	74.047	71.412
	Spiked Amount 40.000 Range 30 - 150 Recovery = 185.12%# 178.53%#						
24)	SAB Decachlor...	9.969	11.807	163.3E6	45024762	71.115	67.410
	Spiked Amount 40.000 Recovery = 177.79% 168.52%						
	Target Compounds						
3) A	alpha-BHC	2.516	3.204	207.9E6	99107429	79.302	74.877
4) MA	gamma-BHC	2.833	3.660	180.9E6	87297020	77.634	73.808
5) MA	Heptachlor	3.363	4.275	168.4E6	82685344	75.247	70.684
6) B	beta-BHC	2.910	3.749	83428691	39332336	73.074	70.146
7) B	delta-BHC	3.106	4.171	188.4E6	88217423	81.989	77.206
8) MB	Aldrin	3.719	4.756	205.5E6	87946140	78.426	73.500
9) B	Heptachlo...	4.474	5.642	169.2E6	73444458	75.269	70.801
10) B	gamma-Chl...	4.647	5.949	188.9E6	76551378	76.471	72.089
11) B	alpha-Chl...	4.831	6.196	190.4E6	74935519	75.876	71.149
12) A	Endosulfan I	5.017	6.295	170.3E6	70205985	76.003	70.745
13) B	4,4'-DDE	4.958	6.494	175.4E6	73081158	77.913	73.088
14) MA	Dieldrin	5.364	6.769	168.1E6	70476140	76.526	70.794
15) MA	Endrin	5.707	7.315	140.1E6	57925300	75.609	70.552
16) A	4,4'-DDD	5.848	7.528	125.0E6	53602636	74.588	70.633
17) B	Endosulfa...	6.049	7.698	158.7E6	62747231	75.334	70.311
18) MA	4,4'-DDT	6.302	8.115	136.8E6	58157405	75.355	70.603
19) B	Endrin Al...	6.726	8.329	125.5E6	46729448	78.193	72.185
20) B	Endosulfa...	7.468	8.846	150.3E6	56642301	76.741	69.772
21) A	Methoxychlor	7.162	9.497	67530122	30572889	71.641	69.245
22)	Mirex	7.304	9.816	132.6E6	46867380	70.335	66.380
23) B	Endrin Ke...	7.944	9.898	158.9E6	59335700	74.058	68.723

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

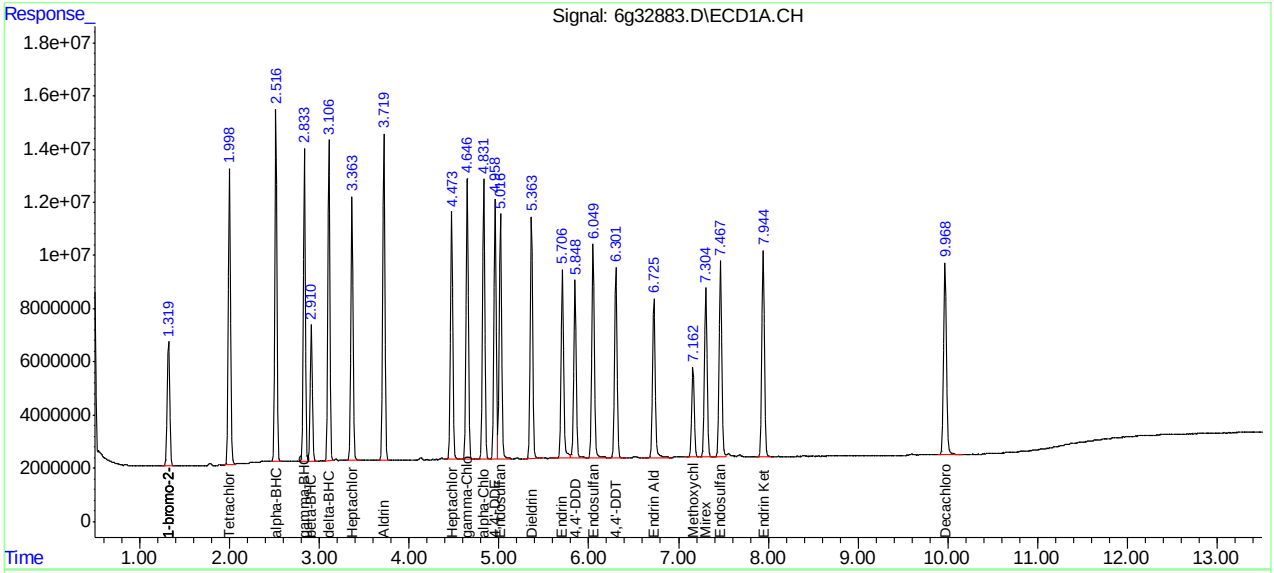
13.6.24 13

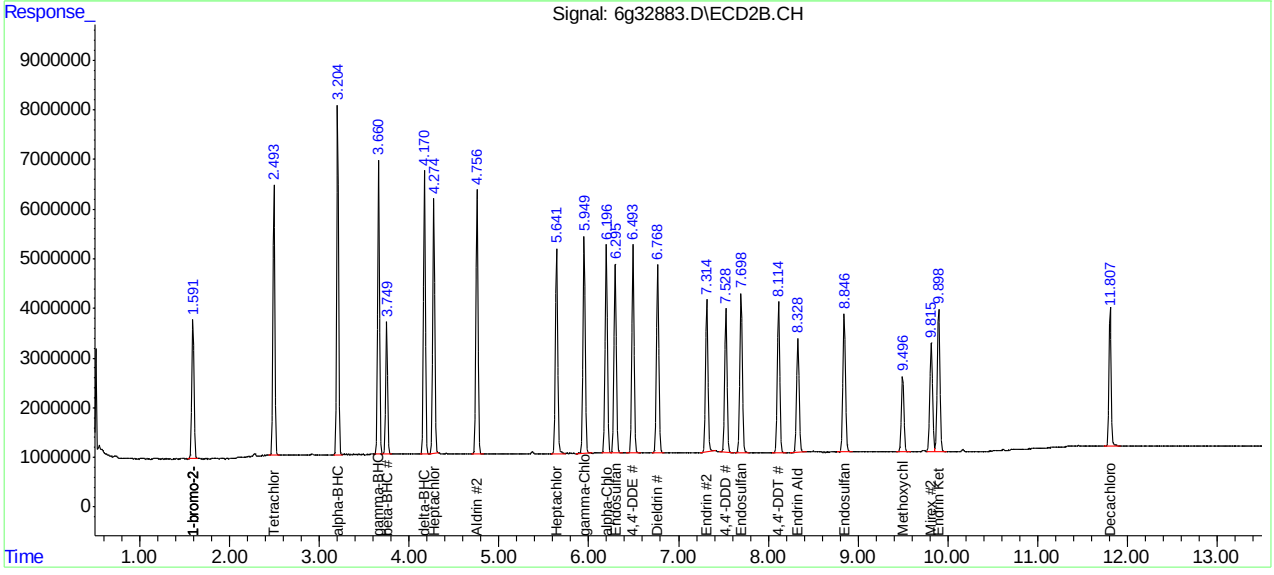
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32883.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 1:46 pm
Operator : dharas
Sample : ic957-75
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:56:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:38:06 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32884.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:03 pm
Operator : dharas
Sample : ic957-100
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:56:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:38:06 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.320	1.592	94320302	48834869	50.000	50.000
25) I	1-bromo-2...	1.320	1.592	94320302	48834869	50.000	50.000
31) I	1-bromo-2...	1.320	1.592	94320302	48834869	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.494	268.6E6	108.1E6	101.426	96.476
	Spiked Amount 40.000 Range 30 - 150 Recovery = 253.57%# 241.19%#						
24)	SAB Decachlor...	9.968	11.807	218.2E6	59912181	94.189	89.581
	Spiked Amount 40.000 Recovery = 235.47% 223.95%						
	Target Compounds						
3) A	alpha-BHC	2.517	3.204	288.8E6	134.5E6	109.170	101.474
4) MA	gamma-BHC	2.835	3.660	249.8E6	117.8E6	106.244	99.448
5) MA	Heptachlor	3.364	4.275	229.9E6	111.3E6	101.817	95.013
6) B	beta-BHC	2.911	3.750	112.8E6	52237488	97.935	93.039
7) B	delta-BHC	3.106	4.171	260.1E6	119.6E6	112.211	104.528
8) MB	Aldrin	3.719	4.756	283.6E6	121.0E6	107.289	100.952
9) B	Heptachlo...	4.475	5.643	231.6E6	99215128	102.149	95.518
10) B	gamma-Chl...	4.648	5.950	260.4E6	102.9E6	104.456	96.764
11) B	alpha-Chl...	4.832	6.196	261.7E6	100.2E6	103.363	95.035
12) A	Endosulfan I	5.018	6.296	233.7E6	93842554	103.427	94.438
13) B	4,4'-DDE	4.959	6.494	242.1E6	98647552	106.622	98.527
14) MA	Dieldrin	5.363	6.769	231.2E6	95201850	104.322	95.505
15) MA	Endrin	5.707	7.316	191.4E6	78018056	102.378	94.899
16) A	4,4'-DDD	5.848	7.530	170.4E6	72722987	100.838	95.702
17) B	Endosulfa...	6.049	7.699	216.5E6	84282780	101.921	94.318
18) MA	4,4'-DDT	6.303	8.114	187.6E6	78299565	102.433	94.930
19) B	Endrin Al...	6.726	8.330	168.8E6	62879635	104.191	97.005
20) B	Endosulfa...	7.468	8.847	202.7E6	76191472	102.600	93.729
21) A	Methoxychlor	7.162	9.498	90139530	40796132	94.789	92.278
22)	Mirex	7.305	9.816	178.7E6	62959869	93.950	89.055
23) B	Endrin Ke...	7.944	9.898	216.1E6	80378042	99.801	92.972

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

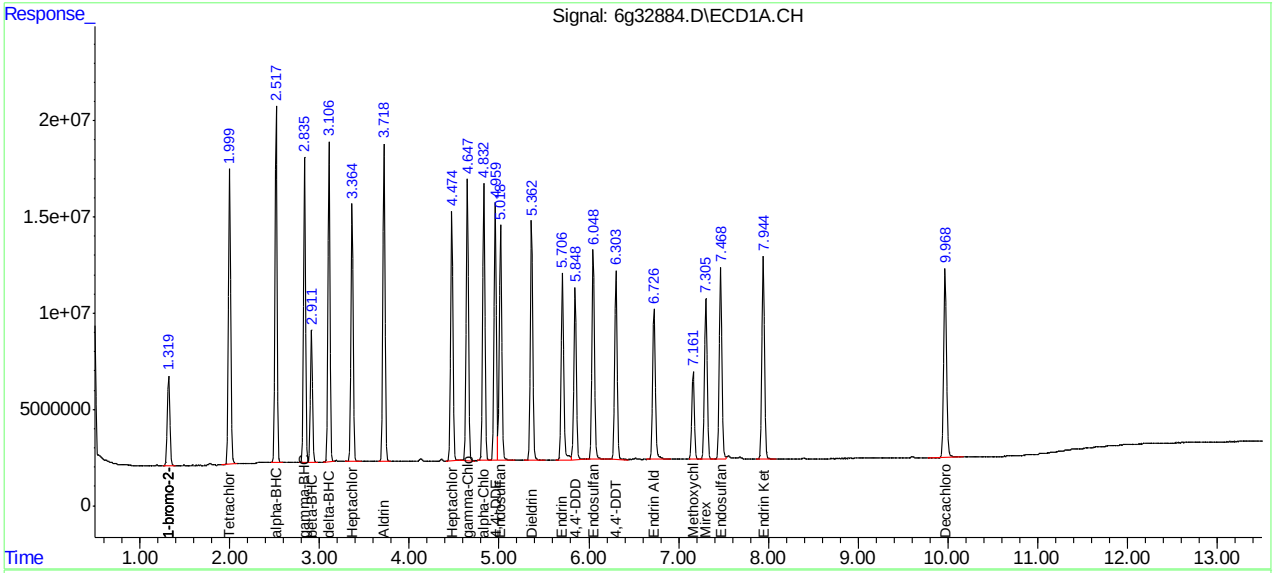
13.6.25 13

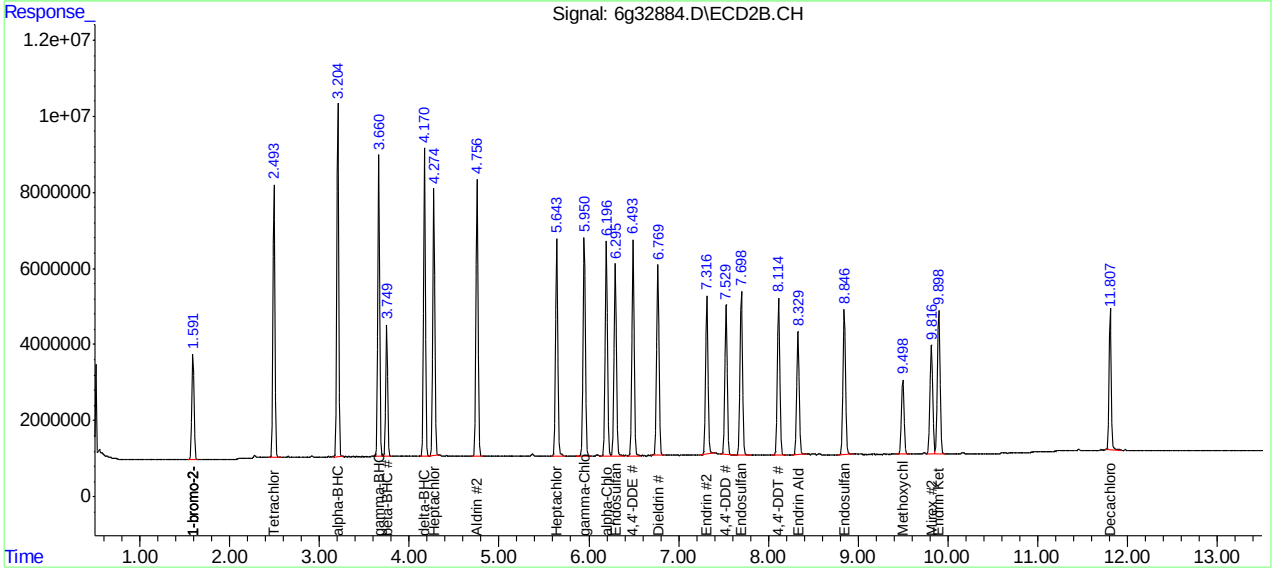
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32884.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:03 pm
Operator : dharas
Sample : ic957-100
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:56:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:38:06 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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
03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.320	1.592	97275214	51270744	50.000	50.000
25) I	1-bromo-2...	1.320	1.592	97275214	51270744	50.000	50.000
31) I	1-bromo-2...	1.320	1.592	97275214	51270744	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	2.000	2.493	136.7E6	56512742	50.041	48.047
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 125.10%	120.12%
24)	SAB Decachlor...	9.969	11.810	116.8E6	33213892	48.893	47.302
	Spiked Amount	40.000			Recovery	= 122.23%	118.26%
	Target Compounds						
32)	Chlordane...	3.363f	4.275f	66353835	34371322	856.386m	909.236m
33)	Chlordane...	3.872	4.967	49035624	20195544	500.000	500.000
34)	Chlordane...	4.647	5.949	175.2E6	66853856	500.000	500.000
35)	Chlordane...	4.823	6.195	271.9E6	110.1E6	500.000	496.550m
36)	Chlordane...	5.953	7.786	41995397	17334220	500.000	500.000
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

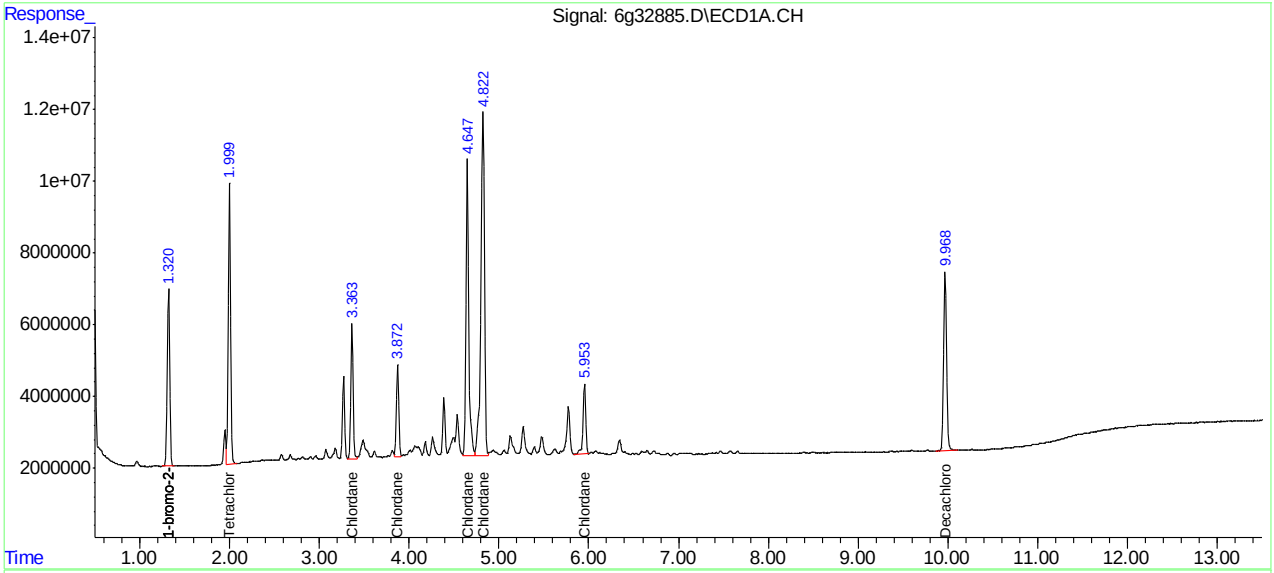
13.6.26
13

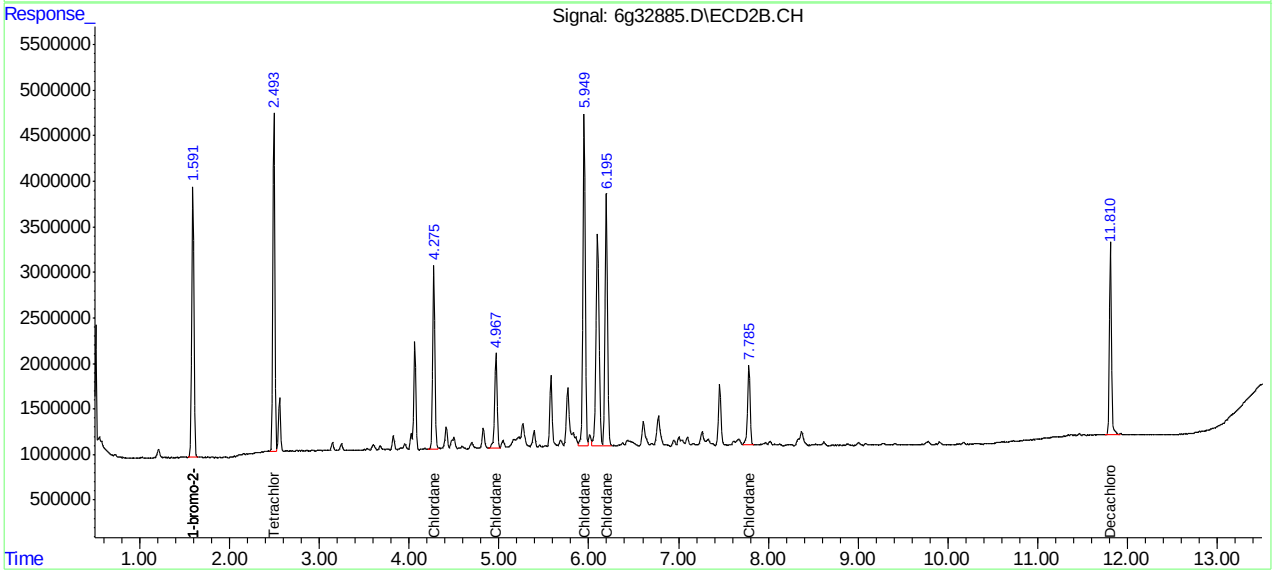
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number:	G6G957-IC957	**Method:**	SW846 8081B
Lab FileID:	6G32885.D	**Analyst approved:**	03/15/16 16:14 Dhara Saparia
Injection Time:	03/15/16 14:19	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

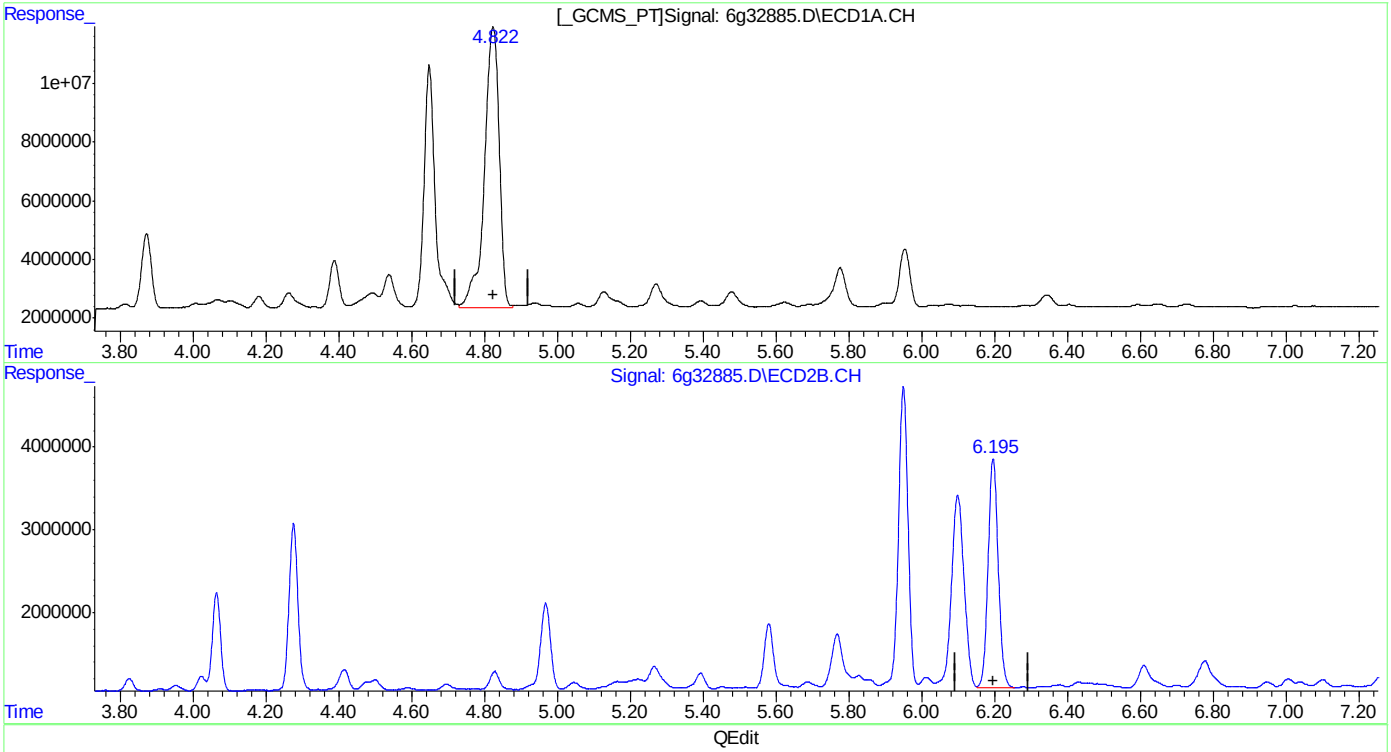
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.19	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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}
4.823min 500.000PPB
response 271878611

(35) Chlordane {D} #2
6.195min 240.573PPB
response 53361886

(+) = Expected Retention Time
6PST957.M Tue Mar 15 15:58:33 2016

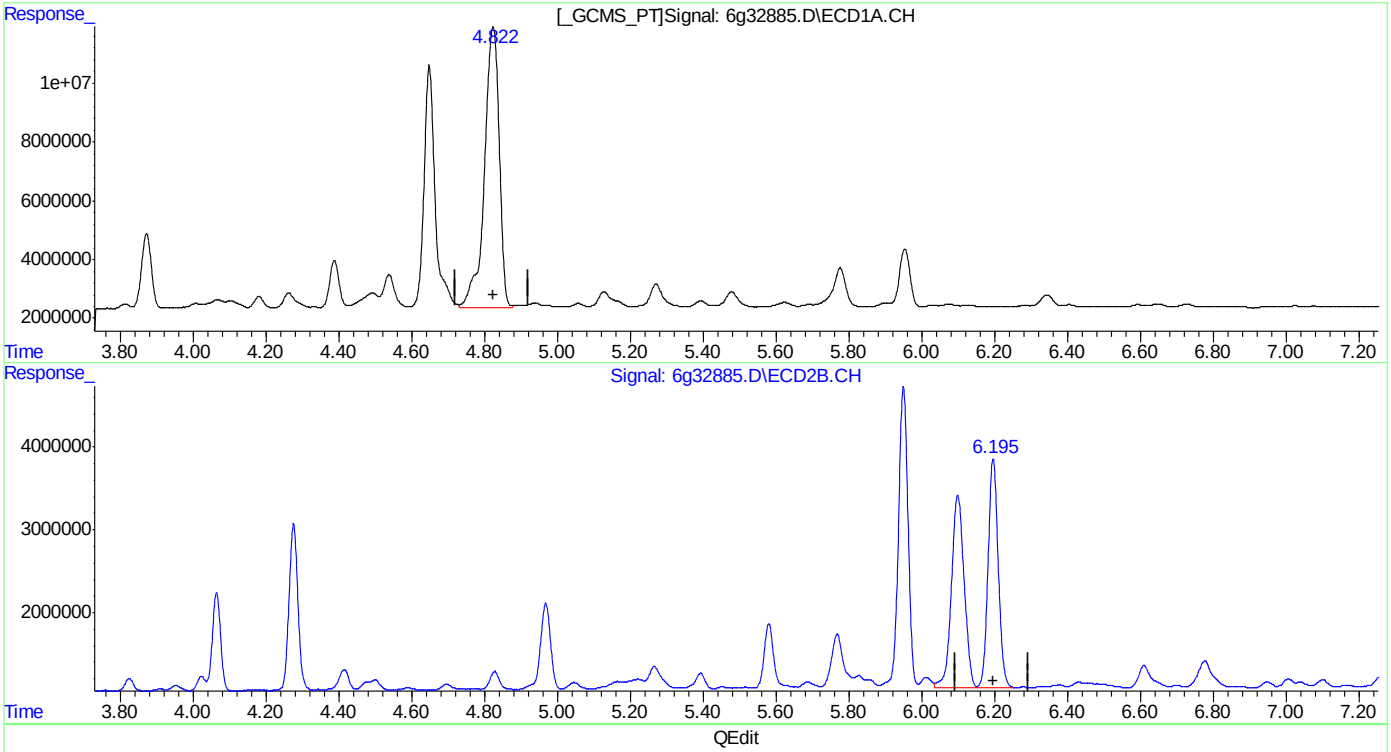
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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}
4.823min 500.000PPB
response 271878611

(35) Chlordane {D} #2
6.195min 496.550PPB m
response 110140645

(+) = Expected Retention Time

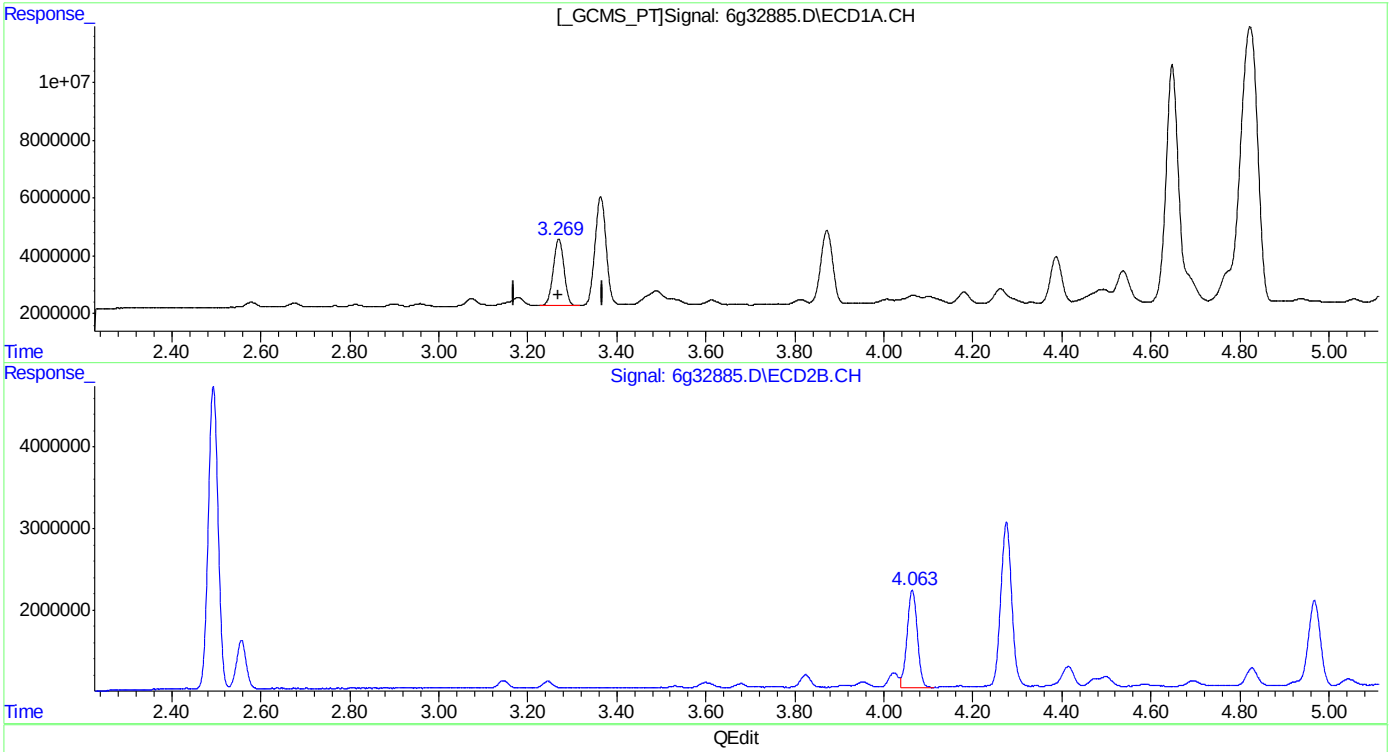
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:58:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(32) Chlordane {A}
3.269min 500.000PPB
response 38740633

(32) Chlordane {A} #2
4.064min 500.000PPB
response 18901200

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:07:21 2016

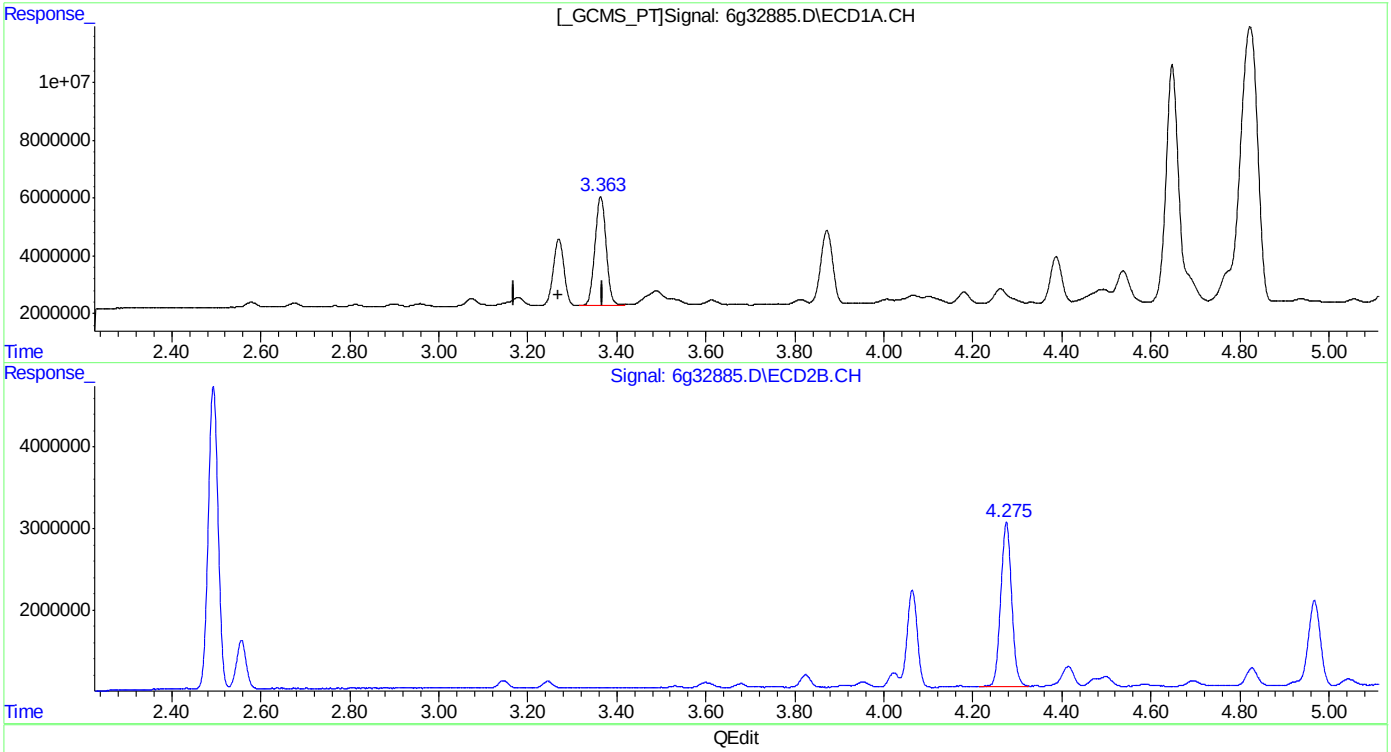
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32885.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:19 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 15:58:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 15:58:05 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(32) Chlordane {A}
3.363min 856.386PPB m
response 66353835

(32) Chlordane {A} #2
4.275min 909.236PPB m
response 34371322

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:07:33 2016

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32886.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:35 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:01:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:01:00 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.591	95045670	49601986	50.000	50.000
25) I	1-bromo-2...	1.318	1.591	95045670	49601986	50.000	50.000
31) I	1-bromo-2...	1.318	1.591	95045670	49601986	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.998	2.493	133.2E6	55119700	49.902	48.439
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	124.76%	121.10%
24)	SAB Decachlor...	9.970	11.808	112.9E6	32120639	48.393	47.284
	Spiked Amount 40.000			Recovery	=	120.98%	118.21%
	Target Compounds						
26) L8	Toxaphene{A}	5.374	6.733	10353960	3708467	500.000	500.000
27) L8	Toxaphene{B}	5.770	7.668	26376047	11131189	500.000	500.000
28) L8	Toxaphene{C}	6.038	7.847	41004798	20309545	500.000	500.000
29) L8	Toxaphene{D}	6.602	8.331	25191033	12588102	500.000	500.000
30) L8	Toxaphene{E}	7.301	9.319	29270563	11040369	500.000	500.000

SemiQuant Compounds - Not Calibrated on this Instrument

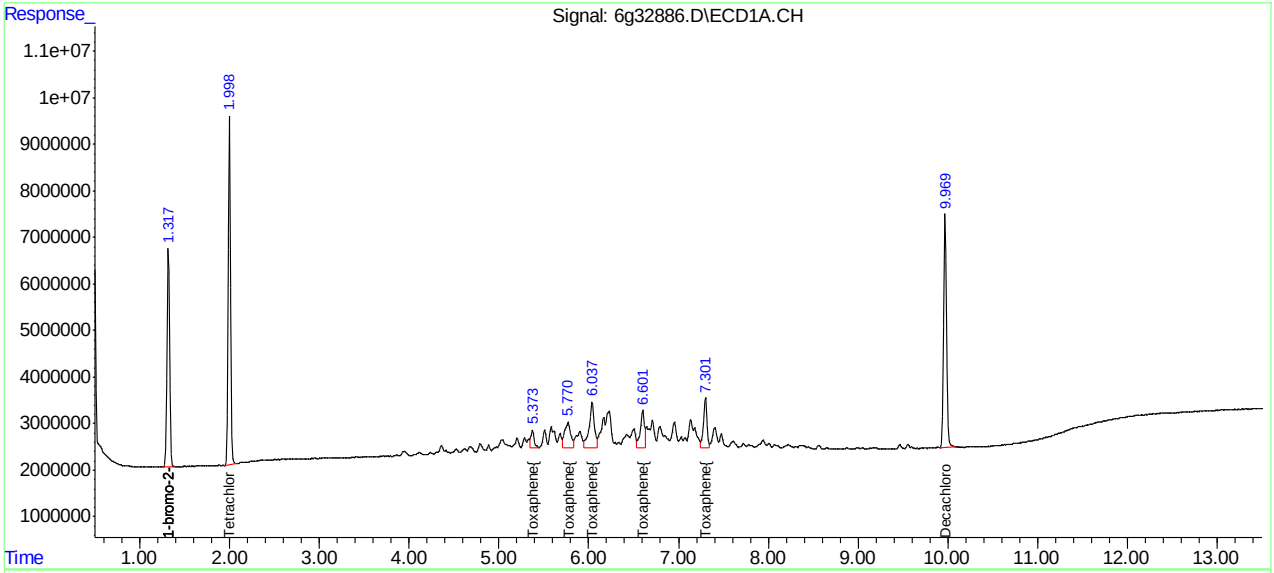
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

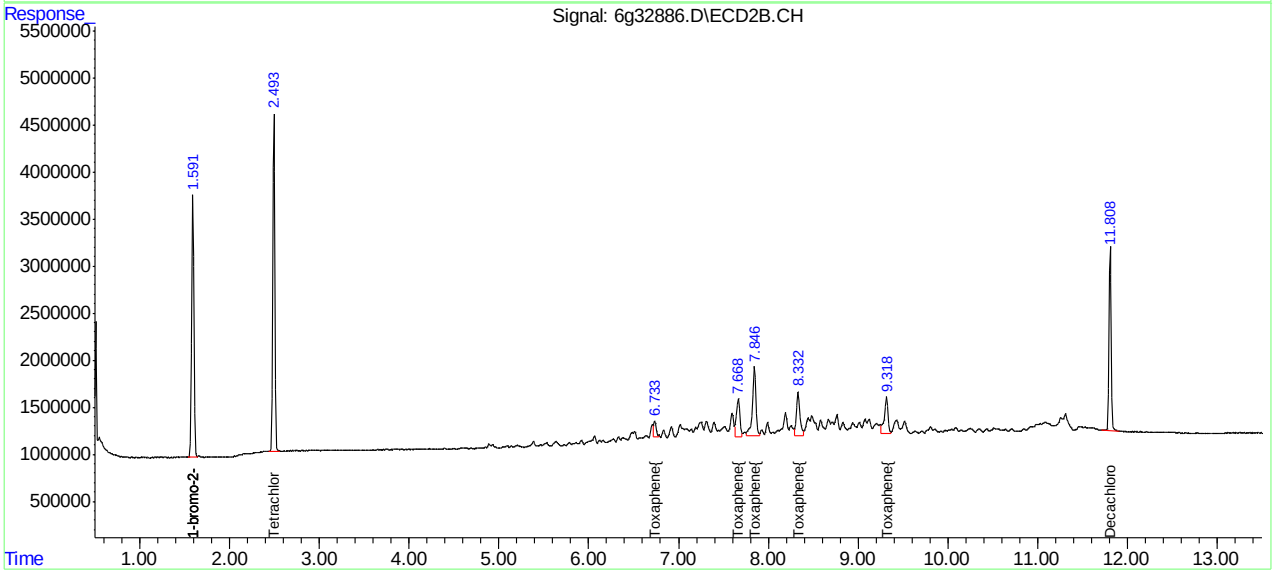
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32886.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:35 pm
Operator : dharas
Sample : ic957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:01:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:01:00 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32887.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:52 pm
Operator : dharas
Sample : icv957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:04:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.590	82052707	43056469	50.000	50.000
25) I	1-bromo-2...	1.319	1.590	82052707	43056469	50.000	50.000
31) I	1-bromo-2...	1.319	1.590	82052707	43056469	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.999	2.493	56714170	26072476	25.124	26.335
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	62.81%	65.84%
24) SAB	Decachlor...	9.969	11.808	54149437	15899655	26.582	27.301
	Spiked Amount 40.000			Recovery	=	66.45%	68.25%
	Target Compounds						
3) A	alpha-BHC	2.516	3.204	57936036	29019374	25.343	25.151
4) MA	gamma-BHC	2.834	3.660	52324633	26279208	25.476	25.509
5) MA	Heptachlor	3.363	4.274	50067321	25601712	25.327	24.821
6) B	beta-BHC	2.910	3.749	25652236	12504256	24.890	24.911
7) B	delta-BHC	3.107	4.171	56507865	27648971	26.950	26.275
8) MB	Aldrin	3.719	4.755	57656432	26614554	25.182	25.416
9) B	Heptachlo...	4.474	5.643	50219443	23439084	25.681	25.878
10) B	gamma-Chl...	4.648	5.949	55694800	24373045	25.778	26.327
11) B	alpha-Chl...	4.832	6.196	55827812	23908923	25.224	25.207
12) A	Endosulfan I	5.018	6.295	48876724	22027572	25.062	25.031
13) B	4,4'-DDE	4.957	6.494	50013140	22617616	24.635	26.077
14) MA	Dieldrin	5.364	6.768	49539582	22896404	25.837	26.156
15) MA	Endrin	5.708	7.315	40203919	20084099	25.110	27.506
16) A	4,4'-DDD	5.848	7.528	35847752	17940512	24.316	26.500
17) B	Endosulfa...	6.049	7.698	46798888	20700520	25.302	26.052
18) MA	4,4'-DDT	6.303	8.115	40256313	18926040	25.444	26.509
19) B	Endrin Al...	6.726	8.330	39230356	16281031	27.016	28.326
20) B	Endosulfa...	7.469	8.846	45529128	19377980	26.381	26.977
21) A	Methoxychlor	7.162	9.498	20794611	10039933	25.091m	25.971
23) B	Endrin Ke...	7.944	9.898	48877806	20034545	26.073	26.279

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

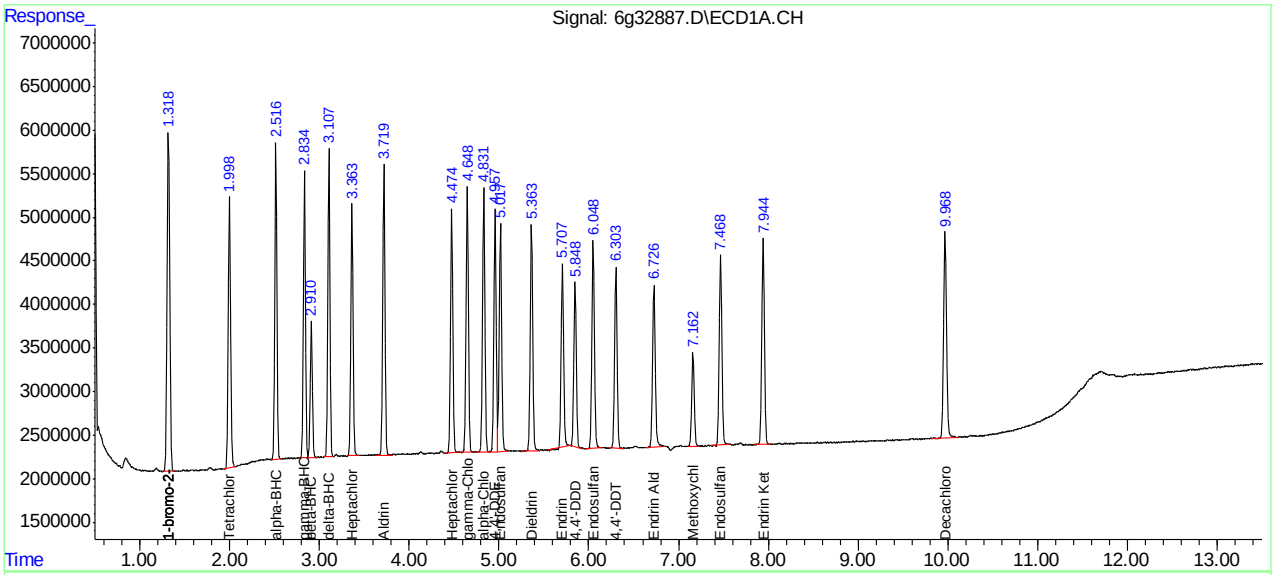
13.6.28 13

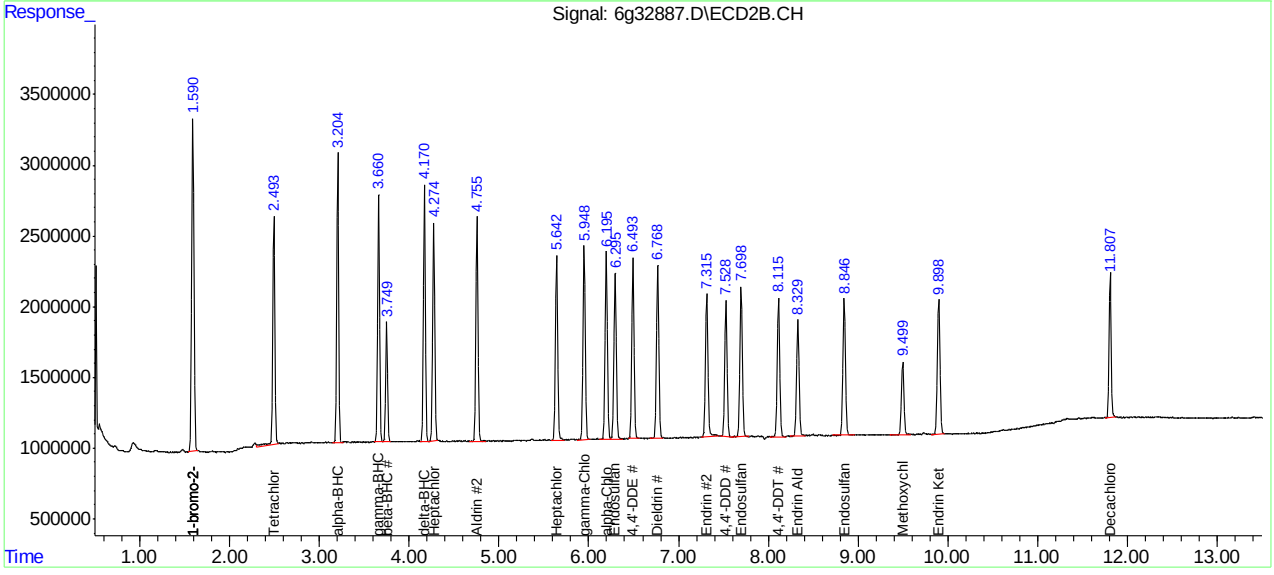
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32887.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:52 pm
Operator : dharas
Sample : icv957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:04:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G957-ICV957	**Method:**	SW846 8081B
Lab FileID:	6G32887.D	**Analyst approved:**	03/15/16 16:16 Dhara Saparia
Injection Time:	03/15/16 14:52	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

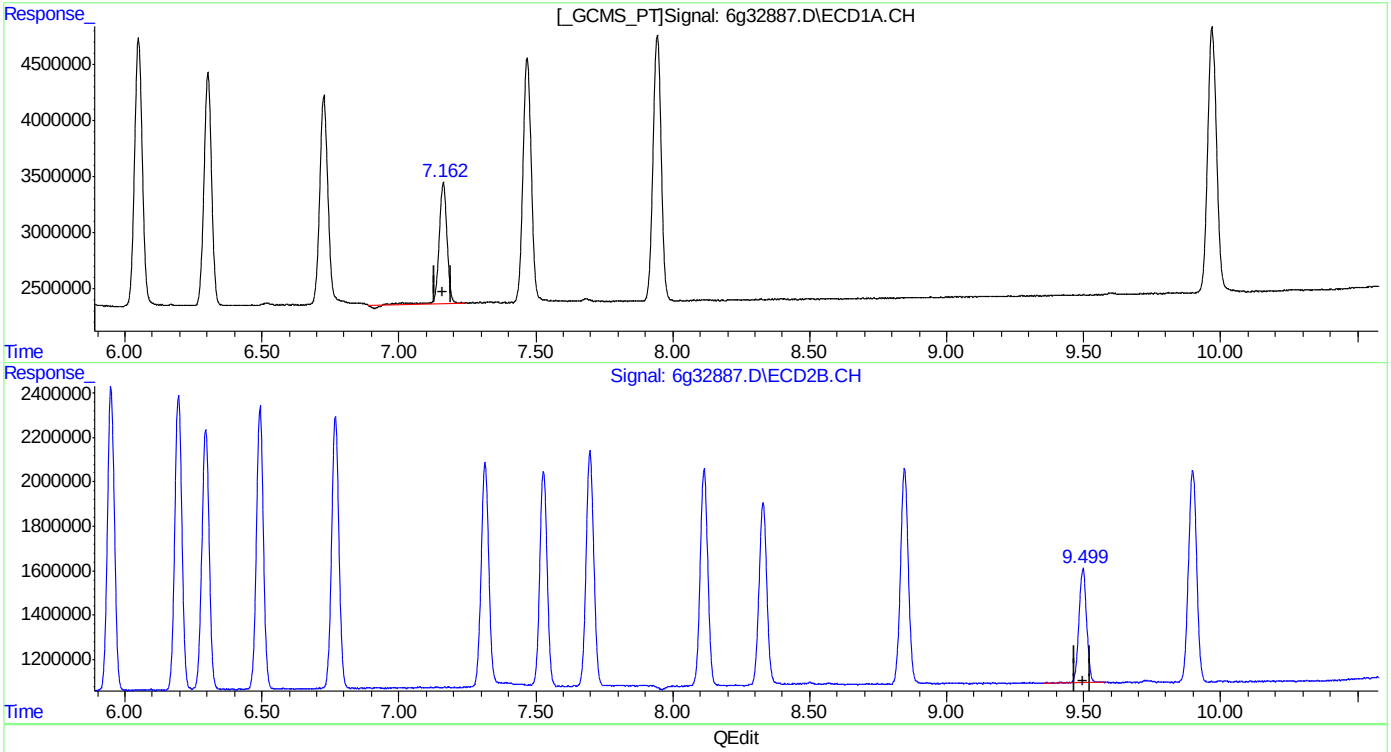
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	7.16	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32887.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:52 pm
Operator : dharas
Sample : icv957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:04:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.162min 26.489PPB
response 21953032

(21) Methoxychlor #2 (A)
9.498min 25.971PPB
response 10039933

(+) = Expected Retention Time

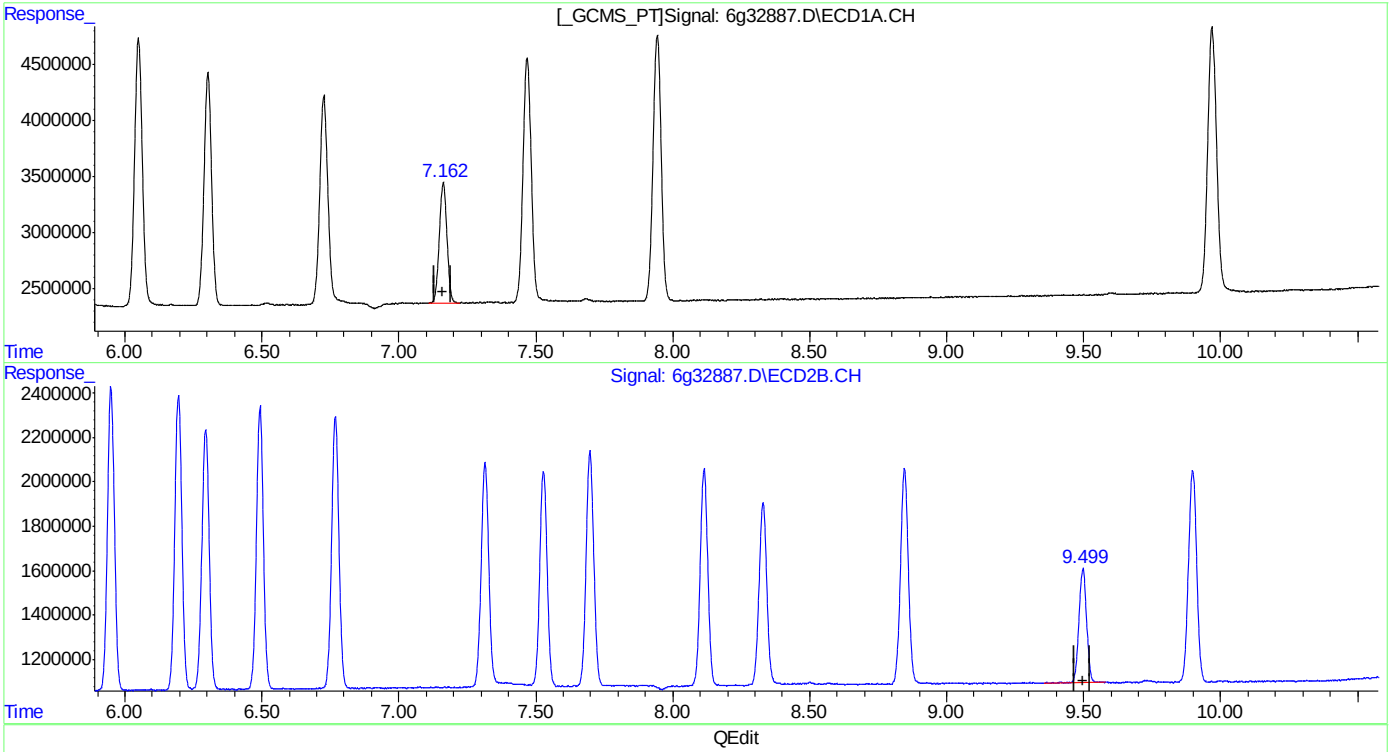
SGS ACCUTEST JC15518
13.6.28.2
13

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32887.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 2:52 pm
Operator : dharas
Sample : icv957-25
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:04:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.162min 25.091PPB m
response 20794611

(21) Methoxychlor #2 (A)
9.498min 25.971PPB
response 10039933

(+) = Expected Retention Time
6PST957.M Tue Mar 15 16:04:53 2016

SGS ACCUTEST JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:25 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:08:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.591	79383194	41663320	50.000	50.000
25) I	1-bromo-2...	1.319	1.591	79383194	41663320	50.000	50.000
31) I	1-bromo-2...	1.319	1.591	79383194	41663320	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.493	108.7E6	47624911	49.769	49.713
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 124.42%	124.28%
24)	SAB Decachlor...	9.968	11.807	103.3E6	29935592	52.403	53.121
	Spiked Amount	40.000			Recovery	= 131.01%	132.80%
	Target Compounds						
32)	Chlordane...	3.363	4.275	47385400	26821126	437.544	480.138
33)	Chlordane...	3.872	4.966	42664814	18933075	533.092	576.835
34)	Chlordane...	4.647	5.948	148.2E6	59174312	518.413	544.619
35)	Chlordane...	4.825	6.194	236.8E6	100.2E6	533.549	559.574m
36)	Chlordane...	5.953	7.784	34989578	14998542	510.482	532.391
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

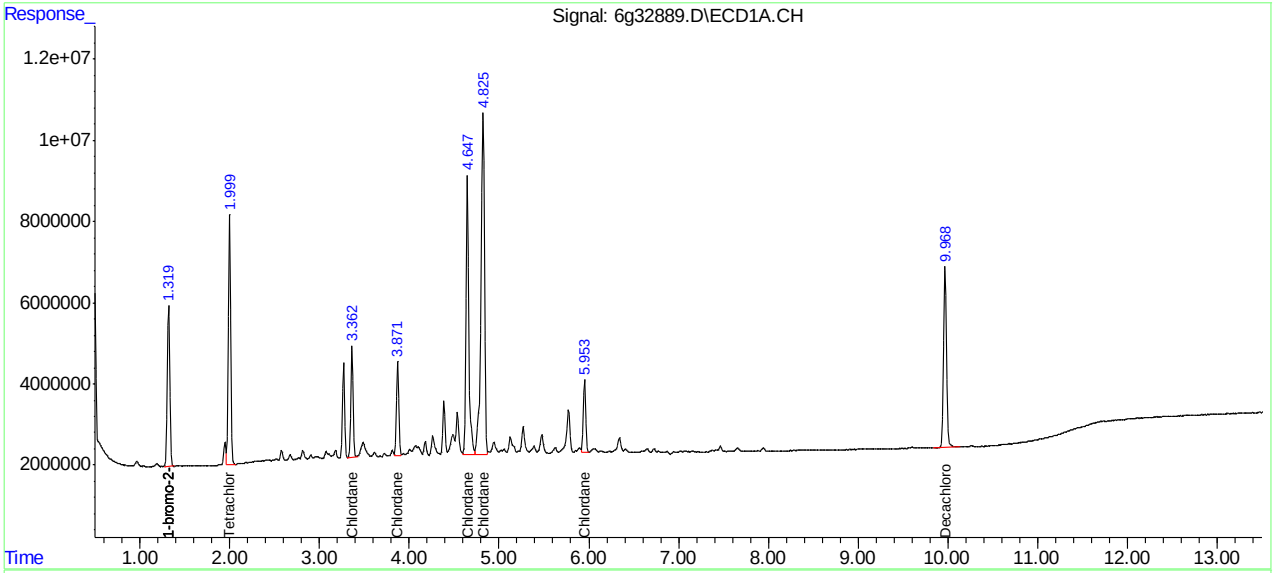
13.6.29 13

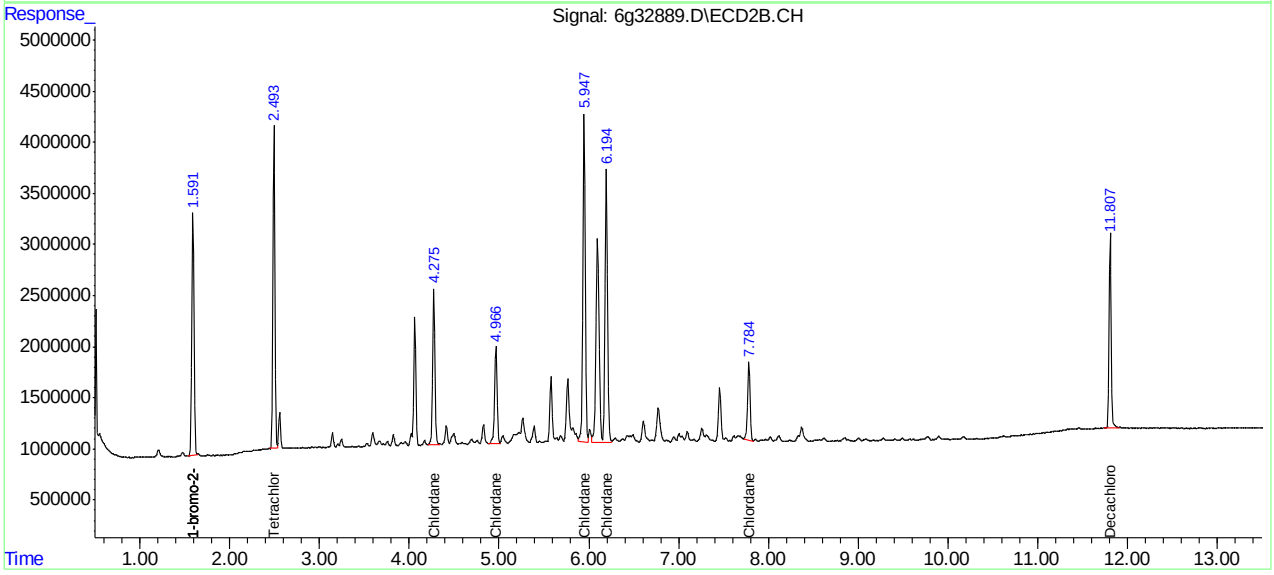
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:25 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:08:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number:	G6G957-ICV957	**Method:**	SW846 8081B
Lab FileID:	6G32889.D	**Analyst approved:**	03/15/16 16:16 Dhara Saparia
Injection Time:	03/15/16 15:25	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

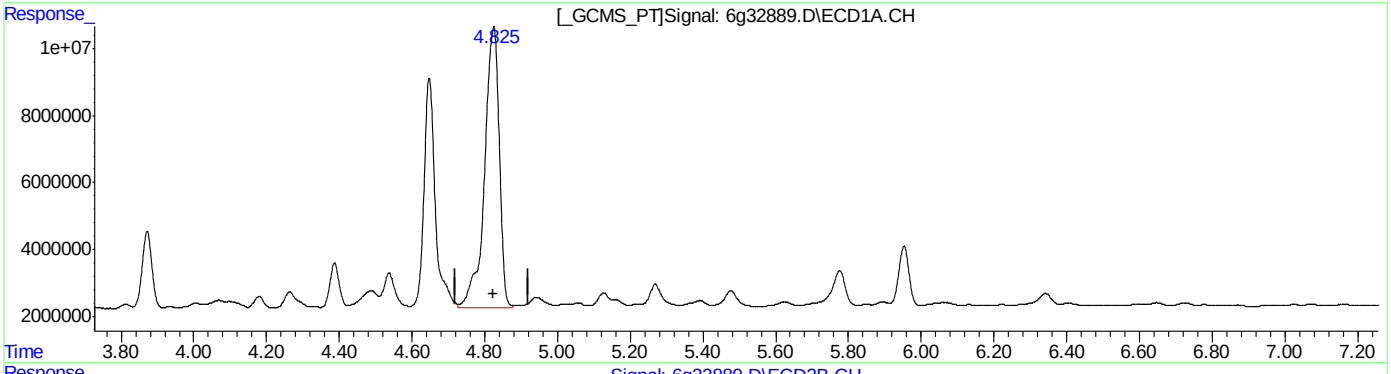
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.19	Poorly defined baseline

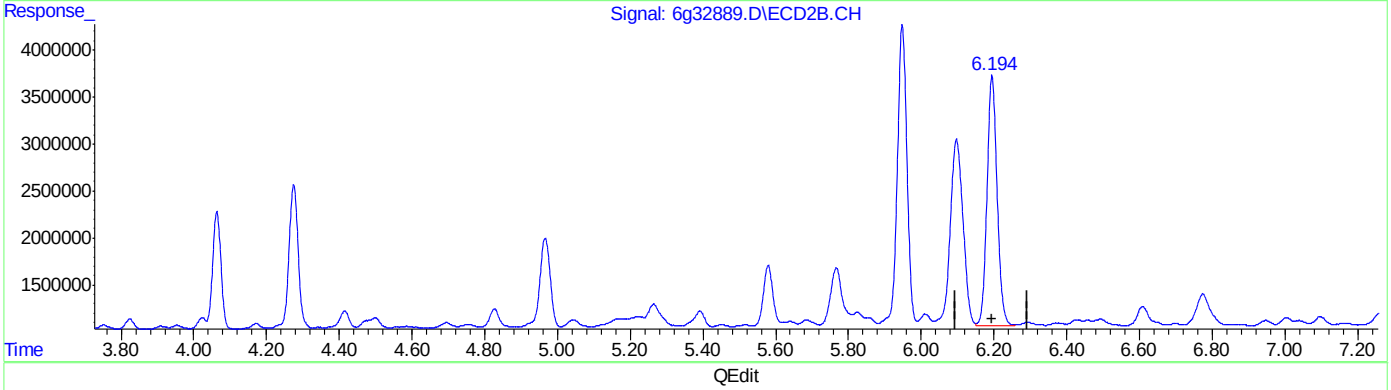
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:25 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:08:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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}
4.825min 533.549PPB
response 236758652

(35) Chlordane {D} #2
6.195min 286.172PPB
response 51225762

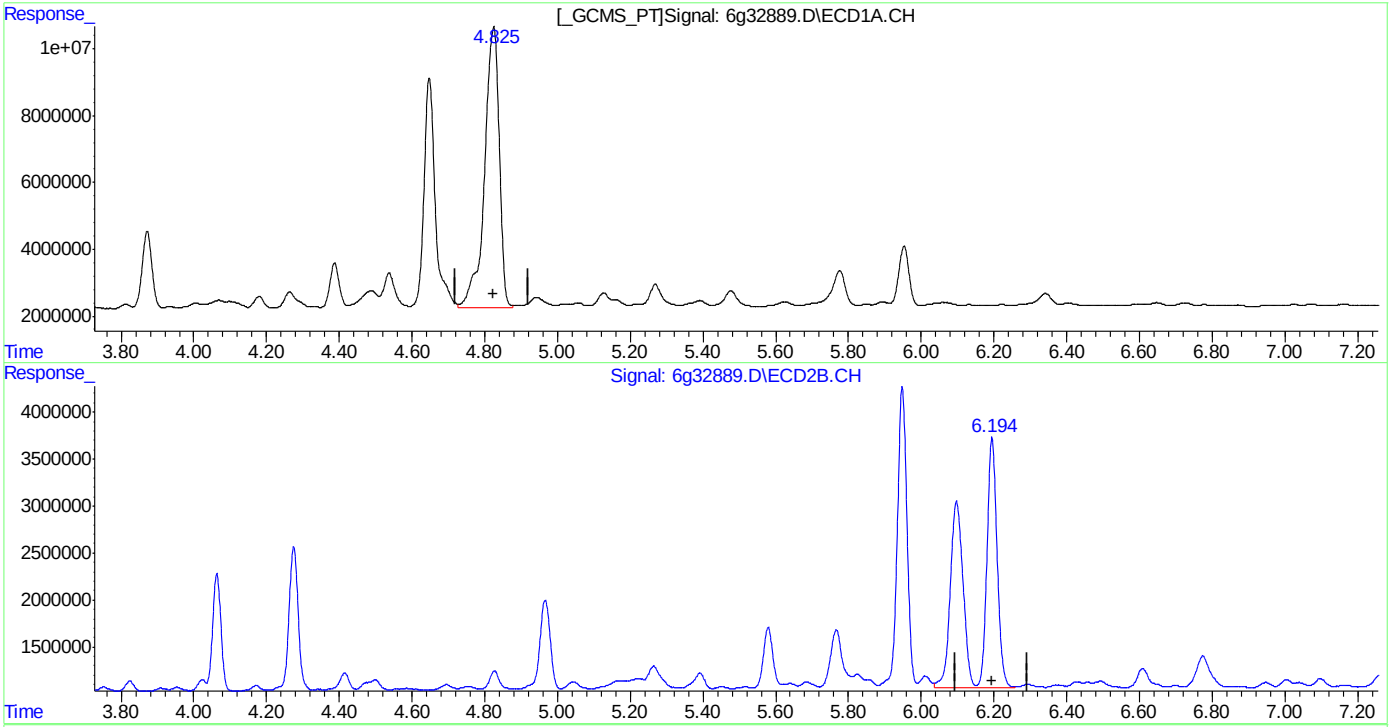
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:25 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:08:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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}
4.825min 533.549PPB
response 236758652

(35) Chlordane {D} #2
6.194min 559.574PPB m
response 100165775

(+) = Expected Retention Time

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
03/16/16 17:31

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32890.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:41 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:07:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.318	1.590	80644981	42377643	50.000	50.000
25) I	1-bromo-2...	1.318	1.590	80644981	42377643	50.000	50.000
31) I	1-bromo-2...	1.318	1.590	80644981	42377643	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.998	2.492	104.4E6	46417574	47.069	47.636
Spiked Amount		40.000	Range	30 - 150	Recovery	= 117.67%	119.09%
24) SAB	Decachlor...	9.968	11.805	99150346	29103023	49.522	50.773
Spiked Amount		40.000			Recovery	= 123.80%	126.93%
	Target Compounds						
26) L8	Toxaphene{A}	5.373	6.731	9505247	3329923	553.671	543.179m
27) L8	Toxaphene{B}	5.771	7.665	23252627	9163018	531.688	497.966
28) L8	Toxaphene{C}	6.039	7.844	37270172	16238818	548.178	483.679
29) L8	Toxaphene{D}	6.602	8.330	21978150	10405945	526.187	500.062
30) L8	Toxaphene{E}	7.298	9.314	25897899	9875617	533.615	541.107m
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

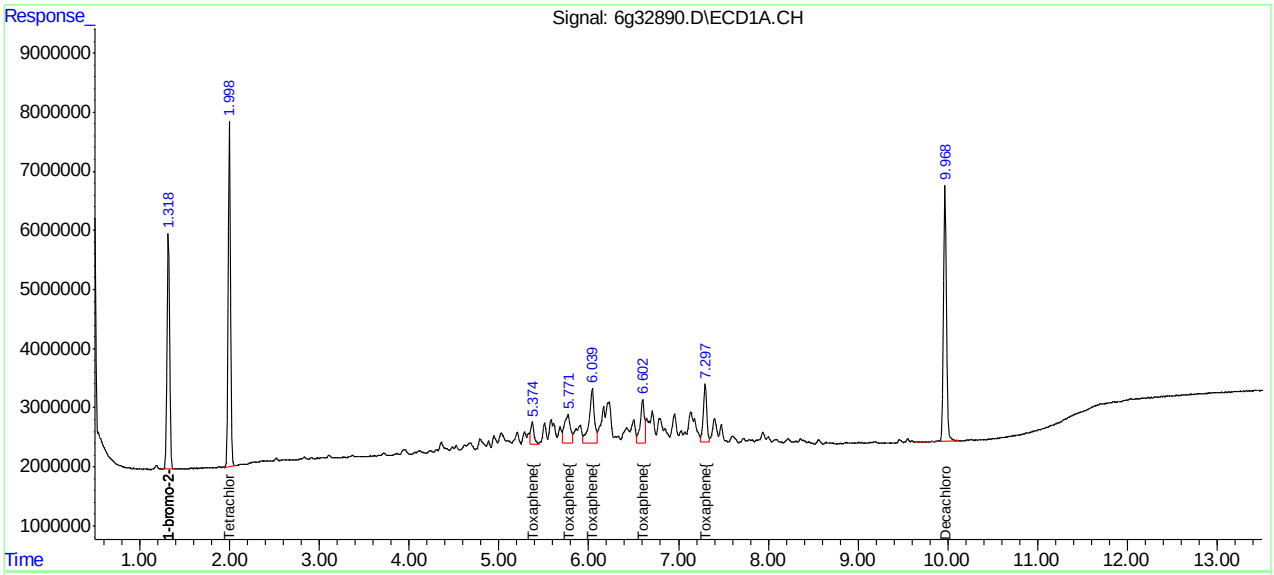
13.6.30
13

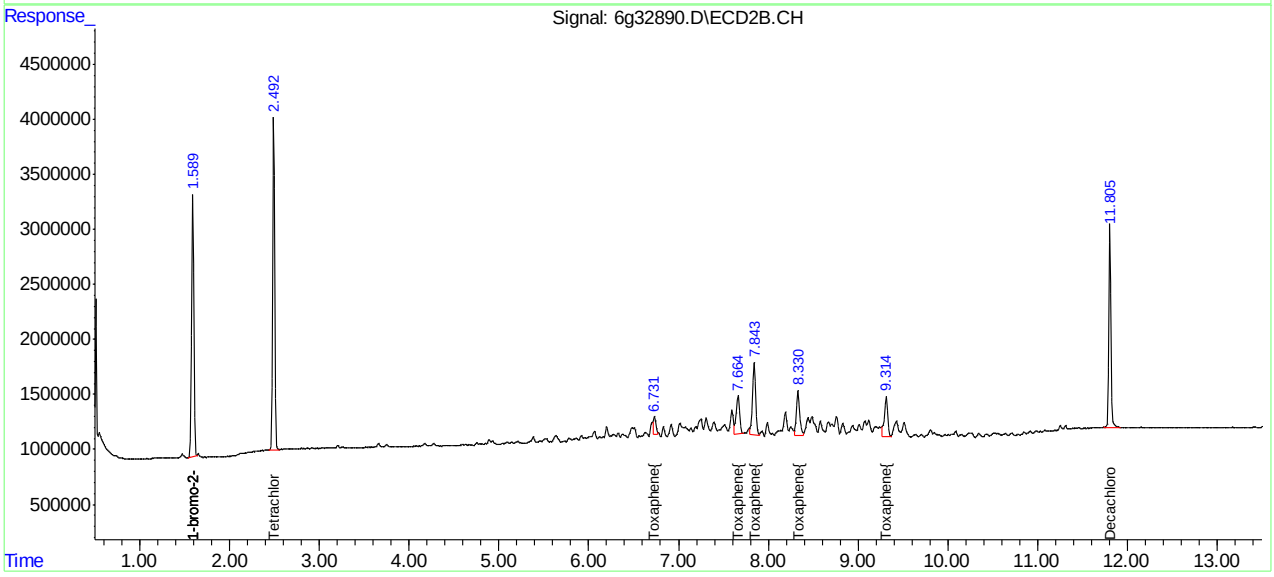
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32890.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:41 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:07:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integration Approval Summary

Sample Number:	G6G957-ICV957	**Method:**	SW846 8081B
Lab FileID:	6G32890.D	**Analyst approved:**	03/15/16 16:16 Dhara Saparia
Injection Time:	03/15/16 15:41	**Supervisor approved:**	03/16/16 17:31 Gwendolyn Burns

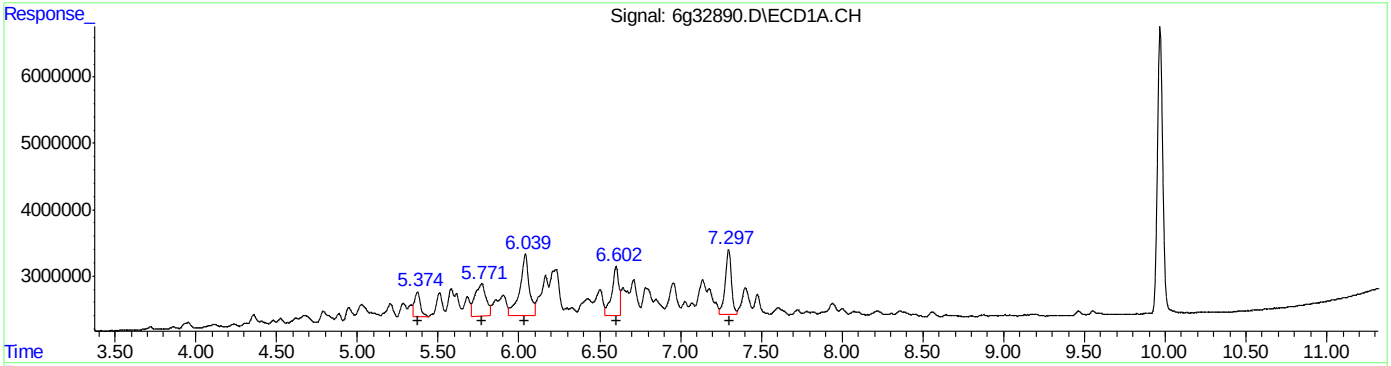
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.73	Poorly defined baseline
Toxaphene-E		2	9.31	Poorly defined baseline

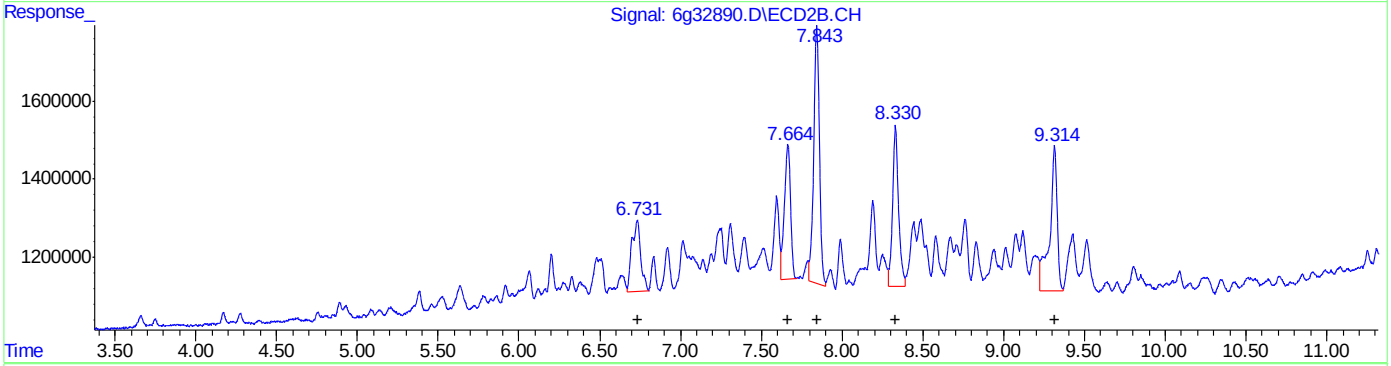
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32890.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:41 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:06:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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
5.37	9505247	553.67
5.77	23252627	531.69
6.04	37270172	548.18
6.60	21978150	526.19
7.30	25897899	533.62

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.73	6962427	1135.71
7.67	9163018	497.97
7.84	16238818	483.68
8.33	10405945	500.06
9.31	11853998	649.51

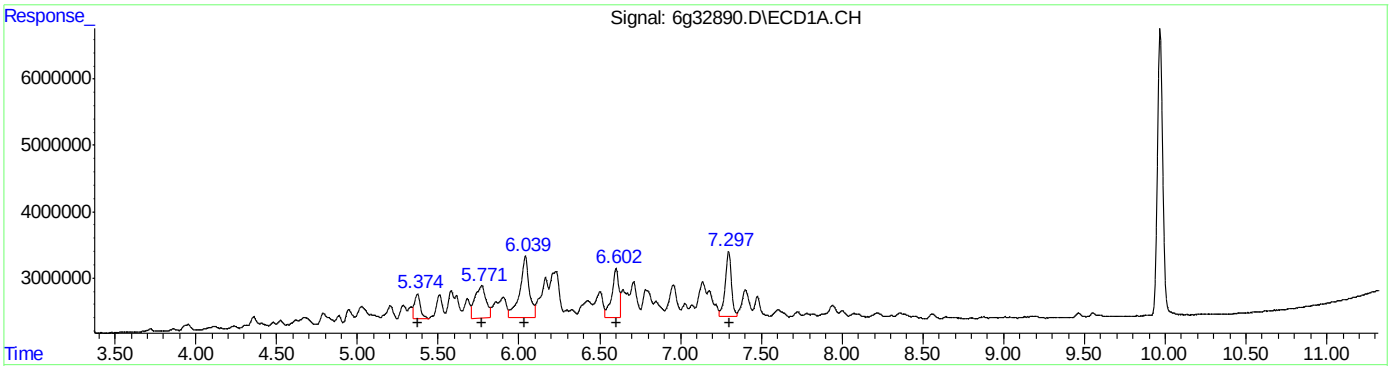
(+) = Expected Retention Time

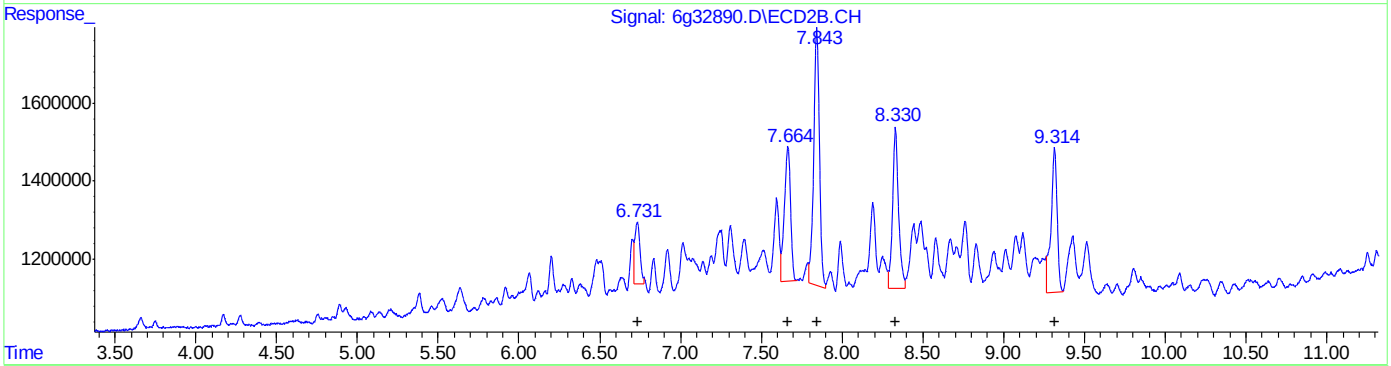
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\957\
Data File : 6g32890.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 3:41 pm
Operator : dharas
Sample : icv957-500
Misc : op91919,g6g957,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 15 16:06:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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
5.37	9505247	553.67
5.77	23252627	531.69
6.04	37270172	548.18
6.60	21978150	526.19
7.30	25897899	533.62

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.73	3329923	543.18
7.67	9163018	497.97
7.84	16238818	483.68
8.33	10405945	500.06
9.31	9875617	541.11

(+) = Expected Retention Time

SGS ACCUTEST JC15518

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32896.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 5:32 pm
Operator : dharas
Sample : cc957-25
Misc : op91913,g6g958,980,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:29:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.319	1.591	79896752	42871380	50.000	50.000
25) I	1-bromo-2...	1.319	1.591	79896752	42871380	50.000	50.000
31) I	1-bromo-2...	1.319	1.591	79896752	42871380	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.999	2.493	63686662	28712366	28.974	29.127
Spiked Amount		40.000	Range	30 - 150	Recovery	= 72.44%	72.82%
24) SAB	Decachlor...	9.968	11.804	57730704	17151488	29.105	29.578
Spiked Amount		40.000			Recovery	= 72.76%	73.94%
	Target Compounds						
3) A	alpha-BHC	2.516	3.204	66502210	33810342	29.874	29.430
4) MA	gamma-BHC	2.834	3.659	59842402	30346281	29.922	29.584
5) MA	Heptachlor	3.364	4.274	56384800	29118632	29.292	28.352
6) B	beta-BHC	2.911	3.749	29709359	14619784	29.604	29.251
7) B	delta-BHC	3.106	4.170	61233631	30587829	29.991	29.194
8) MB	Aldrin	3.718	4.755	65245369	30609335	29.265	29.357
9) B	Heptachlo...	4.474	5.642	56970741	26074108	29.920	28.912
10) B	gamma-Chl...	4.648	5.949	62130462	26692869	29.532	28.957
11) B	alpha-Chl...	4.830	6.195	63035288	26392827	29.248	27.945
12) A	Endosulfan I	5.019	6.295	56302564	25044557	29.649	28.582
13) B	4,4'-DDE	4.958	6.492	55483912	25120655	28.068	29.088
14) MA	Dieldrin	5.363	6.768	55277132	24752536	29.608	28.399
15) MA	Endrin	5.706	7.314	43803742	20590140	28.097	28.321
16) A	4,4'-DDD	5.848	7.528	39676640	19376757	27.640	28.745
17) B	Endosulfa...	6.050	7.697	52806619	22970544	29.320	29.033
18) MA	4,4'-DDT	6.303	8.114	44907879	20530287	29.150	28.880
19) B	Endrin Al...	6.725	8.329	41730823	17302224	29.513	30.232
20) B	Endosulfa...	7.468	8.845	49893771	20839283	29.690	29.136
21) A	Methoxychlor	7.163	9.496	22784042	10780589	28.233	28.007
22)	Mirex	7.305	9.815	48888715	18262249	30.527	30.047
23) B	Endrin Ke...	7.943	9.896	55749010	22151119	30.541	29.181

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

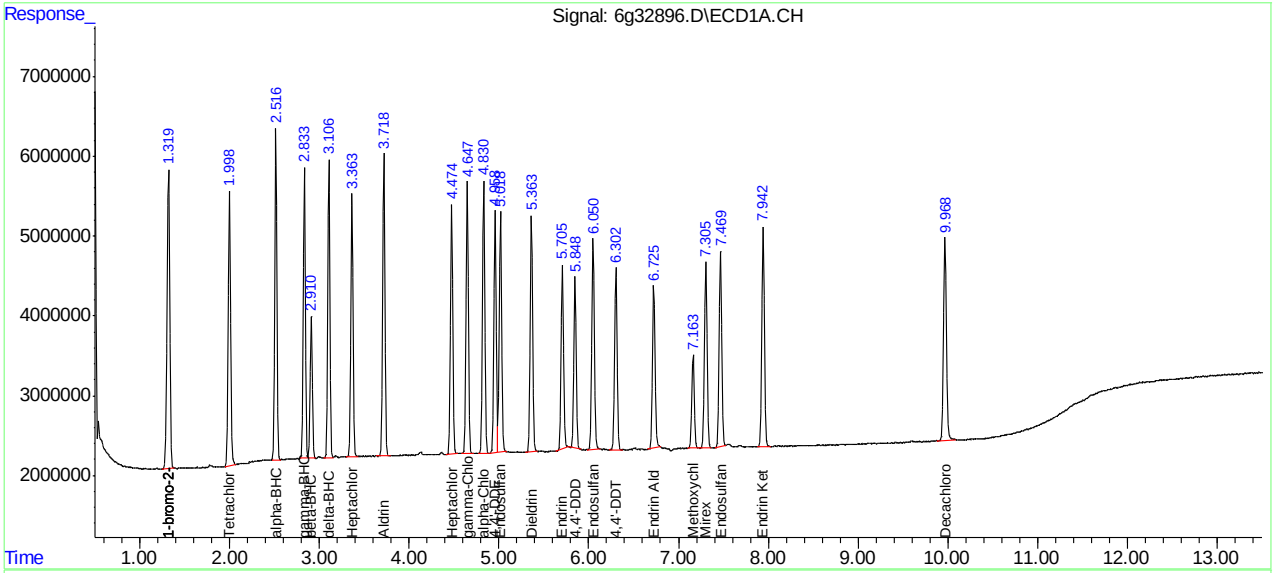
13.6.31 13

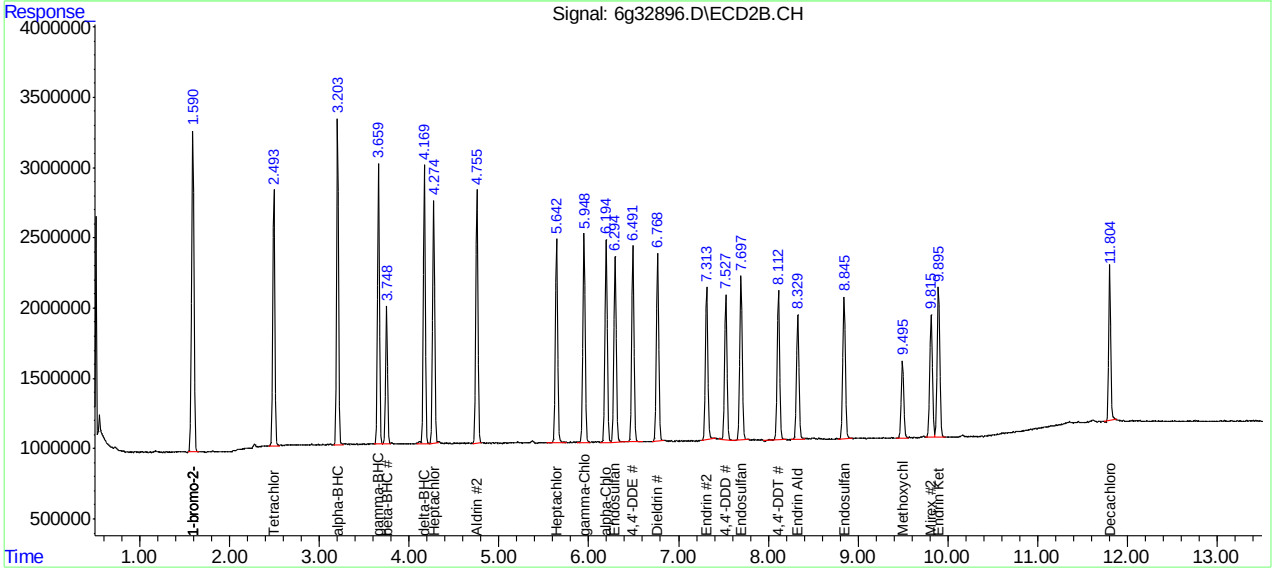
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\958\
Data File : 6g32896.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Mar 2016 5:32 pm
Operator : dharas
Sample : cc957-25
Misc : op91913,g6g958,980,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 08:29:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:07:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC15518

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/17/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\959\
Data File : 6g32918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Mar 2016 9:37 am
Operator : brittanp
Sample : cc957-50
Misc : op91919,g6g959,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 10:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.325	1.595	94287112	44975078	50.000	50.000
25) I	1-bromo-2...	1.325	1.595	94287112	44975078	50.000	50.000
31) I	1-bromo-2...	1.325	1.595	94287112	44975078	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.002	2.495	127.6E6	52750205	49.179	51.009
Spiked Amount		40.000 Range	30 - 150	Recovery	=	122.95%	127.52%
24) SAB	Decachlor...	9.969	11.803	118.7E6	34894968	50.718	57.362
Spiked Amount		40.000		Recovery	=	126.80%	143.41%
	Target Compounds						
3) A	alpha-BHC	2.519	3.205	146.9E6	64291942	55.911	53.344
4) MA	gamma-BHC	2.835	3.660	131.6E6	56589180	55.773	52.588
5) MA	Heptachlor	3.365	4.274	120.7E6	50267688	53.136	46.655
6) B	beta-BHC	2.913	3.749	61666609	26298104	52.069	50.156
7) B	delta-BHC	3.108	4.170	136.5E6	57522723	56.647	52.333
8) MB	Aldrin	3.720	4.755	140.4E6	57197279	53.363	52.291
9) B	Heptachlo...	4.475	5.641	123.3E6	48441094	54.858	51.201
10) B	gamma-Chl...	4.648	5.948	132.8E6	50312889	53.483	52.028
11) B	alpha-Chl...	4.831	6.194	133.2E6	49415388	52.366	49.875
12) A	Endosulfan I	5.018	6.293	121.4E6	46430208	54.185	50.510
13) B	4,4'-DDE	4.959	6.491	122.0E6	48620428	52.296	53.665
14) MA	Dieldrin	5.363	6.766	123.0E6	45560890	55.816	49.828
15) MA	Endrin	5.706	7.314	102.3E6	38630284	55.630	50.649
16) A	4,4'-DDD	5.848	7.525	89076937	34843264	52.582	49.272
17) B	Endosulfa...	6.049	7.697	115.6E6	42210360	54.387	50.856
18) MA	4,4'-DDT	6.304	8.113	98843419	36575706	54.368	49.045
19) B	Endrin Al...	6.725	8.327	93024357	31309812	55.748	52.149
20) B	Endosulfa...	7.467	8.843	109.2E6	37825245	55.043	50.411
21) A	Methoxychlor	7.162	9.494	50118611	18956846	52.627	46.945
22)	Mirex	7.305	9.814	100.8E6	32654181	53.353	51.213m
23) B	Endrin Ke...	7.943	9.895	123.2E6	41038235	57.195	51.533

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

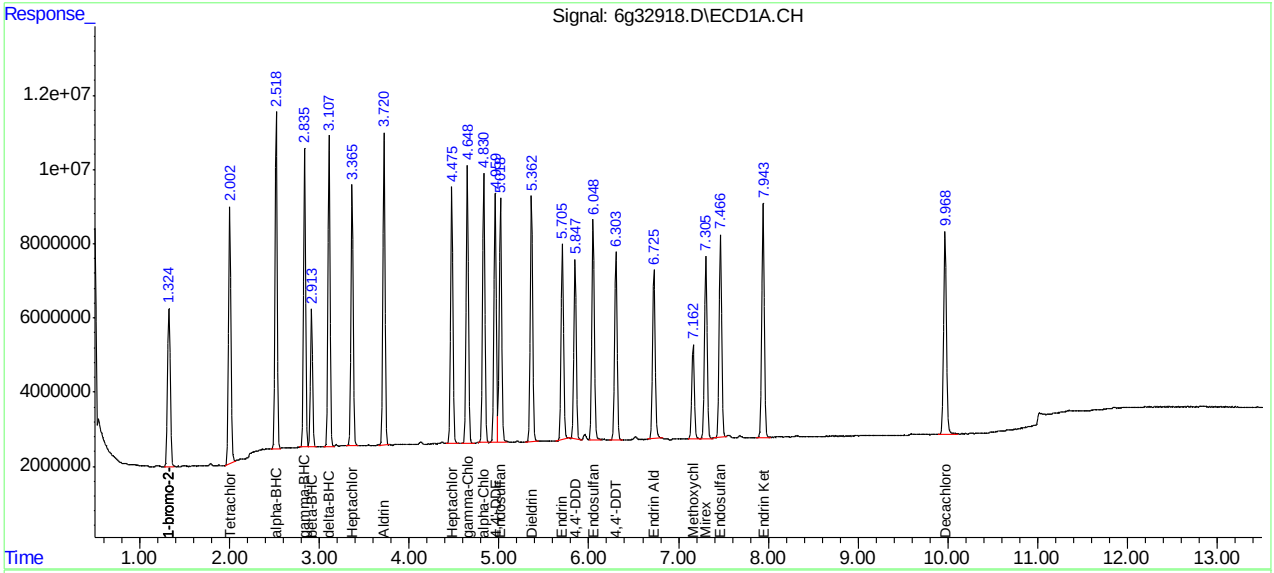
13.6.32 13

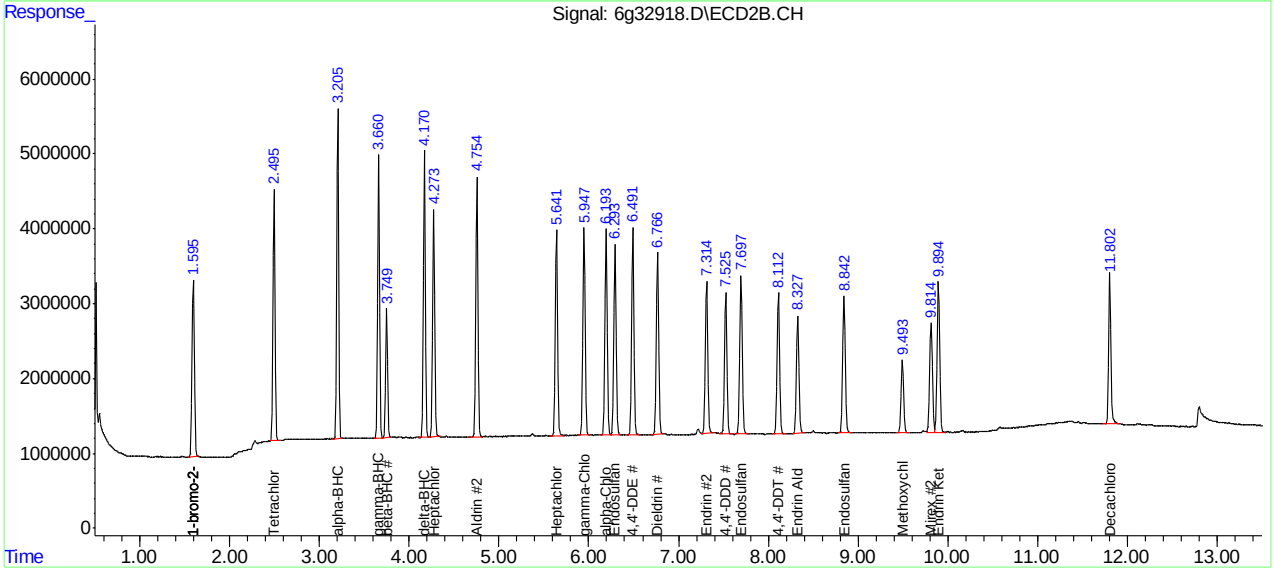
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\959\
Data File : 6g32918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Mar 2016 9:37 am
Operator : brittanp
Sample : cc957-50
Misc : op91919,g6g959,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 10:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G959-CC957	**Method:**	SW846 8081B
Lab FileID:	6G32918.D	**Analyst approved:**	03/16/16 16:18 Dhara Saparia
Injection Time:	03/16/16 09:37	**Supervisor approved:**	03/17/16 13:43 Gwendolyn Burns

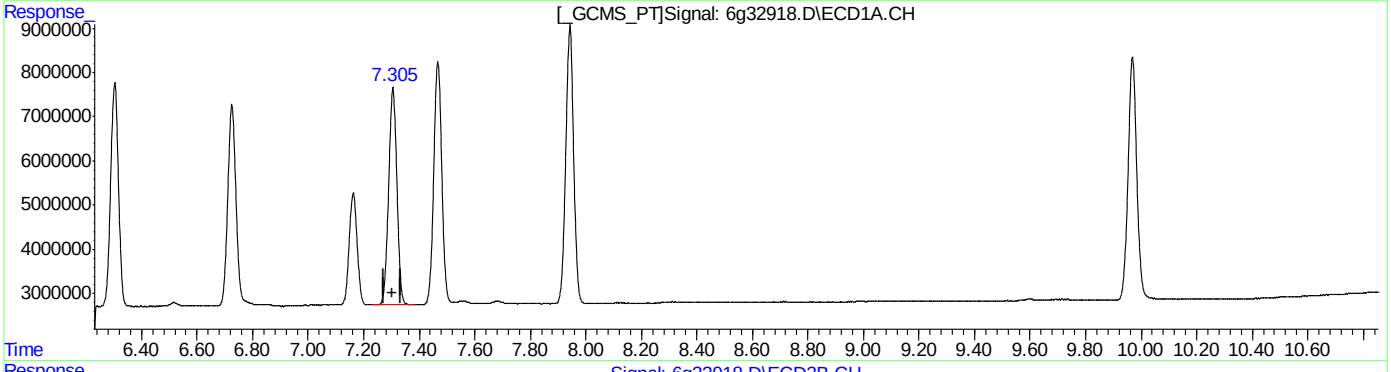
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	2	9.81	Poor instrument integration

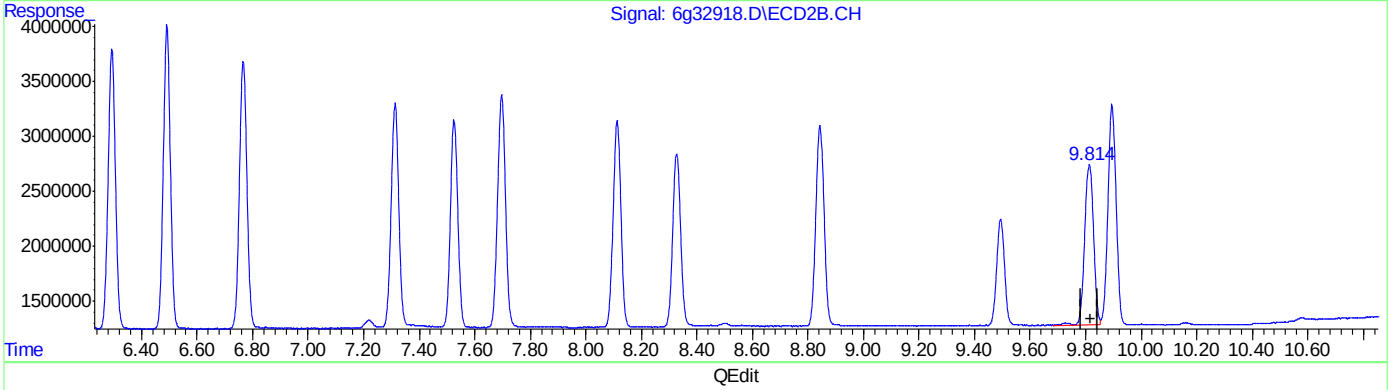
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\959\
Data File : 6g32918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Mar 2016 9:37 am
Operator : brittanp
Sample : cc957-50
Misc : op91919,g6g959,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 10:04:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(22) Mirex
7.305min 53.353PPB
response 100833831

(22) Mirex #2
9.814min 51.634PPB
response 32922425

(+) = Expected Retention Time
6PST957.M Wed Mar 16 10:04:43 2016

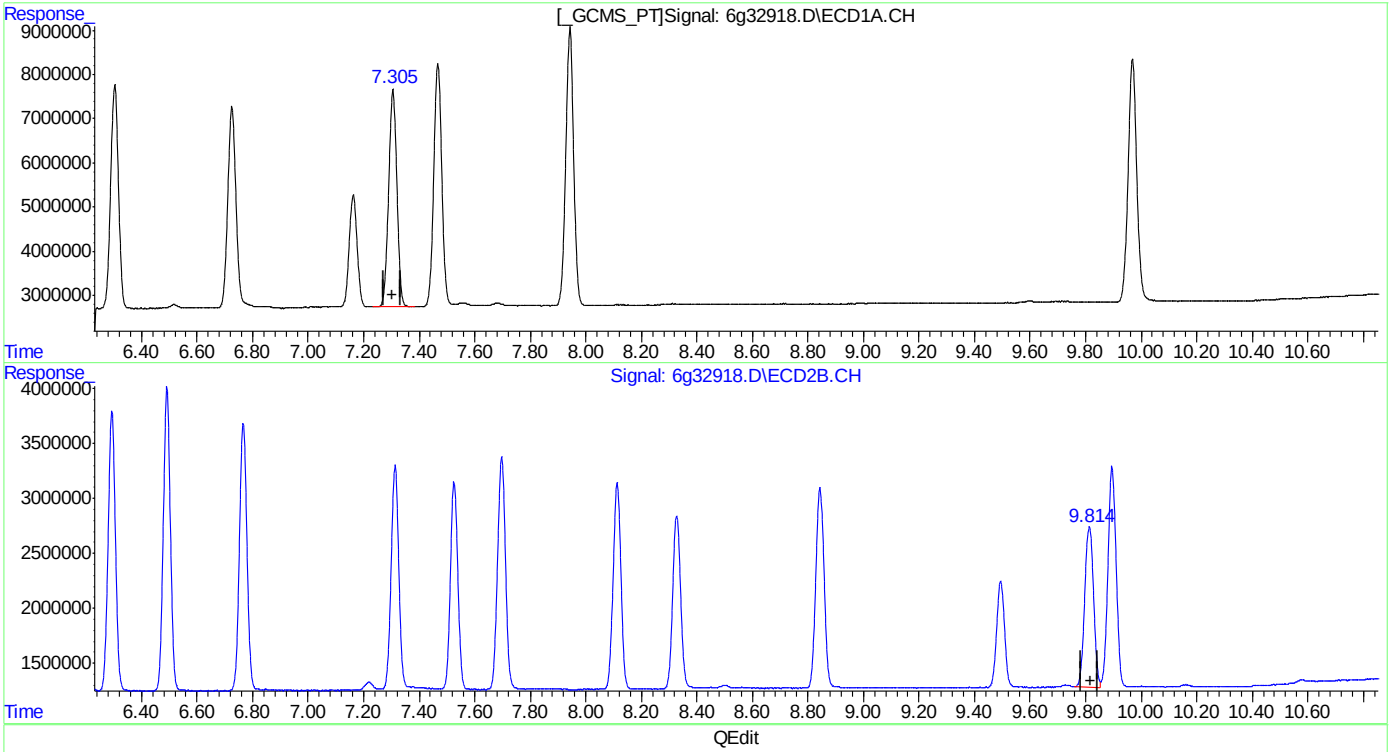
SGS ACCUTEST JC15518

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\959\
Data File : 6g32918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16 Mar 2016 9:37 am
Operator : brittanp
Sample : cc957-50
Misc : op91919,g6g959,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 16 10:04:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST957.M
Quant Title : PEST/PCB
QLast Update : Tue Mar 15 16:03:35 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(22) Mirex
7.305min 53.353PPB
response 100833831

(22) Mirex #2
9.814min 51.213PPB m
response 32654181

(+) = Expected Retention Time

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G17189 2/26

Date: 2/25/16

Analyst Signature: YD

Columns: ZBClpI / ZBClpII

Method 8081, 608

Initial Cal. Method 4pST1719

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.
SV 151808-70A	Pest Mix 1st	1 ppb
-70B		2
-70C -70A		5 10
SV 161874 -35 -52		25 50
151808 -70E -70F		75 100
151712-105	Toxaphene 2nd	500 ppb
151712-103	Pest Mix 2nd	250

Standard Data

Lot #	Description	Conc.
SV 151808-96	Pem	10-250 ppb
-197	IB	20
155982	Hexane (Fisher)	—
161874-75	Pest ISTD	5 ppm
-21	Chlordane 1st	10 ppm
-20	Toxaphene 1st	
151712-104 151712-102	Chlordane 2nd	500 ppb
001515 84-137	Mirex	250 ppb

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: 3/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	465293	Qdt				1			✓	OK	
	294	IB				2			✓	OK	
	295	IC1719 - 1	1st Source	Pest Mix		3			✓	OK	
	296	-2				4			✓	OK	
	297	-5				5			✓	OK	
	298	-10				6			✓	OK	
	299	ICC1719 -25				7			✓	OK	
	300	-50				8			✓	OK	
	301	-75				9			✓	OK	
	302	-100				10			✓	OK	
	303	-500		Chlordane		11			✓	OK	
	304	-500		Toxaphene		12			✓	OK	
	305	ICV1719 -25	2nd Source	Pest Mix		13			✓	OK	
	306	-25				14			✓	OK	
	307	-500				15			✓	OK	
	308	-500				16			✓	OK	
									G 2/25		

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 code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

Form: OR016-05
Rev. Date: 10/20/04

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G65299.D	02/25/16 17:30	G4G1719-ICC1719	YVELANDD
Std#2	4G65310.D	02/26/16 09:30	G4G1720-CC1719	REBECCAK
Std#3	4G65335.D	02/26/16 18:41	G4G1720-CC1719	REBECCAK

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
1-Bromo-2-nitrobenzene	1	ISTD	2.07	2.07	2.05	2.06	0.012	+/- 0.035
1-Bromo-2-nitrobenzene	2	ISTD	2.23	2.24	2.22	2.23	0.010	+/- 0.030
Tetrachloro-m-xylene	1	SURR	2.61	2.62	2.61	2.61	0.006	+/- 0.030 [a]
Decachlorobiphenyl	1	SURR	9.84	9.84	9.85	9.84	0.006	+/- 0.030 [a]
Tetrachloro-m-xylene	2	SURR	3.02	3.02	3.01	3.02	0.006	+/- 0.030 [a]
Decachlorobiphenyl	2	SURR	11.26	11.26	11.26	11.26	0.000	+/- 0.030 [a]
alpha-BHC	1	REG	3.06	3.06	3.06	3.06	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	1	REG	3.35	3.35	3.35	3.35	0.000	+/- 0.030 [a]
beta-BHC	1	REG	3.43	3.43	3.42	3.43	0.006	+/- 0.030 [a]
Heptachlor	1	REG	3.62	3.62	3.61	3.62	0.006	+/- 0.030 [a]
delta-BHC	1	REG	3.83	3.83	3.84	3.83	0.006	+/- 0.030 [a]
Aldrin	1	REG	4.17	4.17	4.18	4.17	0.006	+/- 0.030 [a]
Heptachlor epoxide	1	REG	4.87	4.87	4.89	4.88	0.012	+/- 0.035
gamma-Chlordane	1	REG	5.04	5.04	5.05	5.04	0.006	+/- 0.030 [a]
alpha-Chlordane	1	REG	5.21	5.21	5.23	5.22	0.012	+/- 0.035
4,4'-DDE	1	REG	5.33	5.33	5.33	5.33	0.000	+/- 0.030 [a]
Endosulfan-I	1	REG	5.39	5.39	5.40	5.39	0.006	+/- 0.030 [a]
Dieldrin	1	REG	5.71	5.71	5.73	5.72	0.012	+/- 0.035
Endrin	1	REG	6.04	6.04	6.05	6.04	0.006	+/- 0.030 [a]
4,4'-DDD	1	REG	6.18	6.18	6.17	6.18	0.006	+/- 0.030 [a]
Endosulfan-II	1	REG	6.37	6.37	6.38	6.37	0.006	+/- 0.030 [a]
4,4'-DDT	1	REG	6.59	6.59	6.59	6.59	0.000	+/- 0.030 [a]
Endrin aldehyde	1	REG	6.99	6.99	6.99	6.99	0.000	+/- 0.030 [a]
Methoxychlor	1	REG	7.38	7.38	7.37	7.38	0.006	+/- 0.030 [a]
Mirex	1	REG	7.55	7.55	7.57	7.56	0.012	+/- 0.035
Endosulfan sulfate	1	REG	7.66	7.67	7.67	7.67	0.006	+/- 0.030 [a]
Endrin ketone	1	REG	8.12	8.12	8.13	8.12	0.006	+/- 0.030 [a]
alpha-BHC	2	REG	3.66	3.66	3.66	3.66	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	2	REG	4.09	4.09	4.08	4.09	0.006	+/- 0.030 [a]
beta-BHC	2	REG	4.17	4.17	4.16	4.17	0.006	+/- 0.030 [a]
delta-BHC	2	REG	4.56	4.57	4.56	4.56	0.006	+/- 0.030 [a]
Heptachlor	2	REG	4.66	4.67	4.66	4.66	0.006	+/- 0.030 [a]
Aldrin	2	REG	5.12	5.12	5.12	5.12	0.000	+/- 0.030 [a]
Heptachlor epoxide	2	REG	5.94	5.94	5.94	5.94	0.000	+/- 0.030 [a]
gamma-Chlordane	2	REG	6.23	6.23	6.23	6.23	0.000	+/- 0.030 [a]
alpha-Chlordane	2	REG	6.46	6.46	6.46	6.46	0.000	+/- 0.030 [a]
Endosulfan-I	2	REG	6.56	6.56	6.56	6.56	0.000	+/- 0.030 [a]
4,4'-DDE	2	REG	6.70	6.71	6.71	6.71	0.006	+/- 0.030 [a]
Dieldrin	2	REG	6.99	7.00	7.00	7.00	0.006	+/- 0.030 [a]
Endrin	2	REG	7.51	7.51	7.51	7.51	0.000	+/- 0.030 [a]

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G65299.D	02/25/16 17:30	G4G1719-ICC1719	YVELANDD
Std#2	4G65310.D	02/26/16 09:30	G4G1720-CC1719	REBECCAK
Std#3	4G65335.D	02/26/16 18:41	G4G1720-CC1719	REBECCAK

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
4,4'-DDD	2	REG	7.66	7.66	7.66	7.66	0.000	+/- 0.030 [a]
Endosulfan-II	2	REG	7.86	7.86	7.86	7.86	0.000	+/- 0.030 [a]
4,4'-DDT	2	REG	8.20	8.20	8.20	8.20	0.000	+/- 0.030 [a]
Endrin aldehyde	2	REG	8.43	8.43	8.43	8.43	0.000	+/- 0.030 [a]
Endosulfan sulfate	2	REG	8.90	8.90	8.90	8.90	0.000	+/- 0.030 [a]
Methoxychlor	2	REG	9.42	9.43	9.43	9.43	0.006	+/- 0.030 [a]
Mirex	2	REG	9.74	9.75	9.75	9.75	0.006	+/- 0.030 [a]
Endrin ketone	2	REG	9.79	9.79	9.80	9.79	0.006	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GHG 1734

Date: 3/14/16

Analyst Signature: DIA

Columns: 2BCLPI / 2BCLPII

Method 8081

Initial Cal. Method HPST 1719

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
154MM-79	PCM	10-250 ppb
-75	Pest IRD	5 ppm
-88A	Pest mix	25 ppb
-88B	Pest mix	50
155482	Hexane	–
161874-101	TBA Chemup SM	–
151701-147	IB	20 ppb

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: 3/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4265905	blk				1				OK	
	906	CC 1719-50				2				OK	various of 1st EM of Both
	907	IB				3				OK	
	908	JC151874-15A	91845	8081 TCLP	W	4				OK	
	909	JC15257-9A				5				OK	
	910	-18A				6				OK	
	911	-31A				7				OK	
	912	-44A				8				OK	
	913	-49A				9				OK	
	914	JC15093-54A	91745-1			10				OK	
	915	-55A	91745-1			11				OK	
	916	0891886-LB26				12				OK	
	917	JC15476-1A	91955	8081 TCLP	W	13				OK	
	918	JC15299-2	91919			14				OK	
	919	JC15300-2				15				OK	
	920	JC15345-17A				16				OK	
	921	-22A				17				OK	
	922	-27A				18				OK	
	923	-36A	91955			19				OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

Form: OR016-05

Rev. Date: 10/20/04

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1734

Date: 3/17/16

Analyst Signature: DK

Columns: 2ACLPI / 2ACLPD

Method: 8270

Initial Cal. Method: MPIT 1719

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161874-79	PCM	10-250 ppb
-75	Pest IRTD	5 ppm
-88A	Pest mix	25 ppb
-88B	↓	50 ↓
155482	Hexane	–
151068-141	IB	20 ppb

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: 3/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	H265924	JC15398-41A	91955 ~~91914~~			20		/	/	OK	
	925	-50A				21				Not Run	cut from seq
	926	-54A				22				Not Run	cut from sequence
	926	JC15224-1A	91908	8081 TCL	S	22	50			Not Print	Run before seq. H265922 need TBA
	927	JC15224-1A				23	50	/	/	OK	Run before seq. H265923 had TBA
	928	blk				1		/	/	ok	
	929	CC1719-25				2		/	/	ok	various ↑ 1st ea ↑ Butch
	930	IB				3		/	/	OK	
	931	OP91903-MS1	91903	8081		4		/	/	OK	
	932	JC15398-50A	91955	8081 TCL	W	5		/	/	OK	
	933	-59A				6		/	/	OK	
	~~933A~~	~~OP91893-MS1~~	~~91893~~	~~8081~~	~~S~~	~~99~~		~~/~~	~~/~~	~~ok~~	~~Backup~~
	934	CC1719-50				7		/	/	OK	various ↑ BOTH
	935	IB				8		/	/	OK	
	936	OP91903-MS1	91903	8081		8		/	/	~~Not~~ OK with ↓	~~RR with lower ea RR ones both of compounds~~
	937	-BS1				9					
	938	OP92032-MS1	92032			10		/	/	OK	
	939	-BS1				11					
	940	JC12475-75	91903	TCL	W	12					
	941	JC15557-2	92032	8081 TCL	S	13					

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 code applied as follows:

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Form: OR016-05
Rev. Date: 10/20/04

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13.7.2 13

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GMC 1734

Date: 3/14/16

Analyst Signature: DK

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161874-79	Pem	10-250ppb
-75	Pest ISTD	5ppm
-88A	Pest Mix	50ppb
-88B		25
155982	Hexane (Fisher)	—
151808-147	I.B.	20ppb

Columns: 20 CLP I / 20 CLP II

Method 8081

Initial Cal. Method HPST 1719

Injection Volume: 1.0 µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR Date: 3/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	n265942	JC15557-4	92032	608/ TCL	S	14				NOT using	RR with better cc
	943	OP92032-MS				15					
	944	-MSD				16					
	945	JC15557-6				17					
	946	JC15325-42 ~~JC15491-1~~ JR 3/14/16	81893	PPL		18				OK	Run before sample (Backup n265934)
	947	JC15991-1	92032	TCL		19				NOT using	RR with better cc
	948	JC15597-1		dilution		20				NOT using	sent to RX no surrogates spiked
	949	-2				21				OK	
	950	-3				22				OK	RR 1:20
	951	-4				23				OK	
	952	JC15598-1				24				OK	
	953	-2				25				OK	RR 1:50
	954	JC14999-17	91765	8081 TCL		26	2			NOT using	RR w/ Better cc.
	955	CC1719-25				2				OK	Various 1st & 2nd ~~dilu~~ DHC w/ both
	956	IB				3				OK	
	957	JC15548-3	92032	dilution		27				OK	RR 1:10
	958	-4				28				OK	~~RR 1:2~~ DP 3/15/16 NOT NEEDED
	959	-5				29				OK	
	960	-6				30				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 code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

Form: OR016-05

Rev. Date: 10/20/04

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1734

Date: 3/14/16

Analyst Signature: DK

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161874-79	Pem	10-250ppb
-75	Pest ISTD	5ppm
-88A	Pest Mix	50 ppb
-88B		25 ppb
151808-147	I.B.	20 ppb
155982	Hexane (Fisher)	—

Columns: 2DCLPD1 2DCLPD2

Method 8081

Initial Cal. Method HPST 1719

Injection Volume: 1.0ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR Date: 3/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	H265961	JC15595-7	92032	TCL dieldrin	S	31				OK	
	962	JC15606-1				32				OK	~~RR 1.5~~ BP 3/15/16
	963	-2				33				OK	RR 1.5
	964	-3				34				OK	
	965	-4				35				OK	
	966	JC15958-1	92032	TCL 8081	S	36				Not using	RR with better co

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 code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05

Rev. Date: 10/20/04

13.7.2 13

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 957

Print Analyst Name: Dhara Saparia

Analyst Signature:

Date: 3/15/16

Columns: 2PCLPI / 2PCLPII

Method 8081, 608

Initial Cal. Method G8ST 957

Injection Volume: 1.0 µl

Date Archived:

Standard Data

Lot #	Description	Conc.
SV 151801-70A	Pest mix	1 ppb
-70B		2
-70C		5
-70D		10
161874-88A -88B		25 50
151801-70E -70F		75 100
161874-89 -93 / 151801-73	Pest mix 2nd mirex	250 ppb 250 ppb

Standard Data

Lot #	Description	Conc.
161874-79	PEM	10-250 ppb
-79	Pest DSTD	5 ppm
151801-147	IB	20 ppb
155482	Hexane (Fluka)	–
161874-80	Chlordane 1st	10 ppm
-81	Toxaphene 1st	10 ppm
161874-96 -97	Chlordane 2nd / Toxaphene 2nd	500 ppb 500 ppb

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: Shwen Bu

Date: 3/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6J32875	blk				1			/	OK	
	876	IB				2			/	OK	
	877	IC 957-1	1st source	Pest mix		3			/	OK	
	878	-2				4			/	OK	
	879	-5				5			/	OK	
	880	-10				6			/	OK	
	881	ICC 957-25				7			/	OK	
	882	IC 957-50				8			/	OK	
	883	-75				9			/	OK	
	884	-100				10			/	OK	
	885	-500		CHL		11	20			OK	
	886	-500		Tox		12	20			OK	
	887	ICV 957-25	2nd source	Pest mix		13	10			OK	
	888	-25		mirex		14	10			NG	high
	889	-500		CHL		15				OK	
	890	-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

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G958

Print Analyst Name: Dhara Sapania

Date: 3/15/16

Analyst Signature:

Columns: 2BCLPI / 2BCLPII

Method 8081, 608

Initial Cal. Method G PST 957

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
151194-99	PCM	10-250 ppb
-75	Pest IST D	5 ppm
-88A	Pest mix	25 ppb
-88B	Pest mix	50
151101-1W	IB	20
155912	Hexane (solv)	—

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: Susan Burns Date: 3/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6G 32891	CC957-50				2			/	ok	
	892	IB				3			/	ok	
	893	OP91913-MB1	91913	608 PPL	W	4			/	ok	
	894	-BS1				5			/	ok	
	895	JC155hn-1				6			/	ok	
	896	CC957-25				7			/	ok	
	897	IB				3			/	ok	
	898	OP91918-LBS2	91918	8081 TCL	W	8			/	ok	
	899	OP 91918-LBS4				9			/	ok	
	900	JC15423-1	91903	8081 TCL	W	10			/	ok	
	901	-2				11			/	ok	RR 1:50
	902	OP91902-MS				12			/	ok	
	903	-MSD				13			/	ok	
	904	JC15423-3				14			/	ok	
	905	-4				15			/	ok	
	906	-5				16			/	ok	
	907	-7				17			/	ok	
	908	JC13380-15				18			/	ok	
	909	JC15518-1		BBHC, DDD DDT		19			/	ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area, (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 958

Print Analyst Name: Dhara Saparia

Analyst Signature:

Date: 3/15/16

Columns: 2DCLPI | 2DCLPII

Method 8081

Initial Cal. Method G6ST 957

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161214-75	PEM	10-250 ppb
-75	Pest IRTD	5 ppm
-88A	Pest mix	25 ppb
-88B	Pest mix	50
151201-1M	IS	20
155ar2	Hexane (Film)	-

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: Dhara Saparia Date: 3/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6232910	JC15518-2	91903	BBHC DDD DDT	W	20			/	OK	
	911	-3		8081		21			/	OK	
	912	-4				22			/	OK	
	913	-5				23			/	OK	
	914	-6				24			/	OK	
	915	-7				25			/	OK	
	916	-8				26			/	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G959

Print Analyst Name: BRITTANY PIERCY

Date: 03-16-2016

Analyst Signature: BP

Columns: ZBCLPI / ZBCLPII

Method 8081 / 608

Initial Cal. Method 6PST957

Injection Volume: 1µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161879-79	Pem	10-250ppb
-75	Pest ISTD	5ppm
-88B	Pest Mix	25 ppb
-88A	1	50
SV151808-147	I.B.	20
155982	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: [illegible] Date: 3/21/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 32917	DDT			W	1				OK	
	918	CC 957-50				2				OK	
	919	I.B.				3				OK	
	920	OP92084-MB1	92084-1	8081	S	4				OK	
	921	-BS1				5				OK	
	922	JC14905-25		TCL 8081		6				OK	
	923	-30				7				OK	
	924	OP92053-MB1	92053			8				OK	Run before sequence G6J32922
	925	-BS1				9				OK	
	926	JC15597-1		dieldrin ABCCHL		10				OK	
	927	JC15687-1	92054	soil dieldrin	S	11				OK	
	928	-2		ABCCHL		12				OK	
	929	-3				13				OK	RA 1:20
	930	-4				14				OK	RA 1:10
	931	-5				15				OK	
	932	-6				16				OK	
	933	-7				17				OK	
	934	JC15922-1		soil TCL		18				OK	
	935	OP92054-MS				19				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

13.7.5 13

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G-6G 959

Print Analyst Name: Dhara Suparid

Analyst Signature:

Date: 3/16/16

Columns: 20CLPD / 20CLPD

Method 8081

Initial Cal. Method G8ST 957

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
516IM9-79	PEM	10-250 ppb
-75	Pest IS STD	500 n
-88A	Pest mix	25 ppb
-88B	Pest mix	50
151IM-147	IB	20
155982	Hexane (Fluka)	–

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: 3/21/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6232936	OP92074-MSD	92074	8081	S	20				OK	
	937	JC15687-3		dilution A-8ccml		21	20			OK	
	938	-4				22	10			OK	
	939	dblk				1				OK	
	940	CC957-25				2				OK	
	941	IB				3				OK	
	942	OP92003-MB1	92003	8081	S	4				OK	
	943	-BS1				5				OK	
	944	JC15922-3	92074	8081 TCL	S	6				OK	
	945	-5				7				OK	
	946	-7				8				OK	
	947	-9				9				OK	
	948	-11				10				OK	
	949	-13				11				OK	
	950	-15				12				OK	
	951	-17				13				OK	
	952	-19				14				OK	
	953	-21				15				OK	
	954	JC15283-102	92003	8081 TCL	S	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

13.7.5 13

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 959

Print Analyst Name: Dhara Suparia

Analyst Signature: [signature]

Date: 3/16/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161-74.74	PCM	10-250ppb
-75	Pest DRTD	5 ppm
-55A	Pest mix	25 ppb
-55B	Pest mix	50
151101-1M	IB	20
155412	Hexane (Fisher)	–

Columns: 2DCLPI / 2DCLPD

Method 8081

Initial Cal. Method G6ST 957

Injection Volume: 1.0 uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 3/21/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	G232955	JC15283-107	92003	8081 TCL		17				OK	
	956	-116				18				OK	RR 1:10
	957	-125				19				OK	RR 1:10
	958	-130				20				OK	
	959	-143				21				OK	
	960	-152				22				OK	
	961	CC957-50				23				NOT using	DDT & Methoxychlor ↓ BOTH
	962	IB				3					
	963	JC15283-161	92003	8081 TCL		24					RR under better cc
	964	JC15356-1				25					need TBA
	965	JC15356-1				26					
	966	OP92003-MS				27					
	967	-MSD				28					

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

LOGBOOK ID: 6-1690

Pest/PCB Extraction Log - Aqueous

Date Started: 3/9/16 Time Started: 0800
Date Finished: 3/9/16 Time Finished: 1630

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 91903	RACK# GE55
Extracted by:	BOZ, YR, NL
Concentrated by:	AQ, NL
Vialed by:	BJC ~~AQ~~ BS 3/11/16 NL
Relinquished by:	AQ
Accepted by:	
Supervisor Review:	3/9/16

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		J			
	BS1				DI H2O	1000	CLEAR	10		J			
	JC15423-2 MS		3		Brown	480	Lt YELLOW	10		J			
	MSD		3		Brown	480	Lt YELLOW	10		J			
	MB11 ~~BS~~	-LL-			DI H2O	1000	Clear	1		J			
	MS												
	MSD												
1	~~JC15518-1~~	Pest	3,4		Yellow	1000	Yellow	10		J			Δ
2	~~2~~		3,4		Yellow	1000	Yellow	10		J			Δ
3	~~3~~		1		gold	900	COLLOIDS	10		J			
4	~~4~~		2		Yellow	990	Yellow	10		J			
5	~~5~~		2		Yellow	1000	Clear	10		J			
6	JC15423-1		3		Yellow	900	YELLOW	10		J			
7	-2		1		Brown	900	YELLOW	10		J			
8	-3		2		Yellow	1000	YELLOW	10		J			
9	-4		3		~~Clear~~ Gray/Yellow	990	Yellow	10		J			
10	-5		1		~~Clear~~ Gray	900	Clear	10		J			
11	-7		1		~~Clear~~ Gray	1000	Yellow	10		J			
12	JC13380-15		1		Clear	100	CLEAR	10		J			
13	~~JC15518-6~~		2		Yellow	1000	Clear	10		J			
14	~~7~~		2		Yellow	910	CLEAR	10		J			
15	~~8~~		2		Yellow	950	CLEAR	10		J			
16	JC12475-78	-LL-	3		Yellow	1000	YELLOW	1		J			
17													
18													
19													
20													

HT up 3/9

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	B2, B3	~~72, 73~~ 73, 73	—	—	OK
Buchi Chiller	B2, B3	11	—	—	OK
Waterbath (70-80°C)	6, 7	74, 73	1.5, 1.2	76, 74	NA
Waterbath Chiller (GPM)	F2	-2	—	—	1.5
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	151624128	400 ppb	1

WITNESS SIGN: YR SPIKE SIGN: BOZ

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	151162413 7	250 ppb	1
PCB			

WITNESS SIGN: YR SPIKE SIGN: BOZ

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	157 ~~8/63~~	Fisher	3/60
HEXANE	~~094274~~ 2N (2)	Fisher	1/50
	155482		

REAGENT	LOT #	BRAND
Sodium Sulfate	153169	Fisher
Glass Wool	094P2-2	lab
Filter Paper		
Copper	1516240	Aldrich
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: Okay to split MS/MSD not enough bottles
No more bottles for JC15518-1,2
JC15518 - crossed out because Pest LVI
Δ 2 500mL bottles combined to make volume of 1000mL

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

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