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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC16312T

Sampling Dates: 03/14/16 - 03/15/16

Report to:

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Total number of pages in report: **401**

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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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC16312T

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC16312-1T	03/14/16	09:31	NMR	03/16/16	AQ	Ground Water	S-38
JC16312-2T	03/14/16	13:57	NMR	03/16/16	AQ	Ground Water	S-37
JC16312-3T	03/14/16	15:29	NMR	03/16/16	AQ	Ground Water	S-36
JC16312-4T	03/14/16	16:34	NMR	03/16/16	AQ	Ground Water	S-32
JC16312-5T	03/14/16	19:14	NMR	03/16/16	AQ	Ground Water	MW-9
JC16312-6T	03/15/16	11:08	NMR	03/16/16	AQ	Ground Water	D-1R
JC16312-7T	03/15/16	09:18	NMR	03/16/16	AQ	Ground Water	S-28
JC16312-8T	03/15/16	12:59	NMR	03/16/16	AQ	Ground Water	E-1R
JC16312-9T	03/15/16	15:09	NMR	03/16/16	AQ	Ground Water	G-1R(3)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC16312T
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/2/2016 8:56:12 AM

On 03/16/2016, 9 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 3.9 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC16312T was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP92235

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC16312-6T: Confirmation run.
- JC16312-6T for Decachlorobiphenyl: Outside of in house control limits.
- JC16312-6T for Tetrachloro-m-xylene: Outside of in house control limits.
- JC16312-3T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-3T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-3T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-2T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-3T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-3T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-2T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-3T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-2T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-2T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-2T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-5T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-5T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-5T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP92235

- JC16312-5T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-5T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-5T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-5T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-3T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-3T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-3T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-2T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-2T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-3T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- OP92235-BSD for Endrin ketone: Analytical precision exceeds in-house control limits.
- JC16312-1T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Tetrachloro-m-xylene: High percent recoveries and no positive found in the sample.
- JC16312-1T for Decachlorobiphenyl: High percent recoveries and no positive found in the sample.
- OP92235-BSD for Tetrachloro-m-xylene: Outside the QC limits.
- OP92235-BSD for Decachlorobiphenyl: Outside the QC limits.
- OP92235-BSD for Methoxychlor: Analytical precision exceeds in-house control limits.
- OP92235-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.
- OP92235-BSD for Heptachlor: Analytical precision exceeds in-house control limits.
- JC16312-2T for Aldrin: This compound outside control limits biased high in the associated BS.
- OP92235-BSD for gamma-BHC (Lindane): Analytical precision exceeds in-house control limits.
- JC16312-1T for Aldrin: This compound outside control limits biased high in the associated BS.
- OP92235-BSD for Endrin: Analytical precision exceeds in-house control limits.
- OP92235-BSD for Endosulfan-II: Analytical precision exceeds in-house control limits.
- OP92235-BSD for Endosulfan-I: Analytical precision exceeds in-house control limits.
- OP92235-BSD for Dieldrin: Analytical precision exceeds in-house control limits.
- OP92235-BSD for alpha-Chlordane: Analytical precision exceeds in-house control limits.
- OP92235-BSD for alpha-BHC: Analytical precision exceeds in-house control limits.
- OP92235-BSD for 4,4'-DDT: Analytical precision exceeds in-house control limits.
- OP92235-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP92235-BS1 for Decachlorobiphenyl: Outside the QC limits.
- OP92235-BSD for gamma-Chlordane: Analytical precision exceeds in-house control limits.
- JC16312-1T for Endrin: This compound outside control limits biased high in the associated BS.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP92235

- JC16312-5T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-2T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-2T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-1T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-1T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-1T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-1T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-1T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-1T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-1T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-1T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-2T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-1T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-9T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-9T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-9T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-8T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-9T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-9T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-9T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-9T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-8T for 4,4'-DDT: This compound outside control limits biased high in the associated BS. More than 40% RPD for detected concentrations between the two GC columns.
- JC16312-8T for Methoxychlor: This compound outside control limits biased high in the associated BS.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP92235

- JC16312-5T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-9T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-4T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-4T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-9T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-4T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-4T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-4T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-4T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-4T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-4T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-4T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-9T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-8T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-4T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-7T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-7T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-7T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-7T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-7T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-7T for 4,4'-DDT: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-7T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP92235

- JC16312-5T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-5T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-5T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-5T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-5T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-8T for beta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endrin: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endosulfan-II: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endosulfan-I: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Endosulfan sulfate: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-8T for delta-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endrin aldehyde: This compound outside control limits biased high in the associated BS.
- JC16312-8T for alpha-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-8T for alpha-BHC: This compound outside control limits biased high in the associated BS.
- JC16312-7T for gamma-Chlordane: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Endrin ketone: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Dieldrin: This compound outside control limits biased high in the associated BS.
- JC16312-7T for gamma-BHC (Lindane): This compound outside control limits biased high in the associated BS.
- JC16312-8T for Aldrin: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Heptachlor: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Heptachlor epoxide: This compound outside control limits biased high in the associated BS.
- JC16312-7T for Methoxychlor: This compound outside control limits biased high in the associated BS.
- JC16312-8T for Decachlorobiphenyl: Outside of in house control limits. There's no sample left to reextract.
- JC16312-8T for Tetrachloro-m-xylene: Outside of in house control limits. There's no sample left to reextract.
- JC16312-8T for 4,4'-DDD: This compound outside control limits biased high in the associated BS.
- JC16312-8T for 4,4'-DDE: This compound outside control limits biased high in the associated BS.

Matrix: AQ **Batch ID:** OP92374

- All method blanks for this batch meet method specific criteria.
- Sample(s) JC16609-1MS, JC16609-1MSD, OP92374-MSMSD were used as the QC samples indicated.
- JC16312-6T: Sample re-extracted outside the holding time due to original extraction batch QC failed.
- OP92374-BS1 for delta-BHC: Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.
- OP92374-BS1 for 4,4'-DDD: Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.
- OP92374-BS1 for 4,4'-DDE: Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.

Extractables by GC By Method SW846 8081B

Matrix: AQ	Batch ID: OP92374

- OP92374-BS1 for alpha-Chlordane: Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.

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: JC16312T
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 03/14/16 thru 03/15/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC16312-1T	**S-38**					
No hits reported in this sample.						
JC16312-2T	**S-37**					
No hits reported in this sample.						
JC16312-3T	**S-36**					
No hits reported in this sample.						
JC16312-4T	**S-32**					
No hits reported in this sample.						
JC16312-5T	**MW-9**					
No hits reported in this sample.						
JC16312-6T	**D-1R**					
No hits reported in this sample.						
JC16312-7T	**S-28**					
No hits reported in this sample.						
JC16312-8T	**E-1R**					
4,4'-DDT [a]		0.013	0.010	0.0050	ug/l	SW846 8081B
JC16312-9T	**G-1R(3)**					
No hits reported in this sample.						

(a) This compound outside control limits biased high in the associated BS. More than 40% RPD for detected concentrations between the two GC columns.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	S-38		
Lab Sample ID:	JC16312-1T	**Date Sampled:**	03/14/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66367R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [a]	ND	0.011	0.0064	ug/l	
319-84-6	alpha-BHC [a]	ND	0.011	0.0064	ug/l	
319-85-7	beta-BHC [a]	ND	0.011	0.0061	ug/l	
319-86-8	delta-BHC [a]	ND	0.011	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	ND	0.011	0.0030	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.011	0.0049	ug/l	
5103-74-2	gamma-Chlordane [a]	ND	0.011	0.0049	ug/l	
60-57-1	Dieldrin [a]	ND	0.011	0.0038	ug/l	
72-54-8	4,4'-DDD [a]	ND	0.011	0.0040	ug/l	
72-55-9	4,4'-DDE [a]	ND	0.011	0.0066	ug/l	
50-29-3	4,4'-DDT [a]	ND	0.011	0.0053	ug/l	
72-20-8	Endrin [a]	ND	0.011	0.0054	ug/l	
1031-07-8	Endosulfan sulfate [a]	ND	0.011	0.0056	ug/l	
7421-93-4	Endrin aldehyde [a]	ND	0.011	0.0055	ug/l	
53494-70-5	Endrin ketone [a]	ND	0.011	0.0054	ug/l	
959-98-8	Endosulfan-I [a]	ND	0.011	0.0053	ug/l	
33213-65-9	Endosulfan-II [a]	ND	0.011	0.0046	ug/l	
76-44-8	Heptachlor [a]	ND	0.011	0.0041	ug/l	
1024-57-3	Heptachlor epoxide [a]	ND	0.011	0.0069	ug/l	
72-43-5	Methoxychlor [a]	ND	0.021	0.0060	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	154% [b]		26-132%
877-09-8	Tetrachloro-m-xylene	171% [b]		26-132%
2051-24-3	Decachlorobiphenyl	173% [b]		10-118%
2051-24-3	Decachlorobiphenyl	197% [b]		10-118%

(a) This compound outside control limits biased high in the associated BS.
(b) High percent recoveries and no positive found in the sample.

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-37		
Lab Sample ID:	JC16312-2T	**Date Sampled:**	03/14/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66368R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		26-132%
877-09-8	Tetrachloro-m-xylene	96%		26-132%
2051-24-3	Decachlorobiphenyl	102%		10-118%
2051-24-3	Decachlorobiphenyl	117%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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-36		
Lab Sample ID:	JC16312-3T	**Date Sampled:**	03/14/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66369R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [a]	ND	0.010	0.0062	ug/l	
319-84-6	alpha-BHC [a]	ND	0.010	0.0062	ug/l	
319-85-7	beta-BHC [a]	ND	0.010	0.0059	ug/l	
319-86-8	delta-BHC [a]	ND	0.010	0.0047	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	ND	0.010	0.0029	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.010	0.0048	ug/l	
5103-74-2	gamma-Chlordane [a]	ND	0.010	0.0047	ug/l	
60-57-1	Dieldrin [a]	ND	0.010	0.0037	ug/l	
72-54-8	4,4'-DDD [a]	ND	0.010	0.0039	ug/l	
72-55-9	4,4'-DDE [a]	ND	0.010	0.0064	ug/l	
50-29-3	4,4'-DDT [a]	ND	0.010	0.0051	ug/l	
72-20-8	Endrin [a]	ND	0.010	0.0052	ug/l	
1031-07-8	Endosulfan sulfate [a]	ND	0.010	0.0054	ug/l	
7421-93-4	Endrin aldehyde [a]	ND	0.010	0.0053	ug/l	
53494-70-5	Endrin ketone [a]	ND	0.010	0.0052	ug/l	
959-98-8	Endosulfan-I [a]	ND	0.010	0.0051	ug/l	
33213-65-9	Endosulfan-II [a]	ND	0.010	0.0044	ug/l	
76-44-8	Heptachlor [a]	ND	0.010	0.0039	ug/l	
1024-57-3	Heptachlor epoxide [a]	ND	0.010	0.0067	ug/l	
72-43-5	Methoxychlor [a]	ND	0.021	0.0059	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		26-132%
877-09-8	Tetrachloro-m-xylene	63%		26-132%
2051-24-3	Decachlorobiphenyl	56%		10-118%
2051-24-3	Decachlorobiphenyl	66%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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-32		
Lab Sample ID:	JC16312-4T	**Date Sampled:**	03/14/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66379R.D	5	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [a]	ND	0.051	0.031	ug/l	
319-84-6	alpha-BHC [a]	ND	0.051	0.030	ug/l	
319-85-7	beta-BHC [a]	ND	0.051	0.029	ug/l	
319-86-8	delta-BHC [a]	ND	0.051	0.023	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	ND	0.051	0.014	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.051	0.023	ug/l	
5103-74-2	gamma-Chlordane [a]	ND	0.051	0.023	ug/l	
60-57-1	Dieldrin [a]	ND	0.051	0.018	ug/l	
72-54-8	4,4'-DDD [a]	ND	0.051	0.019	ug/l	
72-55-9	4,4'-DDE [a]	ND	0.051	0.031	ug/l	
50-29-3	4,4'-DDT [a]	ND	0.051	0.025	ug/l	
72-20-8	Endrin [a]	ND	0.051	0.025	ug/l	
1031-07-8	Endosulfan sulfate [a]	ND	0.051	0.027	ug/l	
7421-93-4	Endrin aldehyde [a]	ND	0.051	0.026	ug/l	
53494-70-5	Endrin ketone [a]	ND	0.051	0.026	ug/l	
959-98-8	Endosulfan-I [a]	ND	0.051	0.025	ug/l	
33213-65-9	Endosulfan-II [a]	ND	0.051	0.022	ug/l	
76-44-8	Heptachlor [a]	ND	0.051	0.019	ug/l	
1024-57-3	Heptachlor epoxide [a]	ND	0.051	0.033	ug/l	
72-43-5	Methoxychlor [a]	ND	0.10	0.029	ug/l	
8001-35-2	Toxaphene	ND	1.3	0.93	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		26-132%
877-09-8	Tetrachloro-m-xylene	87%		26-132%
2051-24-3	Decachlorobiphenyl	65%		10-118%
2051-24-3	Decachlorobiphenyl	80%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC16312-5T	**Date Sampled:**	03/14/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66371R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		26-132%
877-09-8	Tetrachloro-m-xylene	95%		26-132%
2051-24-3	Decachlorobiphenyl	110%		10-118%
2051-24-3	Decachlorobiphenyl	114%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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:	D-1R		
Lab Sample ID:	JC16312-6T	**Date Sampled:**	03/15/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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 [a]	1G121324R.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944
Run #2 [b]	4G66372.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%	157% [c]	26-132%
877-09-8	Tetrachloro-m-xylene	76%	156% [c]	26-132%
2051-24-3	Decachlorobiphenyl	98%	149% [c]	10-118%
2051-24-3	Decachlorobiphenyl	75%	151% [c]	10-118%

(a) Sample re-extracted outside the holding time due to original extraction batch QC failed.
(b) Confirmation run.
(c) Outside of in house control limits.

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-28		
Lab Sample ID:	JC16312-7T	**Date Sampled:**	03/15/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66373R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		26-132%
877-09-8	Tetrachloro-m-xylene	75%		26-132%
2051-24-3	Decachlorobiphenyl	73%		10-118%
2051-24-3	Decachlorobiphenyl	78%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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:	E-1R		
Lab Sample ID:	JC16312-8T	**Date Sampled:**	03/15/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66374R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [a]	ND	0.010	0.0060	ug/l	
319-84-6	alpha-BHC [a]	ND	0.010	0.0060	ug/l	
319-85-7	beta-BHC [a]	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC [a]	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.010	0.0046	ug/l	
5103-74-2	gamma-Chlordane [a]	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin [a]	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD [a]	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE [a]	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT [b]	0.013	0.010	0.0050	ug/l	
72-20-8	Endrin [a]	ND	0.010	0.0050	ug/l	
1031-07-8	Endosulfan sulfate [a]	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde [a]	ND	0.010	0.0051	ug/l	
53494-70-5	Endrin ketone [a]	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I [a]	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II [a]	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor [a]	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide [a]	ND	0.010	0.0065	ug/l	
72-43-5	Methoxychlor [a]	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.18	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	163% [c]		26-132%
877-09-8	Tetrachloro-m-xylene	146% [c]		26-132%
2051-24-3	Decachlorobiphenyl	149% [c]		10-118%
2051-24-3	Decachlorobiphenyl	132% [c]		10-118%

(a) This compound outside control limits biased high in the associated BS.
(b) This compound outside control limits biased high in the associated BS. More than 40% RPD for detected concentrations between the two GC columns.

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:	E-1R		
Lab Sample ID:	JC16312-8T	**Date Sampled:**	03/15/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
Method:	SW846 8081B SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q

(c) Outside of in house control limits. There's no sample left to reextract.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	G-1R(3)		
Lab Sample ID:	JC16312-9T	**Date Sampled:**	03/15/16
Matrix:	AQ - Ground Water	**Date Received:**	03/16/16
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	4G66375R.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
Run #2							

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

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin [a]	ND	0.010	0.0061	ug/l	
319-84-6	alpha-BHC [a]	ND	0.010	0.0061	ug/l	
319-85-7	beta-BHC [a]	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC [a]	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane) [a]	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane [a]	ND	0.010	0.0047	ug/l	
5103-74-2	gamma-Chlordane [a]	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin [a]	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD [a]	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE [a]	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT [a]	ND	0.010	0.0050	ug/l	
72-20-8	Endrin [a]	ND	0.010	0.0051	ug/l	
1031-07-8	Endosulfan sulfate [a]	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde [a]	ND	0.010	0.0052	ug/l	
53494-70-5	Endrin ketone [a]	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I [a]	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II [a]	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor [a]	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide [a]	ND	0.010	0.0066	ug/l	
72-43-5	Methoxychlor [a]	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		26-132%
877-09-8	Tetrachloro-m-xylene	88%		26-132%
2051-24-3	Decachlorobiphenyl	80%		10-118%
2051-24-3	Decachlorobiphenyl	62%		10-118%

(a) This compound outside control limits biased high in the associated BS.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
WTB

PN

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 #: JC16312
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, 8260C	SVOC, 8270D	Volatile Alcohols, 8015B	Organo Pesticides, 8081B	SVOC, 8270D SIM	• RFCO 2x50mL FOR PEST 3-16-16 AM					
1 S-38	3/14/16	931	NMR	GW	10	X				X	X	X	X	X	X	•					
2 S-37		1357	NMR	GW	10	X				X	X	X	X	X	X						E31
3 S-36		1529	NMR	GW	10	X				X	X	X	X	X	X						E28
4 S-32		1634	NMR	GW	10	X				X	X	X	X	X	X	•					V762
5 MW-9	3/14/16	1914	NMR	GW	10	X				X	X	X	X	X	X						
6 D-1R	3/15/16	1108	NMR	GW	10	X				X	X	X	X	X	X						
7 S-28		918	NMR	GW	10	X				X	X	X	X	X	X	•					
8 E-1R		1259	NMR	GW	10	X				X	X	X	X	X	X						
9 G-1R(3)		1509	NMR	GW	10	X				X	X	X	X	X	X	•					
10 TB031516	3/15/16	1509	NMR	W	4	X					X		X								

INITIAL ASSESSMENT AM 2A
LABEL VERIFICATION JS

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 # 801219535548
Lab Trip Blank Date 3/27/16 Time 1000
SVOC Analysis by Method 8270D SIM for 1,4 Dioxane and Naphthalene only.

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Vestin M. Rivera	3/15/16 1653	1 FX	2 FX	3-16-16 930	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal # 170, 172, 174, 177	Preserved where applical: Yes	On Ice: Yes. 1.7, 2.2, 1.6, 3.5 °C

5.1
5

SGS Accutest Sample Receipt Summary

Job Number: JC16312 **Client:** Anderson Mulholland **Project:** BMS: Building 5 Area

Date / Time Received: 3/16/2016 9:30:00 AM **Delivery Method:** FedEx **Airbill #'s:** 801219535548

Cooler Temps (Raw Measured) °C: Cooler 1: (1.7); Cooler 2: (2.2); Cooler 3: (1.6); Cooler 4: (3.5);

Cooler Temps (Corrected) °C: Cooler 1: (2.1); Cooler 2: (2.6); Cooler 3: (2.0); Cooler 4: (3.9);

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 -5 Did not receive separate 500ml bottles for Pest.

5.1

5

JC16312T: Chain of Custody

Page 2 of 5

Sample Receipt Summary - Problem Resolution

Job Number: JC16312 **Initiator:** ANDREWS

CSR: Tammy McCloskey **Response Date** 3/17/2016

Response: please aliquot from an SVOC volume

Job Change Order: JC16312

Requested Date:	4/8/2016	**Received Date:**	3/16/2016
Account Name:	Anderson, Mulholland & Associate	**Due Date:**	3/30/2016
Project Description:	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	matthews	**TAT (Days):**	3

==========

Sample #: JC16312-1-9

Dept:

TAT: 3

Change:
please relog retrieve on original job for VR8260124TMB, VMS+BNZLCHL, VMS+IPTOLU, VMS+THF, BR8270MNAP

==========

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Sample #: JC16312-10

Dept:

TAT: 3

Change:
please relog retrieve on original job for VR8260124TMB, VMS+BNZLCHL, VMS+IPTOLU, VMS+THF

TB031516

==========

Above Changes Per: Addison Rice

Date/Time: 4/8/2016 9:51:34 AM

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

Job Change Order: JC16312

Requested Date:	4/15/2016	**Received Date:**	3/16/2016
Account Name:	Anderson, Mulholland & Associate	**Due Date:**	3/30/2016
Project Description:	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	matthews	**TAT (Days):**	14

==========

Sample #: JC16312-1-9

Dept:

TAT: 14

Change:
please relog retrieve for PR8081PESTTCL and reissue report

==========

Above Changes Per: addison rice

Date/Time: 4/15/2016 3:35:43 PM

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

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC16312T

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC16312-1T	Collected: 14-MAR-16 09:31 By: NMR		Received: 16-MAR-16 By: AS			
S-38						
JC16312-1T	SW846 8081B	22-MAR-16 09:30	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-2T	Collected: 14-MAR-16 13:57 By: NMR		Received: 16-MAR-16 By: AS			
S-37						
JC16312-2T	SW846 8081B	22-MAR-16 09:45	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-3T	Collected: 14-MAR-16 15:29 By: NMR		Received: 16-MAR-16 By: AS			
S-36						
JC16312-3T	SW846 8081B	22-MAR-16 09:59	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-4T	Collected: 14-MAR-16 16:34 By: NMR		Received: 16-MAR-16 By: AS			
S-32						
JC16312-4T	SW846 8081B	22-MAR-16 12:41	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-5T	Collected: 14-MAR-16 19:14 By: NMR		Received: 16-MAR-16 By: AS			
MW-9						
JC16312-5T	SW846 8081B	22-MAR-16 10:29	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-6T	Collected: 15-MAR-16 11:08 By: NMR		Received: 16-MAR-16 By: AS			
D-1R						
JC16312-6T	SW846 8081B	22-MAR-16 10:43	RK	21-MAR-16	SP	PR8081PESTTCL
JC16312-6T	SW846 8081B	24-MAR-16 18:14	RK	23-MAR-16	VP	PR8081PESTTCL
JC16312-7T	Collected: 15-MAR-16 09:18 By: NMR		Received: 16-MAR-16 By: AS			
S-28						
JC16312-7T	SW846 8081B	22-MAR-16 10:58	RK	21-MAR-16	NG	PR8081PESTTCL
JC16312-8T	Collected: 15-MAR-16 12:59 By: NMR		Received: 16-MAR-16 By: AS			
E-1R						
JC16312-8T	SW846 8081B	22-MAR-16 11:13	RK	21-MAR-16	NG	PR8081PESTTCL

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC16312T

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC16312-9T	Collected: 15-MAR-16 15:09 By: NMR		Received: 16-MAR-16 By: AS			
G-1R(3)						
JC16312-9T	SW846 8081B	22-MAR-16 11:27	RK	21-MAR-16	NG	PR8081PESTTCL

SGS Accutest Internal Chain of Custody

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-1.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-1.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-1.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-1.1
JC16312-1.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-1.1
JC16312-1.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-1.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-1.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-1.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-1.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-1.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-1.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-1.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-1.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-1.1.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-1.2	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-1.2	Brian Johnson		03/18/16 11:25	Depleted
JC16312-1.2.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-1.2
JC16312-1.2.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-1.2
JC16312-1.2.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-1.2.1	Extract Storage		04/28/16 09:00	Disposed
JC16312-1.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-1.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-1.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-1.3
JC16312-1.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-1.3
JC16312-1.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-1.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-1.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-1.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-1.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-1.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-1.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-1.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-1.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-1.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-1.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-1.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-1.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-1.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-1.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-1.9	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage
JC16312-1.9	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-1.9	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-1.9	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-2.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-2.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-2.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-2.1
JC16312-2.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-2.1
JC16312-2.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-2.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-2.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-2.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-2.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-2.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-2.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-2.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-2.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-2.1.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-2.2	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-2.2	Brian Johnson		03/18/16 11:25	Depleted
JC16312-2.2.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-2.2
JC16312-2.2.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-2.2
JC16312-2.2.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-2.2.1	Extract Storage		04/28/16 09:00	Disposed
JC16312-2.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-2.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-2.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-2.3
JC16312-2.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-2.3
JC16312-2.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-2.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-2.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-2.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-2.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-2.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-2.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-2.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-2.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-2.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-2.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-2.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-2.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-2.7	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage
JC16312-2.7	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-2.7	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-2.7	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-3.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-3.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-3.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-3.1
JC16312-3.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-3.1
JC16312-3.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-3.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-3.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-3.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-3.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-3.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-3.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-3.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-3.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-3.1.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-3.2	Secured Storage	Nicholas Goydish	03/21/16 12:48	Retrieve from Storage
JC16312-3.2	Nicholas Goydish		03/21/16 16:26	Depleted
JC16312-3.2.1	Nicholas Goydish	Organics Prep	03/21/16 12:48	Extract from JC16312-3.2
JC16312-3.2.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-3.2
JC16312-3.2.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-3.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-3.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-3.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-3.3
JC16312-3.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-3.3
JC16312-3.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-3.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage

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Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-3.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-3.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-3.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-3.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-3.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-3.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-3.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-3.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-3.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-3.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-3.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-3.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-3.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-3.9	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage
JC16312-3.9	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-3.9	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-3.9	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-4.1	Secured Storage	Brian Johnson	03/23/16 04:37	Retrieve from Storage
JC16312-4.1	Brian Johnson		03/23/16 13:08	Depleted
JC16312-4.1.1	Brian Johnson	Organics Prep	03/23/16 04:59	Extract from JC16312-4.1
JC16312-4.1.1	Organics Prep	Kyle Sanford	03/23/16 20:07	Extract from JC16312-4.1
JC16312-4.1.1	Kyle Sanford	Extract Storage	03/23/16 20:07	Return to Storage
JC16312-4.2	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-4.2	Brian Johnson		03/18/16 11:25	Depleted
JC16312-4.2.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-4.2
JC16312-4.2.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-4.2
JC16312-4.2.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-4.2.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-4.2.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-4.2.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-4.2.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-4.2.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-4.2.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-4.2.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-4.2.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-4.2.1	Extract Freezer		04/28/16 09:00	Disposed

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Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-4.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-4.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-4.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-4.3
JC16312-4.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-4.3
JC16312-4.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-4.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-4.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-4.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-4.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-4.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-4.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-4.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-4.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-4.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-4.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-4.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-4.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-4.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-4.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-4.7	Secured Storage	Nicole Horvath	03/17/16 15:55	Retrieve from Storage
JC16312-4.7	Nicole Horvath	GCMSU	03/17/16 15:56	Load on Instrument
JC16312-4.7	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-4.7	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-5.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-5.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-5.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-5.1
JC16312-5.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-5.1
JC16312-5.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-5.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-5.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-5.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-5.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-5.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-5.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-5.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-5.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-5.1.1	Extract Freezer		04/28/16 09:00	Disposed

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Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-5.2	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-5.2	Brian Johnson		03/21/16 13:33	Depleted
JC16312-5.2.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-5.2
JC16312-5.2.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-5.2
JC16312-5.2.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-5.2.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-5.2.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-5.2.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-5.2.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-5.3	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-5.3	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-5.3	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-5.3	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-5.3	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-5.3	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-5.3	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-5.3	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-5.4	Secured Storage	Nicole Horvath	03/18/16 11:49	Retrieve from Storage
JC16312-5.4	Nicole Horvath	GCMSU	03/18/16 11:49	Load on Instrument
JC16312-5.4	GCMSU	Hueanh Tran	03/22/16 12:00	Unload from Instrument
JC16312-5.4	Hueanh Tran	Secured Storage	03/22/16 12:00	Return to Storage
JC16312-5.5	Secured Storage	Nicole Horvath	03/17/16 15:35	Retrieve from Storage
JC16312-5.5	Nicole Horvath	GCMSU	03/17/16 15:35	Load on Instrument
JC16312-5.5	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-5.5	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-6.1	Secured Storage	Brian Johnson	03/23/16 04:37	Retrieve from Storage
JC16312-6.1	Brian Johnson		03/23/16 13:08	Depleted
JC16312-6.1.1	Brian Johnson	Organics Prep	03/23/16 05:00	Extract from JC16312-6.1
JC16312-6.1.1	Organics Prep	Vikas Parikh	03/23/16 15:00	Extract from JC16312-6.1
JC16312-6.1.1	Vikas Parikh	Extract Storage	03/23/16 15:00	Return to Storage
JC16312-6.1.1	Extract Storage	Rebecca Krug	03/24/16 09:27	Retrieve from Storage
JC16312-6.1.1	Rebecca Krug	GC1G	03/24/16 09:27	Load on Instrument
JC16312-6.1.1	GC1G	Brittany Piercy	04/21/16 10:11	Unload from Instrument
JC16312-6.1.1	Brittany Piercy	Extract Freezer	04/21/16 10:12	Return to Storage
JC16312-6.2	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-6.2	Brian Johnson		03/18/16 11:25	Depleted

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Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-6.2.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-6.2
JC16312-6.2.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-6.2
JC16312-6.2.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-6.2.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-6.2.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-6.2.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-6.2.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-6.2.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-6.2.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-6.2.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-6.2.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-6.2.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-6.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-6.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-6.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-6.3
JC16312-6.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-6.3
JC16312-6.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-6.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-6.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-6.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-6.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-6.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-6.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-6.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-6.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-6.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-6.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-6.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-6.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-6.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-6.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-6.6	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage
JC16312-6.6	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-6.6	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-6.6	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-7.1	Secured Storage	Nicholas Goydish	03/21/16 12:48	Retrieve from Storage
JC16312-7.1	Nicholas Goydish		03/21/16 16:26	Depleted

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Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-7.1.1	Nicholas Goydish	Organics Prep	03/21/16 12:48	Extract from JC16312-7.1
JC16312-7.1.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-7.1
JC16312-7.1.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-7.2	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-7.2	Brian Johnson		03/18/16 11:25	Depleted
JC16312-7.2.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-7.2
JC16312-7.2.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-7.2
JC16312-7.2.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-7.2.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-7.2.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-7.2.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-7.2.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-7.2.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-7.2.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-7.2.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-7.2.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-7.2.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-7.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-7.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-7.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-7.3
JC16312-7.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-7.3
JC16312-7.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-7.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-7.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-7.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-7.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-7.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-7.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-7.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-7.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-7.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-7.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-7.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-7.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-7.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-7.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-7.7	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage

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Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-7.7	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-7.7	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-7.7	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-8.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-8.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-8.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-8.1
JC16312-8.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-8.1
JC16312-8.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-8.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-8.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-8.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-8.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-8.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-8.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-8.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-8.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-8.1.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-8.2	Secured Storage	Brian Johnson	03/23/16 04:37	Retrieve from Storage
JC16312-8.2	Brian Johnson	Secured Storage	03/23/16 13:08	Return to Storage
JC16312-8.2	Secured Storage	Allan Chung-yew	03/23/16 14:51	Retrieve from Storage
JC16312-8.2	Allan Chung-yew		03/23/16 18:40	Depleted
JC16312-8.2.1	Brian Johnson	Organics Prep	03/23/16 04:59	Extract from JC16312-8.2
JC16312-8.2.1	Organics Prep	Kyle Sanford	03/23/16 20:07	Extract from JC16312-8.2
JC16312-8.2.1	Kyle Sanford	Extract Storage	03/23/16 20:07	Return to Storage
JC16312-8.2.1	Extract Storage	Ashley Dye	03/24/16 12:53	Retrieve from Storage
JC16312-8.2.1	Ashley Dye	GCMS4P	03/24/16 12:53	Load on Instrument
JC16312-8.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-8.3	Brian Johnson		03/21/16 13:33	Depleted
JC16312-8.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-8.3
JC16312-8.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-8.3
JC16312-8.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-8.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-8.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-8.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-8.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-8.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-8.4	Brian Johnson		03/21/16 13:33	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-8.6	Secured Storage	Nicole Horvath	03/17/16 14:53	Retrieve from Storage
JC16312-8.6	Nicole Horvath	GCMSU	03/17/16 14:53	Load on Instrument
JC16312-8.6	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-8.6	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage
JC16312-8.9	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-8.9	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-8.9	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-8.9	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-8.9	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-8.9	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-8.9	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-8.9	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-9.1	Secured Storage	Brian Johnson	03/18/16 04:35	Retrieve from Storage
JC16312-9.1	Brian Johnson		03/18/16 11:25	Depleted
JC16312-9.1.1	Brian Johnson	Organics Prep	03/18/16 04:54	Extract from JC16312-9.1
JC16312-9.1.1	Organics Prep	Nicholas Goydish	03/18/16 14:14	Extract from JC16312-9.1
JC16312-9.1.1	Nicholas Goydish	Extract Storage	03/18/16 14:14	Return to Storage
JC16312-9.1.1	Extract Storage	Linsey Kirschmann	03/18/16 15:29	Retrieve from Storage
JC16312-9.1.1	Linsey Kirschmann	GCMSP	03/18/16 15:29	Load on Instrument
JC16312-9.1.1	GCMSP	Linsey Kirschmann	03/21/16 11:10	Unload from Instrument
JC16312-9.1.1	Linsey Kirschmann	Extract Freezer	03/21/16 11:10	Return to Storage
JC16312-9.1.1	Extract Freezer	Julius Johnson	03/21/16 19:28	Retrieve from Storage
JC16312-9.1.1	Julius Johnson	GCMS4M	03/21/16 19:28	Load on Instrument
JC16312-9.1.1	GCMS4M	Linsey Kirschmann	03/28/16 10:26	Unload from Instrument
JC16312-9.1.1	Linsey Kirschmann	Extract Freezer	03/28/16 10:26	Return to Storage
JC16312-9.1.1	Extract Freezer		04/28/16 09:00	Disposed
JC16312-9.2	Secured Storage	Brian Johnson	03/23/16 04:37	Retrieve from Storage
JC16312-9.2	Brian Johnson	Secured Storage	03/23/16 13:08	Return to Storage
JC16312-9.2	Secured Storage	Allan Chung-yew	03/23/16 14:51	Retrieve from Storage
JC16312-9.2	Allan Chung-yew		03/23/16 18:40	Depleted
JC16312-9.2.1	Brian Johnson	Organics Prep	03/23/16 04:59	Extract from JC16312-9.2
JC16312-9.2.1	Organics Prep	Kyle Sanford	03/23/16 20:07	Extract from JC16312-9.2
JC16312-9.2.1	Kyle Sanford	Extract Storage	03/23/16 20:07	Return to Storage
JC16312-9.2.1	Extract Storage	Ashley Dye	03/24/16 12:53	Retrieve from Storage
JC16312-9.2.1	Ashley Dye	GCMS4P	03/24/16 12:53	Load on Instrument
JC16312-9.3	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-9.3	Brian Johnson		03/21/16 13:33	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 03/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC16312-9.3.1	Brian Johnson	Organics Prep	03/21/16 04:31	Extract from JC16312-9.3
JC16312-9.3.1	Organics Prep	Nicholas Goydish	03/21/16 14:44	Extract from JC16312-9.3
JC16312-9.3.1	Nicholas Goydish	Extract Storage	03/21/16 14:44	Return to Storage
JC16312-9.3.1	Extract Storage	Brittany Piercy	03/22/16 08:51	Retrieve from Storage
JC16312-9.3.1	Brittany Piercy	GC4G	03/22/16 08:51	Load on Instrument
JC16312-9.3.1	GC4G	Brittany Piercy	03/25/16 10:13	Unload from Instrument
JC16312-9.3.1	Brittany Piercy	Extract Freezer	03/25/16 10:13	Return to Storage
JC16312-9.4	Secured Storage	Brian Johnson	03/21/16 04:25	Retrieve from Storage
JC16312-9.4	Brian Johnson		03/21/16 13:33	Depleted
JC16312-9.5	Secured Storage	Xu Liu	03/18/16 12:59	Retrieve from Storage
JC16312-9.5	Xu Liu	Secured Storage	03/18/16 15:38	Return to Storage
JC16312-9.5	Secured Storage	Xu Liu	03/21/16 09:40	Retrieve from Storage
JC16312-9.5	Xu Liu	Secured Storage	03/21/16 15:41	Return to Storage
JC16312-9.5	Secured Storage	Xu Liu	03/22/16 07:35	Retrieve from Storage
JC16312-9.5	Xu Liu	Secured Storage	03/22/16 09:23	Return to Storage
JC16312-9.5	Secured Storage	Xu Liu	03/24/16 07:05	Retrieve from Storage
JC16312-9.5	Xu Liu	Secured Storage	03/24/16 12:42	Return to Storage
JC16312-9.7	Secured Storage	Nicole Horvath	03/17/16 15:55	Retrieve from Storage
JC16312-9.7	Nicole Horvath	GCMSU	03/17/16 15:56	Load on Instrument
JC16312-9.7	GCMSU	Nicole Horvath	03/18/16 09:39	Unload from Instrument
JC16312-9.7	Nicole Horvath	Secured Storage	03/18/16 09:39	Return to Storage

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP92235-MB1	4G66364.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC16312-1T, JC16312-2T, JC16312-3T, JC16312-4T, JC16312-5T, JC16312-7T, JC16312-8T, JC16312-9T

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0048	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0038	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0042	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0049	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0033	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0045	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	
72-20-8	Endrin	ND	0.010	0.0037	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0049	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0053	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0039	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0036	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0044	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0048	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0036	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.15	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	79%	26-132%
877-09-8	Tetrachloro-m-xylene	79%	26-132%
2051-24-3	Decachlorobiphenyl	86%	10-118%
2051-24-3	Decachlorobiphenyl	84%	10-118%

Method Blank Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP92374-MB1	1G121300.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC16312-6T

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0048	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0038	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0042	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0046	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0042	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0049	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0033	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0049	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0045	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0047	ug/l	
72-20-8	Endrin	ND	0.010	0.0037	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0049	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0053	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0039	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0036	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0044	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0048	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0044	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0036	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.15	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	89%	26-132%
877-09-8	Tetrachloro-m-xylene	81%	26-132%
2051-24-3	Decachlorobiphenyl	109%	10-118%
2051-24-3	Decachlorobiphenyl	96%	10-118%

Blank Spike Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP92374-BS1	1G121301.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC16312-6T

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.25	0.19	76	38-138
319-84-6	alpha-BHC	0.25	0.21	84	51-144
319-85-7	beta-BHC	0.25	0.21	84	55-137
319-86-8	delta-BHC	0.25	0.22	88 [a]	33-148
58-89-9	gamma-BHC (Lindane)	0.25	0.21	84	53-142
5103-71-9	alpha-Chlordane	0.25	0.21	84 [a]	52-137
5103-74-2	gamma-Chlordane	0.25	0.21	84	52-140
60-57-1	Dieldrin	0.25	0.21	84	54-144
72-54-8	4,4'-DDD	0.25	0.22	88 [a]	46-151
72-55-9	4,4'-DDE	0.25	0.22	88 [a]	51-142
50-29-3	4,4'-DDT	0.25	0.24	96	53-158
72-20-8	Endrin	0.25	0.22	88	53-149
1031-07-8	Endosulfan sulfate	0.25	0.22	88	49-148
7421-93-4	Endrin aldehyde	0.25	0.22	88	45-137
53494-70-5	Endrin ketone	0.25	0.22	88	48-142
959-98-8	Endosulfan-I	0.25	0.21	84	54-139
33213-65-9	Endosulfan-II	0.25	0.21	84	54-142
76-44-8	Heptachlor	0.25	0.20	80	45-137
1024-57-3	Heptachlor epoxide	0.25	0.21	84	54-140
72-43-5	Methoxychlor	0.25	0.23	92	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	80%	26-132%
877-09-8	Tetrachloro-m-xylene	78%	26-132%
2051-24-3	Decachlorobiphenyl	89%	10-118%
2051-24-3	Decachlorobiphenyl	82%	10-118%

(a) Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP92235-BS1	4G66365.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746
OP92235-BSD	4G66366.D	1	03/22/16	RK	03/21/16	OP92235	G4G1746

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC16312-1T, JC16312-2T, JC16312-3T, JC16312-4T, JC16312-5T, JC16312-7T, JC16312-8T, JC16312-9T

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.25	0.27	108	0.36	144* [a]	29	38-138/30
319-84-6	alpha-BHC	0.25	0.29	116	0.40	160* [a]	32* [b]	51-144/30
319-85-7	beta-BHC	0.25	0.29	116	0.39	156* [a]	29	55-137/30
319-86-8	delta-BHC	0.25	0.28	112	0.38	152* [a]	30	33-148/30
58-89-9	gamma-BHC (Lindane)	0.25	0.30	120	0.41	164* [a]	31* [b]	53-142/30
5103-71-9	alpha-Chlordane	0.25	0.28	112	0.39	156* [a]	33* [b]	52-137/30
5103-74-2	gamma-Chlordane	0.25	0.26	104	0.38	152* [a]	38* [b]	52-140/30
60-57-1	Dieldrin	0.25	0.29	116	0.41	164* [a]	34* [b]	54-144/30
72-54-8	4,4'-DDD	0.25	0.29	116	0.42	168* [a]	30	46-151/30
72-55-9	4,4'-DDE	0.25	0.28	112	0.41	164* [a]	38* [b]	51-142/30
50-29-3	4,4'-DDT	0.25	0.29	116	0.43	172* [a]	39* [b]	53-158/30
72-20-8	Endrin	0.25	0.31	124	0.45	180* [a]	37* [b]	53-149/30
1031-07-8	Endosulfan sulfate	0.25	0.32	128	0.46	184* [a]	27	49-148/30
7421-93-4	Endrin aldehyde	0.25	0.29	116	0.41	164* [a]	28	45-137/30
53494-70-5	Endrin ketone	0.25	0.32	128	0.46	184* [a]	36* [b]	48-142/30
959-98-8	Endosulfan-I	0.25	0.28	112	0.39	156* [a]	33* [b]	54-139/30
33213-65-9	Endosulfan-II	0.25	0.30	120	0.43	172* [a]	36* [b]	54-142/30
76-44-8	Heptachlor	0.25	0.26	104	0.38	152* [a]	38* [b]	45-137/30
1024-57-3	Heptachlor epoxide	0.25	0.28	112	0.40	160* [a]	35* [b]	54-140/30
72-43-5	Methoxychlor	0.25	0.36	144	0.53	212* [a]	38* [b]	51-157/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	107%	131%	26-132%
877-09-8	Tetrachloro-m-xylene	120%	136%* [a]	26-132%
2051-24-3	Decachlorobiphenyl	106%	152%* [a]	10-118%
2051-24-3	Decachlorobiphenyl	125%* [a]	165%* [a]	10-118%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP92374-MS	1G121321.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944
OP92374-MSD	1G121322.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944
JC16609-1	1G121320.D	1	03/24/16	RK	03/23/16	OP92374	G1G3944

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC16312-6T

CAS No.	Compound	JC16609-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.25	0.17	68	0.25	0.16	64	6	37-159/40
319-84-6	alpha-BHC	ND		0.25	0.24	96	0.25	0.20	80	18	37-164/37
319-85-7	beta-BHC	ND		0.25	0.25	100	0.25	0.21	84	17	46-151/36
319-86-8	delta-BHC	ND		0.25	0.25	100	0.25	0.21	84	17	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.25	0.24	96	0.25	0.20	80	18	44-160/37
5103-71-9	alpha-Chlordane	ND		0.25	0.20	80	0.25	0.18	72	11	38-160/35
5103-74-2	gamma-Chlordane	ND		0.25	0.21	84	0.25	0.18	72	15	39-157/37
60-57-1	Dieldrin	ND		0.25	0.22	88	0.25	0.19	76	15	42-161/36
72-54-8	4,4'-DDD	ND		0.25	0.21	84	0.25	0.18	72	15	40-161/36
72-55-9	4,4'-DDE	ND		0.25	0.18	72	0.25	0.16	64	12	34-158/36
50-29-3	4,4'-DDT	ND		0.25	0.20	80	0.25	0.18	72	11	41-173/33
72-20-8	Endrin	ND		0.25	0.24	96	0.25	0.21	84	13	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.25	0.24	96	0.25	0.20	80	18	46-161/36
7421-93-4	Endrin aldehyde	ND		0.25	0.25	100	0.25	0.21	84	17	34-149/36
53494-70-5	Endrin ketone	ND		0.25	0.25	100	0.25	0.20	80	22	44-157/36
959-98-8	Endosulfan-I	ND		0.25	0.22	88	0.25	0.19	76	15	43-154/35
33213-65-9	Endosulfan-II	ND		0.25	0.23	92	0.25	0.20	80	14	40-162/35
76-44-8	Heptachlor	ND		0.25	0.20	80	0.25	0.18	72	11	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.25	0.22	88	0.25	0.19	76	15	45-154/37
72-43-5	Methoxychlor	ND		0.25	0.25	100	0.25	0.23	92	8	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC16609-1	Limits
877-09-8	Tetrachloro-m-xylene	78%	67%	77%	26-132%
877-09-8	Tetrachloro-m-xylene	73%	63%	70%	26-132%
2051-24-3	Decachlorobiphenyl	51%	48%	39%	10-118%
2051-24-3	Decachlorobiphenyl	41%	38%	31%	10-118%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121297.D	**Injection Time:**	08:59
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	840895185	1.54	63312381	1.17
Upper Limit [a]	1681790370	2.04	126624762	1.67
Lower Limit [b]	420447593	1.04	31656191	0.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP92374-MB1	811174650	1.54	57919438	1.17
OP92374-BS1	825053700	1.54	62483251	1.17
OP92384-BS1	779564171	1.54	61558357	1.17
OP92410-MB1	856825608	1.54	65659540	1.17
OP92344-MB2	856825608	1.54	65659540	1.17
OP92028-MB3	856825608	1.54	65659540	1.17
OP92408-MB1	856825608	1.54	65659540	1.17
OP92343-MB2	856825608	1.54	65659540	1.17
OP92028-BS3	801644062	1.54	59622808	1.17
OP92408-BS1	801644062	1.54	59622808	1.17
OP92344-BS2	801644062	1.54	59622808	1.17
OP92343-BS2	801644062	1.54	59622808	1.17
OP92410-BS1	801644062	1.54	59622808	1.17
ZZZZZZ	889075510	1.54	67305108	1.17
ZZZZZZ	915855267	1.54	68906919	1.16

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

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

Semivolatile Internal Standard Area Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121316.D	**Injection Time:**	15:53
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	872248462	1.54	63580557	1.17
Upper Limit [a]	1744496924	2.04	127161114	1.67
Lower Limit [b]	436124231	1.04	31790279	0.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	870452081	1.54	63719683	1.17
JC16609-1	1030373731	1.54	67762136	1.17
OP92374-MS	880407030	1.54	58298640	1.17
OP92374-MSD	1064219314	1.54	71287386	1.17
ZZZZZZ	885051016	1.54	64950206	1.17
JC16312-6T [c]	946844211	1.54	62307197	1.17
ZZZZZZ	946844211	1.54	62307197	1.17
OP92408-MS	913832913	1.54	67025326	1.17
OP92408-LS23	913832913	1.54	67025326	1.17
OP92408-MSD	904614474	1.54	66592507	1.17
OP92408-LB28	826967378	1.54	55669842	1.17
ZZZZZZ	802543934	1.54	63209091	1.17
ZZZZZZ	955525880	1.54	69409344	1.17
ZZZZZZ	902943714	1.54	64977935	1.17
ZZZZZZ	929387176	1.54	64792784	1.17
JC16539-22A	869218682	1.54	63161241	1.17
ZZZZZZ	899818600	1.54	59639246	1.17
ZZZZZZ	892927600	1.54	65523874	1.17
OP92344-LB27	902516240	1.54	65639158	1.17

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample re-extracted outside the holding time due to original extraction batch QC failed.

Semivolatile Internal Standard Area Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66362.D	**Injection Time:**	08:13
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	199401004	2.23	194541004	2.07
Upper Limit [a]	398802008	2.73	389082008	2.57
Lower Limit [b]	99700502	1.73	97270502	1.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP92235-MB1	231992874	2.23	211866193	2.08
OP92235-BS1	217233209	2.23	243408364	2.07
OP92235-BSD	231052061	2.23	239619292	2.07
ZZZZZZ	213670470	2.23	234657145	2.07
JC16312-1T	213670470	2.23	234657145	2.07
ZZZZZZ	226394290	2.23	246791053	2.08
JC16312-2T	226394290	2.23	246791053	2.08
ZZZZZZ	241065781	2.23	263455626	2.07
JC16312-3T	241065781	2.23	263455626	2.07
JC16312-5T	229243868	2.23	230166041	2.08
ZZZZZZ	229243868	2.23	230166041	2.08
ZZZZZZ	204167401	2.23	198994663	2.07
JC16312-6T [c]	204167401	2.23	198994663	2.07
JC16312-7T	218267347	2.23	223881462	2.08
ZZZZZZ	218267347	2.23	223881462	2.08
ZZZZZZ	233395634	2.23	207386155	2.06
JC16312-8T	233395634	2.23	207386155	2.06
ZZZZZZ	284956366	2.23	210712090	2.07
JC16312-9T	284956366	2.23	210712090	2.07
ZZZZZZ	202903803	2.23	222570096	2.08

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) Confirmation run.

Semivolatile Internal Standard Area Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66376.D	**Injection Time:**	11:57
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	205547835	2.23	229162231	2.07
Upper Limit [a]	411095670	2.73	458324462	2.57
Lower Limit [b]	102773918	1.73	114581116	1.57

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
JC16312-4T	264416059	2.23	293274660	2.07
ZZZZZZ	264416059	2.23	293274660	2.07
OP92190-LB11	214593096	2.23	245443789	2.07
ZZZZZZ	213455399	2.24	212125962	2.07
ZZZZZZ	237433499	2.23	208957991	2.08
ZZZZZZ	216070549	2.23	209233897	2.08
JC16190-13A	213309876	2.23	197873238	2.07
ZZZZZZ	196278006	2.23	180017056	2.06
ZZZZZZ	208460762	2.23	229352180	2.07
ZZZZZZ	221444189	2.23	249087090	2.07
ZZZZZZ	218031700	2.24	243414294	2.07
ZZZZZZ	220549936	2.23	248056297	2.07
ZZZZZZ	221303829	2.24	249340727	2.07
ZZZZZZ	211206158	2.23	238432863	2.07
ZZZZZZ	221831389	2.23	249003690	2.07
OP92190-MS	213105390	2.24	240919685	2.07
OP92190-LS8	213105390	2.24	240919685	2.07
OP92190-MSD	209661746	2.23	238973412	2.07

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3933-DDT
Lab File ID: 1G120777.D
Instrument ID: GC1G
Injection Date: 03/14/16
Injection Time: 10:33

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1206770	14264149
4,4'-DDE	1271654	19325009
4,4'-DDT	171488419	1405351696
DDT Breakdown [a]	1.4 %	2.3 %
Endrin aldehyde	1931941	10039190
Endrin ketone	4093701	42447463
Endrin	87274188	901196499
Endrin Breakdown [b]	6.5 %	5.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G3933-IC3933	1G120779.D	03/14/16	11:08	00:35	Initial cal 1
G1G3933-IC3933	1G120780.D	03/14/16	11:25	00:52	Initial cal 2
G1G3933-IC3933	1G120781.D	03/14/16	11:43	01:10	Initial cal 5
G1G3933-IC3933	1G120782.D	03/14/16	12:00	01:27	Initial cal 10
G1G3933-ICC3933	1G120783.D	03/14/16	12:18	01:45	Initial cal 25
G1G3933-IC3933	1G120784.D	03/14/16	12:35	02:02	Initial cal 50
G1G3933-IC3933	1G120785.D	03/14/16	12:53	02:20	Initial cal 75
G1G3933-IC3933	1G120786.D	03/14/16	13:10	02:38	Initial cal 100
G1G3933-IC3933	1G120787.D	03/14/16	13:27	02:55	Initial cal 500
G1G3933-IC3933	1G120788.D	03/14/16	13:45	03:12	Initial cal 500
G1G3933-ICV3933	1G120789.D	03/14/16	14:02	03:30	Initial cal verification 25
G1G3933-ICV3933	1G120790.D	03/14/16	14:20	03:47	Initial cal verification 25
G1G3933-ICV3933	1G120791.D	03/14/16	14:37	04:05	Initial cal verification 500
G1G3933-ICV3933	1G120792.D	03/14/16	14:55	04:22	Initial cal verification 500
G1G3934-CC3933	1G120793.D	03/14/16	15:59	05:26	Continuing cal 25
OP91977-MB1	1G120795.D	03/14/16	16:33	06:01	Method Blank
OP91977-BS1	1G120796.D	03/14/16	16:51	06:18	Blank Spike
OP91977-BSD	1G120797.D	03/14/16	17:09	06:36	Blank Spike Duplicate
OP91687-MB1	1G120798.D	03/14/16	17:26	06:53	Method Blank
OP91687-BS1	1G120799.D	03/14/16	17:43	07:11	Blank Spike
JC14939-1	1G120800.D	03/14/16	18:01	07:28	(used for QC only; not part of job JC16312T)
OP91687-MS	1G120801.D	03/14/16	18:19	07:46	Matrix Spike
OP91687-MSD	1G120802.D	03/14/16	18:36	08:04	Matrix Spike Duplicate
ZZZZZZ	1G120803.D	03/14/16	18:53	08:21	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3933-DDT
Lab File ID: 1G120777.D
Instrument ID: GC1G
Injection Date: 03/14/16
Injection Time: 10:33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G3934-CC3933	1G120804.D	03/14/16	19:11	08:38	Continuing cal 50

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3944-DDT
Lab File ID: 1G121296.D
Instrument ID: GC1G
Injection Date: 03/24/16
Injection Time: 08:41

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2064401	29143420
4,4'-DDE	1491330	18249905
4,4'-DDT	227693544	1774749386
DDT Breakdown [a]	1.5 %	2.6 %
Endrin aldehyde	1159667	12058093
Endrin ketone	4918372	47829063
Endrin	115032574	1069049507
Endrin Breakdown [b]	5 %	5.3 %

(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
G1G3944-CC3933	1G121297.D	03/24/16	08:59	00:18	Continuing cal 25
OP92374-MB1	1G121300.D	03/24/16	09:52	01:10	Method Blank
OP92374-BS1	1G121301.D	03/24/16	10:09	01:27	Blank Spike
OP92384-BS1	1G121303.D	03/24/16	10:59	02:17	Blank Spike
OP92410-MB1	1G121311.D	03/24/16	12:13	03:31	Method Blank
OP92343-MB2	1G121311.D	03/24/16	12:13	03:31	Method Blank
OP92028-MB3	1G121311.D	03/24/16	12:13	03:31	Method Blank
OP92408-MB1	1G121311.D	03/24/16	12:13	03:31	Method Blank
OP92344-MB2	1G121311.D	03/24/16	12:13	03:31	Method Blank
OP92408-BS1	1G121312.D	03/24/16	12:31	03:49	Blank Spike
OP92343-BS2	1G121312.D	03/24/16	12:31	03:49	Blank Spike
OP92344-BS2	1G121312.D	03/24/16	12:31	03:49	Blank Spike
OP92028-BS3	1G121312.D	03/24/16	12:31	03:49	Blank Spike
OP92410-BS1	1G121312.D	03/24/16	12:31	03:49	Blank Spike
ZZZZZZ	1G121313.D	03/24/16	12:48	04:06	(unrelated sample)
ZZZZZZ	1G121314.D	03/24/16	13:06	04:24	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3944-DDT
Lab File ID: 1G121315.D
Instrument ID: GC1G
Injection Date: 03/24/16
Injection Time: 15:36

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1554293	23445127
4,4'-DDE	1873289	25486398
4,4'-DDT	252540940	1982080144
DDT Breakdown [a]	1.3 %	2.4 %
Endrin aldehyde	1300345	13040239
Endrin ketone	5153272	50433659
Endrin	125731677	1171934358
Endrin Breakdown [b]	4.9 %	5.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G3944-CC3933	1G121316.D	03/24/16	15:53	00:18	Continuing cal 50
ZZZZZZ	1G121319.D	03/24/16	16:46	01:11	(unrelated sample)
JC16609-1	1G121320.D	03/24/16	17:04	01:28	(used for QC only; not part of job JC16312T)
OP92374-MS	1G121321.D	03/24/16	17:22	01:46	Matrix Spike
OP92374-MSD	1G121322.D	03/24/16	17:39	02:03	Matrix Spike Duplicate
ZZZZZZ	1G121323.D	03/24/16	17:57	02:21	(unrelated sample)
JC16312-6T	1G121324R.D	03/24/16	18:14	02:39	D-1R
ZZZZZZ	1G121324.D	03/24/16	18:14	02:39	(unrelated sample)
OP92408-LS23	1G121325.D	03/24/16	18:32	02:56	Leachate Spike
OP92408-MS	1G121325.D	03/24/16	18:32	02:56	Matrix Spike
OP92408-MSD	1G121326.D	03/24/16	18:50	03:14	Matrix Spike Duplicate
OP92408-LB28	1G121327.D	03/24/16	19:07	03:32	Leachate Blank
ZZZZZZ	1G121328.D	03/24/16	19:25	03:49	(unrelated sample)
ZZZZZZ	1G121329.D	03/24/16	19:43	04:07	(unrelated sample)
ZZZZZZ	1G121330.D	03/24/16	20:00	04:24	(unrelated sample)
ZZZZZZ	1G121331.D	03/24/16	20:18	04:42	(unrelated sample)
JC16539-22A	1G121332.D	03/24/16	20:35	05:00	(used for QC only; not part of job JC16312T)
ZZZZZZ	1G121333.D	03/24/16	20:53	05:17	(unrelated sample)
ZZZZZZ	1G121334.D	03/24/16	21:11	05:35	(unrelated sample)
OP92344-LB27	1G121335.D	03/24/16	21:28	05:53	Leachate Blank
G1G3944-CC3933	1G121336.D	03/24/16	21:46	06:10	Continuing cal 25
OP92410-LB30	1G121338.D	03/24/16	22:21	06:45	Leachate Blank
OP92410-MS	1G121339.D	03/24/16	22:39	07:03	Matrix Spike
OP92410-LS24	1G121339.D	03/24/16	22:39	07:03	Leachate Spike

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3944-DDT
Lab File ID: 1G121315.D
Instrument ID: GC1G
Injection Date: 03/24/16
Injection Time: 15:36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP92410-MSD	1G121340.D	03/24/16	22:57	07:21	Matrix Spike Duplicate
JC16589-1A	1G121341.D	03/24/16	23:14	07:38	(used for QC only; not part of job JC16312T)
ZZZZZZ	1G121342.D	03/24/16	23:32	07:56	(unrelated sample)
ZZZZZZ	1G121343.D	03/24/16	23:50	08:14	(unrelated sample)
ZZZZZZ	1G121344.D	03/25/16	00:07	08:31	(unrelated sample)
ZZZZZZ	1G121345.D	03/25/16	00:25	08:49	(unrelated sample)
ZZZZZZ	1G121346.D	03/25/16	00:42	09:06	(unrelated sample)
ZZZZZZ	1G121347.D	03/25/16	01:00	09:24	(unrelated sample)
OP92028-LB32	1G121348.D	03/25/16	01:18	09:42	Leachate Blank

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1741-DDT
Lab File ID: 4G66169.D
Instrument ID: GC4G
Injection Date: 03/18/16
Injection Time: 17:45

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	8385130	7051784
4,4'-DDE	2634401	2876000
4,4'-DDT	388085703	362278732
DDT Breakdown [a]	2.8 %	2.7 %
Endrin aldehyde	4194694	3242234
Endrin ketone	9829510	10057782
Endrin	241790714	214367380
Endrin Breakdown [b]	5.5 %	5.8 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G1741-IC1741	4G66171.D	03/18/16	18:14	00:29	Initial cal 1
G4G1741-IC1741	4G66172.D	03/18/16	18:29	00:44	Initial cal 2
G4G1741-IC1741	4G66173.D	03/18/16	18:44	00:59	Initial cal 5
G4G1741-IC1741	4G66174.D	03/18/16	18:58	01:13	Initial cal 10
G4G1741-ICC1741	4G66175.D	03/18/16	19:13	01:28	Initial cal 25
G4G1741-IC1741	4G66176.D	03/18/16	19:28	01:43	Initial cal 50
G4G1741-IC1741	4G66178.D	03/18/16	19:57	02:12	Initial cal 100
G4G1741-IC1741	4G66179.D	03/18/16	20:12	02:27	Initial cal 500
G4G1741-IC1741	4G66180.D	03/18/16	20:26	02:41	Initial cal 500
G4G1741-ICV1741	4G66181.D	03/18/16	20:41	02:56	Initial cal verification 25
G4G1741-ICV1741	4G66182.D	03/18/16	20:56	03:11	Initial cal verification 25
G4G1741-ICV1741	4G66183.D	03/18/16	21:10	03:25	Initial cal verification 500
G4G1741-ICV1741	4G66184.D	03/18/16	21:25	03:40	Initial cal verification 500
G4G1742-CC1741	4G66186.D	03/18/16	21:40	03:55	Continuing cal 25
OP92019-LB36	4G66193.D	03/18/16	22:09	04:24	Leachate Blank
ZZZZZZ	4G66188.D	03/18/16	22:24	04:39	(unrelated sample)
ZZZZZZ	4G66189.D	03/18/16	22:39	04:54	(unrelated sample)
ZZZZZZ	4G66191.D	03/18/16	23:08	05:23	(unrelated sample)
ZZZZZZ	4G66192.D	03/18/16	23:23	05:38	(unrelated sample)
OP92028-MS	4G66194.D	03/18/16	23:37	05:52	Matrix Spike
OP92028-LS20	4G66194.D	03/18/16	23:37	05:52	Leachate Spike
OP92028-MSD	4G66195.D	03/18/16	23:52	06:07	Matrix Spike Duplicate
ZZZZZZ	4G66196.D	03/19/16	00:07	06:22	(unrelated sample)
ZZZZZZ	4G66197.D	03/19/16	00:22	06:37	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1741-DDT
Lab File ID: 4G66169.D
Instrument ID: GC4G
Injection Date: 03/18/16
Injection Time: 17:45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4G66198.D	03/19/16	00:36	06:51	(unrelated sample)
JC15881-9A	4G66199.D	03/19/16	00:51	07:06	(used for QC only; not part of job JC16312T)
ZZZZZZ	4G66200.D	03/19/16	01:06	07:21	(unrelated sample)
ZZZZZZ	4G66201.D	03/19/16	01:20	07:35	(unrelated sample)
ZZZZZZ	4G66203.D	03/19/16	01:50	08:05	(unrelated sample)
ZZZZZZ	4G66204.D	03/19/16	02:04	08:19	(unrelated sample)
ZZZZZZ	4G66205.D	03/19/16	02:19	08:34	(unrelated sample)
ZZZZZZ	4G66206.D	03/19/16	02:34	08:49	(unrelated sample)
G4G1742-CC1741	4G66207.D	03/19/16	02:48	09:03	Continuing cal 50
ZZZZZZ	4G66209.D	03/19/16	03:18	09:33	(unrelated sample)
ZZZZZZ	4G66210.D	03/19/16	03:32	09:47	(unrelated sample)
ZZZZZZ	4G66211.D	03/19/16	03:47	10:02	(unrelated sample)
ZZZZZZ	4G66212.D	03/19/16	04:02	10:17	(unrelated sample)
ZZZZZZ	4G66213.D	03/19/16	04:17	10:32	(unrelated sample)
JC15640-1A	4G66214.D	03/19/16	04:31	10:46	(used for QC only; not part of job JC16312T)
ZZZZZZ	4G66215.D	03/19/16	04:46	11:01	(unrelated sample)
ZZZZZZ	4G66216.D	03/19/16	05:01	11:16	(unrelated sample)
ZZZZZZ	4G66217.D	03/19/16	05:15	11:30	(unrelated sample)
ZZZZZZ	4G66218.D	03/19/16	05:30	11:45	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1746-DDT
Lab File ID: 4G66361.D
Instrument ID: GC4G
Injection Date: 03/22/16
Injection Time: 07:58

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	7891835	7373376
4,4'-DDE	3101384	4162524
4,4'-DDT	430600993	439318516
DDT Breakdown [a]	2.5 %	2.6 %
Endrin aldehyde	4169327	4362532
Endrin ketone	11178350	11422479
Endrin	258180495	252139609
Endrin Breakdown [b]	5.6 %	5.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G4G1746-CC1741	4G66362.D	03/22/16	08:13	00:15	Continuing cal 25
OP92235-MB1	4G66364.D	03/22/16	08:46	00:48	Method Blank
OP92235-BS1	4G66365.D	03/22/16	09:01	01:03	Blank Spike
OP92235-BSD	4G66366.D	03/22/16	09:15	01:17	Blank Spike Duplicate
JC16312-1T	4G66367R.D	03/22/16	09:30	01:32	S-38
ZZZZZZ	4G66367.D	03/22/16	09:30	01:32	(unrelated sample)
JC16312-2T	4G66368R.D	03/22/16	09:45	01:47	S-37
ZZZZZZ	4G66368.D	03/22/16	09:45	01:47	(unrelated sample)
JC16312-3T	4G66369R.D	03/22/16	09:59	02:01	S-36
ZZZZZZ	4G66369.D	03/22/16	09:59	02:01	(unrelated sample)
JC16312-5T	4G66371R.D	03/22/16	10:29	02:31	MW-9
ZZZZZZ	4G66371.D	03/22/16	10:29	02:31	(unrelated sample)
JC16312-6T	4G66372.D	03/22/16	10:43	02:45	D-1R
ZZZZZZ	4G66372.D	03/22/16	10:43	02:45	(unrelated sample)
JC16312-7T	4G66373R.D	03/22/16	10:58	03:00	S-28
ZZZZZZ	4G66373.D	03/22/16	10:58	03:00	(unrelated sample)
JC16312-8T	4G66374R.D	03/22/16	11:13	03:15	E-1R
ZZZZZZ	4G66374.D	03/22/16	11:13	03:15	(unrelated sample)
ZZZZZZ	4G66375.D	03/22/16	11:27	03:29	(unrelated sample)
JC16312-9T	4G66375R.D	03/22/16	11:27	03:29	G-1R(3)
ZZZZZZ	4G66378.D	03/22/16	11:42	03:44	(unrelated sample)
G4G1746-CC1741	4G66376.D	03/22/16	11:57	03:59	Continuing cal 50
JC16312-4T	4G66379R.D	03/22/16	12:41	04:43	S-32
ZZZZZZ	4G66379.D	03/22/16	12:41	04:43	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1746-DDT
Lab File ID: 4G66361.D
Instrument ID: GC4G
Injection Date: 03/22/16
Injection Time: 07:58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP92190-LB11	4G66382.D	03/22/16	13:39	05:41	Leachate Blank
ZZZZZZ	4G66380A.D	03/22/16	13:54	05:56	(unrelated sample)
ZZZZZZ	4G66381A.D	03/22/16	14:42	06:44	(unrelated sample)
ZZZZZZ	4G66383A.D	03/22/16	15:02	07:04	(unrelated sample)
JC16190-13A	4G66384A.D	03/22/16	15:17	07:19	(used for QC only; not part of job JC16312T)
ZZZZZZ	4G66385A.D	03/22/16	15:32	07:34	(unrelated sample)
ZZZZZZ	4G66386A.D	03/22/16	15:46	07:48	(unrelated sample)
ZZZZZZ	4G66387A.D	03/22/16	16:01	08:03	(unrelated sample)
ZZZZZZ	4G66388A.D	03/22/16	16:16	08:18	(unrelated sample)
ZZZZZZ	4G66389A.D	03/22/16	16:30	08:32	(unrelated sample)
ZZZZZZ	4G66390A.D	03/22/16	16:45	08:47	(unrelated sample)
ZZZZZZ	4G66391A.D	03/22/16	17:00	09:02	(unrelated sample)
ZZZZZZ	4G66392A.D	03/22/16	17:14	09:16	(unrelated sample)
OP92190-MS	4G66393A.D	03/22/16	17:29	09:31	Matrix Spike
OP92190-LS8	4G66393A.D	03/22/16	17:29	09:31	Leachate Spike
OP92190-MSD	4G66394A.D	03/22/16	17:44	09:46	Matrix Spike Duplicate

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66362.D	**Injection Time:**	08:13
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	JC16312-8T	**Injection Date:**	03/22/16
Lab File ID:	4G66374R.D	**Injection Time:**	11:13
Client ID:	E-1R		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDT [a]	1 [b]	6.55	6.54	0.013		ug/l	117.5
4,4'-DDT [a]	2	8.15	8.15	0.050		ug/l	

(a) This compound outside control limits biased high in the associated BS. More than 40% RPD for detected concentrations between the two GC columns.
(b) Final result reported from this column.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66362.D	**Injection Time:**	08:13
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP92235-BS1	**Injection Date:**	03/22/16
Lab File ID:	4G66365.D	**Injection Time:**	09:01
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.15	4.14	0.27		ug/l	13.8
Aldrin	2	5.09	5.09	0.31		ug/l	
alpha-BHC	1 [a]	3.05	3.04	0.29		ug/l	15.9
alpha-BHC	2	3.64	3.64	0.34		ug/l	
beta-BHC	1 [a]	3.42	3.41	0.29		ug/l	9.8
beta-BHC	2	4.14	4.14	0.32		ug/l	
delta-BHC	1 [a]	3.81	3.81	0.28		ug/l	16.4
delta-BHC	2	4.54	4.54	0.33		ug/l	
gamma-BHC (Lindane)	1 [a]	3.33	3.33	0.30		ug/l	6.5
gamma-BHC (Lindane)	2	4.06	4.06	0.32		ug/l	
alpha-Chlordane	1 [a]	5.18	5.18	0.28		ug/l	16.4
alpha-Chlordane	2	6.42	6.42	0.33		ug/l	
gamma-Chlordane	1 [a]	5.01	5.01	0.26		ug/l	23.7
gamma-Chlordane	2	6.19	6.19	0.33		ug/l	
Dieldrin	1 [a]	5.68	5.68	0.29		ug/l	15.9
Dieldrin	2	6.95	6.95	0.34		ug/l	
4,4'-DDD	1 [a]	6.14	6.14	0.29		ug/l	6.7
4,4'-DDD	2	7.62	7.62	0.31		ug/l	
4,4'-DDE	1 [a]	5.30	5.29	0.28		ug/l	16.4
4,4'-DDE	2	6.66	6.66	0.33		ug/l	
4,4'-DDT	1 [a]	6.55	6.54	0.29		ug/l	15.9
4,4'-DDT	2	8.15	8.15	0.34		ug/l	
Endrin	1 [a]	6.00	6.00	0.31		ug/l	14.9
Endrin	2	7.46	7.46	0.36		ug/l	
Endosulfan sulfate	1 [a]	7.62	7.62	0.32		ug/l	9.0
Endosulfan sulfate	2	8.85	8.85	0.35		ug/l	
Endrin aldehyde	1 [a]	6.95	6.94	0.29		ug/l	6.7
Endrin aldehyde	2	8.38	8.38	0.31		ug/l	
Endrin ketone	1 [a]	8.08	8.07	0.32		ug/l	9.0
Endrin ketone	2	9.75	9.76	0.35		ug/l	
Endosulfan-I	1 [a]	5.36	5.36	0.28		ug/l	10.2
Endosulfan-I	2	6.52	6.52	0.31		ug/l	
Endosulfan-II	1 [a]	6.33	6.33	0.30		ug/l	9.5
Endosulfan-II	2	7.81	7.81	0.33		ug/l	
Heptachlor	1 [a]	3.60	3.60	0.26		ug/l	23.7
Heptachlor	2	4.64	4.64	0.33		ug/l	
Heptachlor epoxide	1 [a]	4.84	4.84	0.28		ug/l	19.4
Heptachlor epoxide	2	5.91	5.91	0.34		ug/l	
Methoxychlor	1 [a]	7.34	7.34	0.36		ug/l	8.0
Methoxychlor	2	9.38	9.38	0.39		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121297.D	**Injection Time:**	08:59
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP92374-BS1	**Injection Date:**	03/24/16
Lab File ID:	1G121301.D	**Injection Time:**	10:09
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.31	3.31	0.19		ug/l	0.0
Aldrin	2	4.51	4.51	0.19		ug/l	
alpha-BHC	1	2.22	2.22	0.21		ug/l	0.0
alpha-BHC	2 [a]	3.05	3.05	0.21		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.21		ug/l	0.0
beta-BHC	2	3.57	3.57	0.21		ug/l	
delta-BHC [b]	1 [a]	2.77	2.77	0.22		ug/l	4.7
delta-BHC [b]	2	3.97	3.96	0.21		ug/l	
gamma-BHC (Lindane)	1	2.51	2.51	0.21		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.48	3.48	0.21		ug/l	
alpha-Chlordane [b]	1 [a]	4.33	4.32	0.21		ug/l	4.9
alpha-Chlordane [b]	2	5.84	5.84	0.20		ug/l	
gamma-Chlordane	1 [a]	4.16	4.16	0.21		ug/l	0.0
gamma-Chlordane	2	5.62	5.62	0.21		ug/l	
Dieldrin	1 [a]	4.82	4.81	0.21		ug/l	0.0
Dieldrin	2	6.37	6.37	0.21		ug/l	
4,4'-DDD [b]	1 [a]	5.26	5.26	0.22		ug/l	4.7
4,4'-DDD [b]	2	7.06	7.06	0.21		ug/l	
4,4'-DDE [b]	1 [a]	4.44	4.44	0.22		ug/l	4.7
4,4'-DDE [b]	2	6.11	6.11	0.21		ug/l	
4,4'-DDT	1 [a]	5.67	5.66	0.24		ug/l	0.0
4,4'-DDT	2	7.60	7.60	0.24		ug/l	
Endrin	1	5.13	5.13	0.24		ug/l	8.7
Endrin	2 [a]	6.88	6.88	0.22		ug/l	
Endosulfan sulfate	1 [a]	6.75	6.75	0.22		ug/l	0.0
Endosulfan sulfate	2	8.28	8.28	0.22		ug/l	
Endrin aldehyde	1 [a]	6.07	6.07	0.22		ug/l	0.0
Endrin aldehyde	2	7.81	7.81	0.22		ug/l	
Endrin ketone	1	7.17	7.17	0.22		ug/l	0.0
Endrin ketone	2 [a]	9.24	9.24	0.22		ug/l	
Endosulfan-I	1 [a]	4.50	4.50	0.21		ug/l	0.0
Endosulfan-I	2	5.94	5.94	0.21		ug/l	
Endosulfan-II	1 [a]	5.45	5.45	0.21		ug/l	0.0
Endosulfan-II	2	7.23	7.23	0.21		ug/l	
Heptachlor	1	2.99	2.99	0.20		ug/l	0.0
Heptachlor	2 [a]	4.06	4.06	0.20		ug/l	
Heptachlor epoxide	1 [a]	4.01	4.00	0.21		ug/l	0.0
Heptachlor epoxide	2	5.33	5.33	0.21		ug/l	
Methoxychlor	1 [a]	6.45	6.44	0.23		ug/l	8.3
Methoxychlor	2	8.85	8.85	0.25		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121297.D	**Injection Time:**	08:59
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP92374-BS1	**Injection Date:**	03/24/16
Lab File ID:	1G121301.D	**Injection Time:**	10:09
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 1st signal. %D of check on 2nd signal exceed method criteria (20%) so using for confirmation only.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66362.D	**Injection Time:**	08:13
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP92235-BSD	**Injection Date:**	03/22/16
Lab File ID:	4G66366.D	**Injection Time:**	09:15
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.15	4.14	0.36		ug/l	5.4
Aldrin	2	5.09	5.09	0.38		ug/l	
alpha-BHC	1 [a]	3.05	3.04	0.40		ug/l	7.2
alpha-BHC	2	3.64	3.64	0.43		ug/l	
beta-BHC	1 [a]	3.41	3.41	0.39		ug/l	7.4
beta-BHC	2	4.14	4.14	0.42		ug/l	
delta-BHC	1 [a]	3.81	3.81	0.38		ug/l	16.9
delta-BHC	2	4.54	4.54	0.45		ug/l	
gamma-BHC (Lindane)	1 [a]	3.33	3.33	0.41		ug/l	2.4
gamma-BHC (Lindane)	2	4.06	4.06	0.42		ug/l	
alpha-Chlordane	1 [a]	5.18	5.18	0.39		ug/l	7.4
alpha-Chlordane	2	6.42	6.42	0.42		ug/l	
gamma-Chlordane	1 [a]	5.01	5.01	0.38		ug/l	12.3
gamma-Chlordane	2	6.19	6.19	0.43		ug/l	
Dieldrin	1 [a]	5.68	5.68	0.41		ug/l	9.3
Dieldrin	2	6.95	6.95	0.45		ug/l	
4,4'-DDD	1	6.14	6.14	0.43		ug/l	2.4
4,4'-DDD	2 [a]	7.62	7.62	0.42		ug/l	
4,4'-DDE	1 [a]	5.30	5.29	0.41		ug/l	4.8
4,4'-DDE	2	6.66	6.66	0.43		ug/l	
4,4'-DDT	1 [a]	6.55	6.54	0.43		ug/l	6.7
4,4'-DDT	2	8.15	8.15	0.46		ug/l	
Endrin	1 [a]	6.00	6.00	0.45		ug/l	4.3
Endrin	2	7.46	7.46	0.47		ug/l	
Endosulfan sulfate	1	7.62	7.62	0.47		ug/l	2.2
Endosulfan sulfate	2 [a]	8.85	8.85	0.46		ug/l	
Endrin aldehyde	1	6.94	6.94	0.42		ug/l	2.4
Endrin aldehyde	2 [a]	8.38	8.38	0.41		ug/l	
Endrin ketone	1 [a]	8.07	8.07	0.46		ug/l	2.2
Endrin ketone	2	9.75	9.76	0.47		ug/l	
Endosulfan-I	1 [a]	5.36	5.36	0.39		ug/l	5.0
Endosulfan-I	2	6.52	6.52	0.41		ug/l	
Endosulfan-II	1 [a]	6.33	6.33	0.43		ug/l	2.3
Endosulfan-II	2	7.81	7.81	0.44		ug/l	
Heptachlor	1 [a]	3.60	3.60	0.38		ug/l	10.0
Heptachlor	2	4.64	4.64	0.42		ug/l	
Heptachlor epoxide	1 [a]	4.84	4.84	0.40		ug/l	7.2
Heptachlor epoxide	2	5.91	5.91	0.43		ug/l	
Methoxychlor	1 [a]	7.34	7.34	0.53		ug/l	0.0
Methoxychlor	2	9.38	9.38	0.53		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121316.D	**Injection Time:**	15:53
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP92374-MS	**Injection Date:**	03/24/16
Lab File ID:	1G121321.D	**Injection Time:**	17:22
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.31	3.31	0.17		ug/l	6.1
Aldrin	2	4.51	4.51	0.16		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.24		ug/l	13.3
alpha-BHC	2	3.05	3.05	0.21		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.25		ug/l	12.8
beta-BHC	2	3.57	3.57	0.22		ug/l	
delta-BHC	1 [a]	2.77	2.77	0.25		ug/l	17.4
delta-BHC	2	3.97	3.96	0.21		ug/l	
gamma-BHC (Lindane)	1 [a]	2.51	2.51	0.24		ug/l	13.3
gamma-BHC (Lindane)	2	3.48	3.48	0.21		ug/l	
alpha-Chlordane	1 [a]	4.33	4.32	0.20		ug/l	16.2
alpha-Chlordane	2	5.84	5.84	0.17		ug/l	
gamma-Chlordane	1 [a]	4.16	4.16	0.21		ug/l	15.4
gamma-Chlordane	2	5.62	5.62	0.18		ug/l	
Dieldrin	1 [a]	4.82	4.81	0.22		ug/l	9.5
Dieldrin	2	6.38	6.37	0.20		ug/l	
4,4'-DDD	1 [a]	5.26	5.26	0.21		ug/l	15.4
4,4'-DDD	2	7.06	7.06	0.18		ug/l	
4,4'-DDE	1 [a]	4.44	4.44	0.18		ug/l	18.2
4,4'-DDE	2	6.11	6.11	0.15		ug/l	
4,4'-DDT	1 [a]	5.66	5.66	0.20		ug/l	5.1
4,4'-DDT	2	7.60	7.60	0.19		ug/l	
Endrin	1 [a]	5.13	5.13	0.24		ug/l	13.3
Endrin	2	6.88	6.88	0.21		ug/l	
Endosulfan sulfate	1 [a]	6.75	6.75	0.24		ug/l	13.3
Endosulfan sulfate	2	8.28	8.28	0.21		ug/l	
Endrin aldehyde	1 [a]	6.07	6.07	0.25		ug/l	0.0
Endrin aldehyde	2	7.81	7.80	0.25		ug/l	
Endrin ketone	1 [a]	7.17	7.17	0.25		ug/l	12.8
Endrin ketone	2	9.24	9.24	0.22		ug/l	
Endosulfan-I	1 [a]	4.50	4.50	0.22		ug/l	9.5
Endosulfan-I	2	5.94	5.94	0.20		ug/l	
Endosulfan-II	1 [a]	5.45	5.45	0.23		ug/l	14.0
Endosulfan-II	2	7.23	7.23	0.20		ug/l	
Heptachlor	1 [a]	2.99	2.99	0.20		ug/l	5.1
Heptachlor	2	4.06	4.06	0.19		ug/l	
Heptachlor epoxide	1 [a]	4.01	4.01	0.22		ug/l	9.5
Heptachlor epoxide	2	5.33	5.33	0.20		ug/l	
Methoxychlor	1 [a]	6.45	6.44	0.25		ug/l	8.3
Methoxychlor	2	8.85	8.85	0.23		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121316.D	**Injection Time:**	15:53
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP92374-MSD	**Injection Date:**	03/24/16
Lab File ID:	1G121322.D	**Injection Time:**	17:39
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.31	3.31	0.16		ug/l	6.5
Aldrin	2	4.51	4.51	0.15		ug/l	
alpha-BHC	1 [a]	2.23	2.22	0.20		ug/l	16.2
alpha-BHC	2	3.05	3.05	0.17		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.21		ug/l	15.4
beta-BHC	2	3.57	3.57	0.18		ug/l	
delta-BHC	1 [a]	2.77	2.77	0.21		ug/l	21.1
delta-BHC	2	3.97	3.96	0.17		ug/l	
gamma-BHC (Lindane)	1 [a]	2.51	2.51	0.20		ug/l	16.2
gamma-BHC (Lindane)	2	3.48	3.48	0.17		ug/l	
alpha-Chlordane	1 [a]	4.33	4.32	0.18		ug/l	11.8
alpha-Chlordane	2	5.84	5.84	0.16		ug/l	
gamma-Chlordane	1 [a]	4.16	4.16	0.18		ug/l	11.8
gamma-Chlordane	2	5.62	5.62	0.16		ug/l	
Dieldrin	1 [a]	4.81	4.81	0.19		ug/l	11.1
Dieldrin	2	6.37	6.37	0.17		ug/l	
4,4'-DDD	1 [a]	5.26	5.26	0.18		ug/l	11.8
4,4'-DDD	2	7.06	7.06	0.16		ug/l	
4,4'-DDE	1 [a]	4.44	4.44	0.16		ug/l	13.3
4,4'-DDE	2	6.11	6.11	0.14		ug/l	
4,4'-DDT	1 [a]	5.66	5.66	0.18		ug/l	5.7
4,4'-DDT	2	7.60	7.60	0.17		ug/l	
Endrin	1 [a]	5.13	5.13	0.21		ug/l	15.4
Endrin	2	6.88	6.88	0.18		ug/l	
Endosulfan sulfate	1 [a]	6.75	6.75	0.20		ug/l	10.5
Endosulfan sulfate	2	8.28	8.28	0.18		ug/l	
Endrin aldehyde	1 [a]	6.07	6.07	0.21		ug/l	4.9
Endrin aldehyde	2	7.81	7.80	0.20		ug/l	
Endrin ketone	1 [a]	7.17	7.17	0.20		ug/l	10.5
Endrin ketone	2	9.24	9.24	0.18		ug/l	
Endosulfan-I	1 [a]	4.50	4.50	0.19		ug/l	11.1
Endosulfan-I	2	5.94	5.94	0.17		ug/l	
Endosulfan-II	1 [a]	5.45	5.45	0.20		ug/l	16.2
Endosulfan-II	2	7.23	7.23	0.17		ug/l	
Heptachlor	1 [a]	2.99	2.99	0.18		ug/l	11.8
Heptachlor	2	4.06	4.06	0.16		ug/l	
Heptachlor epoxide	1 [a]	4.01	4.01	0.19		ug/l	11.1
Heptachlor epoxide	2	5.33	5.33	0.17		ug/l	
Methoxychlor	1 [a]	6.45	6.44	0.23		ug/l	14.0
Methoxychlor	2	8.85	8.85	0.20		ug/l	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC16312T
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]
JC16312-1T	4G66367R.D	154* [c]	171* [c]	173* [c]	197* [c]
JC16312-2T	4G66368R.D	87	96	102	117
JC16312-3T	4G66369R.D	54	63	56	66
JC16312-4T	4G66379R.D	70	87	65	80
JC16312-5T	4G66371R.D	95	95	110	114
JC16312-6T	4G66372.D	157* [d]	156* [d]	149* [d]	151* [d]
JC16312-6T	1G121324R.D	84	76	98	75
JC16312-7T	4G66373R.D	73	75	73	78
JC16312-8T	4G66374R.D	163* [e]	146* [e]	149* [e]	132* [e]
JC16312-9T	4G66375R.D	95	88	80	62
OP92235-BS1	4G66365.D	107	120	106	125* [f]
OP92235-BSD	4G66366.D	131	136* [f]	152* [f]	165* [f]
OP92235-MB1	4G66364.D	79	79	86	84
OP92374-BS1	1G121301.D	80	78	89	82
OP92374-MB1	1G121300.D	89	81	109	96
OP92374-MS	1G121321.D	78	73	51	41
OP92374-MSD	1G121322.D	67	63	48	38

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) High percent recoveries and no positive found in the sample.
(d) Outside of in house control limits.
(e) Outside of in house control limits. There's no sample left to reextract.
(f) Outside the QC limits.

GC Surrogate Retention Time Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121297.D	**Injection Time:**	08:59
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.75	2.38	8.95	10.88

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP92374-MB1	1G121300.D	03/24/16	09:52	1.75	2.38	8.95	10.88
OP92374-BS1	1G121301.D	03/24/16	10:09	1.75	2.38	8.95	10.88
OP92384-BS1	1G121303.D	03/24/16	10:59	1.75	2.38	8.95	10.88
OP92410-MB1	1G121311.D	03/24/16	12:13	1.76	2.39	8.96	10.89
OP92344-MB2	1G121311.D	03/24/16	12:13	1.76	2.39	8.96	10.89
OP92028-MB3	1G121311.D	03/24/16	12:13	1.76	2.39	8.96	10.89
OP92408-MB1	1G121311.D	03/24/16	12:13	1.76	2.39	8.96	10.89
OP92343-MB2	1G121311.D	03/24/16	12:13	1.76	2.39	8.96	10.89
OP92028-BS3	1G121312.D	03/24/16	12:31	1.75	2.38	8.95	10.88
OP92408-BS1	1G121312.D	03/24/16	12:31	1.75	2.38	8.95	10.88
OP92344-BS2	1G121312.D	03/24/16	12:31	1.75	2.38	8.95	10.88
OP92343-BS2	1G121312.D	03/24/16	12:31	1.75	2.38	8.95	10.88
OP92410-BS1	1G121312.D	03/24/16	12:31	1.75	2.38	8.95	10.88
ZZZZZZ	1G121313.D	03/24/16	12:48	1.75	2.38	8.95	10.88
ZZZZZZ	1G121314.D	03/24/16	13:06	1.75	2.38	8.95	10.89

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3944-CC3933	**Injection Date:**	03/24/16
Lab File ID:	1G121316.D	**Injection Time:**	15:53
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.75	2.39	8.95	10.88

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	1G121319.D	03/24/16	16:46	1.75	2.39	8.95	10.88
JC16609-1	1G121320.D	03/24/16	17:04	1.75	2.39	8.95	10.88
OP92374-MS	1G121321.D	03/24/16	17:22	1.75	2.38	8.95	10.88
OP92374-MSD	1G121322.D	03/24/16	17:39	1.75	2.39	8.95	10.88
ZZZZZZ	1G121323.D	03/24/16	17:57	1.75	2.39	8.95	10.88
JC16312-6T	1G121324R.D	03/24/16	18:14	1.75	2.38	8.95	10.88
ZZZZZZ	1G121324.D	03/24/16	18:14	1.75	2.38	8.95	10.88
OP92408-MS	1G121325.D	03/24/16	18:32	1.75	2.39	8.95	10.88
OP92408-LS23	1G121325.D	03/24/16	18:32	1.75	2.39	8.95	10.88
OP92408-MSD	1G121326.D	03/24/16	18:50	1.75	2.39	8.95	10.88
OP92408-LB28	1G121327.D	03/24/16	19:07	1.75	2.39	8.95	10.88
ZZZZZZ	1G121328.D	03/24/16	19:25	1.75	2.39	8.95	10.88
ZZZZZZ	1G121329.D	03/24/16	19:43	1.75	2.39	8.95	10.88
ZZZZZZ	1G121330.D	03/24/16	20:00	1.75	2.38	8.95	10.88
ZZZZZZ	1G121331.D	03/24/16	20:18	1.75	2.39	8.95	10.88
JC16539-22A	1G121332.D	03/24/16	20:35	1.75	2.39	8.95	10.88
ZZZZZZ	1G121333.D	03/24/16	20:53	1.75	2.38	8.95	10.88
ZZZZZZ	1G121334.D	03/24/16	21:11	1.75	2.39	8.95	10.88
OP92344-LB27	1G121335.D	03/24/16	21:28	1.75	2.38	8.95	10.88

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66362.D	**Injection Time:**	08:13
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.61	3.00	9.81	11.22

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP92235-MB1	4G66364.D	03/22/16	08:46	2.61	3.00	9.81	11.22
OP92235-BS1	4G66365.D	03/22/16	09:01	2.61	3.00	9.81	11.22
OP92235-BSD	4G66366.D	03/22/16	09:15	2.61	3.00	9.81	11.22
ZZZZZZ	4G66367.D	03/22/16	09:30	2.61	3.00	9.80	11.21
JC16312-1T	4G66367R.D	03/22/16	09:30	2.61	3.00	9.80	11.21
ZZZZZZ	4G66368.D	03/22/16	09:45	2.61	3.00	9.81	11.22
JC16312-2T	4G66368R.D	03/22/16	09:45	2.61	3.00	9.81	11.22
ZZZZZZ	4G66369.D	03/22/16	09:59	2.61	3.00	9.80	11.22
JC16312-3T	4G66369R.D	03/22/16	09:59	2.61	3.00	9.80	11.22
JC16312-5T	4G66371R.D	03/22/16	10:29	2.61	3.00	9.81	11.22
ZZZZZZ	4G66371.D	03/22/16	10:29	2.61	3.00	9.81	11.22
ZZZZZZ	4G66372.D	03/22/16	10:43	2.60	3.00	9.80	11.22
JC16312-6T	4G66372.D	03/22/16	10:43	2.60	3.00	9.80	11.22
JC16312-7T	4G66373R.D	03/22/16	10:58	2.61	3.00	9.81	11.22
ZZZZZZ	4G66373.D	03/22/16	10:58	2.61	3.00	9.81	11.22
ZZZZZZ	4G66374.D	03/22/16	11:13	2.60	3.00	9.80	11.22
JC16312-8T	4G66374R.D	03/22/16	11:13	2.60	3.00	9.80	11.22
ZZZZZZ	4G66375.D	03/22/16	11:27	2.61	3.00	9.81	11.22
JC16312-9T	4G66375R.D	03/22/16	11:27	2.61	3.00	9.81	11.22
ZZZZZZ	4G66378.D	03/22/16	11:42	2.62	3.01	9.80	11.22

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1746-CC1741	**Injection Date:**	03/22/16
Lab File ID:	4G66376.D	**Injection Time:**	11:57
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.61	3.00	9.81	11.22

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC16312-4T	4G66379R.D	03/22/16	12:41	2.62	3.00	9.82	11.23
ZZZZZZ	4G66379.D	03/22/16	12:41	2.62	3.00	9.82	11.23
OP92190-LB11	4G66382.D	03/22/16	13:39	2.61	3.00	9.80	11.21
ZZZZZZ	4G66380A.D	03/22/16	13:54	2.61	3.01	9.80	11.22
ZZZZZZ	4G66381A.D	03/22/16	14:42	2.62	3.00	9.81	11.23
ZZZZZZ	4G66383A.D	03/22/16	15:02	2.62	3.01	9.82	11.23
JC16190-13A	4G66384A.D	03/22/16	15:17	2.61	3.01	9.81	11.22
ZZZZZZ	4G66385A.D	03/22/16	15:32	2.61	3.01	9.80	11.22
ZZZZZZ	4G66386A.D	03/22/16	15:46	2.61	3.01	9.80	11.22
ZZZZZZ	4G66387A.D	03/22/16	16:01	2.61	3.01	9.80	11.22
ZZZZZZ	4G66388A.D	03/22/16	16:16	2.61	3.01	9.80	11.22
ZZZZZZ	4G66389A.D	03/22/16	16:30	2.61	3.01	9.80	11.22
ZZZZZZ	4G66390A.D	03/22/16	16:45	2.61	3.01	9.80	11.22
ZZZZZZ	4G66391A.D	03/22/16	17:00	2.60	3.00	9.81	11.22
ZZZZZZ	4G66392A.D	03/22/16	17:14	2.61	3.01	9.80	11.22
OP92190-MS	4G66393A.D	03/22/16	17:29	2.61	3.01	9.81	11.22
OP92190-LS8	4G66393A.D	03/22/16	17:29	2.61	3.01	9.81	11.22
OP92190-MSD	4G66394A.D	03/22/16	17:44	2.61	3.01	9.80	11.22

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: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICC3933
Lab FileID: 1G120783.D

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration

Calibration Files
2 =1G120780.D 5 =1G120781.D 10 =1G120782.D 25 =1G120783.D
50 =1G120784.D 100 =1G120786.D 1 =1G120779.D 75 =1G120785.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.189	1.125	1.117	1.143	1.134	1.112	1.202	1.122	1.143	2.97
3) alpha-BHC	1.179	1.172	1.205	1.325	1.434	1.523	1.254	1.485	1.322	10.73
4) gamma-BHC	1.135	1.156	1.173	1.276	1.352	1.406	1.215	1.383	1.262	8.53
5) Heptachlor	1.361	1.279	1.286	1.338	1.377	1.380	1.504	1.376	1.363	5.12
6) beta-BHC	0.675	0.661	0.663	0.674	0.661	0.635	0.719	0.644	0.666	3.78
7) delta-BHC	1.051	1.072	1.091	1.182	1.275	1.352	1.102	1.320	1.181	10.15
8) Aldrin	1.191	1.132	1.146	1.216	1.264	1.299	1.200	1.283	1.216	5.06
9) Heptachlor E	1.225	1.214	1.206	1.240	1.245	1.229	1.365	1.235	1.245	4.03
10) gamma-Chlord	1.240	1.202	1.194	1.227	1.238	1.239	1.297	1.236	1.234	2.51
11) alpha-Chlord	1.251	1.211	1.212	1.241	1.245	1.232	1.284	1.237	1.239	1.86
12) Endosulfan I	1.190	1.159	1.159	1.174	1.184	1.172	1.260	1.176	1.184	2.73
13) 4,4'-DDE	0.990	0.973	0.983	1.043	1.090	1.130	1.025	1.108	1.043	5.80
14) Dieldrin	1.130	1.119	1.118	1.177	1.208	1.228	1.240	1.220	1.180	4.33
15) Endrin	1.081	1.025	1.033	1.065	1.075	1.052	1.127	1.067	1.066	2.97
16) 4,4'-DDD	0.847	0.824	0.845	0.894	0.923	0.949	0.927	0.938	0.893	5.41
17) Endosulfan I	1.190	1.134	1.137	1.153	1.148	1.131	1.244	1.140	1.160	3.36
18) 4,4'-DDT	0.758	0.760	0.810	0.901	0.947	0.969	0.727	0.956	0.853	11.79
19) Endrin Aldeh	0.975	0.959	0.947	0.935	0.931	0.940	1.077	0.942	0.963	5.00
20) Endosulfan S	1.126	1.094	1.104	1.095	1.084	1.054	1.098	1.066	1.090	2.03
21) Methoxychlor	0.641	0.598	0.595	0.629	0.611	0.585	0.682	0.600	0.618	5.20
22) Mirex	1.281	1.251	1.268	1.207	1.126	1.028	1.449	1.062	1.209	11.24
23) Endrin Keton	1.163	1.140	1.185	1.202	1.226	1.237	1.176	1.239	1.196	3.03
24) Decachlorobi	1.491	1.417	1.405	1.360	1.280	1.194	1.598	1.231	1.372	9.89
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.018				0.018	0.00
27) Toxaphene{B}					0.047				0.047	0.00
28) Toxaphene{C}					0.035				0.035	0.00
29) Toxaphene{D}					0.033				0.033	0.00
30) Toxaphene{E}					0.032				0.032	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.036				0.036	0.00
33) Chlordane {B					0.047				0.047	0.00
34) Chlordane {C					0.154				0.154	0.00
35) Chlordane {D					0.243				0.243	0.00
36) Chlordane {E					0.036				0.036	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.973	1.021	0.987	0.986	0.944	0.889	0.971	0.908	0.960	4.55
3) alpha-BHC	1.464	1.442	1.437	1.424	1.386	1.319	1.597	1.341	1.426	5.99
4) gamma-BHC	1.291	1.283	1.270	1.274	1.236	1.174	1.550	1.194	1.284	9.01

Initial Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICC3933
Lab FileID: 1G120783.D

5)	Heptachlor	1.224	1.139	1.104	1.119	1.073	0.972	1.449	1.001	1.135	13.16
6)	beta-BHC	0.586	0.579	0.559	0.556	0.528	0.488	0.623	0.507	0.553	7.99
7)	delta-BHC	1.342	1.301	1.268	1.264	1.237	1.178	1.484	1.200	1.284	7.50
8)	Aldrin	1.207	1.183	1.140	1.132	1.067	0.996	1.244	1.024	1.124	7.86
9)	Heptachlor E	1.143	1.067	1.054	1.028	0.966	0.894	1.208	0.922	1.035	10.36
10)	gamma-Chlord	1.090	1.034	1.007	0.992	0.955	0.892	1.119	0.918	1.001	7.92
11)	alpha-Chlord	1.072	1.034	0.984	0.972	0.913	0.853	1.273	0.879	0.998	13.43
12)	Endosulfan I	1.024	0.990	0.963	0.960	0.901	0.834	1.107	0.861	0.955	9.36
13)	4,4'-DDE	1.043	1.003	1.002	0.997	0.944	0.881	1.104	0.903	0.985	7.45
14)	Dieldrin	1.166	1.070	1.062	1.052	0.992	0.921	1.147	0.947	1.045	8.41
15)	Endrin	1.148	0.963	0.942	0.933	0.864	0.782	1.265	0.820	0.965	17.05
16)	4,4'-DDD	0.985	0.904	0.862	0.854	0.796	0.744	0.911	0.762	0.852	9.59
17)	Endosulfan I	1.024	0.979	0.924	0.921	0.863	0.796	1.092	0.825	0.928	10.85
18)	4,4'-DDT	0.544	0.538	0.573	0.667	0.677	0.652	0.487	0.657	0.599	12.09
19)	Endrin Aldeh	0.750	0.718	0.719	0.700	0.668	0.639	0.784	0.651	0.704	7.07
20)	Endosulfan S	0.821	0.812	0.811	0.793	0.757	0.703	0.911	0.724	0.792	8.20
21)	Methoxychlor	0.287	0.294	0.311	0.350	0.346	0.323	0.270	0.335	0.315	9.25
22)	Mirex	0.584	0.593	0.603	0.602	0.573	0.521	0.639	0.536	0.581	6.52
23)	Endrin Keton	0.785	0.819	0.854	0.847	0.817	0.781	0.917	0.794	0.827	5.48
24)	Decachlorobi	0.610	0.576	0.507	0.555	0.527	0.486	0.686	0.506	0.557	11.95

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.021	0.021	0.00
27)	Toxaphene{B}	0.024	0.024	0.00
28)	Toxaphene{C}	0.041	0.041	0.00
29)	Toxaphene{D}	0.024	0.024	0.00
30)	Toxaphene{E}	0.018	0.018	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.033	0.033	0.00
33)	Chlordane {B	0.033	0.033	0.00
34)	Chlordane {C	0.110	0.110	0.00
35)	Chlordane {D	0.181	0.181	0.00
36)	Chlordane {E	0.030	0.030	0.00

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

1PST3933.M Mon Mar 14 19:39:55 2016 RPT1

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICV3933
Lab FileID: 1G120789.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD2B.CH
Acq On    : 3-14-16 02:02:58 PM                      Operator: dharas
Sample    : icv3933-25                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 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	106	0.00	1.15- 1.21
2	SAB	Tetrachloro-m-xylene	1.143	0.986	13.7	91	0.00	1.74- 1.80
3	A	alpha-BHC	1.322	1.139	13.8	91	0.00	2.21- 2.27
4	MA	gamma-BHC	1.262	1.101	12.8	91	0.00	2.50- 2.56
5	MA	Heptachlor	1.363	1.151	15.6	91	0.00	2.97- 3.03
6	B	beta-BHC	0.666	0.581	12.8	91	0.00	2.58- 2.64
7	B	delta-BHC	1.181	1.067	9.7	95	0.00	2.76- 2.82
8	MB	Aldrin	1.216	1.057	13.1	92	0.00	3.30- 3.36
9	B	Heptachlor Epoxide	1.245	1.082	13.1	92	0.00	4.00- 4.06
10	B	gamma-Chlordane	1.234	1.093	11.4	94	0.00	4.15- 4.21
11	B	alpha-Chlordane	1.239	1.090	12.0	93	0.00	4.32- 4.38
12	A	Endosulfan I	1.184	1.011	14.6	91	0.00	4.49- 4.55
13	B	4,4'-DDE	1.043	0.918	12.0	93	0.00	4.43- 4.49
14	MA	Dieldrin	1.180	1.037	12.1	93	0.00	4.81- 4.87
15	MA	Endrin	1.066	0.939	11.9	93	0.00	5.12- 5.18
16	A	4,4'-DDD	0.893	0.791	11.4	94	0.00	5.25- 5.32
17	B	Endosulfan II	1.160	1.001	13.7	92	0.00	5.44- 5.50
18	MA	4,4'-DDT	0.853	0.768	10.0	90	0.00	5.66- 5.72
19	B	Endrin Aldehyde	0.963	0.866	10.1	98	0.00	6.07- 6.13
20	B	Endosulfan Sulfate	1.090	0.953	12.6	92	0.00	6.75- 6.81
21	A	Methoxychlor	0.618	0.532	13.9	89	0.00	6.44- 6.50
23	B	Endrin Ketone	1.196	1.058	11.5	93	0.00	7.17- 7.23
24	SA	Decachlorobiphenyl	1.372	1.262	8.0	98	0.00	8.95- 9.01

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.52- 1.58
2	SAB	Tetrachloro-m-xylene	0.960	0.835	13.0	89	0.00	2.37- 2.43
3	A	alpha-BHC	1.426	1.247	12.6	93	0.00	3.04- 3.10
4	MA	gamma-BHC	1.284	1.102	14.2	91	0.00	3.47- 3.53
5	MA	Heptachlor	1.135	0.975	14.1	92	0.00	4.04- 4.10
6	B	beta-BHC	0.553	0.469	15.2	89	0.00	3.55- 3.61
7	B	delta-BHC	1.284	1.149	10.5	96	0.00	3.95- 4.01
8	MB	Aldrin	1.124	0.991	11.8	92	0.00	4.50- 4.56
9	B	Heptachlor Epoxide	1.035	0.918	11.3	94	0.00	5.32- 5.38
10	B	gamma-Chlordane	1.001	0.909	9.2	97	0.00	5.61- 5.67
11	B	alpha-Chlordane	0.998	0.869	12.9	94	0.00	5.83- 5.89
12	A	Endosulfan I	0.955	0.812	15.0	89	0.00	5.93- 5.99
13	B	4,4'-DDE	0.985	0.890	9.6	94	0.00	6.10- 6.16
14	MA	Dieldrin	1.045	0.947	9.4	95	0.00	6.36- 6.42

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICV3933
Lab FileID: 1G120789.D

15	MA	Endrin	0.965	0.850	11.9	96	0.00	6.87- 6.93
16	A	4,4'-DDD	0.852	0.784	8.0	97	0.00	7.05- 7.11
17	B	Endosulfan II	0.928	0.822	11.4	94	0.00	7.22- 7.28
18	MA	4,4'-DDT	0.599	0.607	-1.3	96	0.00	7.59- 7.65
19	B	Endrin Aldehyde	0.704	0.700	0.6	106	0.00	7.79- 7.85
20	B	Endosulfan Sulfate	0.792	0.723	8.7	96	0.00	8.27- 8.33
21	A	Methoxychlor	0.315	0.322	-2.2	97	0.00	8.84- 8.90
23	B	Endrin Ketone	0.827	0.784	5.2	98	0.00	9.23- 9.29
24	SA	Decachlorobiphenyl	0.557	0.534	4.1	102	0.00	10.87-10.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120783.D 1PST3933.M Mon Mar 14 19:39:00 2016 RPT1

6.10.2

6

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICV3933
Lab FileID: 1G120790.D

```
                    Evaluate Continuing Calibration Report

 Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD1A.CH Vial: 14
 Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD2B.CH
 Acq On    : 3-14-16 02:20:25 PM                       Operator: dharas
 Sample    : icv3933-25                                Inst    : GC1G
 Misc      : op91921,g1g3933,980,,,5,1                 Multiplr: 1.00
 IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

 Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
 Title        : PEST/PCB
 Last Update  : Mon Mar 14 19:32:23 2016
 Response via : Multiple Level Calibration

 Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
 Max. RRF Dev :  20%     Max. Rel. Area : 200%

        Compound                AvgRF   CCRF      %Dev Area% Dev(min)RT Window
 ---------------------------------------------------------------------------

 1 I   1-bromo-2-nitrobenzene   1.000   1.000      0.0  108   0.00    1.16- 1.22
22     Mirex                    1.209   1.194      1.2  107   0.00    6.55- 6.61

*****  Signal #2   *****

 1 I   1-bromo-2-nitrobenzene   1.000   1.000      0.0  107   0.00    1.52- 1.58
22     Mirex                    0.581   0.616     -6.0  109   0.00    9.16- 9.22

---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    1G120783.D 1PST3933.M       Mon Mar 14 19:39:01 2016   RPT1
```

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICV3933
Lab FileID: 1G120791.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD2B.CH
Acq On    : 3-14-16 02:37:51 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 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	100	0.00	1.09- 1.29
32	Chlordane {A}	0.036	0.041	-13.9	112	0.00	2.82- 3.02
33	Chlordane {B}	0.047	0.046	2.1	99	0.00	3.37- 3.57
34	Chlordane {C}	0.154	0.141	8.4	92	0.00	4.08- 4.28
35	Chlordane {D}	0.243	0.230	5.3	95	0.00	4.24- 4.44
36	Chlordane {E}	0.036	0.037	-2.8	103	0.00	5.27- 5.47

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.45- 1.65
32	Chlordane {A}	0.033	0.035	-6.1	112	0.00	3.78- 3.98
33	Chlordane {B}	0.033	0.030	9.1	98	0.00	4.62- 4.82
34	Chlordane {C}	0.110	0.101	8.2	96	0.00	5.54- 5.74
35	Chlordane {D}	0.181	0.167	7.7	97	0.00	5.76- 5.96
36	Chlordane {E}	0.030	0.027	10.0	94	0.00	7.23- 7.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120784.D 1PST3933.M Mon Mar 14 19:45:30 2016 RPT1

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3933-ICV3933
Lab FileID: 1G120792.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD2B.CH
Acq On    : 3-14-16 02:55:19 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 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	99	0.00	1.08- 1.28
26	L8	Toxaphene{A}	0.018	0.020	-11.1	108	0.00	4.75- 4.95
27	L8	Toxaphene{B}	0.047	0.050	-6.4	104	0.00	5.36- 5.56
28	L8	Toxaphene{C}	0.035	0.034	2.9	94	0.00	5.53- 5.73
29	L8	Toxaphene{D}	0.033	0.037	-12.1	111	0.00	5.87- 6.07
30	L8	Toxaphene{E}	0.032	0.033	-3.1	104	0.00	6.50- 6.70

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.45- 1.65
26	L8	Toxaphene{A}	0.021	0.023	-9.5	103	0.00	6.26- 6.46
27	L8	Toxaphene{B}	0.024	0.026	-8.3	101	0.00	7.12- 7.32
28	L8	Toxaphene{C}	0.041	0.045	-9.8	107	0.00	7.28- 7.48
29	L8	Toxaphene{D}	0.024	0.027	-12.5	105	0.00	7.72- 7.92
30	L8	Toxaphene{E}	0.018	0.020	-11.1	106	0.00	8.63- 8.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120784.D 1PST3933.M Mon Mar 14 19:43:08 2016 RPT1

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121297.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On    : 3-24-16 08:59:20 AM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.143	0.980	14.3	100	0.00	1.72- 1.78
3	A	alpha-BHC	1.322	1.154	12.7	101	0.00	2.19- 2.25
4	MA	gamma-BHC	1.262	1.081	14.3	99	0.00	2.48- 2.54
5	MA	Heptachlor	1.363	1.177	13.6	103	0.00	2.96- 3.02
6	B	beta-BHC	0.666	0.538	19.2	93	0.00	2.56- 2.62
7	B	delta-BHC	1.181	0.981	16.9	97	0.00	2.74- 2.80
8	MB	Aldrin	1.216	1.042	14.3	100	0.00	3.28- 3.34
9	B	Heptachlor Epoxide	1.245	0.996	20.0	94	0.00	3.97- 4.03
10	B	gamma-Chlordane	1.234	0.996	19.3	95	0.00	4.13- 4.19
11	B	alpha-Chlordane	1.239	1.014	18.2	95	0.00	4.29- 4.35
12	A	Endosulfan I	1.184	0.967	18.3	96	0.00	4.47- 4.53
13	B	4,4'-DDE	1.043	0.897	14.0	100	0.00	4.41- 4.47
14	MA	Dieldrin	1.180	0.974	17.5	96	0.00	4.78- 4.84
15	MA	Endrin	1.066	0.937	12.1	102	0.00	5.10- 5.16
16	A	4,4'-DDD	0.893	0.753	15.7	98	0.00	5.22- 5.29
17	B	Endosulfan II	1.160	0.952	17.9	96	0.00	5.42- 5.48
18	MA	4,4'-DDT	0.853	0.781	8.4	101	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.963	0.781	18.9	97	0.00	6.04- 6.10
20	B	Endosulfan Sulfate	1.090	0.907	16.8	96	0.00	6.72- 6.78
21	A	Methoxychlor	0.618	0.537	13.1	99	0.00	6.41- 6.47
22		Mirex	1.209	0.954	21.1#	92	0.00	6.52- 6.58
23	B	Endrin Ketone	1.196	0.980	18.1	95	0.00	7.14- 7.20
24	SA	Decachlorobiphenyl	1.372	1.205	12.2	103	0.00	8.92- 8.98
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.07- 1.27
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.07- 1.27
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121297.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.960	0.827	13.9	95	0.00	2.35- 2.41
3	A	alpha-BHC	1.426	1.185	16.9	94	0.00	3.02- 3.08
4	MA	gamma-BHC	1.284	1.037	19.2	92	0.00	3.45- 3.51
5	MA	Heptachlor	1.135	0.944	16.8	95	0.00	4.03- 4.09
6	B	beta-BHC	0.553	0.437	21.0#	89	0.00	3.54- 3.60
7	B	delta-BHC	1.284	1.003	21.9#	90	0.00	3.93- 3.99
8	MB	Aldrin	1.124	0.908	19.2	91	0.00	4.48- 4.54
9	B	Heptachlor Epoxide	1.035	0.810	21.7#	89	0.00	5.30- 5.36
10	B	gamma-Chlordane	1.001	0.794	20.7#	91	0.00	5.59- 5.65
11	B	alpha-Chlordane	0.998	0.762	23.6#	89	0.00	5.81- 5.87
12	A	Endosulfan I	0.955	0.757	20.7#	89	0.00	5.91- 5.97
13	B	4,4'-DDE	0.985	0.785	20.3#	89	0.00	6.08- 6.14
14	MA	Dieldrin	1.045	0.833	20.3#	90	0.00	6.34- 6.40
15	MA	Endrin	0.965	0.775	19.7	94	0.00	6.85- 6.91
16	A	4,4'-DDD	0.852	0.669	21.5#	89	0.00	7.03- 7.09
17	B	Endosulfan II	0.928	0.727	21.7#	89	0.00	7.20- 7.26
18	MA	4,4'-DDT	0.599	0.552	7.8	94	0.00	7.57- 7.63
19	B	Endrin Aldehyde	0.704	0.554	21.3#	90	0.00	7.78- 7.84
20	B	Endosulfan Sulfate	0.792	0.632	20.2#	90	0.00	8.25- 8.31
21	A	Methoxychlor	0.315	0.294	6.7	95	0.00	8.82- 8.88
22		Mirex	0.581	0.458	21.2#	86	0.00	9.14- 9.20
23	B	Endrin Ketone	0.827	0.668	19.2	89	0.00	9.21- 9.27
24	SA	Decachlorobiphenyl	0.557	0.456	18.1	93	0.00	10.85-10.91
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120783.D 1PST3933.M Thu Mar 24 11:47:08 2016 RPT1

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121316.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD2B.CH
Acq On    : 3-24-16 03:53:54 PM                      Operator: rebeccak
Sample    : cc3933-50                                Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.143	1.074	6.0	109	0.00	1.72- 1.78
3	A	alpha-BHC	1.322	1.345	-1.7	108	0.00	2.19- 2.25
4	MA	gamma-BHC	1.262	1.221	3.2	104	0.00	2.48- 2.54
5	MA	Heptachlor	1.363	1.316	3.4	110	0.00	2.96- 3.02
6	B	beta-BHC	0.666	0.580	12.9	101	0.00	2.56- 2.62
7	B	delta-BHC	1.181	1.089	7.8	98	0.00	2.74- 2.80
8	MB	Aldrin	1.216	1.179	3.0	107	0.00	3.28- 3.34
9	B	Heptachlor Epoxide	1.245	1.097	11.9	101	0.00	3.98- 4.04
10	B	gamma-Chlordane	1.234	1.092	11.5	101	0.00	4.13- 4.19
11	B	alpha-Chlordane	1.239	1.109	10.5	102	0.00	4.29- 4.35
12	A	Endosulfan I	1.184	1.075	9.2	104	0.00	4.47- 4.53
13	B	4,4'-DDE	1.043	1.026	1.6	108	0.00	4.41- 4.47
14	MA	Dieldrin	1.180	1.102	6.6	105	0.00	4.78- 4.84
15	MA	Endrin	1.066	1.057	0.8	113	0.00	5.10- 5.16
16	A	4,4'-DDD	0.893	0.846	5.3	105	0.00	5.22- 5.29
17	B	Endosulfan II	1.160	1.046	9.8	105	0.00	5.42- 5.48
18	MA	4,4'-DDT	0.853	0.918	-7.6	111	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.963	0.853	11.4	105	0.00	6.04- 6.10
20	B	Endosulfan Sulfate	1.090	0.972	10.8	103	0.00	6.72- 6.78
21	A	Methoxychlor	0.618	0.598	3.2	112	0.00	6.41- 6.47
22		Mirex	1.209	1.012	16.3	103	0.00	6.52- 6.58
23	B	Endrin Ketone	1.196	1.080	9.7	101	0.00	7.14- 7.20
24	SA	Decachlorobiphenyl	1.372	1.279	6.8	115	0.00	8.92- 8.98
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.07- 1.27
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.07- 1.27
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121316.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	114	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.960	0.871	9.3	105	0.00	2.36- 2.42
3	A	alpha-BHC	1.426	1.256	11.9	104	0.00	3.02- 3.08
4	MA	gamma-BHC	1.284	1.065	17.1	98	0.00	3.45- 3.51
5	MA	Heptachlor	1.135	0.972	14.4	103	0.00	4.03- 4.09
6	B	beta-BHC	0.553	0.444	19.7	96	0.00	3.54- 3.60
7	B	delta-BHC	1.284	1.004	21.8#	93	0.00	3.93- 3.99
8	MB	Aldrin	1.124	0.912	18.9	98	0.00	4.48- 4.54
9	B	Heptachlor Epoxide	1.035	0.815	21.3#	96	0.00	5.30- 5.36
10	B	gamma-Chlordane	1.001	0.804	19.7	96	0.00	5.59- 5.65
11	B	alpha-Chlordane	0.998	0.771	22.7#	96	0.00	5.81- 5.87
12	A	Endosulfan I	0.955	0.767	19.7	97	0.00	5.91- 5.97
13	B	4,4'-DDE	0.985	0.802	18.6	97	0.00	6.08- 6.14
14	MA	Dieldrin	1.045	0.841	19.5	97	0.00	6.34- 6.40
15	MA	Endrin	0.965	0.786	18.5	104	0.00	6.85- 6.91
16	A	4,4'-DDD	0.852	0.675	20.8#	97	0.00	7.03- 7.09
17	B	Endosulfan II	0.928	0.732	21.1#	97	0.00	7.20- 7.26
18	MA	4,4'-DDT	0.599	0.623	-4.0	105	0.00	7.57- 7.63
19	B	Endrin Aldehyde	0.704	0.567	19.5	97	0.00	7.77- 7.83
20	B	Endosulfan Sulfate	0.792	0.634	19.9	96	0.00	8.25- 8.31
21	A	Methoxychlor	0.315	0.325	-3.2	107	0.00	8.82- 8.88
22		Mirex	0.581	0.481	17.2	96	0.00	9.14- 9.20
23	B	Endrin Ketone	0.827	0.675	18.4	94	0.00	9.21- 9.27
24	SA	Decachlorobiphenyl	0.557	0.449	19.4	97	0.00	10.85-10.91
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.44- 1.64
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.44- 1.64
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120784.D 1PST3933.M Fri Mar 25 11:18:08 2016 RPT1

6.10.7

6

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121336.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD2B.CH
Acq On    : 3-24-16 09:46:29 PM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92408,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	132	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.143	1.020	10.8	117	0.00	1.72- 1.78
3	A	alpha-BHC	1.322	1.188	10.1	118	0.00	2.19- 2.25
4	MA	gamma-BHC	1.262	1.138	9.8	117	0.00	2.48- 2.54
5	MA	Heptachlor	1.363	1.205	11.6	119	0.00	2.96- 3.02
6	B	beta-BHC	0.666	0.590	11.4	115	0.00	2.56- 2.62
7	B	delta-BHC	1.181	0.965	18.3	107	0.00	2.74- 2.80
8	MB	Aldrin	1.216	1.105	9.1	120	0.00	3.28- 3.34
9	B	Heptachlor Epoxide	1.245	1.110	10.8	118	0.00	3.98- 4.04
10	B	gamma-Chlordane	1.234	1.093	11.4	117	0.00	4.13- 4.19
11	B	alpha-Chlordane	1.239	1.096	11.5	116	0.00	4.30- 4.36
12	A	Endosulfan I	1.184	1.044	11.8	117	0.00	4.47- 4.53
13	B	4,4'-DDE	1.043	0.971	6.9	123	0.00	4.41- 4.47
14	MA	Dieldrin	1.180	1.047	11.3	117	0.00	4.78- 4.84
15	MA	Endrin	1.066	0.939	11.9	116	0.00	5.10- 5.16
16	A	4,4'-DDD	0.893	0.794	11.1	117	0.00	5.22- 5.29
17	B	Endosulfan II	1.160	1.002	13.6	114	0.00	5.42- 5.48
18	MA	4,4'-DDT	0.853	0.803	5.9	117	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.963	0.849	11.8	120	0.00	6.04- 6.10
20	B	Endosulfan Sulfate	1.090	0.878	19.4	105	0.00	6.72- 6.78
21	A	Methoxychlor	0.618	0.555	10.2	116	0.00	6.42- 6.48
22		Mirex	1.209	1.061	12.2	116	0.00	6.52- 6.58
23	B	Endrin Ketone	1.196	0.922	22.9#	101	0.00	7.14- 7.20
24	SA	Decachlorobiphenyl	1.372	1.328	3.2	129	0.00	8.92- 8.98
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.07- 1.27
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.07- 1.27
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3944-CC3933
Lab FileID: 1G121336.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	134	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.960	0.888	7.5	121	0.00	2.36- 2.42
3	A	alpha-BHC	1.426	1.272	10.8	120	0.00	3.02- 3.08
4	MA	gamma-BHC	1.284	1.139	11.3	120	0.00	3.45- 3.51
5	MA	Heptachlor	1.135	0.997	12.2	120	0.00	4.03- 4.09
6	B	beta-BHC	0.553	0.497	10.1	120	0.00	3.54- 3.60
7	B	delta-BHC	1.284	1.041	18.9	111	0.00	3.94- 4.00
8	MB	Aldrin	1.124	1.011	10.1	120	0.00	4.48- 4.54
9	B	Heptachlor Epoxide	1.035	0.913	11.8	119	0.00	5.30- 5.36
10	B	gamma-Chlordane	1.001	0.901	10.0	122	0.00	5.59- 5.65
11	B	alpha-Chlordane	0.998	0.867	13.1	120	0.00	5.81- 5.87
12	A	Endosulfan I	0.955	0.857	10.3	120	0.00	5.91- 5.97
13	B	4,4'-DDE	0.985	0.891	9.5	120	0.00	6.08- 6.14
14	MA	Dieldrin	1.045	0.929	11.1	119	0.00	6.34- 6.40
15	MA	Endrin	0.965	0.811	16.0	117	0.00	6.85- 6.91
16	A	4,4'-DDD	0.852	0.751	11.9	118	0.00	7.03- 7.09
17	B	Endosulfan II	0.928	0.804	13.4	117	0.00	7.20- 7.26
18	MA	4,4'-DDT	0.599	0.623	-4.0	125	0.00	7.57- 7.63
19	B	Endrin Aldehyde	0.704	0.635	9.8	122	0.00	7.77- 7.83
20	B	Endosulfan Sulfate	0.792	0.646	18.4	109	0.00	8.25- 8.31
21	A	Methoxychlor	0.315	0.327	-3.8	126	0.00	8.82- 8.88
22		Mirex	0.581	0.525	9.6	117	0.00	9.14- 9.20
23	B	Endrin Ketone	0.827	0.655	20.8#	104	0.00	9.21- 9.27
24	SA	Decachlorobiphenyl	0.557	0.500	10.2	121	0.00	10.85-10.91
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G120783.D 1PST3933.M Fri Mar 25 12:17:30 2016 RPT1

Initial Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICC1741
Lab FileID: 4G66175.D

Response Factor Report GC4G

Method : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Sat Mar 19 13:31:47 2016
Response via : Initial Calibration

Calibration Files
2 =4g66172.D 5 =4g66173.D 10 =4g66174.D 25 =4g66175.D
50 =4g66176.D 100 =4g66178.D 1 =4g66171.D

Compound	2	5	10	25	50	100	1	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	----------ISTD----------								
2)SABTetrachloro-m-xyl	0.906	0.953	0.975	0.949	1.018	1.019	1.022	0.977	4.56
3)A alpha-BHC	1.226	1.254	1.275	1.321	1.426	1.469	1.203	1.310	7.74
4)MAgamma-BHC	1.145	1.124	1.129	1.162	1.252	1.290	1.139	1.177	5.62
5)MAHeptachlor	1.064	1.055	1.080	1.137	1.223	1.271	1.156	1.141	7.24
6)B beta-BHC	0.585	0.630	0.604	0.595	0.612	0.603	0.546	0.596	4.38
7)B delta-BHC	1.115	1.068	1.077	1.109	1.190	1.232	1.103	1.128	5.38
8)MBAldrin	1.097	1.085	1.149	1.148	1.237	1.265	1.150	1.162	5.75
9)B Heptachlor Epoxid	1.060	1.028	1.036	1.064	1.129	1.142	1.109	1.081	4.19
10)B gamma-Chlordane	1.009	0.984	1.018	1.048	1.124	1.158	1.105	1.064	6.17
11)B alpha-Chlordane	1.011	0.952	1.003	1.030	1.096	1.122	1.135	1.050	6.51
12)A Endosulfan I	1.033	1.021	1.071	1.104	1.175	1.197	1.037	1.091	6.49
13)B 4,4'-DDE	0.869	0.779	0.817	0.851	0.935	0.986	0.927	0.881	8.21
14)MADieldrin	1.010	0.967	1.001	1.050	1.141	1.192	1.133	1.071	7.92
15)MAEndrin	0.873	0.874	0.892	0.931	1.014	1.047	0.943	0.939	7.29
16)A 4,4'-DDD	0.660	0.701	0.759	0.781	0.848	0.887	0.711	0.764	10.69
17)B Endosulfan II	0.864	0.852	0.894	0.916	0.994	1.034	0.900	0.922	7.32
18)MA4,4'-DDT	0.329	0.418	0.482	0.563	0.672	0.762	0.385	0.516	30.61
----- Quadratic regression ----- Coefficient = 0.9997									
Response Ratio = -0.01401 + 0.57302 *A + 0.09838 *A^2									
19)B Endrin Aldehyde	0.692	0.707	0.757	0.779	0.857	0.875	0.725	0.770	9.34
20)B Endosulfan Sulfat	0.696	0.706	0.735	0.777	0.846	0.912	0.681	0.765	11.27
21)A Methoxychlor	0.237	0.246	0.276	0.303	0.346	0.372	0.306	0.298	16.67
22) Mirex	0.763	0.736	0.758	0.749	0.790	0.836	0.818	0.778	4.78
23)B Endrin Ketone	0.788	0.799	0.855	0.921	1.007	1.044	0.840	0.894	11.23
24)SADecachlorobipheny	0.958	0.966	0.970	0.971	1.005	0.999	1.137	1.001	6.24
25) I 1-bromo-2-nitrobenzen	----------ISTD----------								
26)L8Toxaphene{A}					0.041			0.041	0.00
27)L8Toxaphene{B}					0.040			0.040	0.00
28)L8Toxaphene{C}					0.035			0.035	0.00
29)L8Toxaphene{D}					0.032			0.032	0.00
30)L8Toxaphene{E}					0.025			0.025	0.00
31) I 1-bromo-2-nitrobenzen	----------ISTD----------								
32) Chlordane {A}					0.037			0.037	0.00
33) Chlordane {B}					0.048			0.048	0.00
34) Chlordane {C}					0.157			0.157	0.00
35) Chlordane {D}					0.249			0.249	0.00
36) Chlordane {E}					0.035			0.035	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen ----------ISTD----------

Initial Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICC1741
Lab FileID: 4G66175.D

```
 2)SABTetrachloro-m-xyl 0.938 0.918 0.898 0.917 0.967 0.989 1.025 0.950   4.78
 3)A alpha-BHC         1.179 1.155 1.182 1.250 1.384 1.462 1.209 1.260   9.32
 4)MAgamma-BHC         1.073 1.050 1.067 1.121 1.237 1.298 1.062 1.130   8.70
 5)MAHeptachlor        1.074 1.058 1.078 1.127 1.221 1.267 1.154 1.140   6.99
 6)B beta-BHC          0.468 0.484 0.504 0.508 0.551 0.561 0.457 0.505   7.80
 7)B delta-BHC         0.981 0.962 0.984 1.041 1.145 1.216 1.038 1.052   8.99
 8)MBAldrin            1.064 1.034 1.065 1.103 1.193 1.244 1.234 1.134   7.72
 9)B Heptachlor Epoxid 0.987 0.958 0.995 1.015 1.087 1.112 0.984 1.020   5.64
10)B gamma-Chlordane   0.978 0.980 0.992 1.017 1.088 1.124 1.104 1.040   6.03
11)B alpha-Chlordane   1.000 0.984 0.981 1.003 1.053 1.088 1.012 1.017   3.84
12)A Endosulfan I      0.905 0.940 0.943 0.968 1.019 1.042 1.169 0.998   8.91
13)B 4,4'-DDE          0.906 0.901 0.922 0.975 1.043 1.081 0.986 0.973   7.16
14)MADieldrin          0.953 0.959 0.974 1.013 1.095 1.138 0.919 1.007   7.98
15)MAEndrin            0.901 0.884 0.869 0.897 0.964 0.987 0.878 0.911   5.00
16)A 4,4'-DDD          0.903 0.804 0.794 0.821 0.896 0.915 0.961 0.871   7.36
17)B Endosulfan II     0.880 0.859 0.867 0.890 0.985 0.996 0.916 0.913   6.12
18)MA4,4'-DDT          0.402 0.504 0.522 0.610 0.704 0.759 0.398 0.557  25.23
         ----- Quadratic regression -----  Coefficient =  0.9996
              Response Ratio = -0.01457 + 0.63980 *A + 0.06368 *A^2

19)B Endrin Aldehyde   0.802 0.695 0.708 0.742 0.769 0.775 0.941 0.776  10.55
20)B Endosulfan Sulfat 0.751 0.742 0.793 0.777 0.810 0.817 0.789 0.783   3.59
21)A Methoxychlor      0.306 0.311 0.318 0.368 0.389 0.406 0.301 0.343  12.73
22)  Mirex             0.720 0.716 0.721 0.693 0.705 0.711 0.716 0.712   1.42
23)B Endrin Ketone     0.811 0.841 0.886 0.936 1.030 1.078 0.757 0.906  12.87
24)SADecachlorobipheny 0.666 0.720 0.690 0.695 0.716 0.702 0.730 0.703   3.09

25) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
26)L8Toxaphene{A}                              0.020             0.020   0.00
27)L8Toxaphene{B}                              0.025             0.025   0.00
28)L8Toxaphene{C}                              0.042             0.042   0.00
29)L8Toxaphene{D}                              0.025             0.025   0.00
30)L8Toxaphene{E}                              0.020             0.020   0.00

31) I   1-bromo-2-nitrobenzen ----------------ISTD---------------------
32)  Chlordane {A}                             0.039             0.039   0.00
33)  Chlordane {B}                             0.043             0.043   0.00
34)  Chlordane {C}                             0.156             0.156   0.00
35)  Chlordane {D}                             0.255             0.255   0.00
36)  Chlordane {E}                             0.038             0.038   0.00
-------------------------------------------------------------------------------
(#) = Out of Range

          4PST1741.M        Sat Mar 19 13:35:43 2016   RPT1
```

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICV1741
Lab FileID: 4G66181.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1741\4g66181.D\ECD1A.ch  Vial: 13
Signal #2 : C:\msdchem\1\DATA\4G1741\4g66181.D\ECD2B.ch
Acq On    : 18 Mar 2016   8:41 pm                    Operator: brittanp
Sample    : icv1741-25                               Inst    : GC4G
Misc      : op92130,g4g1741,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Sat Mar 19 13:02:16 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.977	1.020	-4.4	101	0.00	2.57- 2.63
3	A	alpha-BHC	1.310	1.370	-4.6	97	0.00	3.01- 3.07
4	MA	gamma-BHC	1.177	1.214	-3.1	98	0.00	3.30- 3.36
5	MA	Heptachlor	1.141	1.243	-8.9	103	0.00	3.58- 3.64
6	B	beta-BHC	0.596	0.622	-4.4	98	0.00	3.39- 3.45
7	B	delta-BHC	1.128	1.179	-4.5	100	0.00	3.78- 3.84
8	MB	Aldrin	1.162	1.223	-5.2	100	0.00	4.12- 4.18
9	B	Heptachlor Epoxide	1.081	1.121	-3.7	99	0.00	4.82- 4.88
10	B	gamma-Chlordane	1.064	1.133	-6.5	101	0.00	4.99- 5.05
11	B	alpha-Chlordane	1.050	1.086	-3.4	99	0.00	5.16- 5.22
12	A	Endosulfan I	1.091	1.194	-9.4	101	0.00	5.33- 5.39
13	B	4,4'-DDE	0.881	0.832	5.6	92	0.00	5.28- 5.34
14	MA	Dieldrin	1.071	1.115	-4.1	100	0.00	5.65- 5.71
15	MA	Endrin	0.939	1.007	-7.2	101	0.00	5.98- 6.04
16	A	4,4'-DDD	0.764	0.843	-10.3	101	0.01	6.12- 6.18
17	B	Endosulfan II	0.922	1.016	-10.2	104	0.00	6.31- 6.37
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	25.515	-2.1	101	0.00	6.53- 6.59
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.770	0.829	-7.7	100	0.00	6.92- 6.98
20	B	Endosulfan Sulfate	0.765	0.841	-9.9	101	0.00	7.60- 7.66
21	A	Methoxychlor	0.298	0.299	-0.3	93	0.00	7.32- 7.38
23	B	Endrin Ketone	0.894	0.979	-9.5	100	0.00	8.05- 8.11
24	SA	Decachlorobiphenyl	1.001	1.090	-8.9	105	0.00	9.78- 9.84

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	2.19- 2.25
2	SAB	Tetrachloro-m-xylene	0.950	0.960	-1.1	98	0.00	2.97- 3.03
3	A	alpha-BHC	1.260	1.308	-3.8	98	0.00	3.61- 3.67
4	MA	gamma-BHC	1.130	1.184	-4.8	99	0.00	4.04- 4.10
5	MA	Heptachlor	1.140	1.196	-4.9	100	0.00	4.61- 4.67
6	B	beta-BHC	0.505	0.540	-6.9	100	0.00	4.12- 4.18
7	B	delta-BHC	1.052	1.135	-7.9	103	0.00	4.51- 4.57
8	MB	Aldrin	1.134	1.157	-2.0	99	0.00	5.07- 5.13
9	B	Heptachlor Epoxide	1.020	1.089	-6.8	101	0.00	5.88- 5.94
10	B	gamma-Chlordane	1.040	1.098	-5.6	101	0.00	6.17- 6.23

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICV1741
Lab FileID: 4G66181.D

11	B	alpha-Chlordane	1.017	1.060	-4.2	99	0.00	6.39- 6.45
12	A	Endosulfan I	0.998	0.989	0.9	96	0.00	6.50- 6.56
13	B	4,4'-DDE	0.973	1.026	-5.4	99	0.00	6.64- 6.70
14	MA	Dieldrin	1.007	1.081	-7.3	100	0.00	6.93- 6.99
15	MA	Endrin	0.911	0.974	-6.9	102	0.00	7.44- 7.50
16	A	4,4'-DDD	0.871	0.898	-3.1	103	0.00	7.60- 7.66
17	B	Endosulfan II	0.913	1.003	-9.9	106	0.00	7.79- 7.85
			---------- True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	24.682	1.3	98	0.00	8.13- 8.19
			---------- AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.776	0.805	-3.7	102	0.00	8.36- 8.42
20	B	Endosulfan Sulfate	0.783	0.818	-4.5	99	0.00	8.83- 8.89
21	A	Methoxychlor	0.343	0.361	-5.2	92	0.00	9.36- 9.42
23	B	Endrin Ketone	0.906	0.999	-10.3	100	0.00	9.73- 9.79
24	SA	Decachlorobiphenyl	0.703	0.772	-9.8	104	0.00	11.19-11.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66175.D 4PST1741.M Sat Mar 19 13:13:51 2016 RPT1

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICV1741
Lab FileID: 4G66182.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1741\4g66182.D\ECD1A.ch  Vial: 14
Signal #2 : C:\msdchem\1\DATA\4G1741\4g66182.D\ECD2B.ch
Acq On    : 18 Mar 2016   8:56 pm                    Operator: brittanp
Sample    : icv1741-25                               Inst    : GC4G
Misc      : op92130,g4g1741,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Sat Mar 19 13:02:16 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   91   0.00    2.04- 2.10
22     Mirex                   0.778   0.877    -12.7  107   0.00    7.49- 7.55

*****  Signal #2   *****

 1 I   1-bromo-2-nitrobenzene   1.000   1.000      0.0   90   0.00    2.20- 2.26
22     Mirex                   0.712   0.852    -19.7  110   0.00    9.68- 9.74

---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    4g66175.D  4PST1741.M       Sat Mar 19 13:13:53 2016   RPT1
```

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICV1741
Lab FileID: 4G66183.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1741\4g66183.D\ECD1A.ch  Vial: 15
Signal #2 : C:\msdchem\1\DATA\4G1741\4g66183.D\ECD2B.ch
Acq On    : 18 Mar 2016   9:10 pm                    Operator: brittanp
Sample    : icv1741-500                              Inst    : GC4G
Misc      : op92130,g4g1741,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Sat Mar 19 13:31:47 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	96	0.00	1.96- 2.16
32	Chlordane {A}	0.037	0.041	-10.8	105	0.00	3.62- 3.82
33	Chlordane {B}	0.048	0.048	0.0	95	0.00	4.18- 4.38
34	Chlordane {C}	0.157	0.143	8.9	87	0.00	4.92- 5.12
35	Chlordane {D}	0.249	0.229	8.0	89	0.00	5.08- 5.28
36	Chlordane {E}	0.035	0.032	8.6	88	0.00	6.15- 6.35

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	2.12- 2.32
32	Chlordane {A}	0.039	0.038	2.6	104	0.00	4.34- 4.54
33	Chlordane {B}	0.043	0.039	9.3	96	0.00	5.18- 5.38
34	Chlordane {C}	0.156	0.126	19.2	85	0.00	6.10- 6.30
35	Chlordane {D}	0.255	0.210	17.6	87	0.00	6.32- 6.52
36	Chlordane {E}	0.038	0.032	15.8	90	0.00	7.80- 8.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66176.D 4PST1741.M Sat Mar 19 13:34:52 2016 RPT1

Initial Calibration Verification

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1741-ICV1741
Lab FileID: 4G66184.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1741\4g66184.D\ECD1A.ch  Vial: 16
Signal #2 : C:\msdchem\1\DATA\4G1741\4g66184.D\ECD2B.ch
Acq On    : 18 Mar 2016   9:25 pm                    Operator: brittanp
Sample    : icv1741-500                              Inst    : GC4G
Misc      : op92130,g4g1741,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Sat Mar 19 13:02:16 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	109	0.00	1.96- 2.16
26 L8	Toxaphene{A}	0.041	0.038	7.3	101	0.00	5.95- 6.15
27 L8	Toxaphene{B}	0.040	0.038	5.0	103	0.00	6.22- 6.42
28 L8	Toxaphene{C}	0.035	0.032	8.6	102	0.00	6.39- 6.59
29 L8	Toxaphene{D}	0.032	0.032	0.0	106	0.00	6.74- 6.94
30 L8	Toxaphene{E}	0.025	0.023	8.0	100	0.00	7.40- 7.60
***** Signal #2 *****							
25 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	2.13- 2.33
26 L8	Toxaphene{A}	0.020	0.022	-10.0	117	0.00	6.82- 7.02
27 L8	Toxaphene{B}	0.025	0.026	-4.0	113	0.00	7.69- 7.89
28 L8	Toxaphene{C}	0.042	0.041	2.4	103	0.00	7.85- 8.05
29 L8	Toxaphene{D}	0.025	0.025	0.0	106	0.00	8.29- 8.49
30 L8	Toxaphene{E}	0.020	0.019	5.0	102	0.00	9.20- 9.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66176.D 4PST1741.M Sat Mar 19 13:14:11 2016 RPT1

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66362.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1746\4g66362.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1746\4g66362.D\ECD2B.ch
Acq On    : 22 Mar 2016   8:13 am                    Operator: rebeccak
Sample    : cc1741-25                                Inst    : GC4G
Misc      : op92278,g4g1746,15.4,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 21 15:01:38 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	83	0.00	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.977	1.090	-11.6	96	0.00	2.58- 2.64
3	A	alpha-BHC	1.310	1.469	-12.1	93	0.00	3.01- 3.07
4	MA	gamma-BHC	1.177	1.329	-12.9	95	0.00	3.30- 3.36
5	MA	Heptachlor	1.141	1.071	6.1	78	0.00	3.57- 3.63
6	B	beta-BHC	0.596	0.632	-6.0	88	0.00	3.38- 3.44
7	B	delta-BHC	1.128	1.198	-6.2	90	0.00	3.78- 3.84
8	MB	Aldrin	1.162	1.241	-6.8	90	0.00	4.11- 4.17
9	B	Heptachlor Epoxide	1.081	1.028	4.9	80	0.00	4.81- 4.87
10	B	gamma-Chlordane	1.064	1.022	3.9	81	0.00	4.98- 5.04
11	B	alpha-Chlordane	1.050	1.080	-2.9	87	0.00	5.15- 5.21
12	A	Endosulfan I	1.091	1.153	-5.7	87	0.00	5.33- 5.39
13	B	4,4'-DDE	0.881	0.959	-8.9	94	0.00	5.26- 5.32
14	MA	Dieldrin	1.071	1.099	-2.6	87	0.00	5.65- 5.71
15	MA	Endrin	0.939	1.013	-7.9	91	0.00	5.97- 6.03
16	A	4,4'-DDD	0.764	0.833	-9.0	89	0.00	6.11- 6.17
17	B	Endosulfan II	0.922	0.996	-8.0	90	0.00	6.30- 6.36
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	26.351	-5.4	93	0.00	6.51- 6.57
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.770	0.834	-8.3	89	0.00	6.91- 6.97
20	B	Endosulfan Sulfate	0.765	0.893	-16.7	96	0.00	7.59- 7.65
21	A	Methoxychlor	0.298	0.363	-21.8#	99	0.00	7.31- 7.37
22		Mirex	0.778	0.845	-8.6	94	0.00	7.48- 7.54
23	B	Endrin Ketone	0.894	1.026	-14.8	93	0.00	8.04- 8.10
24	SA	Decachlorobiphenyl	1.001	1.125	-12.4	96	0.00	9.78- 9.84

***** 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	0.950	1.029	-8.3	101	0.00	2.97- 3.03
3	A	alpha-BHC	1.260	1.374	-9.0	99	0.00	3.61- 3.67
4	MA	gamma-BHC	1.130	1.149	-1.7	92	0.00	4.03- 4.09
5	MA	Heptachlor	1.140	1.237	-8.5	99	0.00	4.61- 4.67
6	B	beta-BHC	0.505	0.519	-2.8	92	0.00	4.11- 4.17
7	B	delta-BHC	1.052	1.096	-4.2	95	0.00	4.51- 4.57
8	MB	Aldrin	1.134	1.180	-4.1	96	0.00	5.06- 5.12

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66362.D

9	B	Heptachlor Epoxide	1.020	1.055	-3.4	93	0.00	5.88- 5.94
10	B	gamma-Chlordane	1.040	1.076	-3.5	95	0.00	6.16- 6.22
11	B	alpha-Chlordane	1.017	1.046	-2.9	94	0.00	6.39- 6.45
12	A	Endosulfan I	0.998	1.044	-4.6	97	0.00	6.49- 6.55
13	B	4,4'-DDE	0.973	1.029	-5.8	95	0.00	6.63- 6.69
14	MA	Dieldrin	1.007	1.079	-7.1	96	0.00	6.92- 6.98
15	MA	Endrin	0.911	0.997	-9.4	100	0.00	7.43- 7.49
16	A	4,4'-DDD	0.871	0.852	2.2	93	0.00	7.59- 7.65
17	B	Endosulfan II	0.913	0.965	-5.7	97	0.00	7.78- 7.84
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	26.971	-7.9	103	0.00	8.12- 8.18
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.776	0.757	2.4	92	0.00	8.35- 8.41
20	B	Endosulfan Sulfate	0.783	0.864	-10.3	100	0.00	8.82- 8.88
21	A	Methoxychlor	0.343	0.418	-21.9#	102	0.00	9.35- 9.41
22		Mirex	0.712	0.762	-7.0	99	0.00	9.67- 9.73
23	B	Endrin Ketone	0.906	0.999	-10.3	96	0.00	9.73- 9.79
24	SA	Decachlorobiphenyl	0.703	0.840	-19.5	109	0.00	11.19-11.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66175.D 4PST1741.M Tue Mar 22 11:53:48 2016 RPT1

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66376.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1746\4g66376.D\ECD1A.ch  Vial: 16
Signal #2 : C:\msdchem\1\DATA\4G1746\4g66376.D\ECD2B.ch
Acq On    : 22 Mar 2016  11:57 am                    Operator: brittanp
Sample    : cc1741-50                                Inst    : GC4G
Misc      : op92235,g4g1746,990,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 21 15:01:38 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.01	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.977	1.029	-5.3	102	0.00	2.58- 2.64
3	A	alpha-BHC	1.310	1.432	-9.3	101	0.00	3.02- 3.08
4	MA	gamma-BHC	1.177	1.262	-7.2	102	0.00	3.30- 3.36
5	MA	Heptachlor	1.141	1.208	-5.9	100	0.00	3.58- 3.64
6	B	beta-BHC	0.596	0.634	-6.4	105	0.00	3.39- 3.45
7	B	delta-BHC	1.128	1.182	-4.8	100	0.00	3.78- 3.84
8	MB	Aldrin	1.162	1.223	-5.2	100	0.00	4.12- 4.18
9	B	Heptachlor Epoxide	1.081	1.124	-4.0	100	0.00	4.81- 4.87
10	B	gamma-Chlordane	1.064	1.068	-0.4	96	0.00	4.98- 5.04
11	B	alpha-Chlordane	1.050	1.068	-1.7	98	0.00	5.15- 5.21
12	A	Endosulfan I	1.091	1.166	-6.9	100	0.00	5.33- 5.39
13	B	4,4'-DDE	0.881	0.872	1.0	94	0.00	5.27- 5.33
14	MA	Dieldrin	1.071	1.116	-4.2	99	0.00	5.65- 5.71
15	MA	Endrin	0.939	0.985	-4.9	98	0.00	5.97- 6.03
16	A	4,4'-DDD	0.764	0.821	-7.5	98	0.00	6.11- 6.17
17	B	Endosulfan II	0.922	1.008	-9.3	102	0.00	6.30- 6.36
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	50.000	46.855	6.3	92	0.00	6.52- 6.58
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.770	0.807	-4.8	95	0.00	6.92- 6.98
20	B	Endosulfan Sulfate	0.765	0.817	-6.8	97	0.00	7.59- 7.65
21	A	Methoxychlor	0.298	0.325	-9.1	95	0.00	7.31- 7.37
22		Mirex	0.778	0.760	2.3	97	0.00	7.48- 7.54
23	B	Endrin Ketone	0.894	0.955	-6.8	96	0.00	8.05- 8.11
24	SA	Decachlorobiphenyl	1.001	1.006	-0.5	101	0.00	9.78- 9.84

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	2.20- 2.26
2	SAB	Tetrachloro-m-xylene	0.950	1.078	-13.5	107	0.00	2.97- 3.03
3	A	alpha-BHC	1.260	1.521	-20.7#	105	0.00	3.61- 3.67
4	MA	gamma-BHC	1.130	1.356	-20.0#	105	0.00	4.03- 4.09
5	MA	Heptachlor	1.140	1.334	-17.0	105	0.00	4.61- 4.67
6	B	beta-BHC	0.505	0.610	-20.8#	106	0.00	4.12- 4.18
7	B	delta-BHC	1.052	1.236	-17.5	103	0.00	4.51- 4.57
8	MB	Aldrin	1.134	1.309	-15.4	105	0.00	5.06- 5.12

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66376.D

9	B	Heptachlor Epoxide	1.020	1.194	-17.1	105	0.00	5.88- 5.94
10	B	gamma-Chlordane	1.040	1.200	-15.4	106	0.00	6.16- 6.22
11	B	alpha-Chlordane	1.017	1.147	-12.8	104	0.00	6.39- 6.45
12	A	Endosulfan I	0.998	1.092	-9.4	103	0.00	6.49- 6.55
13	B	4,4'-DDE	0.973	1.115	-14.6	102	0.00	6.64- 6.70
14	MA	Dieldrin	1.007	1.193	-18.5	104	0.00	6.92- 6.98
15	MA	Endrin	0.911	1.030	-13.1	102	0.00	7.43- 7.49
16	A	4,4'-DDD	0.871	0.959	-10.1	102	0.00	7.59- 7.65
17	B	Endosulfan II	0.913	1.053	-15.3	102	0.00	7.78- 7.84
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	50.000	51.749	-3.5	97	0.00	8.13- 8.19
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.776	0.960	-23.7#	120	0.00	8.35- 8.41
20	B	Endosulfan Sulfate	0.783	0.904	-15.5	107	0.00	8.82- 8.88
21	A	Methoxychlor	0.343	0.390	-13.7	96	0.00	9.36- 9.42
22		Mirex	0.712	0.789	-10.8	107	0.00	9.67- 9.73
23	B	Endrin Ketone	0.906	1.034	-14.1	96	0.00	9.73- 9.79
24	SA	Decachlorobiphenyl	0.703	0.825	-17.4	110	0.00	11.19-11.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66176.D 4PST1741.M Tue Mar 22 13:08:44 2016 RPT1

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66398.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1746\4g66398.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1746\4g66398.D\ECD2B.ch
Acq On    : 22 Mar 2016   8:11 pm                    Operator: dharas
Sample    : cc1741-25                                Inst    : GC4G
Misc      : op92190,g4g1746,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1741.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 21 15:01:38 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	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.977	0.981	-0.4	100	0.00	2.57- 2.63
3	A	alpha-BHC	1.310	1.354	-3.4	99	0.00	3.01- 3.07
4	MA	gamma-BHC	1.177	1.217	-3.4	102	0.00	3.30- 3.36
5	MA	Heptachlor	1.141	1.074	5.9	92	0.00	3.57- 3.63
6	B	beta-BHC	0.596	0.643	-7.9	105	0.00	3.38- 3.44
7	B	delta-BHC	1.128	1.095	2.9	96	0.00	3.78- 3.84
8	MB	Aldrin	1.162	1.179	-1.5	100	0.00	4.11- 4.17
9	B	Heptachlor Epoxide	1.081	1.059	2.0	97	0.00	4.81- 4.87
10	B	gamma-Chlordane	1.064	0.949	10.8	88	0.00	4.98- 5.04
11	B	alpha-Chlordane	1.050	1.009	3.9	95	0.00	5.15- 5.21
12	A	Endosulfan I	1.091	1.100	-0.8	97	0.00	5.33- 5.39
13	B	4,4'-DDE	0.881	0.827	6.1	94	0.00	5.27- 5.33
14	MA	Dieldrin	1.071	1.042	2.7	96	0.00	5.65- 5.71
15	MA	Endrin	0.939	0.890	5.2	93	0.00	5.97- 6.03
16	A	4,4'-DDD	0.764	0.730	4.5	91	0.00	6.11- 6.17
17	B	Endosulfan II	0.922	0.909	1.4	96	0.00	6.30- 6.36
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	21.510	14.0	86	0.00	6.52- 6.58
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.770	0.779	-1.2	97	0.00	6.92- 6.98
20	B	Endosulfan Sulfate	0.765	0.788	-3.0	98	0.00	7.59- 7.65
21	A	Methoxychlor	0.298	0.282	5.4	90	0.00	7.31- 7.37
22		Mirex	0.778	0.784	-0.8	102	0.00	7.48- 7.54
23	B	Endrin Ketone	0.894	0.902	-0.9	95	0.00	8.04- 8.10
24	SA	Decachlorobiphenyl	1.001	1.024	-2.3	102	0.00	9.78- 9.84

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	2.19- 2.25
2	SAB	Tetrachloro-m-xylene	0.950	1.056	-11.2	106	0.00	2.97- 3.03
3	A	alpha-BHC	1.260	1.420	-12.7	104	0.00	3.61- 3.67
4	MA	gamma-BHC	1.130	1.229	-8.8	101	0.00	4.03- 4.09
5	MA	Heptachlor	1.140	1.251	-9.7	102	0.00	4.60- 4.66
6	B	beta-BHC	0.505	0.567	-12.3	103	0.00	4.11- 4.17
7	B	delta-BHC	1.052	1.151	-9.4	102	0.00	4.51- 4.57
8	MB	Aldrin	1.134	1.229	-8.4	102	0.00	5.06- 5.12

Continuing Calibration Summary

Job Number: JC16312T
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1746-CC1741
Lab FileID: 4G66398.D

9	B	Heptachlor Epoxide	1.020	1.127	-10.5	102	0.00	5.88- 5.94
10	B	gamma-Chlordane	1.040	1.125	-8.2	102	0.00	6.16- 6.22
11	B	alpha-Chlordane	1.017	1.103	-8.5	101	0.00	6.39- 6.45
12	A	Endosulfan I	0.998	1.058	-6.0	100	0.00	6.49- 6.55
13	B	4,4'-DDE	0.973	1.068	-9.8	101	0.00	6.64- 6.70
14	MA	Dieldrin	1.007	1.118	-11.0	101	0.00	6.92- 6.98
15	MA	Endrin	0.911	0.956	-4.9	98	0.00	7.43- 7.49
16	A	4,4'-DDD	0.871	0.890	-2.2	100	0.00	7.59- 7.65
17	B	Endosulfan II	0.913	0.992	-8.7	102	0.00	7.78- 7.84
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	24.948	0.2	96	0.00	8.12- 8.18
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.776	0.818	-5.4	101	0.00	8.35- 8.41
20	B	Endosulfan Sulfate	0.783	0.858	-9.6	101	0.00	8.82- 8.88
21	A	Methoxychlor	0.343	0.354	-3.2	88	0.00	9.35- 9.41
22		Mirex	0.712	0.772	-8.4	102	0.00	9.67- 9.73
23	B	Endrin Ketone	0.906	0.991	-9.4	97	0.00	9.73- 9.79
24	SA	Decachlorobiphenyl	0.703	0.798	-13.5	105	0.00	11.19-11.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g66175.D 4PST1741.M Wed Mar 23 08:47:38 2016 RPT1

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66367r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:30 am
Operator : brittanp
Sample : jc16312-1t (Sig #1); jc16312-1 (Sig #2)
Misc : op92235,g4g1746,940,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:36:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.074	2.233	234.7E6	213.7E6	50.000	50.000
25) I	1-bromo-2...	2.074	2.233	234.7E6	213.7E6	50.000	50.000
31) I	1-bromo-2...	2.074	2.233	234.7E6	213.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.609	3.004	282.7E6	277.4E6	61.626	68.313
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	154.07%#	170.78%#
24) SA	Decachlor...	9.804	11.215	325.4E6	237.0E6	69.272	78.901
	Spiked Amount 40.000			Recovery	=	173.18%	197.25%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

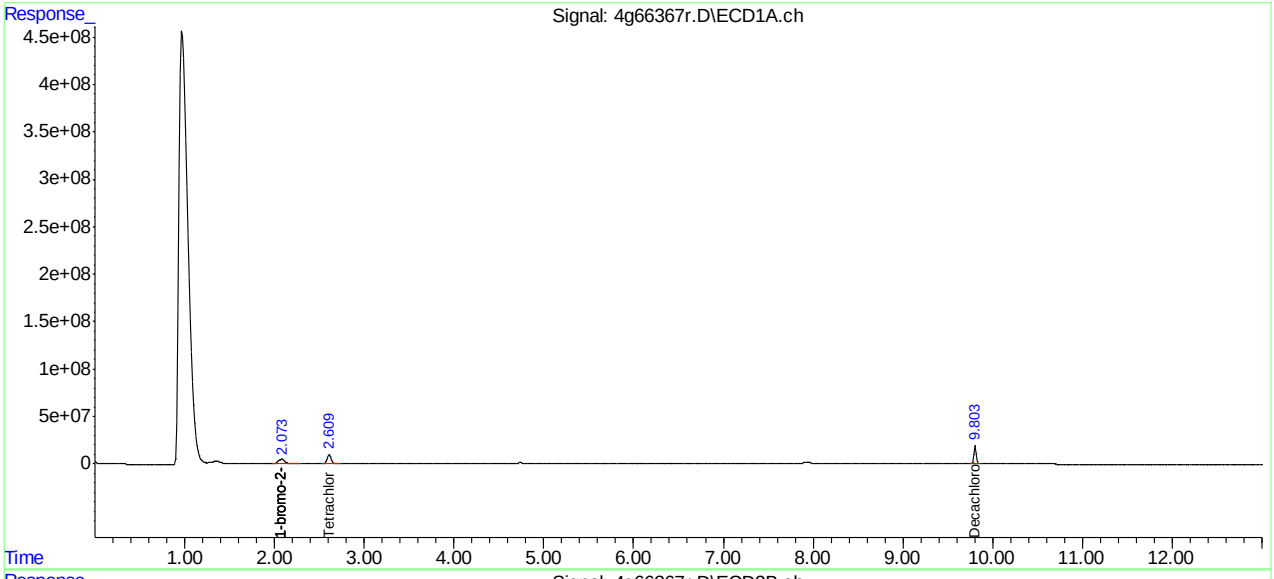
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

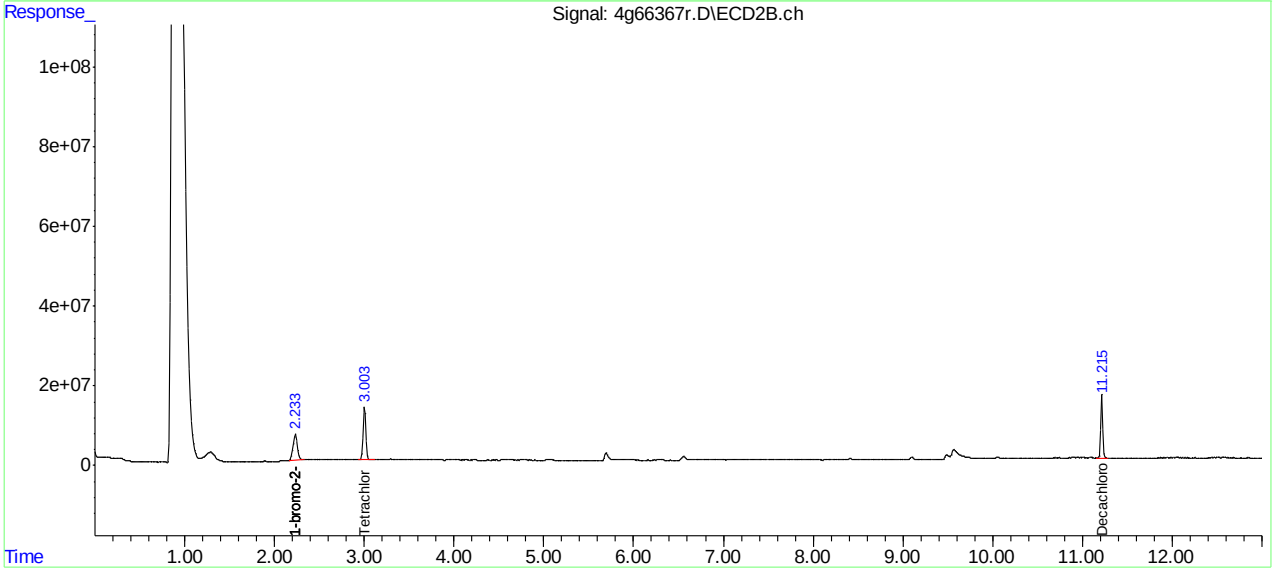
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66367r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:30 am
Operator : brittanp
Sample : jc16312-1t (Sig #1); jc16312-1 (Sig #2)
Misc : op92235,g4g1746,940,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:36:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66368r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:45 am
Operator : brittanp
Sample : jc16312-2t (Sig #1); jc16312-2 (Sig #2)
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:37:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.076	2.235	246.8E6	226.4E6	50.000	50.000
25) I 1-bromo-2...	2.076	2.235	246.8E6	226.4E6	50.000	50.000
31) I 1-bromo-2...	2.076	2.235	246.8E6	226.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.610	3.004	168.1E6	165.1E6	34.845	38.355
Spiked Amount	40.000	Range	30 - 150	Recovery	= 87.11%	95.89%
24) SA Decachlor...	9.806	11.218	201.2E6	148.6E6	40.731	46.687
Spiked Amount	40.000			Recovery	= 101.83%	116.72%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

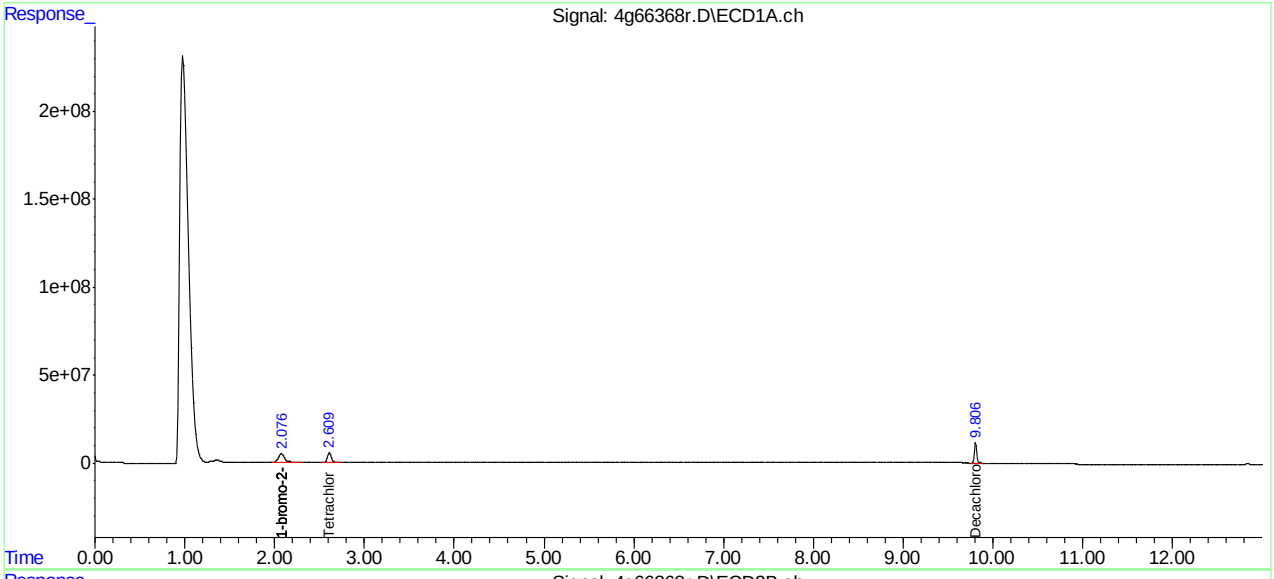
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

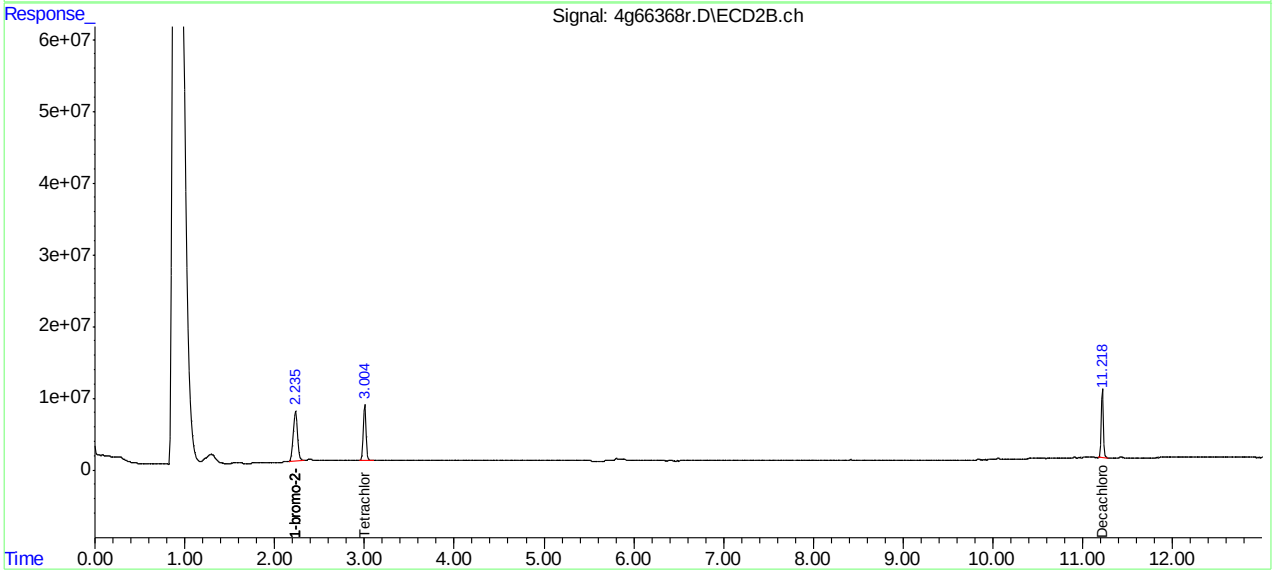
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66368r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:45 am
Operator : brittanp
Sample : jc16312-2t (Sig #1); jc16312-2 (Sig #2)
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:37:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66369r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:59 am
Operator : brittanp
Sample : jc16312-3t (Sig #1); jc16312-3 (Sig #2)
Misc : op92235,g4g1746,970,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:38:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.072	2.232	263.5E6	241.1E6	50.000	50.000
25) I 1-bromo-2...	2.072	2.232	263.5E6	241.1E6	50.000	50.000
31) I 1-bromo-2...	2.072	2.232	263.5E6	241.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.609	3.003	112.2E6	114.8E6	21.778	25.061
Spiked Amount	40.000	Range	30 - 150	Recovery	= 54.45%	62.65%
24) SA Decachlor...	9.805	11.216	118.9E6	89606879	22.552	26.444
Spiked Amount	40.000			Recovery	= 56.38%	66.11%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

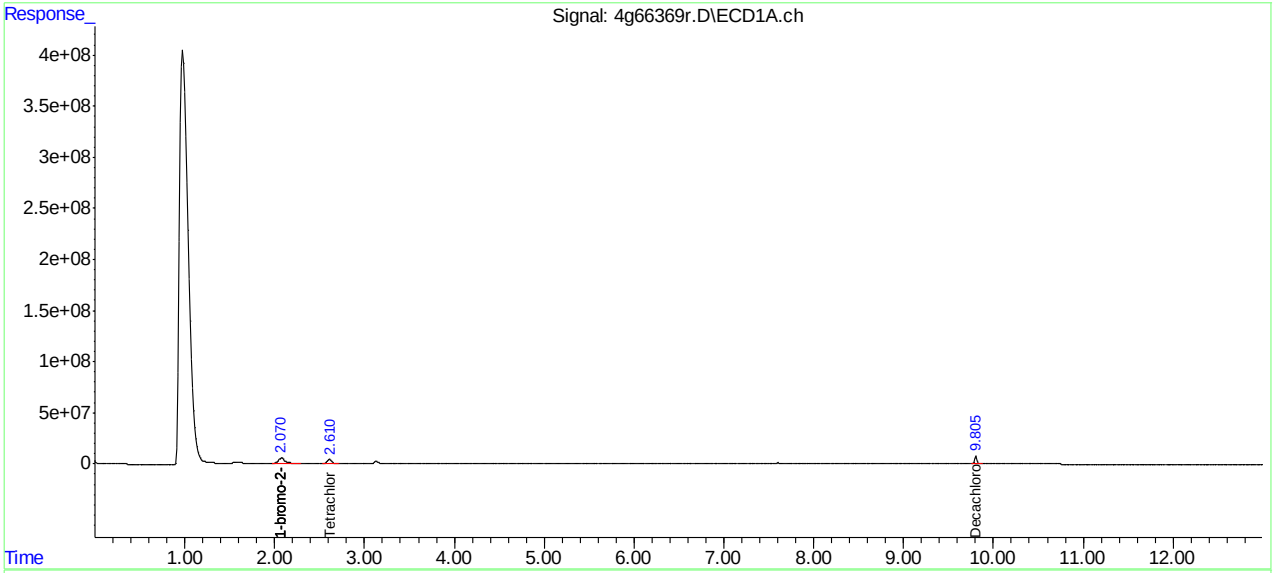
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

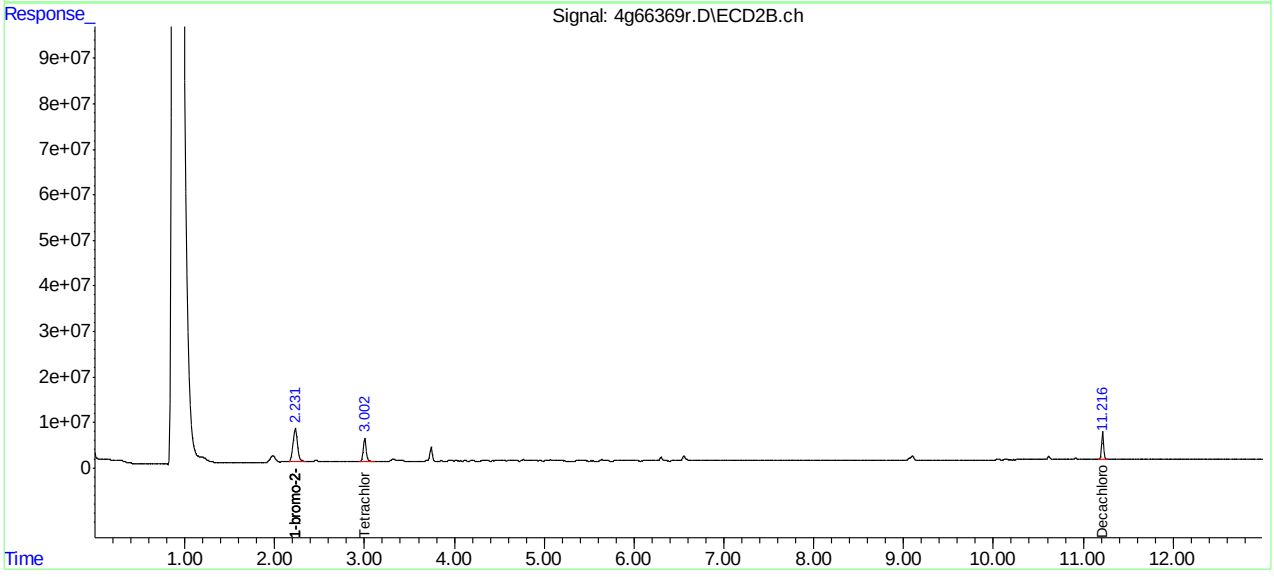
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66369r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:59 am
Operator : brittanp
Sample : jc16312-3t (Sig #1); jc16312-3 (Sig #2)
Misc : op92235,g4g1746,970,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:38:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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)
Gwendolyn Burns 04/29/16 16:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66379r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 12:41 pm
Operator : brittanp
Sample : jc16312-4t (Sig #1); jc16312-4 (Sig #2)
Misc : op92235,g4g1746,990,,,10,5
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 29 16:08:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.074	2.227	293.3E6	264.4E6	50.000m	50.000
25) I 1-bromo-2...	2.074	2.227	293.2E6	264.4E6	50.000m	50.000
31) I 1-bromo-2...	2.074	2.227	292.4E6	264.4E6	50.000m	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.621	3.001	32181171	34975978	5.613	6.959
Spiked Amount	40.000	Range	30 - 150	Recovery	= 14.03%#	17.40%#
24) SA Decachlor...	9.820	11.227	30712055	23817855	5.231	6.408m
Spiked Amount	40.000			Recovery	= 13.08%	16.02%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

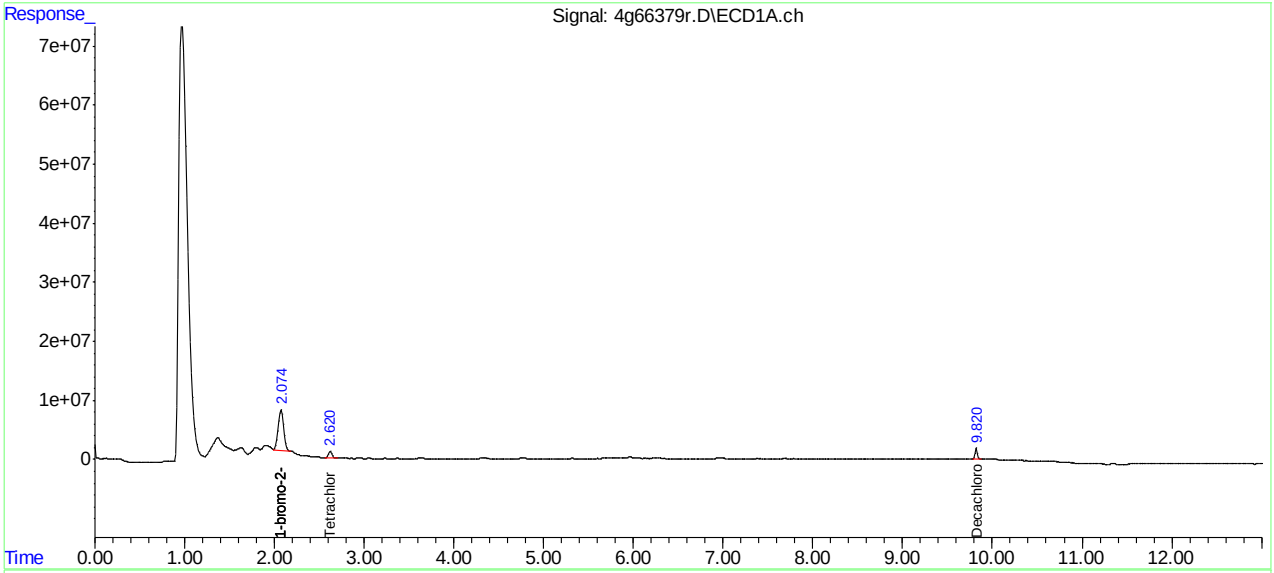
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

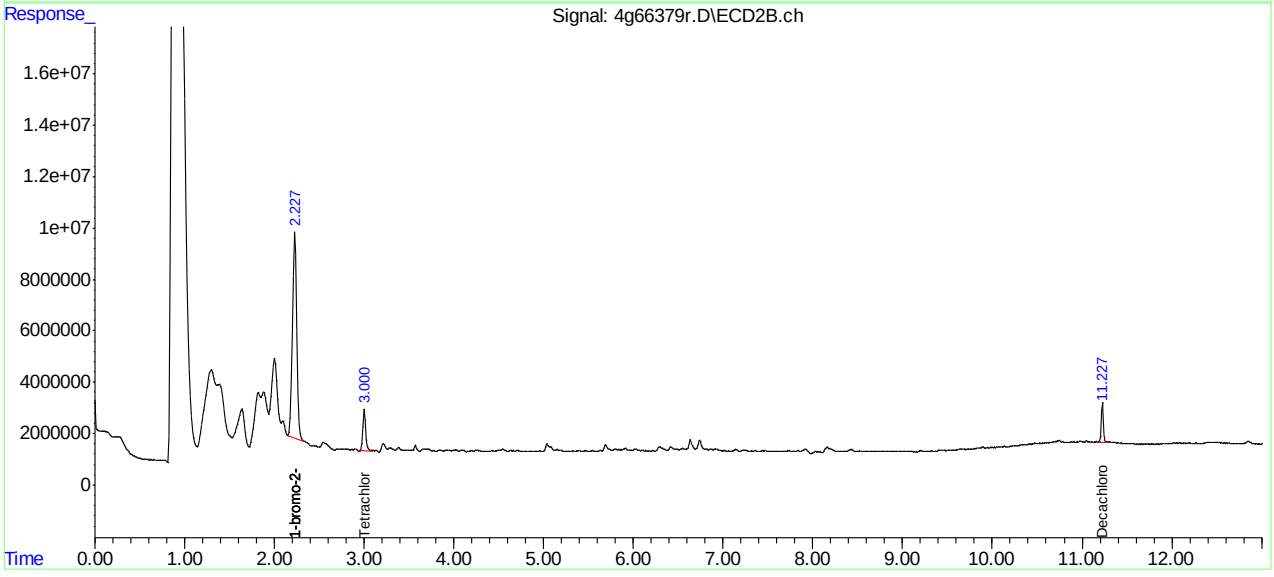
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66379r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 12:41 pm
Operator : brittanp
Sample : jc16312-4t (Sig #1); jc16312-4 (Sig #2)
Misc : op92235,g4g1746,990,,,10,5
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 29 16:08:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	JC16312-4T	**Method:**	SW846 8081B
Lab FileID:	4G66379R.D	**Analyst approved:**	04/29/16 16:10 Brittany Piercy
Injection Time:	03/22/16 12:41	**Supervisor approved:**	04/29/16 16:29 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
1-Bromo-2-nitrobenzene	577-19-5	1	2.07	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.23	Poorly defined baseline

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66371r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:29 am
Operator : brittanp
Sample : jc16312-5t (Sig #1); jc16312-5 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:48:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.076	2.233	230.2E6	229.2E6	50.000	50.000
25) I 1-bromo-2...	2.076	2.233	230.2E6	229.2E6	50.000	50.000
31) I 1-bromo-2...	2.076	2.233	230.2E6	229.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.610	3.003	170.2E6	165.9E6	37.816	38.062
Spiked Amount	40.000	Range	30 - 150	Recovery	= 94.54%	95.15%
24) SA Decachlor...	9.806	11.217	202.0E6	147.4E6	43.848	45.752
Spiked Amount	40.000			Recovery	= 109.62%	114.38%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

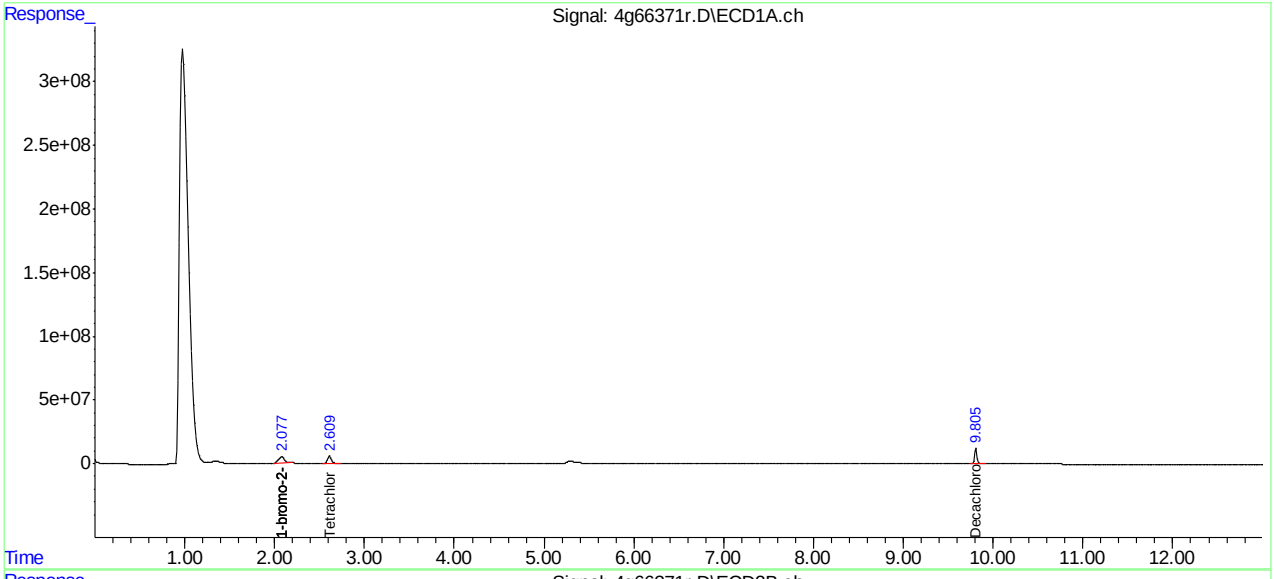
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

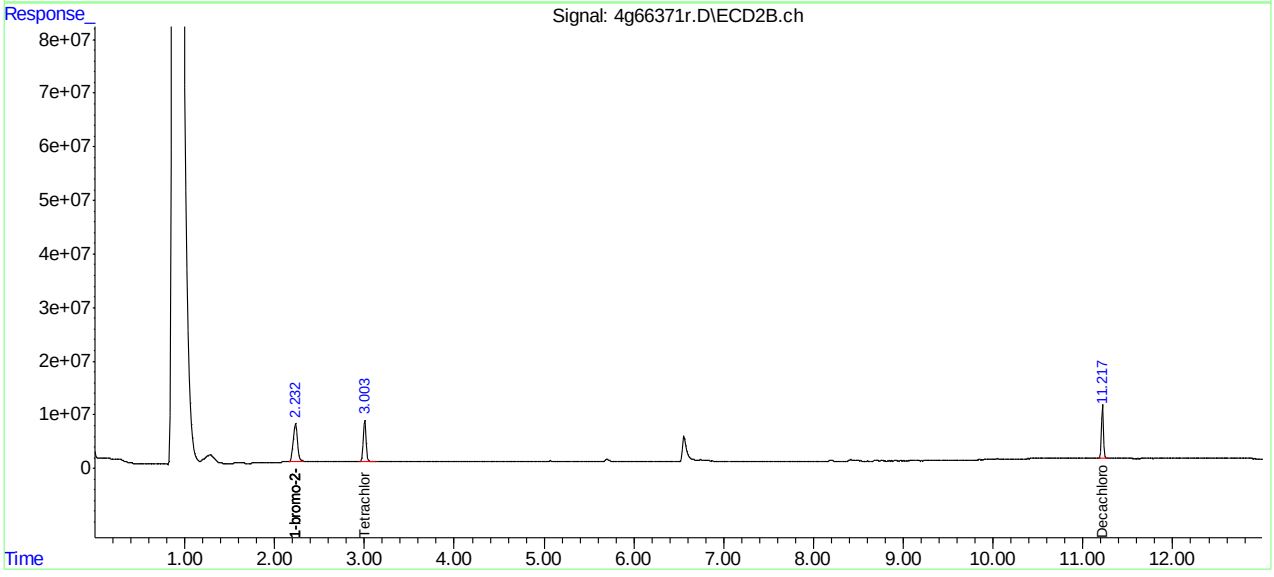
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66371r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:29 am
Operator : brittanp
Sample : jc16312-5t (Sig #1); jc16312-5 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:48:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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)
Gwendolyn Burns 04/29/16 17:48

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121324R.D\ECD1A.CH Vial: 57
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121324R.D\ECD2B.CH
Acq On    : 3-24-16 06:14:55 PM                    Operator: rebeccak
Sample    : jc16312-6t                             Inst    : GC1G
Misc      : op92374,g1g3944,980,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:52 2016  Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	62307197	946.8E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	62307197	946.8E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	62307197	946.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	47604771	555.4E6	33.426	30.559
Spiked Amount 40.000	Range 30 - 150		Recovery =		83.56%	76.40%
24) SA Decachlorobiphen	8.95	10.88	66892401	316.3E6	39.128m	30.009
Spiked Amount 40.000			Recovery =		97.82%	75.02%
Target Compounds						

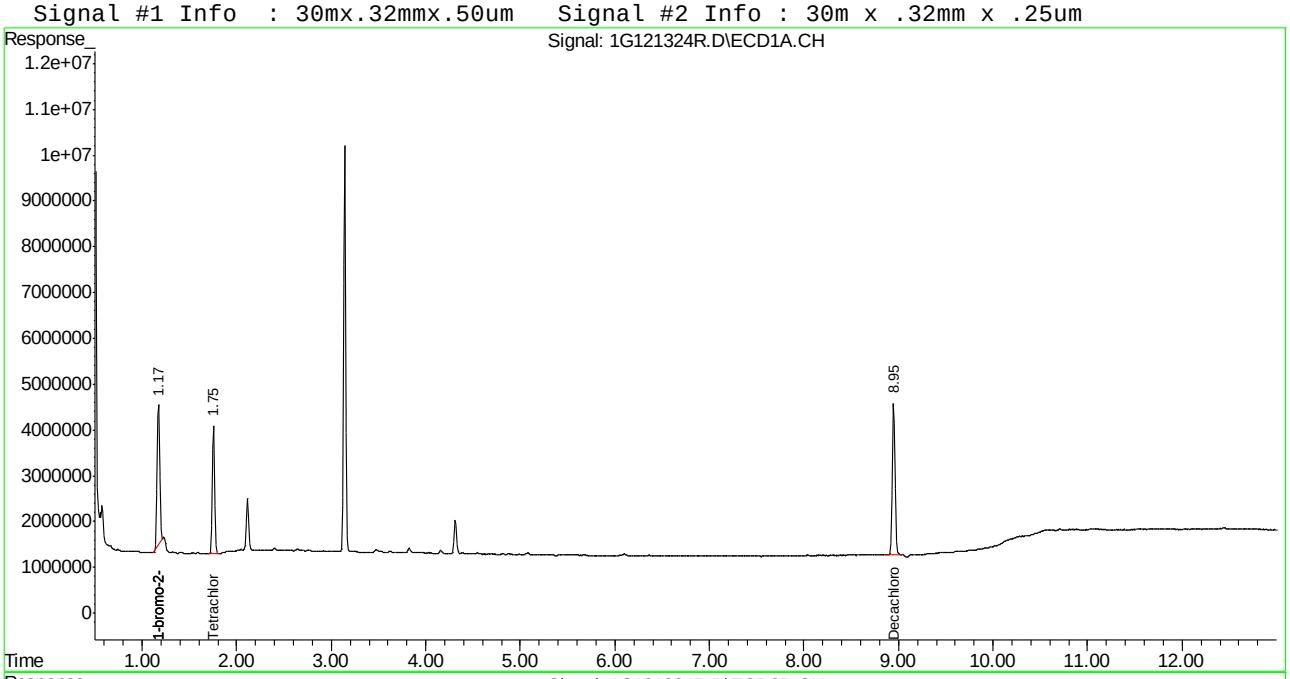
(f)=RT Delta > 1/2 Window (m)=manual int.

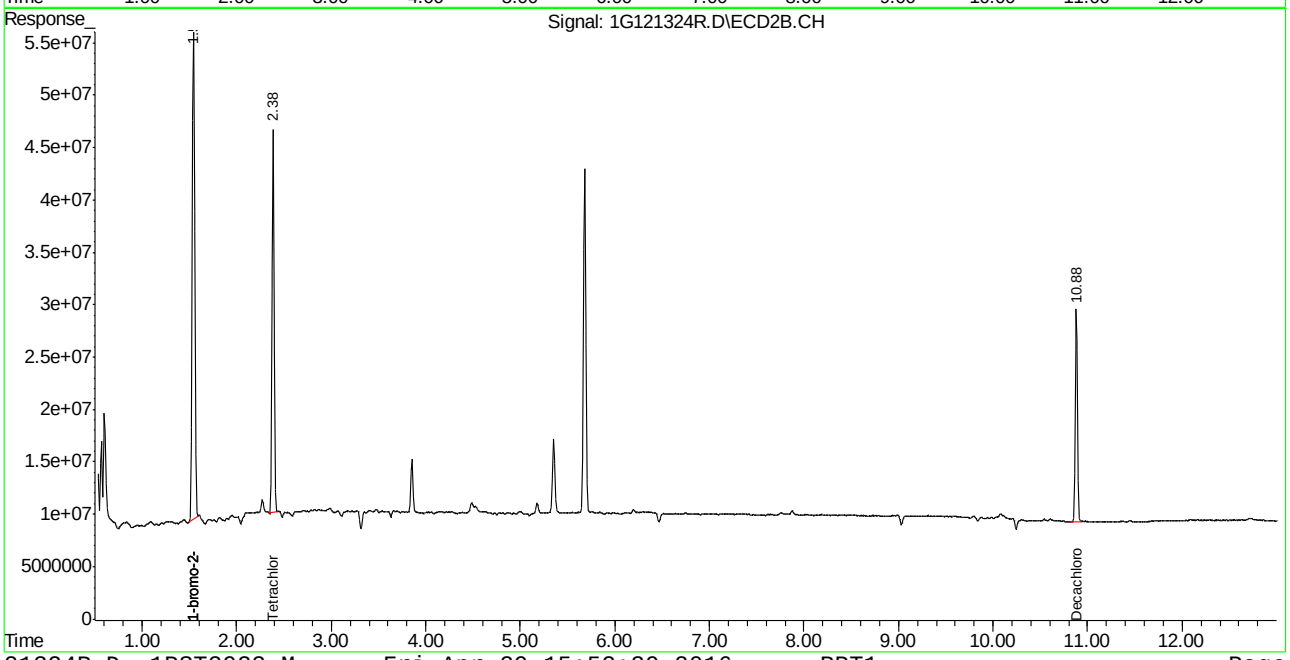
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121324R.D\ECD1A.CH Vial: 57
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121324R.D\ECD2B.CH
Acq On : 3-24-16 06:14:55 PM Operator: rebeccak
Sample : jc16312-6t Inst : GC1G
Misc : op92374,g1g3944,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:52 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	JC16312-6T	**Method:**	SW846 8081B
Lab FileID:	1G121324R.D	**Analyst approved:**	04/29/16 17:47 Gwendolyn Burns
Injection Time:	03/24/16 18:14	**Supervisor approved:**	04/29/16 17:48 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	8.95	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/29/16 17:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66372.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:43 am
Operator : brittanp
Sample : jc16312-6
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:50:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.070	2.231	199.0E6	204.2E6	50.000	50.000
25) I 1-bromo-2...	2.070	2.231	199.0E6	204.2E6	50.000	50.000
31) I 1-bromo-2...	2.070	2.231	199.0E6	204.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.603	3.003	244.4E6	241.7E6	62.833	62.292
Spiked Amount 40.000	Range 30 - 150		Recovery = 157.08%#		155.73%#	
24) SA Decachlor...	9.804	11.216	237.7E6	173.7E6	59.681	60.516
Spiked Amount 40.000			Recovery = 149.20%		151.29%	
Target Compounds						
18) MA 4,4'-DDT	6.509f	8.155	2388367	3425809	2.252m	2.438m
SemiQuant Compounds - Not Calibrated on this Instrument						

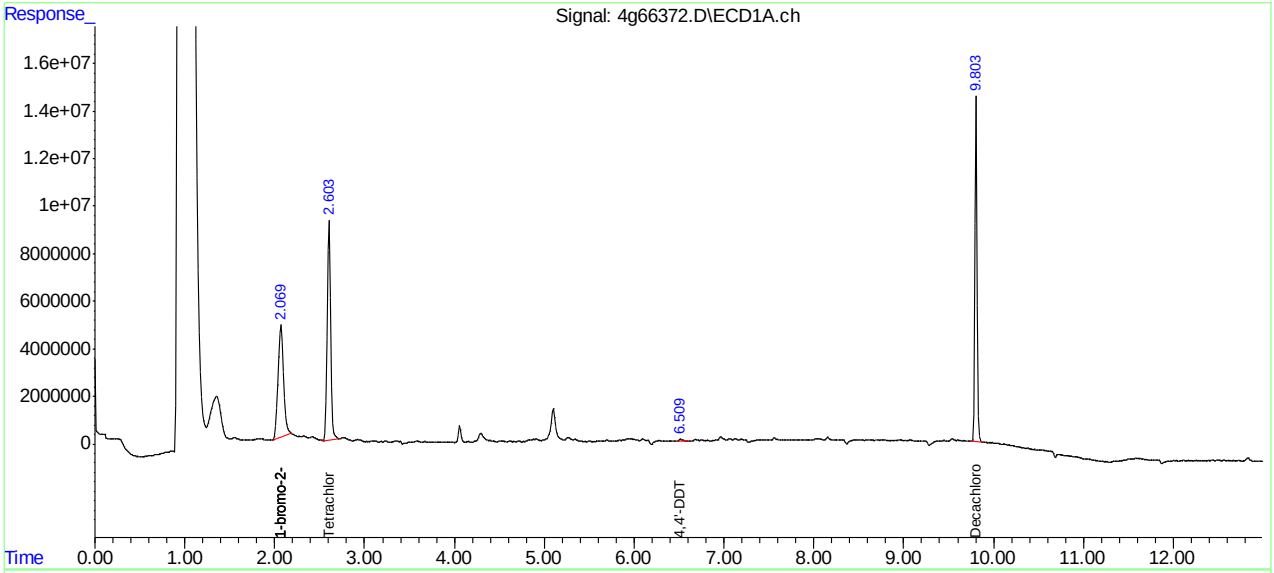
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

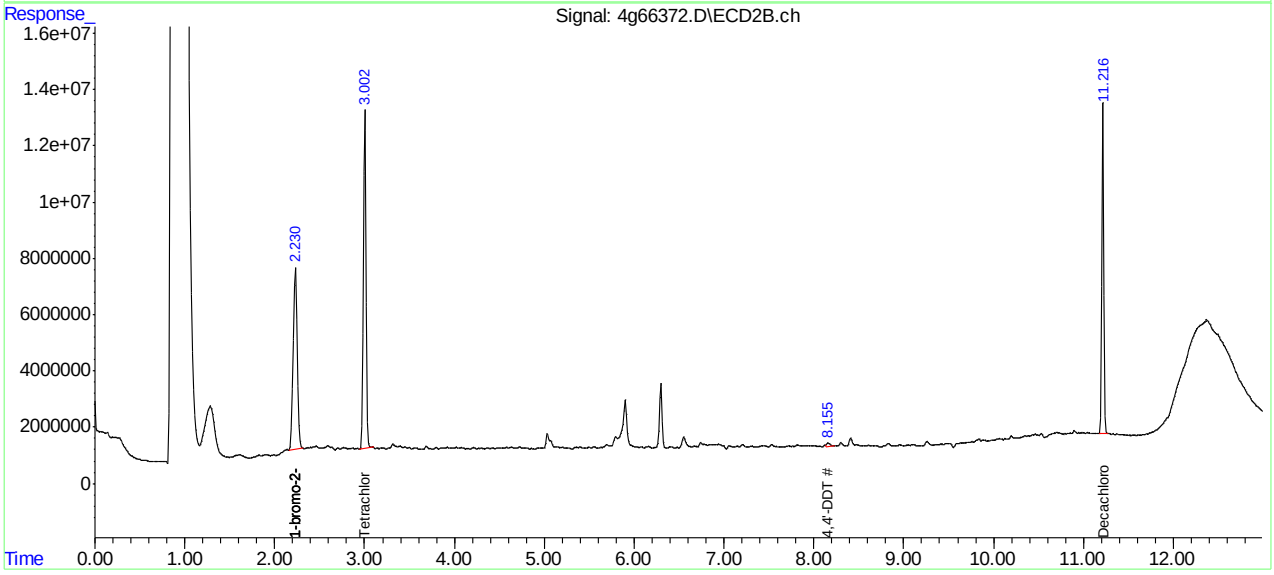
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66372.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:43 am
Operator : brittanp
Sample : jc16312-6
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:50:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	JC16312-6T	**Method:**	SW846 8081B
Lab FileID:	4G66372.D	**Analyst approved:**	04/29/16 17:33 Gwendolyn Burns
Injection Time:	03/22/16 10:43	**Supervisor approved:**	04/29/16 17:46 Gwendolyn Burns

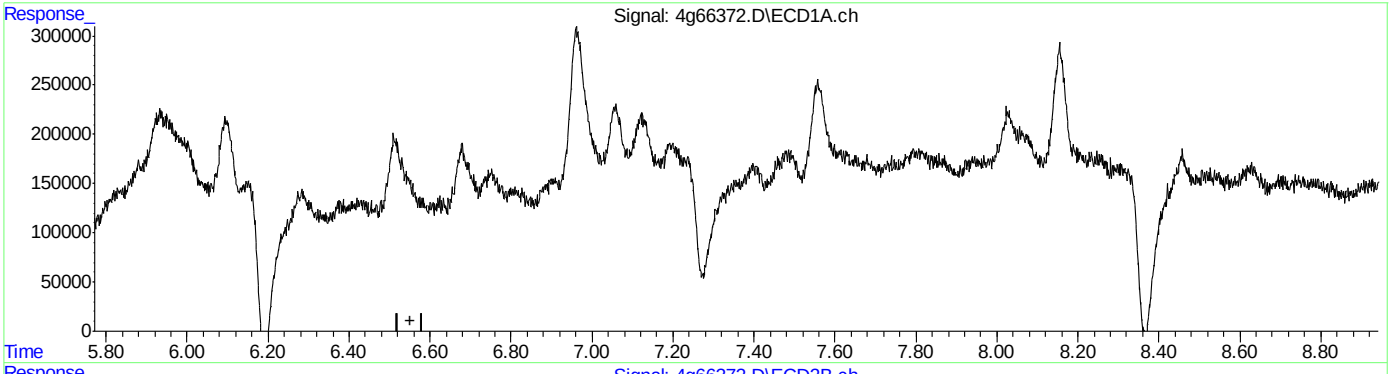
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	1	6.51	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.16	Poorly defined baseline

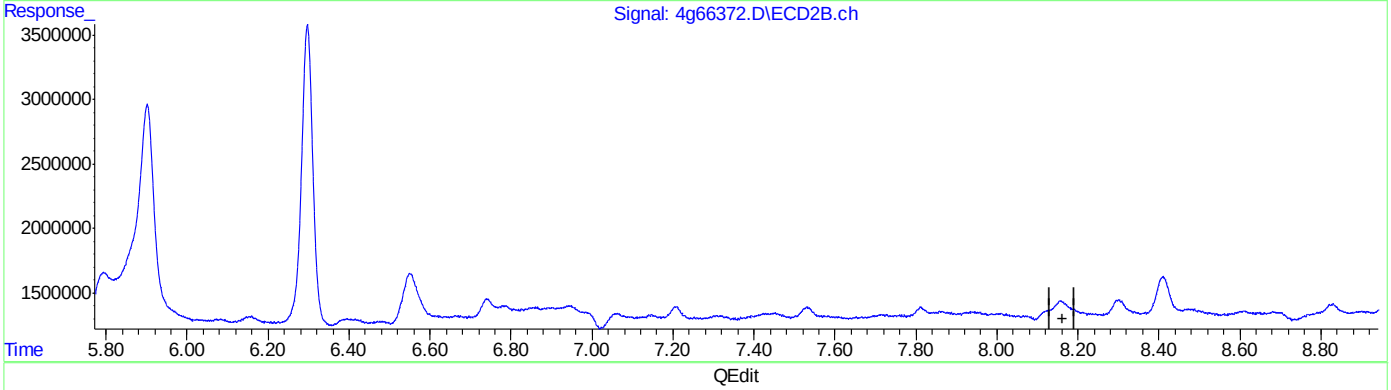
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66372.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:43 am
Operator : brittanp
Sample : jc16312-6
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(18) 4,4'-DDT (MA)
0.000min 0.000 PPB
response 0

(18) 4,4'-DDT #2 (MA)
0.000min 0.000 PPB
response 0

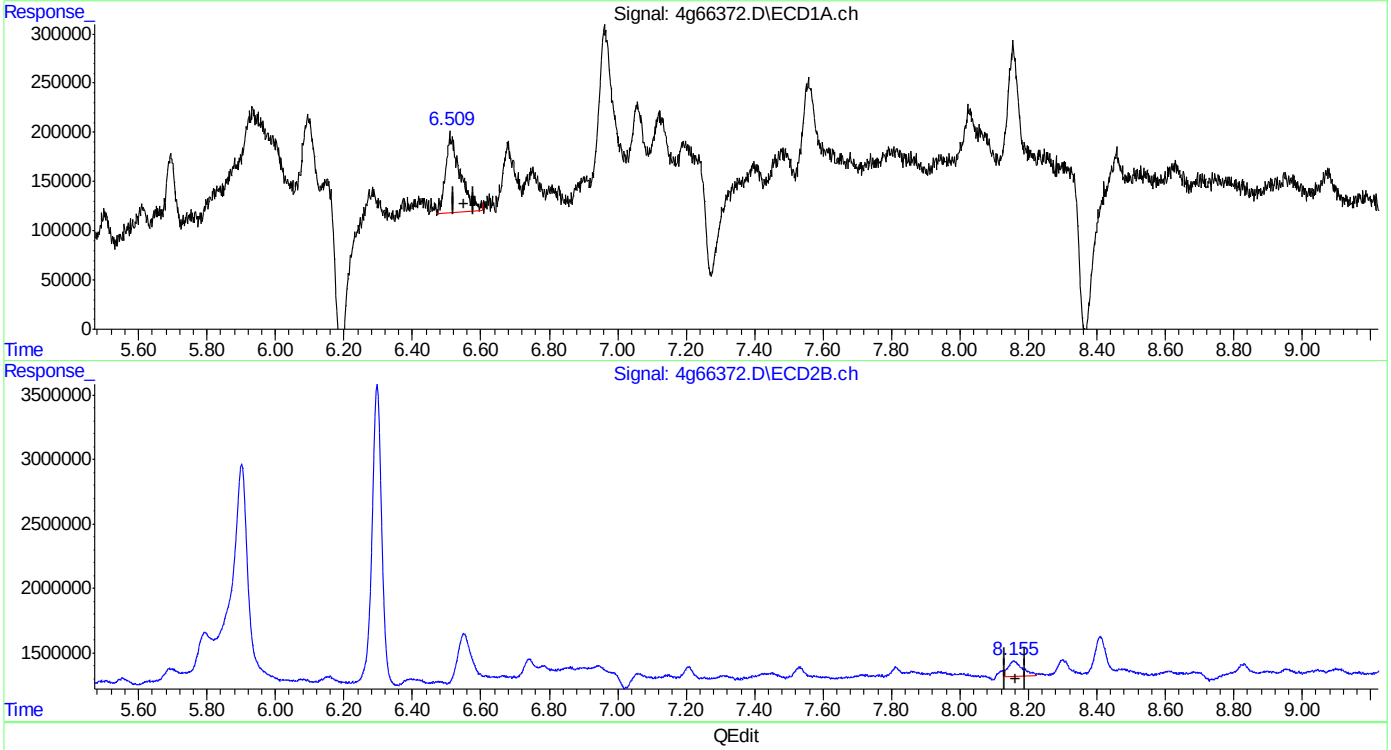
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66372.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:43 am
Operator : brittanp
Sample : jc16312-6
Misc : op92235,g4g1746,980,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(18) 4,4'-DDT (MA)
6.509min 2.252 PPB m
response 2388367

(18) 4,4'-DDT #2 (MA)
8.155min 2.438 PPB m
response 3425809

(+) = Expected Retention Time

SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66373r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:58 am
Operator : brittanp
Sample : jc16312-7t (Sig #1); jc16312-7 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:52:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.076	2.232	223.9E6	218.3E6	50.000	50.000
25) I	1-bromo-2...	2.076	2.232	223.9E6	218.3E6	50.000	50.000
31) I	1-bromo-2...	2.076	2.232	223.9E6	218.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.612	3.002	127.0E6	124.6E6	29.010	30.027
Spiked Amount		40.000	Range	30 - 150	Recovery	= 72.53%	75.07%
24) SA	Decachlor...	9.808	11.216	131.1E6	96290715	29.243	31.384
Spiked Amount		40.000			Recovery	= 73.11%	78.46%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

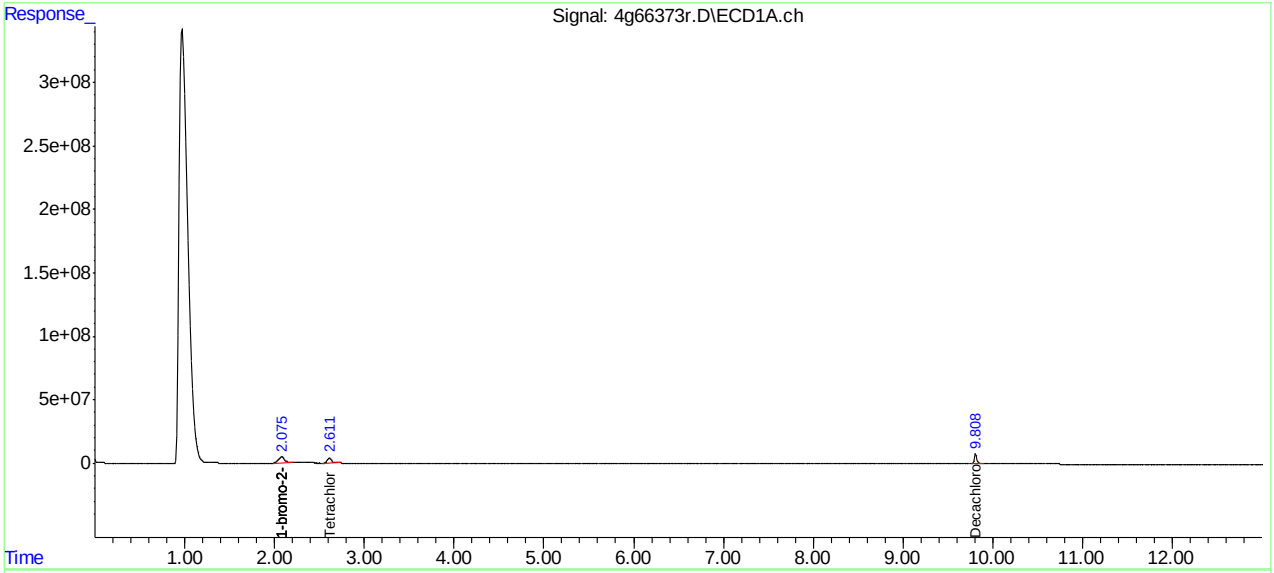
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

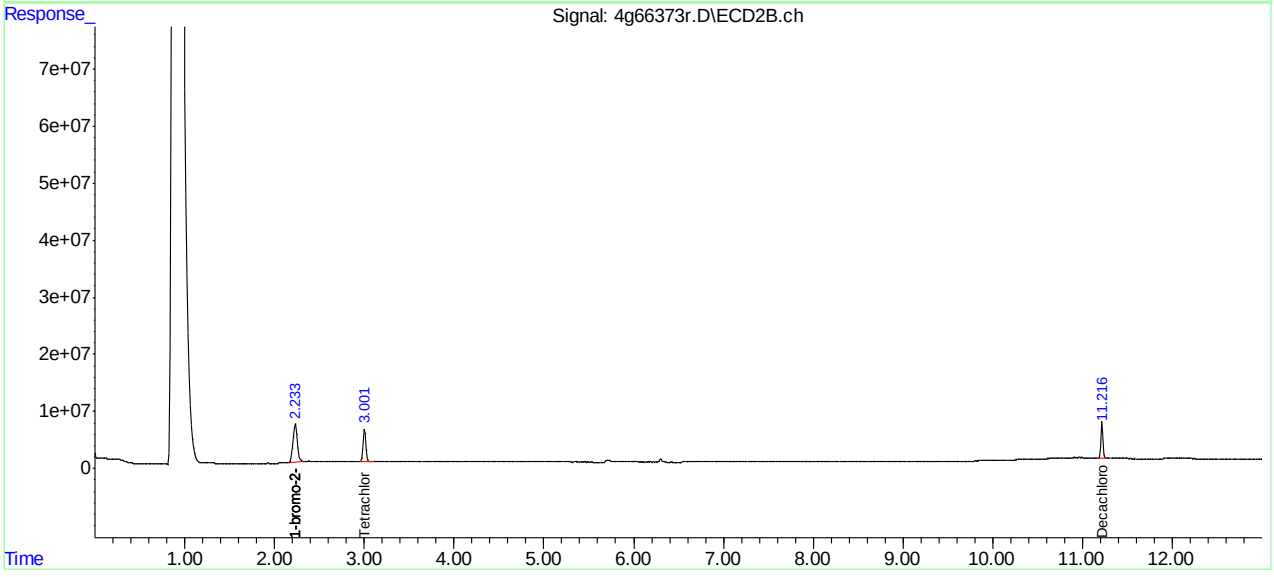
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66373r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 10:58 am
Operator : brittanp
Sample : jc16312-7t (Sig #1); jc16312-7 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:52:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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)
Gwendolyn Burns 04/29/16 17:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66374r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:13 am
Operator : brittanp
Sample : jc16312-8t (Sig #1); jc16312-8 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:55:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.064	2.229	207.4E6	233.4E6	50.000	50.000
25) I	1-bromo-2...	2.064	2.229	207.4E6	233.4E6	50.000	50.000
31) I	1-bromo-2...	2.064	2.229	207.4E6	233.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.603	3.001	264.8E6	258.2E6	65.308	58.198
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	163.27%#	145.50%
24) SA	Decachlor...	9.805	11.219	247.5E6	173.7E6	59.611	52.941
	Spiked Amount 40.000			Recovery	=	149.03%	132.35%
	Target Compounds						
18) MA	4,4'-DDT	6.546	8.146f	310170	11697455	1.347m	5.005m#

SemiQuant Compounds - Not Calibrated on this Instrument

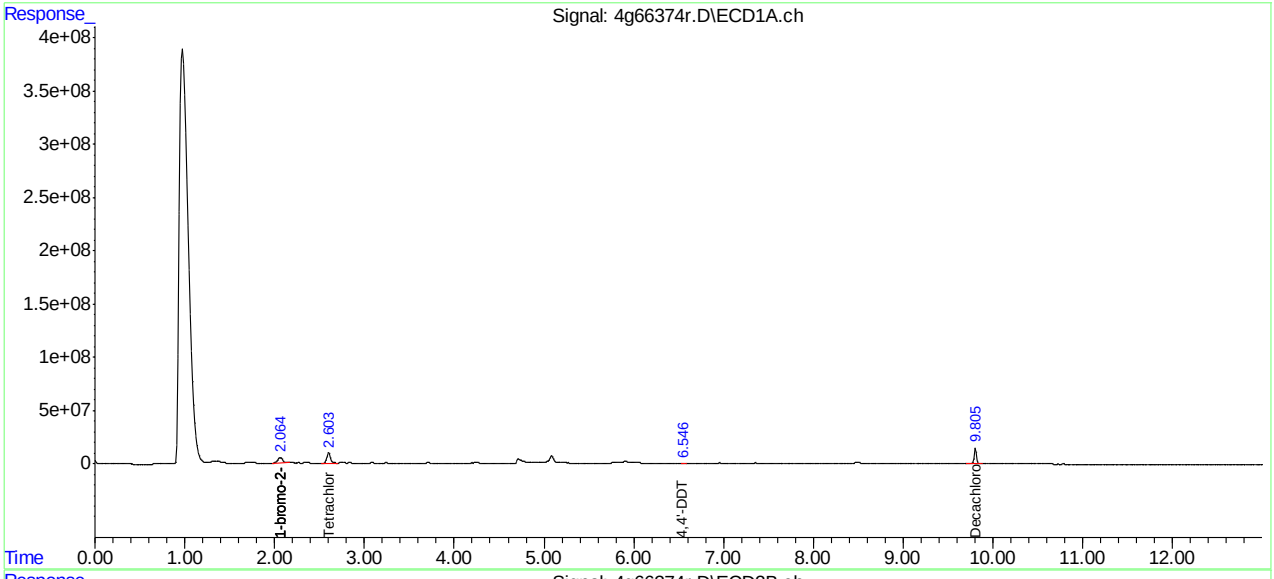
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

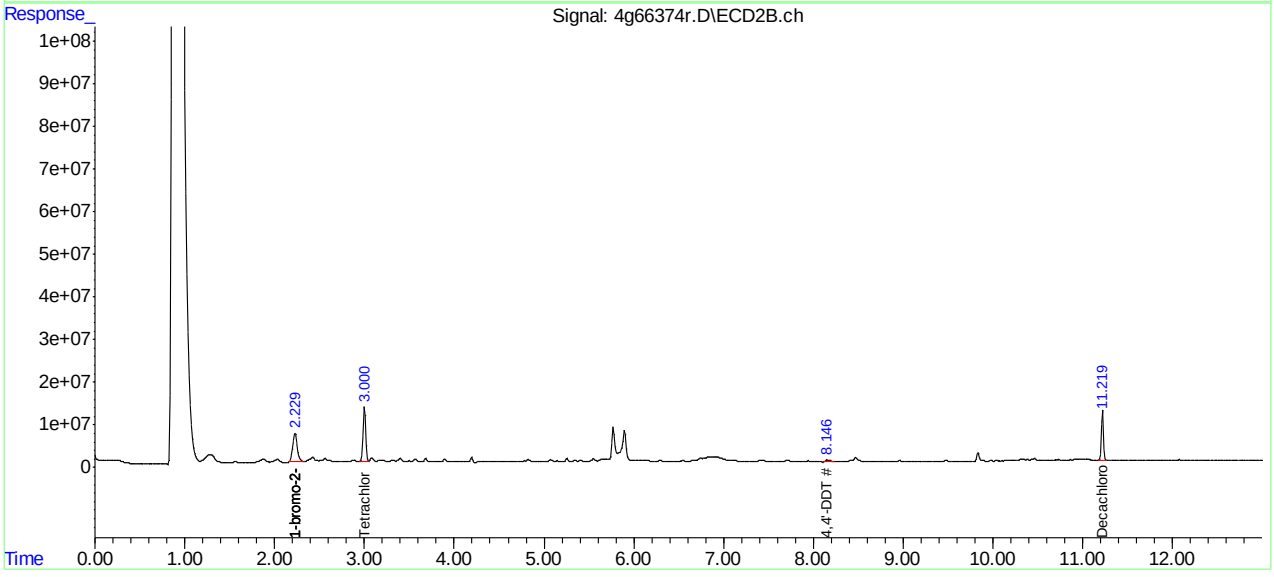
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66374r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:13 am
Operator : brittanp
Sample : jc16312-8t (Sig #1); jc16312-8 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:55:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	JC16312-8T	**Method:**	SW846 8081B
Lab FileID:	4G66374R.D	**Analyst approved:**	04/29/16 16:01 Brittany Piercy
Injection Time:	03/22/16 11:13	**Supervisor approved:**	04/29/16 17:46 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	1	6.55	Poor instrument integration
4,4'-DDT	50-29-3	2	8.15	Poor instrument integration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66375r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:27 am
Operator : brittanp
Sample : jc16312-9t (Sig #1); jc16312-9 (Sig #2)
Misc : op92235,g4g1746,990,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 29 16:05:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.068	2.231	210.7E6	285.0E6	50.000	50.000
25) I	1-bromo-2...	2.068	2.231	210.7E6	285.0E6	50.000	50.000
31) I	1-bromo-2...	2.068	2.231	210.7E6	285.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.606	3.003	156.6E6	190.6E6	38.025	35.197
Spiked Amount		40.000	Range	30 - 150	Recovery	= 95.06%	87.99%
24) SA	Decachlor...	9.805	11.217	135.0E6	99649686	31.999	24.878
Spiked Amount		40.000		Recovery		= 80.00%	62.20%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

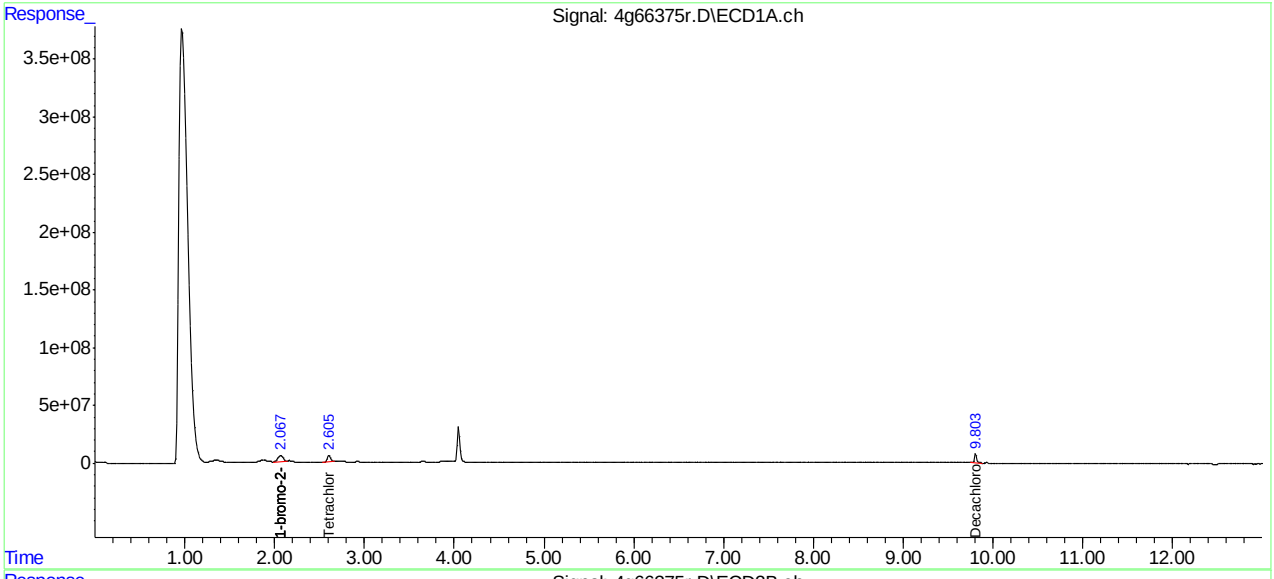
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

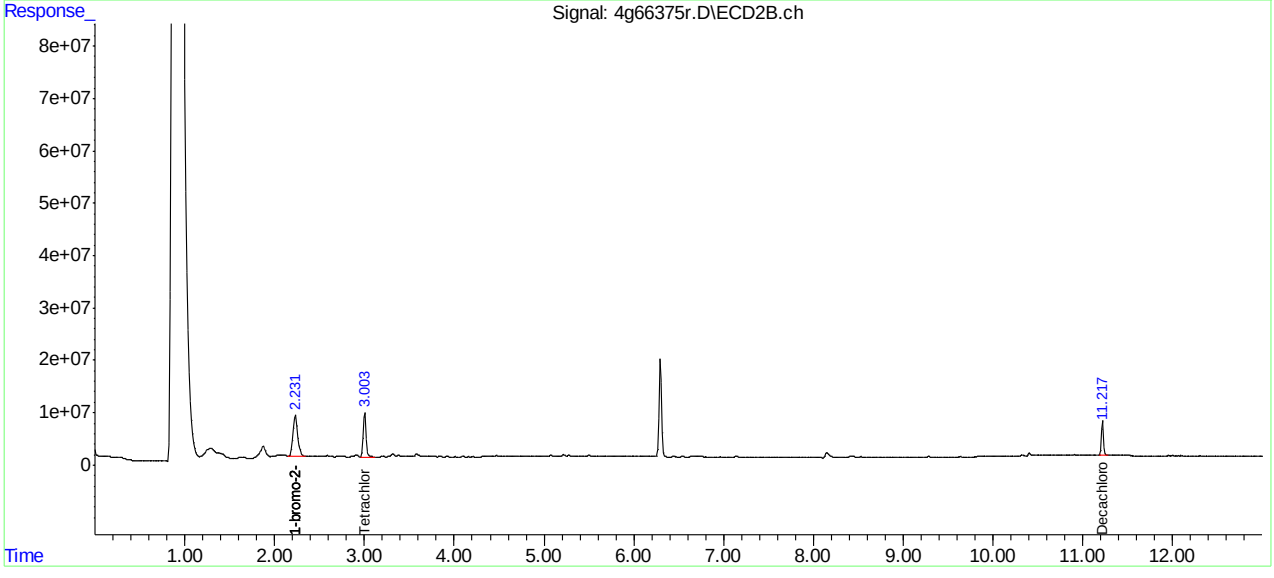
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66375r.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:27 am
Operator : brittanp
Sample : jc16312-9t (Sig #1); jc16312-9 (Sig #2)
Misc : op92235,g4g1746,990,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 29 16:05:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66364.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:46 am
Operator : brittanp
Sample : op92235-mb1 (Sig #1); op92238-mb1 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:33:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.076	2.228	211.9E6	232.0E6	50.000	50.000
25) I	1-bromo-2...	2.076	2.228	211.9E6	232.0E6	50.000	50.000
31) I	1-bromo-2...	2.076	2.228	211.9E6	232.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.614	3.000	131.4E6	139.9E6	31.720	31.731
Spiked Amount		40.000	Range	30 - 150	Recovery	= 79.30%	79.33%
24) SA	Decachlor...	9.815	11.221	145.3E6	108.9E6	34.260	33.398
Spiked Amount		40.000			Recovery	= 85.65%	83.50%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

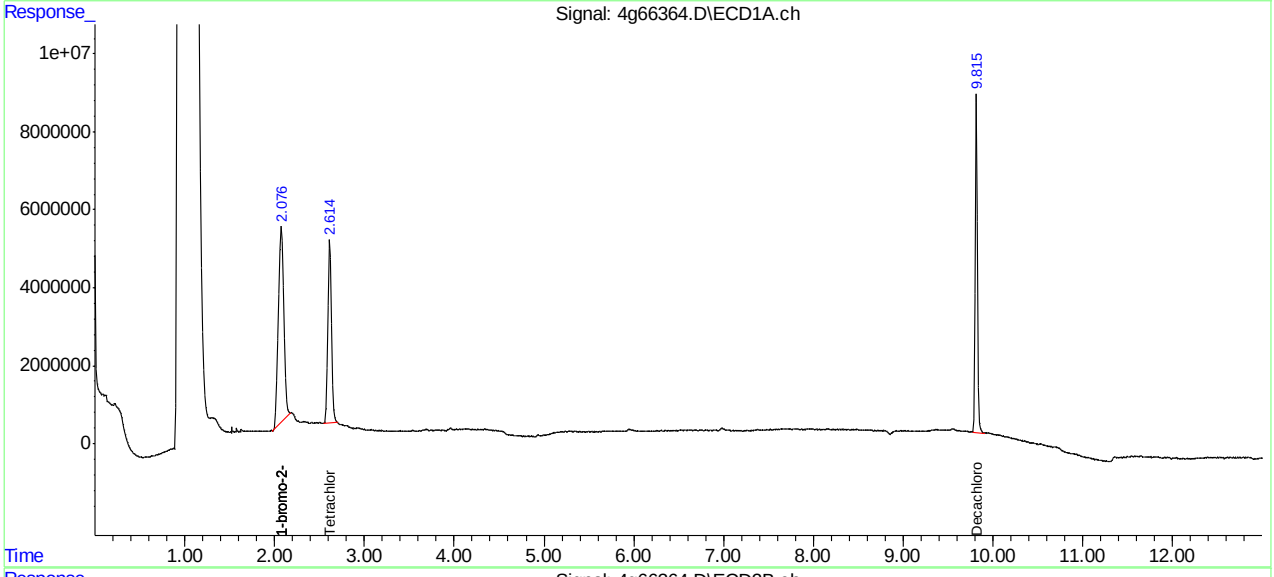
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

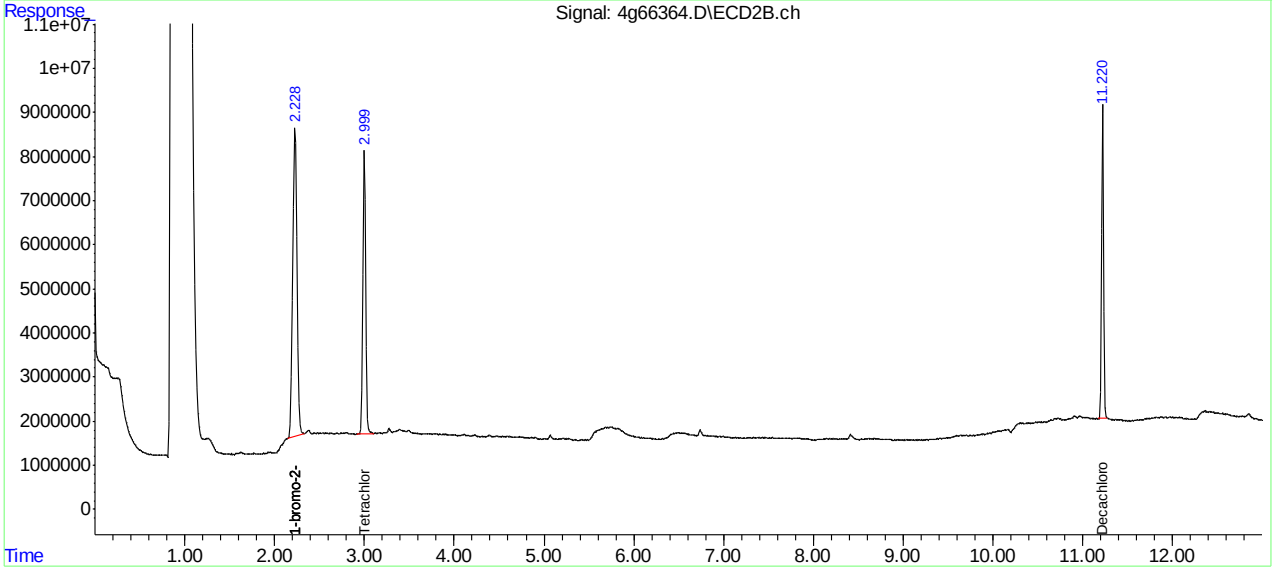
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66364.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:46 am
Operator : brittanp
Sample : op92235-mb1 (Sig #1); op92238-mb1 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:33:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121300.D\ECD1A.CH Vial: 32
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121300.D\ECD2B.CH
Acq On    : 3-24-16 09:52:06 AM                    Operator: rebeccak
Sample    : op92374-mb1                            Inst    : GC1G
Misc      : op92374,g1g3944,1000,,,10,1            Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:08 2016  Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	57919438	811.2E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	57919438	811.2E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	57919438	811.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	47069772	501.9E6	35.554	32.235
Spiked Amount 40.000	Range 30 - 150		Recovery =		88.89%	80.59%
24) SA Decachlorobiphen	8.95	10.88	69527920	347.2E6	43.750	38.448
Spiked Amount 40.000			Recovery =		109.38%	96.12%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

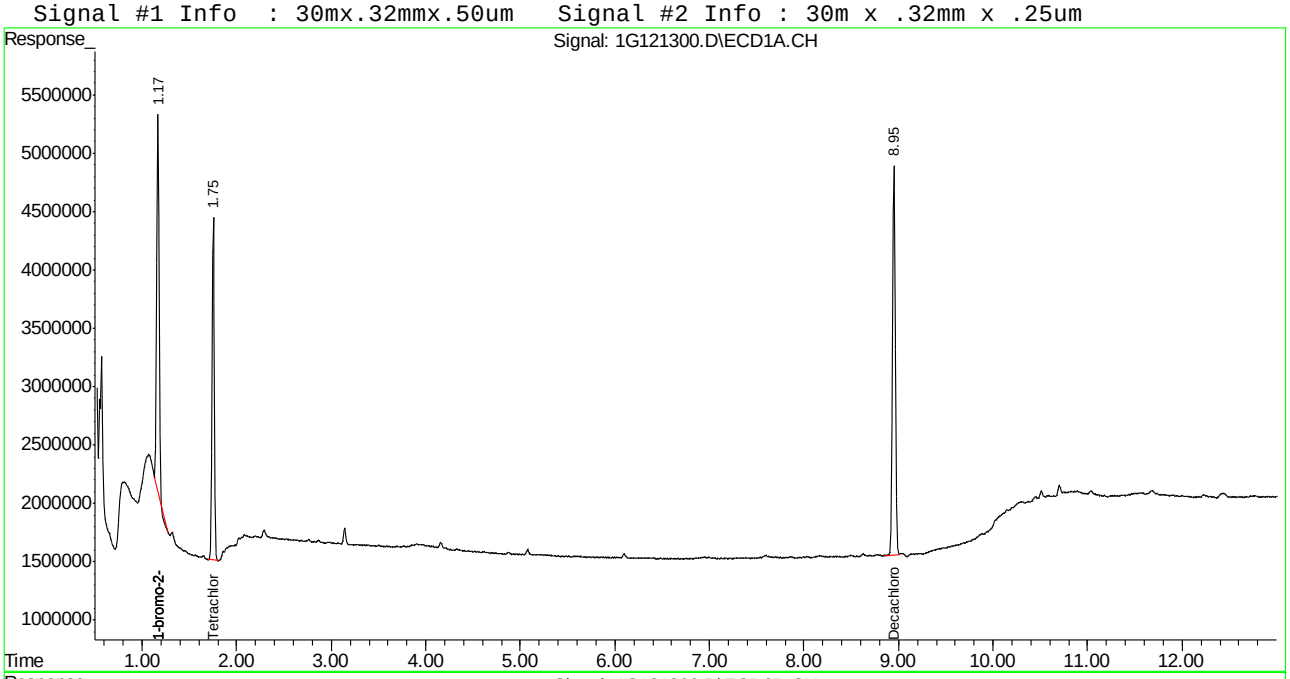
SGS ACCUTEST JC16312T

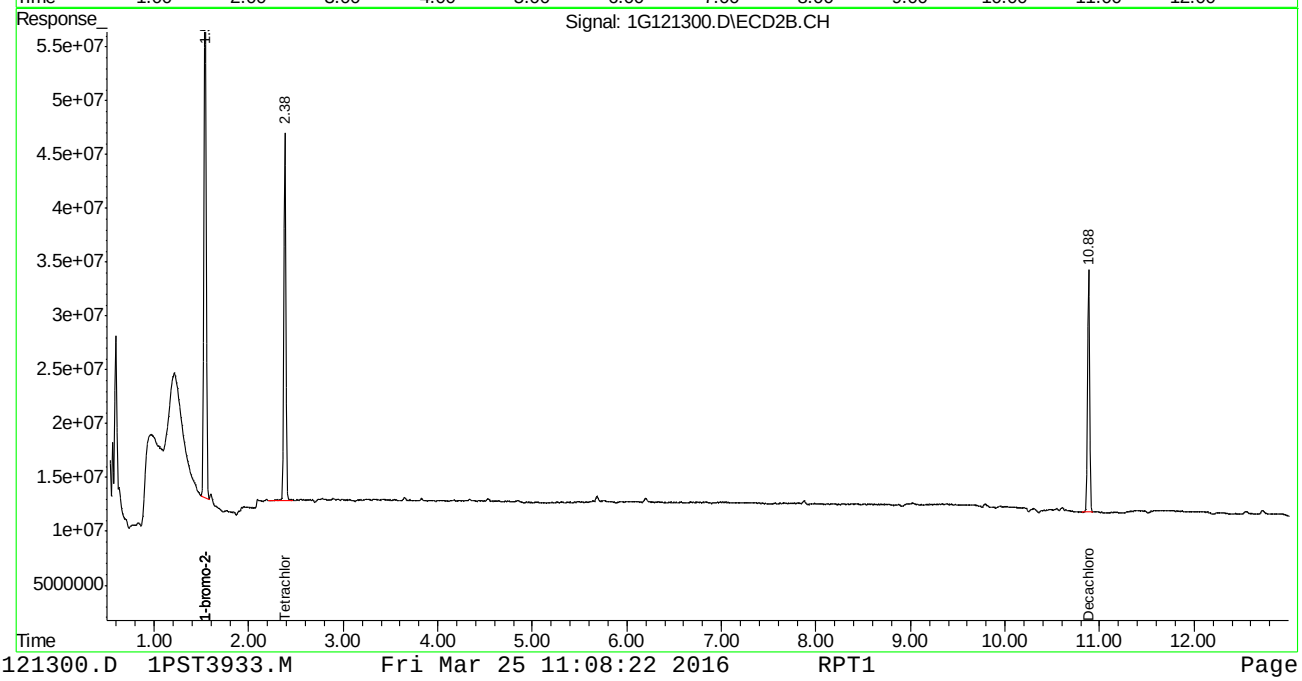
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121300.D\ECD1A.CH Vial: 32
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121300.D\ECD2B.CH
Acq On : 3-24-16 09:52:06 AM Operator: rebeccak
Sample : op92374-mb1 Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:08 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





1G121300.D 1PST3933.M Fri Mar 25 11:08:22 2016 RPT1 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/23/16 11:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66365.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:01 am
Operator : brittanp
Sample : op92235-bs1 (Sig #1); op92238-bs1 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:35:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.074	2.234	243.4E6	217.2E6	50.000	50.000	
25) I	1-bromo-2...	2.074	2.234	243.4E6	217.2E6	50.000	50.000	
31) I	1-bromo-2...	2.074	2.234	243.4E6	217.2E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.609	3.003	203.7E6	198.4E6	42.802	48.048	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 107.01%	120.12%	
24) SA	Decachlor...	9.807	11.218	206.0E6	153.1E6	42.277	50.129	
	Spiked Amount	40.000			Recovery	= 105.69%	125.32%	
	Target Compounds							
3) A	alpha-BHC	3.048	3.640	186.5E6	183.8E6	29.234	33.578	
4) MA	gamma-BHC	3.333	4.062	172.5E6	159.2E6	30.101	32.427	
5) MA	Heptachlor	3.605	4.636	143.8E6	163.0E6	25.888	32.910	#
6) B	beta-BHC	3.417	4.143	84687462	70621375	29.170	32.206	
7) B	delta-BHC	3.813	4.539	153.1E6	150.6E6	27.885	32.936	
8) MB	Aldrin	4.146	5.091	154.2E6	151.6E6	27.264	30.779	
9) B	Heptachlo...	4.844	5.905	148.6E6	149.3E6	28.227	33.712m	
10) B	gamma-Chl...	5.014	6.192	136.7E6	149.1E6	26.392	32.977	
11) B	alpha-Chl...	5.182	6.416	141.5E6	143.9E6	27.684	32.570	
12) A	Endosulfan I	5.360	6.518	148.4E6	136.0E6	27.929	31.379	
13) B	4,4'-DDE	5.299	6.665	118.1E6	141.7E6	27.549	33.500	
14) MA	Dieldrin	5.679	6.953	151.2E6	149.8E6	29.005	34.235	
15) MA	Endrin	6.005	7.462	143.5E6	141.6E6	31.394	35.771	
16) A	4,4'-DDD	6.144	7.620	108.7E6	118.4E6	29.225	31.294	
17) B	Endosulfa...	6.332	7.813	133.6E6	131.4E6	29.768	33.109	
18) MA	4,4'-DDT	6.550	8.155	87007778	98979518	29.437	34.392	
19) B	Endrin Al...	6.947	8.382	109.8E6	105.5E6	29.289	31.283	
20) B	Endosulfa...	7.623	8.853	117.6E6	118.3E6	31.600	34.803	
21) A	Methoxychlor	7.343	9.383	51552014	58229567	35.519	39.115	
23) B	Endrin Ke...	8.077	9.755	138.3E6	137.6E6	31.789	34.971	

SemiQuant Compounds - Not Calibrated on this Instrument

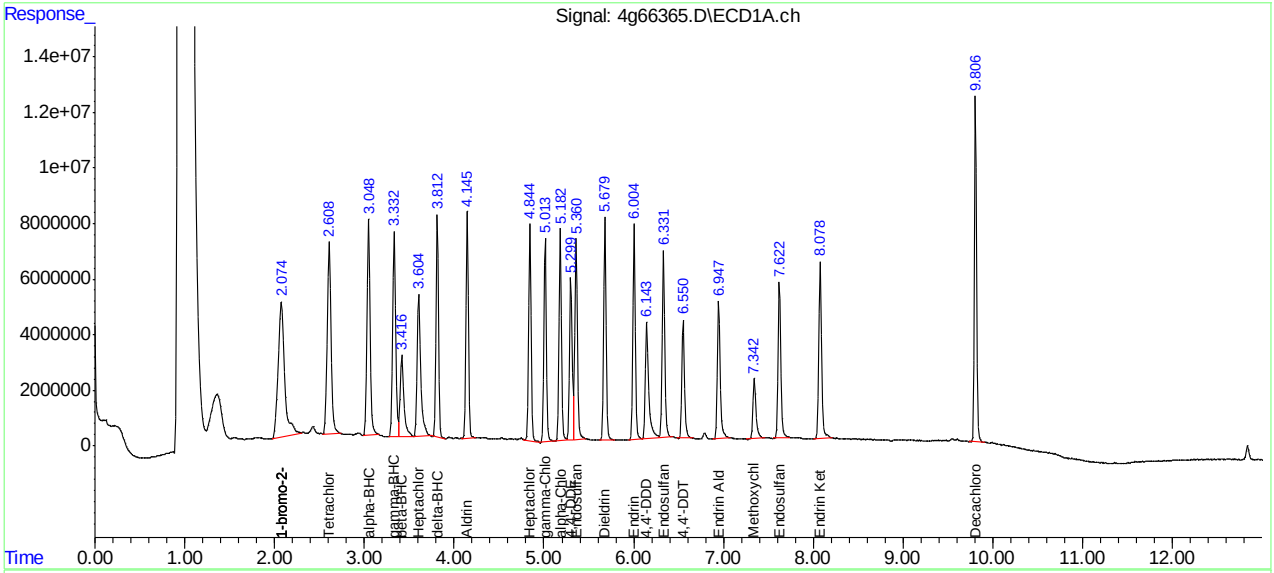
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

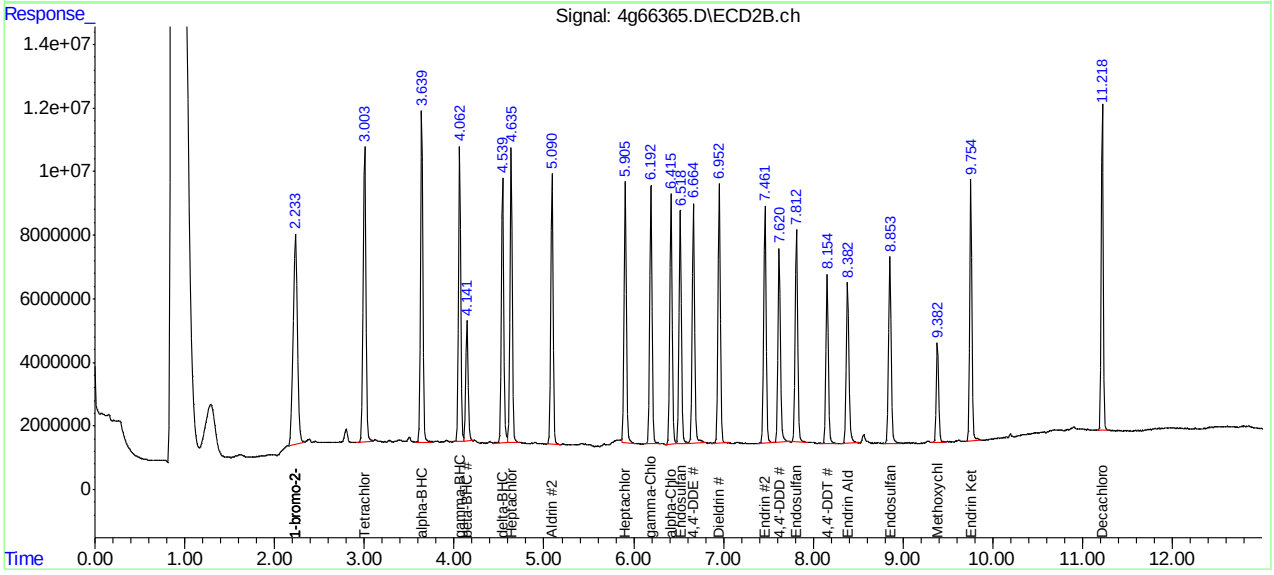
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66365.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:01 am
Operator : brittanp
Sample : op92235-bs1 (Sig #1); op92238-bs1 (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:35:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	OP92235-BS1	**Method:**	SW846 8081B
Lab FileID:	4G66365.D	**Analyst approved:**	03/22/16 11:57 Brittany Piercy
Injection Time:	03/22/16 09:01	**Supervisor approved:**	03/23/16 11:30 Gwendolyn Burns

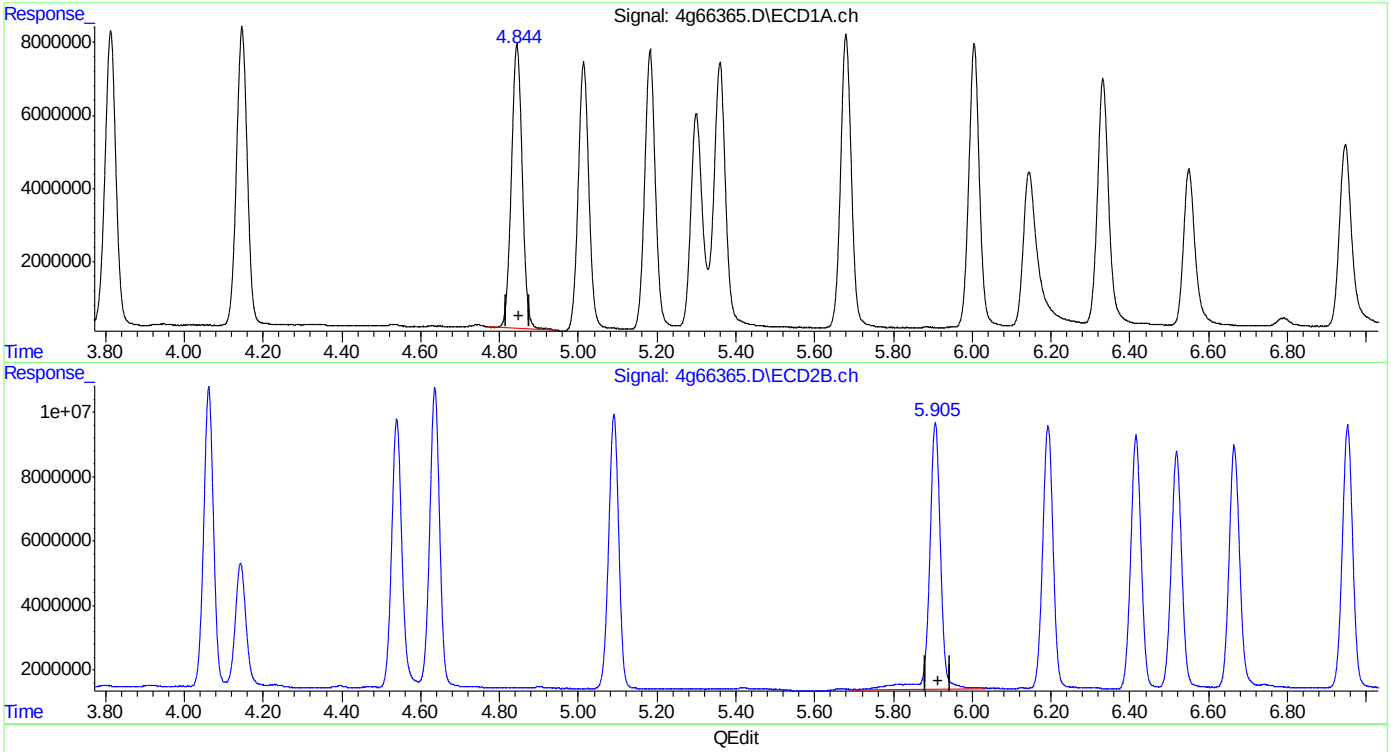
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	2	5.91	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66365.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Mar 2016   9:01 am
Operator  : brittanp
Sample    : op92238-bs1
Misc      : op92235,g4g1746,1000,,,10,1
ALS Vial  : 5   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:34:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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
```



QEdit

(9) Heptachlor Epoxide (B)

4.844min 28.227 PPB

response 148575867

(9) Heptachlor Epoxide #2 (B)

5.906min 36.210 PPB

response 160407239

(+) = Expected Retention Time

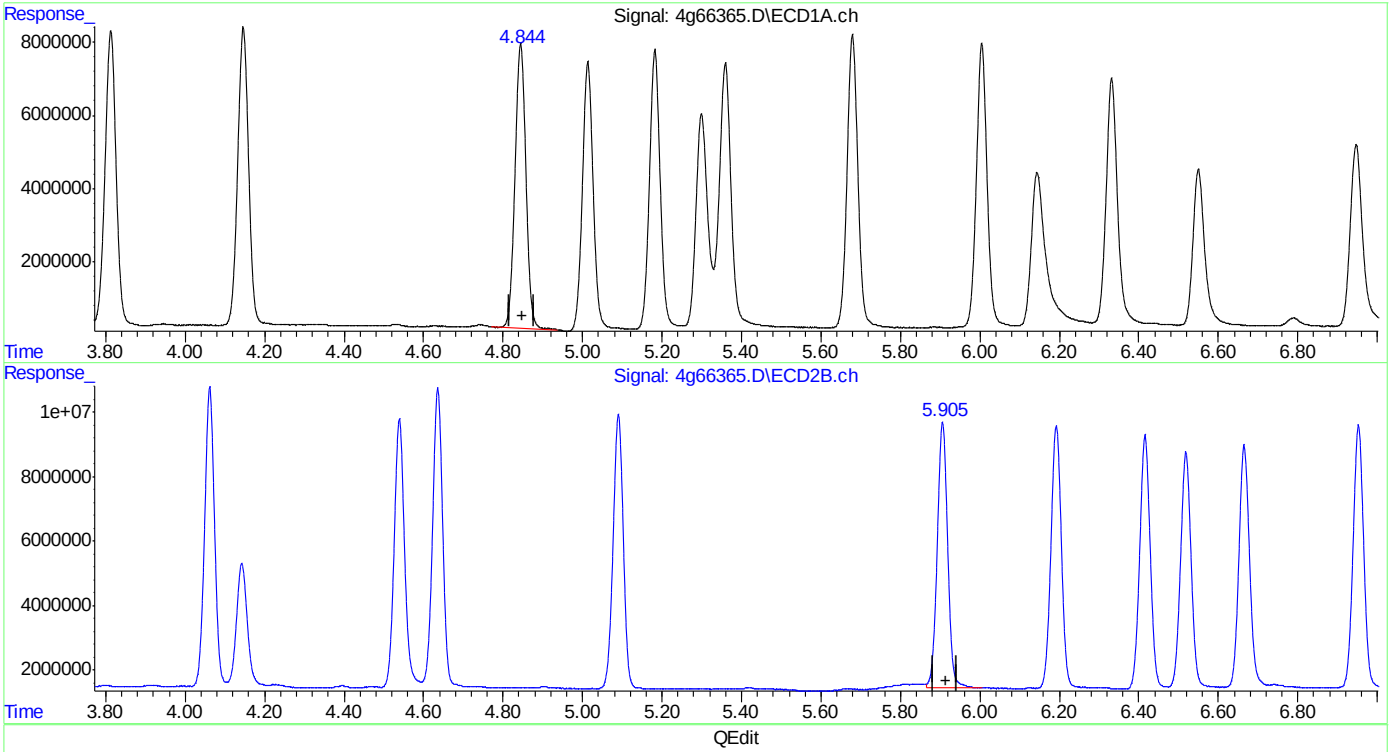
4PST1741.M Tue Mar 22 11:34:27 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66365.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:01 am
Operator : brittanp
Sample : op92238-bs1
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:34:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(9) Heptachlor Epoxide (B)
4.844min 28.227 PPB
response 148575867

(9) Heptachlor Epoxide #2 (B)
5.905min 33.712 PPB m
response 149341033

(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:34:39 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/23/16 11:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66366.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:15 am
Operator : brittanp
Sample : op92235-bsd (Sig #1); op92238-bsd (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:36:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.074	2.234	239.6E6	231.1E6	50.000	50.000
25) I	1-bromo-2...	2.074	2.234	239.6E6	231.1E6	50.000	50.000
31) I	1-bromo-2...	2.074	2.234	239.6E6	231.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.608	3.003	245.9E6	238.2E6	52.497	54.238
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 131.24%	135.60%
24) SA	Decachlor...	9.806	11.217	291.8E6	214.0E6	60.828	65.904
	Spiked Amount	40.000			Recovery	= 152.07%	164.76%
	Target Compounds						
3) A	alpha-BHC	3.046	3.641	248.4E6	248.4E6	39.546	42.656
4) MA	gamma-BHC	3.331	4.062	231.5E6	219.6E6	41.032	42.059
5) MA	Heptachlor	3.603	4.637	207.6E6	218.9E6	37.975	41.548
6) B	beta-BHC	3.415	4.143	111.8E6	98001925	39.110	42.020
7) B	delta-BHC	3.812	4.539	203.9E6	217.6E6	37.724	44.736
8) MB	Aldrin	4.146	5.090	200.7E6	198.3E6	36.058	37.846
9) B	Heptachlo...	4.844	5.906	206.3E6	203.8E6	39.821	43.256m
10) B	gamma-Chl...	5.012	6.192	192.7E6	207.3E6	37.794	43.119
11) B	alpha-Chl...	5.181	6.416	197.3E6	198.5E6	39.209	42.234
12) A	Endosulfan I	5.357	6.519	204.1E6	187.2E6	39.023	40.594
13) B	4,4'-DDE	5.296	6.665	173.4E6	192.7E6	41.090	42.835
14) MA	Dieldrin	5.678	6.953	212.8E6	210.4E6	41.475	45.191
15) MA	Endrin	6.004	7.461	203.3E6	198.8E6	45.165	47.207
16) A	4,4'-DDD	6.140	7.619	156.9E6	167.8E6	42.857	41.724
17) B	Endosulfa...	6.329	7.813	189.9E6	185.8E6	42.989	44.022
18) MA	4,4'-DDT	6.547	8.153	132.2E6	145.1E6	43.017	46.017
19) B	Endrin Al...	6.945	8.381	156.6E6	147.4E6	42.410	41.093
20) B	Endosulfa...	7.621	8.852	173.2E6	166.8E6	47.264	46.111
21) A	Methoxychlor	7.341	9.383	75171442	84158012	52.612	53.152
23) B	Endrin Ke...	8.075	9.754	197.2E6	197.2E6	46.037	47.117
	SemiQuant Compounds - Not Calibrated on this Instrument						

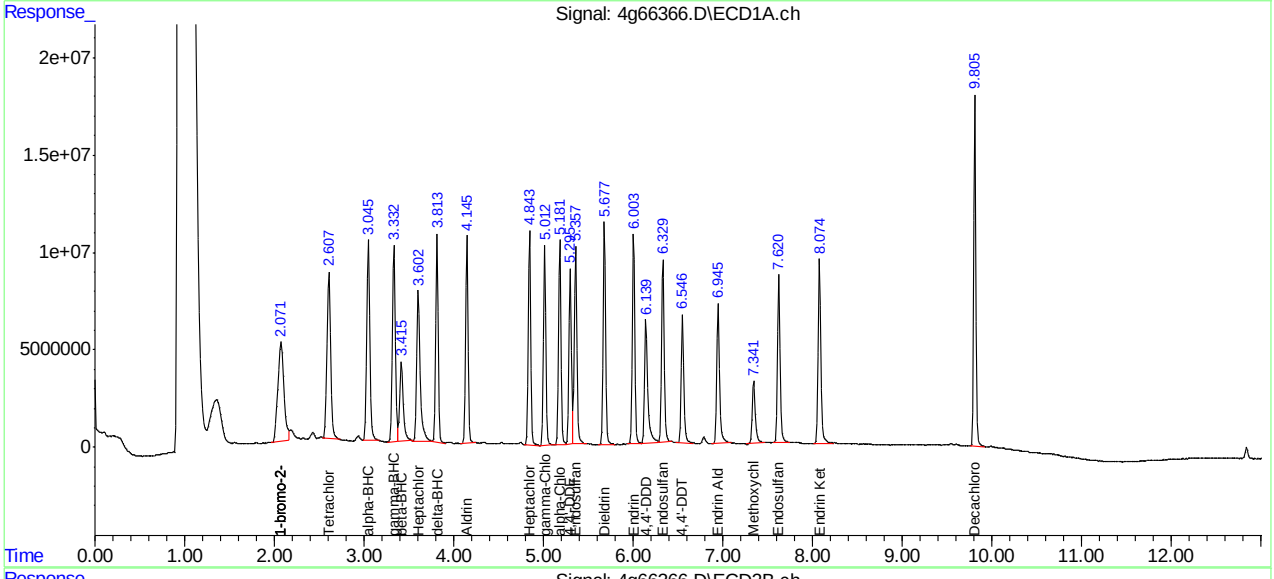
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

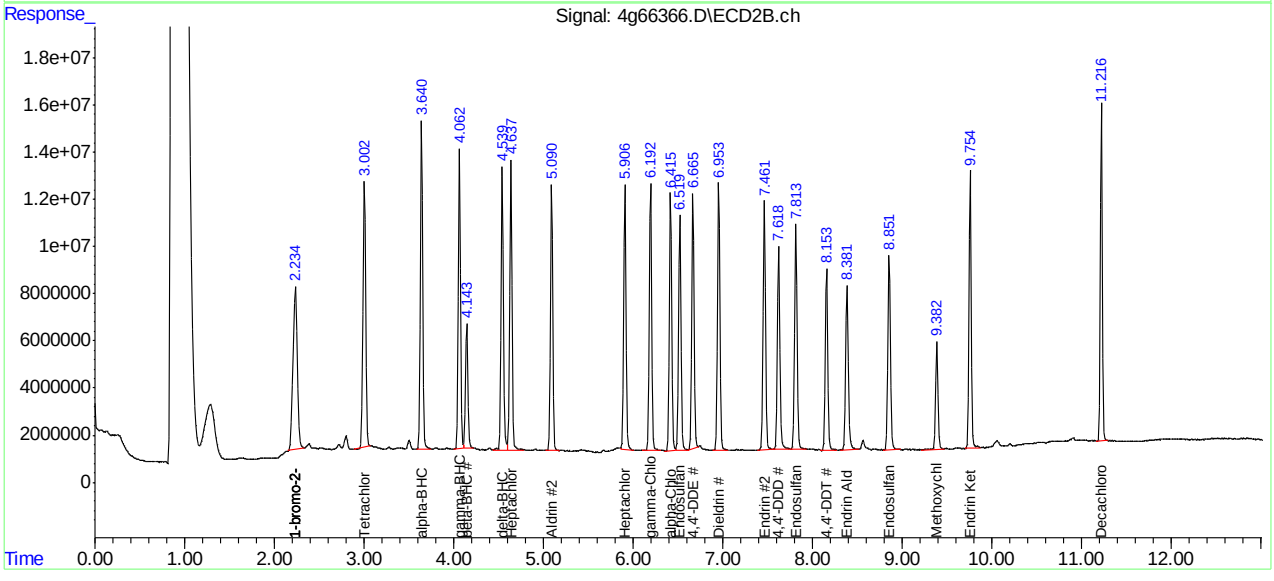
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66366.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:15 am
Operator : brittanp
Sample : op92235-bsd (Sig #1); op92238-bsd (Sig #2)
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:36:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	OP92235-BSD	**Method:**	SW846 8081B
Lab FileID:	4G66366.D	**Analyst approved:**	03/22/16 11:57 Brittany Piercy
Injection Time:	03/22/16 09:15	**Supervisor approved:**	03/23/16 11:30 Gwendolyn Burns

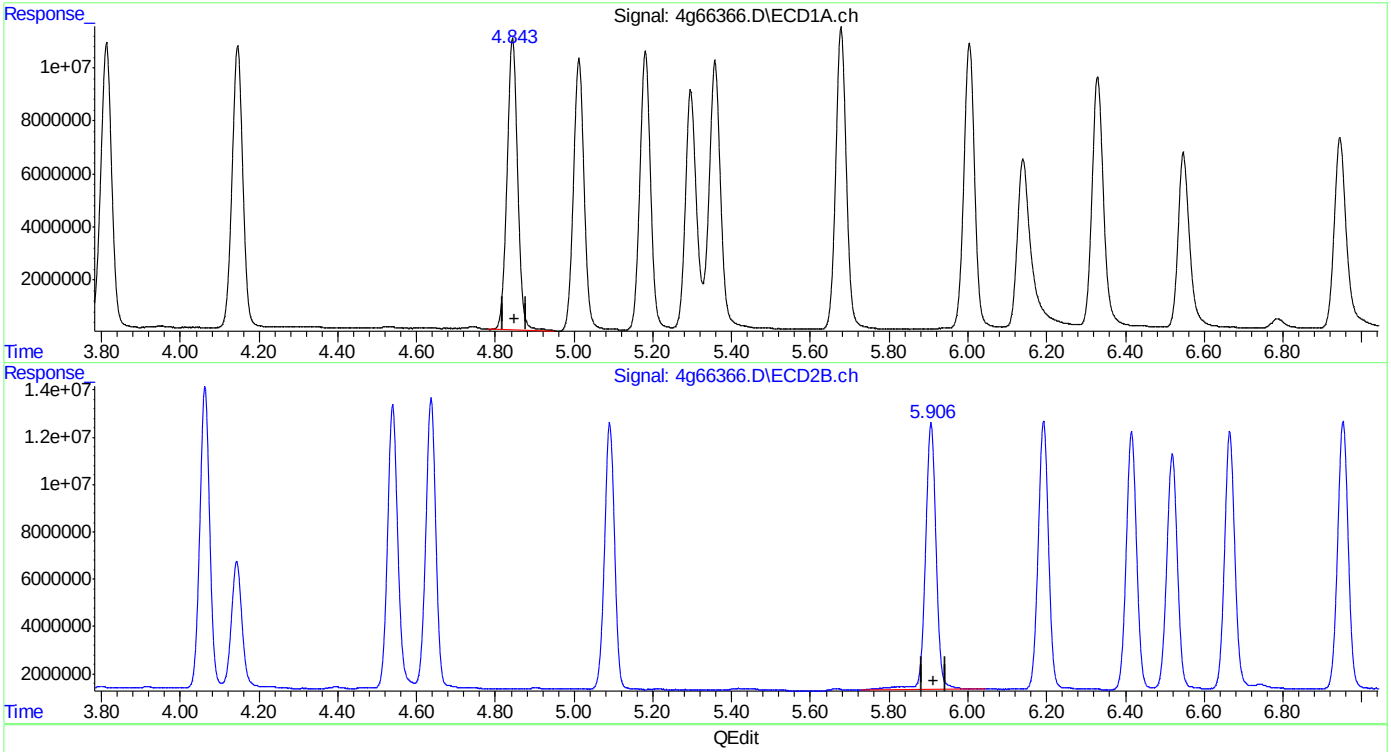
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	2	5.91	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66366.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:15 am
Operator : brittanp
Sample : op92238-bsd
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:35:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(9) Heptachlor Epoxide (B)
4.844min 39.821 PPB
response 206337366

(9) Heptachlor Epoxide #2 (B)
5.906min 44.996 PPB
response 212007412

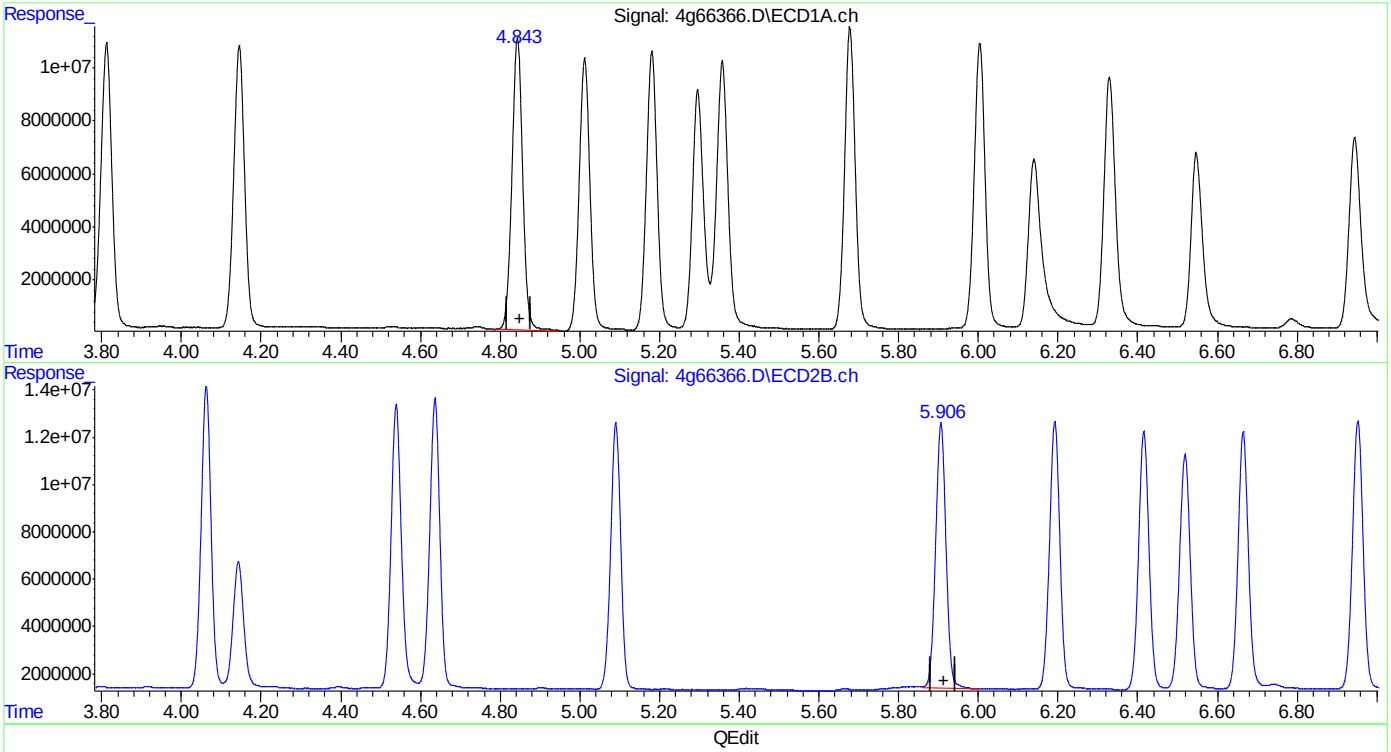
(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:35:25 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66366.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 9:15 am
Operator : brittanp
Sample : op92238-bsd
Misc : op92235,g4g1746,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:35:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(9) Heptachlor Epoxide (B)
4.844min 39.821 PPB
response 206337366

(9) Heptachlor Epoxide #2 (B)
5.906min 43.256 PPB m
response 203805888

(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:35:41 2016 RPT1

SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121301.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121301.D\ECD2B.CH
Acq On : 24 Mar 2016 10:09 am Operator: rebeccak
Sample : op92374-bs1 Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:08 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	62483251	825.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	62483251	825.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	62483251	825.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	45820285	496.9E6	32.082	31.376
Spiked Amount	40.000 Range	30 - 150	Recovery	=		80.20%	78.44%
24) SA	Decachlorobiphen	8.95	10.88	61013384	302.5E6	35.588	32.930
Spiked Amount	40.000		Recovery	=		88.97%	82.33%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	34462302	486.1E6	20.857	20.652
4) MA	gamma-BHC	2.51	3.48	33673357	438.7E6	21.353	20.703
5) MA	Heptachlor	2.99	4.06	34143182	371.1E6	20.049	19.815
6) B	beta-BHC	2.59	3.57	17483189	189.6E6	20.991	20.773
7) B	delta-BHC	2.77	3.97	32030054	440.6E6	21.710	20.793
8) MB	Aldrin	3.31	4.51	29145547	356.4E6	19.173	19.214
9) B	Heptachlor Epoxi	4.01	5.33	32364360	353.5E6	20.805	20.691
10) B	gamma-Chlordane	4.16	5.62	32861060	345.1E6	21.310	20.892
11) B	alpha-Chlordane	4.33	5.84	32536027	337.1E6	21.010	20.478
12) A	Endosulfan I	4.50	5.94	30512276	327.8E6	20.615	20.800
13) B	4,4'-DDE	4.44	6.11	29022816	345.7E6	22.273	21.281
14) MA	Dieldrin	4.82	6.37	31631136	369.7E6	21.447	21.445
15) MA	Endrin	5.13	6.88	31600947	345.8E6	23.731	21.719
16) A	4,4'-DDD	5.26	7.06	24934596	300.6E6	22.336	21.375
17) B	Endosulfan II	5.45	7.23	31121341	320.6E6	21.475	20.933
18) MA	4,4'-DDT	5.67	7.60	25415828	240.3E6	23.833	24.296
19) B	Endrin Aldehyde	6.07	7.81	26508125	252.0E6	22.022	21.698
20) B	Endosulfan Sulfa	6.75	8.28	29642472	282.7E6	21.761	21.641
21) A	Methoxychlor	6.45	8.85	17635536	129.5E6	22.852	24.947
23) B	Endrin Ketone	7.17	9.24	33182504	299.1E6	22.201	21.921

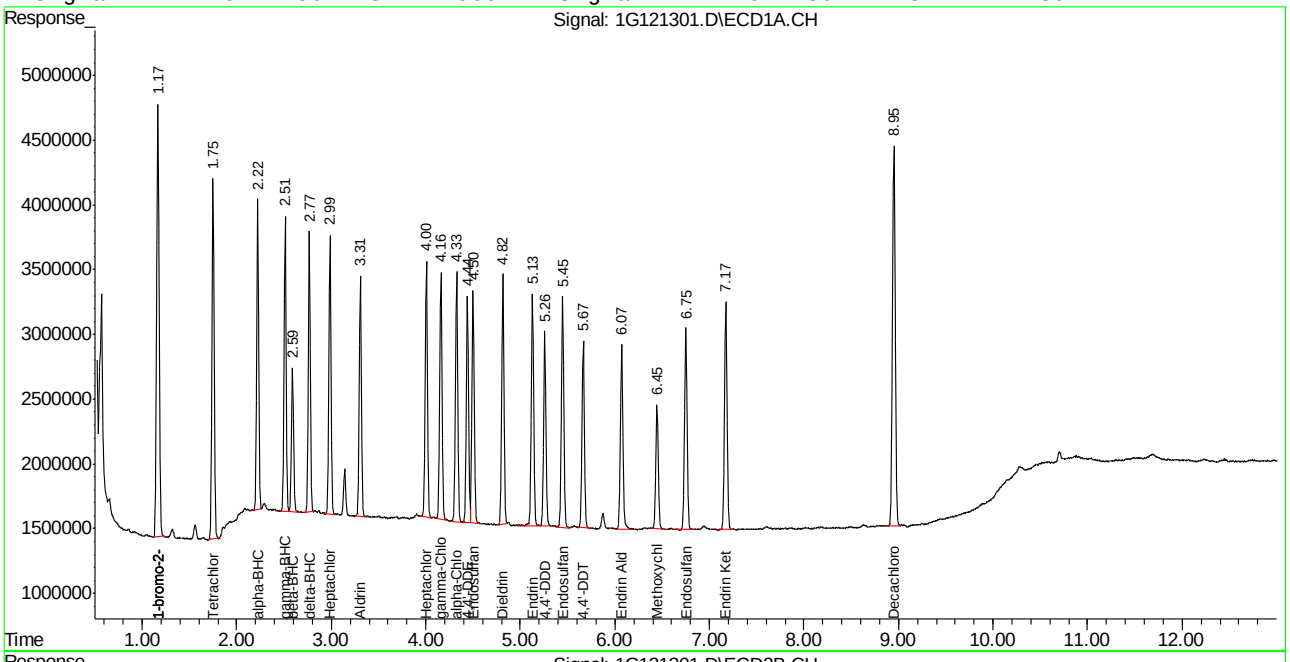
(f)=RT Delta > 1/2 Window (m)=manual int.

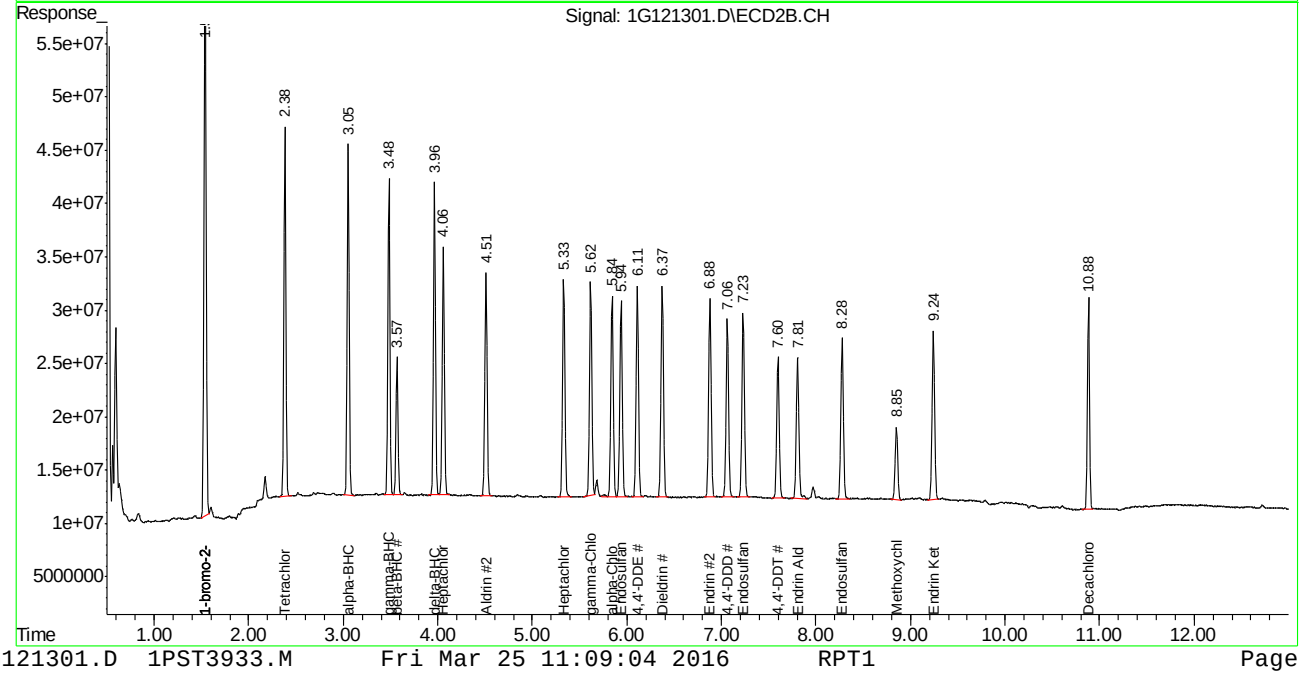
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121301.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121301.D\ECD2B.CH
Acq On : 24 Mar 2016 10:09 am Operator: rebeccak
Sample : op92374-bs1 Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:08 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121321.D\ECD1A.CH Vial: 54
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121321.D\ECD2B.CH
Acq On : 3-24-16 05:22:01 PM Operator: rebeccak
Sample : op92374-ms Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:33 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	58298640	880.4E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	58298640	880.4E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	58298640	880.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	41314579	491.5E6	31.004	29.086
Spiked Amount	40.000	Range	30 - 150	Recovery	=	77.51%	72.72%
24) SA	Decachlorobiphen	8.95	10.88	32849329	160.6E6	20.536	16.381
Spiked Amount	40.000			Recovery	=	51.34%	40.95%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	36515818	530.9E6	23.686	21.138
4) MA	gamma-BHC	2.51	3.48	34823292	468.9E6	23.667	20.739
5) MA	Heptachlor	2.99	4.06	32158263	371.1E6	20.239	18.569
6) B	beta-BHC	2.59	3.57	19096442	210.1E6	24.574	21.564
7) B	delta-BHC	2.77	3.97	34437408	471.0E6	25.017	20.830
8) MB	Aldrin	3.31	4.51	24465612	312.6E6	17.250	15.794
9) B	Heptachlor Epoxi	4.01	5.33	31771526	356.3E6	21.890	19.545
10) B	gamma-Chlordane	4.16	5.62	30527976	322.4E6	21.218	18.292
11) B	alpha-Chlordane	4.33	5.84	28753688	305.9E6	19.900	17.416
12) A	Endosulfan I	4.50	5.94	30025559	330.3E6	21.742	19.639
13) B	4,4'-DDE	4.44	6.11	21782041	268.5E6	17.916	15.489
14) MA	Dieldrin	4.82	6.38	30506063	364.7E6	22.168	19.829
15) MA	Endrin	5.13	6.88	29781688	350.3E6	23.970	20.619
16) A	4,4'-DDD	5.26	7.06	21491636	272.6E6	20.634	18.169
17) B	Endosulfan II	5.45	7.23	31188667	328.8E6	23.066	20.116
18) MA	4,4'-DDT	5.66	7.60	19622548	196.1E6	19.721	18.583
19) B	Endrin Aldehyde	6.07	7.81	27586895	314.6E6	24.564	25.387
20) B	Endosulfan Sulfa	6.75	8.28	30289888	292.5E6	23.833	20.987
21) A	Methoxychlor	6.45	8.85	17827426	128.0E6	24.759	23.101
23) B	Endrin Ketone	7.17	9.24	34582589	319.0E6	24.799	21.908

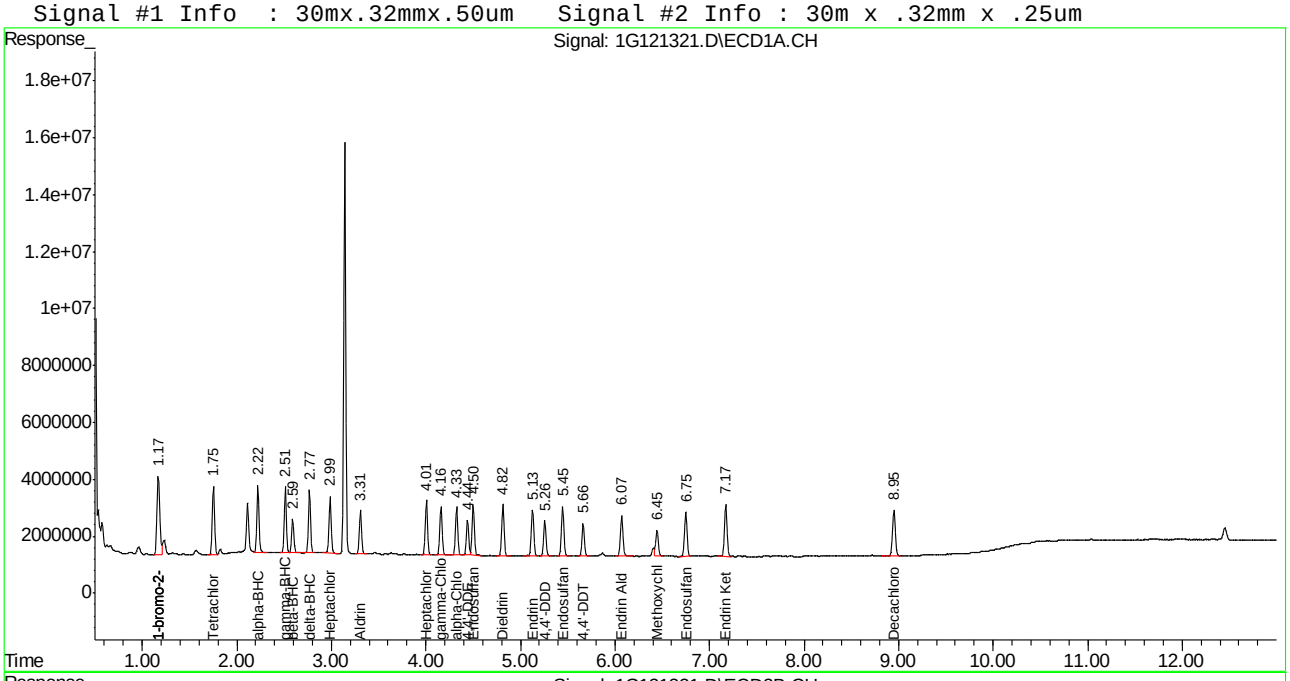
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121321.D 1PST3933.M Fri Mar 25 11:33:55 2016 RPT1 Page 1

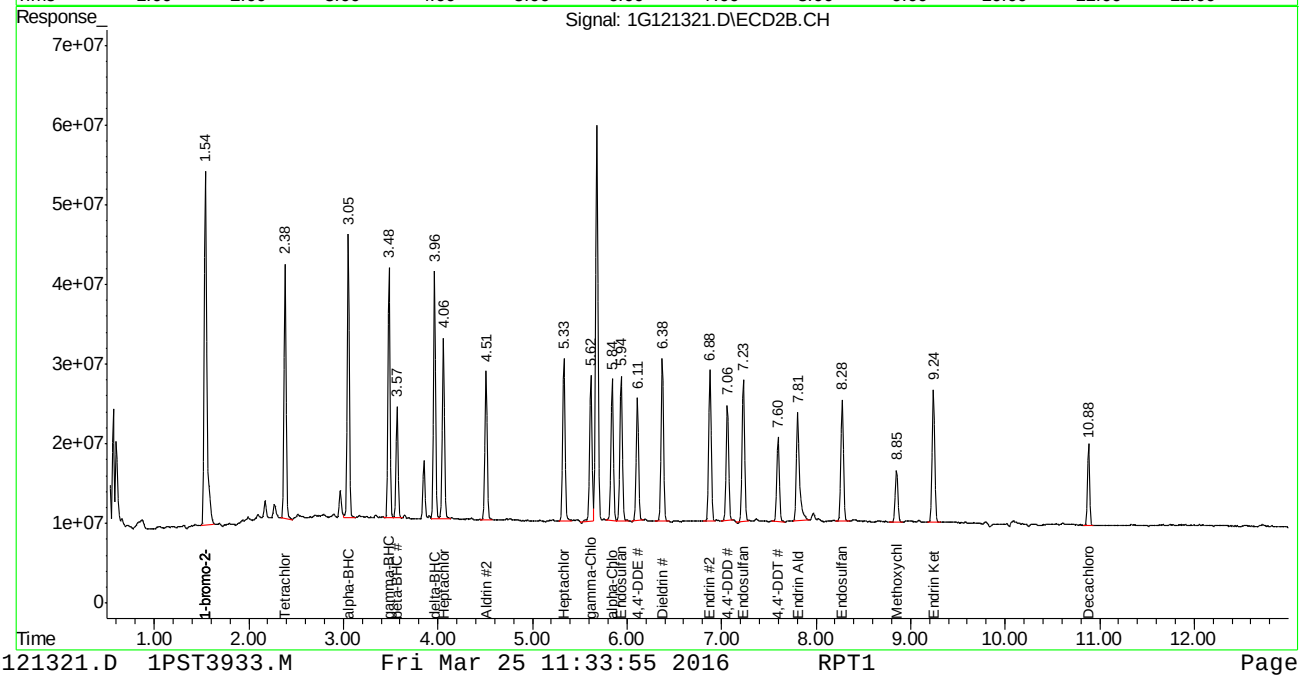
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121321.D\ECD1A.CH Vial: 54
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121321.D\ECD2B.CH
Acq On : 3-24-16 05:22:01 PM Operator: rebeccak
Sample : op92374-ms Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:33 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121322.D\ECD1A.CH Vial: 55
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121322.D\ECD2B.CH
Acq On : 3-24-16 05:39:37 PM Operator: rebeccak
Sample : op92374-msd Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:34 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	71287386	1064.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	71287386	1064.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	71287386	1064.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.39	43815902	511.4E6	26.890	25.037
Spiked Amount	40.000	Range	30 - 150	Recovery	=	67.22%	62.59%
24) SA	Decachlorobiphen	8.95	10.88	37189104	180.0E6	19.013	15.193
Spiked Amount	40.000			Recovery	=	47.53%	37.98%
	Target Compounds						
3) A	alpha-BHC	2.23	3.05	37369938	528.9E6	19.824	17.423
4) MA	gamma-BHC	2.51	3.48	35799926	477.7E6	19.898	17.480
5) MA	Heptachlor	2.99	4.06	35819032	394.4E6	18.435	16.326
6) B	beta-BHC	2.59	3.57	19568370	212.0E6	20.593	18.004
7) B	delta-BHC	2.77	3.97	34639446	476.4E6	20.579	17.429
8) MB	Aldrin	3.31	4.51	28056053	350.2E6	16.177	14.636
9) B	Heptachlor Epoxi	4.01	5.33	33600570	376.0E6	18.932	17.064
10) B	gamma-Chlordane	4.16	5.62	32354084	351.3E6	18.390	16.491
11) B	alpha-Chlordane	4.33	5.84	31548202	331.6E6	17.856	15.620
12) A	Endosulfan I	4.50	5.94	31544668	345.0E6	18.680	16.972
13) B	4,4'-DDE	4.44	6.11	24401928	299.0E6	16.414	14.269
14) MA	Dieldrin	4.81	6.37	32506777	385.9E6	19.318	17.355
15) MA	Endrin	5.13	6.88	31687584	366.5E6	20.857	17.850
16) A	4,4'-DDD	5.26	7.06	23310147	293.2E6	18.302	16.165
17) B	Endosulfan II	5.45	7.23	32394376	345.7E6	19.593	17.498
18) MA	4,4'-DDT	5.66	7.60	21594178	213.0E6	17.748	16.700
19) B	Endrin Aldehyde	6.07	7.81	28541937	297.4E6	20.783	19.854
20) B	Endosulfan Sulfa	6.75	8.28	31214993	301.3E6	20.086	17.886
21) A	Methoxychlor	6.45	8.85	19923080	136.5E6	22.628	20.391
23) B	Endrin Ketone	7.17	9.24	34922828	321.6E6	20.480	18.273

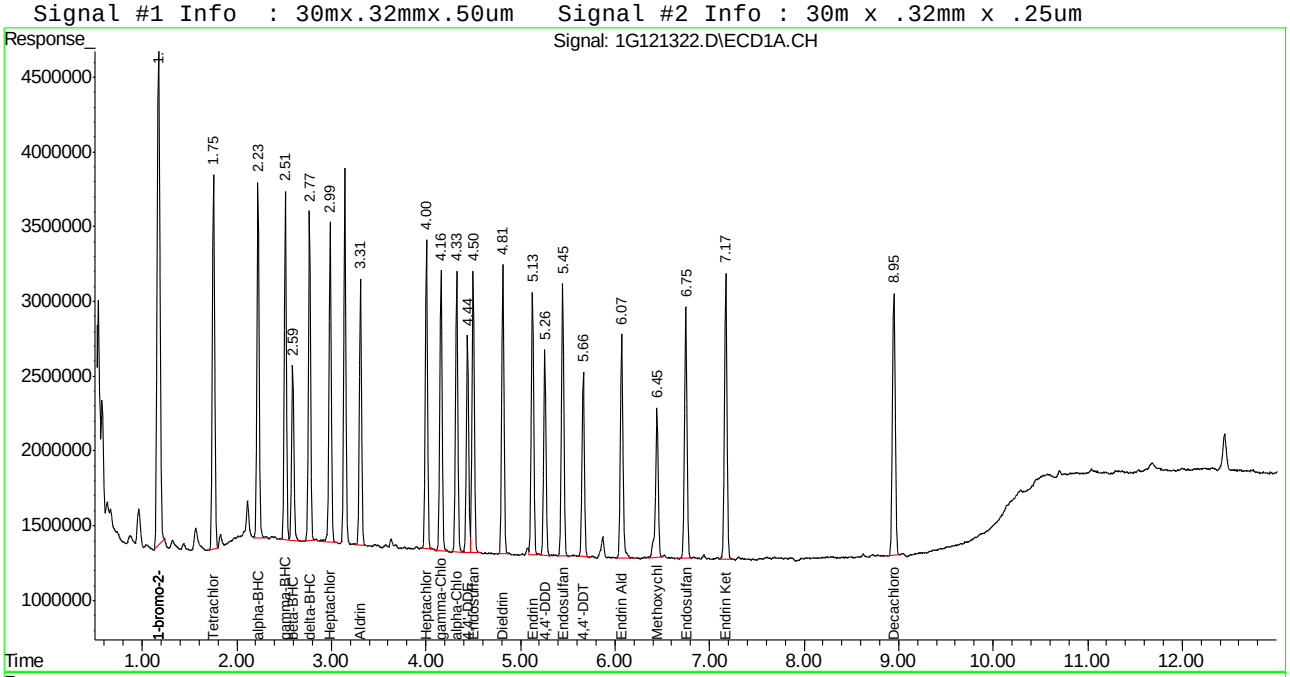
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121322.D 1PST3933.M Fri Mar 25 11:34:35 2016 RPT1 Page 1

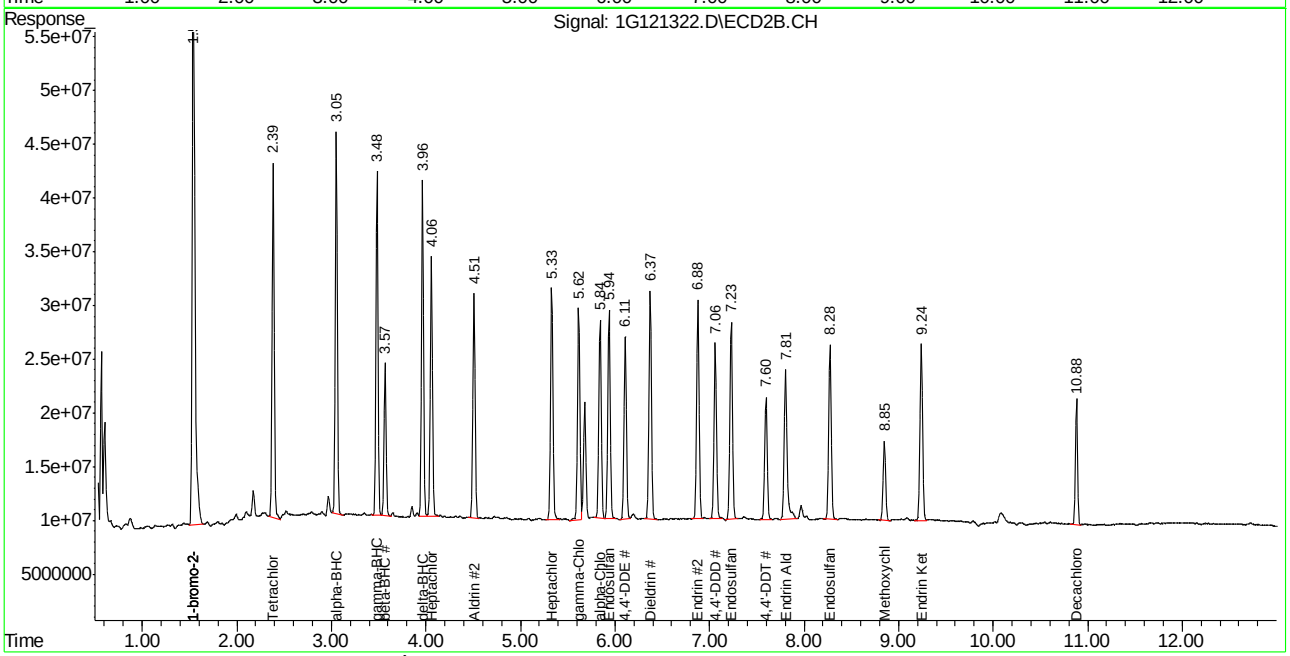
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121322.D\ECD1A.CH Vial: 55
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121322.D\ECD2B.CH
Acq On : 3-24-16 05:39:37 PM Operator: rebeccak
Sample : op92374-msd Inst : GC1G
Misc : op92374,g1g3944,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:34 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On : 14 Mar 2016 10:33 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:34 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	80586250	1002.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.19	1.55	80586250	1002.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.19	1.55	80586250	1002.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	32477679	405.5E6	17.632	21.083
Spiked Amount	40.000	Range	30 - 150	Recovery	=	44.08%	52.71%
24) SA	Decachlorobiphen	9.00	10.91	40320452	221.8E6	18.235	19.878
Spiked Amount	40.000			Recovery	=	45.59%	49.70%
	Target Compounds						
13) B	4,4'-DDE	4.48	6.14	1271654	19325009	0.757	0.979
15) MA	Endrin	5.17	6.91	87274188	901.2E6	50.815	46.607
16) A	4,4'-DDD	5.30	7.09	1206770	14264149	0.838	0.835m
18) MA	4,4'-DDT	5.71	7.63	171.5E6	1405.4E6	124.683	116.996m
19) B	Endrin Aldehyde	6.12	7.83	1931941	10039190	1.244	0.712m
23) B	Endrin Ketone	7.22	9.27	4093701	42447463	2.124	2.561

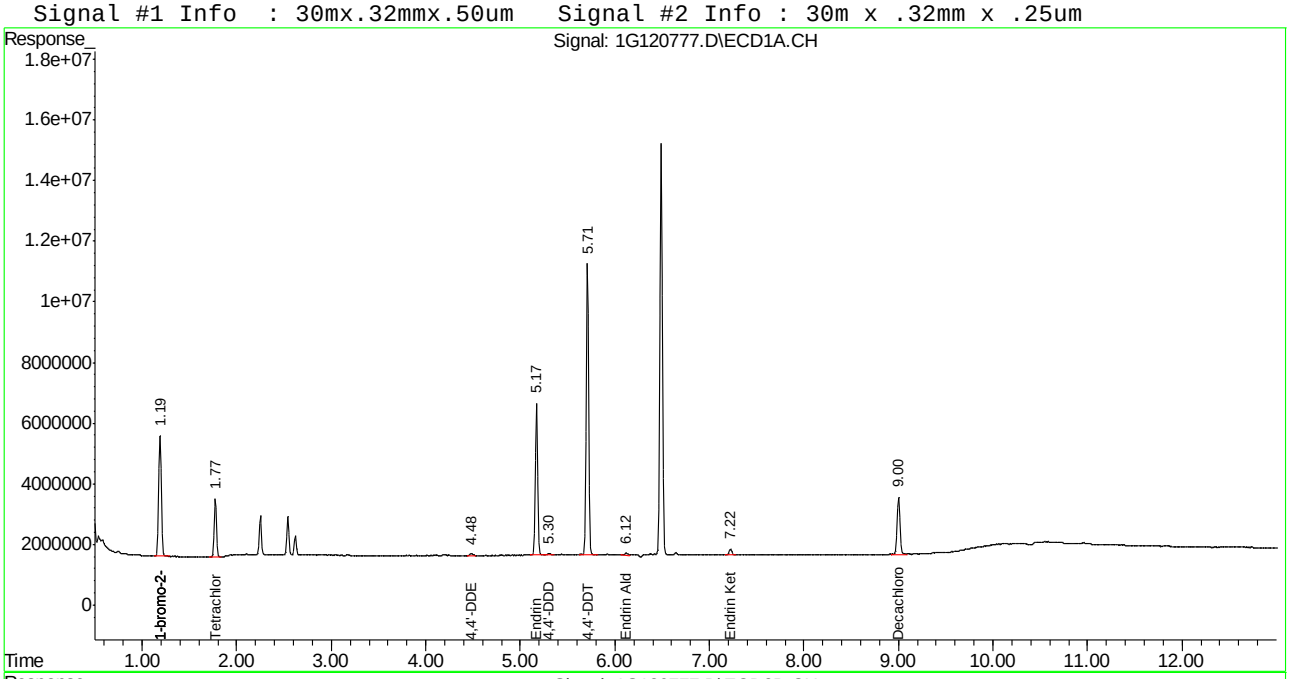
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120777.D 1PST3933.M Mon Mar 14 19:34:33 2016 RPT1 Page 1

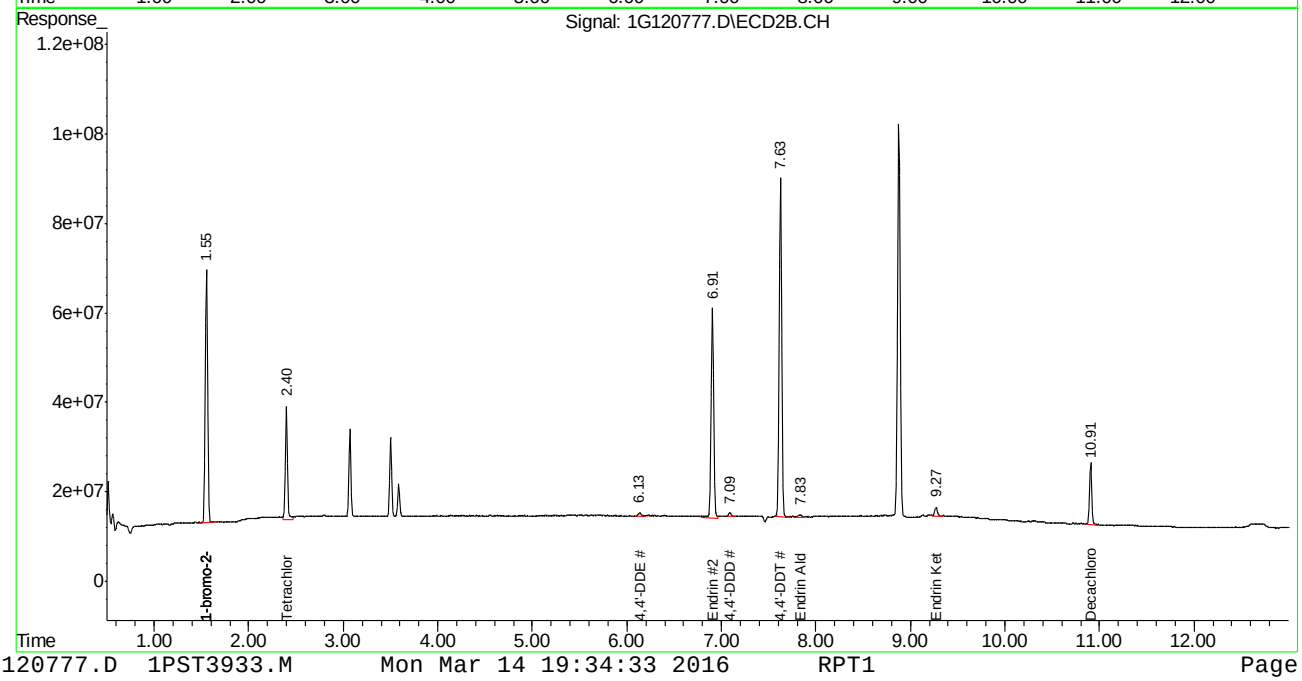
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On : 14 Mar 2016 10:33 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:34 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

Manual Integration Approval Summary

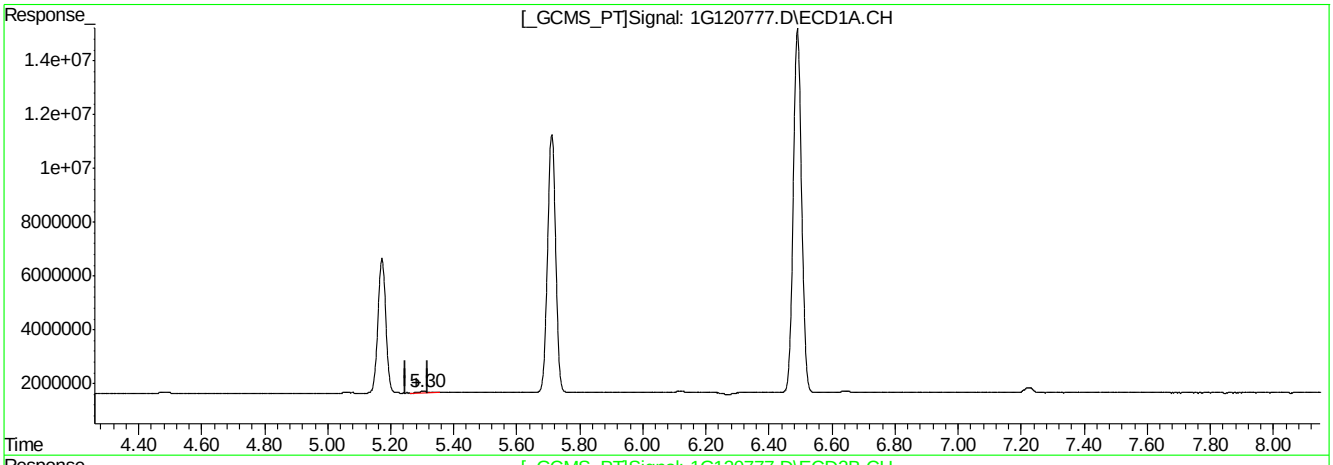
Sample Number:	G1G3933-DDT	**Method:**	EPA 608
Lab FileID:	1G120777.D	**Analyst approved:**	03/14/16 19:46 Joseph Ravino
Injection Time:	03/14/16 10:33	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

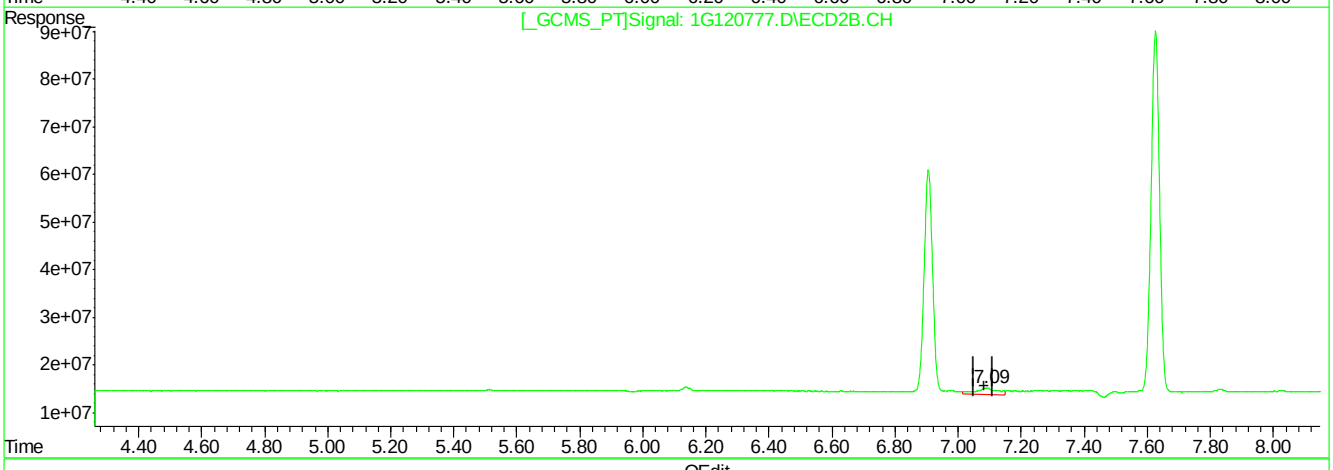
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	2	7.09	Poor instrument integration
4,4'-DDT	50-29-3	2	7.63	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.83	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.30min 0.838PPB

response 1206770

(16) 4,4'-DDD #2 (A)

7.09min 4.255PPB

response 72683994

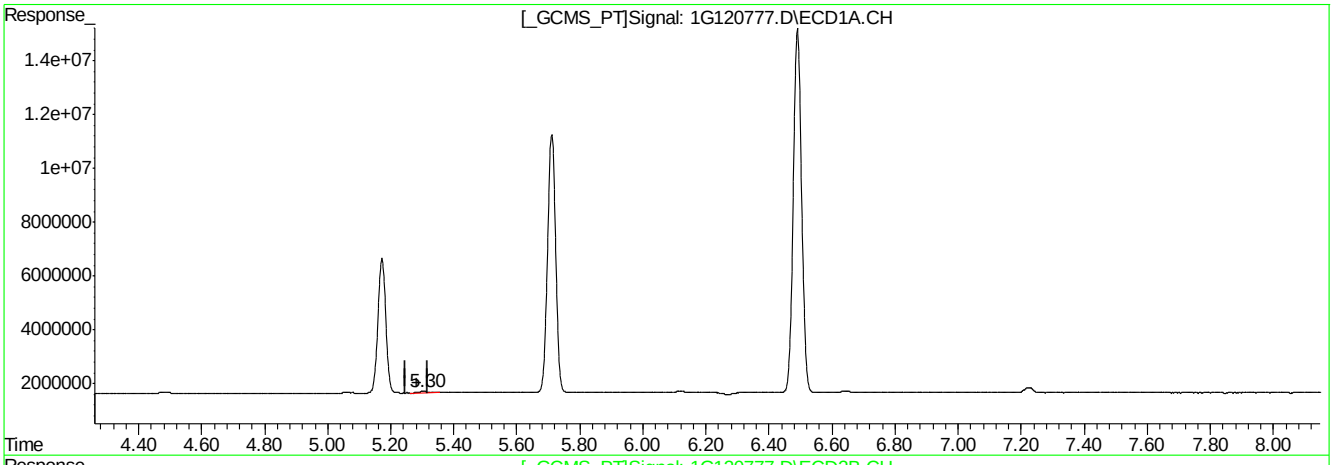
(+) = Expected Retention Time

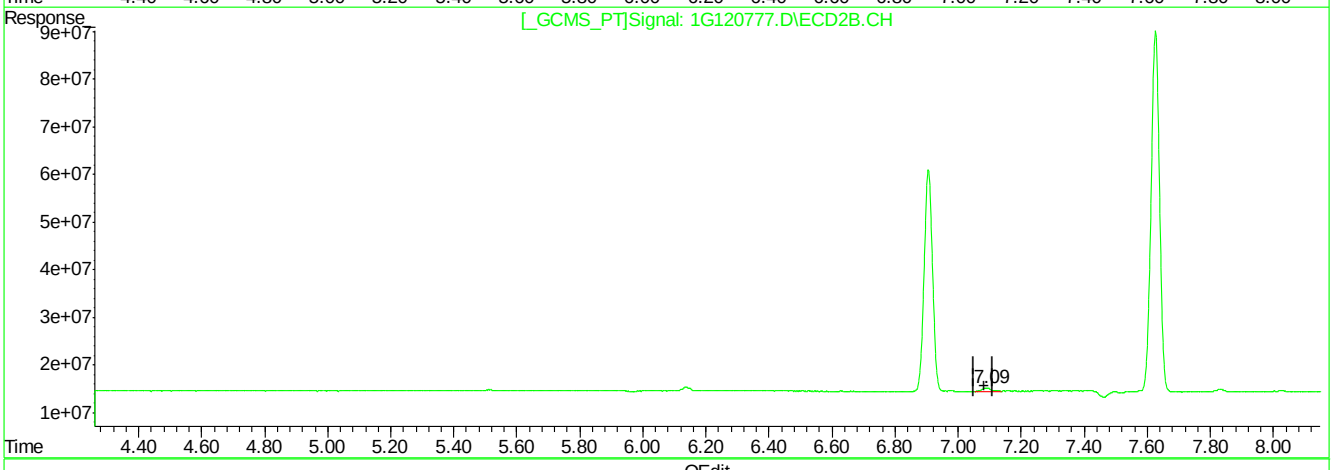
1G120777.D 1PST3933.M Mon Mar 14 19:33:56 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.30min 0.838PPB

response 1206770

(16) 4,4'-DDD #2 (A)

7.09min 0.835PPB m

response 14264149

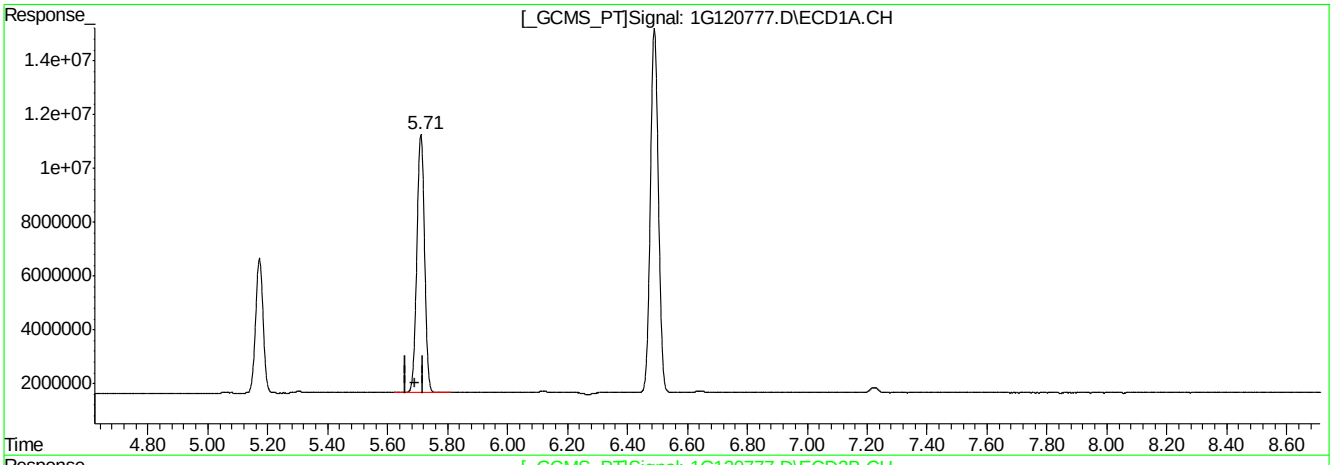
(+) = Expected Retention Time

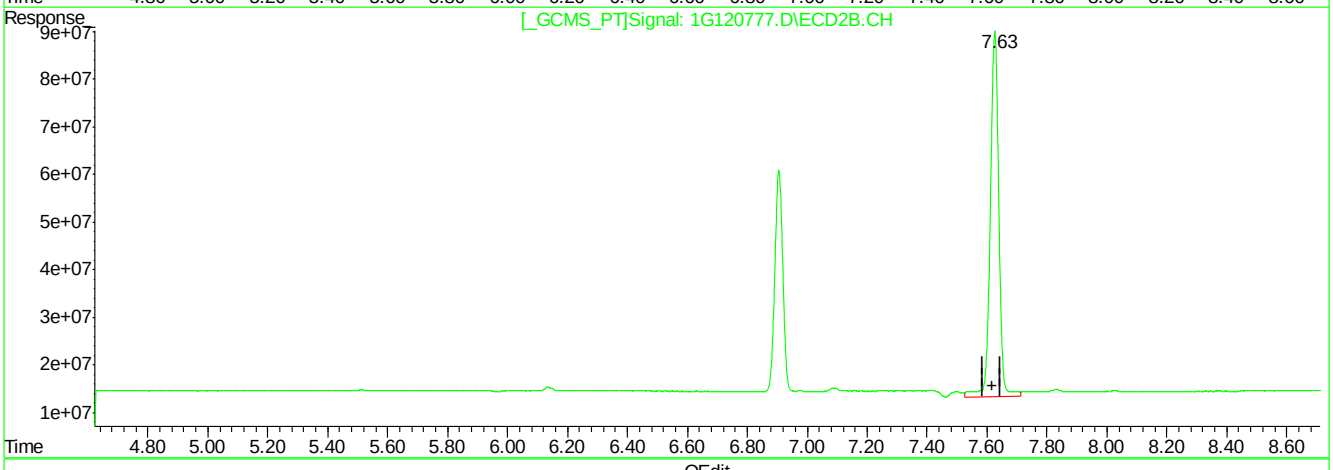
1G120777.D 1PST3933.M Mon Mar 14 19:34:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.71min 124.683PPB

response 171488419

(18) 4,4'-DDT #2 (MA)

7.63min 126.260PPB

response 1516630960

(+) = Expected Retention Time

1G120777.D 1PST3933.M Mon Mar 14 19:34:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
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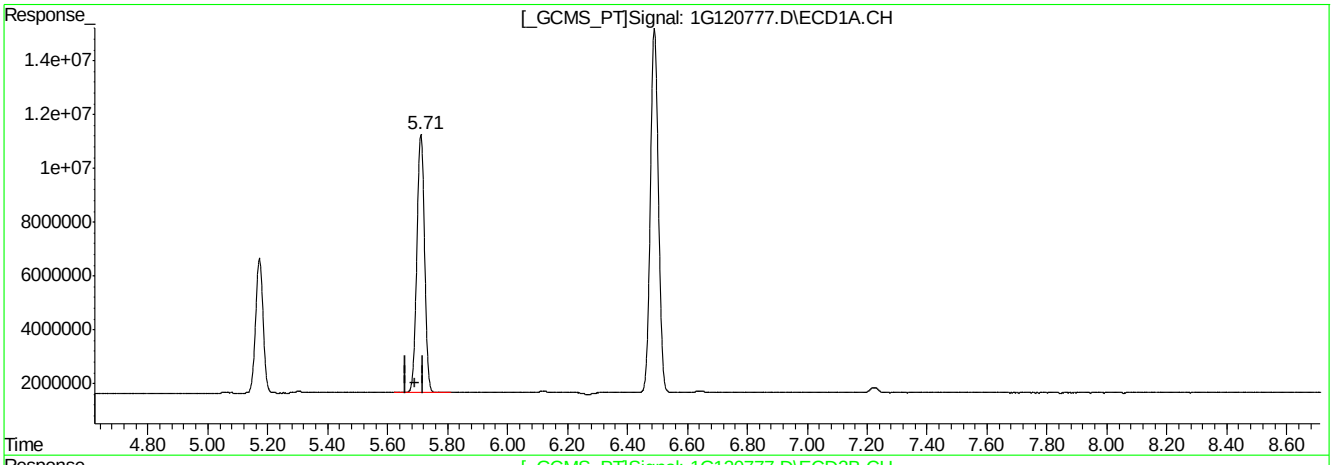
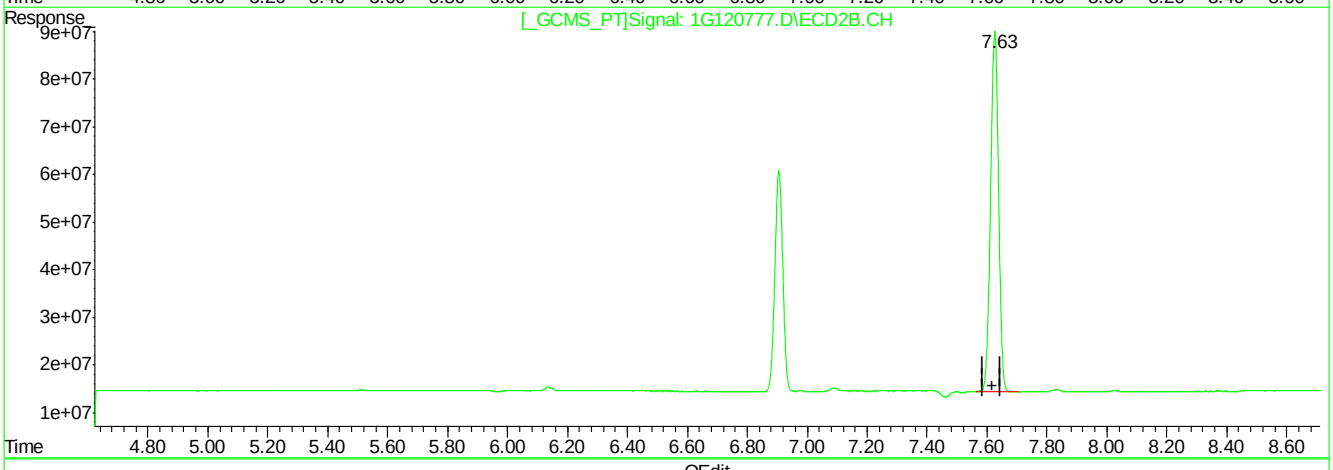




QEdit

(18) 4,4'-DDT (MA)

5.71min 124.683PPB

response 171488419

(18) 4,4'-DDT #2 (MA)

7.63min 116.996PPB m

response 1405351696

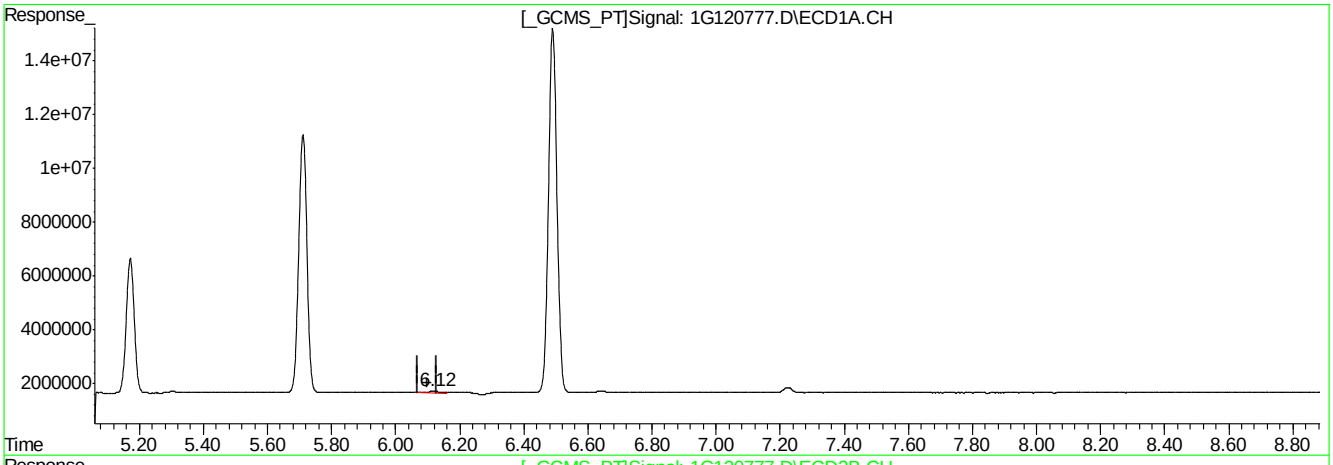
(+) = Expected Retention Time

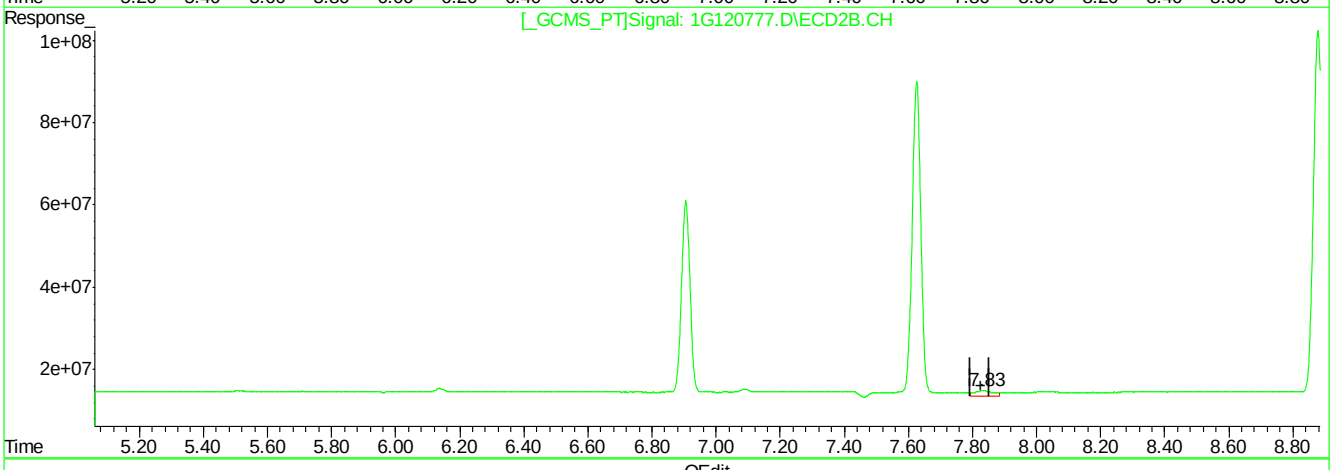
1G120777.D 1PST3933.M Mon Mar 14 19:34:13 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.12min 1.244PPB

response 1931941

(19) Endrin Aldehyde #2 (B)

7.83min 3.969PPB

response 55983999

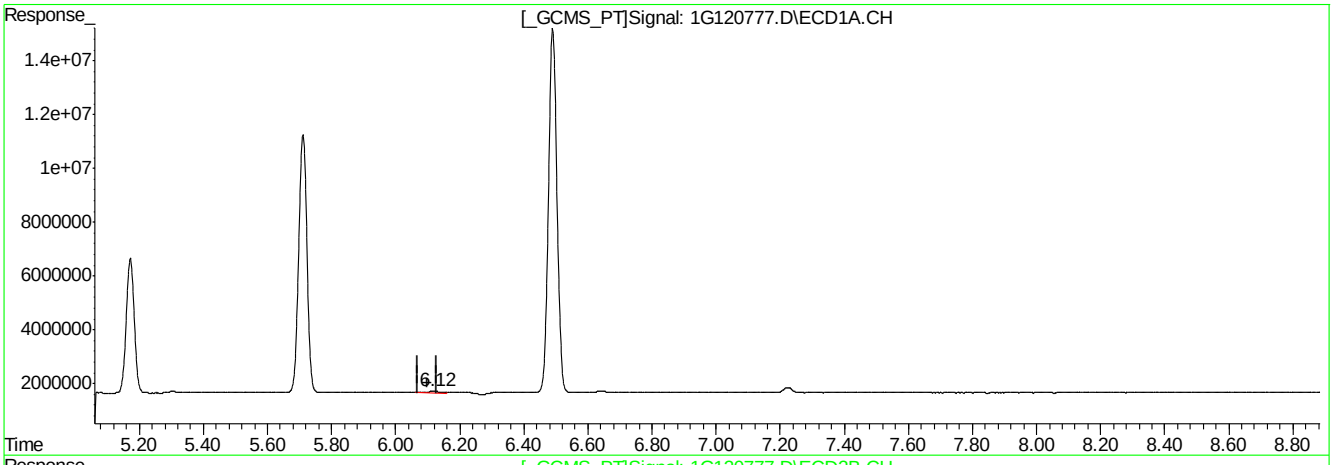
(+) = Expected Retention Time

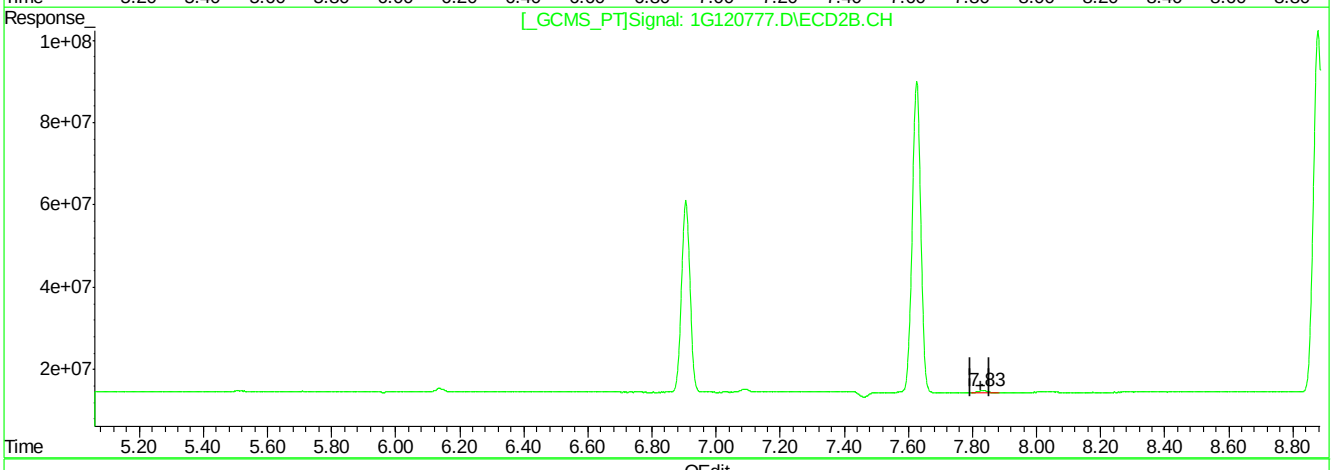
1G120777.D 1PST3933.M Mon Mar 14 19:34:17 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120777.D\ECD2B.CH
Acq On    : 14 Mar 2016  10:33 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:33 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.12min 1.244PPB

response 1931941

(19) Endrin Aldehyde #2 (B)

7.83min 0.712PPB m

response 10039190

(+) = Expected Retention Time

1G120777.D 1PST3933.M Mon Mar 14 19:34:23 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/25/16 09:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On : 3-24-16 08:41:48 AM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op92347,g1g3944,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:46 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.16	1.54	110.1E6	1426.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.54	110.1E6	1426.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.54	110.1E6	1426.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	42725170	462.1E6	16.983	16.879
Spiked Amount	40.000	Range	30 - 150	Recovery	=	42.46%	42.20%
24) SA	Decachlorobiphen	8.94	10.88	53419363	270.7E6	17.689	17.048
Spiked Amount	40.000			Recovery	=	44.22%	42.62%
	Target Compounds						
13) B	4,4'-DDE	4.43	6.10	1491330	18249905	0.650m	0.650m
15) MA	Endrin	5.12	6.87	115.0E6	1069.0E6	49.039	38.848
16) A	4,4'-DDD	5.25	7.06	2064401	29143420	1.050	1.199m
18) MA	4,4'-DDT	5.65	7.59	227.7E6	1774.7E6	121.208	103.816
19) B	Endrin Aldehyde	6.06	7.80	1159667	12058093	0.547m	0.601m
23) B	Endrin Ketone	7.16	9.24	4918372	47829063	1.868	2.028m

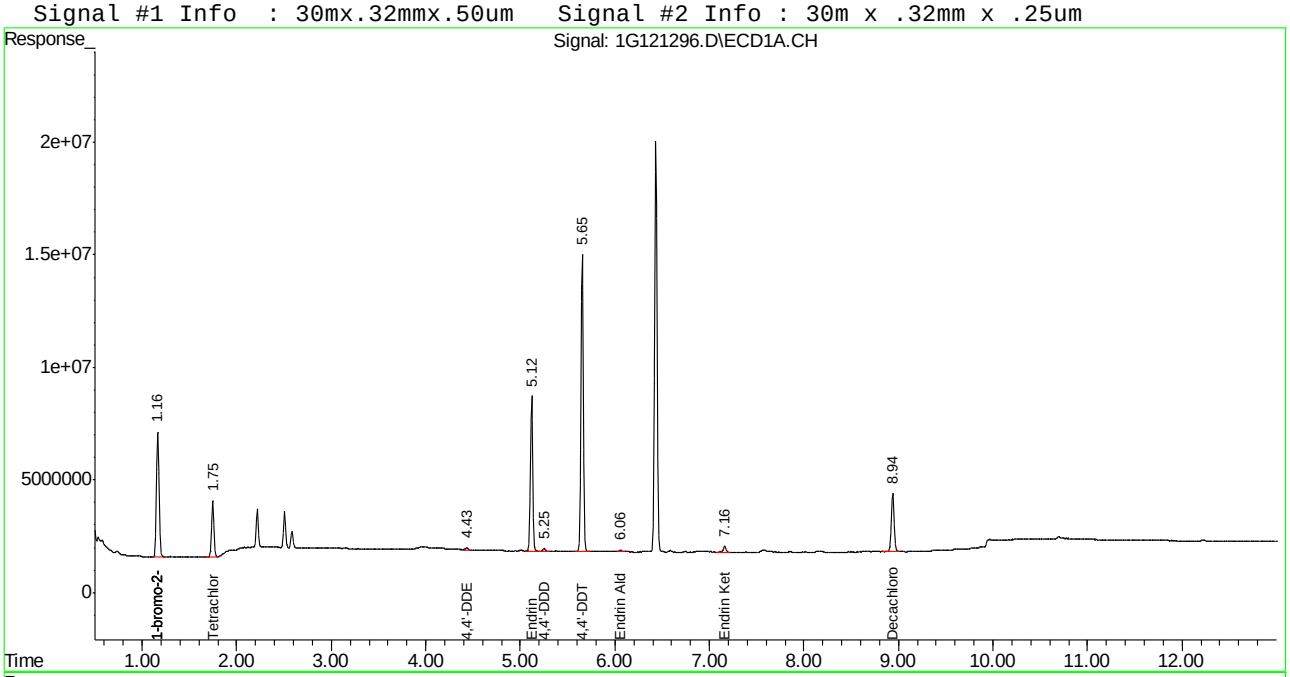
(f)=RT Delta > 1/2 Window (m)=manual int.

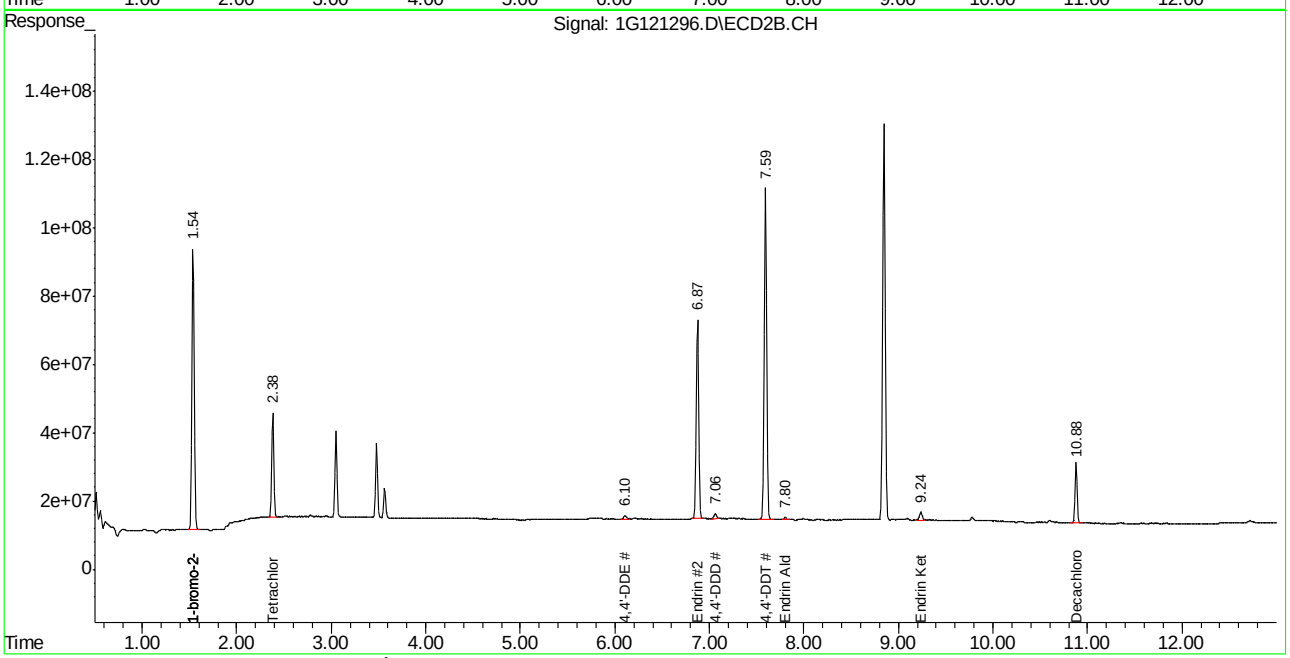
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On : 3-24-16 08:41:48 AM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op92347,g1g3944,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:46 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

Manual Integration Approval Summary

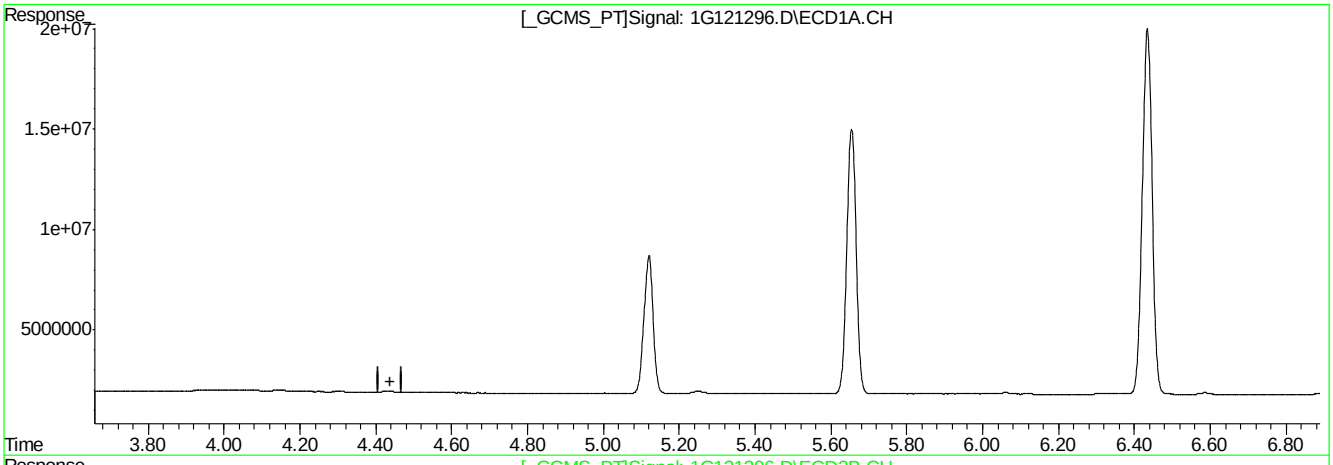
Sample Number:	G1G3944-DDT	**Method:**	SW846 8081B
Lab FileID:	1G121296.D	**Analyst approved:**	03/24/16 11:47 Rebecca Krug
Injection Time:	03/24/16 08:41	**Supervisor approved:**	03/25/16 09:41 Gwendolyn Burns

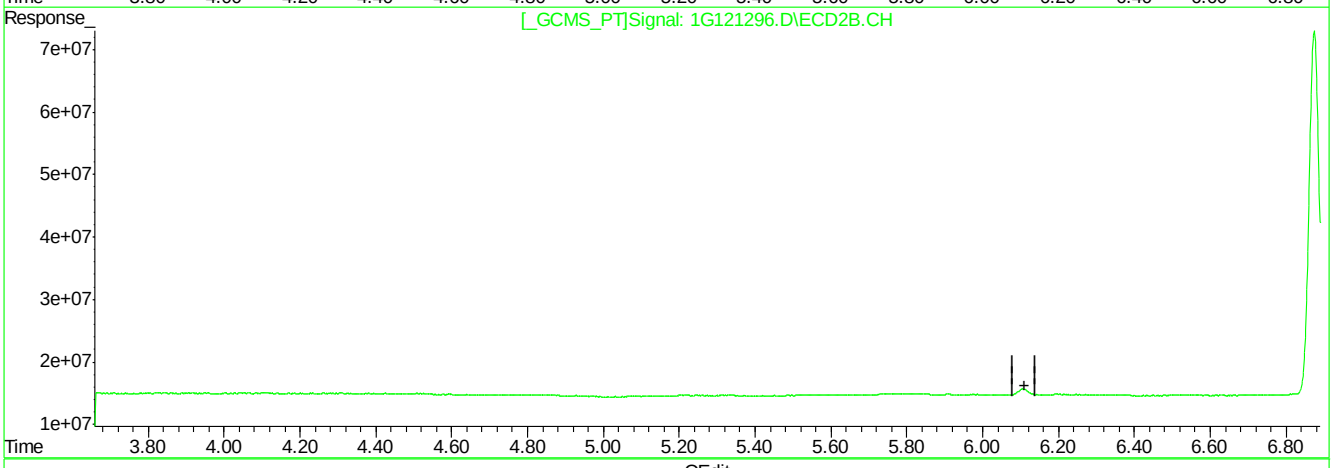
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.43	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	6.06	Poorly defined baseline
4,4'-DDE	72-55-9	2	6.10	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.06	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	7.80	Poorly defined baseline
Endrin ketone	53494-70-5	2	9.24	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

0.00min 0.000PPB

response 0

(13) 4,4'-DDE #2 (B)

0.00min 0.000PPB

response 0

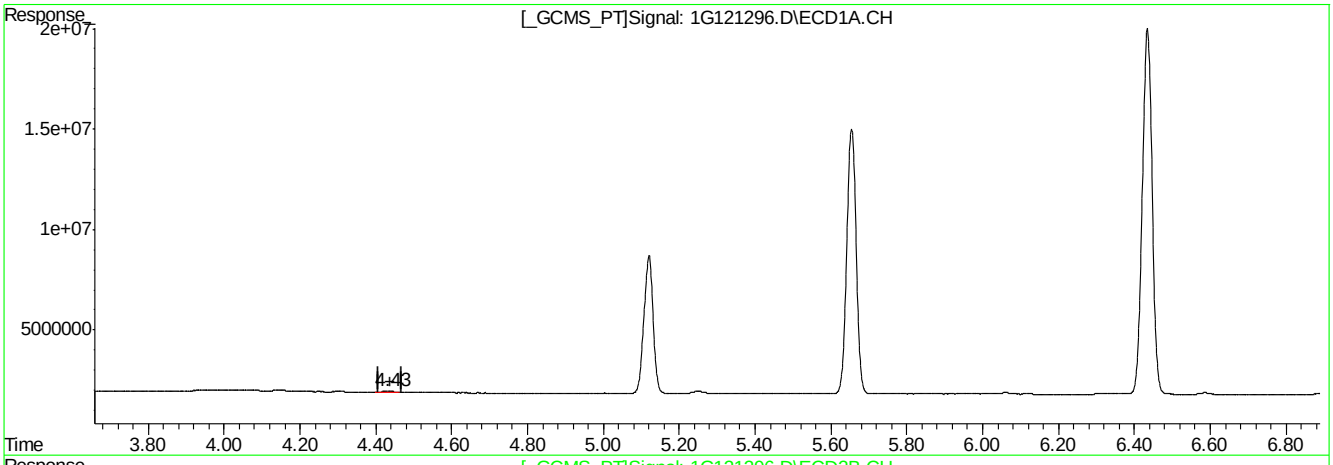
(+) = Expected Retention Time

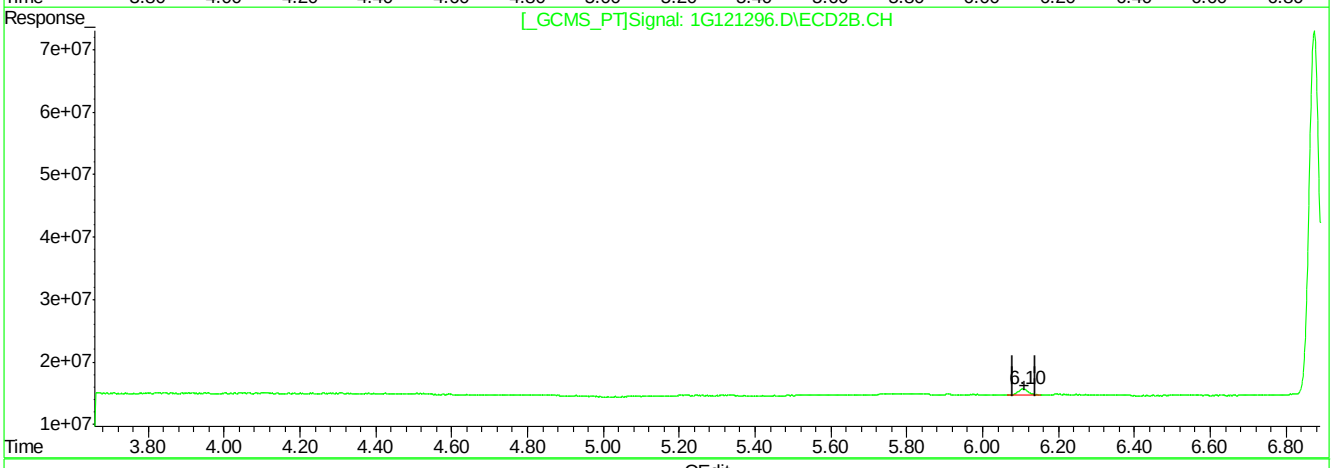
1G121296.D 1PST3933.M Thu Mar 24 11:45:42 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 0.650PPB m

response 1491330

(13) 4,4'-DDE #2 (B)

6.10min 0.650PPB m

response 18249905

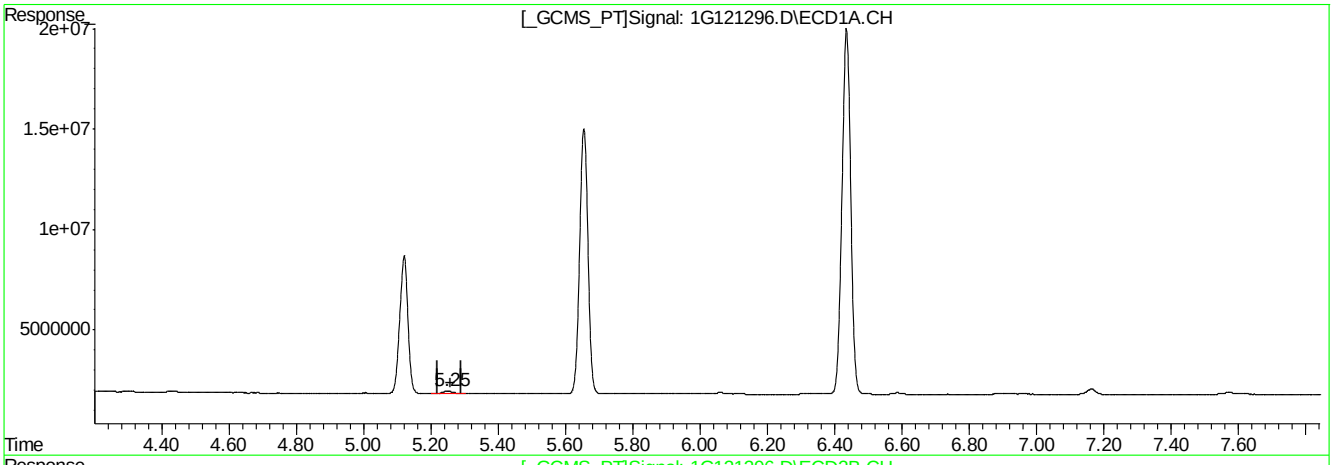
(+) = Expected Retention Time

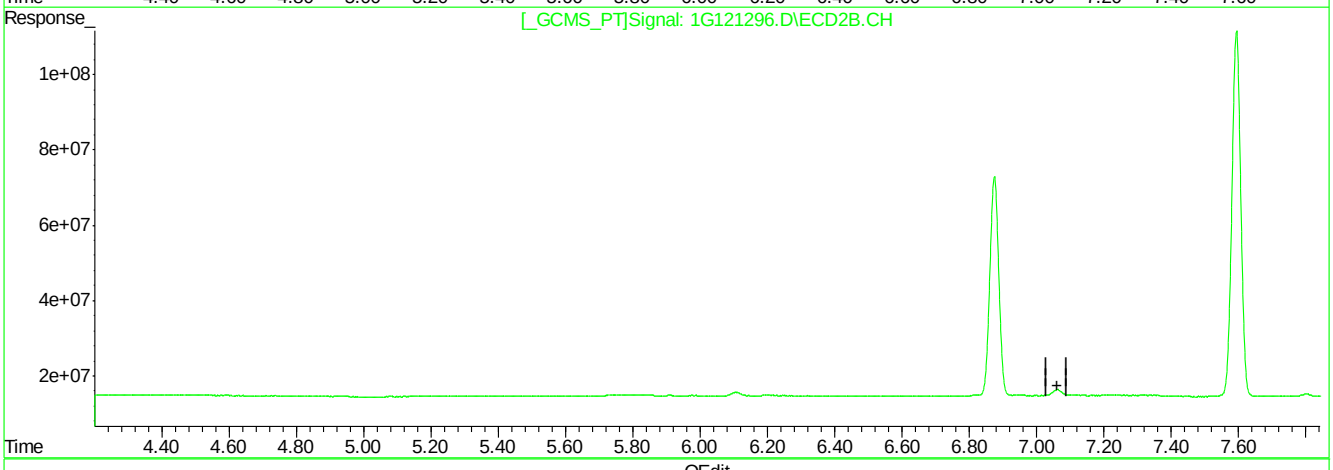
1G121296.D 1PST3933.M Thu Mar 24 11:45:54 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.25min 1.050PPB

response 2064401

(16) 4,4'-DDD #2 (A)

0.00min 0.000PPB

response 0

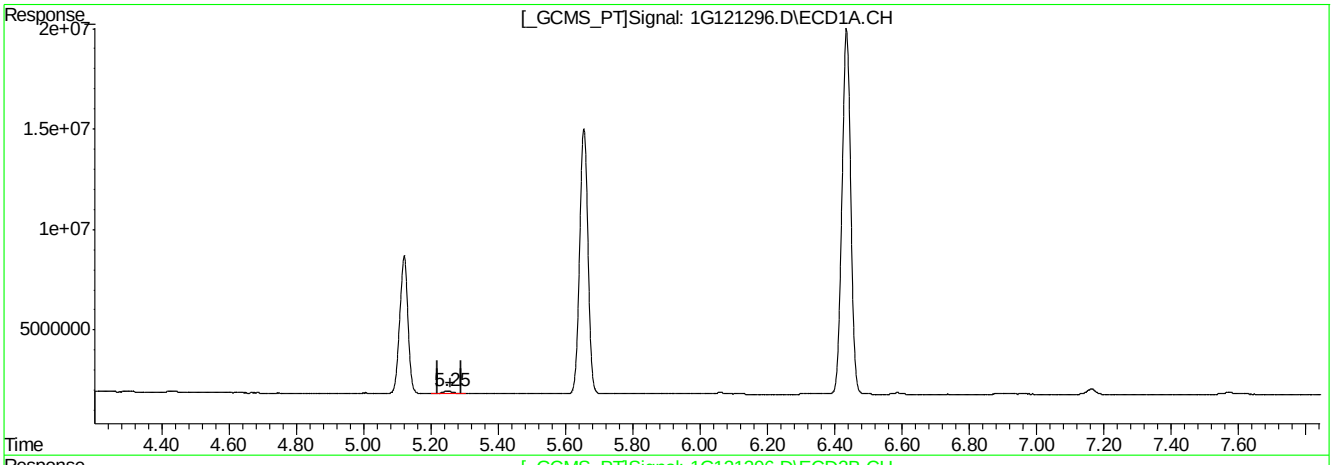
(+) = Expected Retention Time

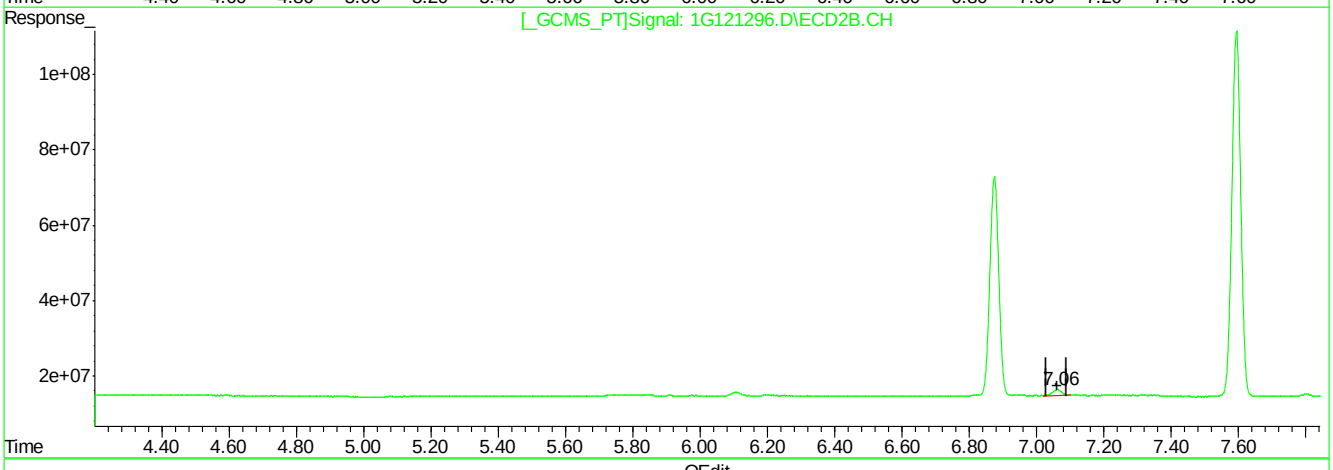
1G121296.D 1PST3933.M Thu Mar 24 11:45:59 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.25min 1.050PPB

response 2064401

(16) 4,4'-DDD #2 (A)

7.06min 1.199PPB m

response 29143420

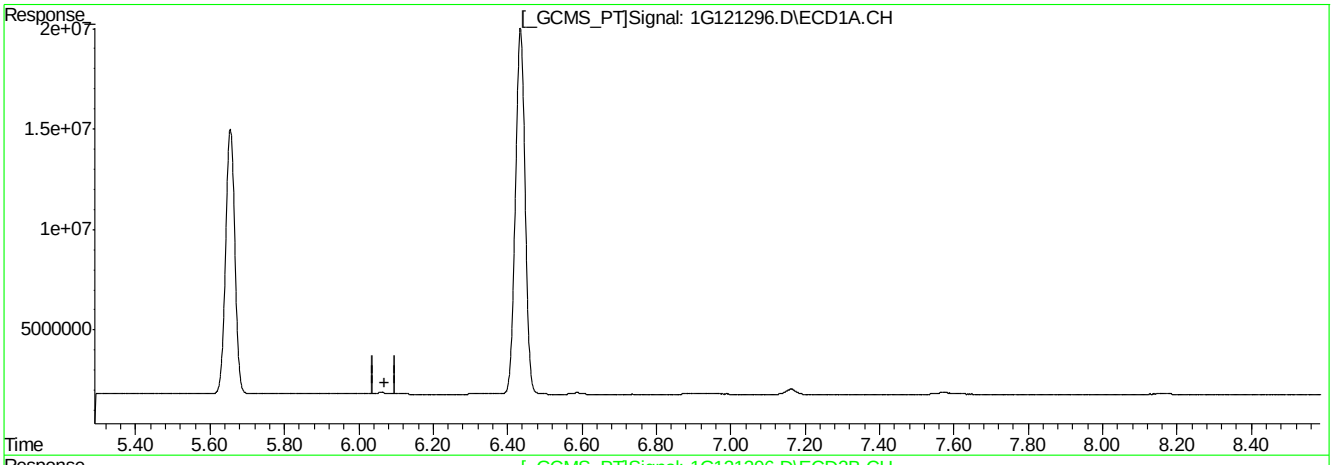
(+) = Expected Retention Time

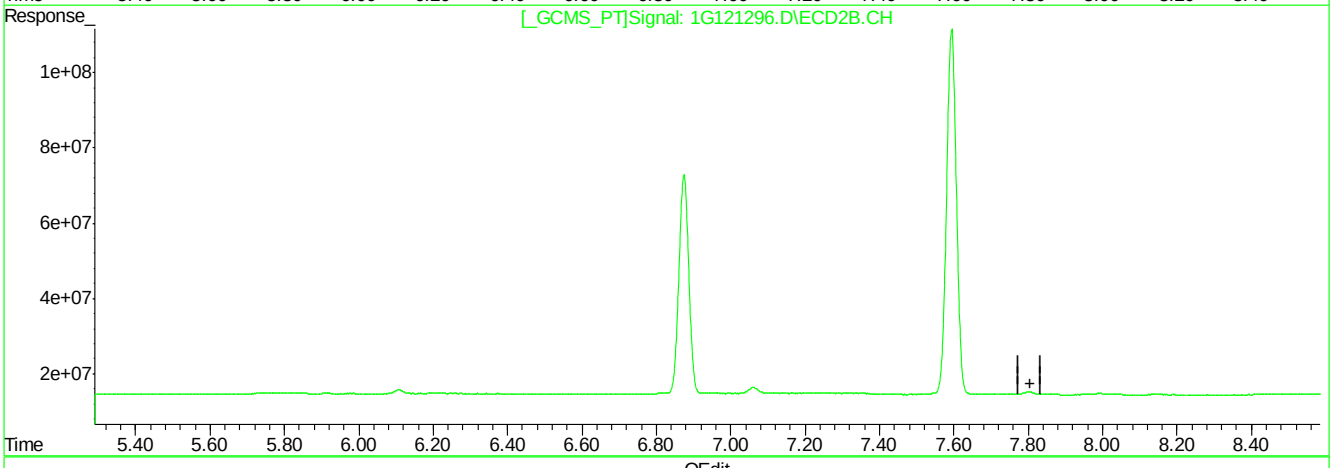
1G121296.D 1PST3933.M Thu Mar 24 11:46:04 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

0.00min 0.000PPB

response 0

(19) Endrin Aldehyde #2 (B)

0.00min 0.000PPB

response 0

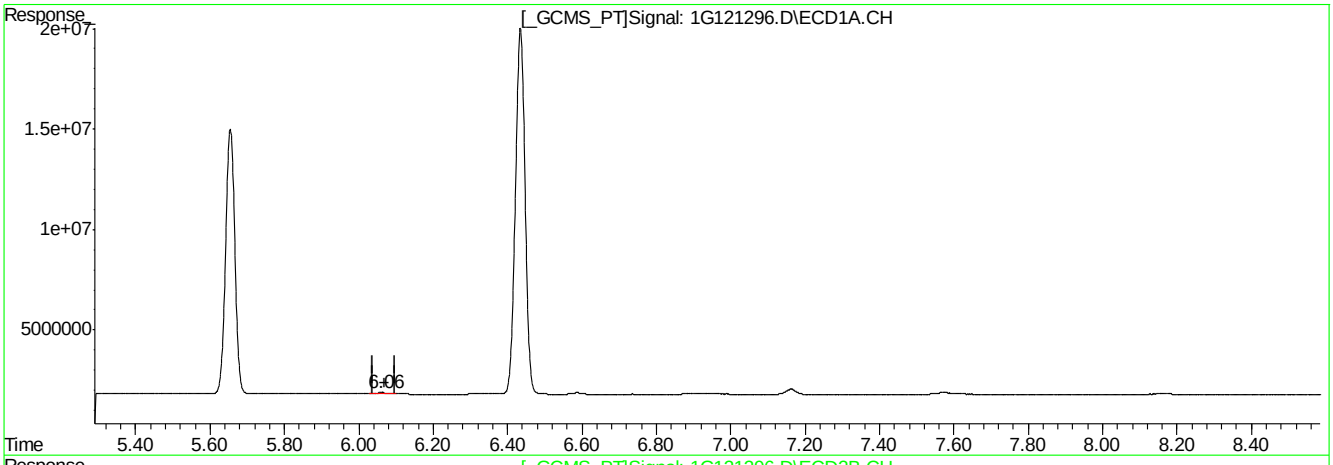
(+) = Expected Retention Time

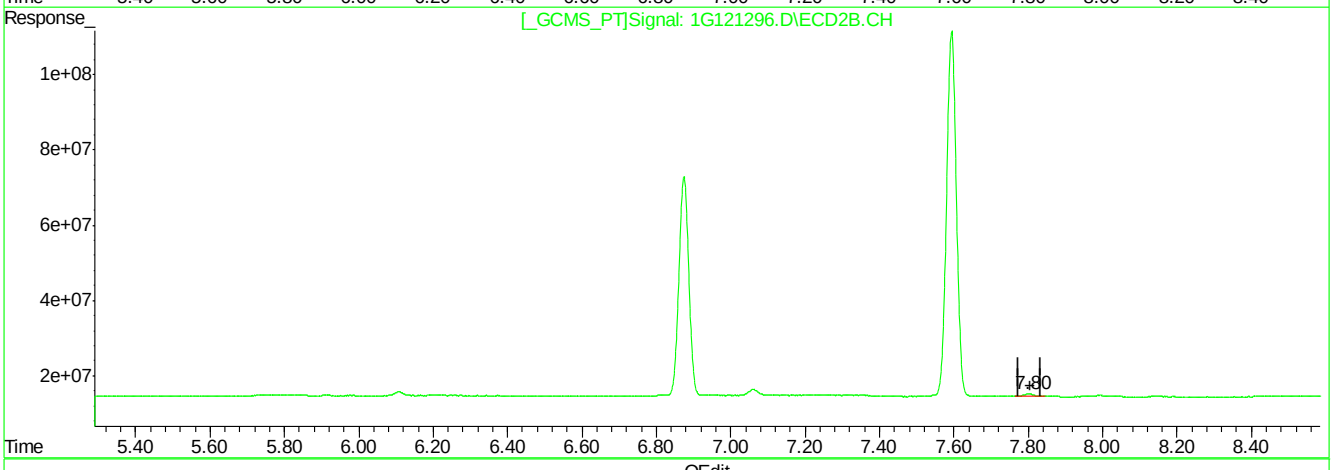
1G121296.D 1PST3933.M Thu Mar 24 11:46:10 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.06min 0.547PPB m

response 1159667

(19) Endrin Aldehyde #2 (B)

7.80min 0.601PPB m

response 12058093

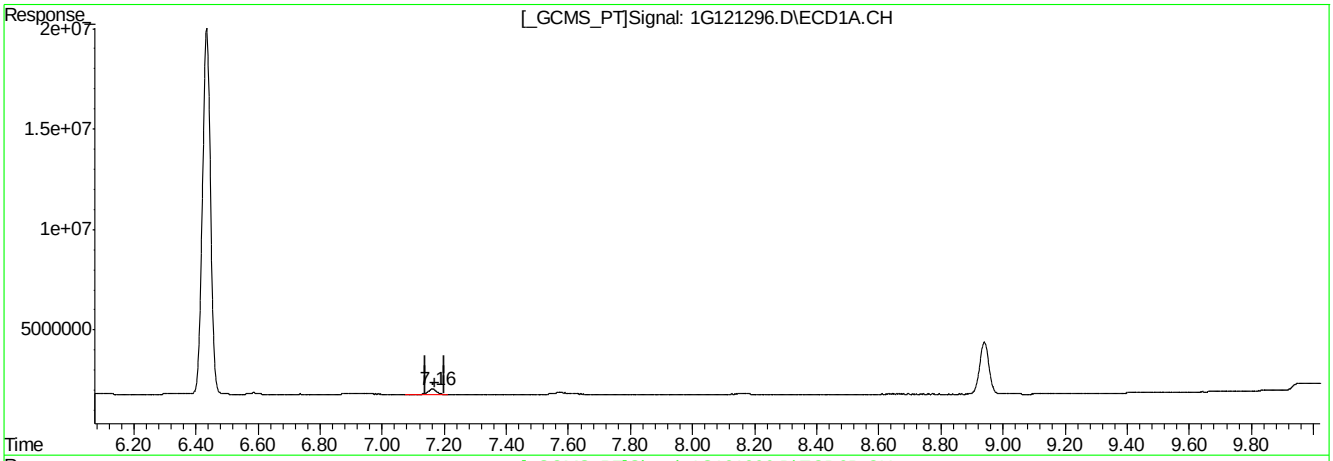
(+) = Expected Retention Time

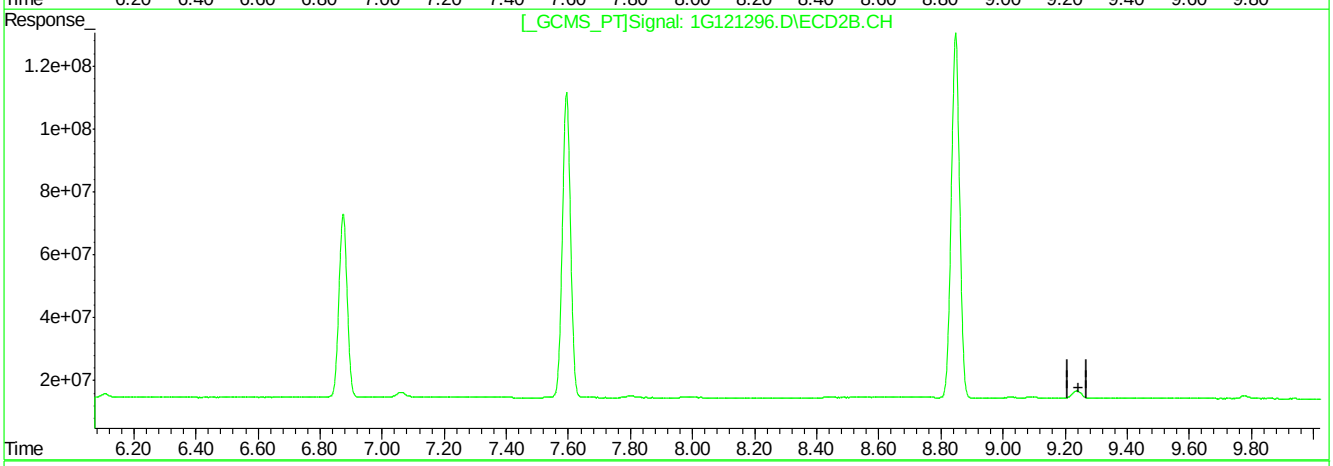
1G121296.D 1PST3933.M Thu Mar 24 11:46:21 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 1.868PPB

response 4918372

(23) Endrin Ketone #2 (B)

0.00min 0.000PPB

response 0

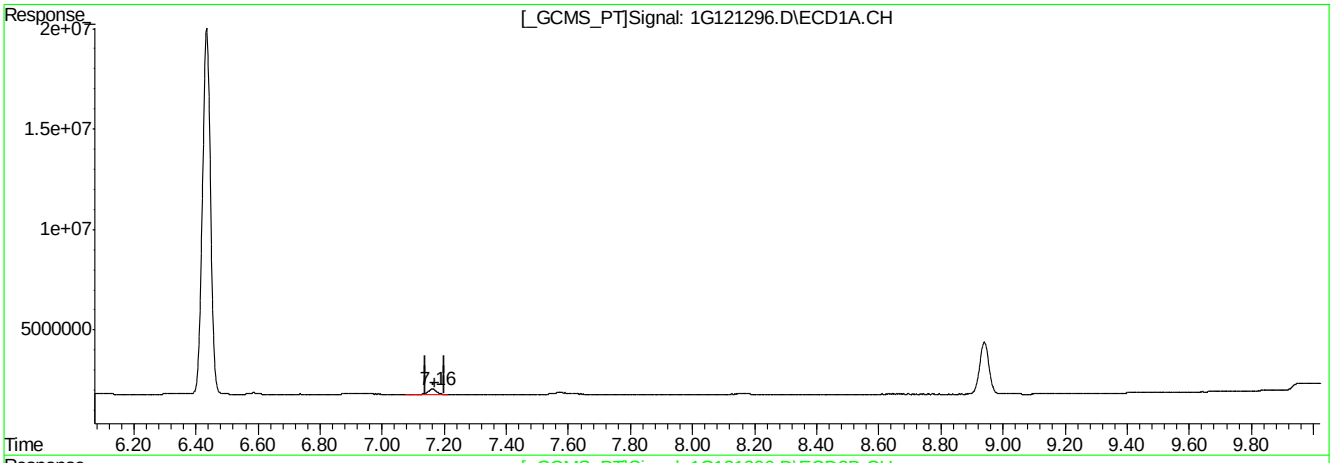
(+) = Expected Retention Time

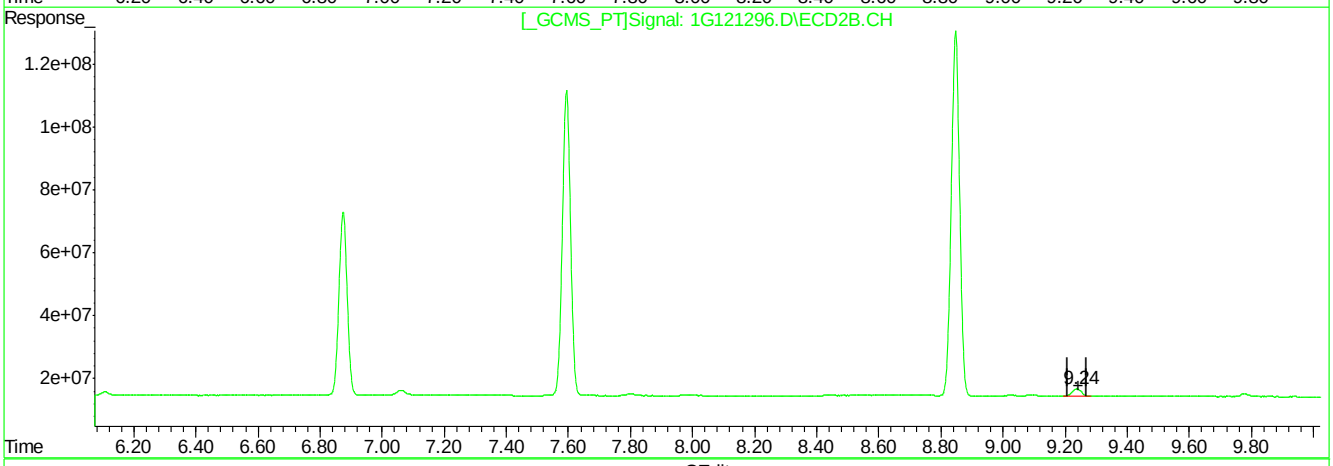
1G121296.D 1PST3933.M Thu Mar 24 11:46:27 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121296.D\ECD2B.CH
Acq On    : 3-24-16 08:41:48 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:45 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 1.868PPB

response 4918372

(23) Endrin Ketone #2 (B)

9.24min 2.028PPB m

response 47829063

(+) = Expected Retention Time

1G121296.D 1PST3933.M Thu Mar 24 11:46:34 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/25/16 13:14

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On : 3-24-16 03:36:16 PM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op92344,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:16 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	120.3E6	1583.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	120.3E6	1583.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	120.3E6	1583.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	47452724	532.0E6	17.253	17.506
Spiked Amount	40.000 Range	30 - 150	Recovery	=		43.13%	43.77%
24) SA	Decachlorobiphen	8.94	10.88	59546808	289.2E6	18.036	16.412
Spiked Amount	40.000		Recovery	=		45.09%	41.03%
	Target Compounds						
13) B	4,4'-DDE	4.43	6.11	1873289	25486398	0.747	0.818m
15) MA	Endrin	5.12	6.87	125.7E6	1171.9E6	49.029	38.365
16) A	4,4'-DDD	5.25	7.06	1554293	23445127	0.723m	0.869m
18) MA	4,4'-DDT	5.65	7.59	252.5E6	1982.1E6	122.971	104.451
19) B	Endrin Aldehyde	6.06	7.80	1300345	13040239	0.561m	0.585m
23) B	Endrin Ketone	7.16	9.24	5153272	50433659	1.790	1.926

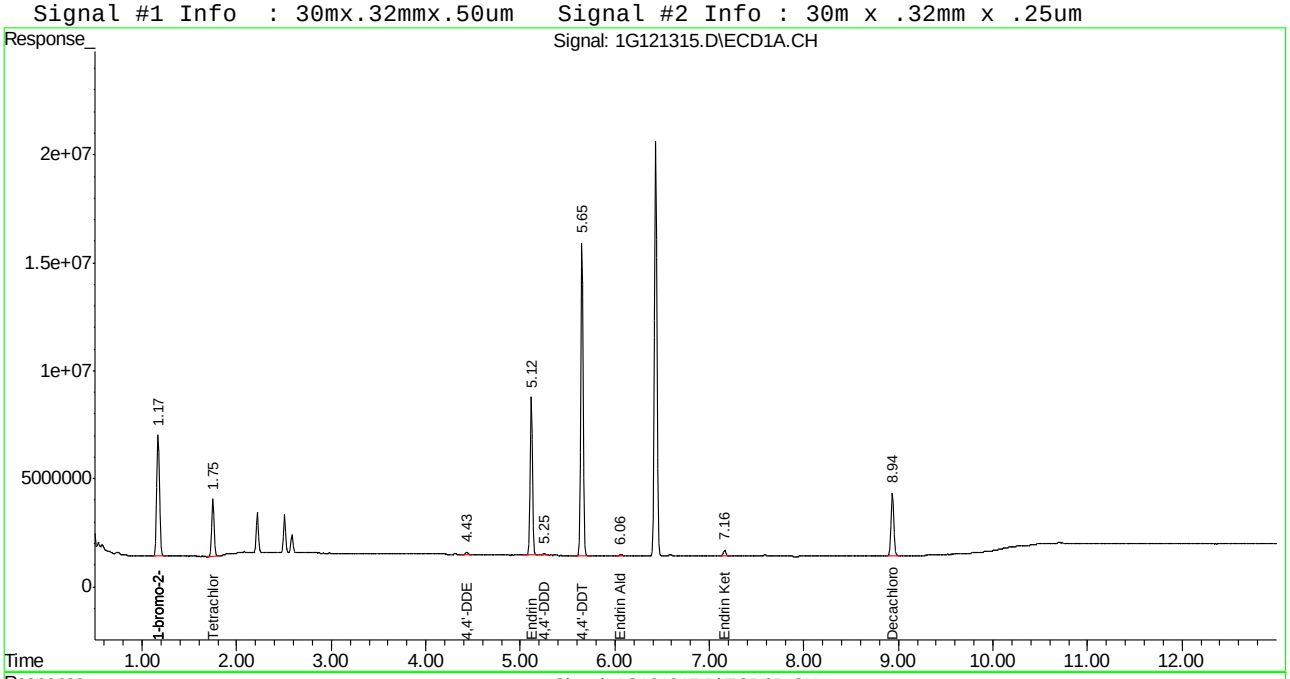
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121315.D 1PST3933.M Fri Mar 25 11:16:33 2016 RPT1 Page 1

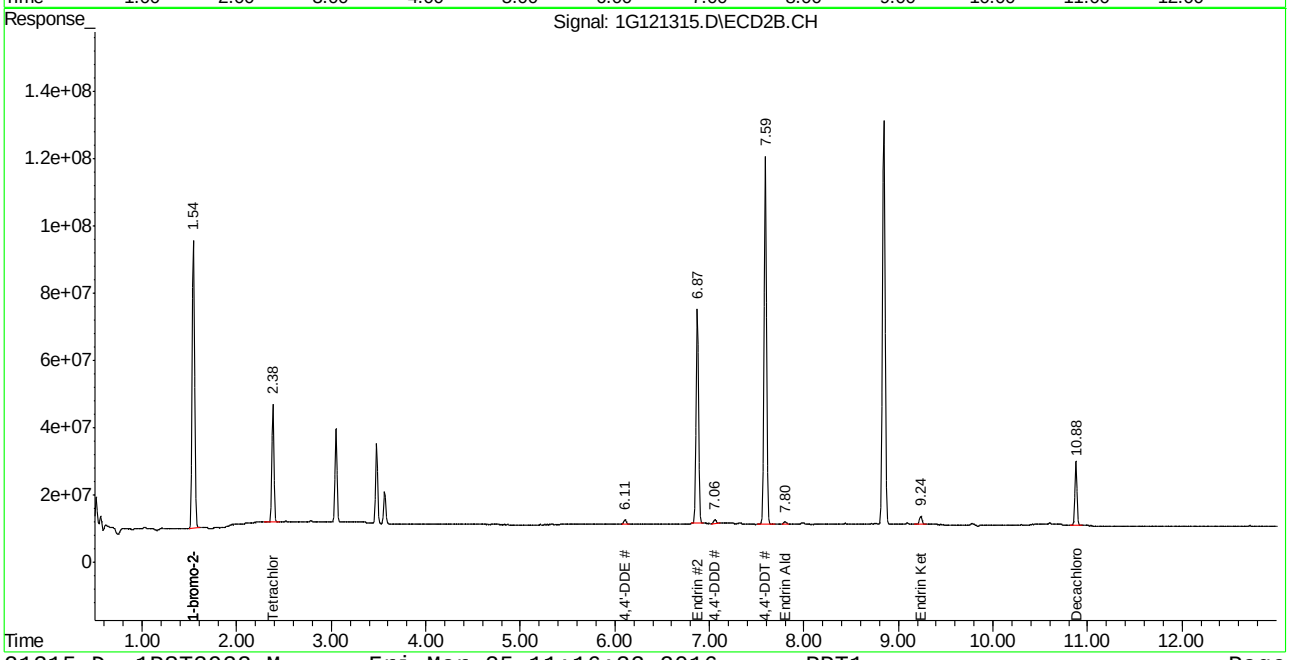
Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                    Operator: rebeccak
Sample    : ddt                                    Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:16 2016  Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```





Manual Integration Approval Summary

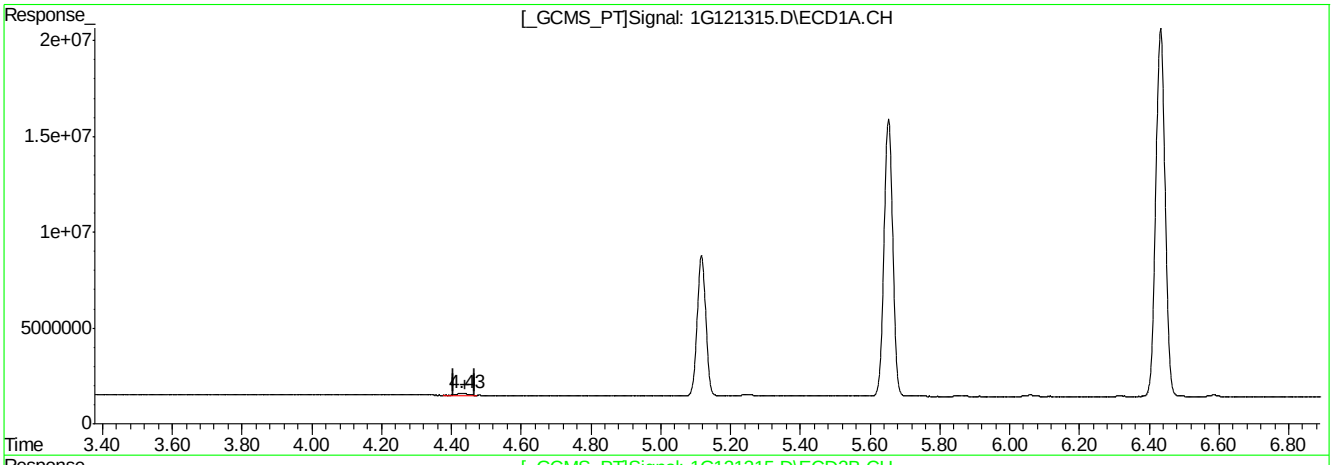
Sample Number:	G1G3944-DDT	**Method:**	SW846 8081B
Lab FileID:	1G121315.D	**Analyst approved:**	03/25/16 11:20 Dhara Saparia
Injection Time:	03/24/16 15:36	**Supervisor approved:**	03/25/16 13:14 Gwendolyn Burns

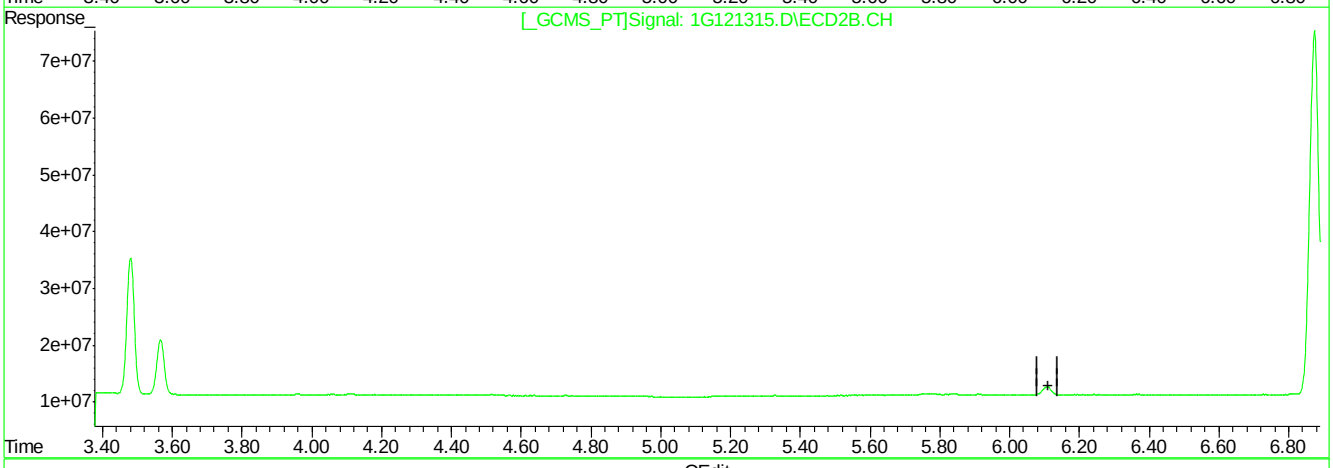
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	5.25	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.06	Poor instrument integration
4,4'-DDE	72-55-9	2	6.11	Poor instrument integration
4,4'-DDD	72-54-8	2	7.06	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.80	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 0.747PPB

response 1873289

(13) 4,4'-DDE #2 (B)

0.00min 0.000PPB

response 0

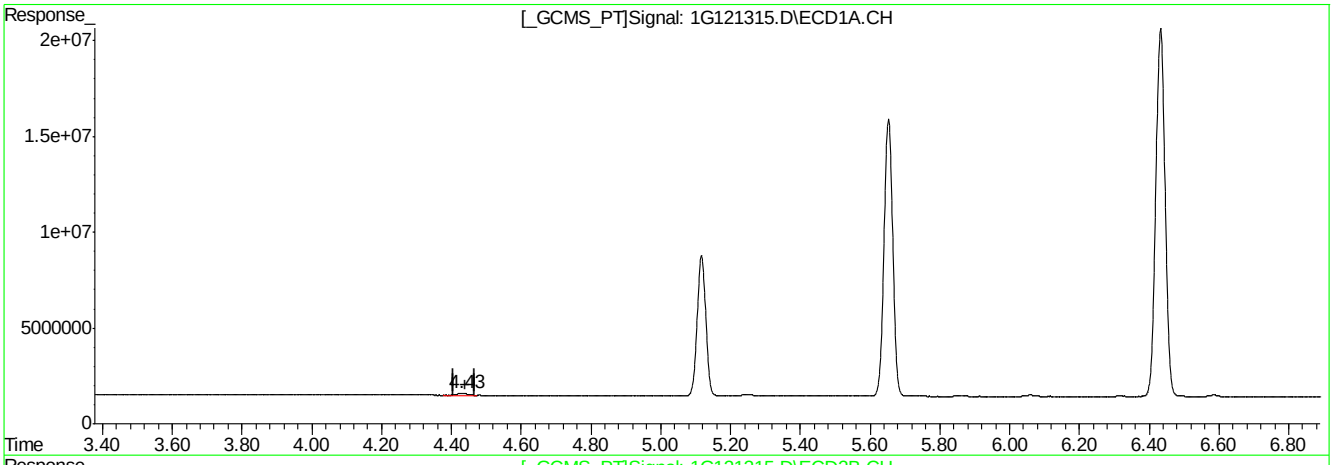
(+) = Expected Retention Time

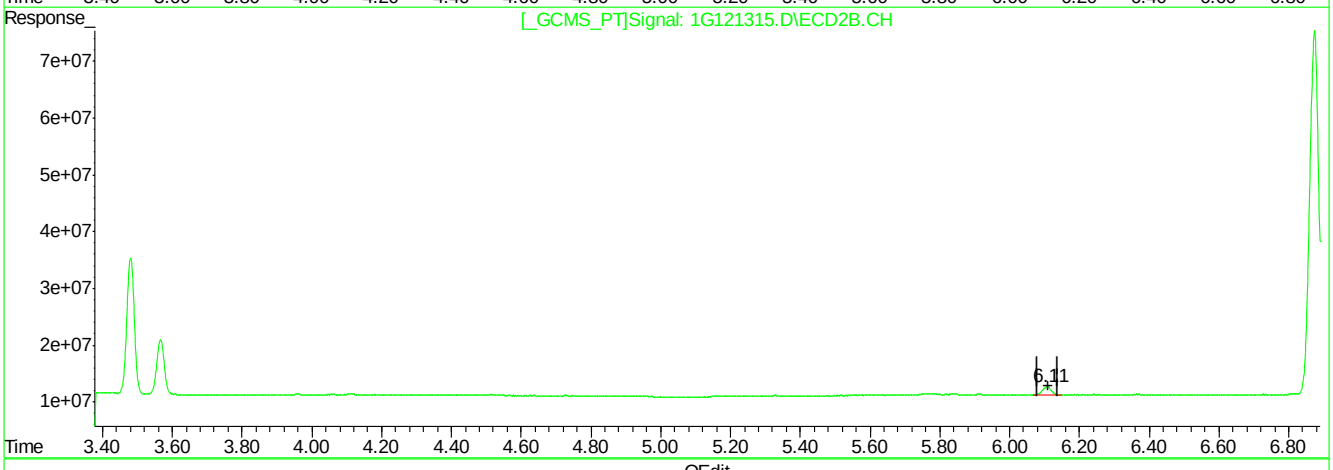
1G121315.D 1PST3933.M Fri Mar 25 11:15:28 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 0.747PPB

response 1873289

(13) 4,4'-DDE #2 (B)

6.11min 0.818PPB m

response 25486398

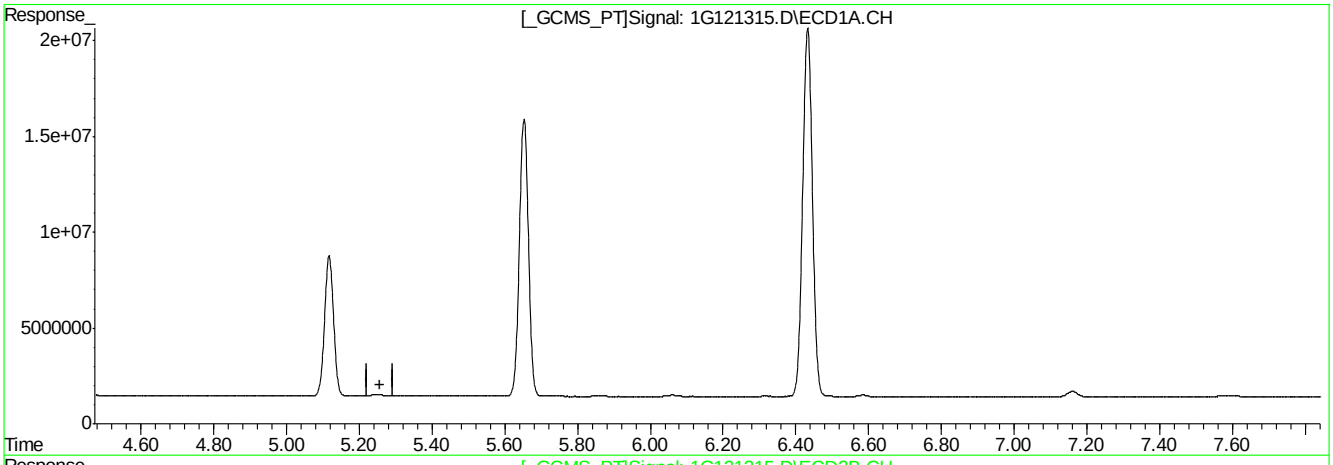
(+) = Expected Retention Time

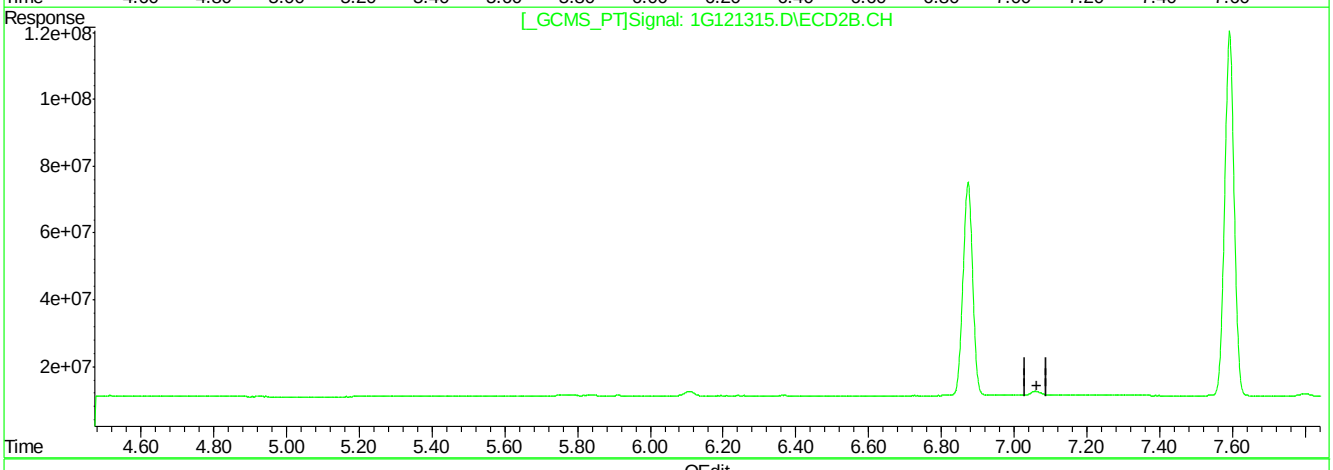
1G121315.D 1PST3933.M Fri Mar 25 11:15:39 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

0.00min 0.000PPB

response 0

(16) 4,4'-DDD #2 (A)

0.00min 0.000PPB

response 0

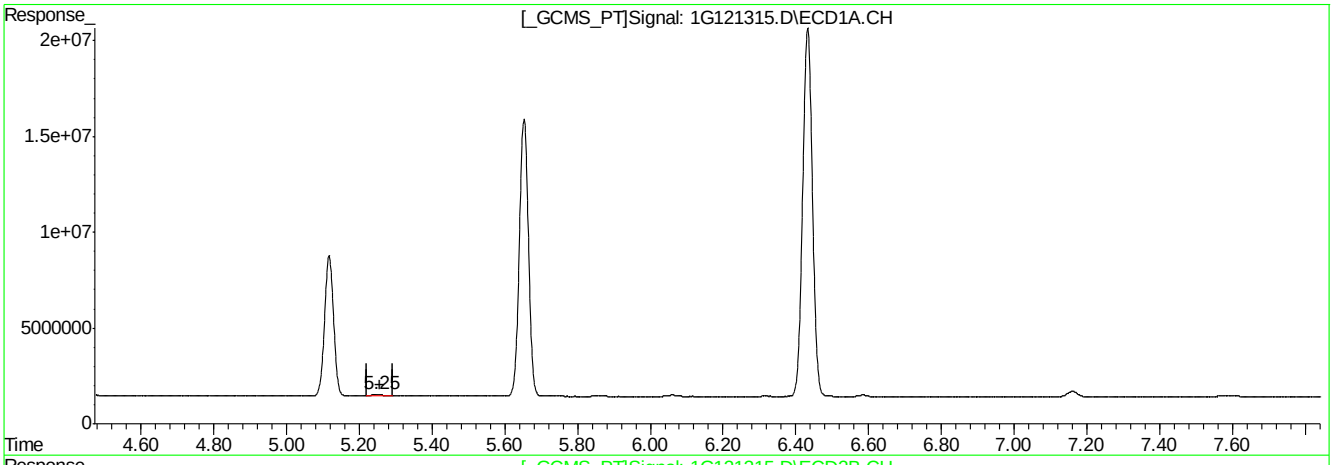
(+) = Expected Retention Time

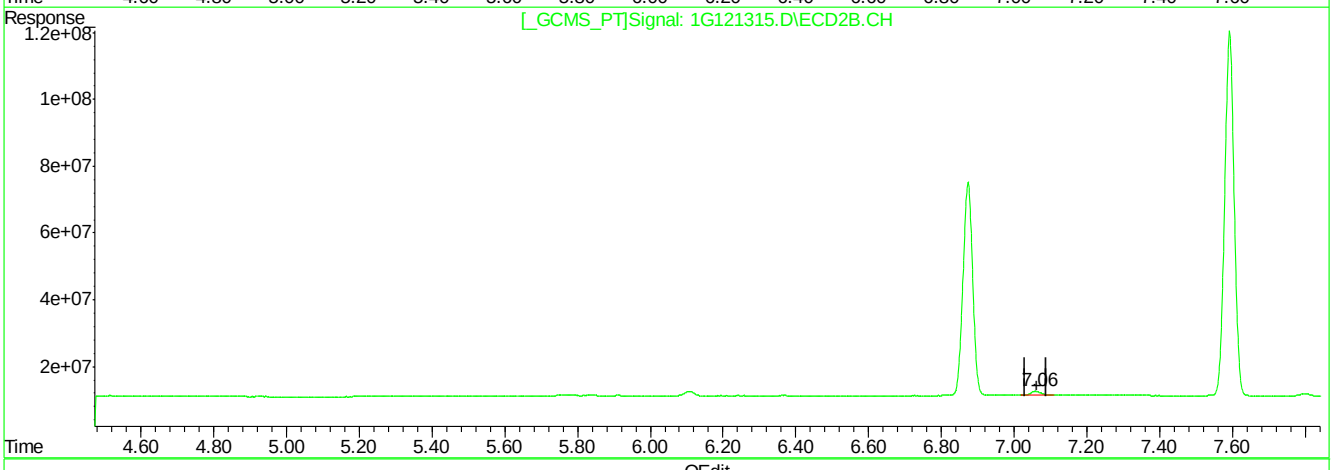
1G121315.D 1PST3933.M Fri Mar 25 11:15:42 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On : 3-24-16 03:36:16 PM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op92344,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration





QEdit

(16) 4,4'-DDD (A)

5.25min 0.723PPB m

response 1554293

(16) 4,4'-DDD #2 (A)

7.06min 0.869PPB m

response 23445127

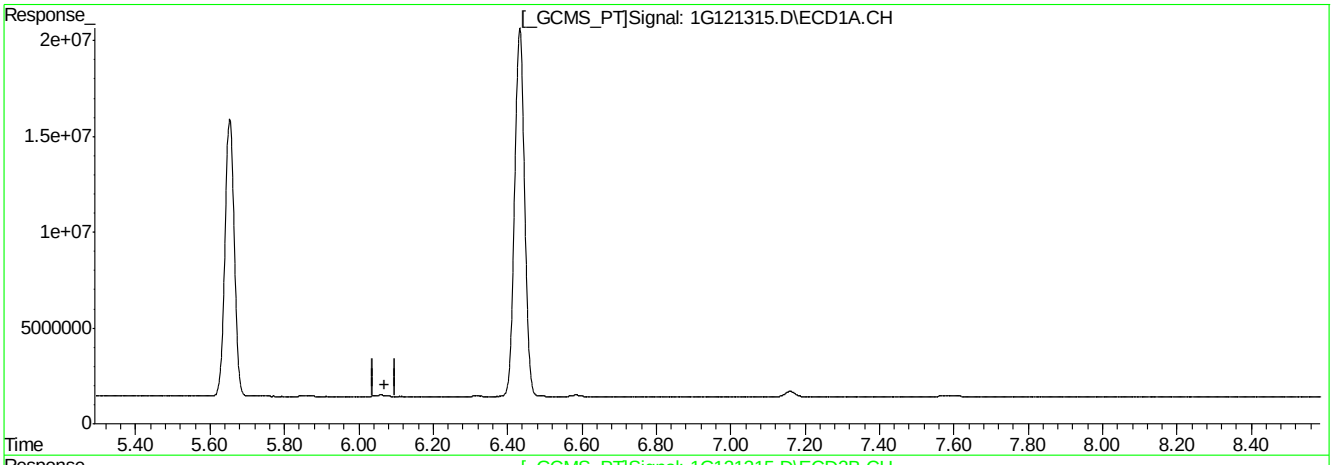
(+) = Expected Retention Time

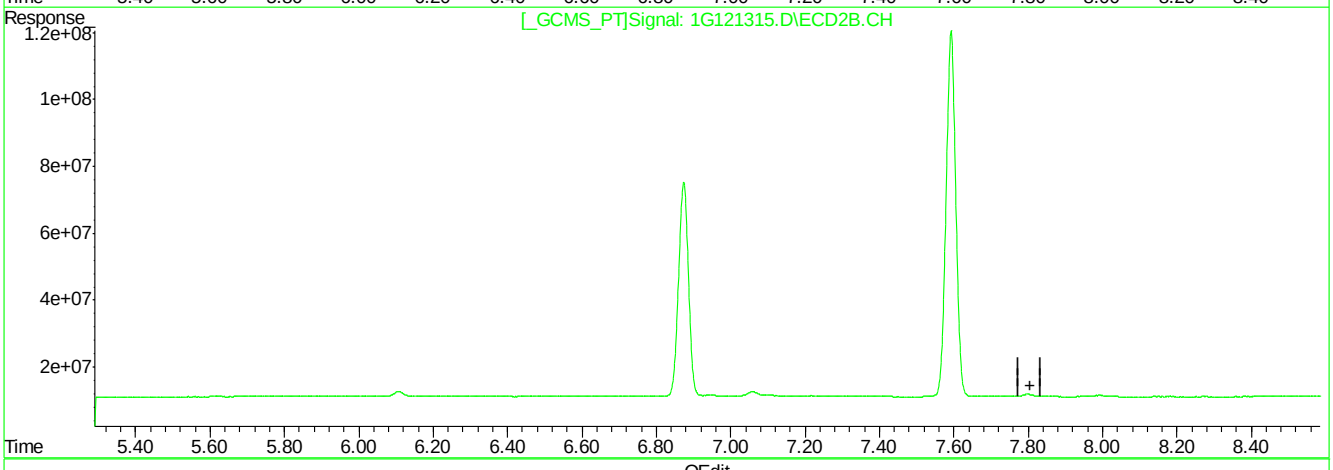
1G121315.D 1PST3933.M Fri Mar 25 11:15:59 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

0.00min 0.000PPB

response 0

(19) Endrin Aldehyde #2 (B)

0.00min 0.000PPB

response 0

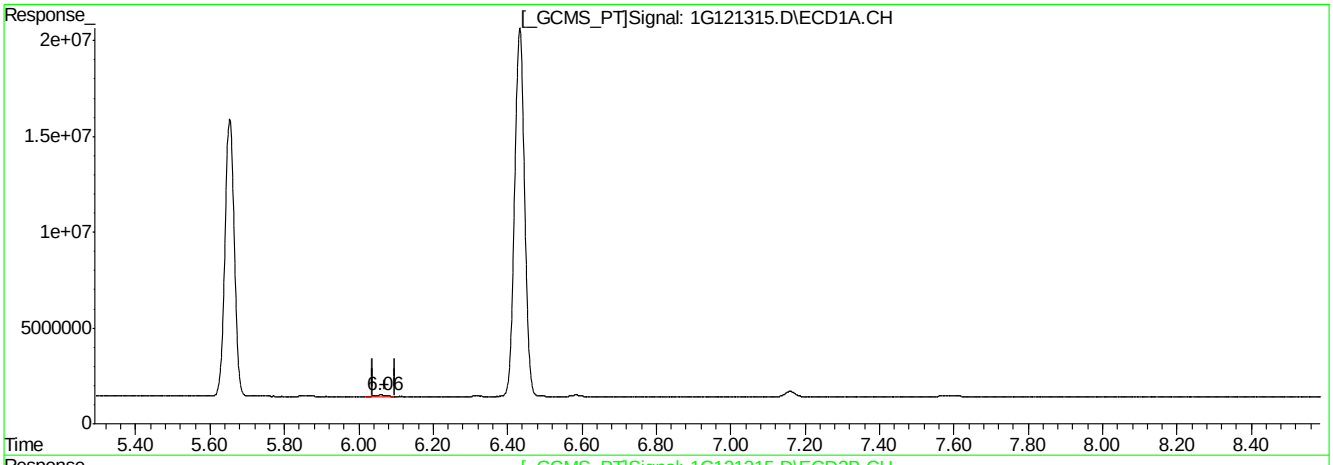
(+) = Expected Retention Time

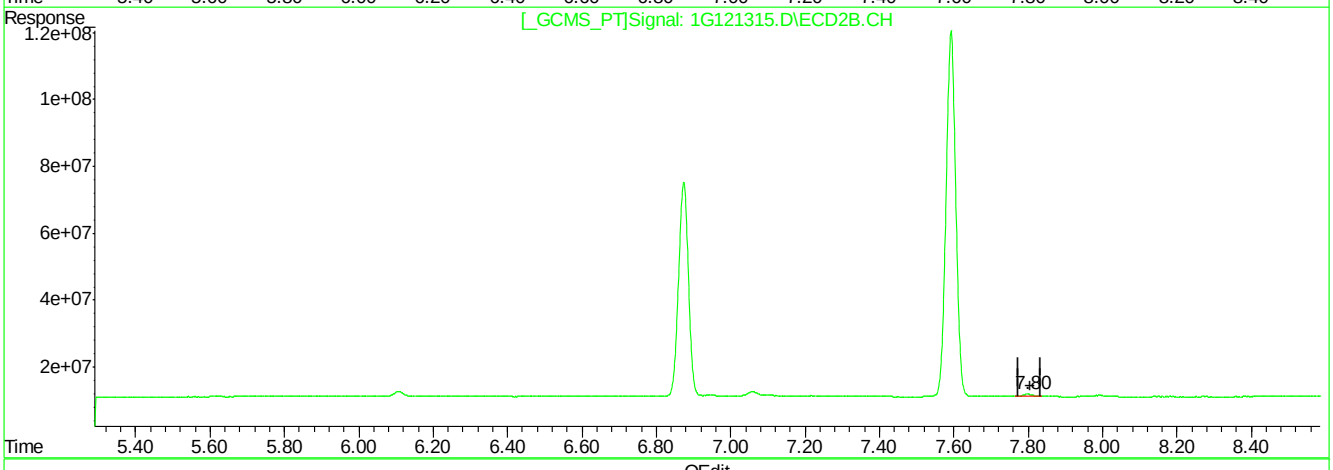
1G121315.D 1PST3933.M Fri Mar 25 11:16:05 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121315.D\ECD2B.CH
Acq On    : 3-24-16 03:36:16 PM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op92344,g1g3944,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:13 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.06min 0.561PPB m

response 1300345

(19) Endrin Aldehyde #2 (B)

7.80min 0.585PPB m

response 13040239

(+) = Expected Retention Time

1G121315.D 1PST3933.M Fri Mar 25 11:16:23 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 5:45 pm
Operator : brittanp
Sample : ddt
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:54:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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...	2.060	2.223	219.6E6	222.4E6	50.000	50.000
25) I	1-bromo-2...	2.060	2.223	219.6E6	222.4E6	50.000	50.000
31) I	1-bromo-2...	2.060	2.223	219.6E6	222.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.605	3.000	86111238	80872020	20.058	19.134
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	50.14%	47.84%
24) SA	Decachlor...	9.811	11.222	93522762	65854461	21.274	21.069
	Spiked Amount 40.000			Recovery	=	53.19%	52.67%
	Target Compounds						
13) B	4,4'-DDE	5.303	6.674	2634401	2876000	0.681m	0.664
15) MA	Endrin	6.013	7.469	241.8E6	214.4E6	58.622	52.890
16) A	4,4'-DDD	6.155	7.631	8385130	7051784	2.500m	1.822m#
18) MA	4,4'-DDT	6.551	8.161	388.1E6	362.3E6	112.201m	106.069
19) B	Endrin Al...	6.953	8.387	4194694	3242234	1.240m	0.939
23) B	Endrin Ke...	8.081	9.761	9829510	10057782	2.504m	2.497
	SemiQuant Compounds - Not Calibrated on this Instrument						

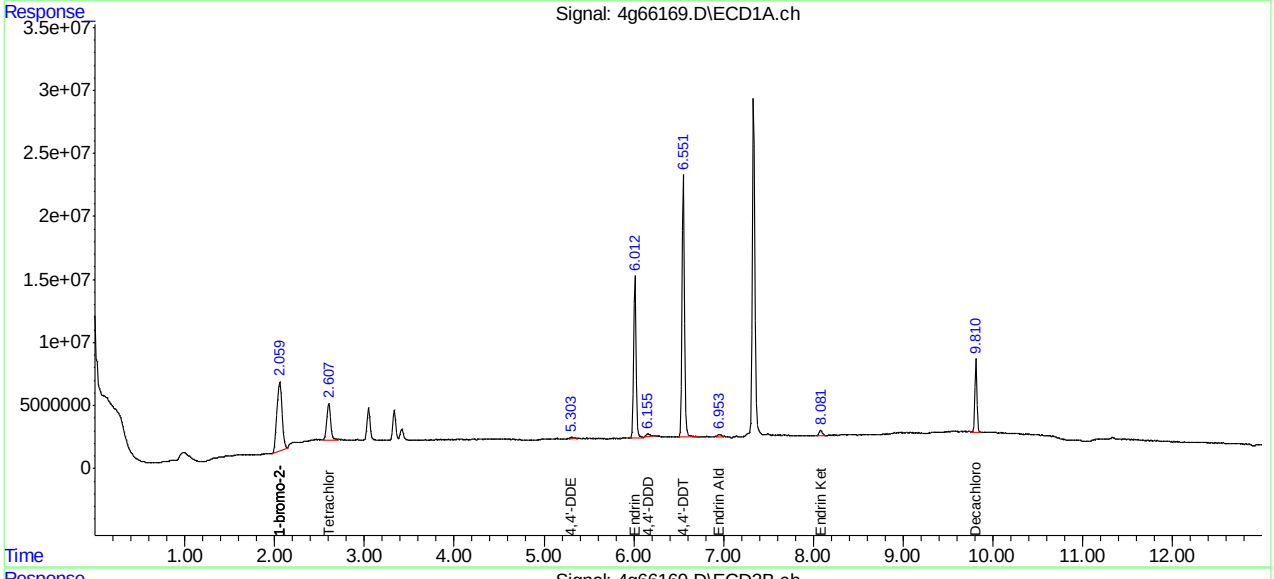
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

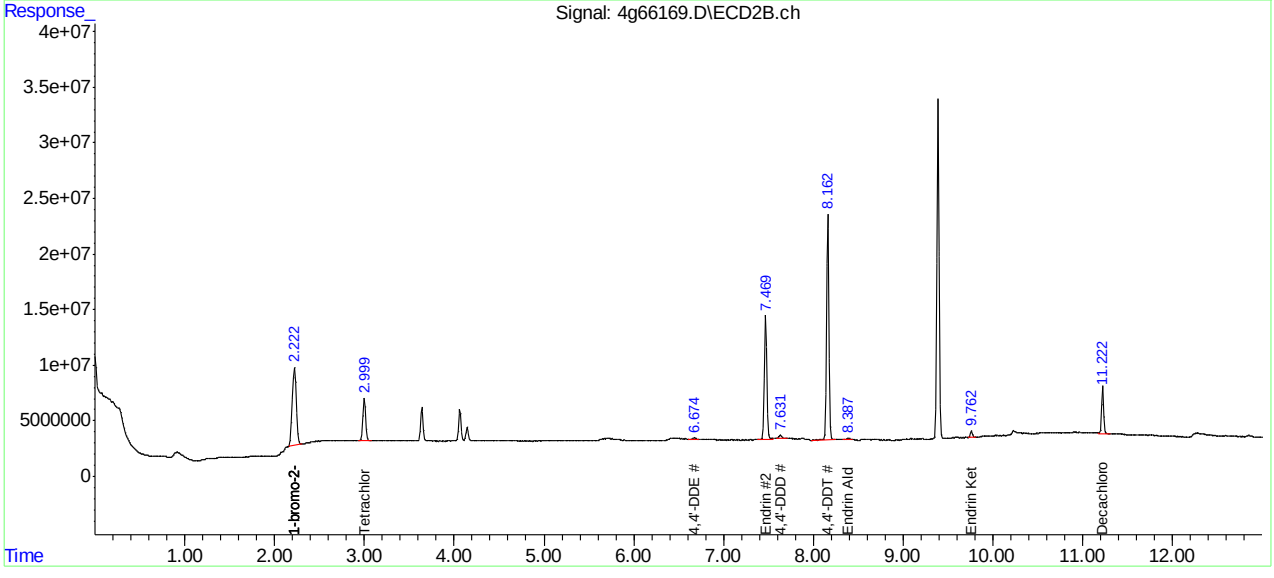
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 5:45 pm
Operator : brittanp
Sample : ddt
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:54:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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:	G4G1741-DDT	**Method:**	SW846 8081B
Lab FileID:	4G66169.D	**Analyst approved:**	03/19/16 12:57 Joseph Ravino
Injection Time:	03/18/16 17:45	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

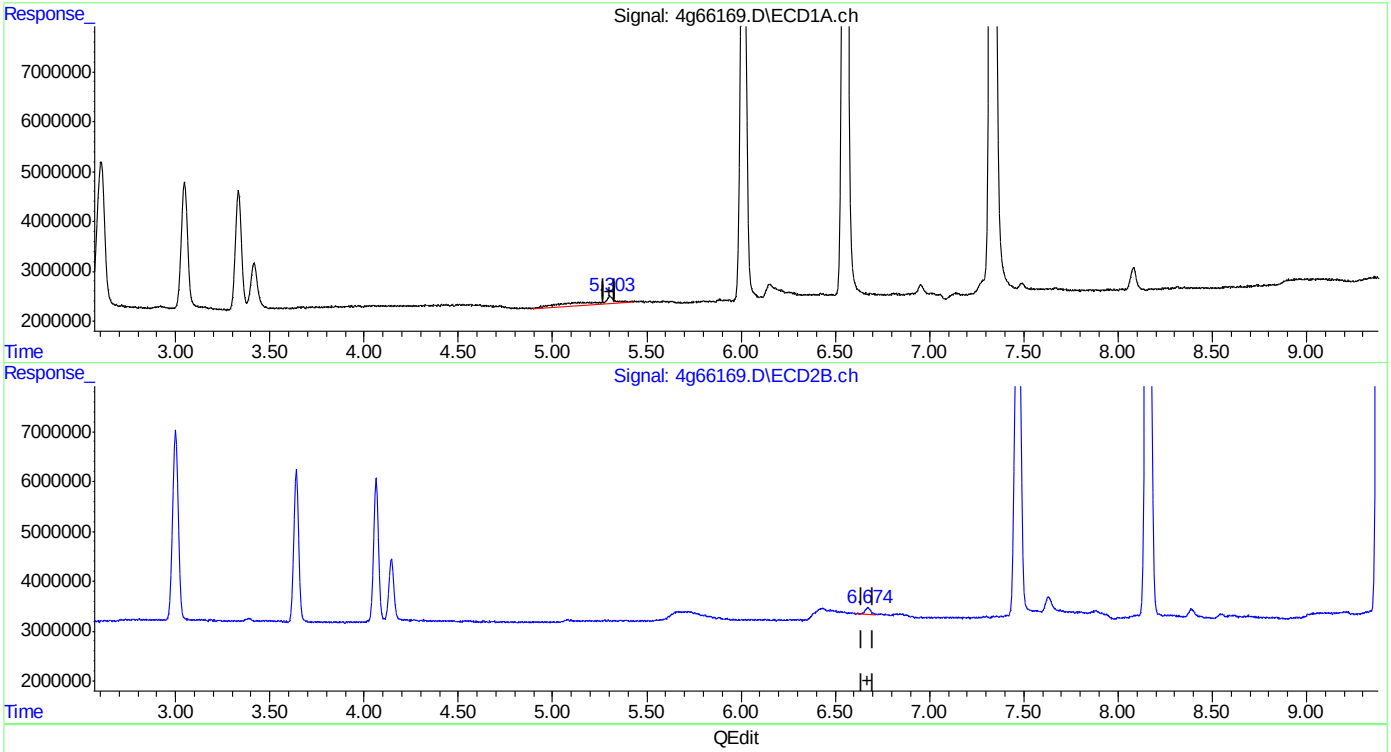
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.30	Poor instrument integration
4,4'-DDD	72-54-8	1	6.15	Poor instrument integration
4,4'-DDT	50-29-3	1	6.55	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.95	Poor instrument integration
4,4'-DDD	72-54-8	2	7.63	Poor instrument integration
Endrin ketone	53494-70-5	1	8.08	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)

5.305min 3.961 PPB

response 15321496

(13) 4,4'-DDE #2 (B)

6.674min 0.664 PPB

response 2876000

(+) = Expected Retention Time

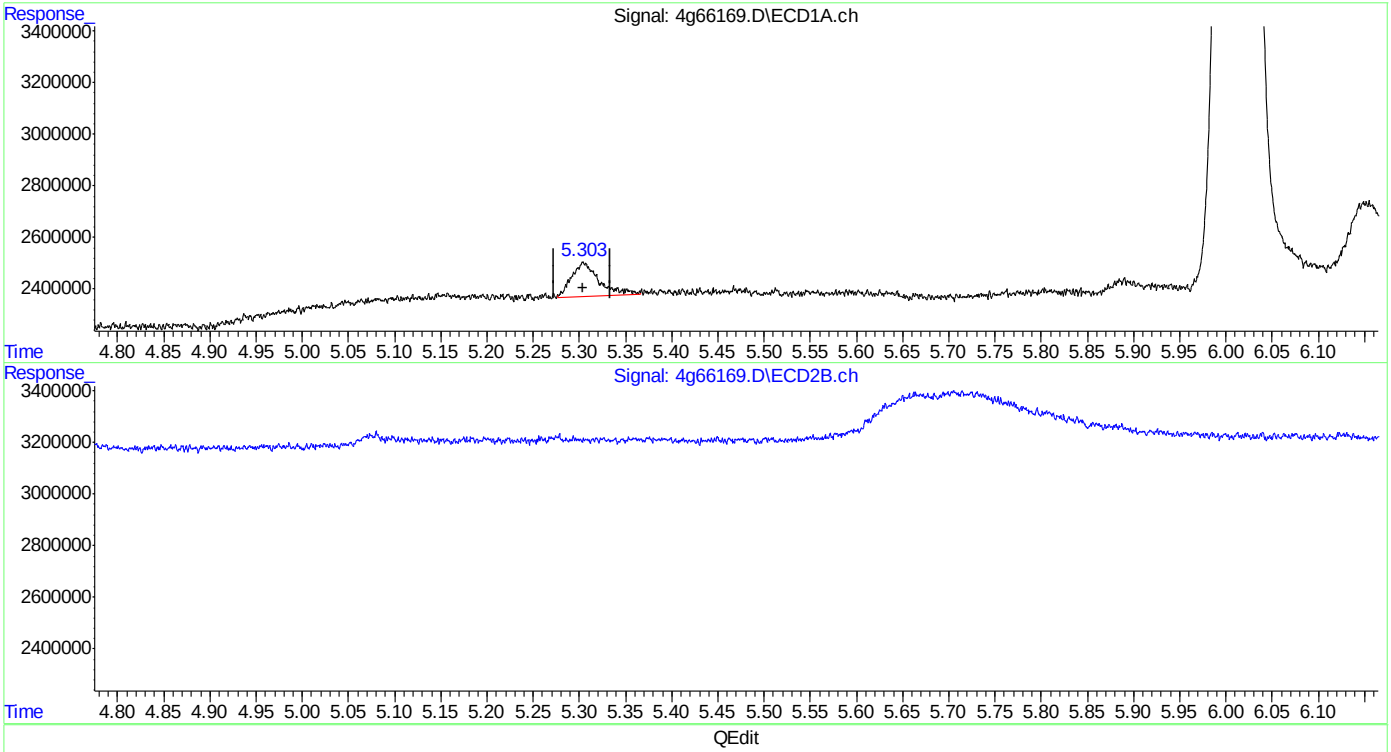
4PST1741.M Sat Mar 19 12:52:51 2016 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)

5.303min 0.681 PPB m

response 2634401

(13) 4,4'-DDE #2 (B)

6.674min 0.664 PPB

response 2876000

(+) = Expected Retention Time

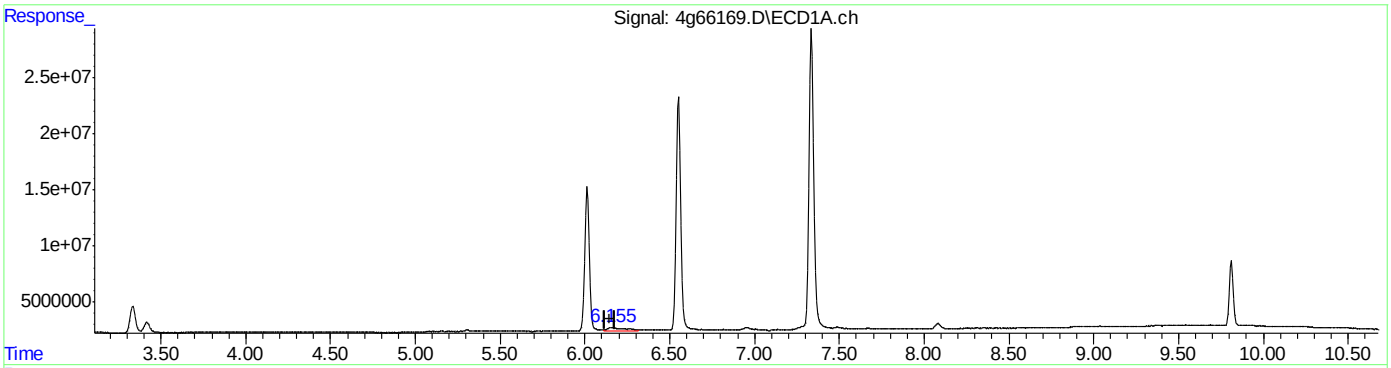
4PST1741.M Sat Mar 19 12:53:00 2016 RPT1

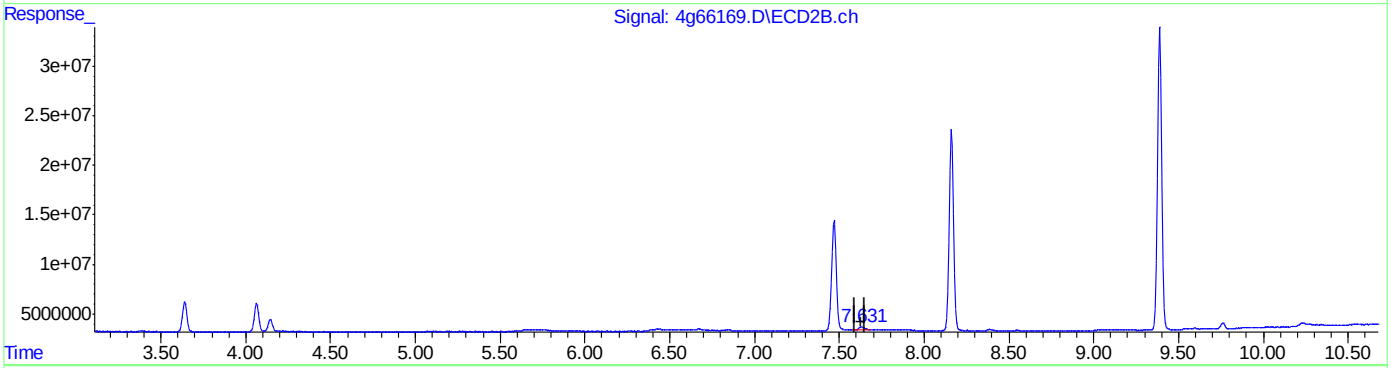
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 5:45 pm
Operator : brittanp
Sample : ddt
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)
6.152min 6.025 PPB
response 20211392

(16) 4,4'-DDD #2 (A)
7.629min 2.248 PPB
response 8704442

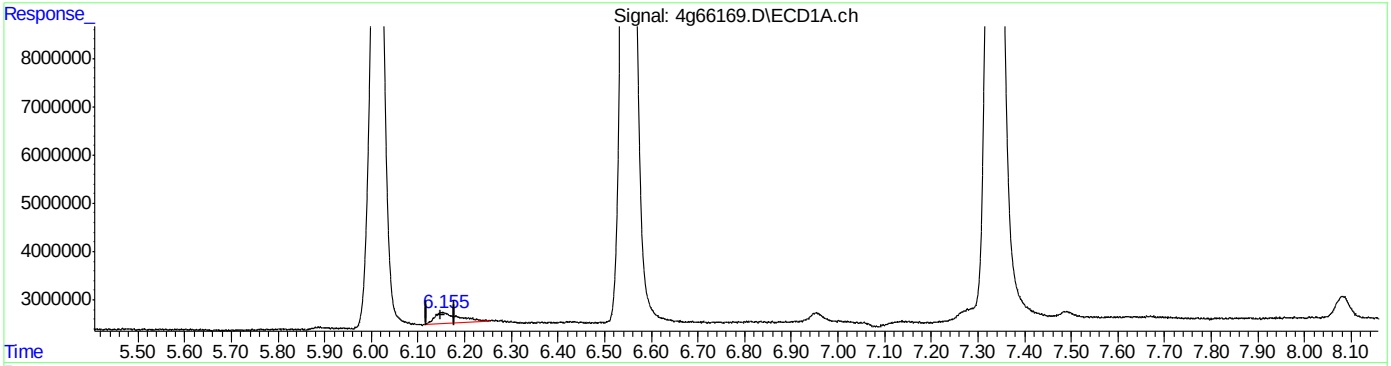
(+) = Expected Retention Time

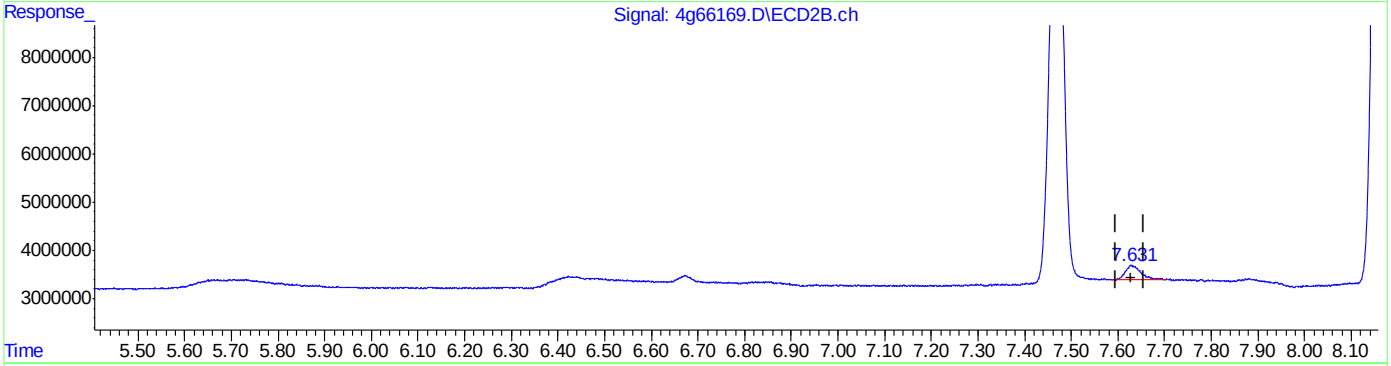
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 5:45 pm
Operator : brittanp
Sample : ddt
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)
6.155min 2.500 PPB m
response 8385130

(16) 4,4'-DDD #2 (A)
7.631min 1.822 PPB m
response 7051784

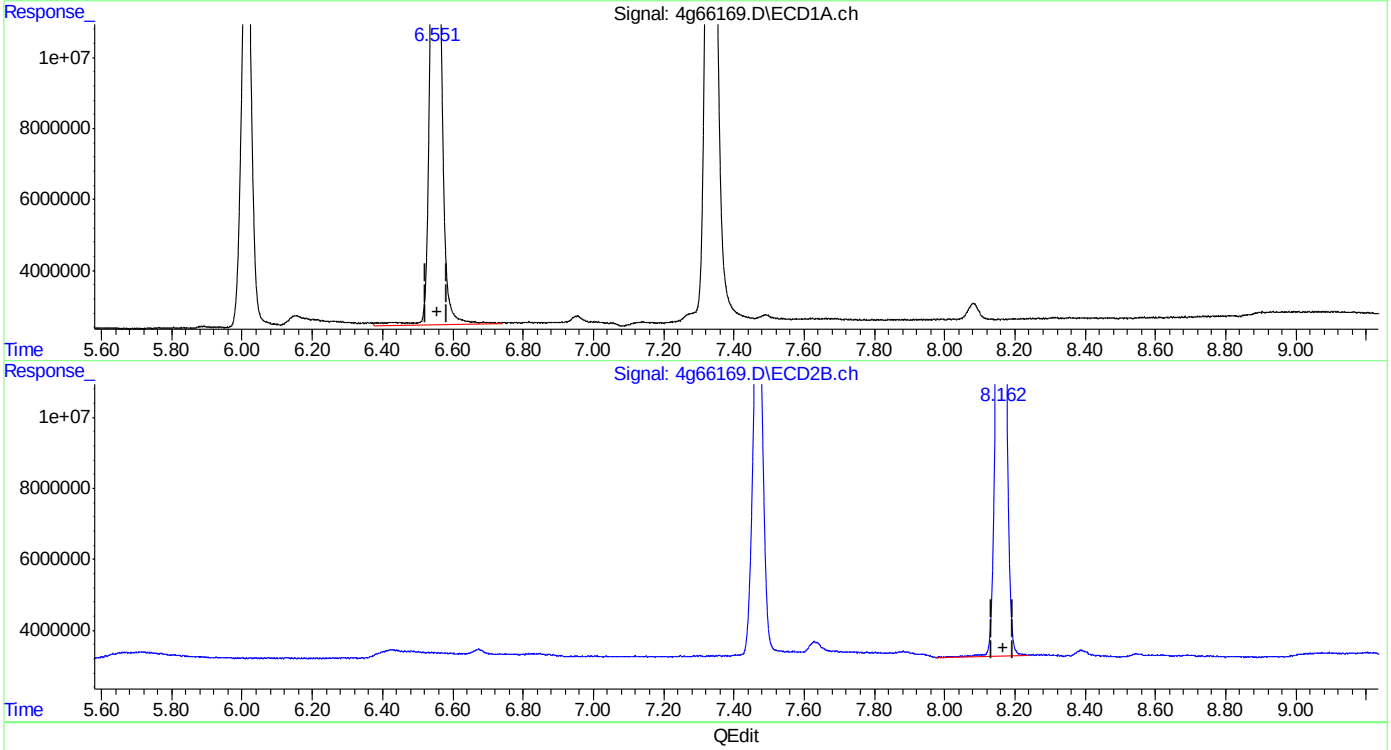
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)

6.551min 114.023 PPB

response 396236601

(18) 4,4'-DDT #2 (MA)

8.161min 106.069 PPB

response 362278732

(+) = Expected Retention Time

4PST1741.M Sat Mar 19 12:53:35 2016 RPT1

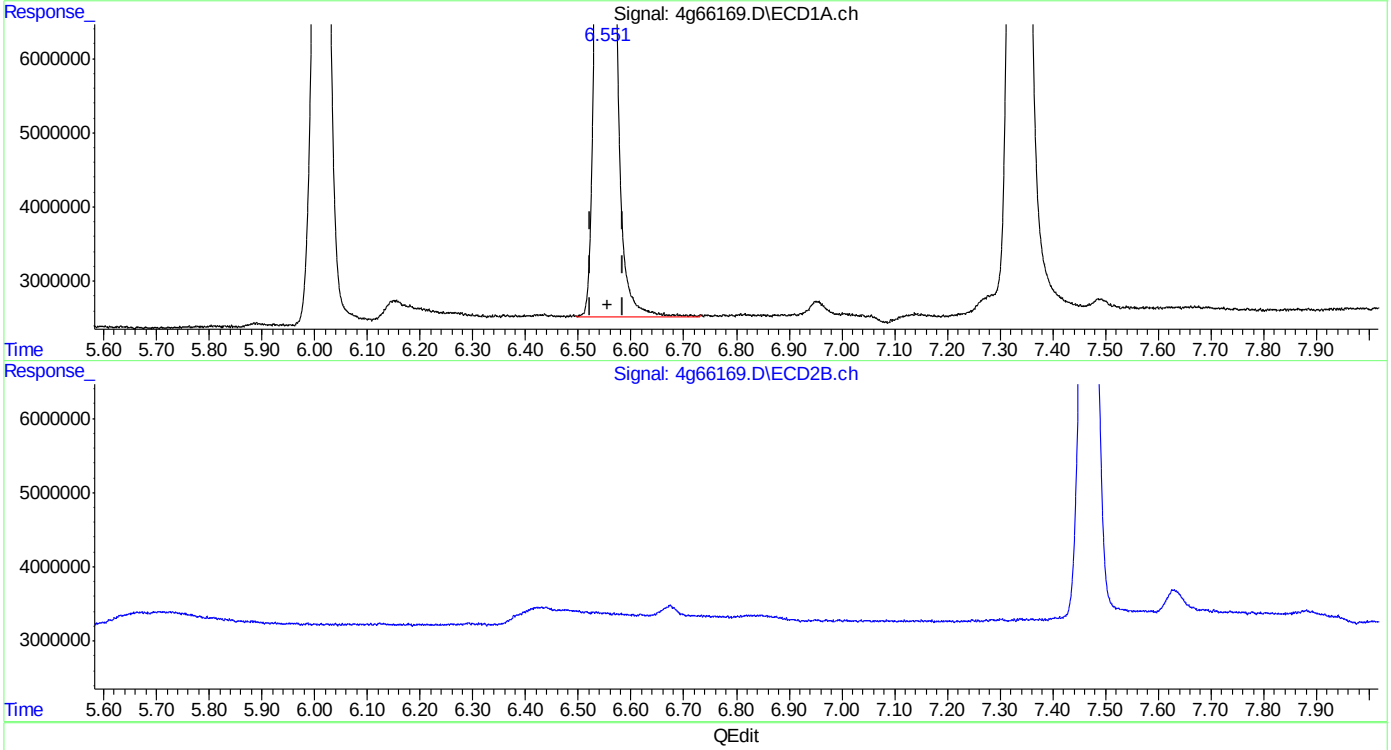
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)
6.551min 112.201 PPB m
response 388085703

(18) 4,4'-DDT #2 (MA)
8.161min 106.069 PPB
response 362278732

(+) = Expected Retention Time

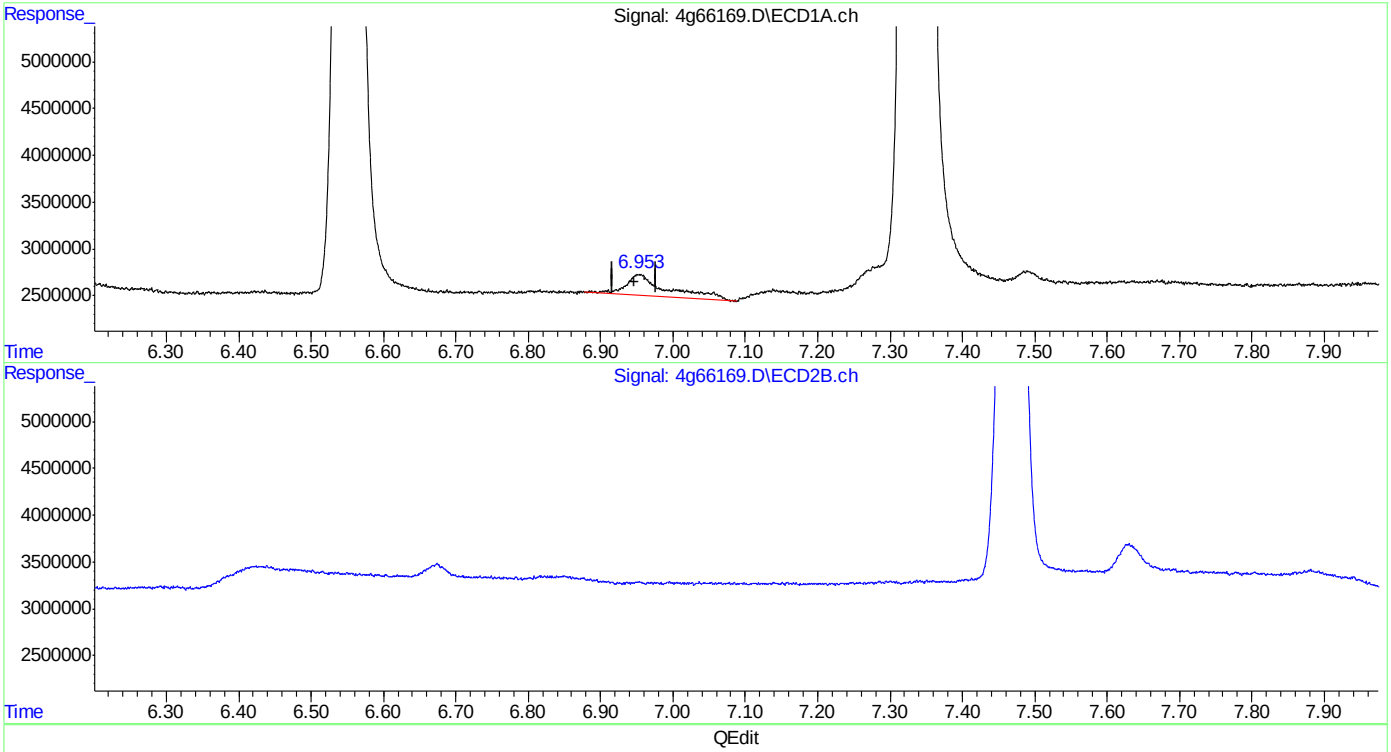
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)

6.953min 2.685 PPB

response 9084248

(19) Endrin Aldehyde #2 (B)

8.387min 0.939 PPB

response 3242234

(+) = Expected Retention Time

4PST1741.M Sat Mar 19 12:53:53 2016 RPT1

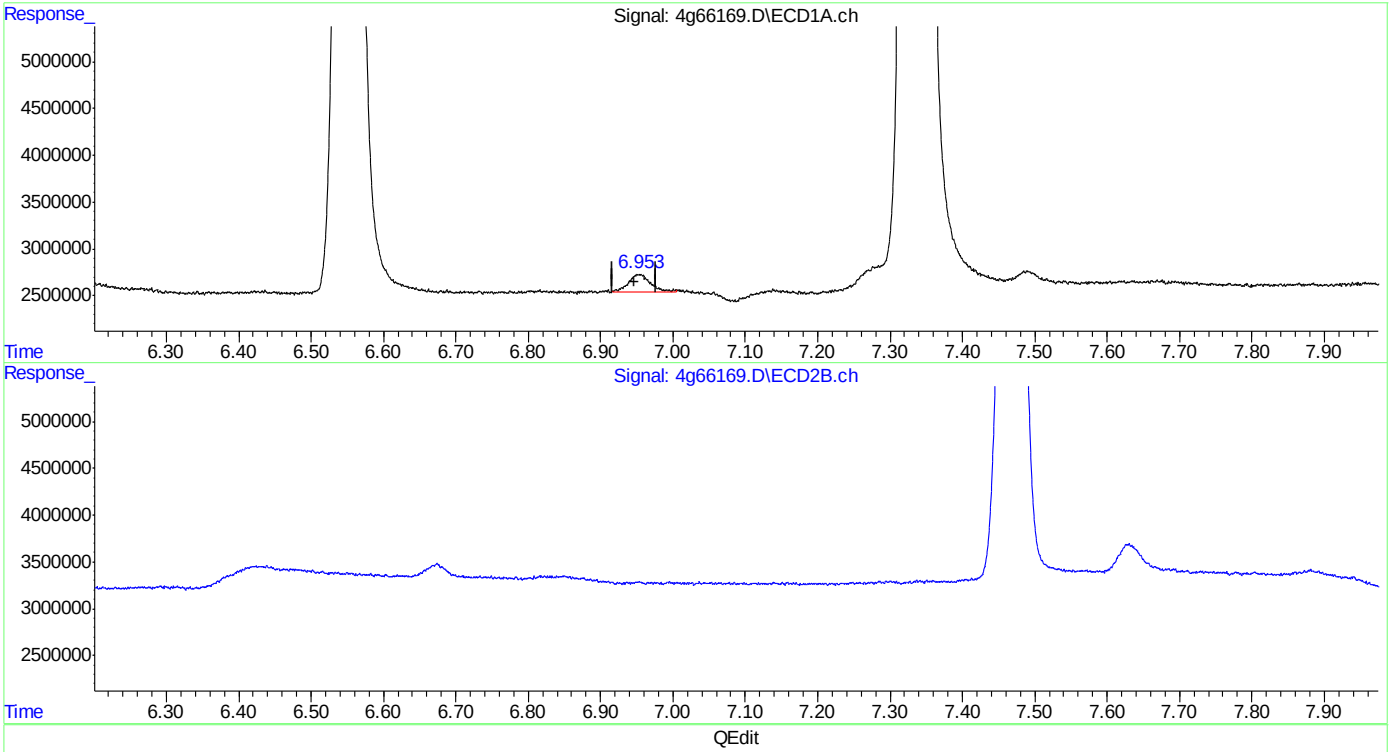
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)

6.953min 1.240 PPB m

response 4194694

(19) Endrin Aldehyde #2 (B)

8.387min 0.939 PPB

response 3242234

(+) = Expected Retention Time

4PST1741.M Sat Mar 19 12:53:57 2016 RPT1

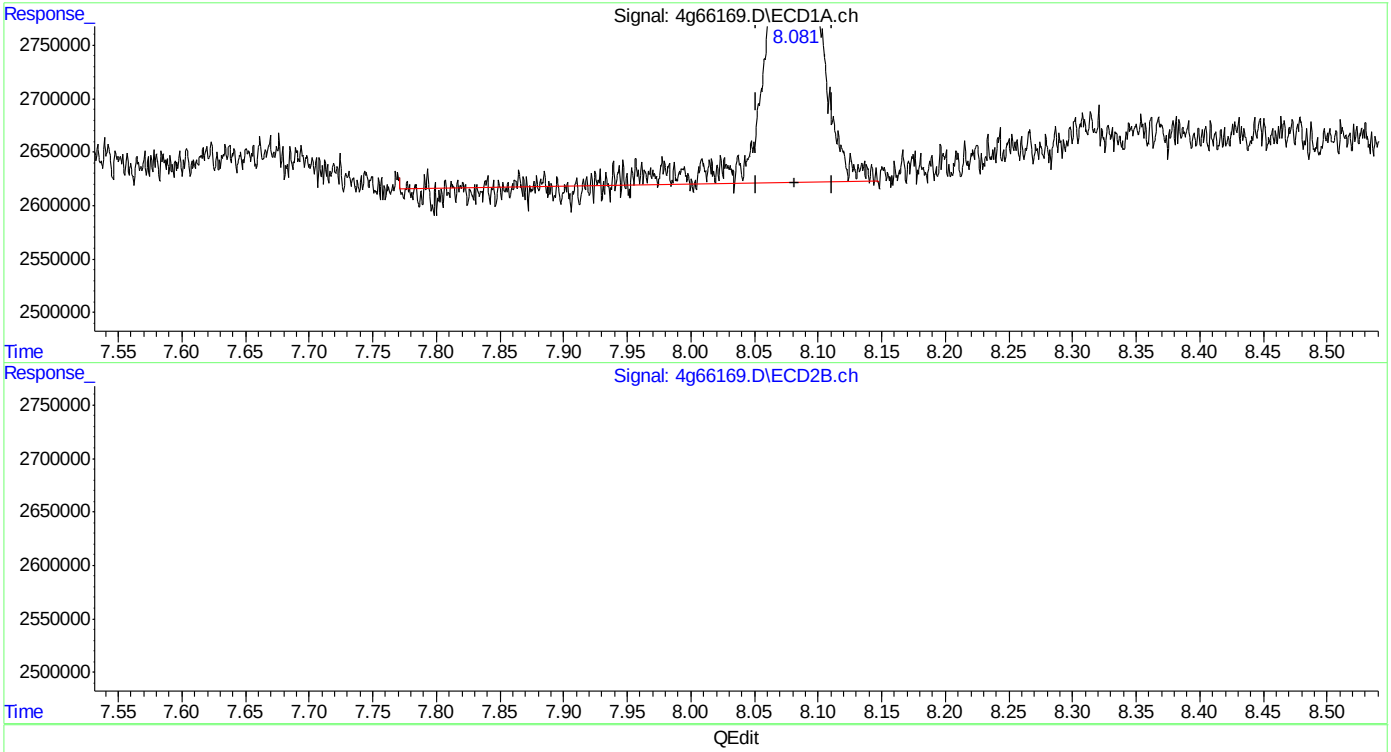
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 5:45 pm
Operator : brittanp
Sample : ddt
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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)
8.082min 2.617 PPB
response 10272870

(23) Endrin Ketone #2 (B)
9.761min 2.497 PPB
response 10057782

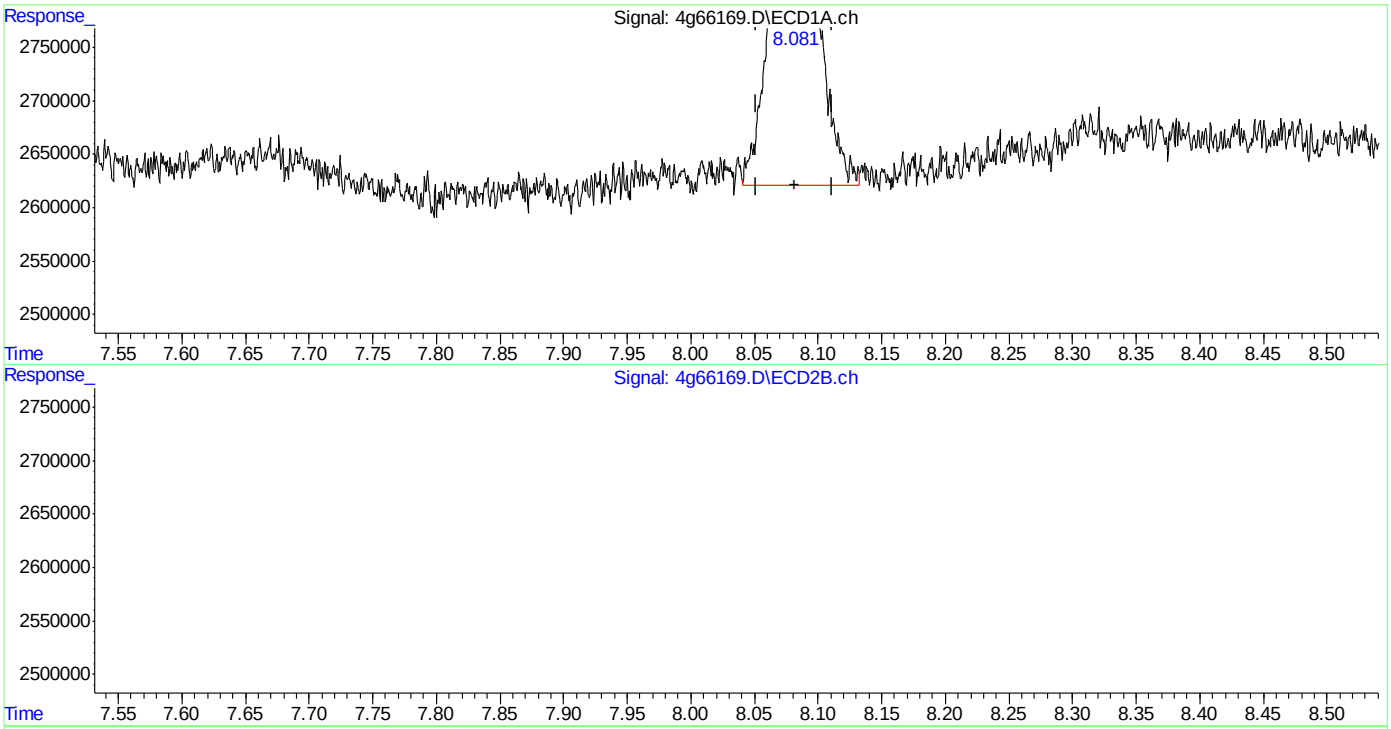
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:54:11 2016 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66169.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   5:45 pm
Operator  : brittanp
Sample    : ddt
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:52:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 12:50:04 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 2.504 PPB m

response 9829510

(23) Endrin Ketone #2 (B)

9.761min 2.497 PPB

response 10057782

(+) = Expected Retention Time

4PST1741.M Sat Mar 19 12:54:15 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/22/16 14:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:31:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.066	2.231	248.9E6	258.2E6	50.000	50.000
25) I	1-bromo-2...	2.066	2.231	248.9E6	258.2E6	50.000	50.000
31) I	1-bromo-2...	2.066	2.231	248.9E6	258.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.603	3.002	100.3E6	99793330	20.602	20.333
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	51.51%	50.83%
24) SA	Decachlor...	9.802	11.214	108.0E6	83462747	21.674	22.996
	Spiked Amount 40.000			Recovery	=	54.18%	57.49%
	Target Compounds						
13) B	4,4'-DDE	5.292	6.665	3101384	4162524	0.707m	0.828m
15) MA	Endrin	5.999	7.460	258.2E6	252.1E6	55.219	53.573
16) A	4,4'-DDD	6.141	7.620	7891835	7373376	2.075m	1.640
18) MA	4,4'-DDT	6.538	8.153	430.6E6	439.3E6	110.347	110.013
19) B	Endrin Al...	6.938	8.380	4169327	4362532	1.087m	1.088
23) B	Endrin Ke...	8.068	9.753	11178350	11422479	2.512	2.442
	SemiQuant Compounds - Not Calibrated on this Instrument						

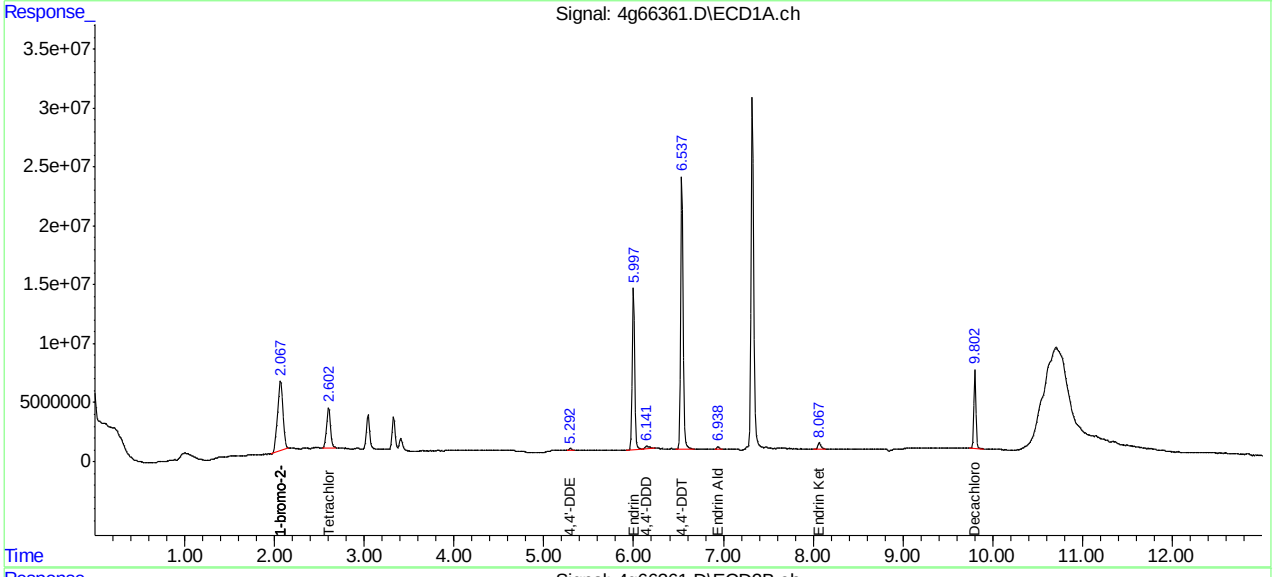
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

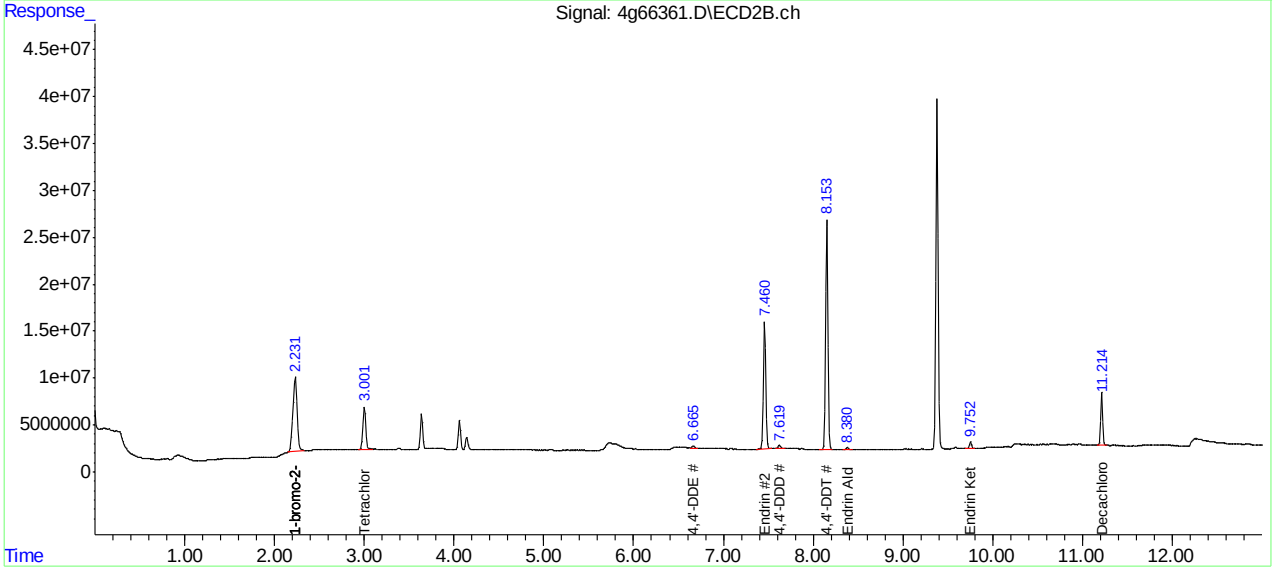
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:31:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	G4G1746-DDT	**Method:**	SW846 8081B
Lab FileID:	4G66361.D	**Analyst approved:**	03/22/16 11:55 Brittany Piercy
Injection Time:	03/22/16 07:58	**Supervisor approved:**	03/22/16 14:46 Gwendolyn Burns

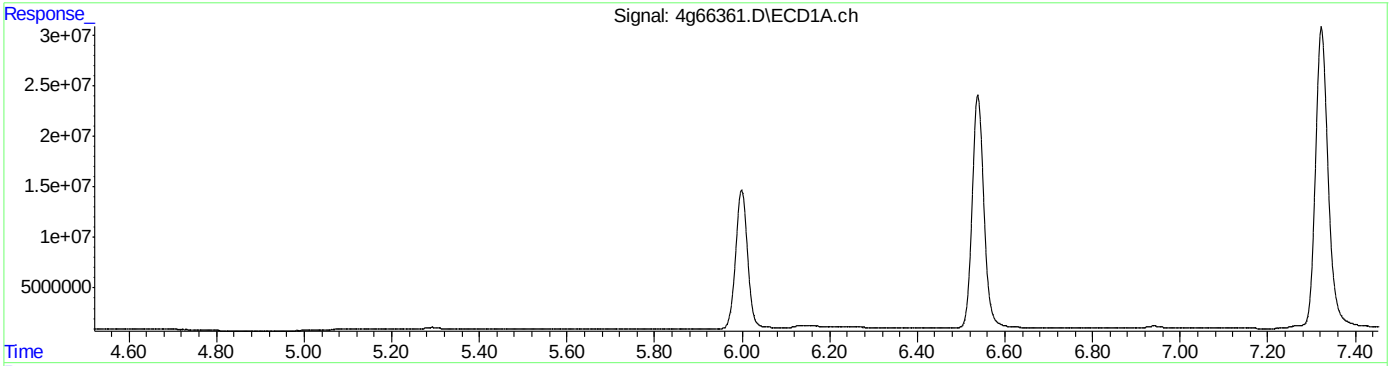
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.29	Poor instrument integration
4,4'-DDD	72-54-8	1	6.14	Poor instrument integration
4,4'-DDE	72-55-9	2	6.66	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.94	Poor instrument integration

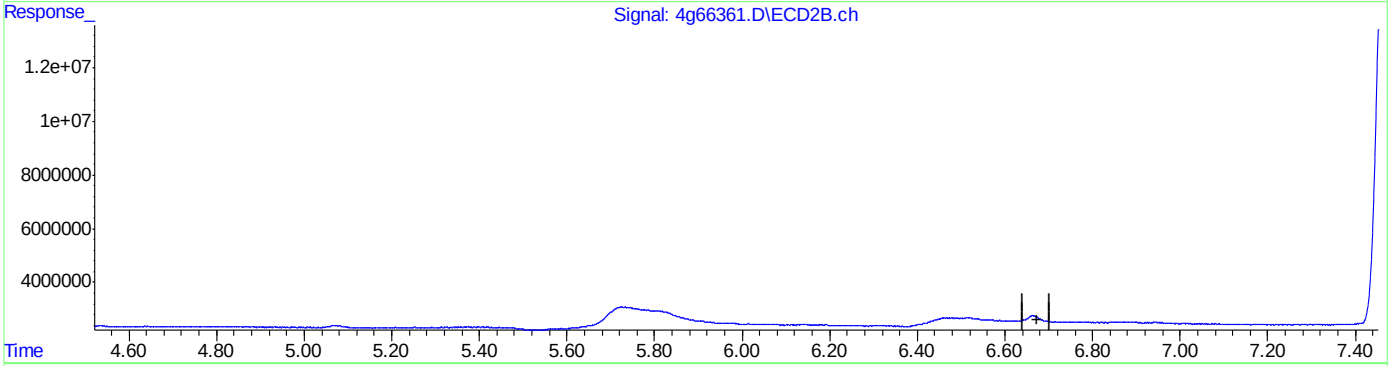
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





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

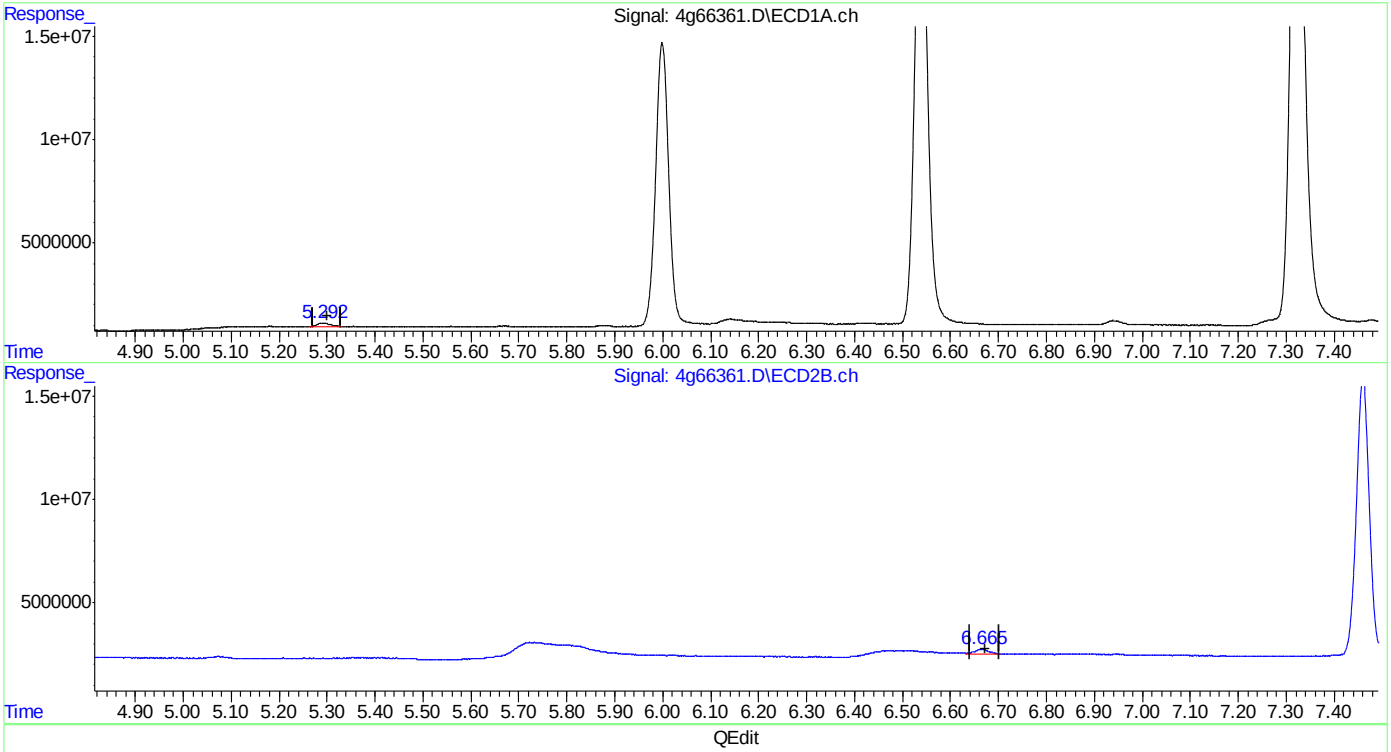
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Mar 2016   7:58 am
Operator  : rebeccak
Sample    : ddt
Misc      : op92278,g4g1746,15.4,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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
```



QEdit

(13) 4,4'-DDE (B)
5.292min 0.707 PPB m
response 3101384

(13) 4,4'-DDE #2 (B)
6.665min 0.828 PPB m
response 4162524

(+) = Expected Retention Time

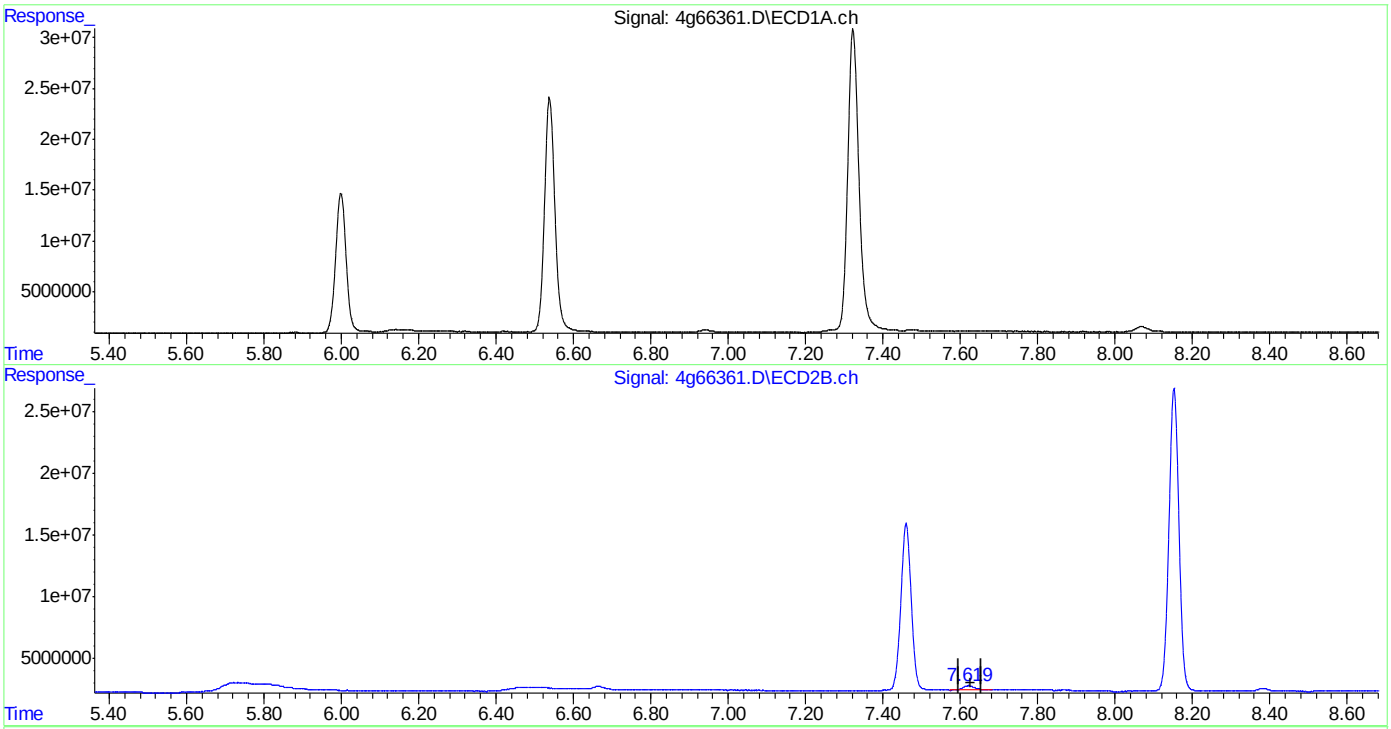
SGS ACCUTEST JC16312T

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



QEdit

(16) 4,4'-DDD (A)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
7.620min 1.640 PPB
response 7373376

(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:30:14 2016 RPT1

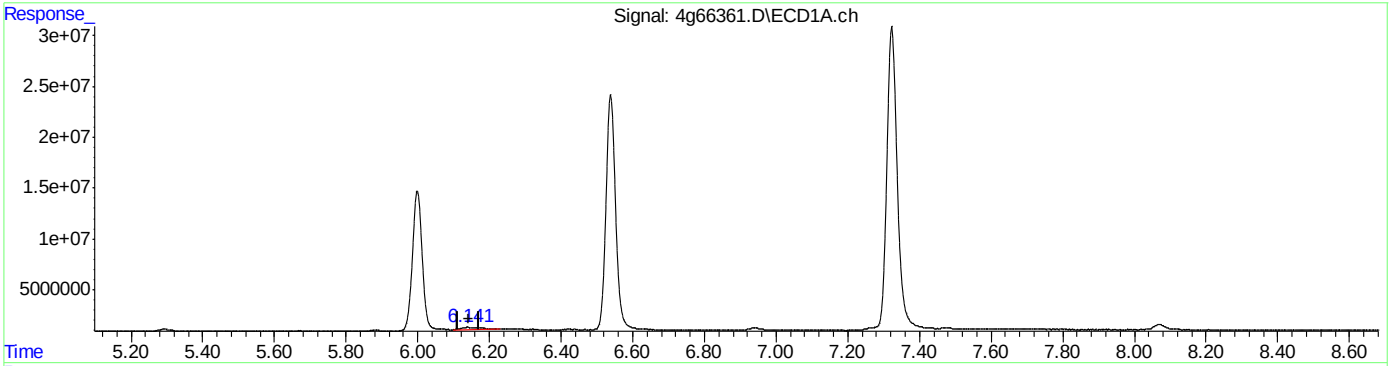
SGS ACCUTEST JC16312T

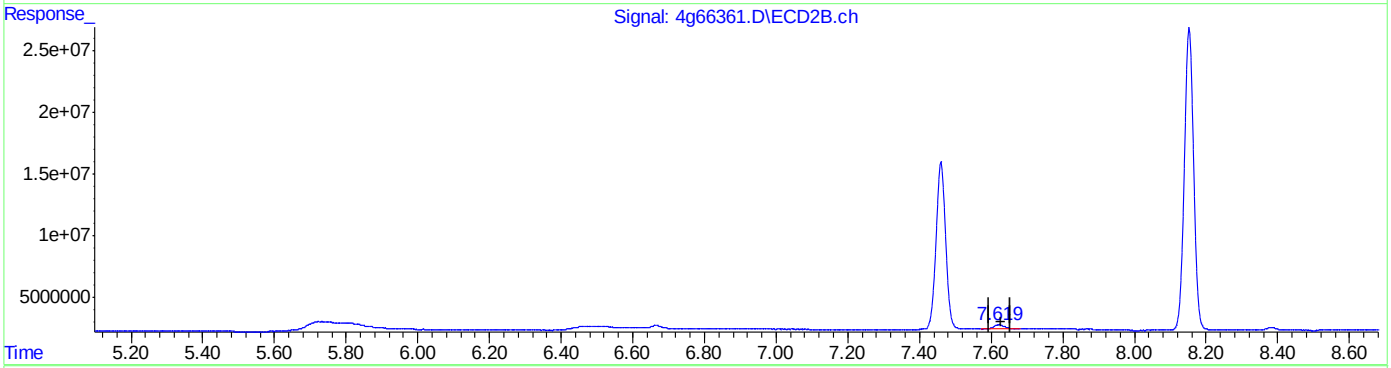
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(16) 4,4'-DDD (A)
6.141min 2.075 PPB m
response 7891835

(16) 4,4'-DDD #2 (A)
7.620min 1.640 PPB
response 7373376

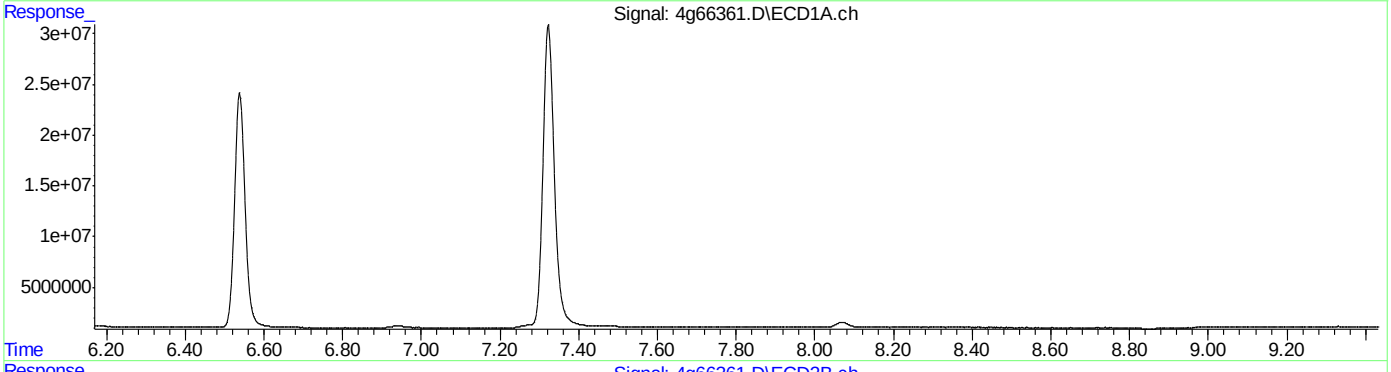
(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:30:23 2016 RPT1

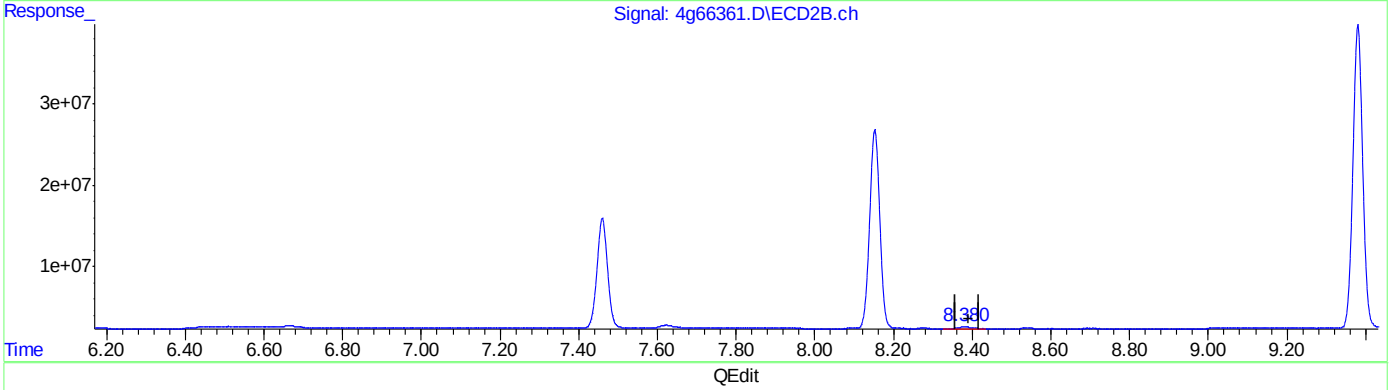
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000 PPB
response 0

(19) Endrin Aldehyde #2 (B)
8.380min 1.088 PPB
response 4362532

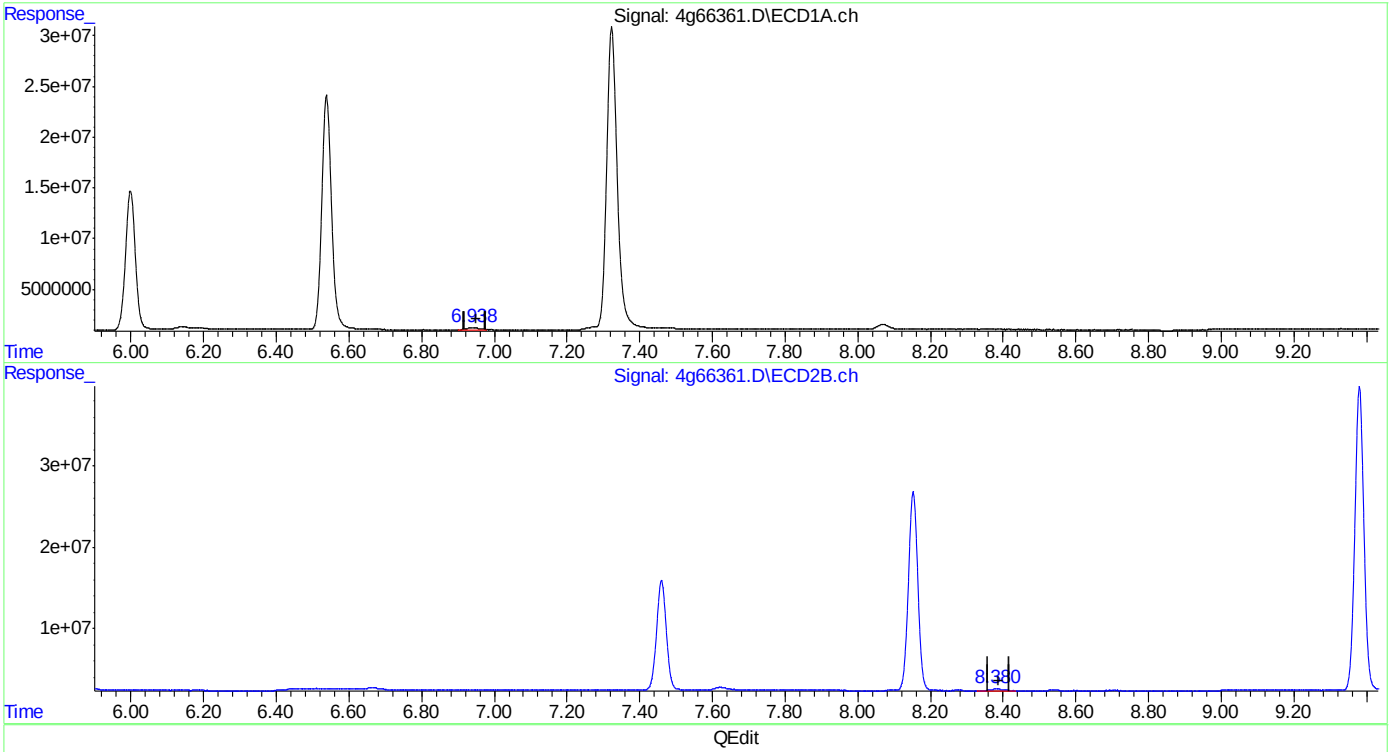
(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:30:32 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 7:58 am
Operator : rebeccak
Sample : ddt
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 11:29:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



QEdit

(19) Endrin Aldehyde (B)
6.938min 1.087 PPB m
response 4169327

(19) Endrin Aldehyde #2 (B)
8.380min 1.088 PPB
response 4362532

(+) = Expected Retention Time
4PST1741.M Tue Mar 22 11:30:43 2016 RPT1

SGS ACCUTEST JC16312T

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On : 14 Mar 2016 11:08 am Operator: dharas
Sample : ic3933-1 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	56388719	778.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	1355116	15109264	1.083	1.218m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	2.71%#	3.04%#
24) SA	Decachlorobiphen	8.98	10.90	1802160	10674365	1.276	1.379
Spiked Amount	40.000			Recovery	=	3.19%	3.45%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	1414613	24843279	0.960m	1.201m
4) MA	gamma-BHC	2.53	3.50	1370174	24121234	0.953m	1.377
5) MA	Heptachlor	3.01	4.08	1696266	22544381	1.050	1.454
6) B	beta-BHC	2.61	3.58	810645	9697429	1.043m	1.310m
7) B	delta-BHC	2.79	3.98	1242448	23090882	0.951	1.450m
8) MB	Aldrin	3.33	4.53	1352936	19351593	0.930	1.234
9) B	Heptachlor Epoxi	4.03	5.35	1539323	18800002	1.029	1.392
10) B	gamma-Chlordane	4.18	5.64	1462452	17418733	0.972	1.271
11) B	alpha-Chlordane	4.35	5.86	1447937	19806075	0.977	1.425
12) A	Endosulfan I	4.52	5.96	1420896	17231896	1.026	1.283
13) B	4,4'-DDE	4.46	6.13	1155963	17179144	0.985	1.301
14) MA	Dieldrin	4.84	6.39	1398293	17849036	1.004	1.236
15) MA	Endrin	5.15	6.90	1271409	19681768	1.110	1.777
16) A	4,4'-DDD	5.28	7.08	1045355	14168135	0.984	1.237m
17) B	Endosulfan II	5.47	7.25	1403293	16990324	1.057	1.406
18) MA	4,4'-DDT	5.69	7.62	819484	7576741	0.803m	0.732m
19) B	Endrin Aldehyde	6.10	7.83	1214586	12205822	1.128	1.233
20) B	Endosulfan Sulfa	6.78	8.30	1237948	14170612	1.028	1.427
21) A	Methoxychlor	6.47	8.87	769663	4201468	1.071m	0.776m
22)	Mirex	6.58	9.19	1634492	9944558	1.163	1.207
23) B	Endrin Ketone	7.20	9.26	1325813	14272910	1.111	1.390

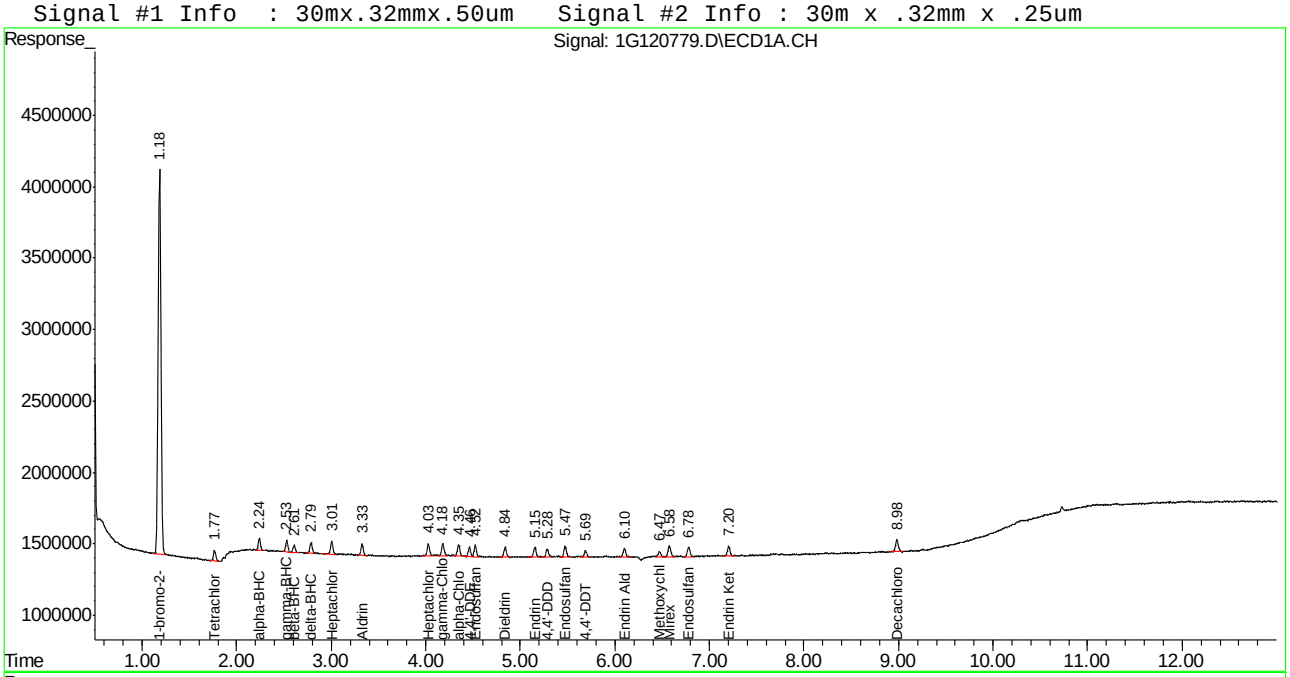
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120779.D 1PST3933.M Mon Mar 14 19:30:34 2016 RPT1 Page 1

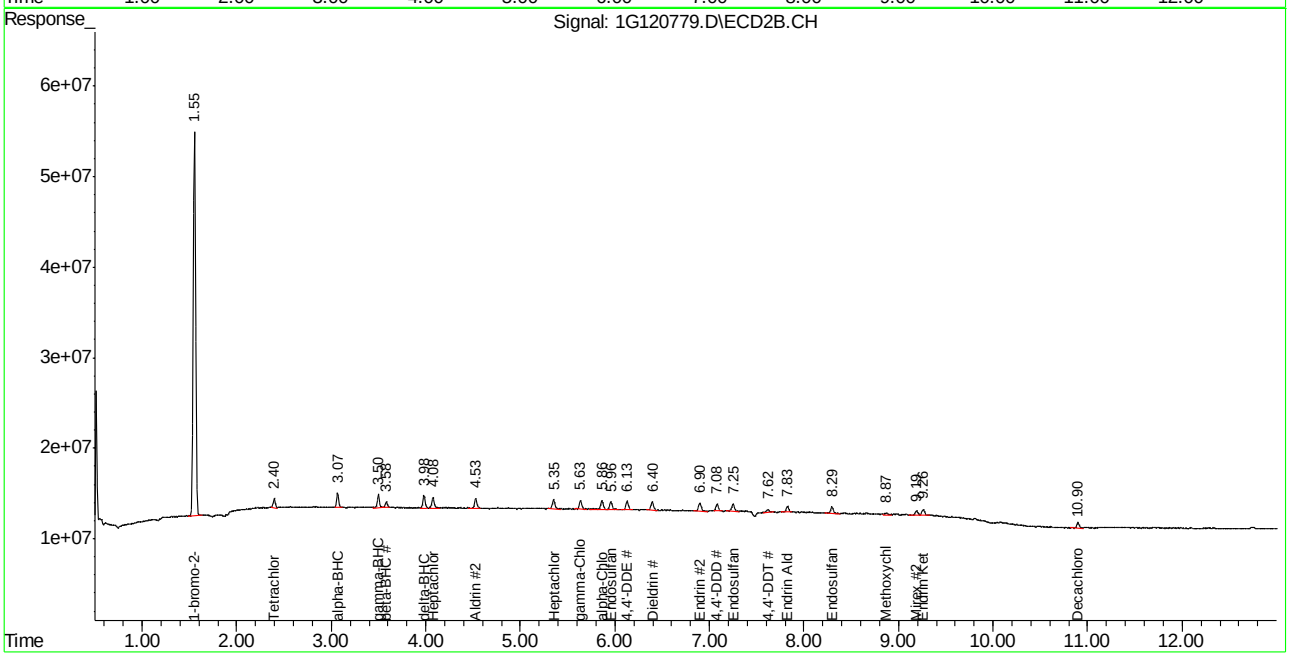
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On : 14 Mar 2016 11:08 am Operator: dharas
Sample : ic3933-1 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





1G120779.D 1PST3933.M Mon Mar 14 19:30:35 2016 RPT1 Page 2

Manual Integration Approval Summary

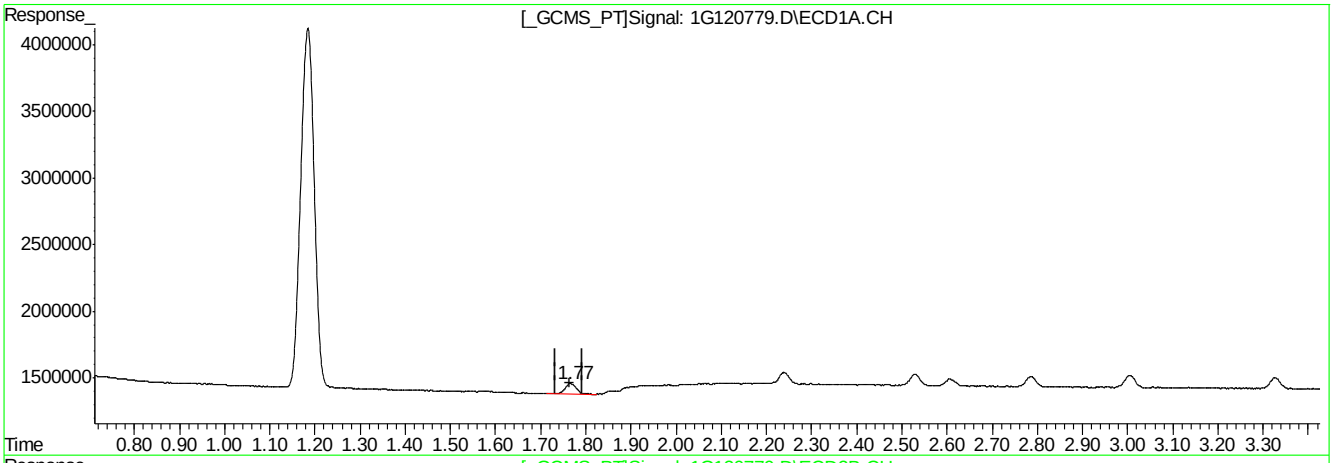
Sample Number: G1G3933-IC3933 **Method:** EPA 608
Lab FileID: 1G120779.D **Analyst approved:** 03/14/16 19:22 Joseph Ravino
Injection Time: 03/14/16 11:08 **Supervisor approved:** 03/15/16 13:13 Gwendolyn Burns

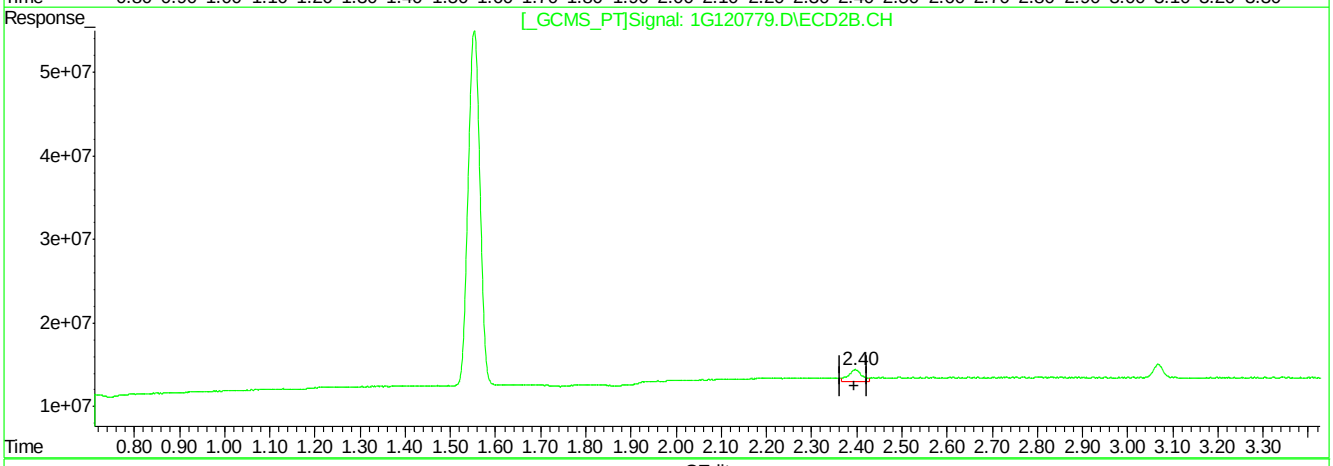
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.24	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.40	Poor instrument integration
gamma-BHC (Lindane)	58-89-9	1	2.53	Poor instrument integration
beta-BHC	319-85-7	1	2.61	Poor instrument integration
alpha-BHC	319-84-6	2	3.07	Poor instrument integration
beta-BHC	319-85-7	2	3.58	Poor instrument integration
delta-BHC	319-86-8	2	3.98	Poor instrument integration
4,4'-DDT	50-29-3	1	5.69	Poor instrument integration
Methoxychlor	72-43-5	1	6.47	Poor instrument integration
4,4'-DDD	72-54-8	2	7.08	Poor instrument integration
4,4'-DDT	50-29-3	2	7.62	Poor instrument integration
Methoxychlor	72-43-5	2	8.87	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.77min 1.083PPB

response 1355116

(2) Tetrachloro-m-xylene #2 (SAB)

2.40min 2.371PPB

response 29397594

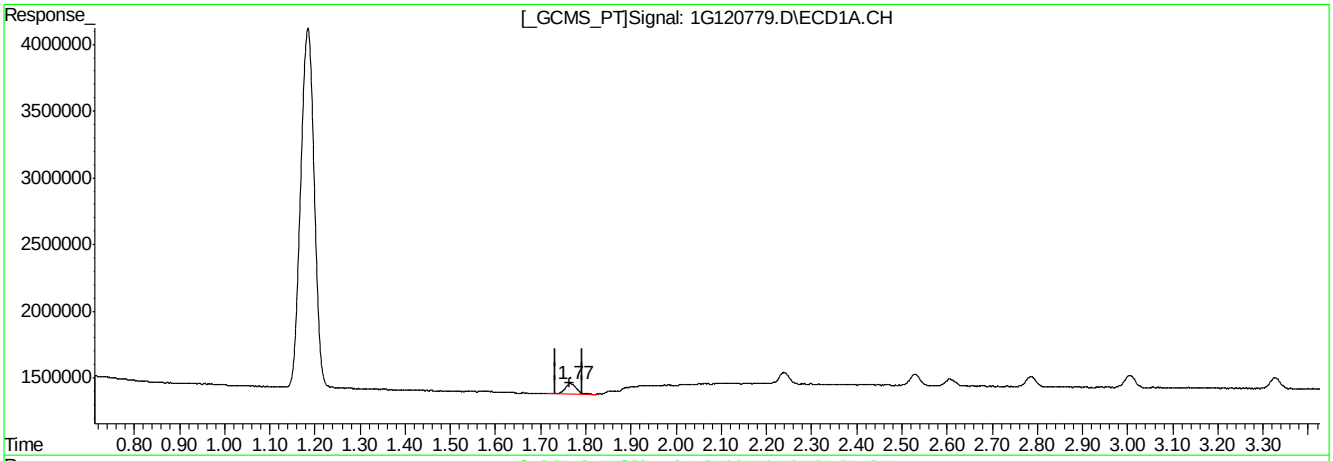
(+) = Expected Retention Time

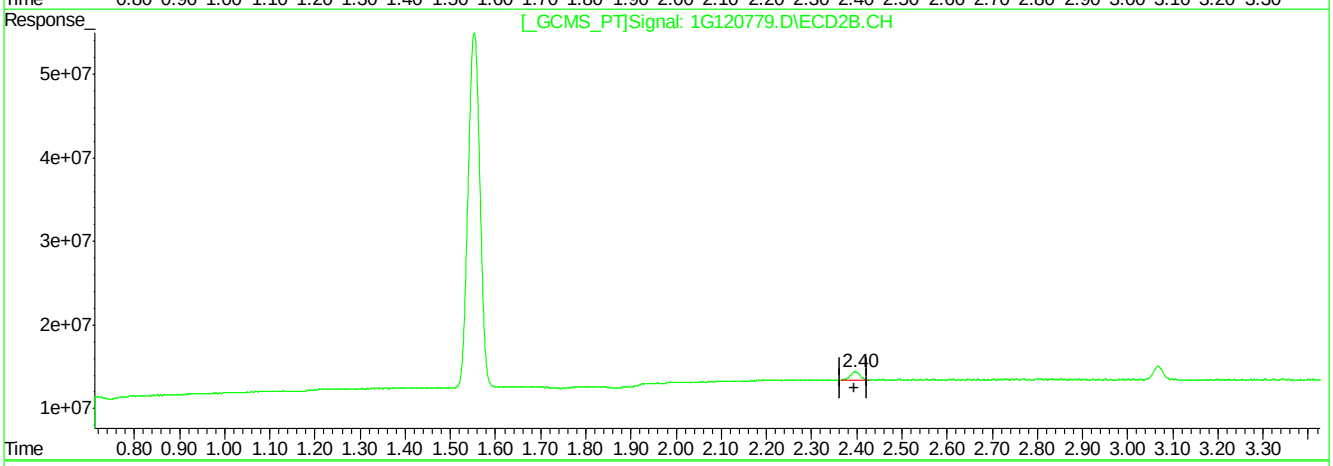
1G120779.D 1PST3933.M Mon Mar 14 19:12:34 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.77min 1.083PPB

response 1355116

(2) Tetrachloro-m-xylene #2 (SAB)

2.40min 1.218PPB m

response 15109264

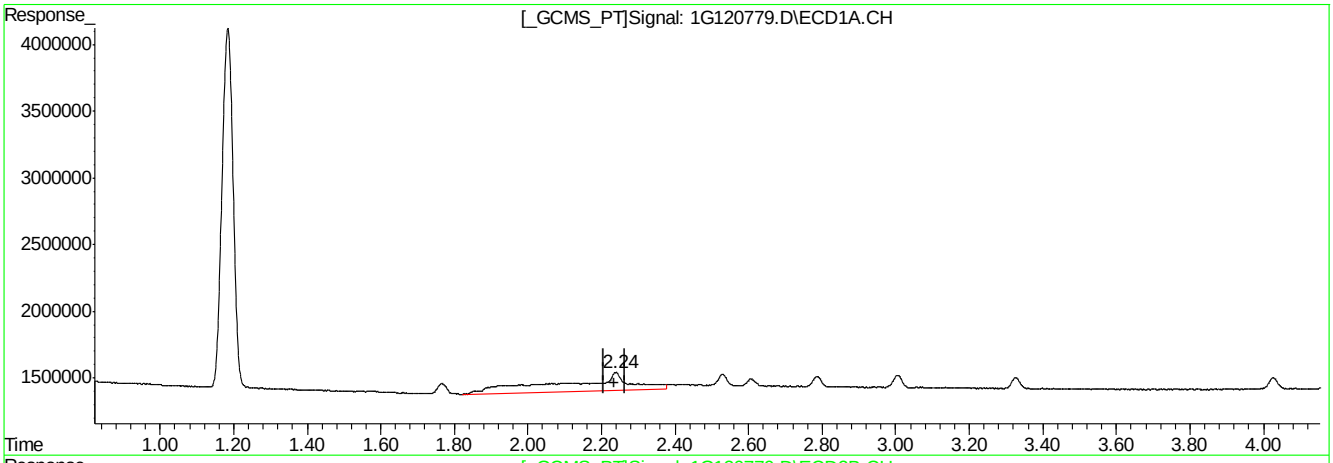
(+) = Expected Retention Time

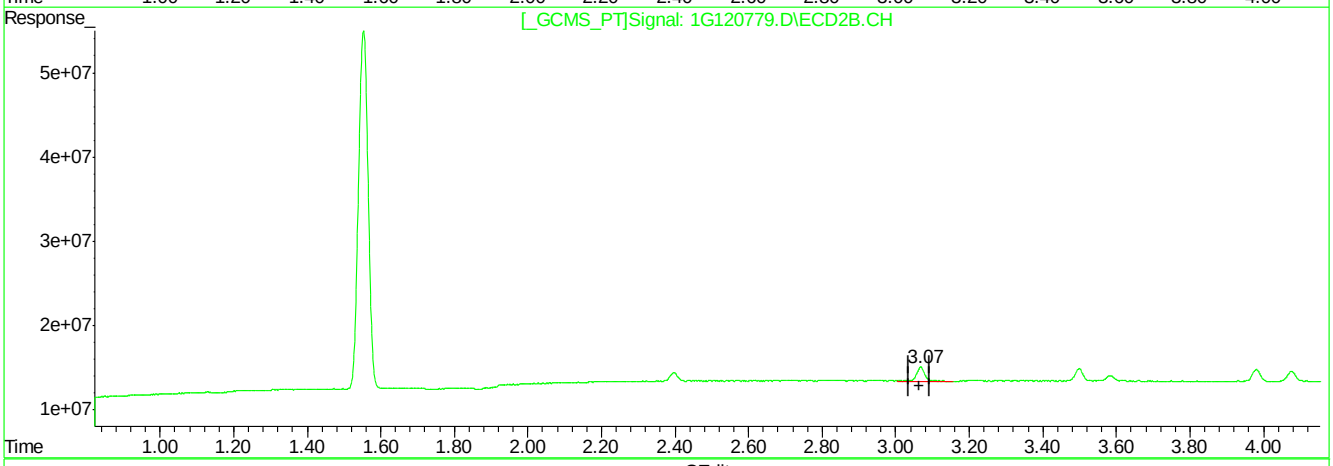
1G120779.D 1PST3933.M Mon Mar 14 19:12:43 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.24min 11.743PPB

response 17299554

(3) alpha-BHC #2 (A)

3.07min 1.392PPB

response 28787511

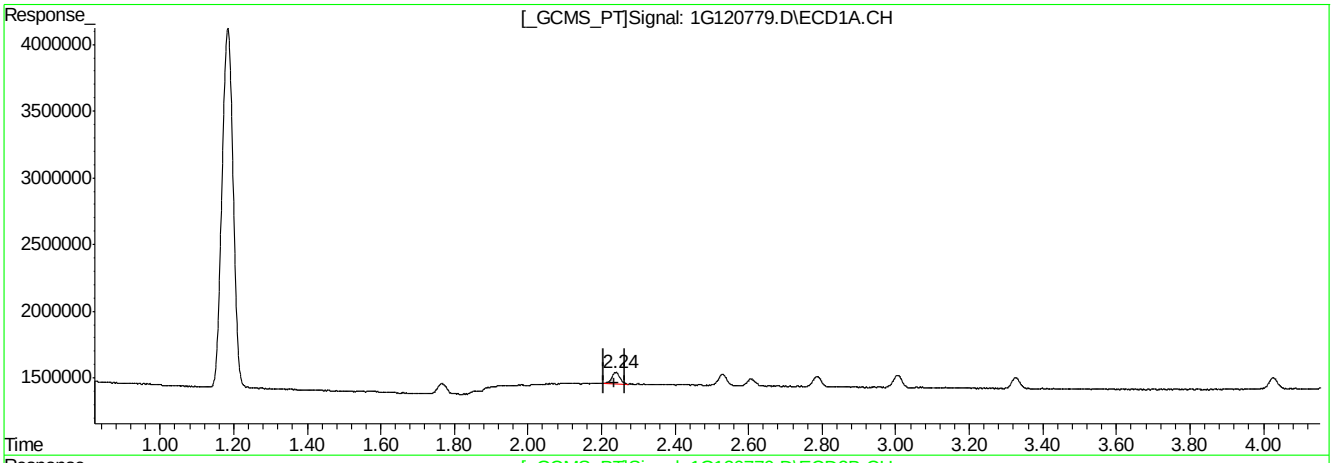
(+) = Expected Retention Time

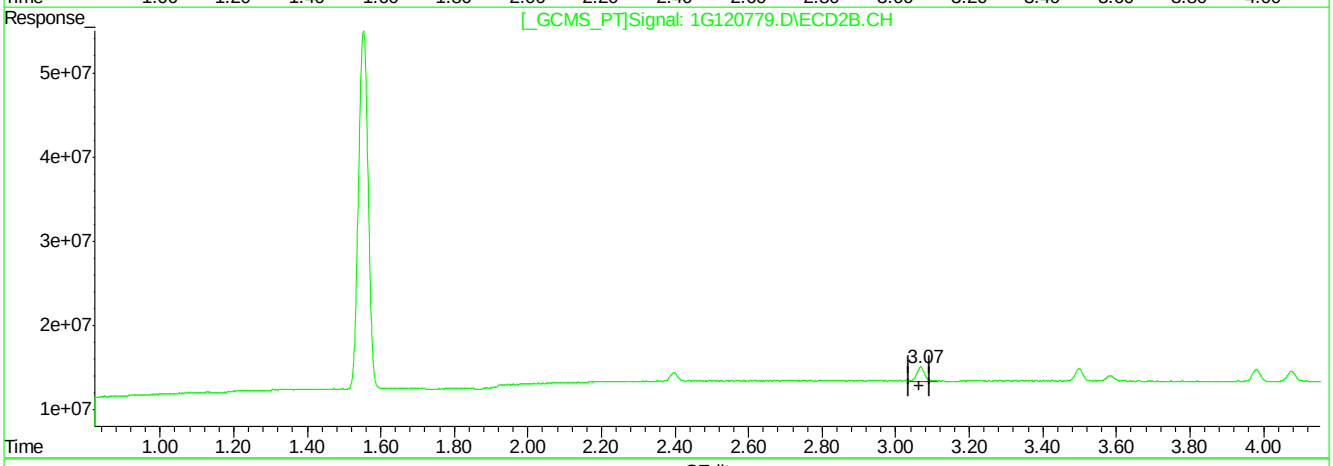
1G120779.D 1PST3933.M Mon Mar 14 19:12:46 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.24min 0.960PPB m

response 1414613

(3) alpha-BHC #2 (A)

3.07min 1.201PPB m

response 24843279

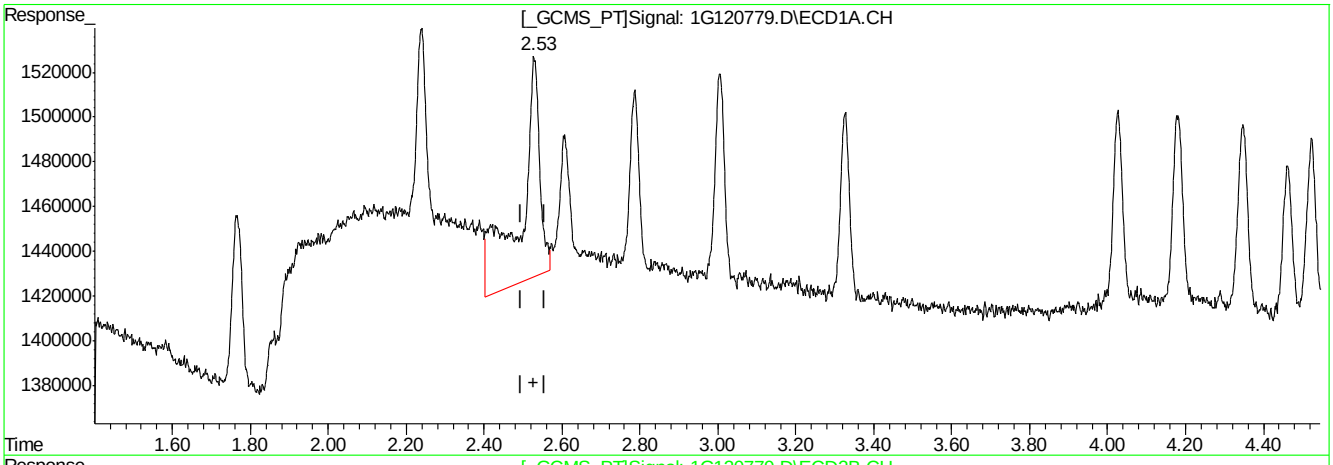
(+) = Expected Retention Time

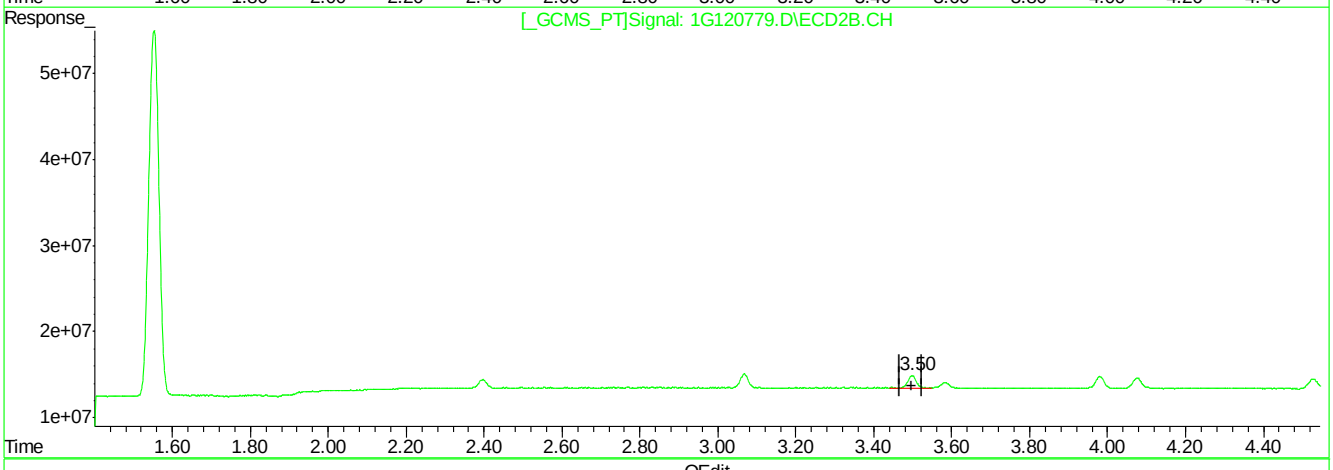
1G120779.D 1PST3933.M Mon Mar 14 19:13:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.53min 2.330PPB

response 3348621

(4) gamma-BHC #2 (MA)

3.50min 1.377PPB

response 24121234

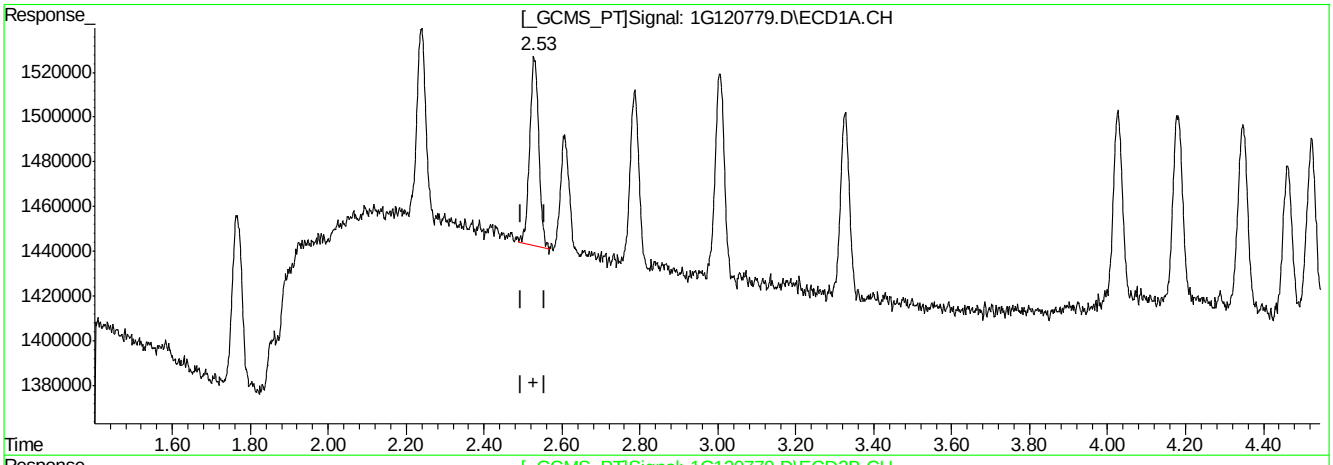
(+) = Expected Retention Time

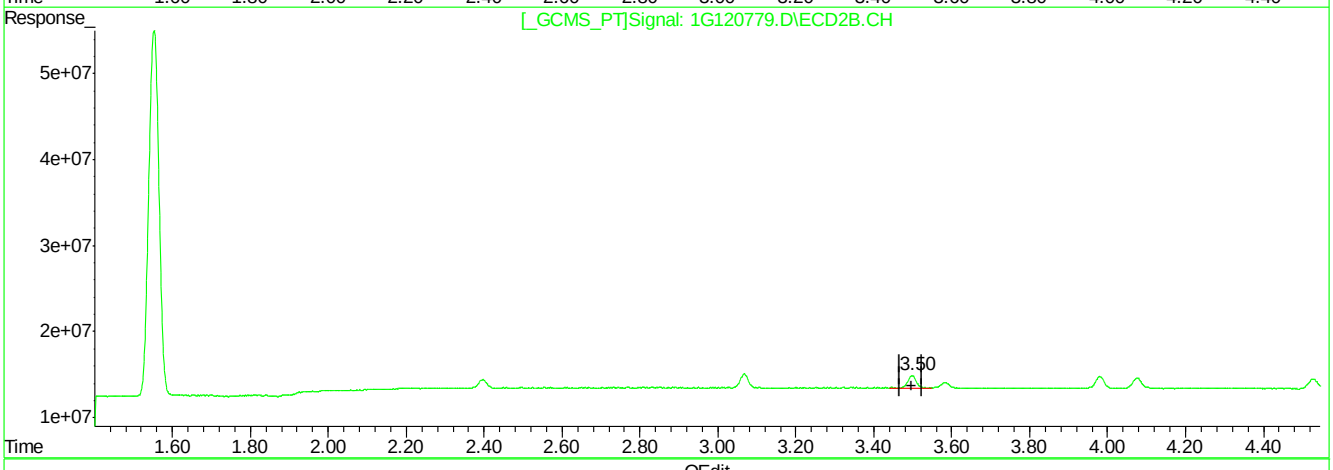
1G120779.D 1PST3933.M Mon Mar 14 19:13:07 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.53min 0.953PPB m

response 1370174

(4) gamma-BHC #2 (MA)

3.50min 1.377PPB

response 24121234

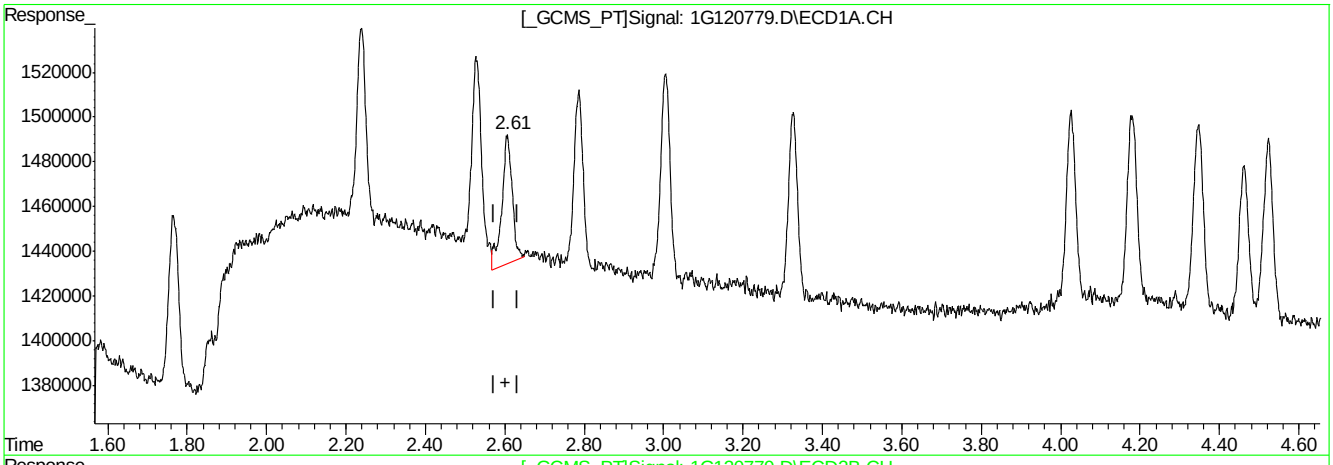
(+) = Expected Retention Time

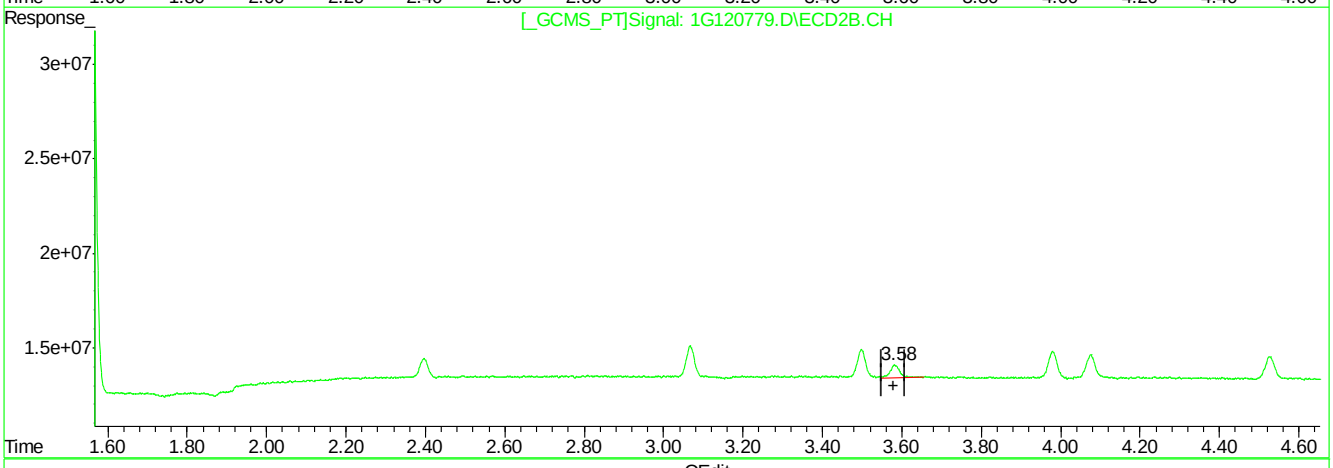
1G120779.D 1PST3933.M Mon Mar 14 19:13:12 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.61min 1.341PPB

response 1042179

(6) beta-BHC #2 (B)

3.58min 1.597PPB

response 11821541

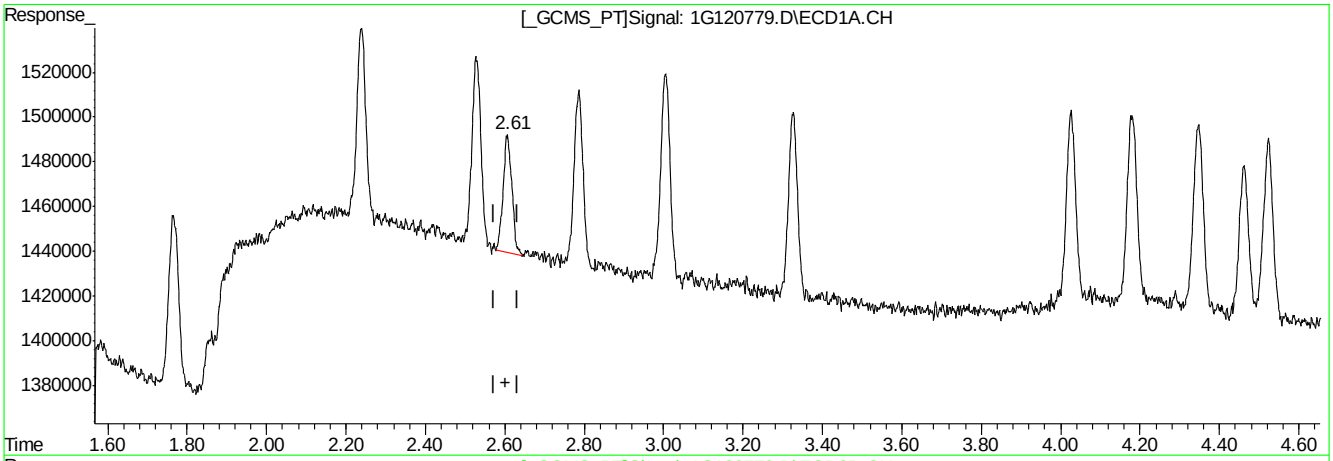
(+) = Expected Retention Time

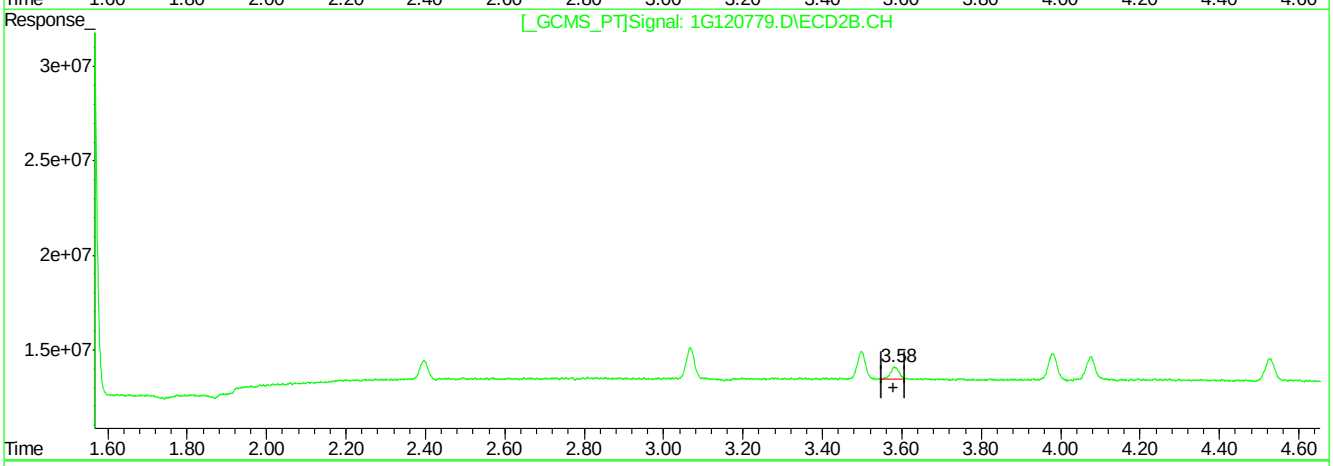
1G120779.D 1PST3933.M Mon Mar 14 19:13:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.61min 1.043PPB m

response 810645

(6) beta-BHC #2 (B)

3.58min 1.310PPB m

response 9697429

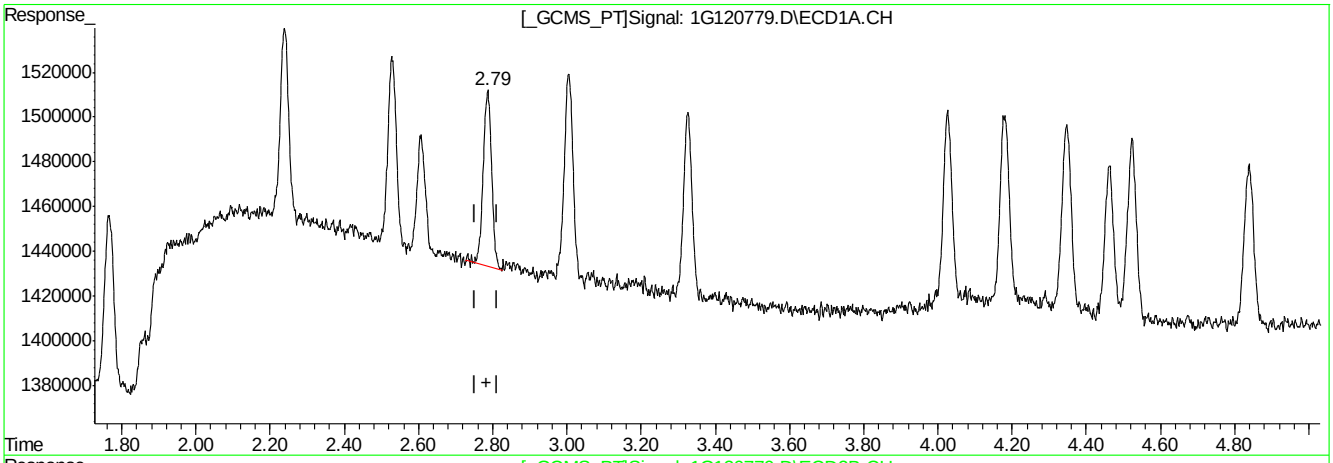
(+) = Expected Retention Time

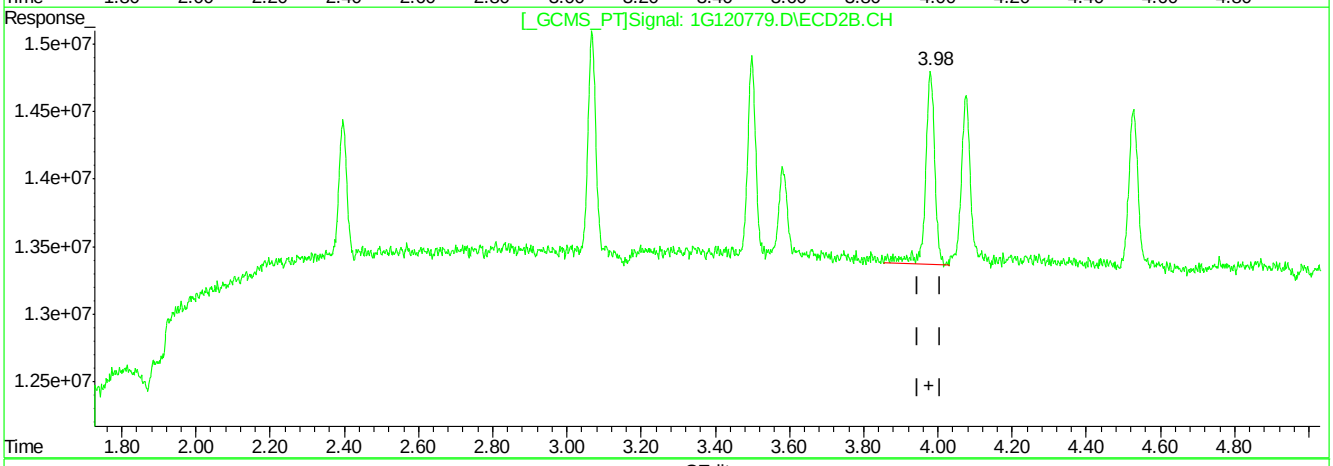
1G120779.D 1PST3933.M Mon Mar 14 19:13:30 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(7) delta-BHC (B)

2.79min 0.951PPB

response 1242448

(7) delta-BHC #2 (B)

3.98min 1.583PPB

response 25208334

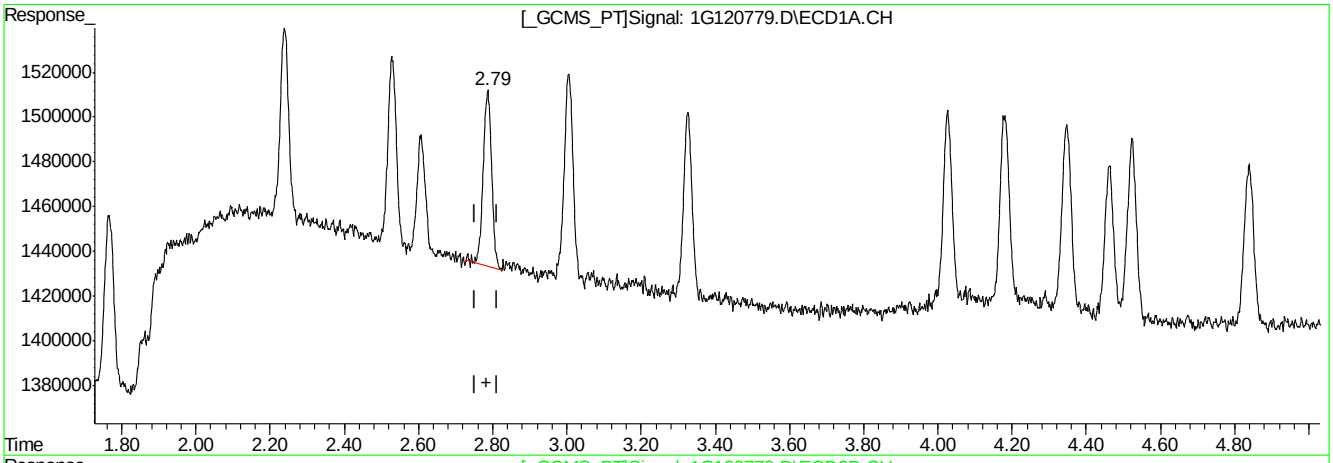
(+) = Expected Retention Time

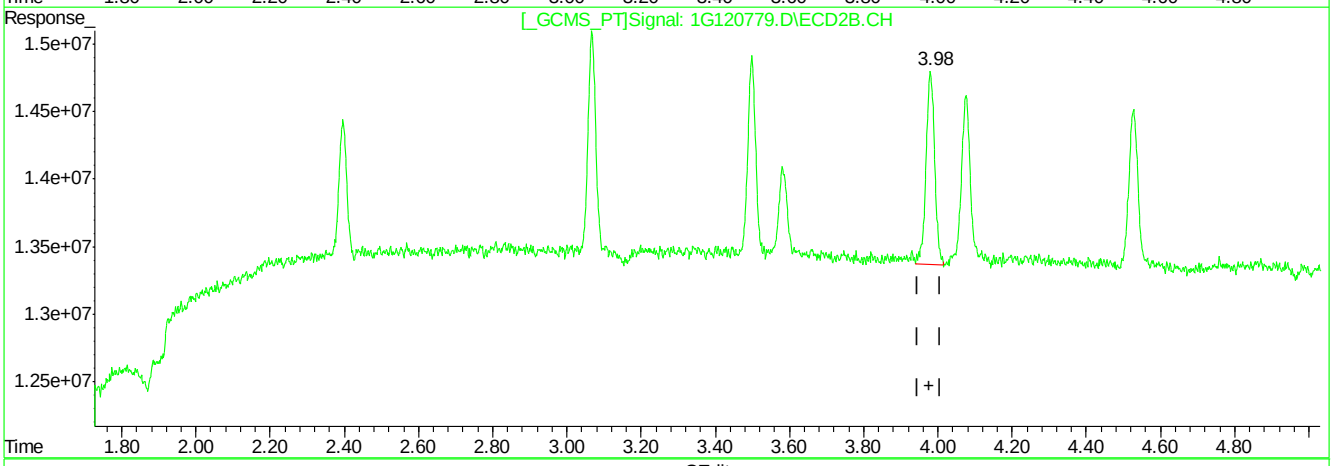
1G120779.D 1PST3933.M Mon Mar 14 19:13:35 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(7) delta-BHC (B)

2.79min 0.951PPB

response 1242448

(7) delta-BHC #2 (B)

3.98min 1.450PPB m

response 23090882

(+) = Expected Retention Time

1G120779.D 1PST3933.M Mon Mar 14 19:13:41 2016 RPT1

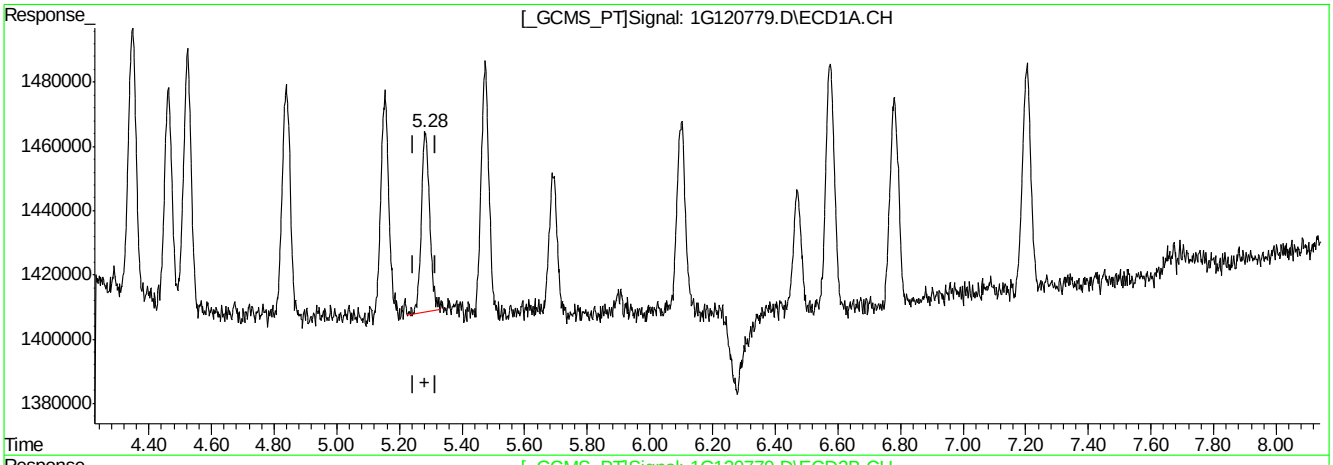
7.6.1.11

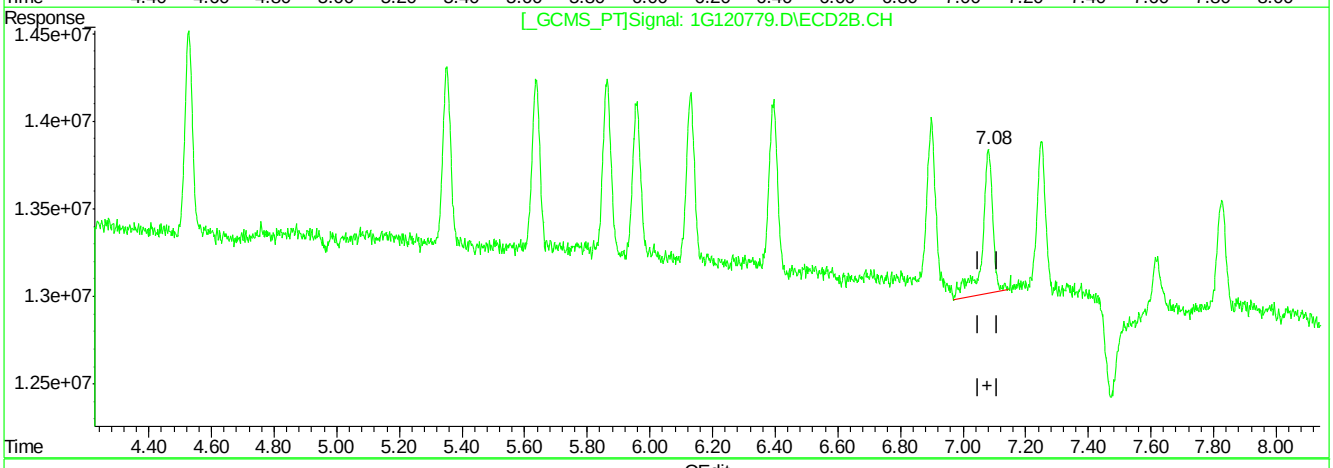
7

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.28min 0.984PPB

response 1045355

(16) 4,4'-DDD #2 (A)

7.08min 1.691PPB

response 19372704

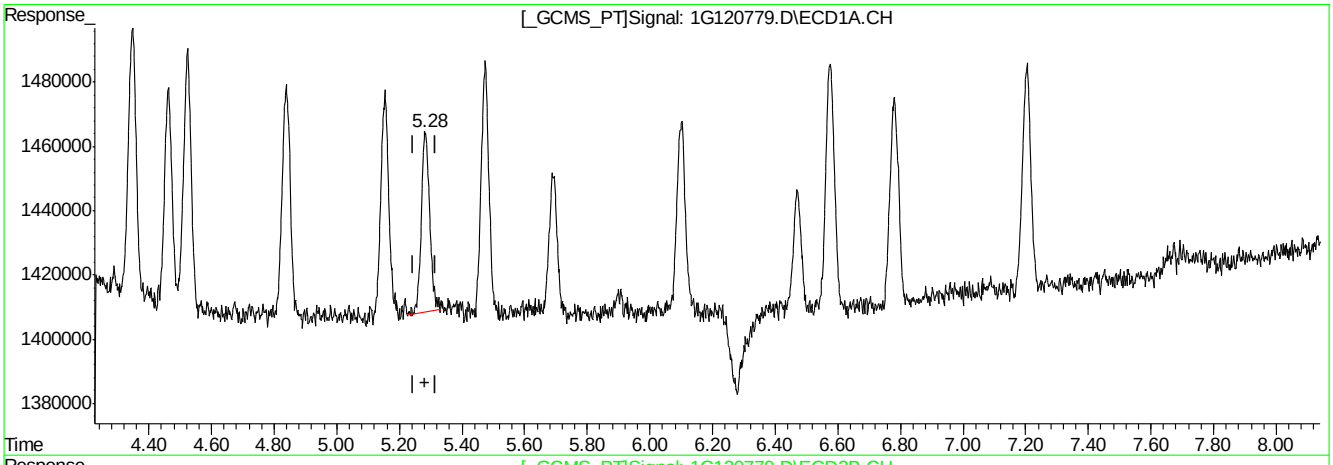
(+) = Expected Retention Time

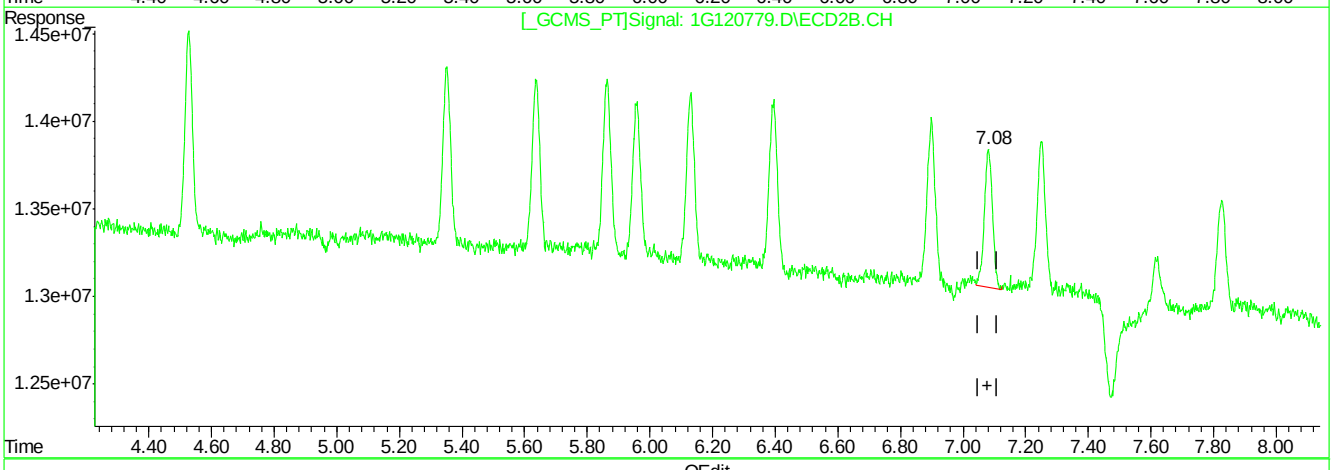
1G120779.D 1PST3933.M Mon Mar 14 19:13:57 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.28min 0.984PPB

response 1045355

(16) 4,4'-DDD #2 (A)

7.08min 1.237PPB m

response 14168135

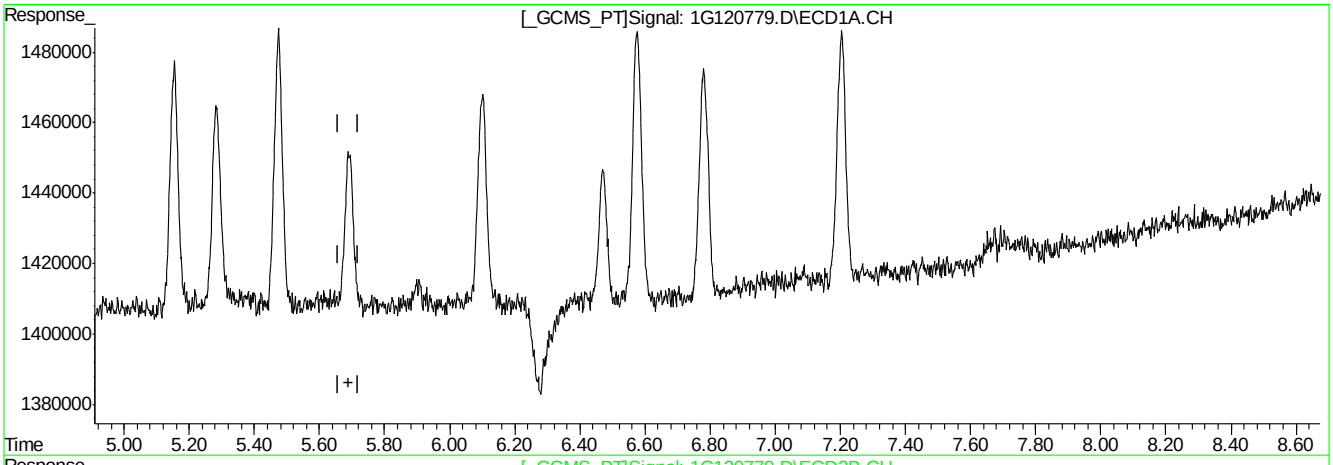
(+) = Expected Retention Time

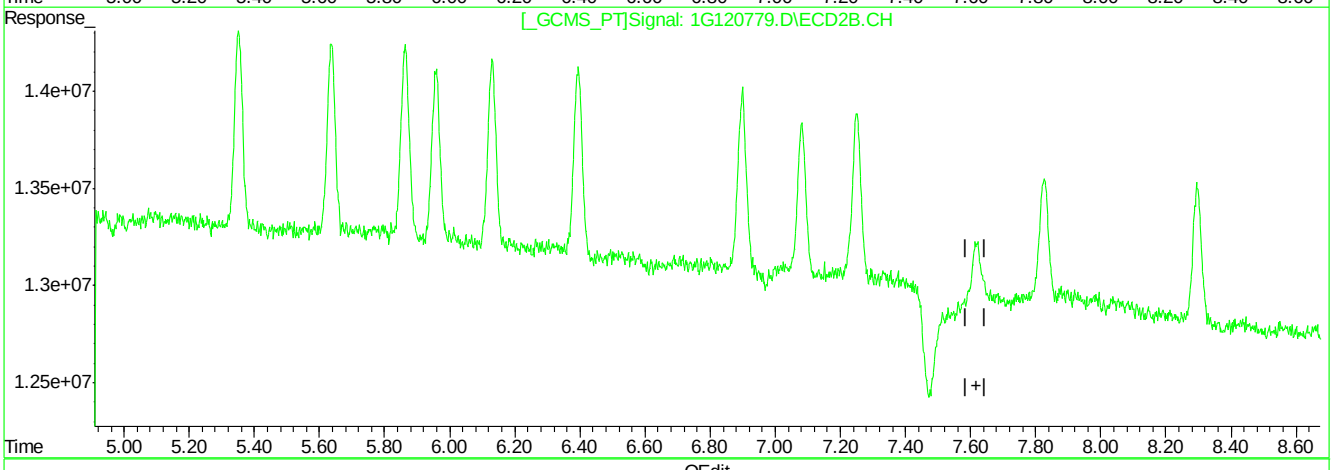
1G120779.D 1PST3933.M Mon Mar 14 19:14:02 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

0.00min 0.000PPB

response 0

(18) 4,4'-DDT #2 (MA)

7.62min -0.597PPB

response -6176602

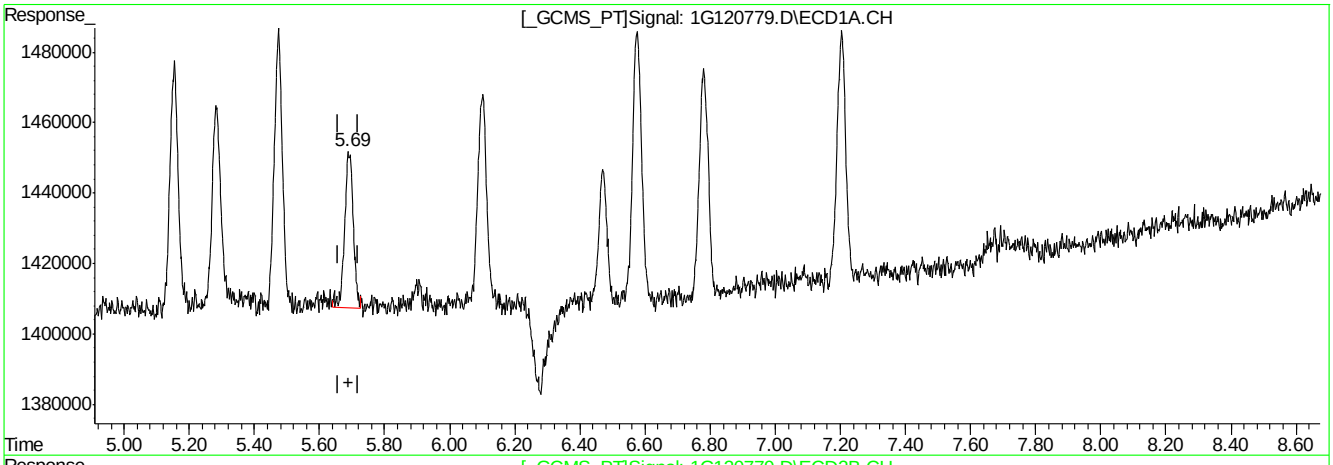
(+) = Expected Retention Time

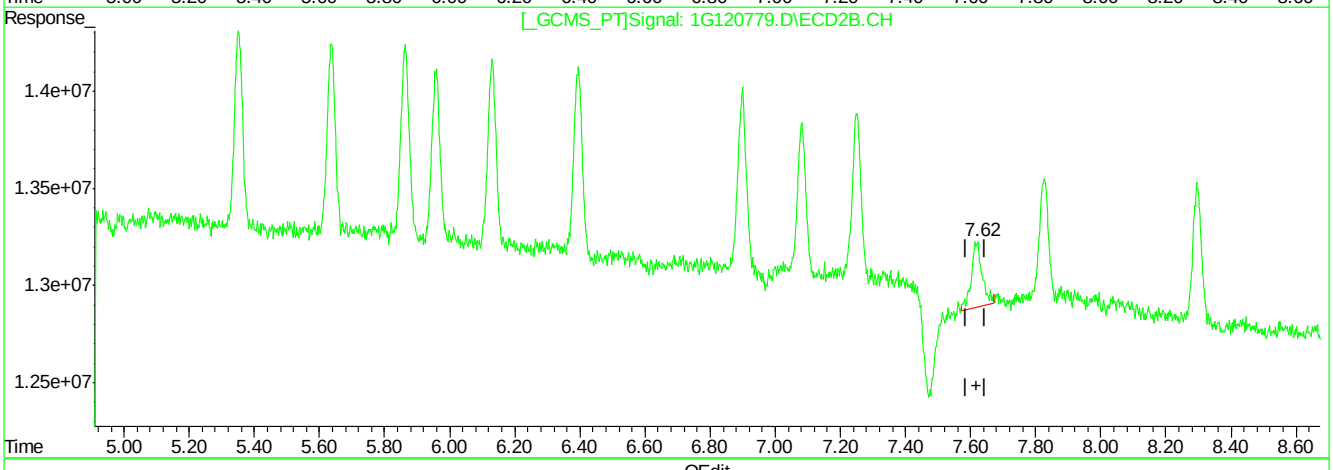
1G120779.D 1PST3933.M Mon Mar 14 19:14:06 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.69min 0.803PPB m

response 819484

(18) 4,4'-DDT #2 (MA)

7.62min 0.732PPB m

response 7576741

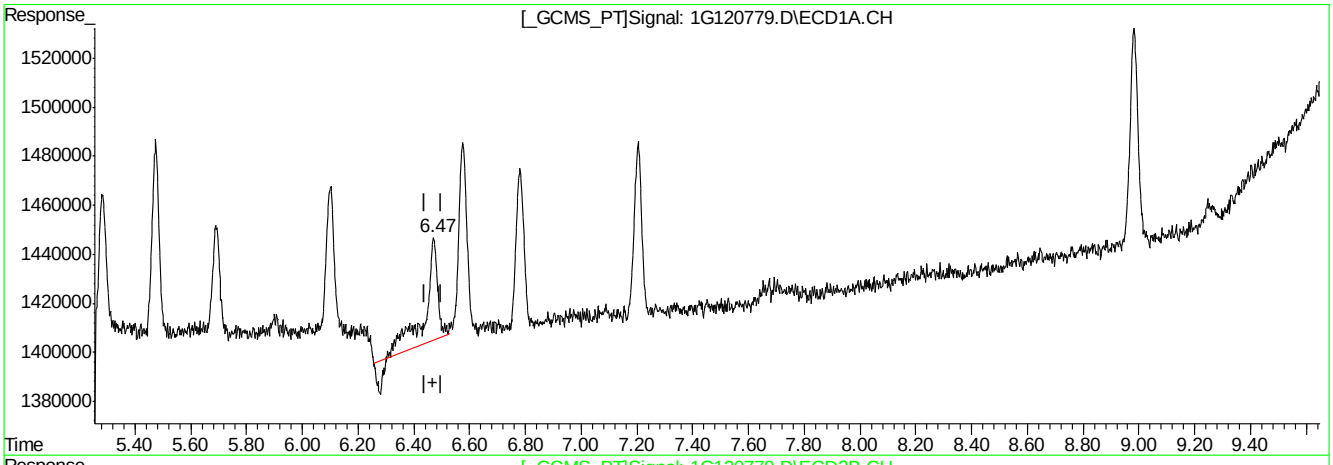
(+) = Expected Retention Time

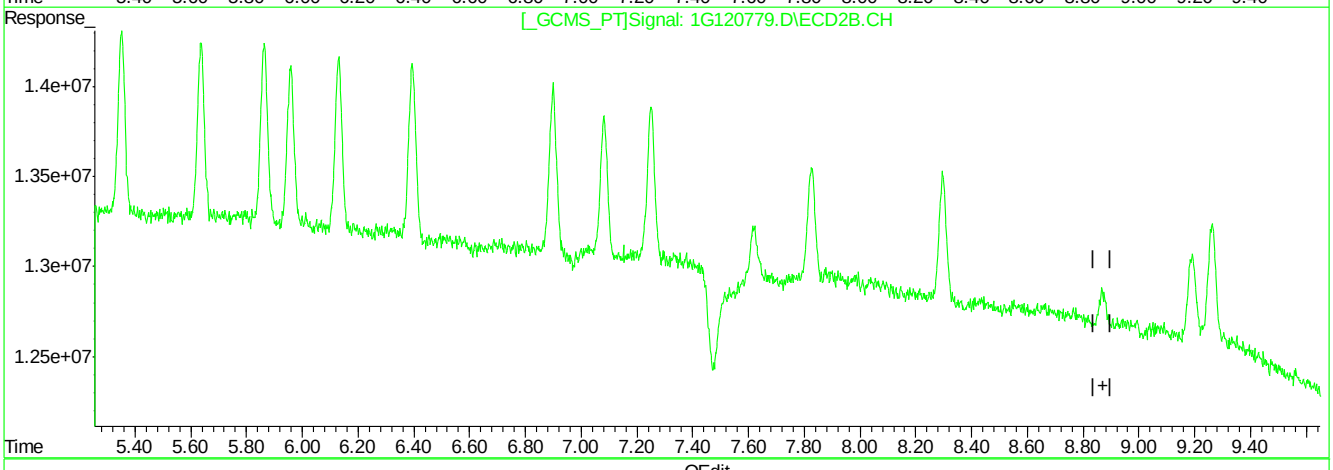
1G120779.D 1PST3933.M Mon Mar 14 19:14:27 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On : 14 Mar 2016 11:08 am Operator: dharas
Sample : ic3933-1 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:12 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.47min 1.643PPB

response 1181351

(21) Methoxychlor #2 (A)

0.00min 0.000PPB

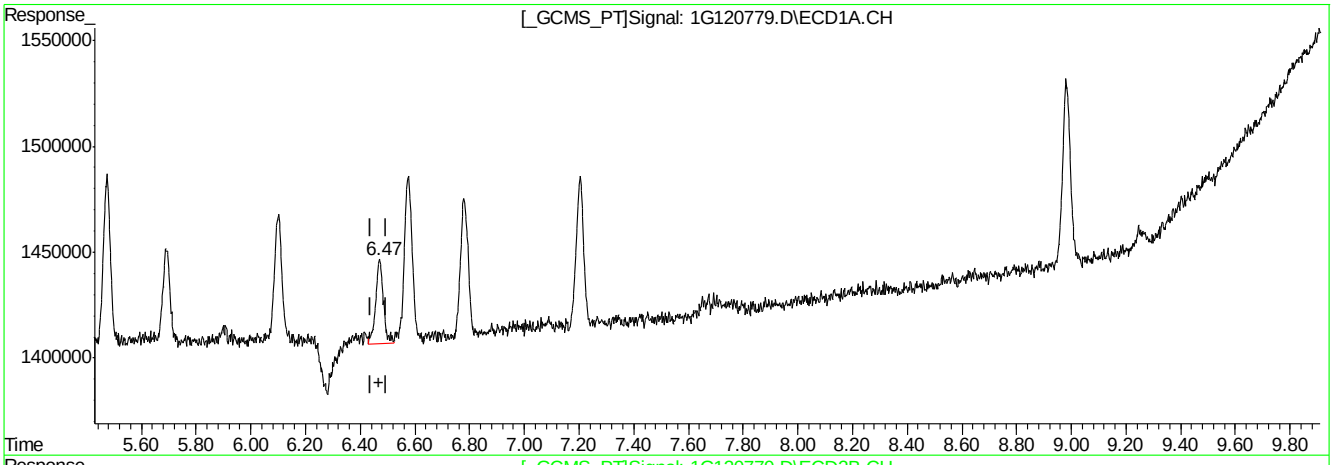
response 0

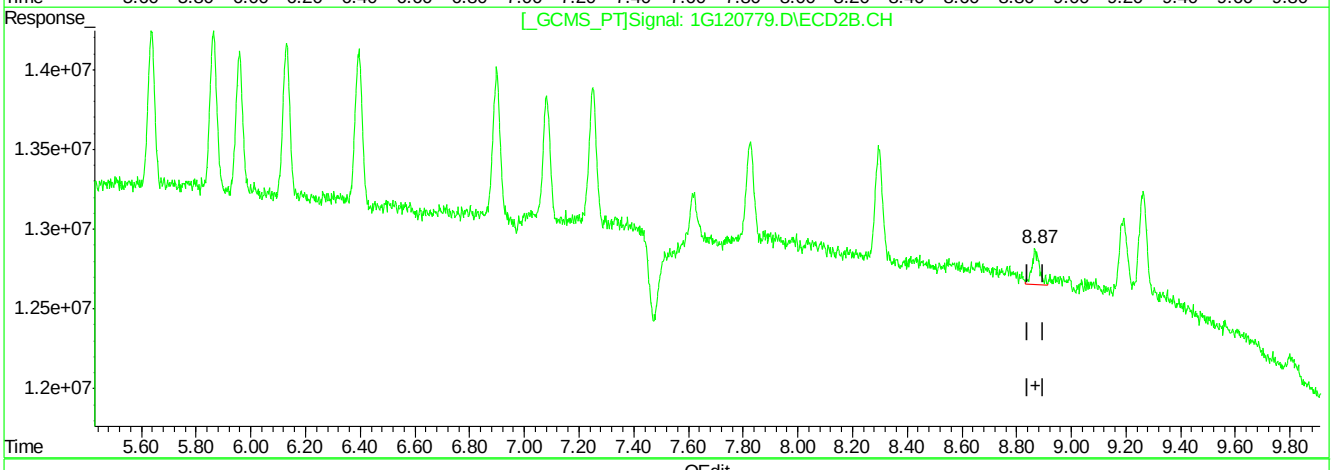
(+) = Expected Retention Time
1G120779.D 1PST3933.M Mon Mar 14 19:14:34 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120779.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:08 am                    Operator: dharas
Sample    : ic3933-1                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:14 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:18:26 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 1.071PPB m

response 769663

(21) Methoxychlor #2 (A)

8.87min 0.776PPB m

response 4201468

(+) = Expected Retention Time

1G120779.D 1PST3933.M Mon Mar 14 19:19:16 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On : 14 Mar 2016 11:25 am Operator: dharas
Sample : ic3933-2 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	56256574	777.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	2675275	30235813	2.143	2.441
Spiked Amount	40.000	Range	30 - 150	Recovery	=	5.36%#	6.10%#
24) SA	Decachlorobiphen	8.99	10.90	3356061	18962751	2.381	2.454
Spiked Amount	40.000			Recovery	=	5.95%	6.13%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	2652898	45507654	1.805m	2.203
4) MA	gamma-BHC	2.53	3.50	2553124	40116696	1.781	2.293
5) MA	Heptachlor	3.01	4.08	3063191	38049466	1.901	2.458
6) B	beta-BHC	2.61	3.58	1519336	18198118	1.960	2.462m
7) B	delta-BHC	2.79	3.98	2363936	41711745	1.814	2.624
8) MB	Aldrin	3.33	4.53	2679851	37503648	1.846	2.395
9) B	Heptachlor Epoxi	4.03	5.35	2756606	35528700	1.846m	2.634
10) B	gamma-Chlordane	4.18	5.64	2789586	33875379	1.859	2.474
11) B	alpha-Chlordane	4.35	5.86	2814702	33331007	1.903	2.401
12) A	Endosulfan I	4.52	5.96	2678579	31825292	1.939	2.372
13) B	4,4'-DDE	4.46	6.13	2227653	32411540	1.904	2.457
14) MA	Dieldrin	4.84	6.40	2543856	36242281	1.831	2.513
15) MA	Endrin	5.16	6.90	2433406	35676972	2.129	3.226
16) A	4,4'-DDD	5.28	7.08	1906437	30614856	1.799	2.676
17) B	Endosulfan II	5.47	7.25	2677581	31838662	2.021m	2.639
18) MA	4,4'-DDT	5.69	7.62	1705102	16902649	1.674	1.635m
19) B	Endrin Aldehyde	6.10	7.82	2194248	23296335	2.043	2.357m
20) B	Endosulfan Sulfa	6.78	8.30	2532713	25524986	2.109	2.573
21) A	Methoxychlor	6.47	8.88	1441471	8907156	2.010m	1.648m
22)	Mirex	6.58	9.19	2882256	18137297	2.055	2.204
23) B	Endrin Ketone	7.21	9.26	2617603	24407843	2.199	2.380

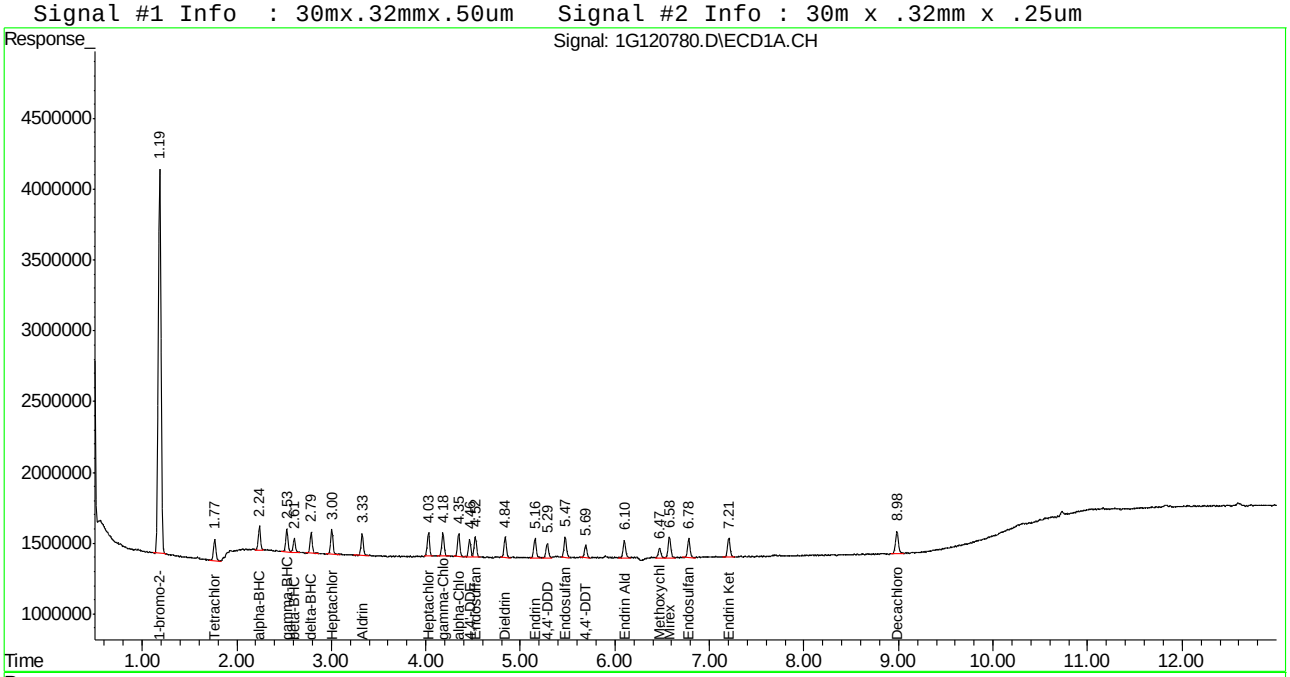
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120780.D 1PST3933.M Mon Mar 14 19:30:38 2016 RPT1 Page 1

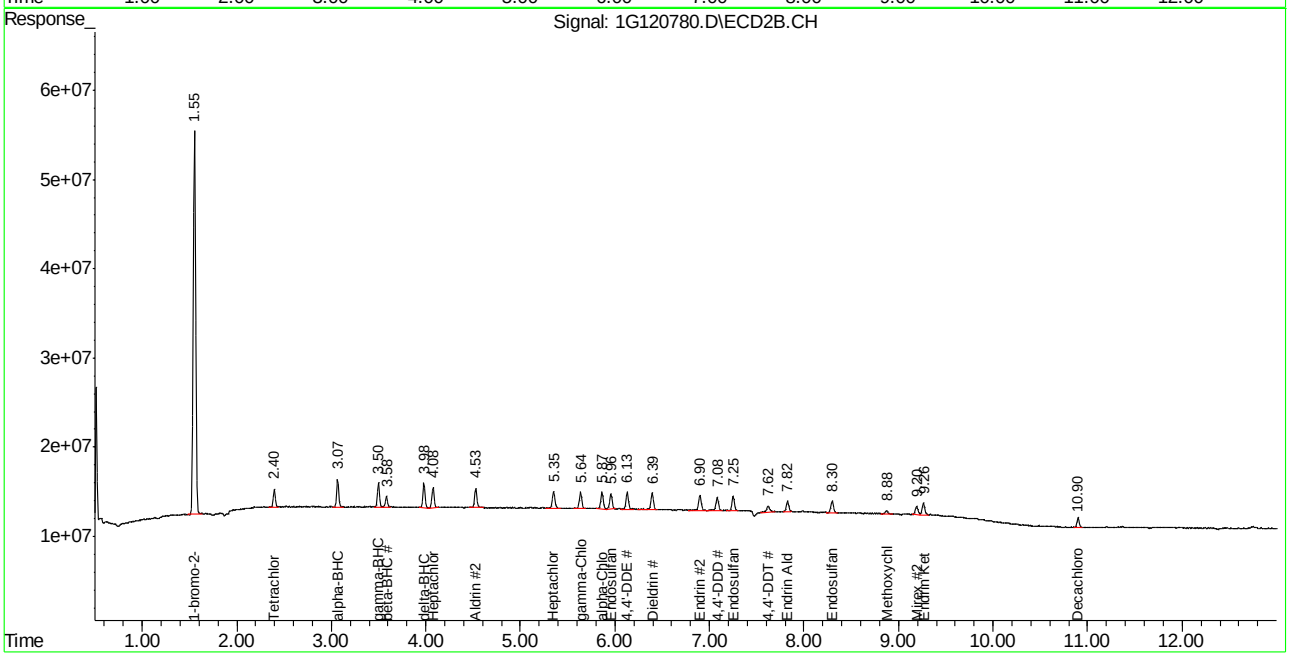
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On : 14 Mar 2016 11:25 am Operator: dharas
Sample : ic3933-2 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

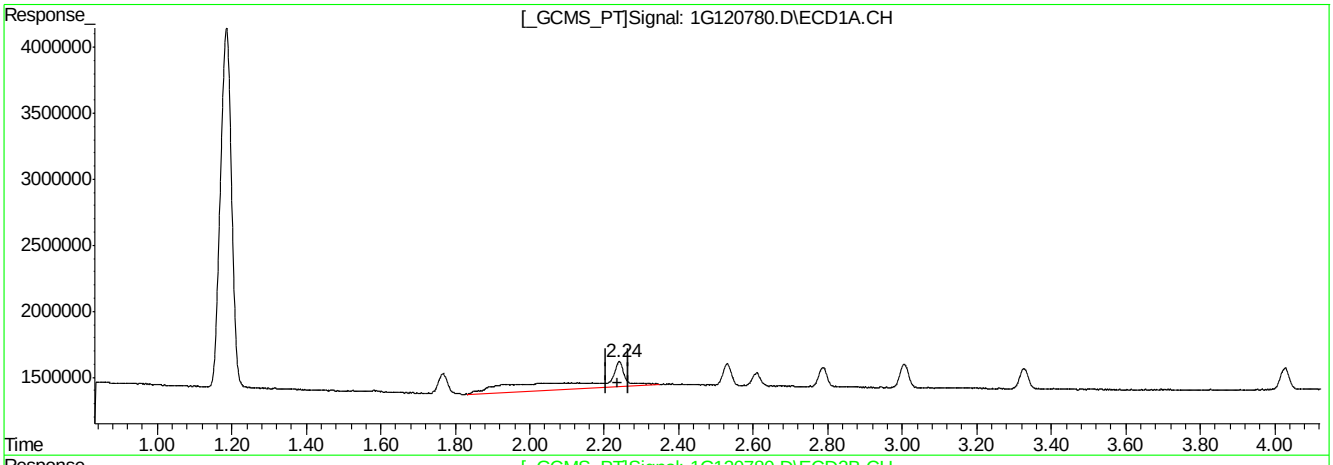
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120780.D	**Analyst approved:**	03/14/16 19:22 Joseph Ravino
Injection Time:	03/14/16 11:25	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

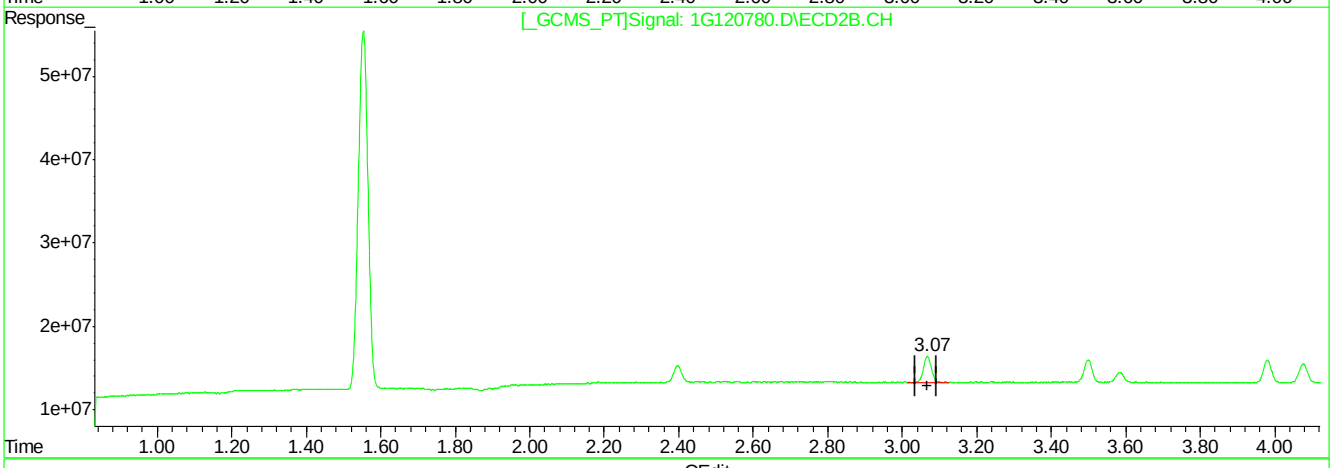
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.24	Poor instrument integration
beta-BHC	319-85-7	2	3.58	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.03	Poor instrument integration
Endosulfan-II	33213-65-9	1	5.47	Poor instrument integration
Methoxychlor	72-43-5	1	6.47	Poor instrument integration
4,4'-DDT	50-29-3	2	7.62	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.82	Poor instrument integration
Methoxychlor	72-43-5	2	8.88	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.24min 9.114PPB

response 13394592

(3) alpha-BHC #2 (A)

3.07min 2.203PPB

response 45507654

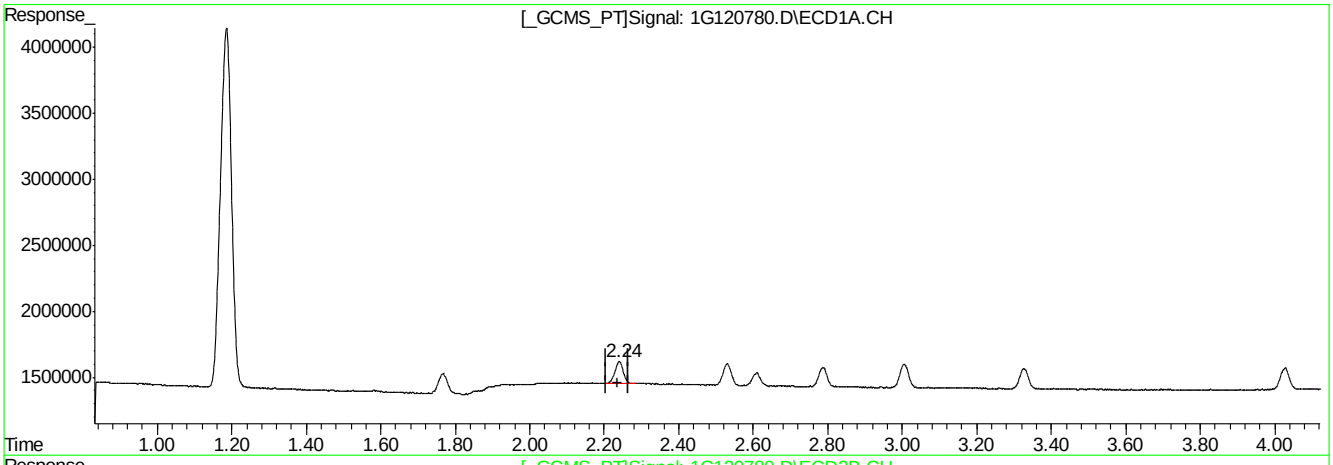
(+) = Expected Retention Time

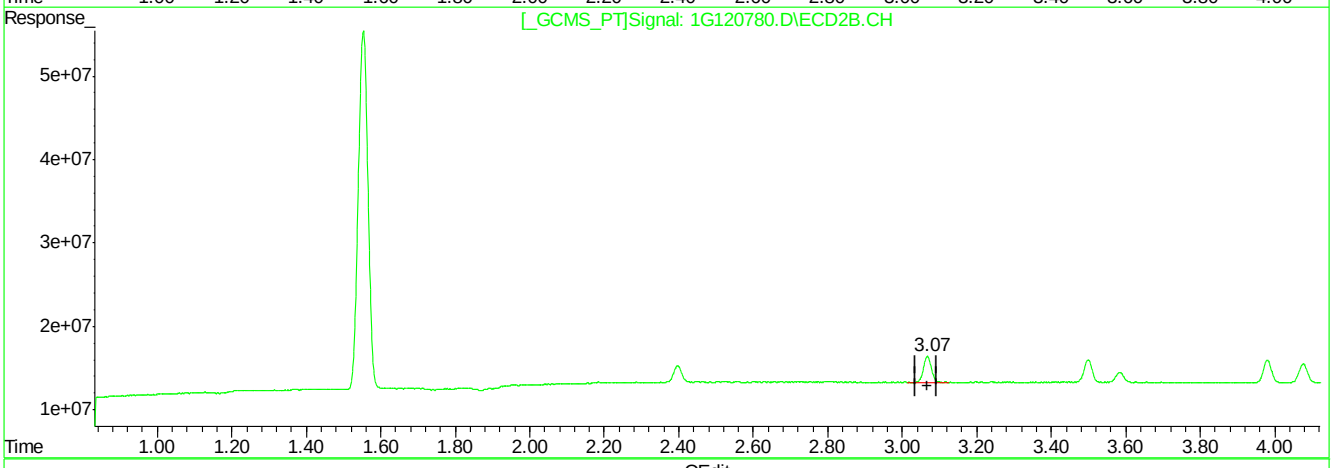
1G120780.D 1PST3933.M Mon Mar 14 19:08:46 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.24min 1.805PPB m

response 2652898

(3) alpha-BHC #2 (A)

3.07min 2.203PPB

response 45507654

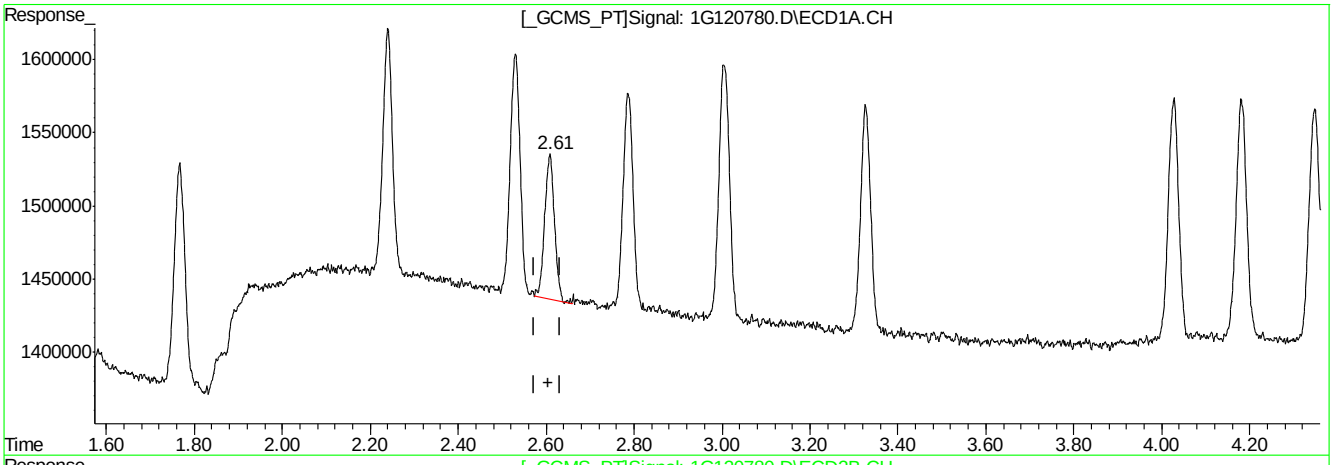
(+) = Expected Retention Time

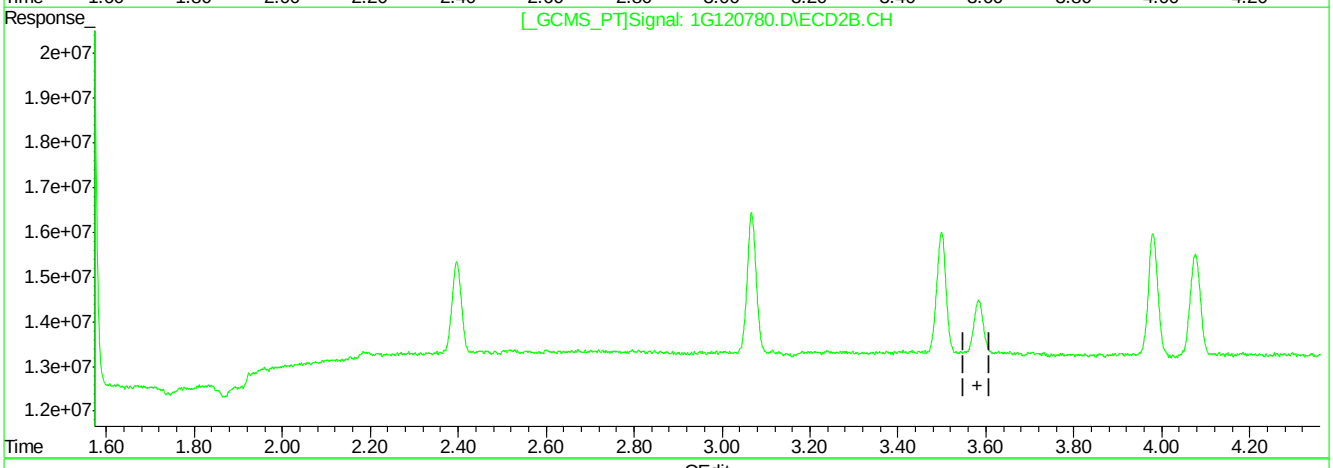
1G120780.D 1PST3933.M Mon Mar 14 19:08:51 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.61min 1.960PPB

response 1519336

(6) beta-BHC #2 (B)

0.00min 0.000PPB

response 0

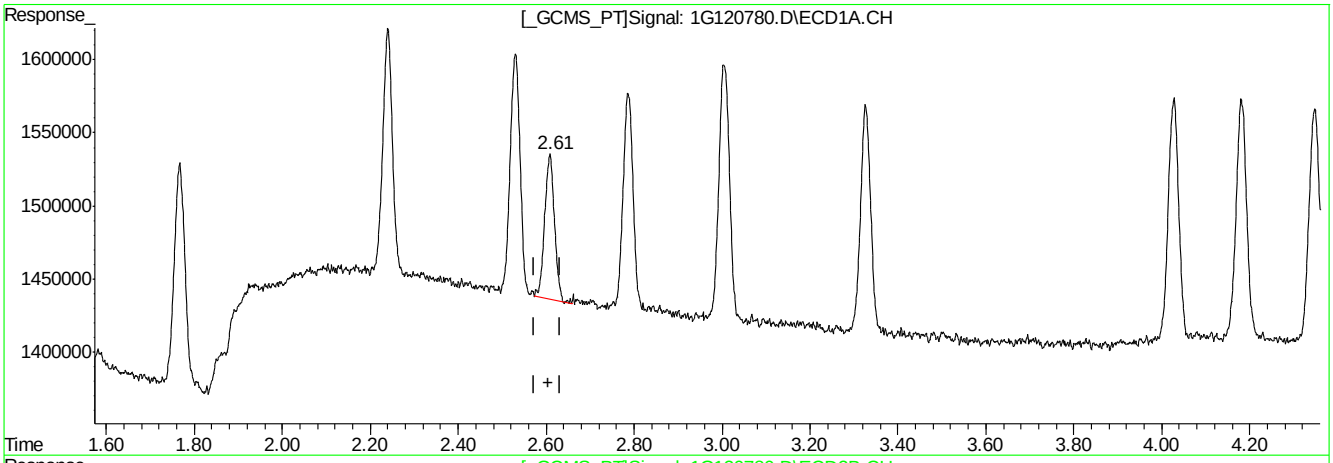
(+) = Expected Retention Time

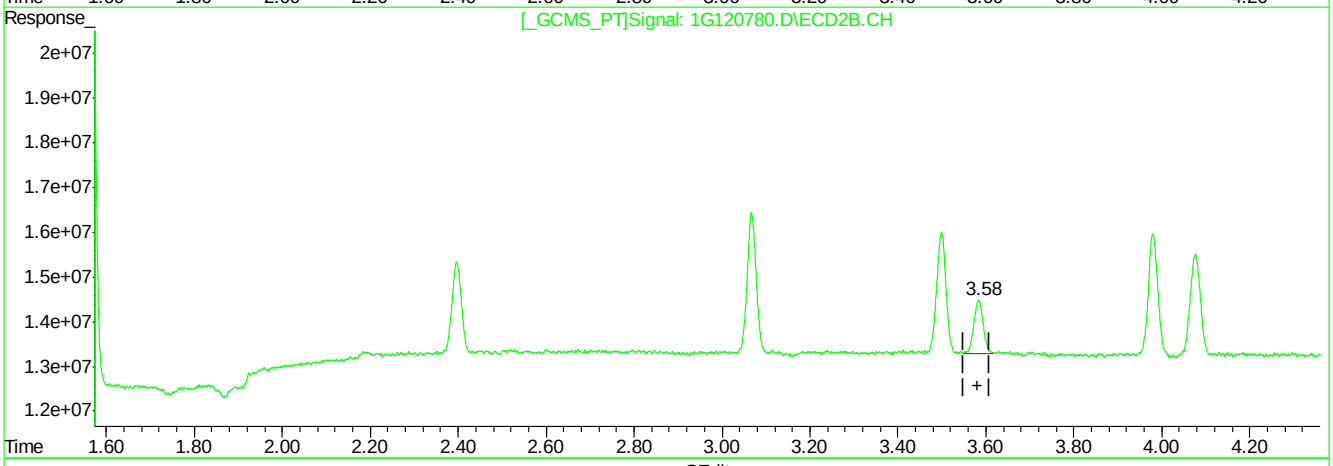
1G120780.D 1PST3933.M Mon Mar 14 19:08:58 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.61min 1.960PPB

response 1519336

(6) beta-BHC #2 (B)

3.58min 2.462PPB m

response 18198118

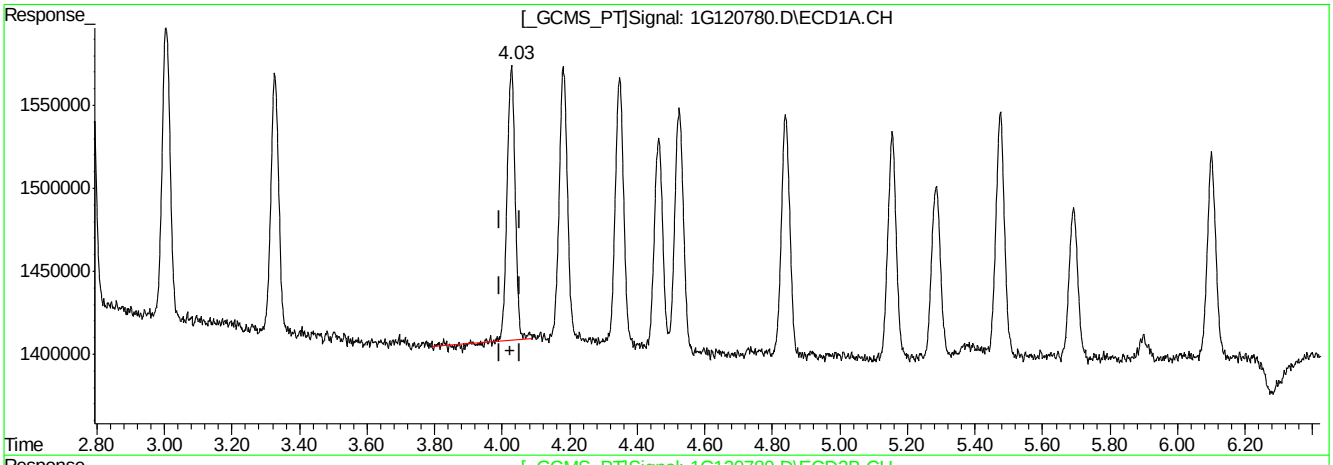
(+) = Expected Retention Time

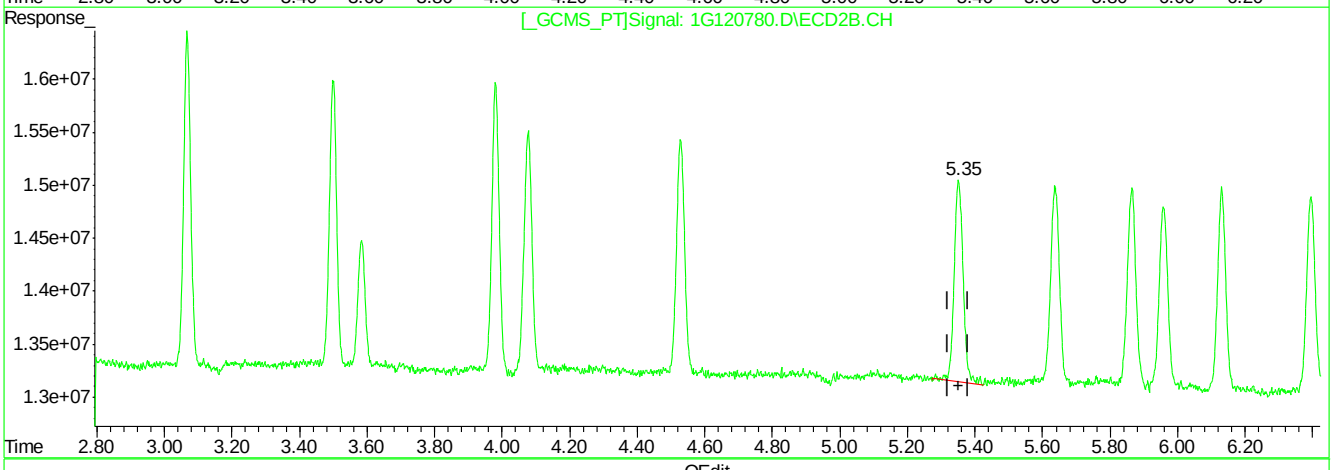
1G120780.D 1PST3933.M Mon Mar 14 19:09:04 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On : 14 Mar 2016 11:25 am Operator: dharas
Sample : ic3933-2 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration





QEdit

(9) Heptachlor Epoxide (B)

4.03min 1.839PPB

response 2745143

(9) Heptachlor Epoxide #2 (B)

5.35min 2.634PPB

response 35528700

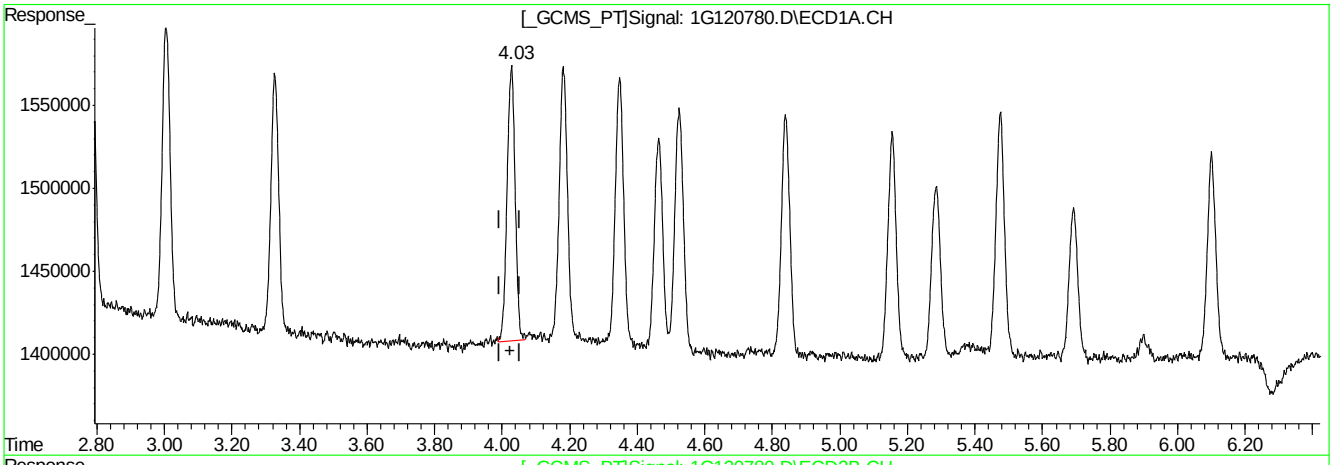
(+) = Expected Retention Time

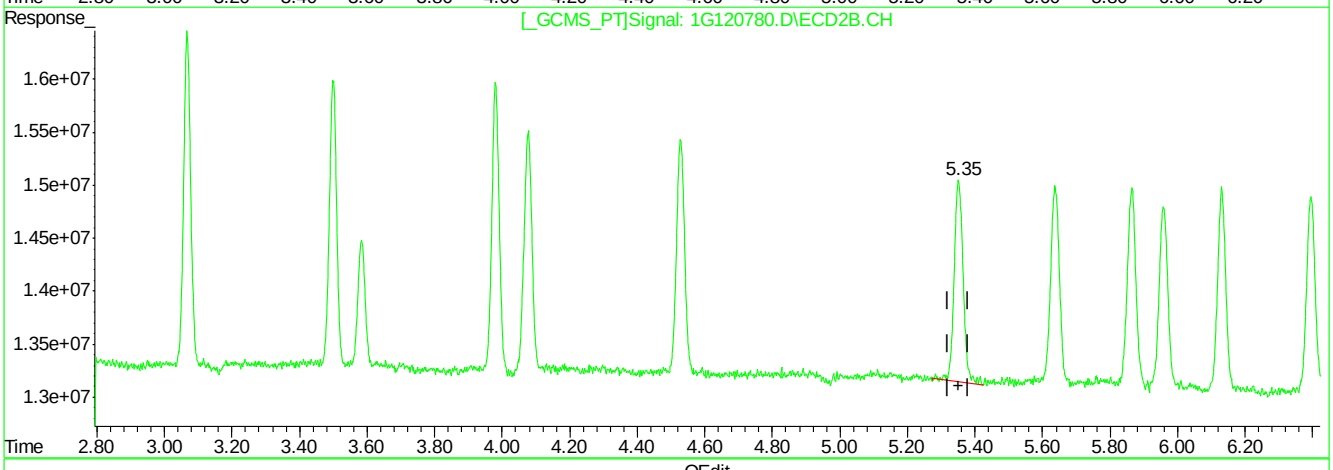
1G120780.D 1PST3933.M Mon Mar 14 19:09:10 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.03min 1.846PPB m

response 2756606

(9) Heptachlor Epoxide #2 (B)

5.35min 2.634PPB

response 35528700

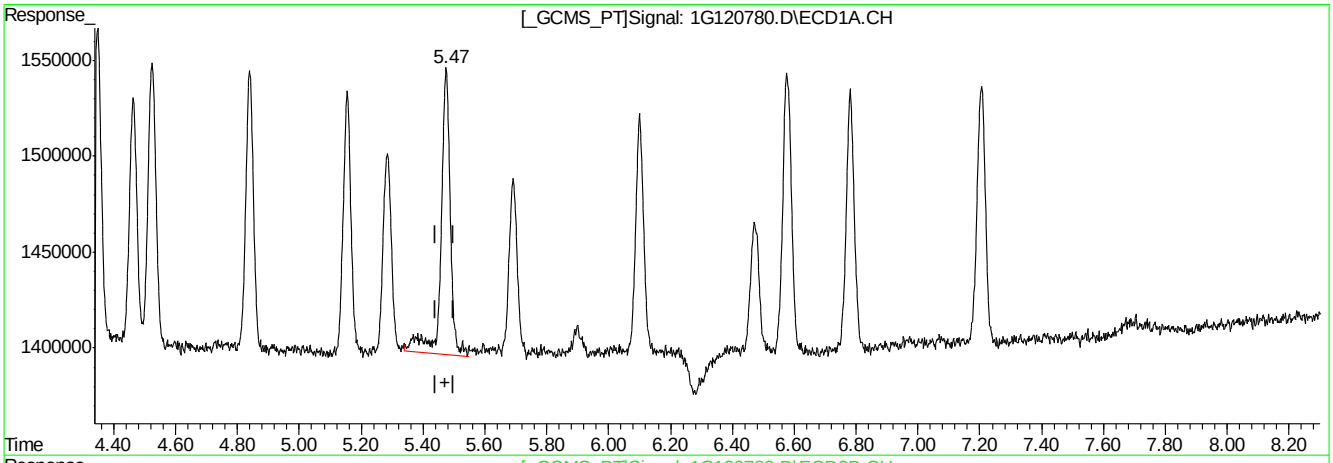
(+) = Expected Retention Time

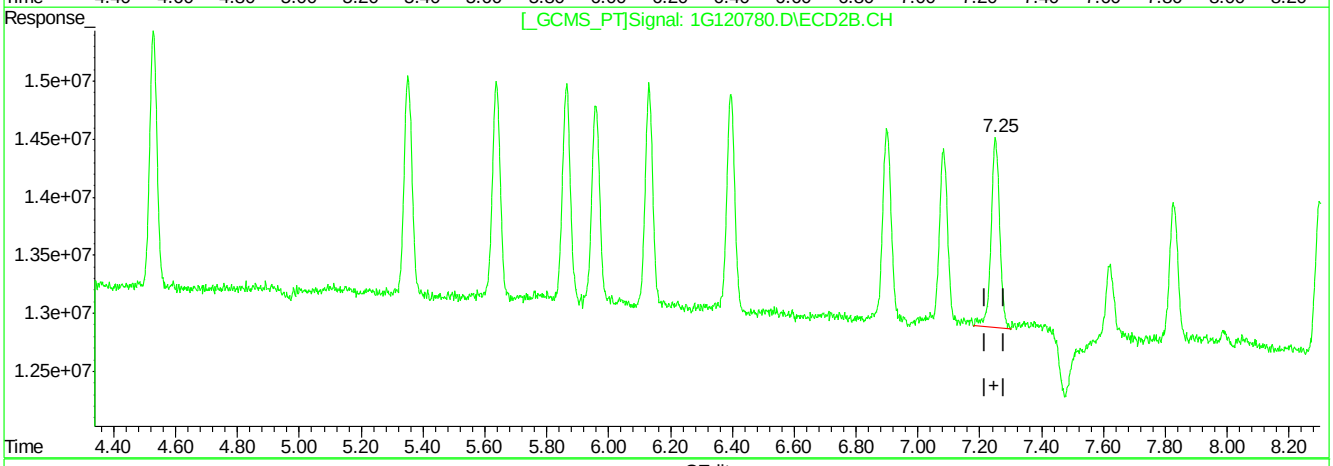
1G120780.D 1PST3933.M Mon Mar 14 19:09:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(17) Endosulfan II (B)

5.47min 2.359PPB

response 3124376

(17) Endosulfan II #2 (B)

7.25min 2.639PPB

response 31838662

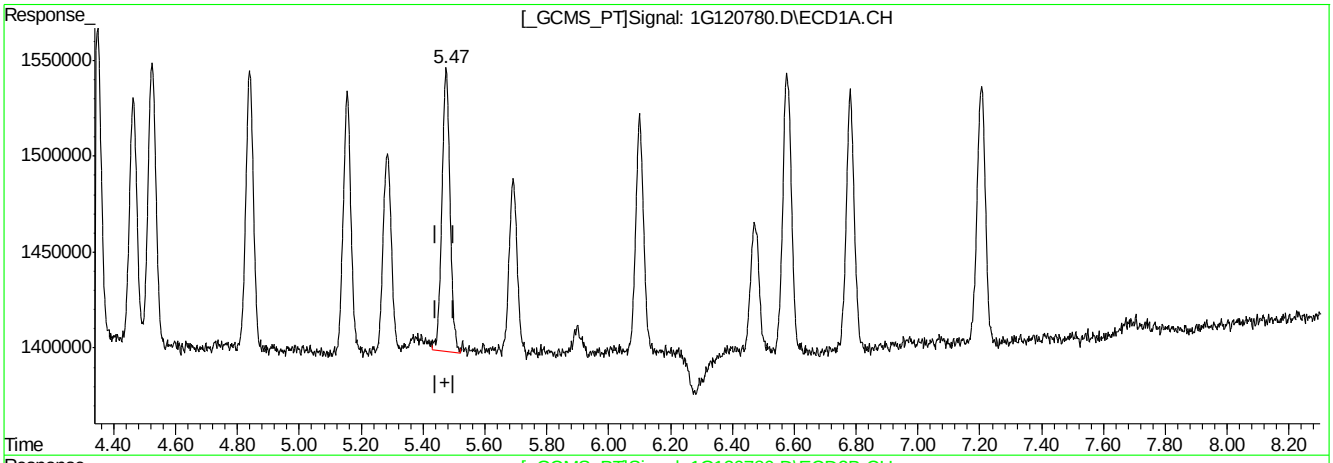
(+) = Expected Retention Time

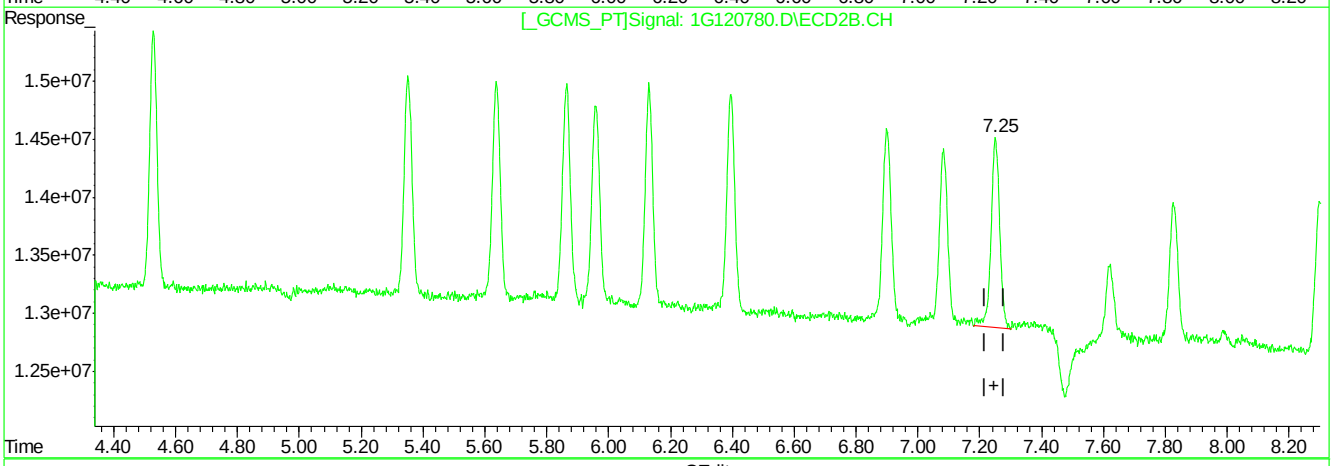
1G120780.D 1PST3933.M Mon Mar 14 19:09:30 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(17) Endosulfan II (B)

5.47min 2.021PPB m

response 2677581

(17) Endosulfan II #2 (B)

7.25min 2.639PPB

response 31838662

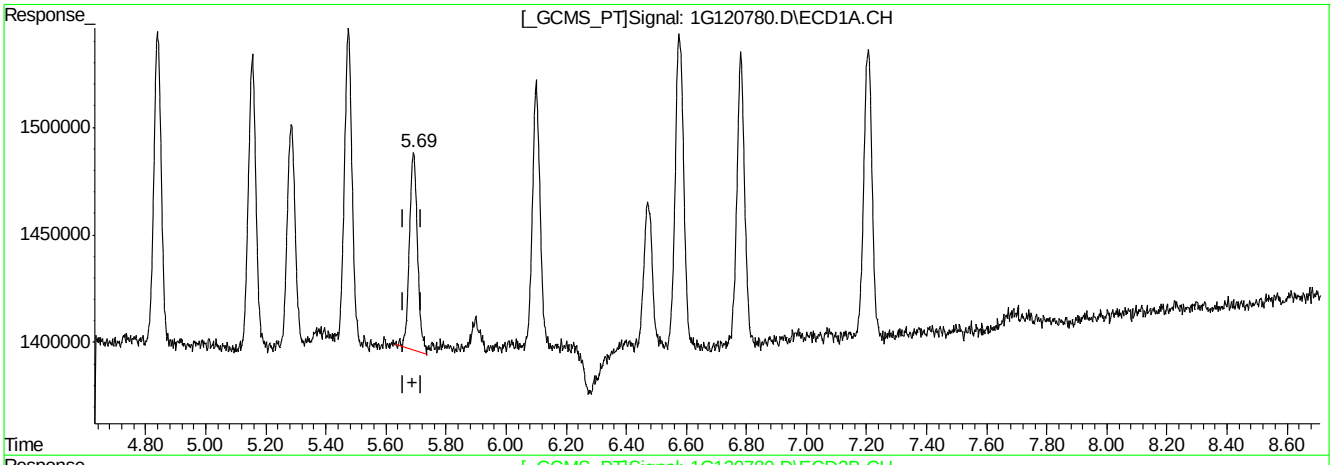
(+) = Expected Retention Time

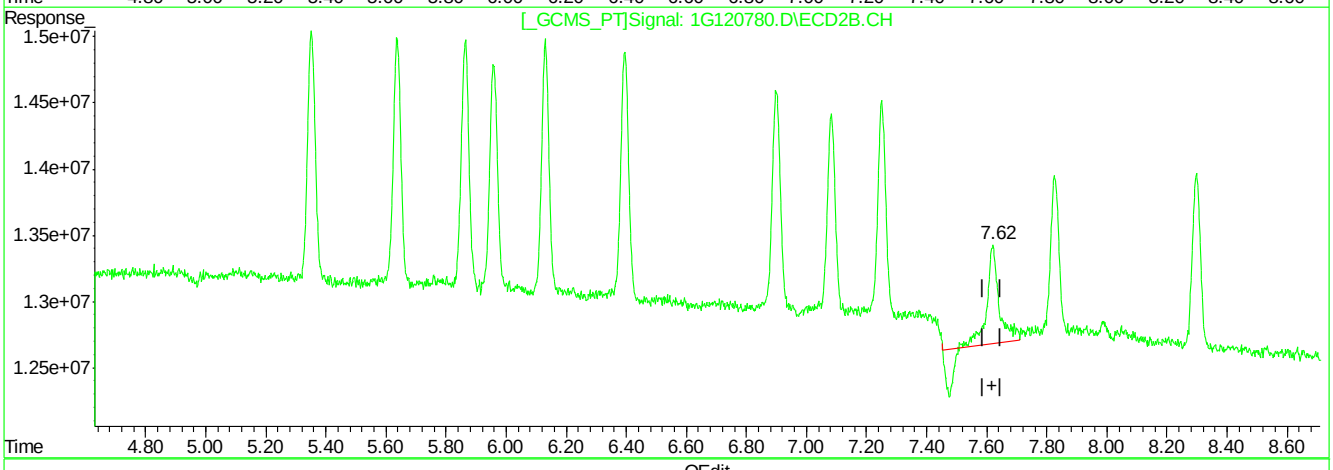
1G120780.D 1PST3933.M Mon Mar 14 19:09:35 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On : 14 Mar 2016 11:25 am Operator: dharas
Sample : ic3933-2 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDT (MA)

5.69min 1.674PPB

response 1705102

(18) 4,4'-DDT #2 (MA)

7.62min 1.625PPB

response 16793970

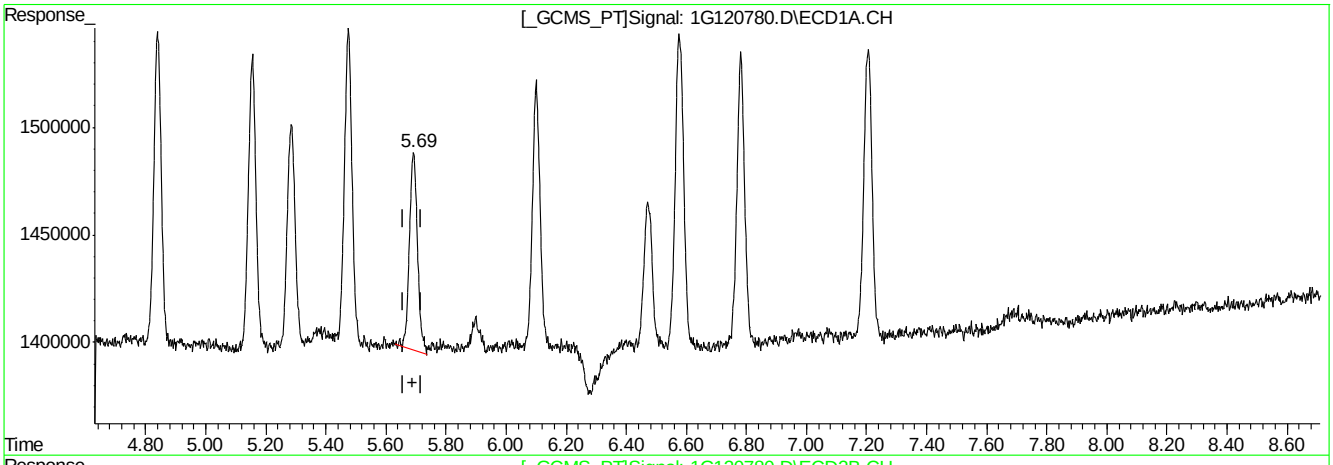
(+) = Expected Retention Time

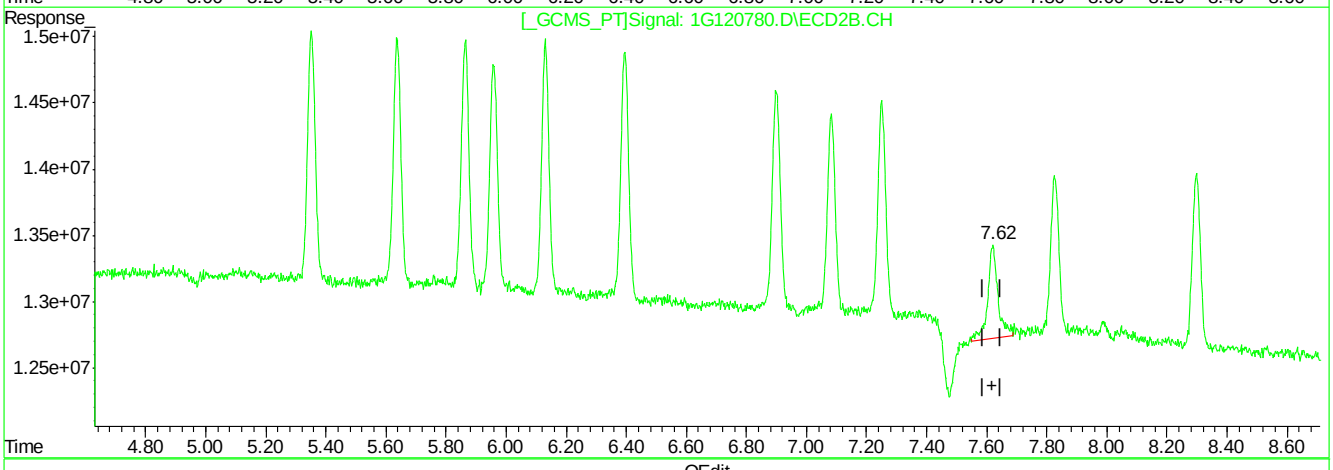
1G120780.D 1PST3933.M Mon Mar 14 19:09:39 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.69min 1.674PPB

response 1705102

(18) 4,4'-DDT #2 (MA)

7.62min 1.635PPB m

response 16902649

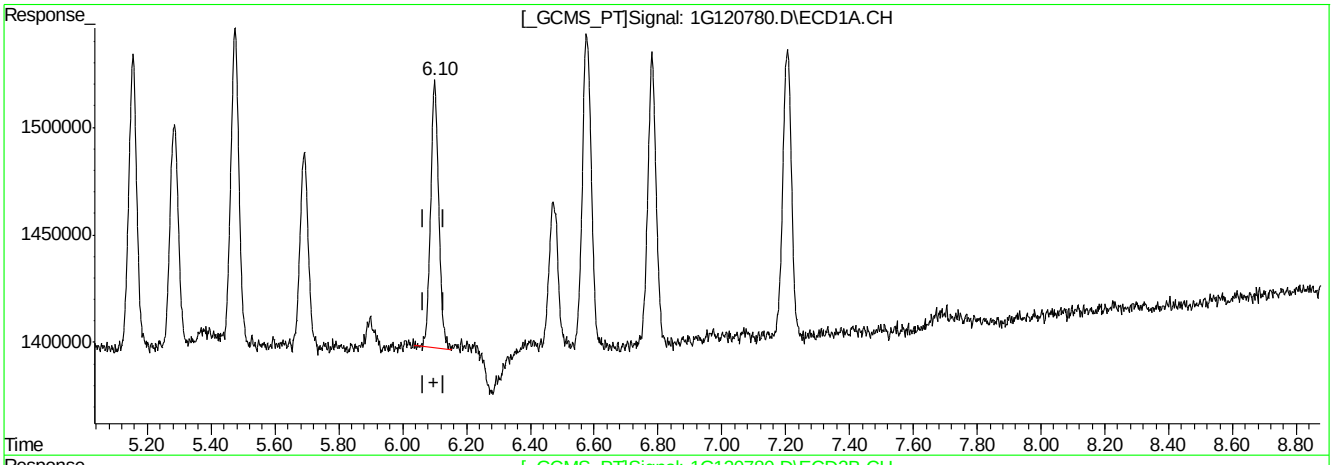
(+) = Expected Retention Time

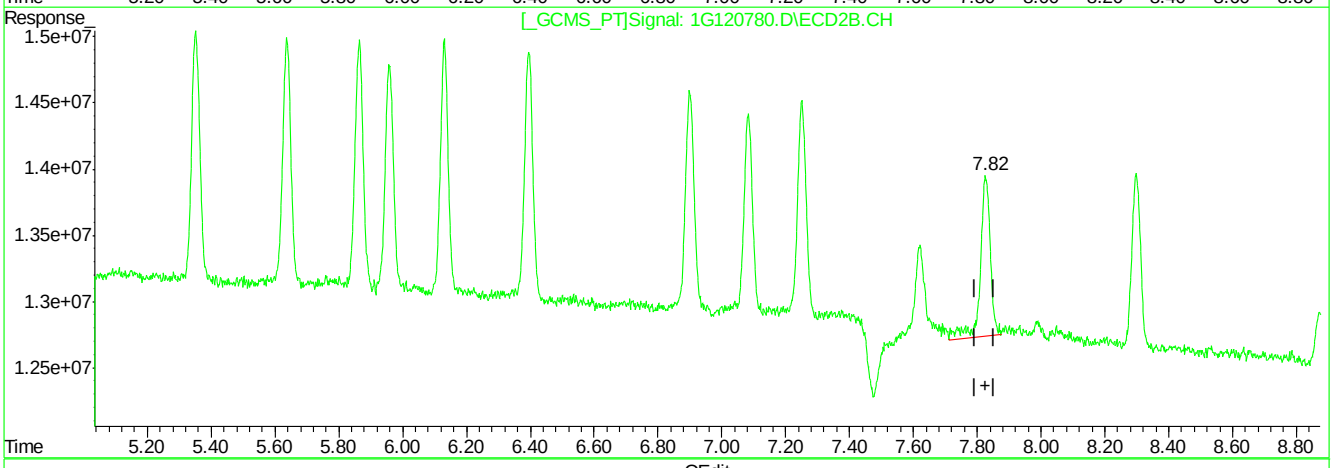
1G120780.D 1PST3933.M Mon Mar 14 19:09:47 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.10min 2.043PPB

response 2194248

(19) Endrin Aldehyde #2 (B)

7.83min 2.721PPB

response 26897662

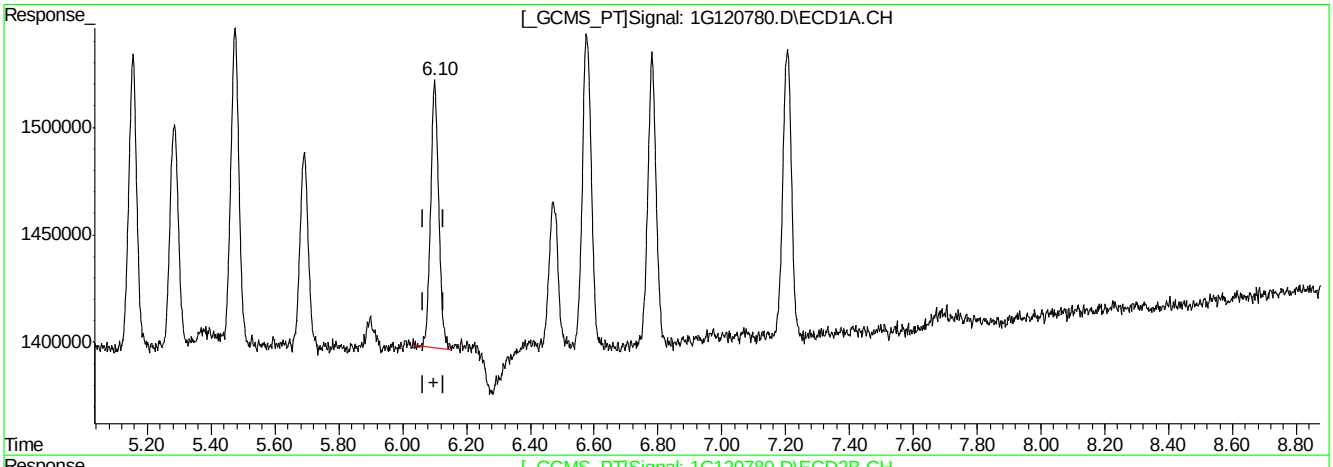
(+) = Expected Retention Time

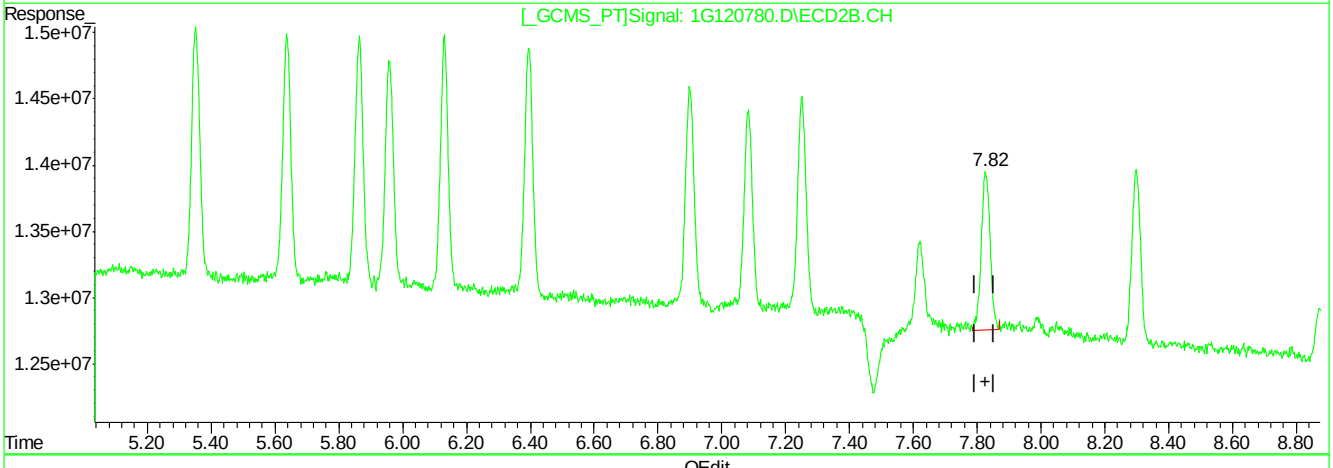
1G120780.D 1PST3933.M Mon Mar 14 19:09:51 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.10min 2.043PPB

response 2194248

(19) Endrin Aldehyde #2 (B)

7.82min 2.357PPB m

response 23296335

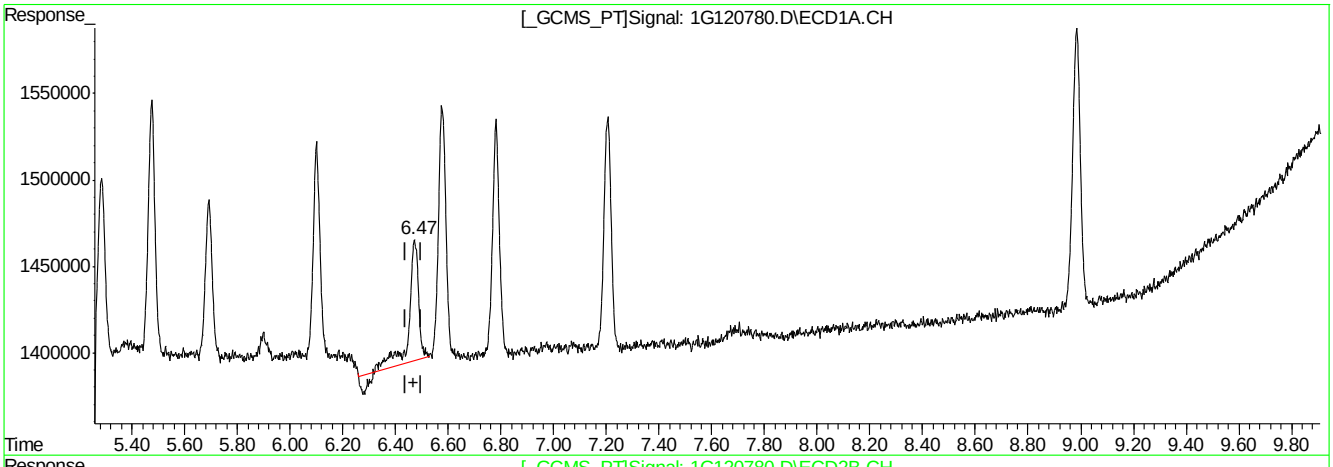
(+) = Expected Retention Time

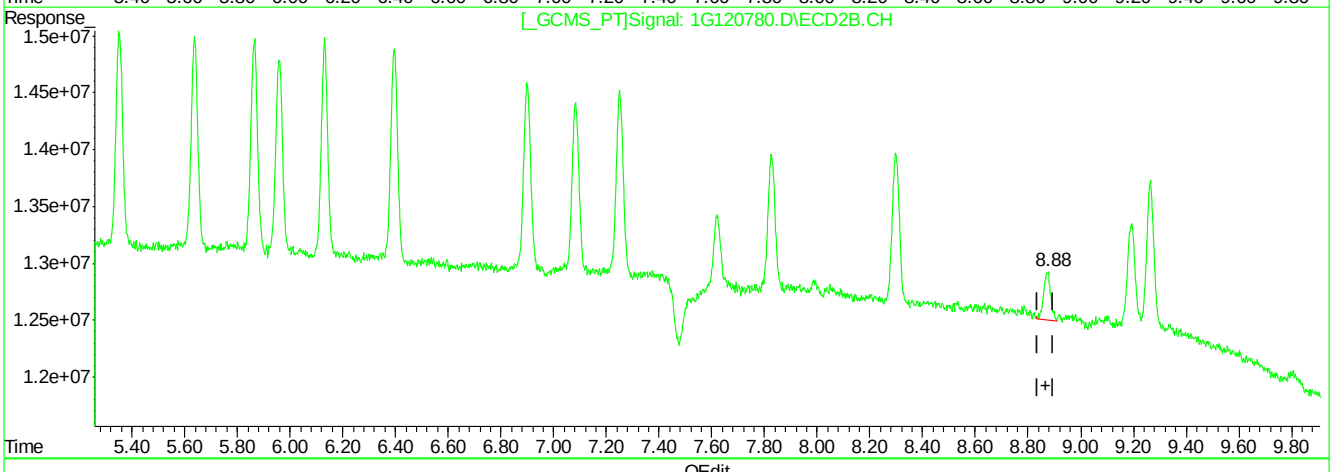
1G120780.D 1PST3933.M Mon Mar 14 19:09:57 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:08 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 2.319PPB

response 1663139

(21) Methoxychlor #2 (A)

8.88min 1.429PPB

response 7723694

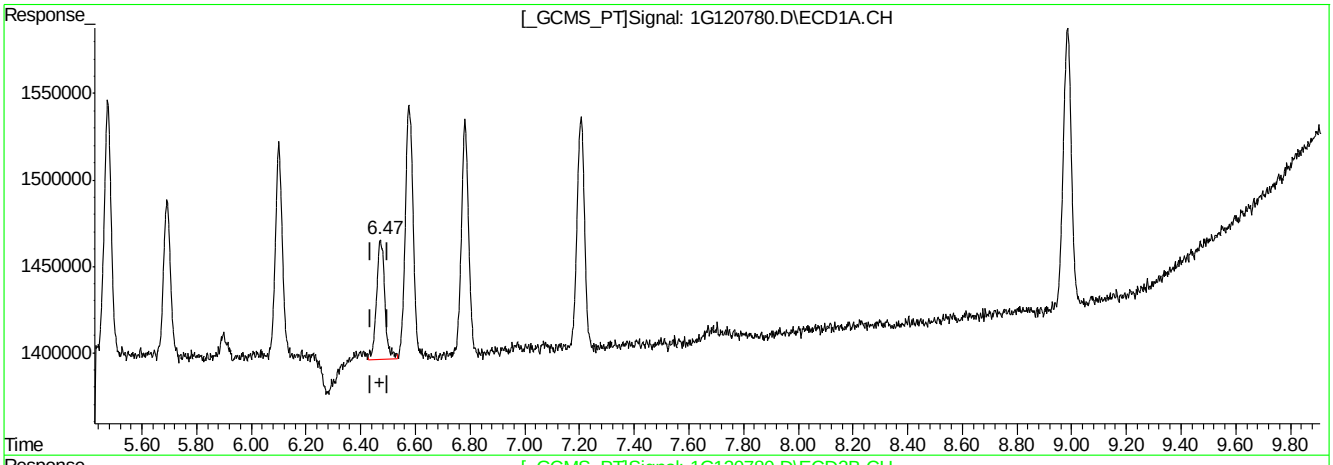
(+) = Expected Retention Time

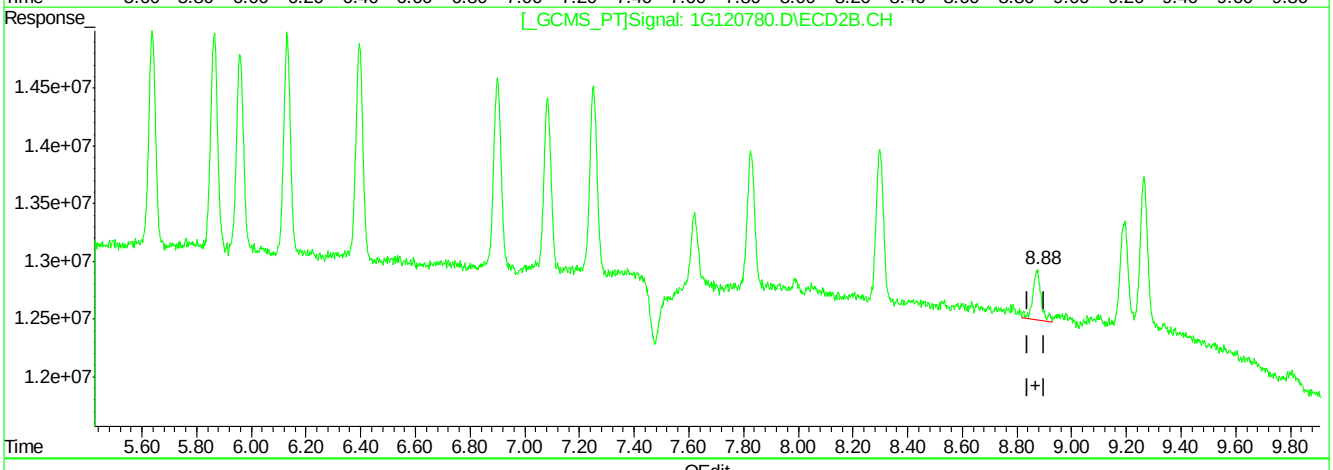
1G120780.D 1PST3933.M Mon Mar 14 19:10:02 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120780.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:25 am                    Operator: dharas
Sample    : ic3933-2                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:10 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:16:08 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 2.010PPB m

response 1441471

(21) Methoxychlor #2 (A)

8.88min 1.648PPB m

response 8907156

(+) = Expected Retention Time

1G120780.D 1PST3933.M Mon Mar 14 19:17:52 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On : 14 Mar 2016 11:43 am Operator: dharas
Sample : ic3933-5 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	55768711	768.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	6273941	78410545	5.070	6.404
Spiked Amount	40.000	Range	30 - 150	Recovery	=	12.68%#	16.01%#
24) SA	Decachlorobiphen	8.98	10.90	7901265	44280292	5.656	5.795
Spiked Amount	40.000			Recovery	=	14.14%	14.49%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	6534960	110.8E6	4.485	5.424
4) MA	gamma-BHC	2.53	3.50	6448813	98589549	4.537	5.700
5) MA	Heptachlor	3.01	4.08	7133371	87464404	4.467	5.714
6) B	beta-BHC	2.61	3.58	3687364	44491638	4.799	6.087
7) B	delta-BHC	2.79	3.98	5980755	99953636	4.630	6.359
8) MB	Aldrin	3.33	4.53	6314174	90911615	4.389	5.873
9) B	Heptachlor Epoxi	4.03	5.35	6772350	82005640	4.576	6.149
10) B	gamma-Chlordane	4.18	5.64	6702447	79457967	4.505	5.870
11) B	alpha-Chlordane	4.35	5.86	6755705	79412818	4.607	5.786
12) A	Endosulfan I	4.52	5.96	6462086	76046630	4.718	5.733
13) B	4,4'-DDE	4.46	6.13	5428079	77063264	4.679	5.910
14) MA	Dieldrin	4.84	6.40	6242512	82234886	4.532	5.767
15) MA	Endrin	5.15	6.90	5718488	73988319	5.046	6.766
16) A	4,4'-DDD	5.28	7.08	4593935	69423104	4.374	6.138
17) B	Endosulfan II	5.47	7.25	6325950	75242524	4.817	6.307
18) MA	4,4'-DDT	5.69	7.62	4236047	41345505	4.195	4.046m
19) B	Endrin Aldehyde	6.10	7.83	5348174	55194232	5.022	5.648
20) B	Endosulfan Sulfa	6.78	8.30	6100315	62363323	5.124	6.358
21) A	Methoxychlor	6.47	8.87	3336943	22602248	4.693m	4.230
22)	Mirex	6.58	9.19	6977707	45549827	5.018	5.598
23) B	Endrin Ketone	7.20	9.26	6359999	62941917	5.390	6.209

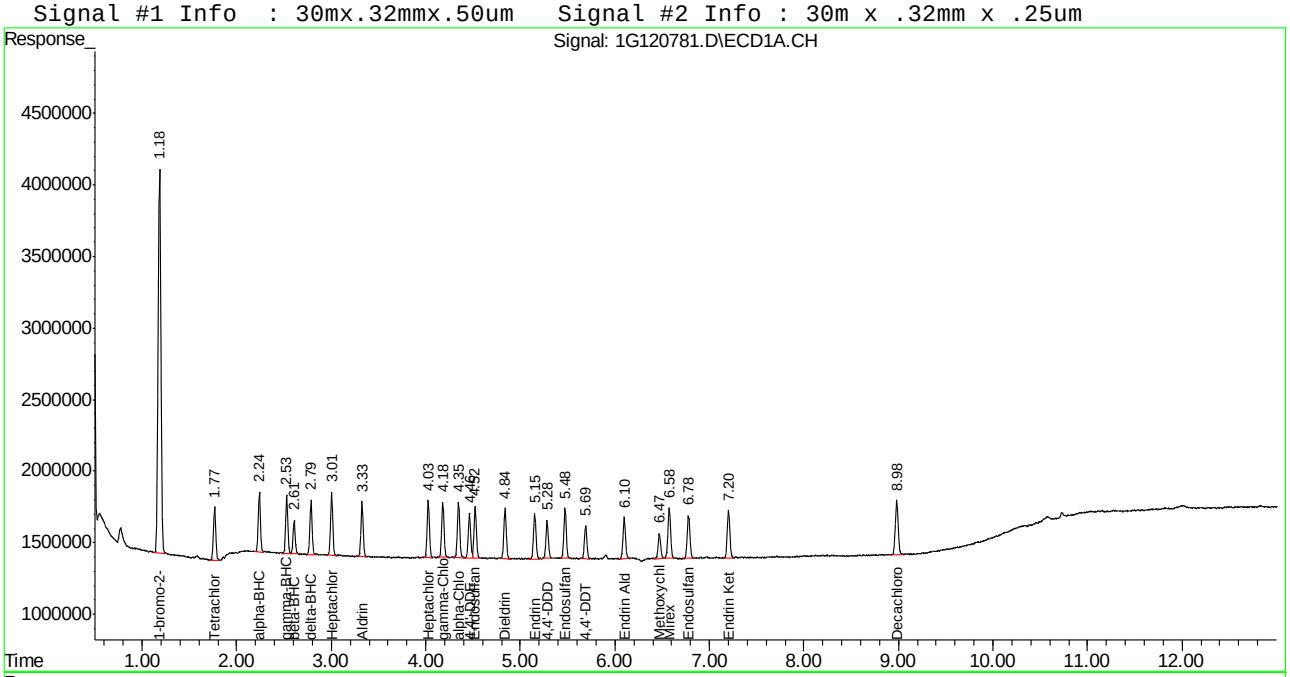
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120781.D 1PST3933.M Mon Mar 14 19:30:41 2016 RPT1 Page 1

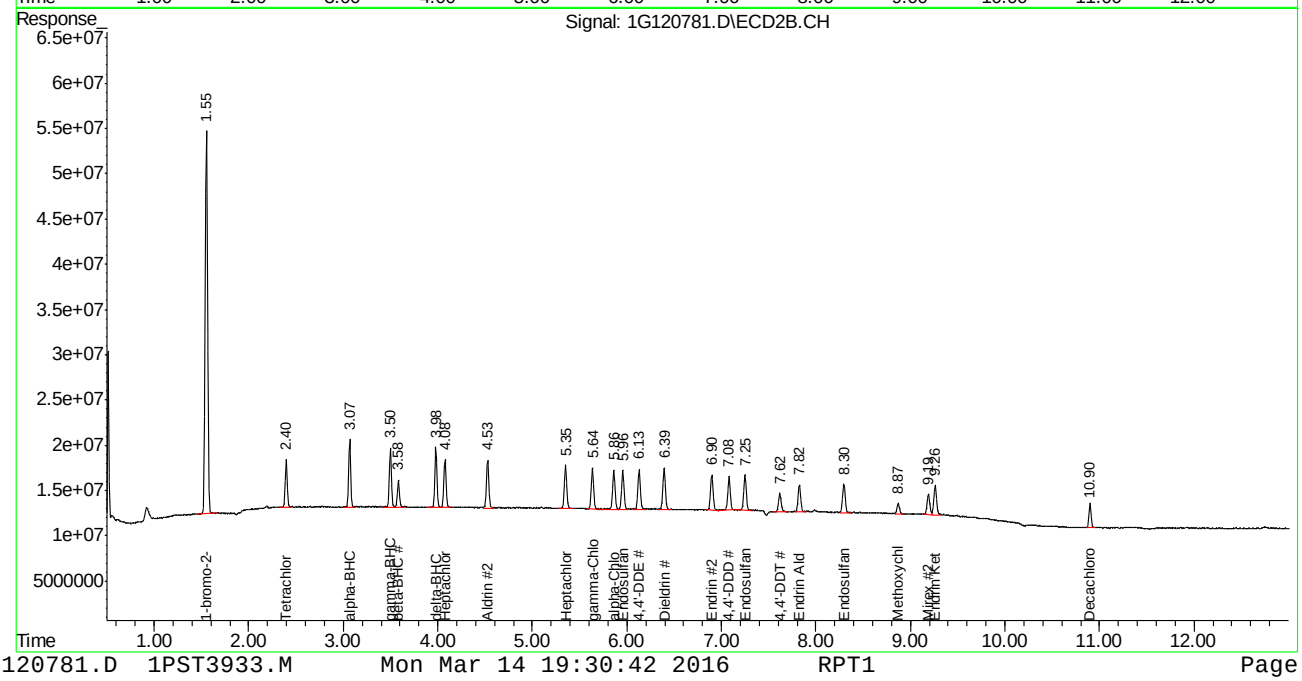
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On : 14 Mar 2016 11:43 am Operator: dharas
Sample : ic3933-5 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

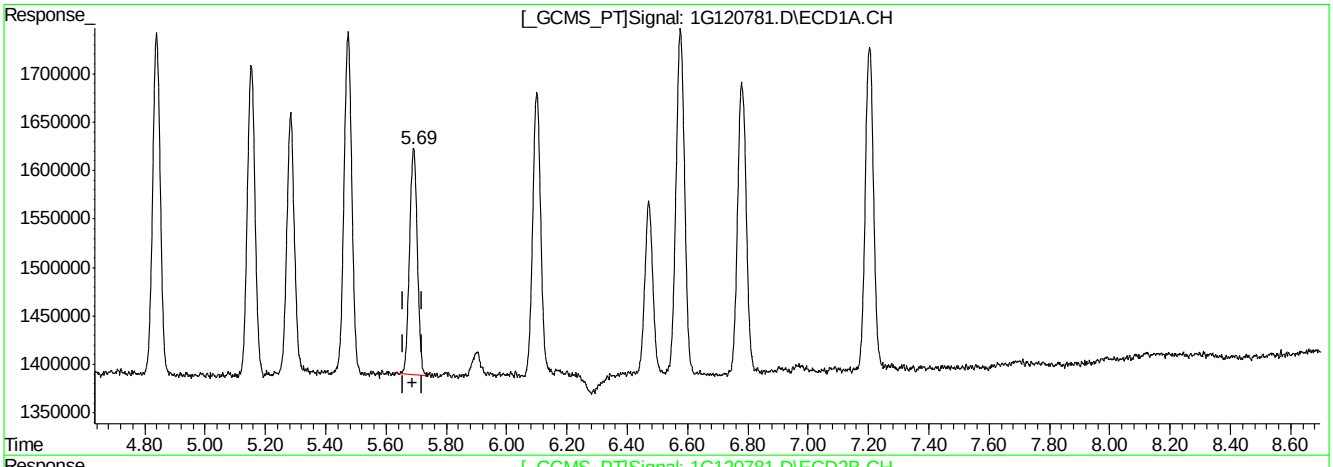
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120781.D	**Analyst approved:**	03/14/16 19:22 Joseph Ravino
Injection Time:	03/14/16 11:43	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

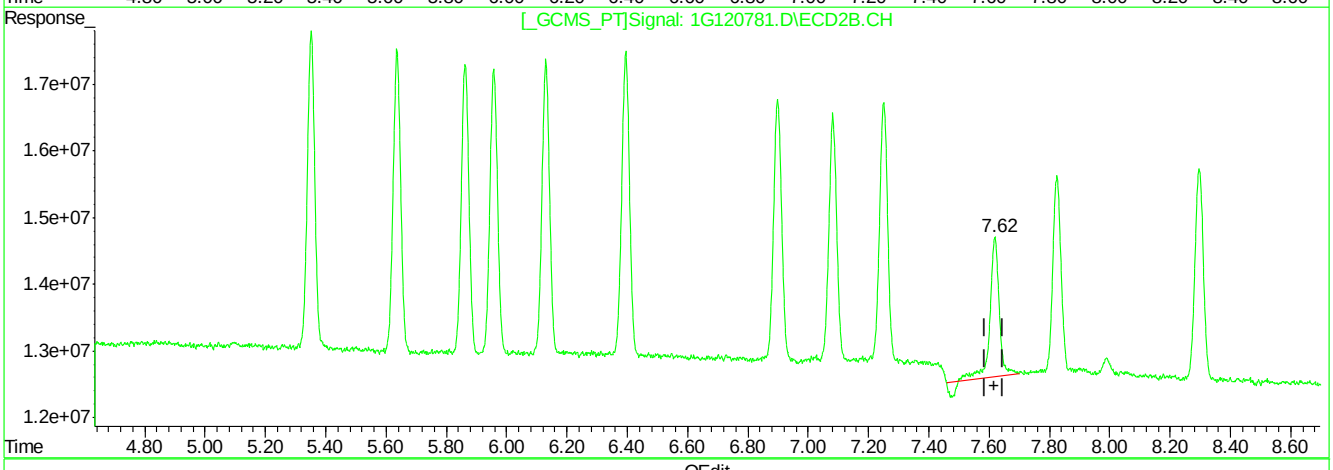
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	6.47	Poor instrument integration
4,4'-DDT	50-29-3	2	7.62	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:43 am                    Operator: dharas
Sample    : ic3933-5                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:02 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.69min 4.195PPB

response 4236047

(18) 4,4'-DDT #2 (MA)

7.62min 4.206PPB

response 42977068

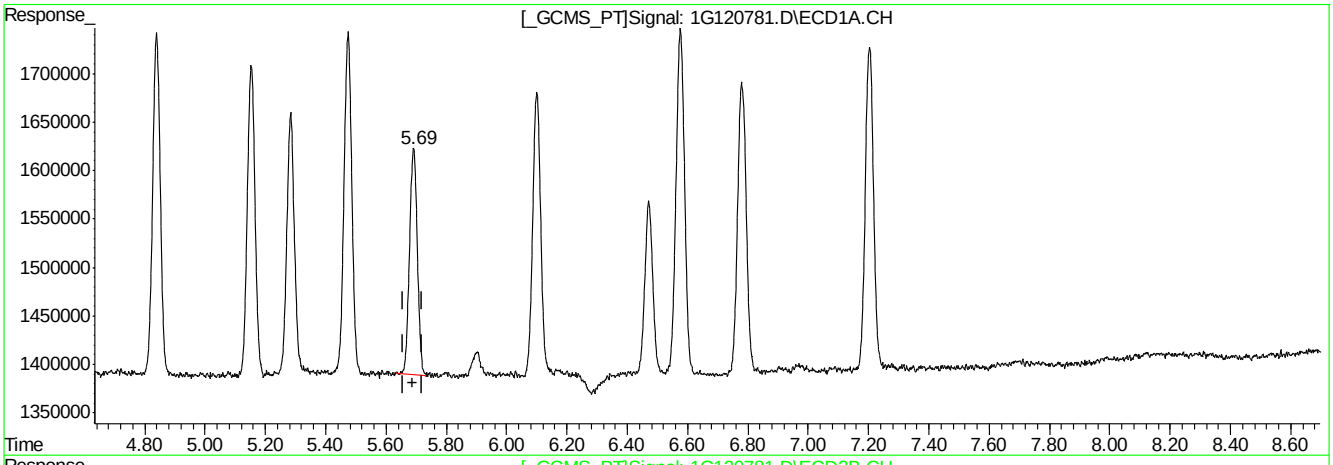
(+) = Expected Retention Time

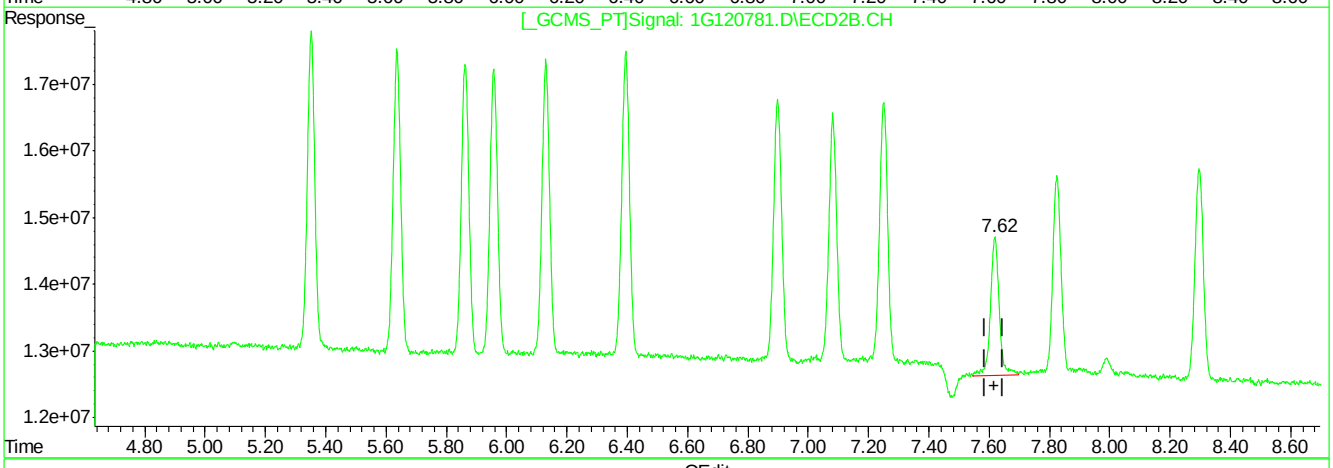
1G120781.D 1PST3933.M Mon Mar 14 19:02:56 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:43 am                    Operator: dharas
Sample    : ic3933-5                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:02 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.69min 4.195PPB

response 4236047

(18) 4,4'-DDT #2 (MA)

7.62min 4.046PPB m

response 41345505

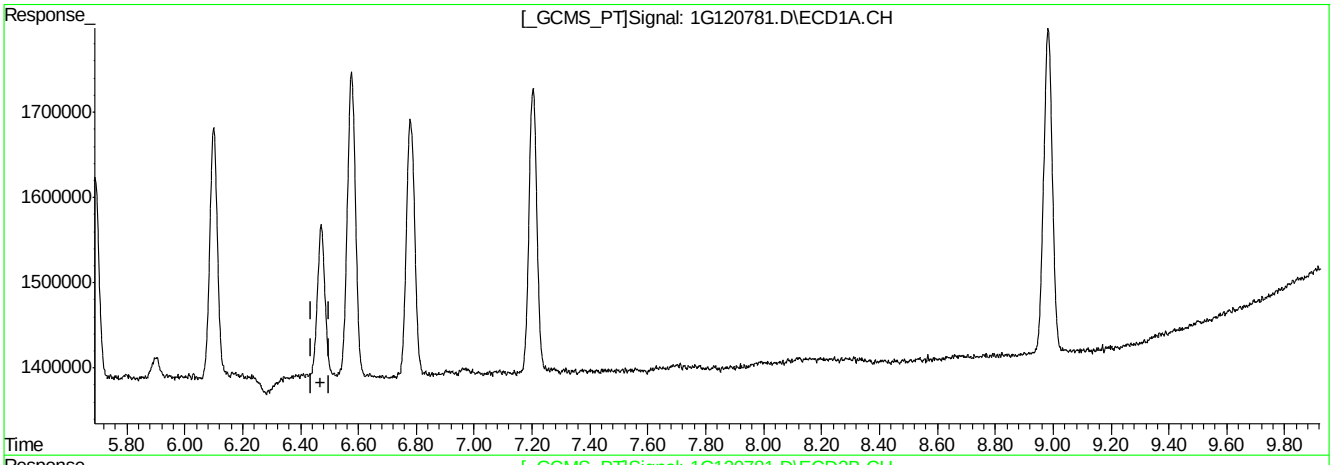
(+) = Expected Retention Time

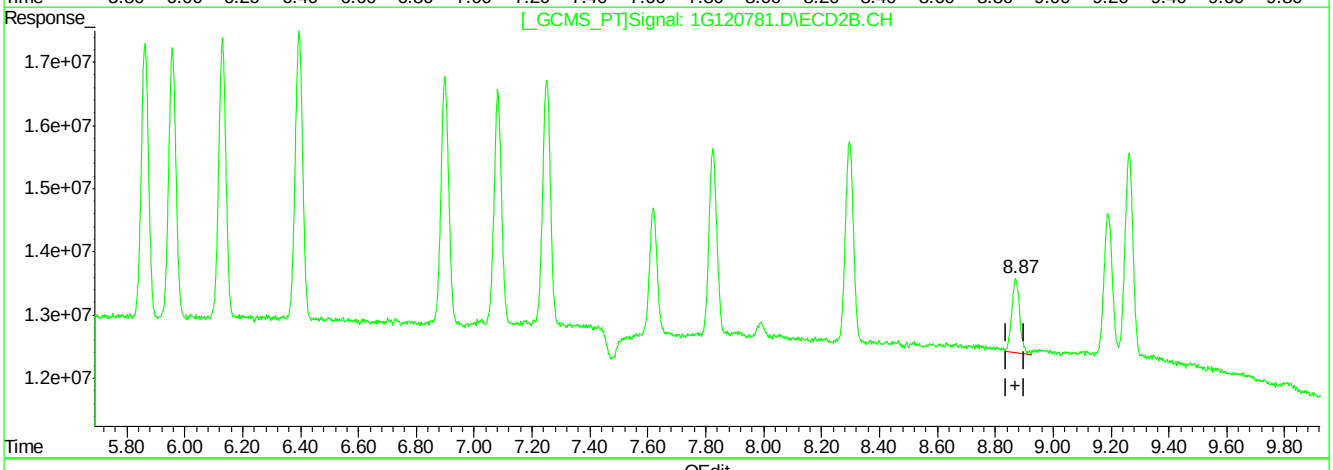
1G120781.D 1PST3933.M Mon Mar 14 19:03:02 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:43 am                    Operator: dharas
Sample    : ic3933-5                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:02 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.87min 4.230PPB

response 22602248

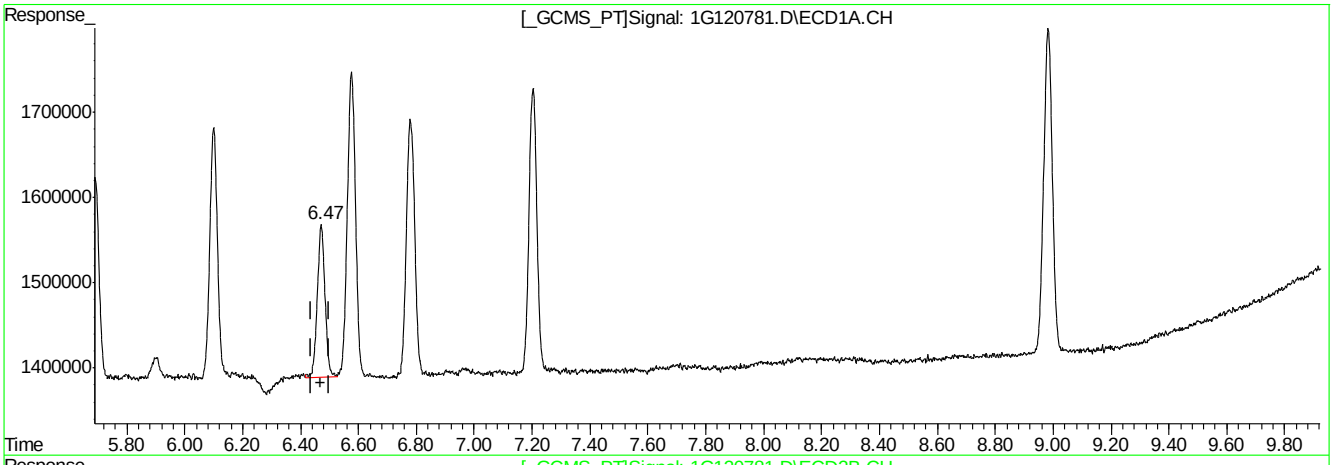
(+) = Expected Retention Time

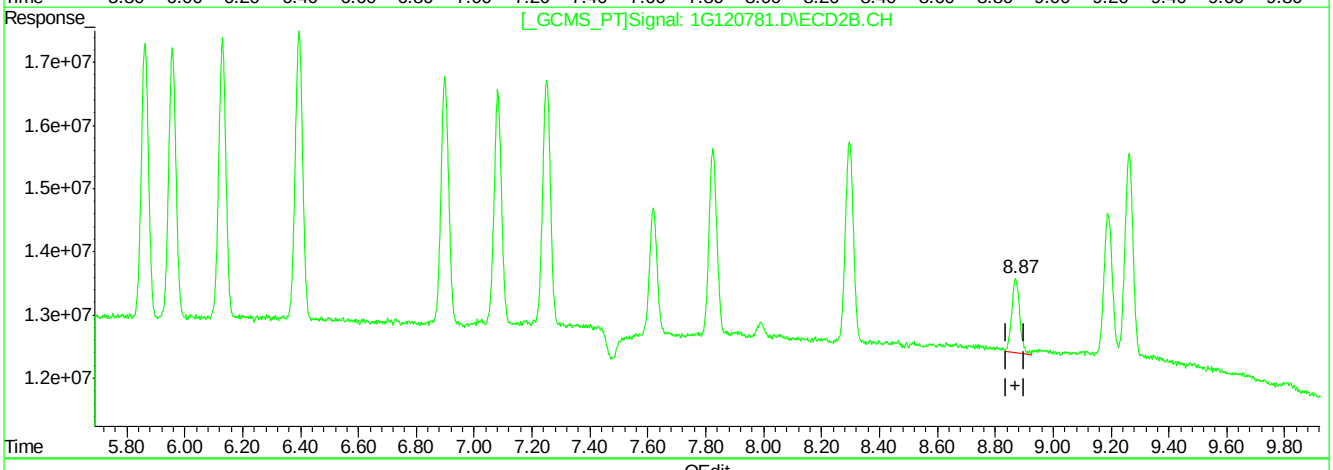
1G120781.D 1PST3933.M Mon Mar 14 19:03:09 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120781.D\ECD2B.CH
Acq On    : 14 Mar 2016  11:43 am                    Operator: dharas
Sample    : ic3933-5                                 Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:02 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 4.693PPB m

response 3336943

(21) Methoxychlor #2 (A)

8.87min 4.230PPB

response 22602248

(+) = Expected Retention Time

1G120781.D 1PST3933.M Mon Mar 14 19:03:14 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On : 14 Mar 2016 12:00 pm Operator: dharas
Sample : ic3933-10 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	56350415	770.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	12584170	152.0E6	10.063	12.379
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	25.16%#	30.95%
24) SA	Decachlorobiphen	8.98	10.90	15831166	78064257	11.215	10.191m
	Spiked Amount 40.000			Recovery	=	28.04%	25.48%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	13581866	221.3E6	9.226	10.809
4) MA	gamma-BHC	2.53	3.50	13218853	195.6E6	9.204	11.284
5) MA	Heptachlor	3.00	4.08	14498501	170.1E6	8.985	11.082
6) B	beta-BHC	2.61	3.58	7469784	86085344	9.621	11.748
7) B	delta-BHC	2.79	3.98	12297096	195.3E6	9.421	12.392
8) MB	Aldrin	3.33	4.53	12918937	175.5E6	8.886	11.310
9) B	Heptachlor Epoxi	4.03	5.35	13591572	162.3E6	9.088	12.143
10) B	gamma-Chlordane	4.18	5.64	13453437	155.0E6	8.950	11.424
11) B	alpha-Chlordane	4.35	5.86	13663472	151.6E6	9.222	11.015
12) A	Endosulfan I	4.52	5.96	13066695	148.4E6	9.441	11.160
13) B	4,4'-DDE	4.46	6.13	11076539	154.4E6	9.450	11.811
14) MA	Dieldrin	4.84	6.39	12600119	163.6E6	9.053	11.442
15) MA	Endrin	5.15	6.90	11636959	145.0E6	10.163	13.230
16) A	4,4'-DDD	5.28	7.08	9526301	132.7E6	8.977	11.706
17) B	Endosulfan II	5.47	7.25	12819704	142.3E6	9.661	11.898
18) MA	4,4'-DDT	5.69	7.62	9126201	88285386	8.945	8.618m
19) B	Endrin Aldehyde	6.10	7.83	10671900	110.8E6	9.918	11.306
20) B	Endosulfan Sulfa	6.78	8.30	12440441	124.9E6	10.342	12.706
21) A	Methoxychlor	6.47	8.87	6702235	47950833	9.329	8.952
22)	Mirex	6.57	9.19	14290120	92842501	10.172	11.382
23) B	Endrin Ketone	7.20	9.26	13352269	131.5E6	11.200	12.938

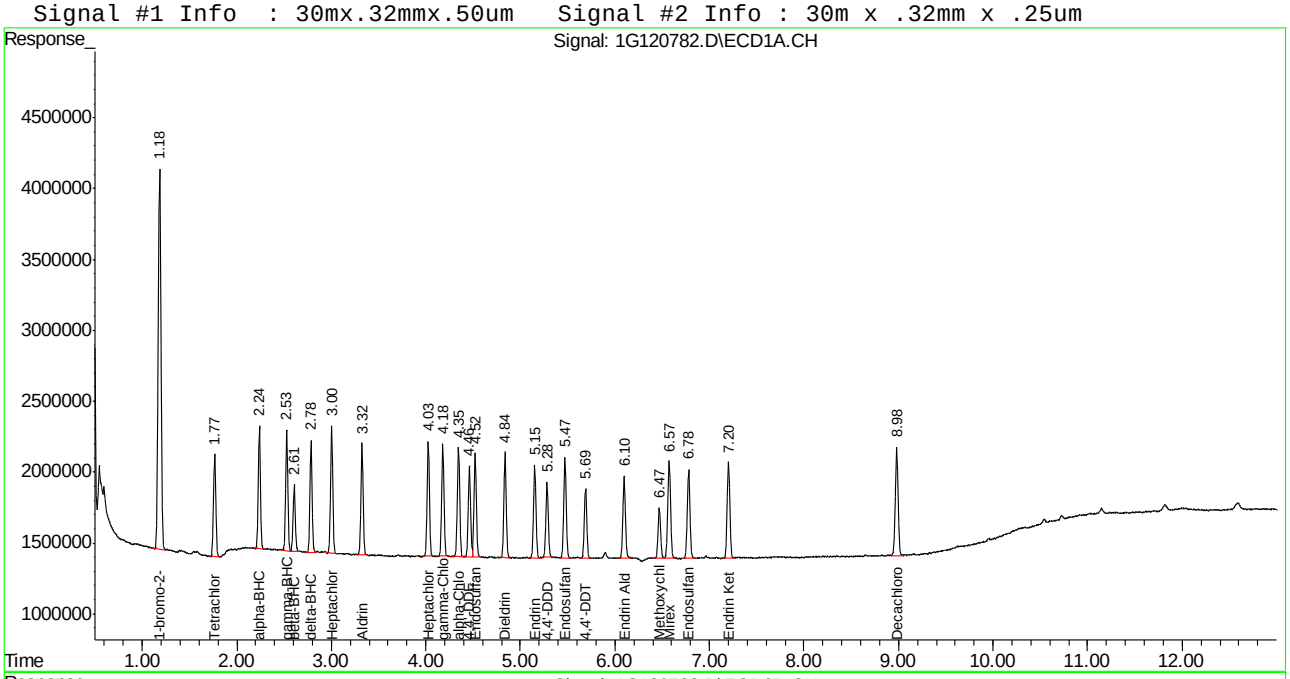
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120782.D 1PST3933.M Mon Mar 14 19:30:44 2016 RPT1 Page 1

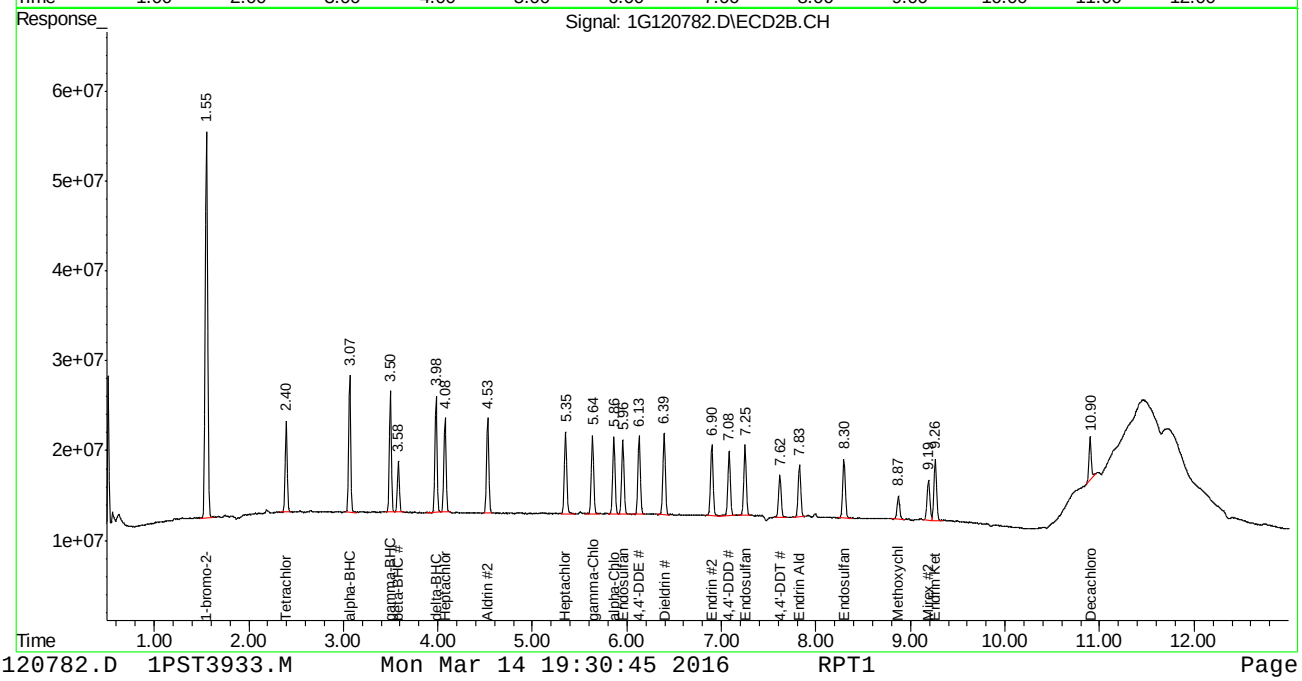
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On : 14 Mar 2016 12:00 pm Operator: dharas
Sample : ic3933-10 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:28 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

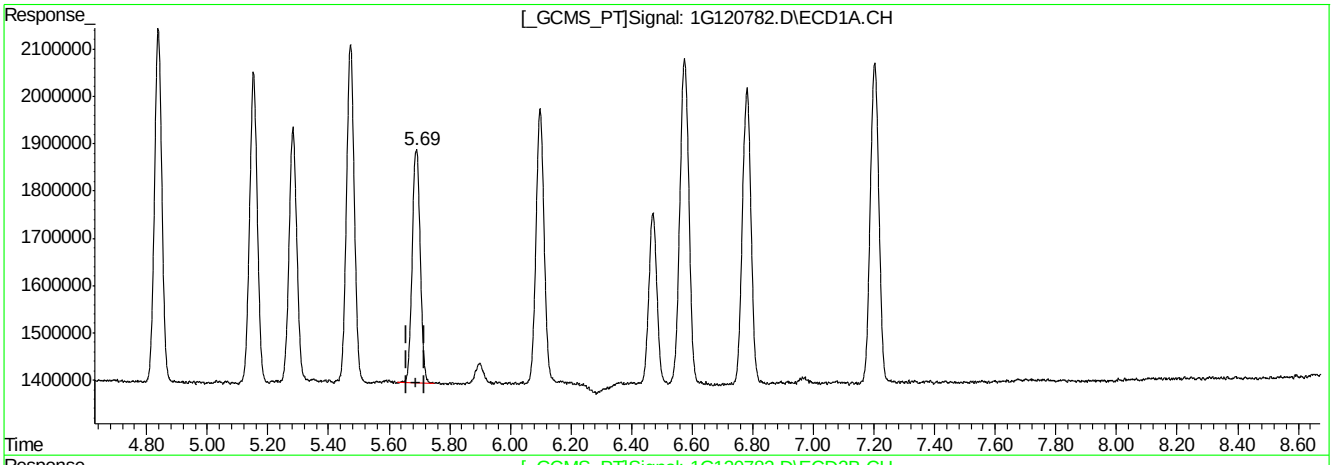
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120782.D	**Analyst approved:**	03/14/16 19:22 Joseph Ravino
Injection Time:	03/14/16 12:00	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

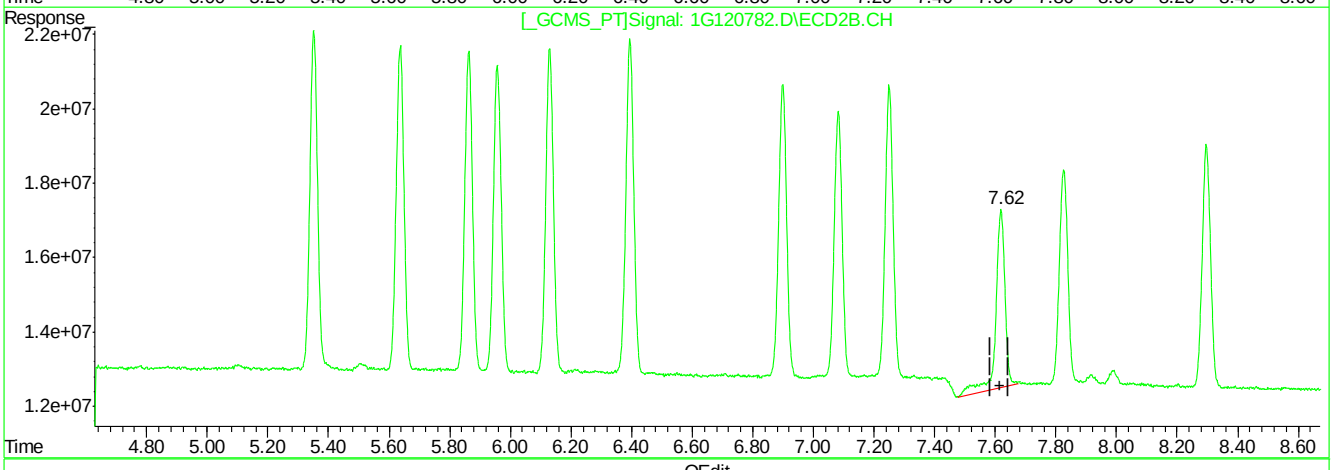
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	2	7.62	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	10.90	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On    : 14 Mar 2016  12:00 pm                    Operator: dharas
Sample    : ic3933-10                                Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:03 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.69min 8.945PPB

response 9126201

(18) 4,4'-DDT #2 (MA)

7.62min 9.873PPB

response 101135376

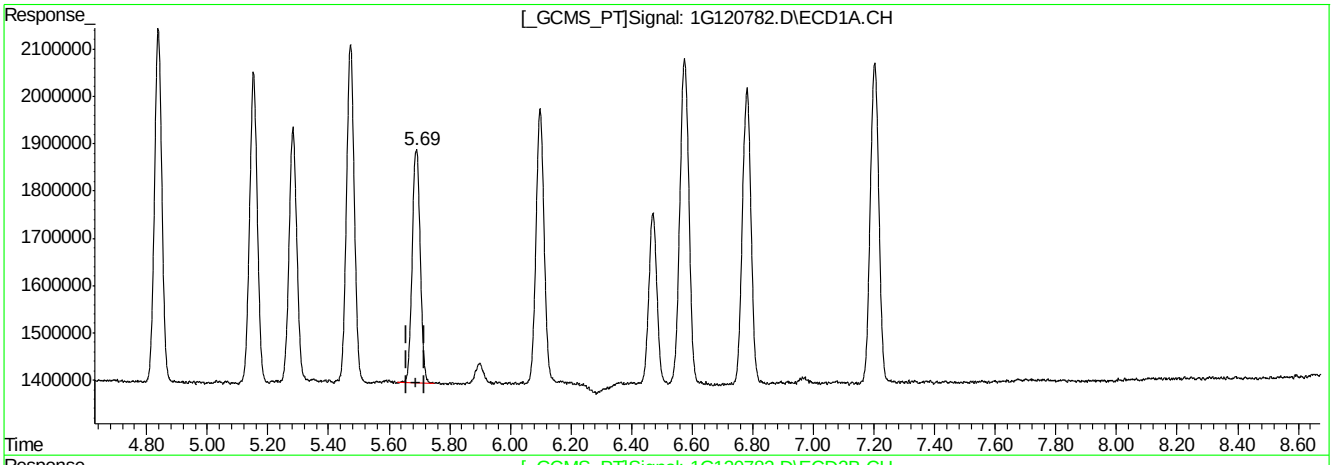
(+) = Expected Retention Time

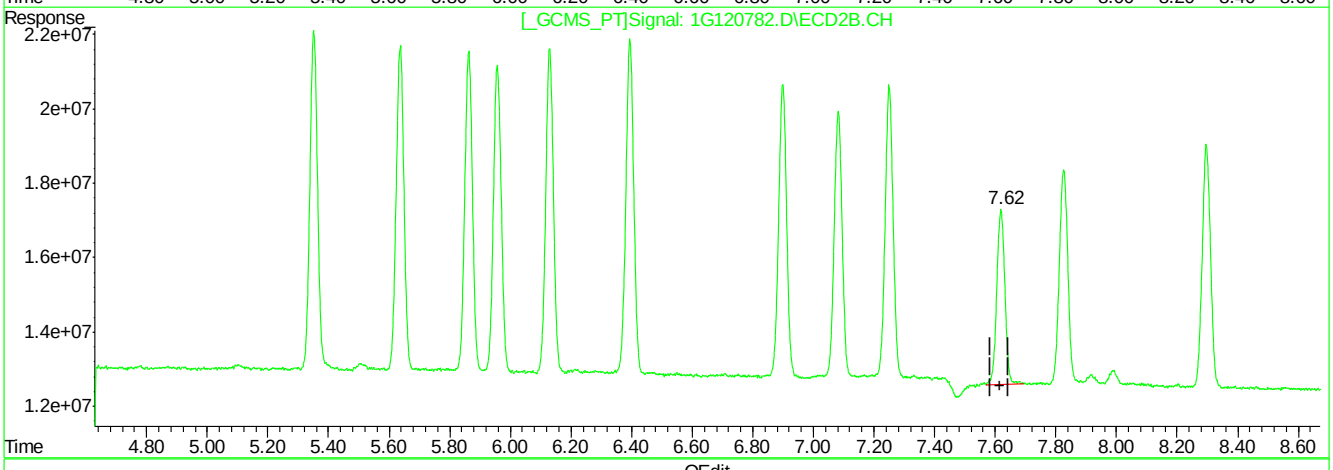
1G120782.D 1PST3933.M Mon Mar 14 19:04:02 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On : 14 Mar 2016 12:00 pm Operator: dharas
Sample : ic3933-10 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:03 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDT (MA)

5.69min 8.945PPB

response 9126201

(18) 4,4'-DDT #2 (MA)

7.62min 8.618PPB m

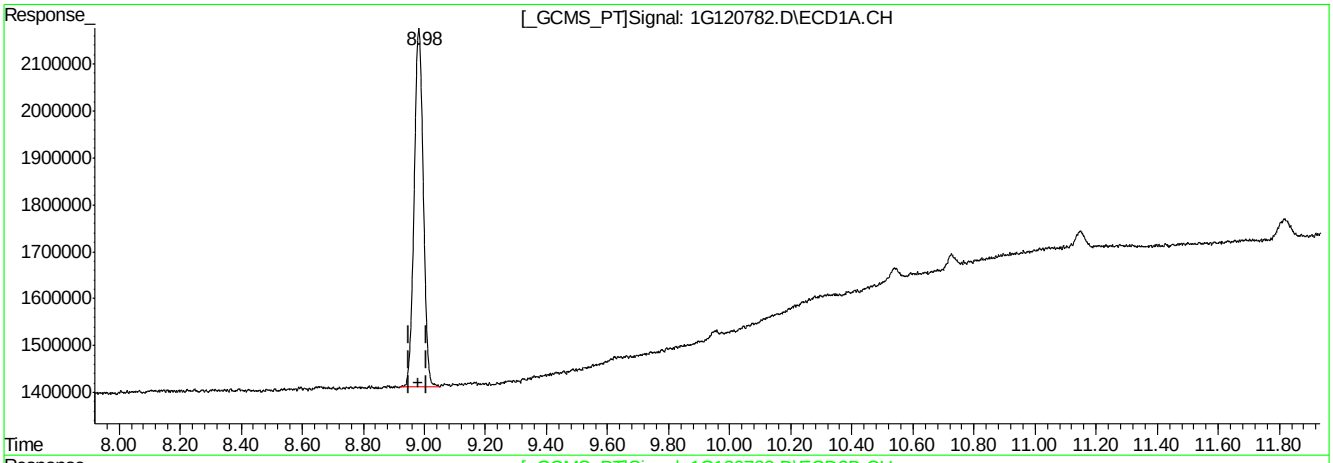
response 88285386

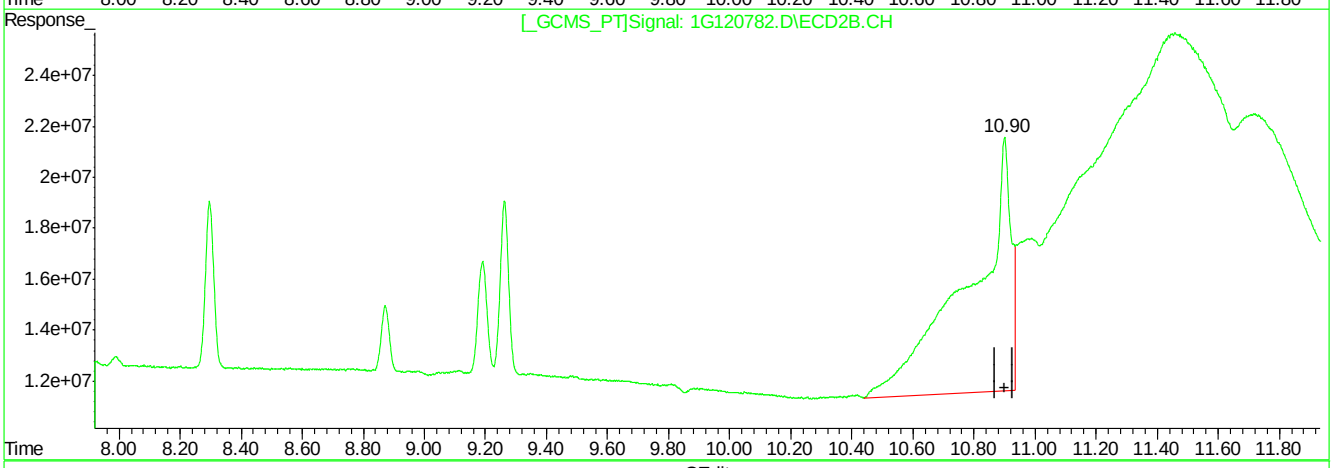
(+) = Expected Retention Time
1G120782.D 1PST3933.M Mon Mar 14 19:04:10 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On    : 14 Mar 2016  12:00 pm                    Operator: dharas
Sample    : ic3933-10                                Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:03 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.98min 11.215PPB

response 15831166

(24) Decachlorobiphenyl #2 (SA)

10.90min 121.486PPB

response 930595469

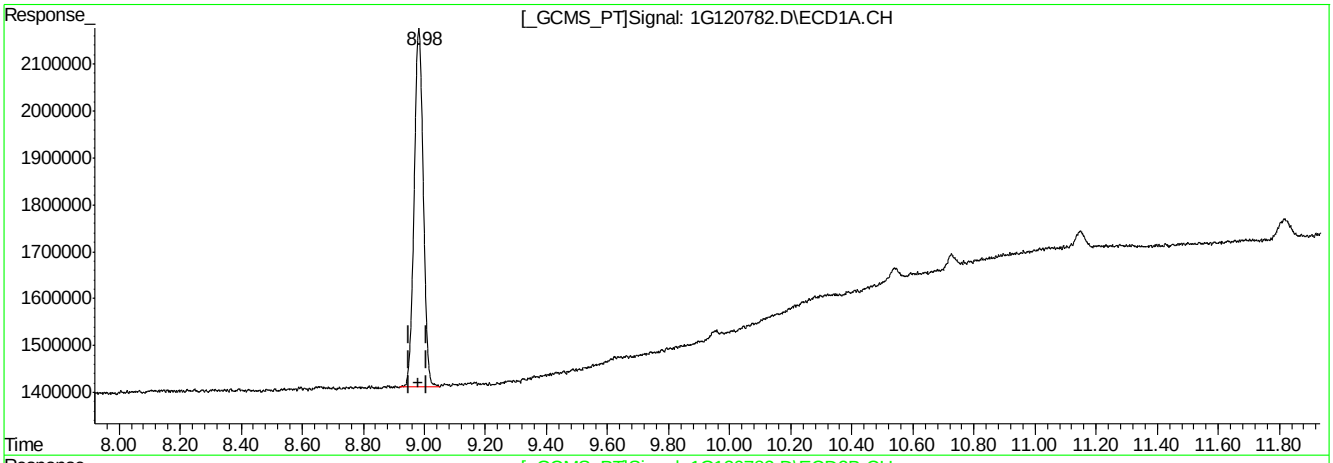
(+) = Expected Retention Time

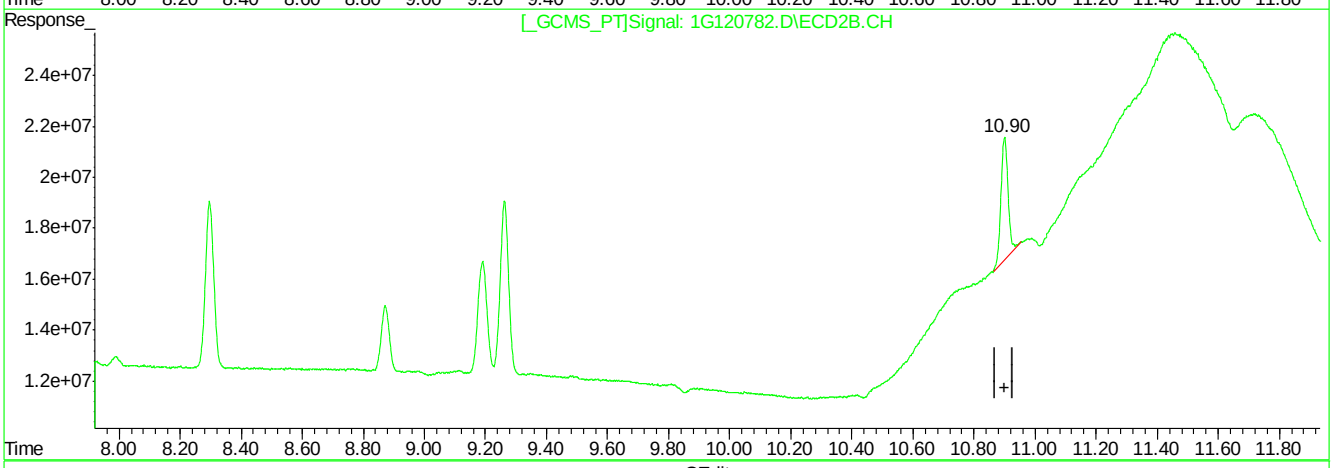
1G120782.D 1PST3933.M Mon Mar 14 19:04:25 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120782.D\ECD2B.CH
Acq On    : 14 Mar 2016  12:00 pm                    Operator: dharas
Sample    : ic3933-10                                Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:03 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.98min 11.215PPB

response 15831166

(24) Decachlorobiphenyl #2 (SA)

10.90min 10.191PPB m

response 78064257

(+) = Expected Retention Time

1G120782.D 1PST3933.M Mon Mar 14 19:04:33 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120783.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120783.D\ECD2B.CH
Acq On : 14 Mar 2016 12:18 pm Operator: dharas
Sample : icc3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	54341860	743.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	31063336	366.4E6	25.759	30.933
Spiked Amount	40.000	Range	30 - 150	Recovery	=	64.40%	77.33%
24) SA	Decachlorobiphen	8.98	10.90	36961825	206.3E6	27.152	27.907
Spiked Amount	40.000			Recovery	=	67.88%	69.77%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	36008832	529.0E6	25.364	26.771
4) MA	gamma-BHC	2.53	3.50	34666633	473.5E6	25.030	28.296
5) MA	Heptachlor	3.00	4.08	36342800	415.8E6	23.354	28.078
6) B	beta-BHC	2.61	3.58	18317043	206.5E6	24.465	29.199
7) B	delta-BHC	2.79	3.98	32118680	469.5E6	25.517	30.875
8) MB	Aldrin	3.33	4.53	33050735	420.7E6	23.575	28.089
9) B	Heptachlor Epoxi	4.03	5.35	33686411	381.9E6	23.357	29.601
10) B	gamma-Chlordane	4.18	5.64	33348824	368.7E6	23.006	28.156
11) B	alpha-Chlordane	4.35	5.86	33720437	361.1E6	23.600	27.197
12) A	Endosulfan I	4.52	5.96	31911602	356.9E6	23.909	27.811
13) B	4,4'-DDE	4.46	6.13	28337362	370.3E6	25.069	29.356
14) MA	Dieldrin	4.84	6.39	31991141	390.9E6	23.834	28.334
15) MA	Endrin	5.15	6.90	28933542	346.9E6	26.202	32.784
16) A	4,4'-DDD	5.28	7.08	24283372	317.4E6	23.728	29.006
17) B	Endosulfan II	5.47	7.25	31330842	342.3E6	24.484	29.659
18) MA	4,4'-DDT	5.69	7.62	24481466	247.8E6	24.883	25.063
19) B	Endrin Aldehyde	6.10	7.82	25402707	260.1E6	24.481	27.513
20) B	Endosulfan Sulfa	6.78	8.30	29756943	294.7E6	25.653	31.060
21) A	Methoxychlor	6.47	8.87	17091133	129.9E6	24.668	25.129
22)	Mirex	6.58	9.19	32791880	223.6E6	24.204	28.400
23) B	Endrin Ketone	7.20	9.26	32655854	314.8E6	28.404	32.093

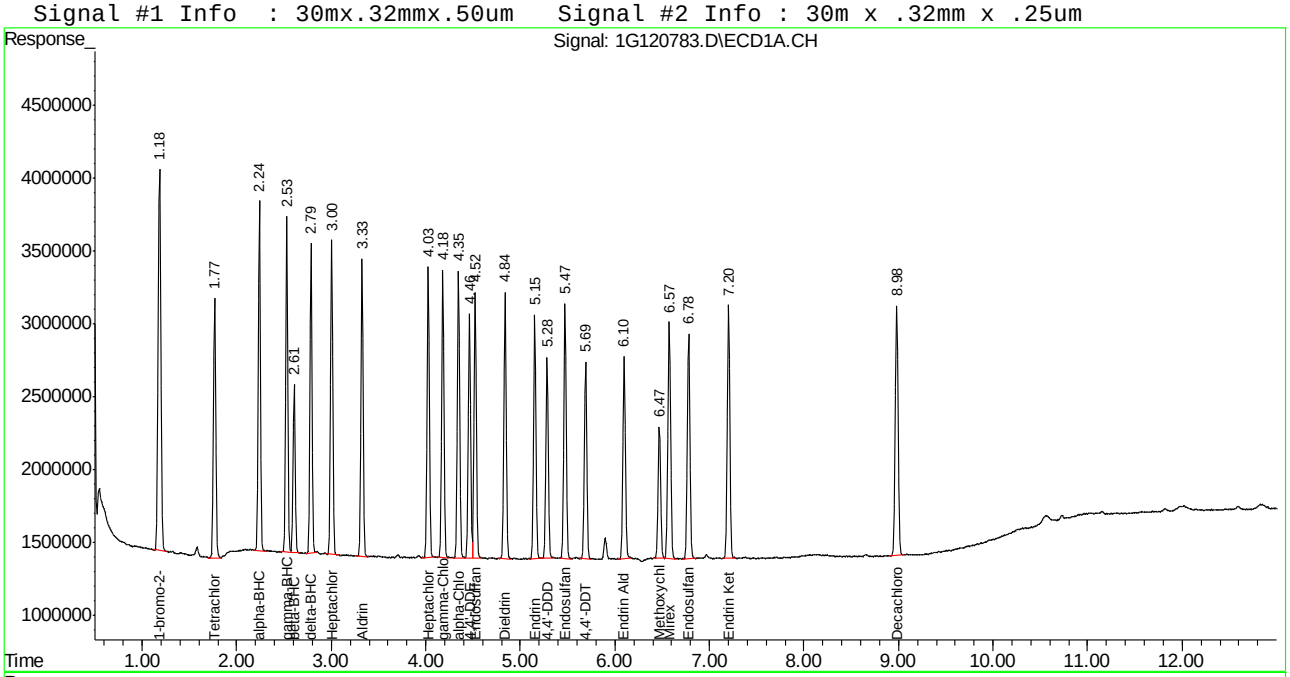
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120783.D 1PST3933.M Mon Mar 14 19:30:47 2016 RPT1 Page 1

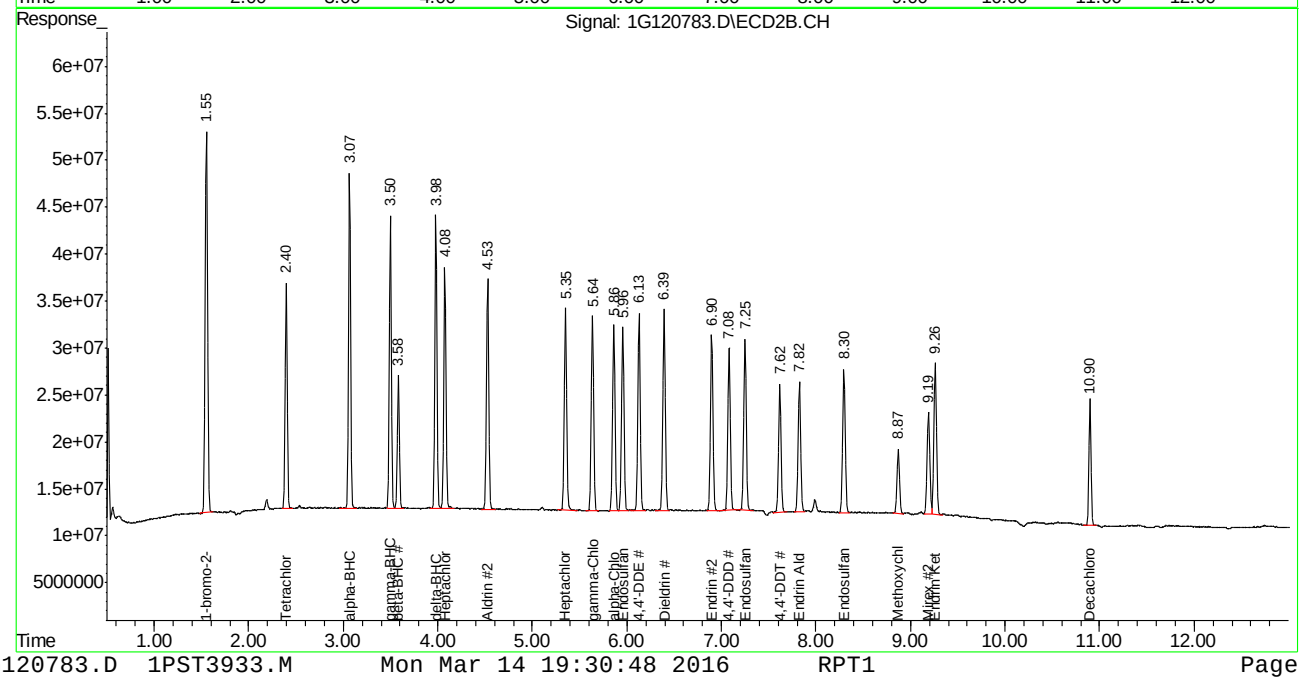
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120783.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120783.D\ECD2B.CH
Acq On : 14 Mar 2016 12:18 pm Operator: dharas
Sample : icc3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120784.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120784.D\ECD2B.CH
Acq On : 14 Mar 2016 12:35 pm Operator: dharas
Sample : ic3933-50 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	55387259	763.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	62834402	720.6E6	51.122	59.210
	Spiked Amount 40.000	Range 30 - 150		Recovery =		127.80%	148.03%
24) SA	Decachlorobiphen	8.98	10.90	70873947	402.2E6	51.081	52.954
	Spiked Amount 40.000			Recovery =		127.70%	132.38%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	79431008	1058.4E6	54.894	52.135
4) MA	gamma-BHC	2.53	3.50	74907101	943.7E6	53.063	54.895
5) MA	Heptachlor	3.00	4.08	76270053	819.4E6	48.086	53.860
6) B	beta-BHC	2.61	3.58	36593235	403.3E6	47.952	55.517
7) B	delta-BHC	2.78	3.98	70622646	944.4E6	55.048	60.444
8) MB	Aldrin	3.33	4.53	69999187	814.8E6	48.987	52.957
9) B	Heptachlor Epoxi	4.03	5.35	68933794	737.7E6	46.894	55.656
10) B	gamma-Chlordane	4.18	5.64	68560278	729.0E6	46.405	54.183
11) B	alpha-Chlordane	4.35	5.86	68958735	697.3E6	47.351	51.110
12) A	Endosulfan I	4.52	5.96	65584824	687.9E6	48.210	52.179
13) B	4,4'-DDE	4.46	6.13	60370352	721.2E6	52.398	55.639
14) MA	Dieldrin	4.84	6.39	66935119	757.4E6	48.926	53.436
15) MA	Endrin	5.15	6.90	59516005	660.0E6	52.879	60.717
16) A	4,4'-DDD	5.28	7.08	51097602	607.9E6	48.987	54.069
17) B	Endosulfan II	5.47	7.25	63563591	658.8E6	48.735	55.563
18) MA	4,4'-DDT	5.69	7.62	52465543	517.1E6	52.320	50.915
19) B	Endrin Aldehyde	6.10	7.83	51552326	510.2E6	48.744	52.524
20) B	Endosulfan Sulfa	6.78	8.30	60013342	578.1E6	50.759	59.302
21) A	Methoxychlor	6.47	8.87	33840878	264.3E6	47.921	49.767
22)	Mirex	6.57	9.19	62351801	437.6E6	45.153	54.103
23) B	Endrin Ketone	7.20	9.26	67910681	623.8E6	57.954	61.912

(f)=RT Delta > 1/2 Window (m)=manual int.

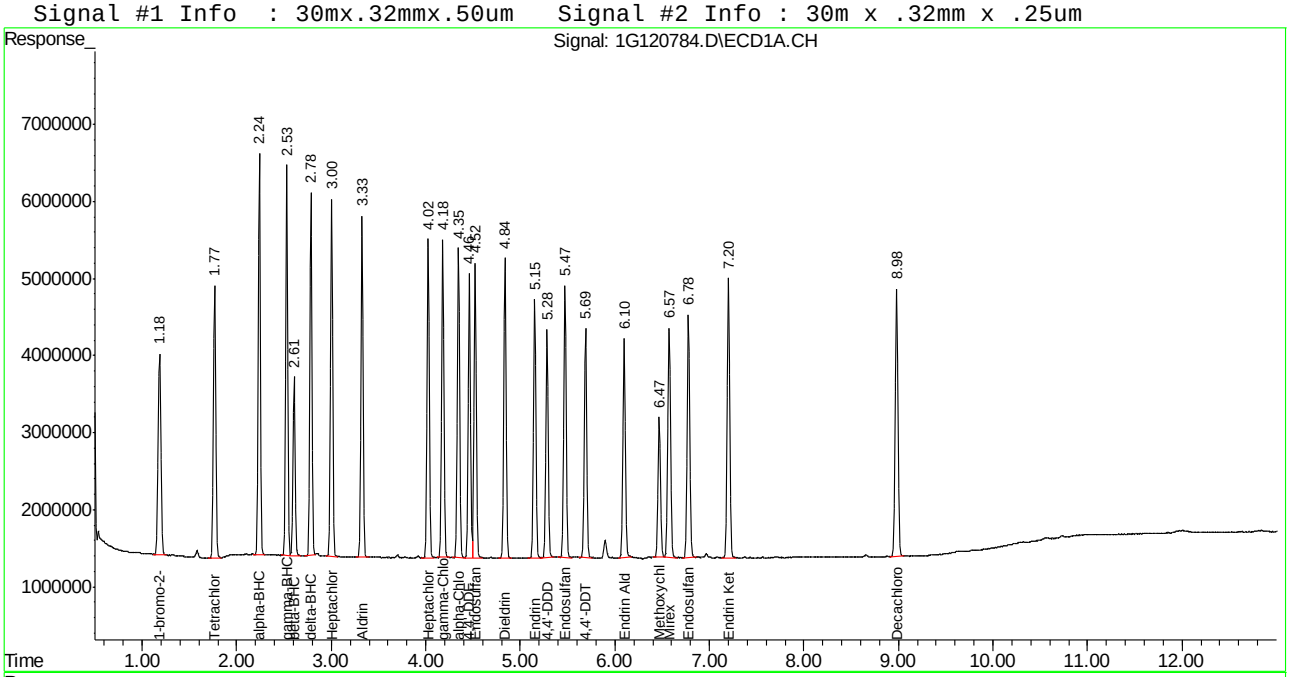
SGS ACCUTEST JC16312T

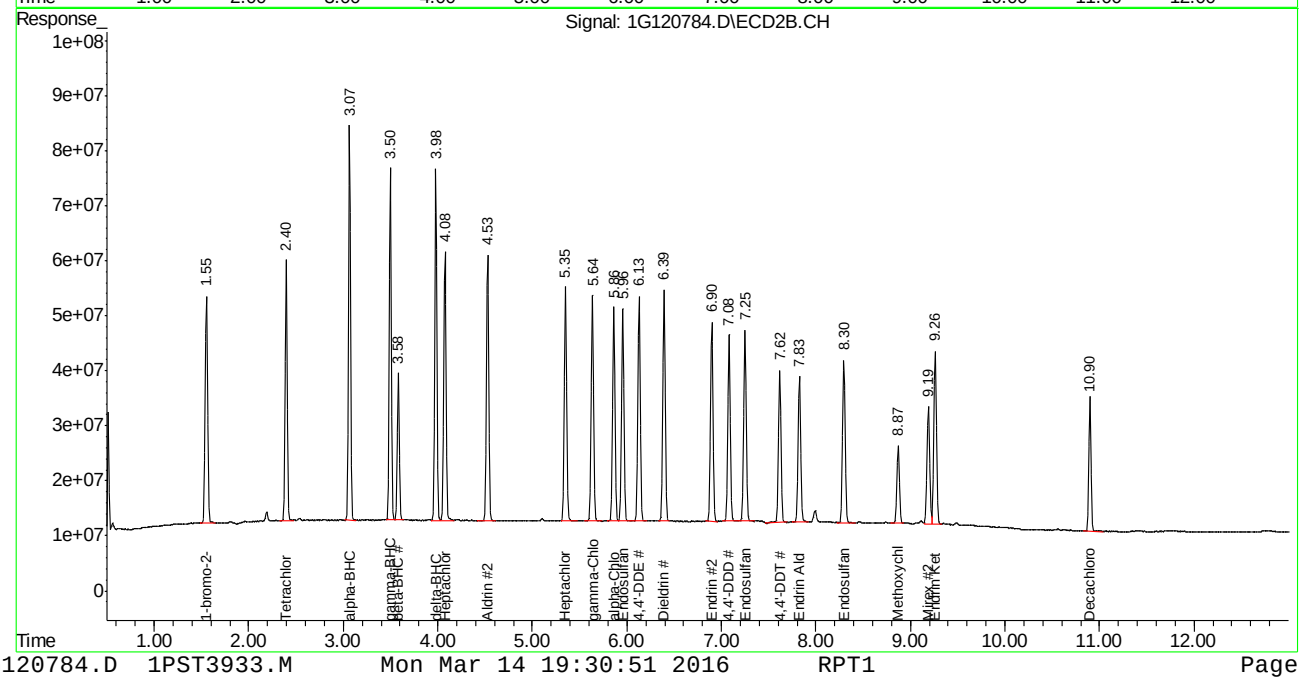
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120784.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120784.D\ECD2B.CH
Acq On : 14 Mar 2016 12:35 pm Operator: dharas
Sample : ic3933-50 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

1G120785.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD2B.CH
Acq On : 14 Mar 2016 12:53 pm Operator: dharas
Sample : ic3933-75 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	56096488	773.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	94376420	1053.3E6	75.813	85.435
Spiked Amount	40.000	Range	30 - 150	Recovery	=	189.53%#	213.59%#
24) SA	Decachlorobiphen	8.98	10.90	103.5E6	587.2E6	73.683	76.319
Spiked Amount	40.000			Recovery	=	184.21%	190.80%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	125.0E6	1556.2E6	85.264	75.666
4) MA	gamma-BHC	2.53	3.50	116.3E6	1385.5E6	81.371	79.555
5) MA	Heptachlor	3.01	4.08	115.8E6	1161.3E6	72.088	75.348
6) B	beta-BHC	2.61	3.58	54210175	588.5E6	70.140	79.958
7) B	delta-BHC	2.79	3.98	111.1E6	1392.3E6	85.505	87.964
8) MB	Aldrin	3.33	4.53	107.9E6	1188.1E6	74.579	76.219
9) B	Heptachlor Epoxi	4.03	5.35	103.9E6	1069.9E6	69.798	79.672
10) B	gamma-Chlordane	4.18	5.64	104.0E6	1065.5E6	69.477	78.173
11) B	alpha-Chlordane	4.35	5.86	104.1E6	1019.5E6	70.552	73.768
12) A	Endosulfan I	4.52	5.96	98995154	998.5E6	71.849	74.760
13) B	4,4'-DDE	4.46	6.13	93232334	1047.3E6	79.898	79.758
14) MA	Dieldrin	4.84	6.39	102.6E6	1098.7E6	74.072	76.517
15) MA	Endrin	5.15	6.90	89741601	951.9E6	78.726	86.442
16) A	4,4'-DDD	5.28	7.08	78921392	884.4E6	74.704	77.649
17) B	Endosulfan II	5.47	7.25	95887298	957.6E6	72.589	79.720
18) MA	4,4'-DDT	5.69	7.62	80415302	761.9E6	79.179	74.044
19) B	Endrin Aldehyde	6.10	7.82	79265103	755.8E6	74.000	76.812
20) B	Endosulfan Sulfa	6.78	8.30	89726377	839.6E6	74.931	85.008
21) A	Methoxychlor	6.47	8.87	50453059	389.2E6	70.542m	72.341
22)	Mirex	6.58	9.19	89403316	622.4E6	63.925	75.960
23) B	Endrin Ketone	7.20	9.26	104.3E6	921.8E6	87.841	90.306

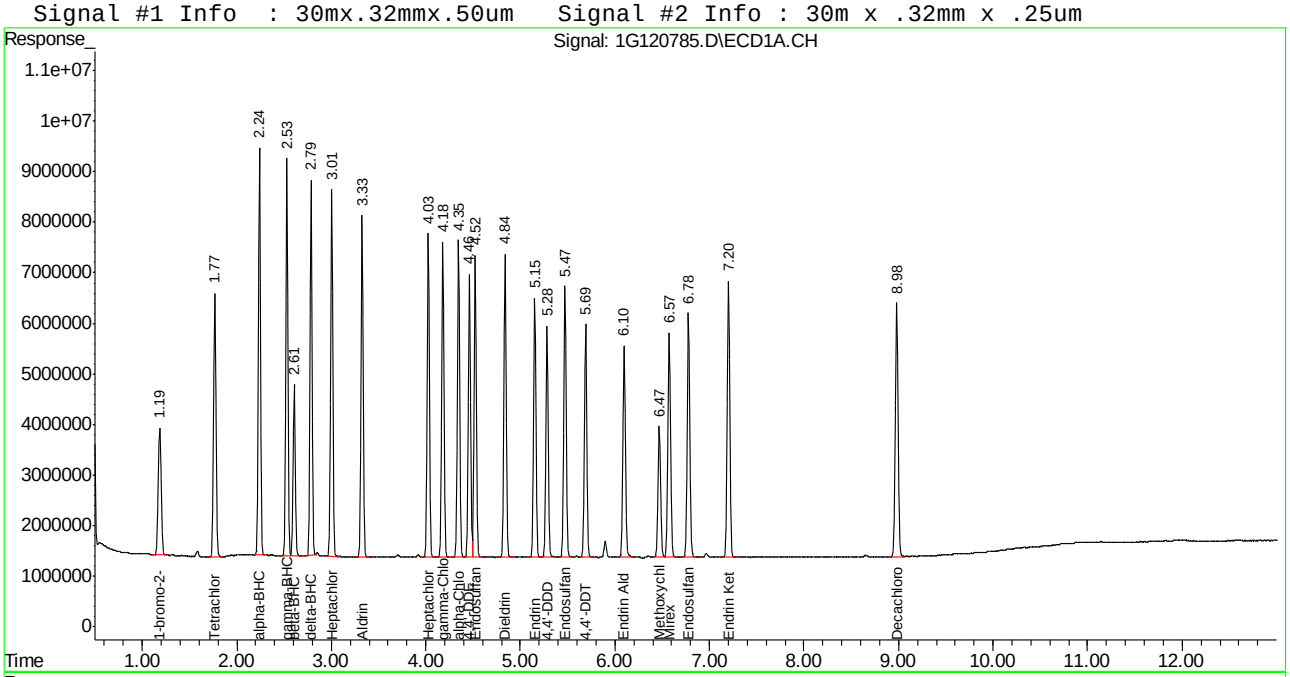
(f)=RT Delta > 1/2 Window (m)=manual int.

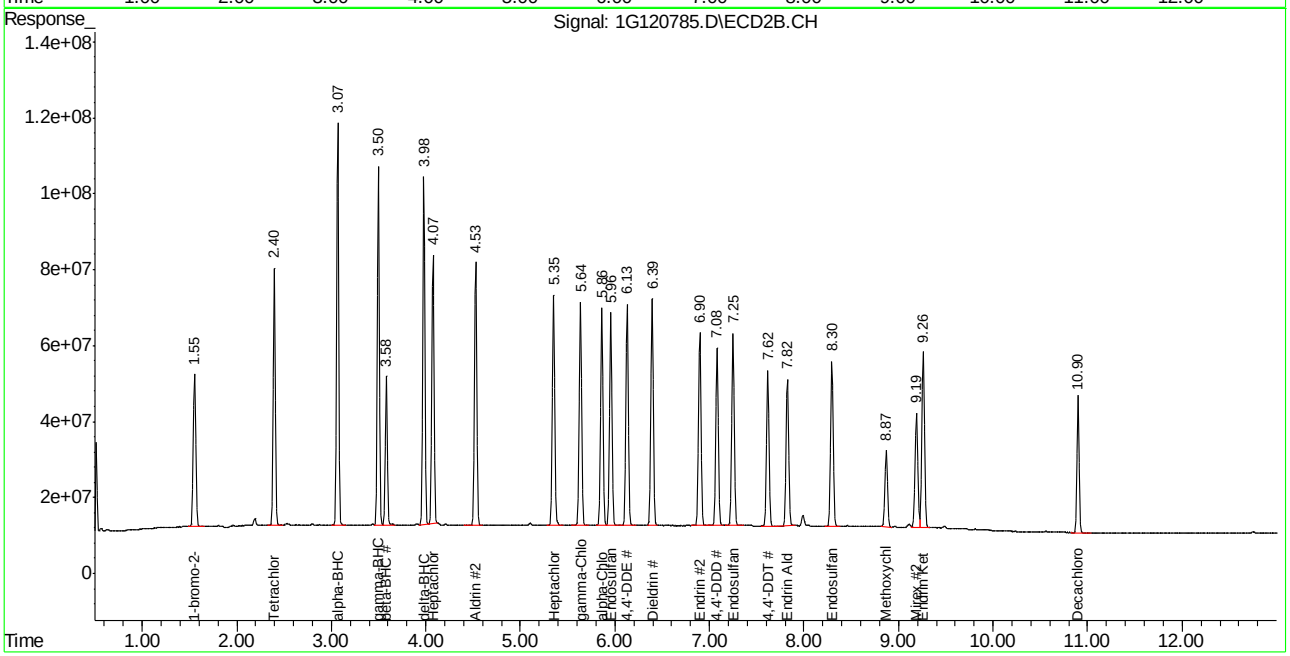
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD2B.CH
Acq On : 14 Mar 2016 12:53 pm Operator: dharas
Sample : ic3933-75 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

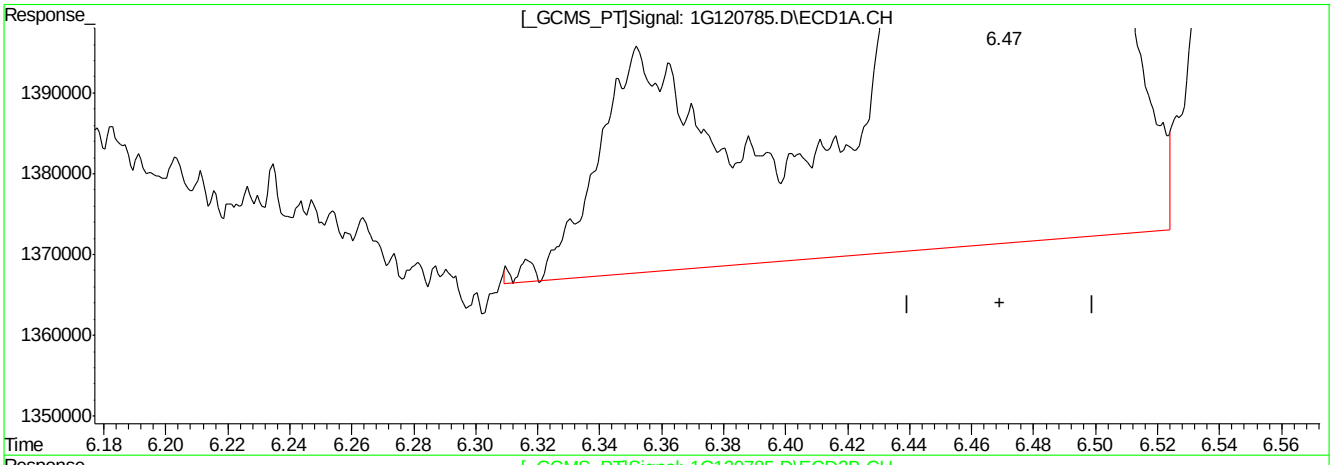
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120785.D	**Analyst approved:**	03/14/16 19:22 Joseph Ravino
Injection Time:	03/14/16 12:53	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

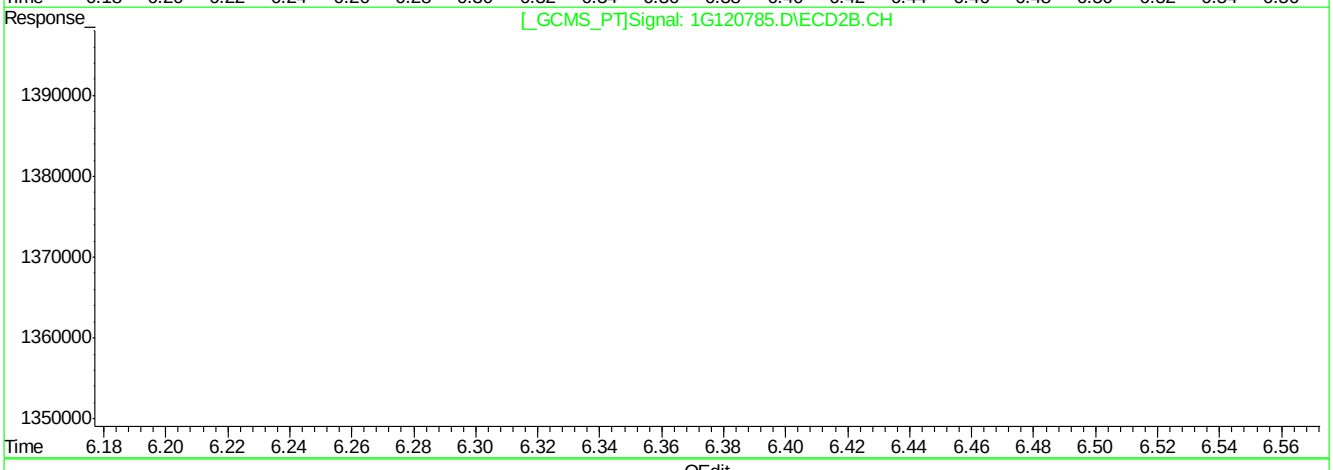
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	6.47	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD2B.CH
Acq On    : 14 Mar 2016  12:53 pm                    Operator: dharas
Sample    : ic3933-75                                Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:05 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 71.562PPB

response 51182308

(21) Methoxychlor #2 (A)

8.87min 72.341PPB

response 389188686

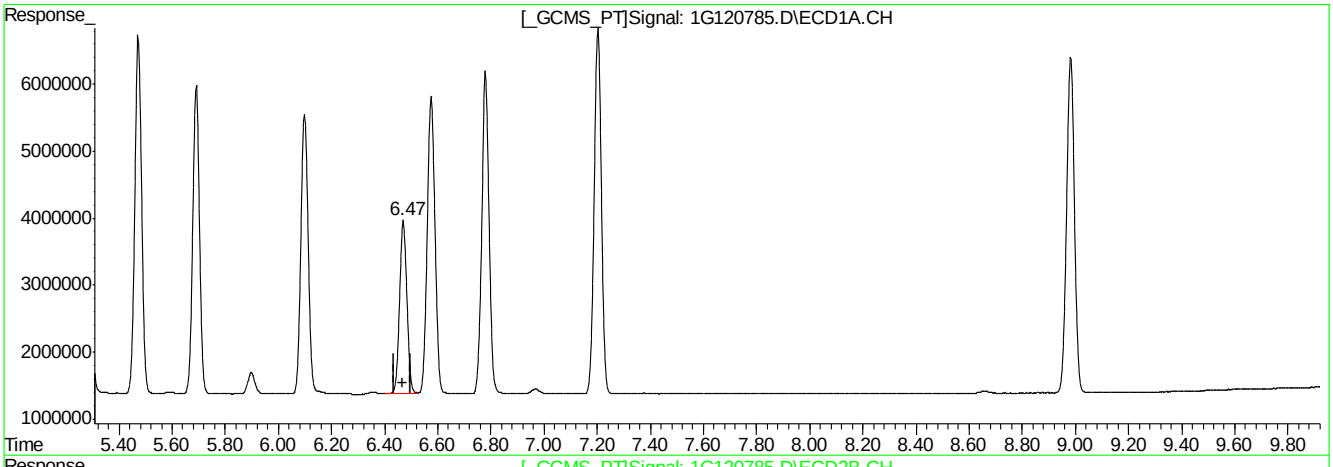
(+) = Expected Retention Time

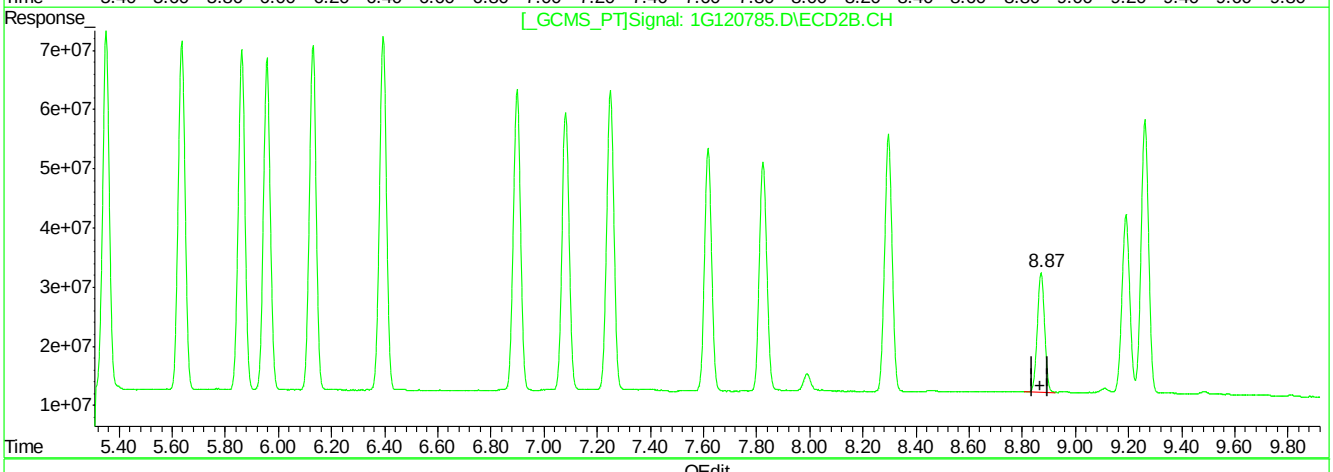
1G120785.D 1PST3933.M Mon Mar 14 19:06:02 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120785.D\ECD2B.CH
Acq On : 14 Mar 2016 12:53 pm Operator: dharas
Sample : ic3933-75 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:05 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.47min 70.542PPB m

response 50453059

(21) Methoxychlor #2 (A)

8.87min 72.341PPB

response 389188686

(+) = Expected Retention Time

1G120785.D 1PST3933.M Mon Mar 14 19:06:10 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD2B.CH
Acq On : 3-14-16 01:10:32 PM Operator: dharas
Sample : ic3933-100 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	57252905	788.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	127.3E6	1402.9E6	100.186	111.577
	Spiked Amount 40.000	Range 30 - 150		Recovery	=	250.47%#	278.94%#
24) SA	Decachlorobiphen	8.98	10.90	136.7E6	766.2E6	95.313	97.643
	Spiked Amount 40.000			Recovery	=	238.28%	244.11%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	174.4E6	2081.7E6	116.585	99.249
4) MA	gamma-BHC	2.53	3.50	161.0E6	1851.9E6	110.318	104.266
5) MA	Heptachlor	3.01	4.08	158.1E6	1533.6E6	96.409	97.567
6) B	beta-BHC	2.61	3.58	72696639	769.8E6	92.159	102.564
7) B	delta-BHC	2.79	3.98	154.8E6	1858.3E6	116.721	115.117
8) MB	Aldrin	3.33	4.53	148.8E6	1571.6E6	100.738	98.864
9) B	Heptachlor Epoxi	4.03	5.35	140.7E6	1410.4E6	92.618	102.982
10) B	gamma-Chlordane	4.18	5.64	141.9E6	1407.4E6	92.910	101.243
11) B	alpha-Chlordane	4.35	5.86	141.1E6	1346.4E6	93.743	95.526
12) A	Endosulfan I	4.52	5.96	134.2E6	1315.2E6	95.409	96.558
13) B	4,4'-DDE	4.46	6.13	129.4E6	1389.3E6	108.621	103.746
14) MA	Dieldrin	4.84	6.39	140.7E6	1452.6E6	99.466	99.197
15) MA	Endrin	5.15	6.90	120.5E6	1234.3E6	103.567	109.914
16) A	4,4'-DDD	5.28	7.08	108.7E6	1173.8E6	100.784	101.055
17) B	Endosulfan II	5.47	7.25	129.5E6	1256.2E6	96.063	102.541
18) MA	4,4'-DDT	5.69	7.62	111.0E6	1028.3E6	107.076	98.000
19) B	Endrin Aldehyde	6.10	7.82	107.6E6	1007.4E6	98.458	100.385
20) B	Endosulfan Sulfa	6.78	8.30	120.7E6	1109.5E6	98.776	110.150
21) A	Methoxychlor	6.47	8.87	66953467	510.1E6	91.722m	92.969
22)	Mirex	6.58	9.19	117.7E6	822.5E6	82.457	98.433
23) B	Endrin Ketone	7.20	9.26	141.7E6	1231.6E6	116.957	118.303

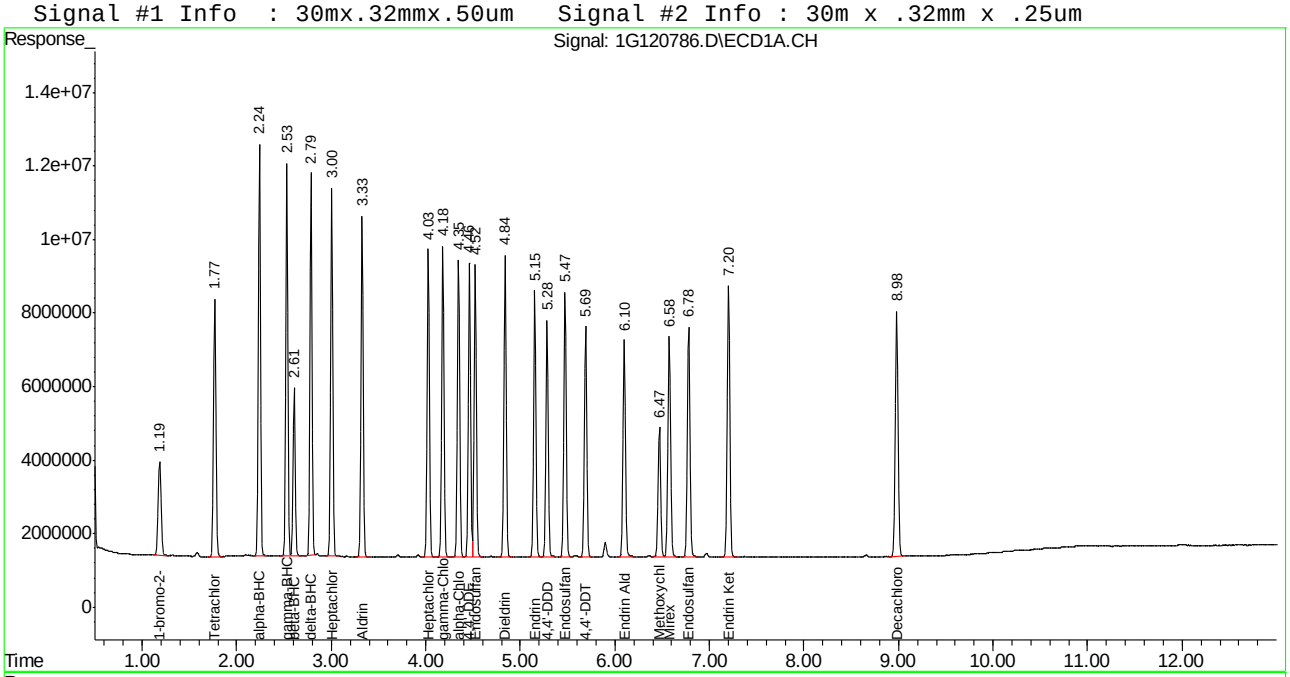
(f)=RT Delta > 1/2 Window (m)=manual int.

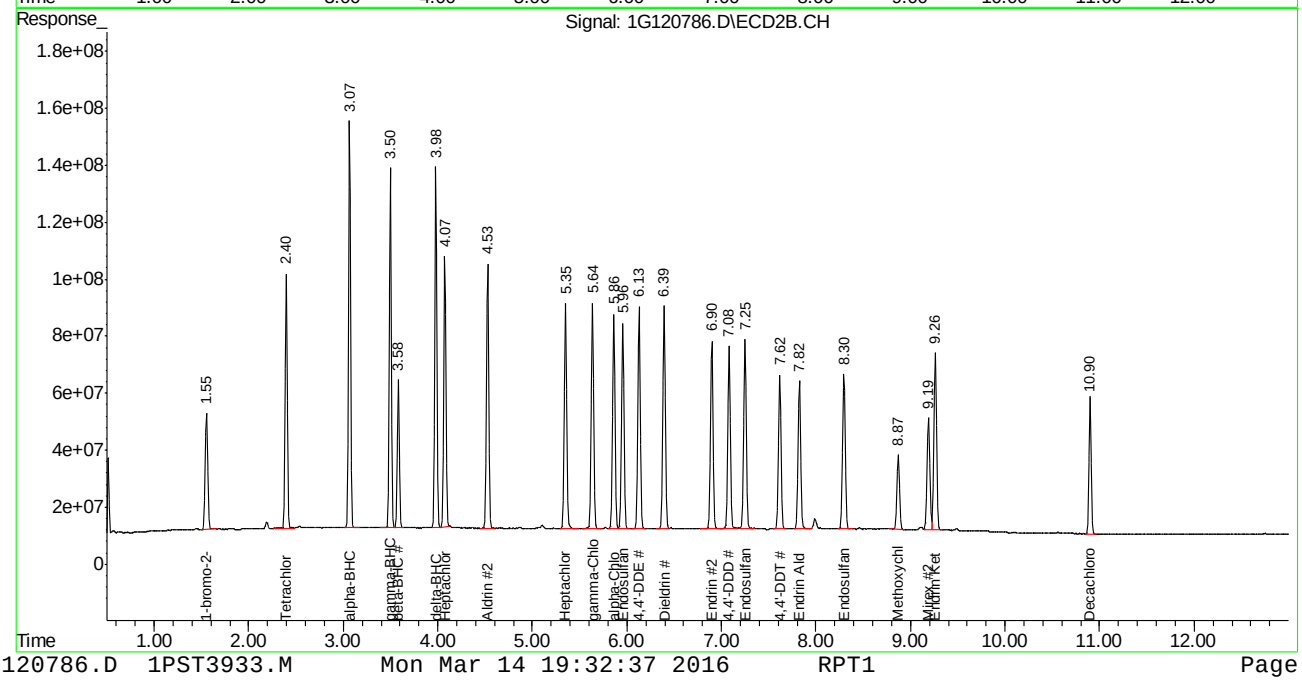
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD2B.CH
Acq On : 3-14-16 01:10:32 PM Operator: dharas
Sample : ic3933-100 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:29 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC16312T

Manual Integration Approval Summary

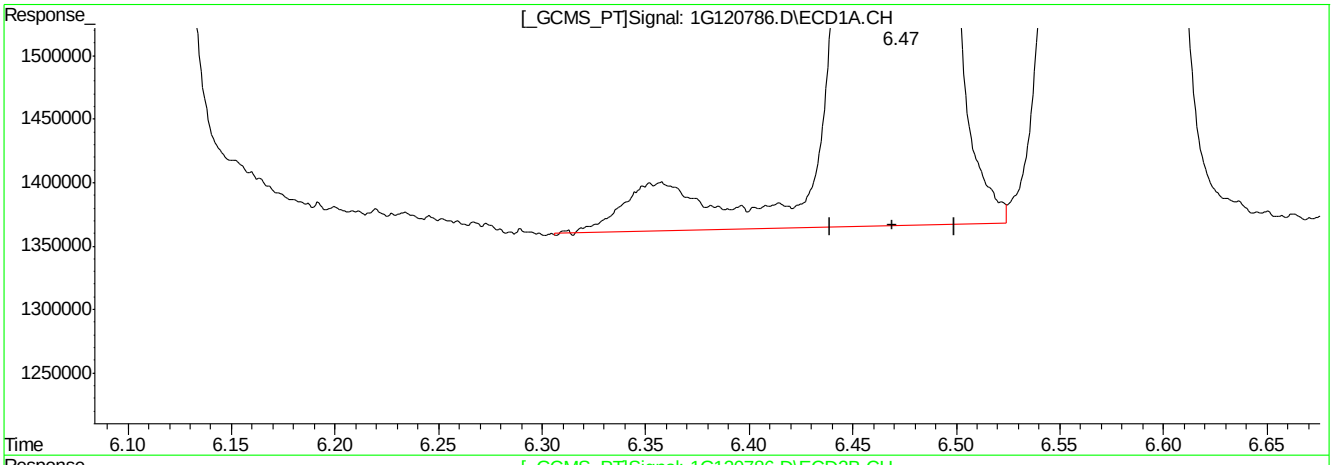
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120786.D	**Analyst approved:**	03/14/16 19:22 Joseph Ravino
Injection Time:	03/14/16 13:10	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

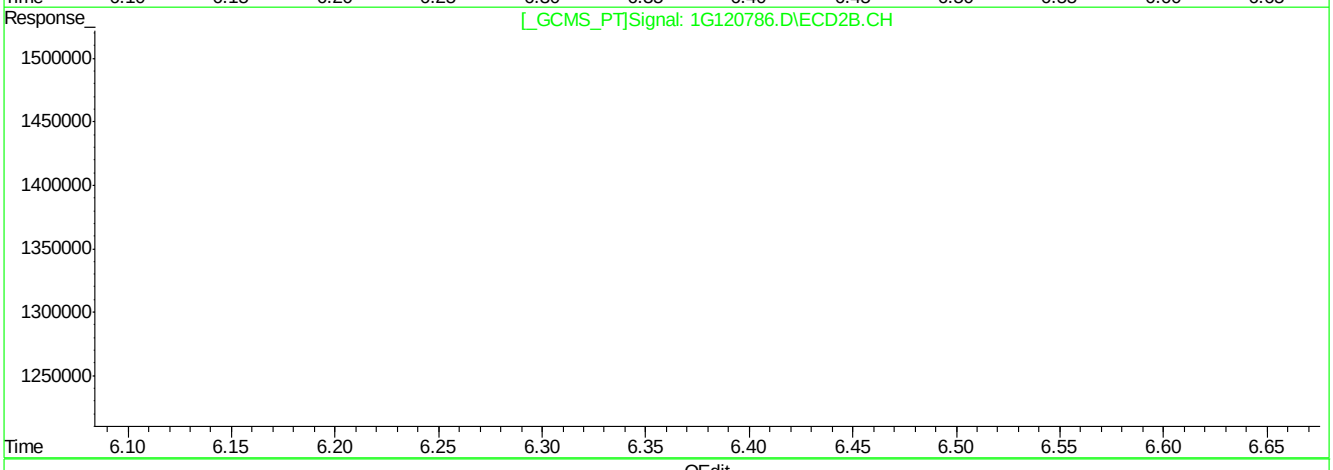
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	6.47	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD2B.CH
Acq On    : 3-14-16 01:10:32 PM                      Operator: dharas
Sample    : ic3933-100                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:06 2016  Quant Results File: 1PST3933.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 93.145PPB

response 67992209

(21) Methoxychlor #2 (A)

8.87min 92.969PPB

response 510092562

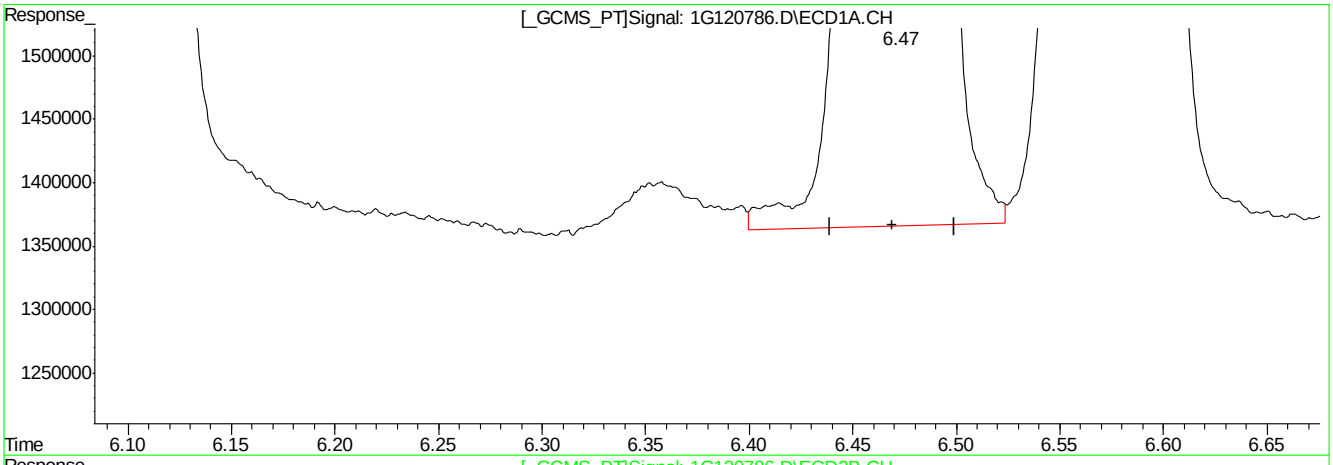
(+) = Expected Retention Time

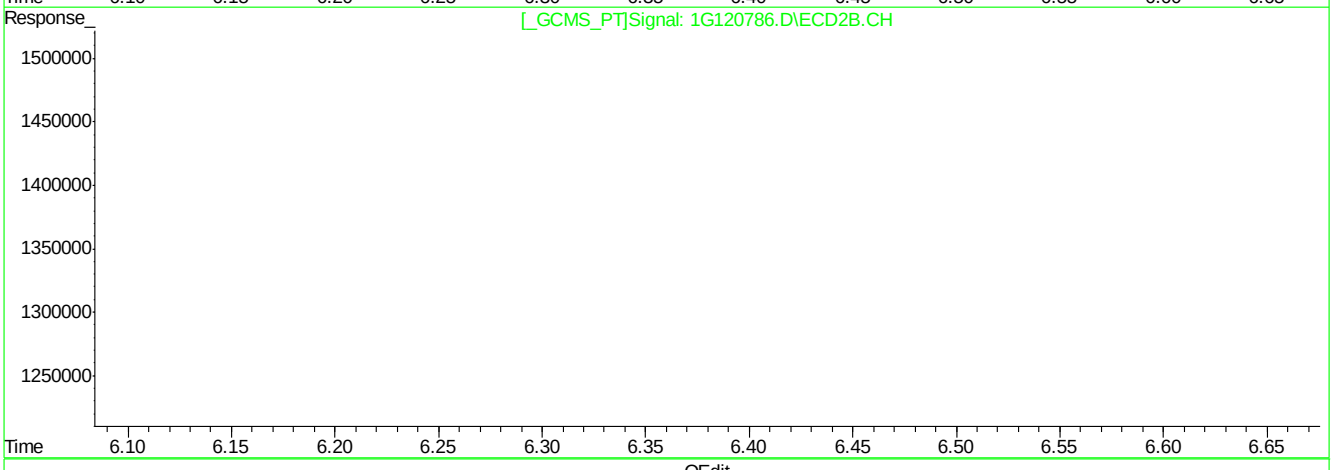
1G120786.D 1PST3933.M Mon Mar 14 19:06:53 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120786.D\ECD2B.CH
Acq On    : 3-14-16 01:10:32 PM                      Operator: dharas
Sample    : ic3933-100                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:06 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:01:04 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.47min 91.722PPB m

response 66953467

(21) Methoxychlor #2 (A)

8.87min 92.969PPB

response 510092562

(+) = Expected Retention Time

1G120786.D 1PST3933.M Mon Mar 14 19:07:00 2016 RPT1

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD2B.CH
Acq On : 3-14-16 01:27:59 PM Operator: dharas
Sample : ic3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:30 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:19:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
31) I	1-bromo-2-nitrob	1.19	1.55	59209704	817.8E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane {A}	2.92	3.88	21579377	270.2E6	495.364	499.397
33)	Chlordane {B}	3.47	4.72	27668487	268.1E6	454.456	504.521
34)	Chlordane {C}	4.18	5.64	90901488	900.6E6	490.605	482.225
35)	Chlordane {D}	4.34	5.86	144.1E6	1477.1E6	489.595	484.531m
36)	Chlordane {E}	5.37	7.33	21146448	248.1E6	502.159	491.306

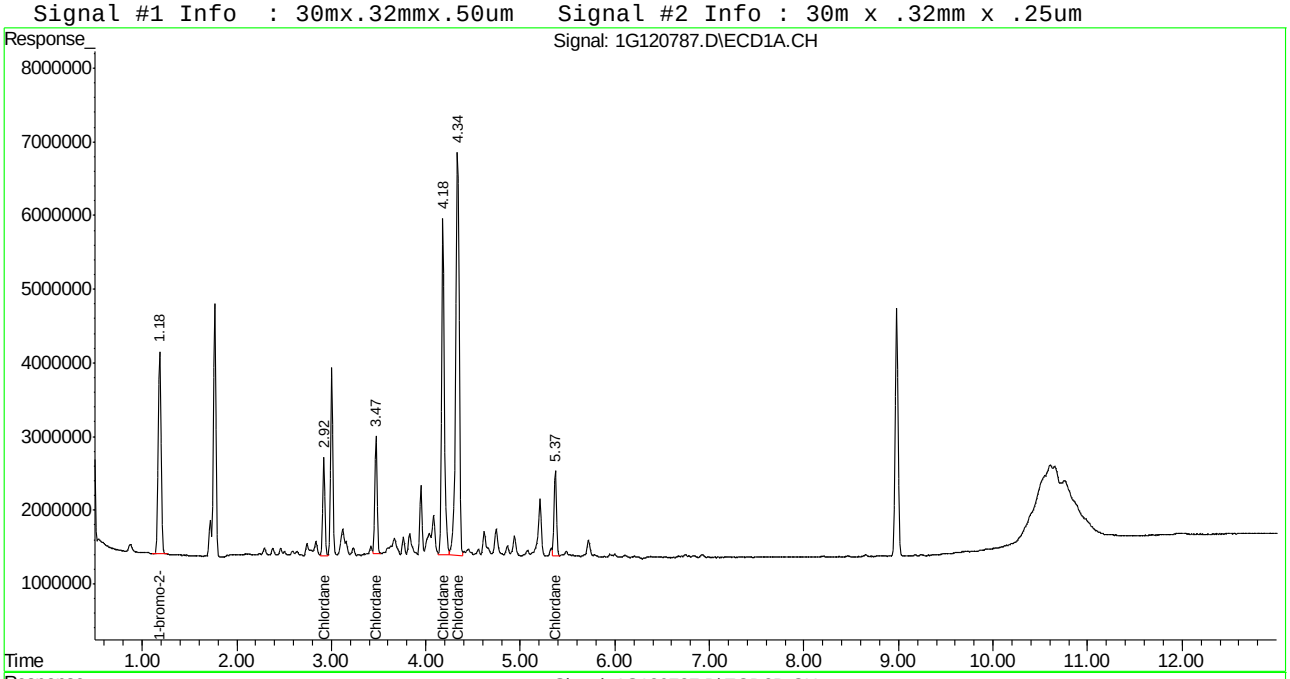
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120787.D 1PST3933.M Mon Mar 14 19:30:59 2016 RPT1 Page 1

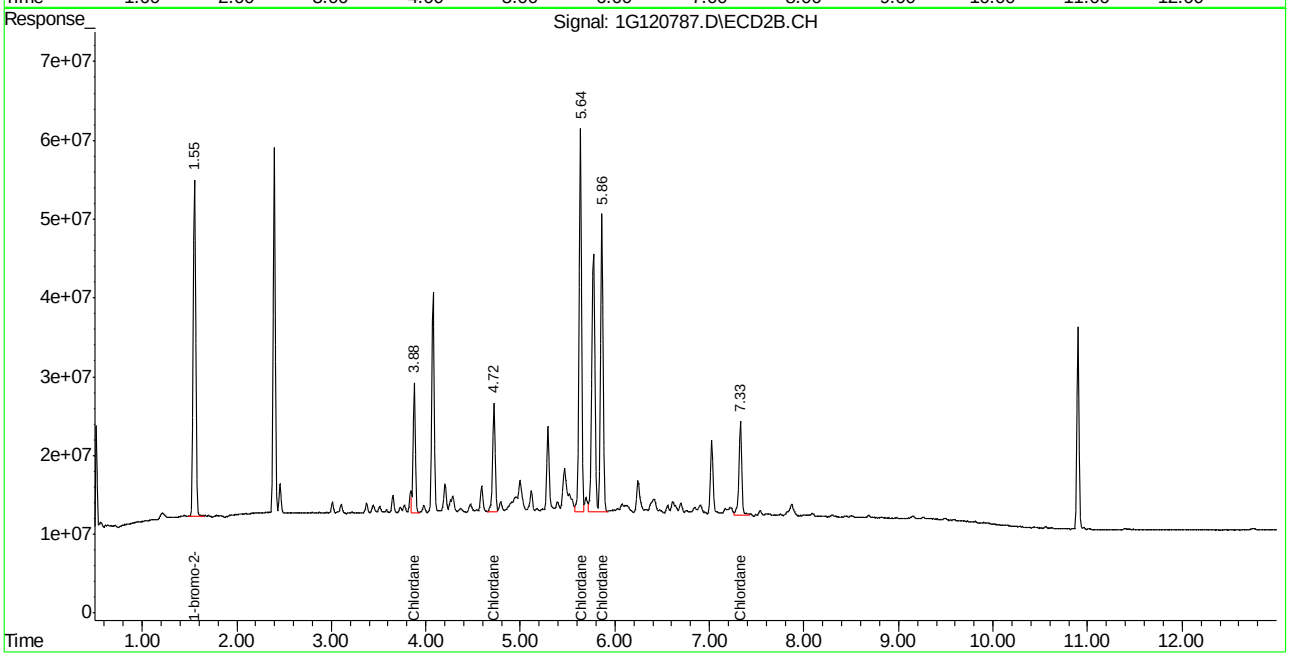
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD2B.CH
Acq On : 3-14-16 01:27:59 PM Operator: dharas
Sample : ic3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:30 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

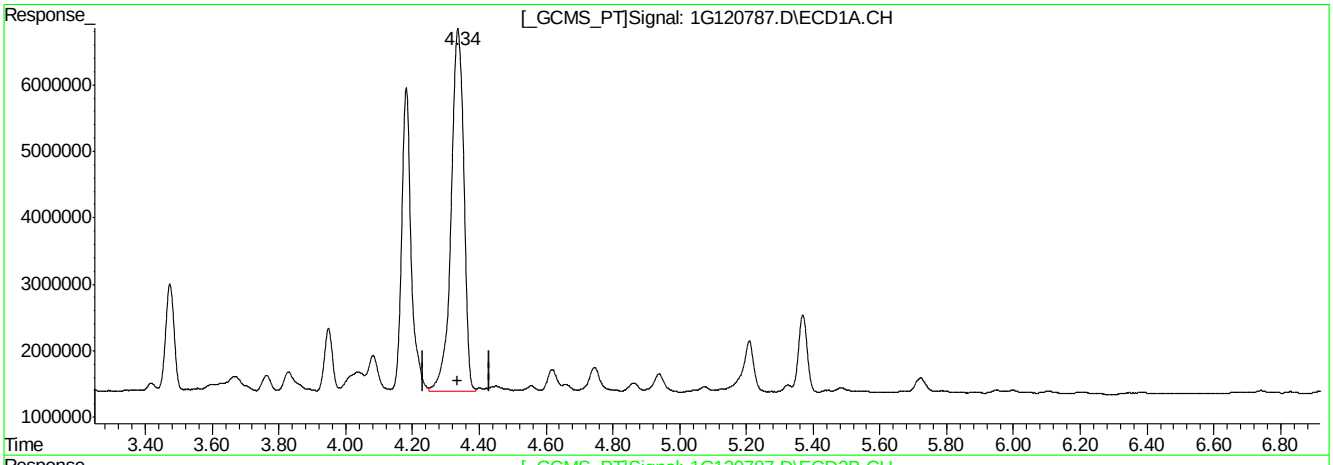
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120787.D	**Analyst approved:**	03/14/16 19:28 Joseph Ravino
Injection Time:	03/14/16 13:27	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

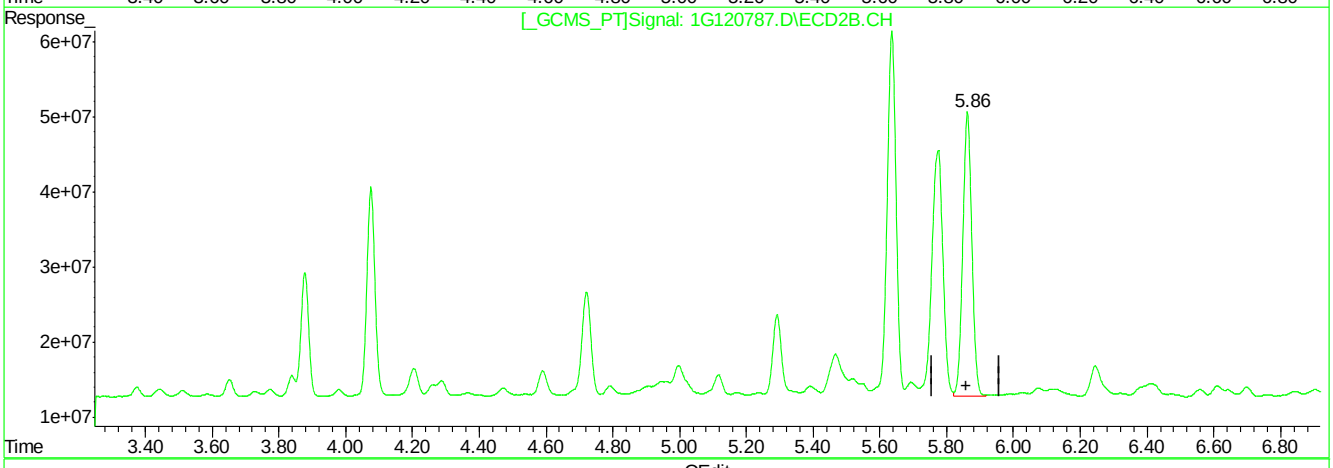
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.86	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD2B.CH
Acq On    : 3-14-16 01:27:59 PM                      Operator: dharas
Sample    : ic3933-500                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:23 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.34min 489.595PPB

response 144129224

(35) Chlordane {D} #2

5.86min 232.246PPB

response 707997940

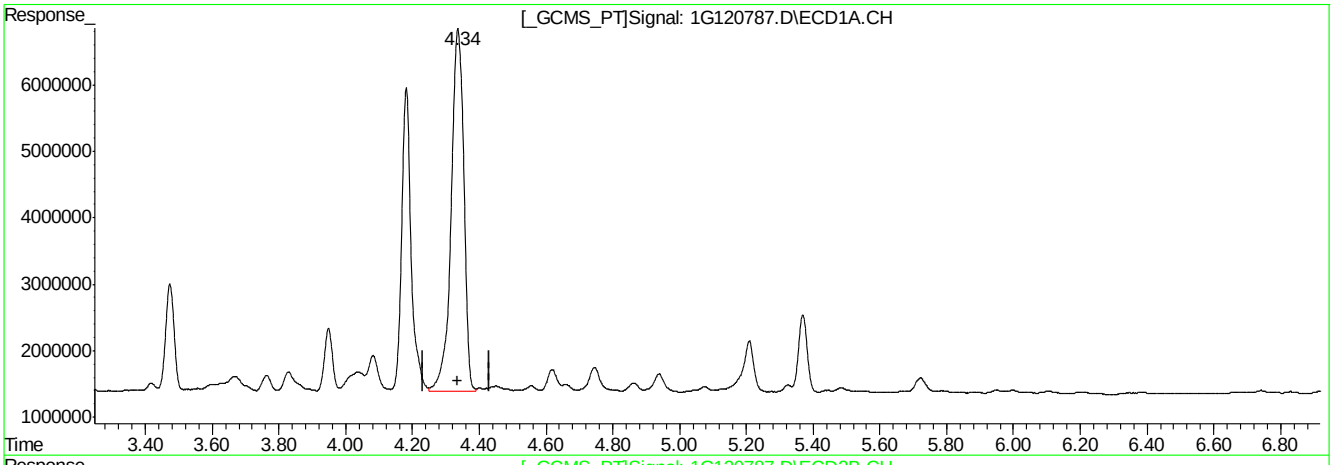
(+) = Expected Retention Time

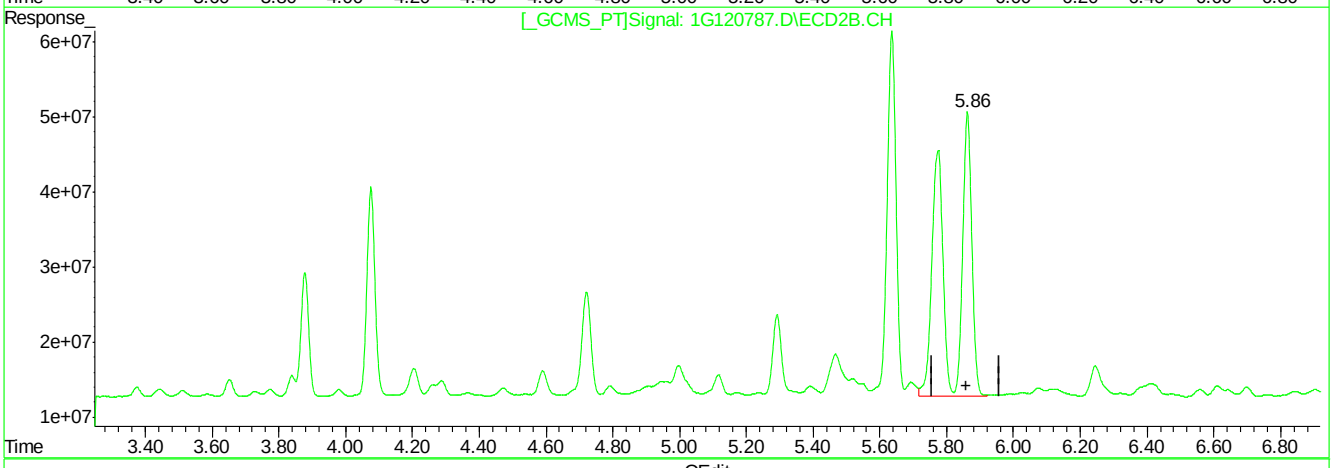
1G120787.D 1PST3933.M Mon Mar 14 19:23:57 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120787.D\ECD2B.CH
Acq On    : 3-14-16 01:27:59 PM                      Operator: dharas
Sample    : ic3933-500                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:23 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.34min 489.595PPB

response 144129224

(35) Chlordane {D} #2

5.86min 484.531PPB m

response 1477085910

(+) = Expected Retention Time

1G120787.D 1PST3933.M Mon Mar 14 19:24:23 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD2B.CH
Acq On : 3-14-16 01:45:24 PM Operator: dharas
Sample : ic3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:30 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:19:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
25) I	1-bromo-2-nitrob	1.19	1.55	60443888	832.5E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	4.85	6.36	10930875	174.5E6	469.176	1359.694m
27) L8	Toxaphene{B}	5.46	7.22	28563629	202.7E6	605.155	622.813
28) L8	Toxaphene{C}	5.63	7.38	21307143	338.8E6	497.894	567.649
29) L8	Toxaphene{D}	5.97	7.82	19650037	203.9E6	464.657	544.616
30) L8	Toxaphene{E}	6.60	8.73	19136325	149.0E6	479.912	439.391

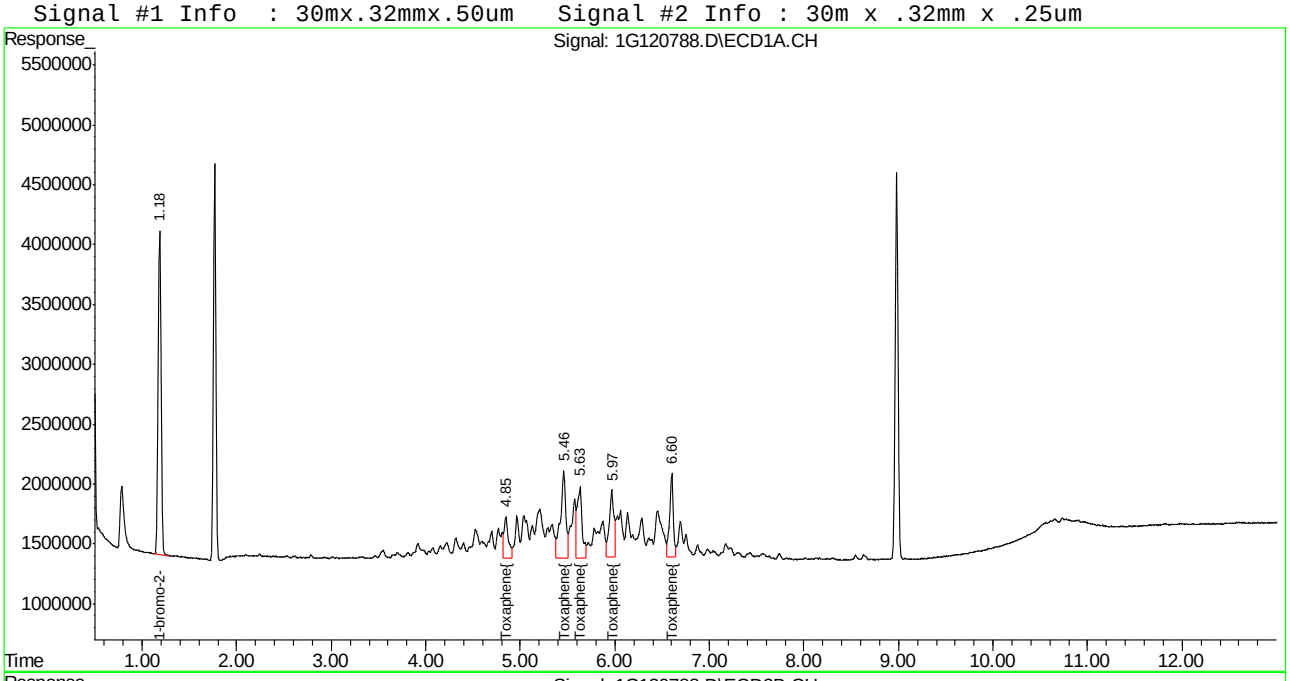
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120788.D 1PST3933.M Mon Mar 14 19:31:03 2016 RPT1 Page 1

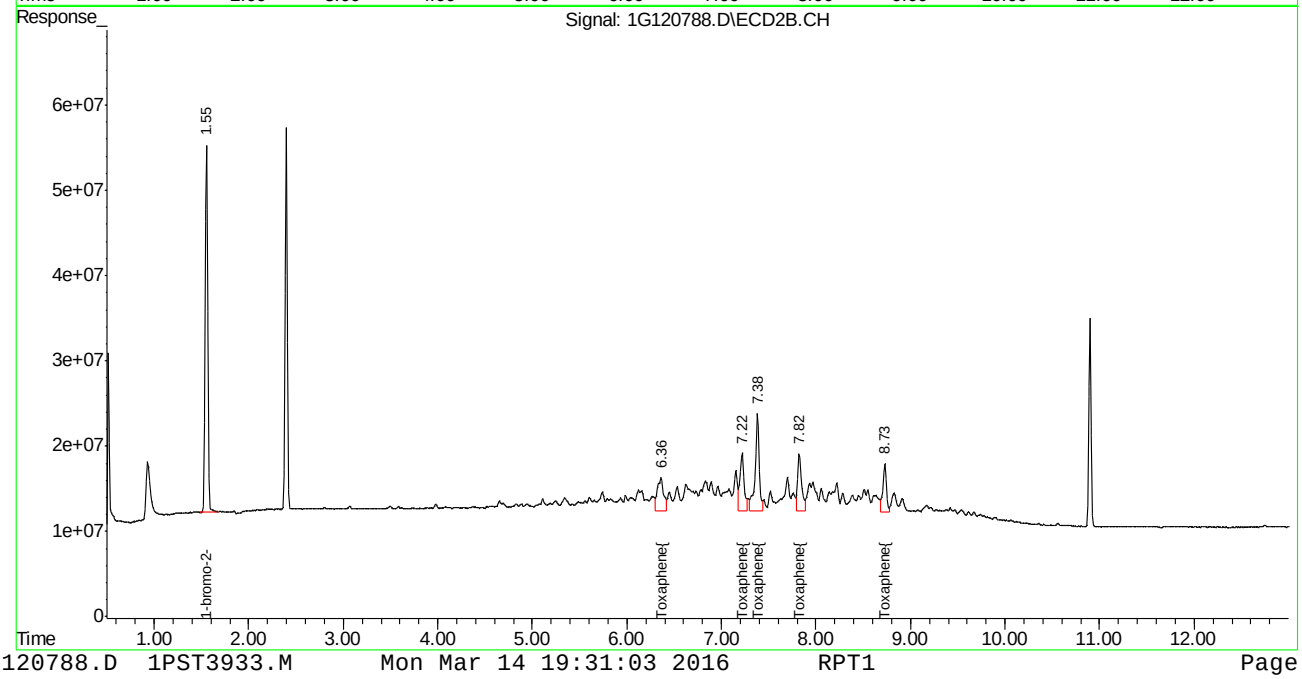
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD2B.CH
Acq On : 3-14-16 01:45:24 PM Operator: dharas
Sample : ic3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:30 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

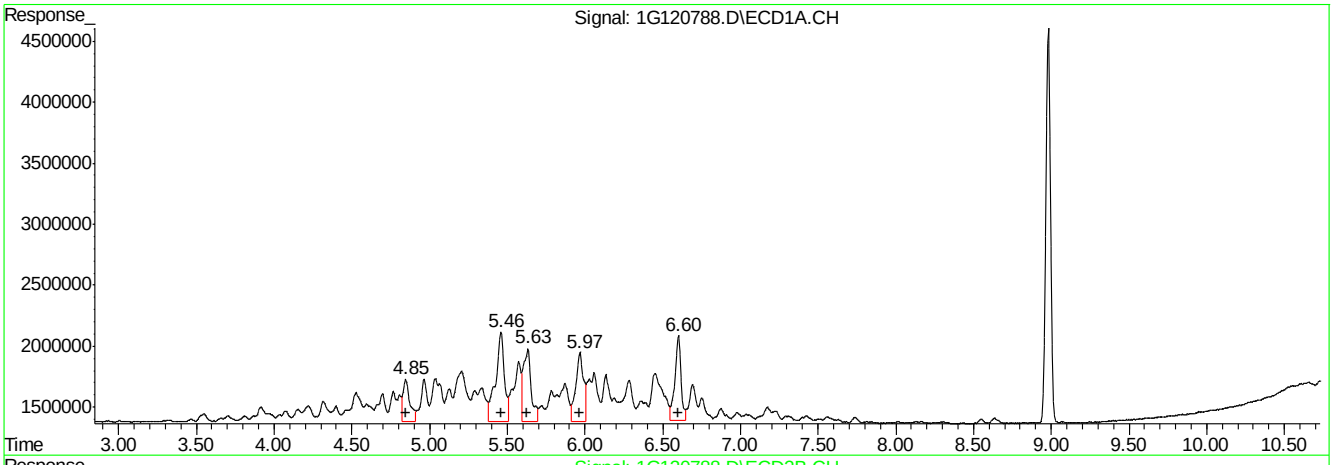
Sample Number:	G1G3933-IC3933	**Method:**	EPA 608
Lab FileID:	1G120788.D	**Analyst approved:**	03/14/16 19:28 Joseph Ravino
Injection Time:	03/14/16 13:45	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

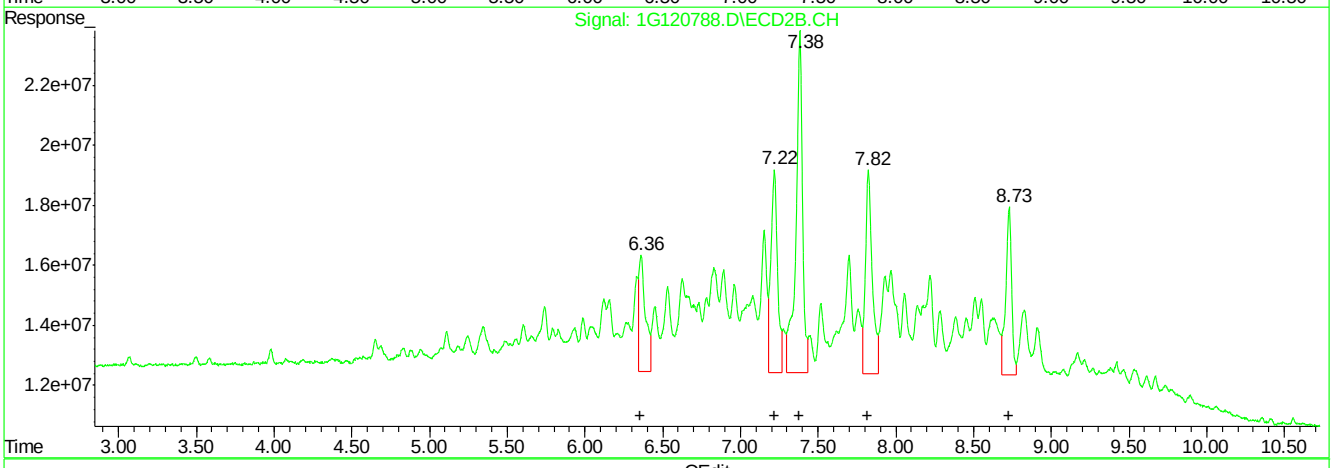
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.36	Split peak
Decachlorobiphenyl	2051-24-3	1	8.98	Poor instrument integration

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD2B.CH
Acq On : 3-14-16 01:45:24 PM Operator: dharas
Sample : ic3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:26 2016 Quant Results File: 1PST3933.RES

Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.85	10930875	469.18
5.46	28563629	605.15
5.63	21307143	497.89
5.97	19650037	464.66
6.60	19136325	479.91

(26) Toxaphene{A} #2 (L8)

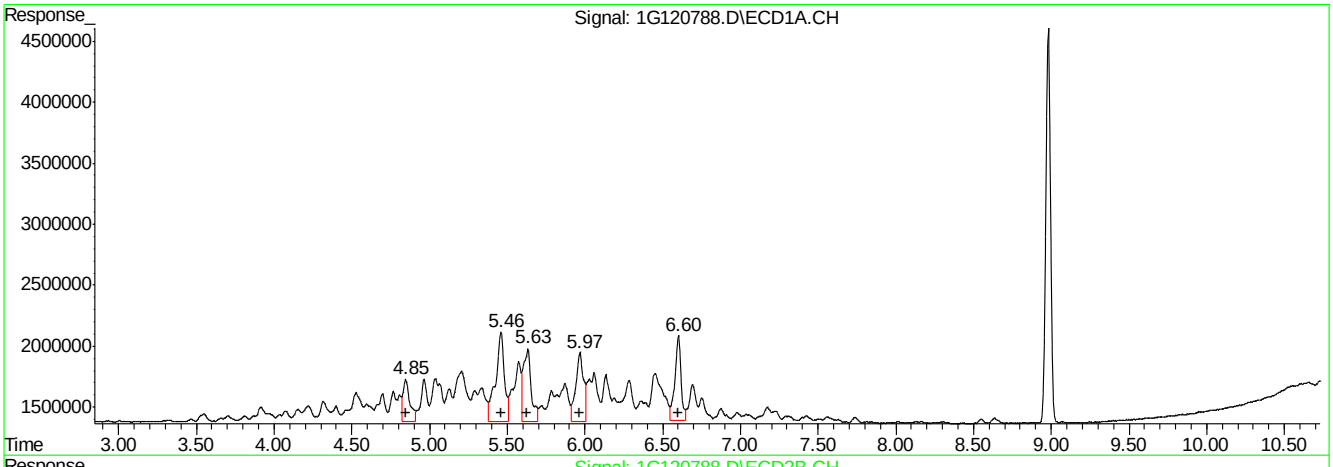
R.T.	Response	Conc
6.36	117159700	912.92
7.22	202691466	622.81
7.38	338841207	567.65
7.82	203900001	544.62
8.73	148996940	439.39

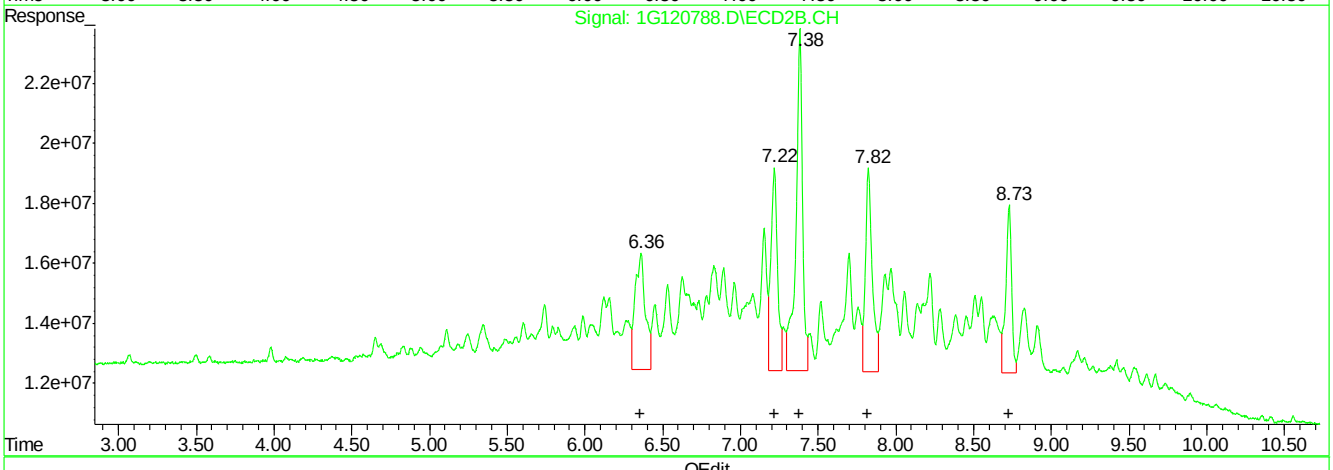
(+) = Expected Retention Time
1G120788.D 1PST3933.M Mon Mar 14 19:26:25 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120788.D\ECD2B.CH
Acq On    : 3-14-16 01:45:24 PM                      Operator: dharas
Sample    : ic3933-500                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:26 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:19:45 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
4.85	10930875	469.18
5.46	28563629	605.15
5.63	21307143	497.89
5.97	19650037	464.66
6.60	19136325	479.91

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.36	174496136	1359.69
7.22	202691466	622.81
7.38	338841207	567.65
7.82	203900001	544.62
8.73	148996940	439.39

(+) = Expected Retention Time

1G120788.D 1PST3933.M Mon Mar 14 19:26:46 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD2B.CH
Acq On : 3-14-16 02:02:58 PM Operator: dharas
Sample : icv3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:38 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	57488469	785.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.18	1.55	57488469	785.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.18	1.55	57488469	785.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	28337564	327.8E6	21.565	21.752
Spiked Amount	40.000 Range	30 - 150	Recovery	=		53.91%	54.38%
24) SA	Decachlorobiphen	8.98	10.90	36275525	209.7E6	22.998	23.994m
Spiked Amount	40.000		Recovery	=		57.50%	59.98%
	Target Compounds						
3) A	alpha-BHC	2.24	3.07	32733177	489.4E6	21.532	21.855
4) MA	gamma-BHC	2.53	3.50	31654571	432.6E6	21.817	21.455
5) MA	Heptachlor	3.00	4.07	33087979	382.9E6	21.117	21.484
6) B	beta-BHC	2.61	3.58	16701851	184.2E6	21.795	21.210
7) B	delta-BHC	2.79	3.98	30660617	451.0E6	22.587	22.367
8) MB	Aldrin	3.33	4.53	30379752	388.9E6	21.721	22.034
9) B	Heptachlor Epoxi	4.03	5.35	31090520	360.5E6	21.722	22.176
10) B	gamma-Chlordane	4.18	5.64	31427008	356.7E6	22.150	22.694
11) B	alpha-Chlordane	4.35	5.86	31331840	341.3E6	21.990	21.789
12) A	Endosulfan I	4.52	5.96	29055966	318.9E6	21.337	21.266
13) B	4,4'-DDE	4.46	6.13	26378116	349.2E6	22.002	22.589
14) MA	Dieldrin	4.84	6.39	29818622	371.9E6	21.974	22.673
15) MA	Endrin	5.15	6.90	26992725	333.7E6	22.031	22.026
16) A	4,4'-DDD	5.28	7.08	22727627	307.7E6	22.128	22.996
17) B	Endosulfan II	5.47	7.25	28770811	322.6E6	21.578	22.136
18) MA	4,4'-DDT	5.69	7.62	22061774	238.2E6	22.485	25.315
19) B	Endrin Aldehyde	6.10	7.82	24889491	274.8E6	22.474	24.871
20) B	Endosulfan Sulfa	6.78	8.30	27402440	283.7E6	21.865	22.830
21) A	Methoxychlor	6.47	8.87	15281683	126.4E6	21.522	25.584
23) B	Endrin Ketone	7.20	9.26	30406903	307.7E6	22.112	23.700

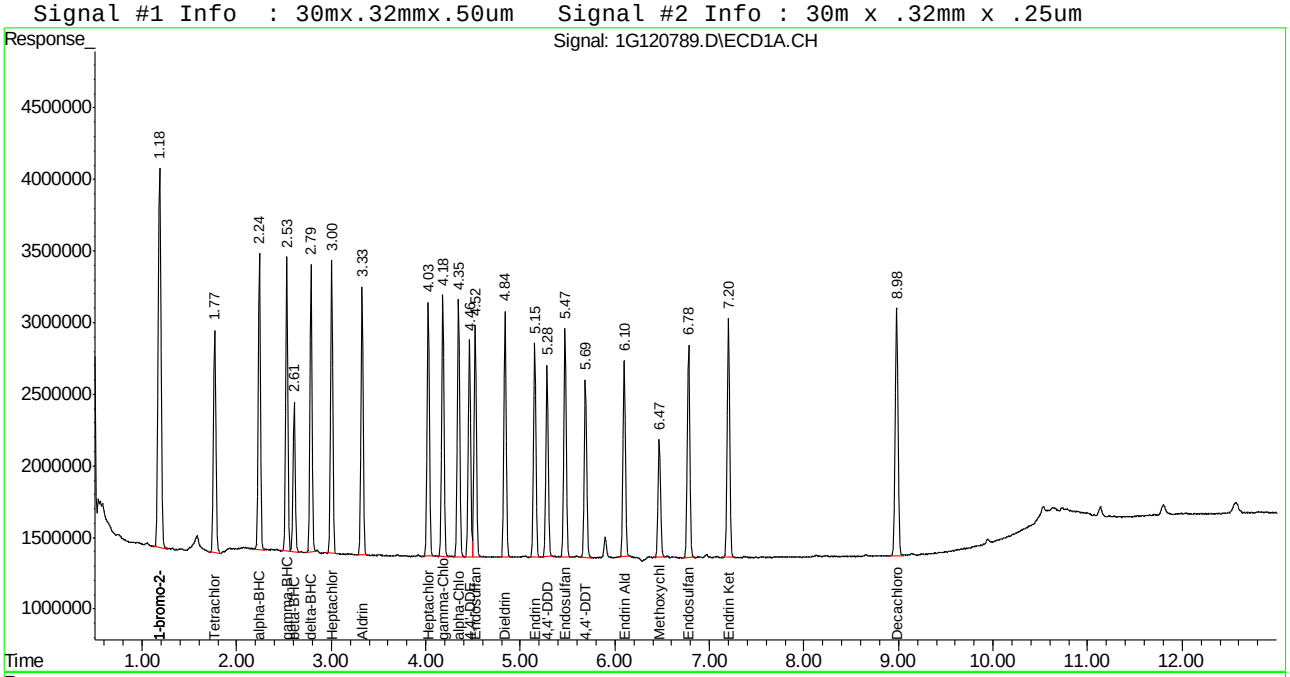
(f)=RT Delta > 1/2 Window (m)=manual int.

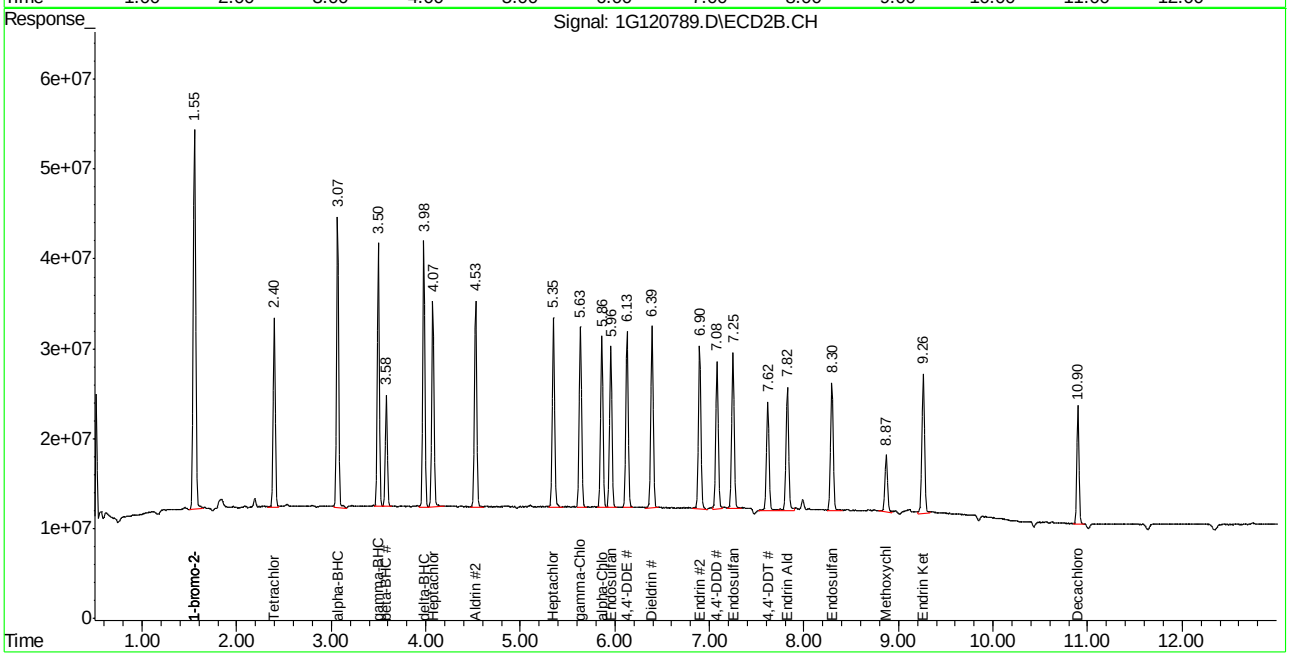
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD2B.CH
Acq On : 3-14-16 02:02:58 PM Operator: dharas
Sample : icv3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:38 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

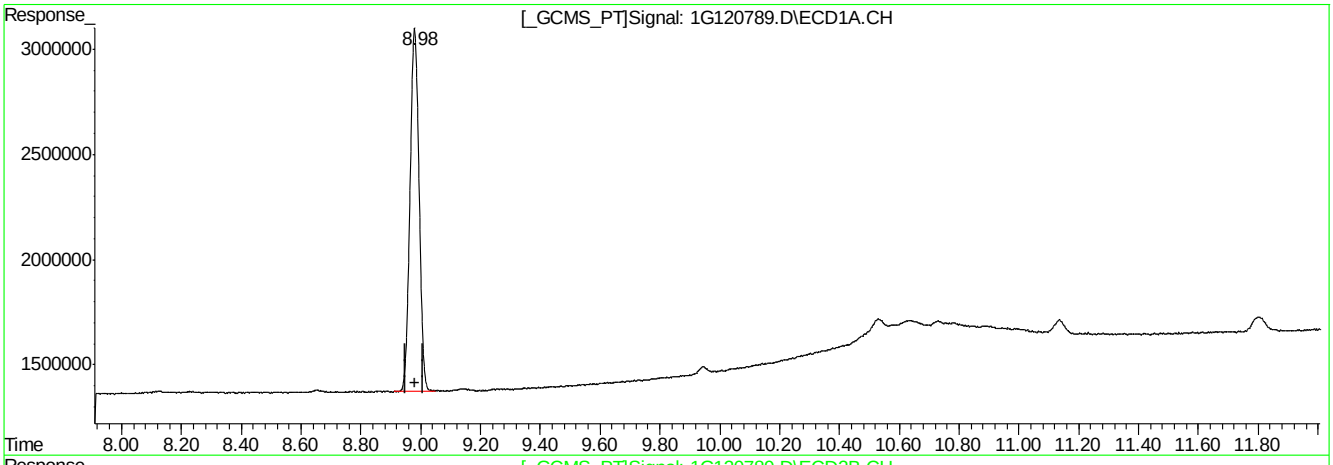
Sample Number:	G1G3933-ICV3933	**Method:**	EPA 608
Lab FileID:	1G120789.D	**Analyst approved:**	03/14/16 19:46 Joseph Ravino
Injection Time:	03/14/16 14:02	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

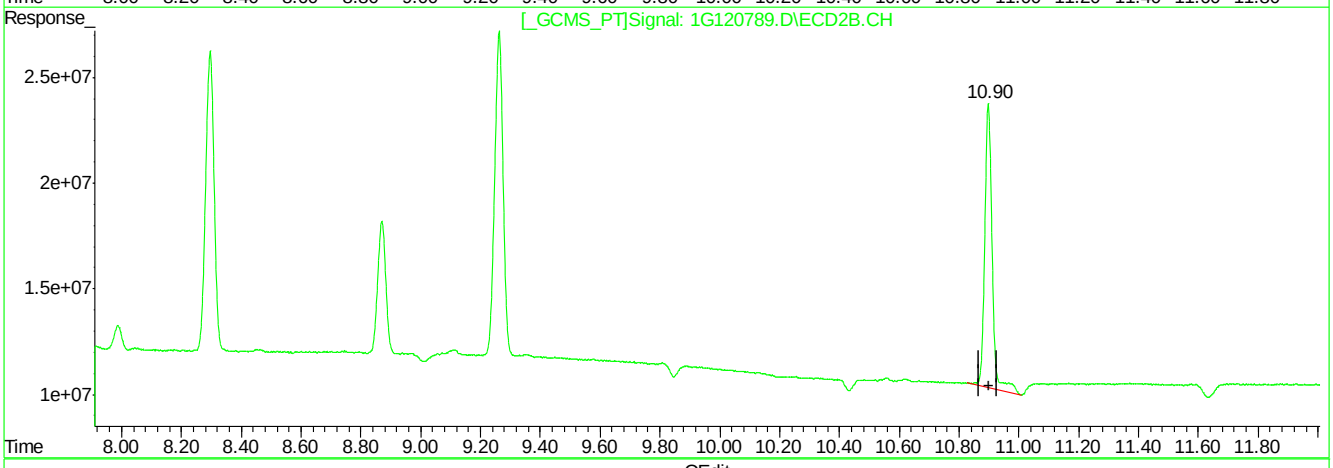
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	2	10.90	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD2B.CH
Acq On    : 3-14-16 02:02:58 PM                      Operator: dharas
Sample    : icv3933-25                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:38 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.98min 22.998PPB

response 36275525

(24) Decachlorobiphenyl #2 (SA)

10.90min 26.659PPB

response 232995072

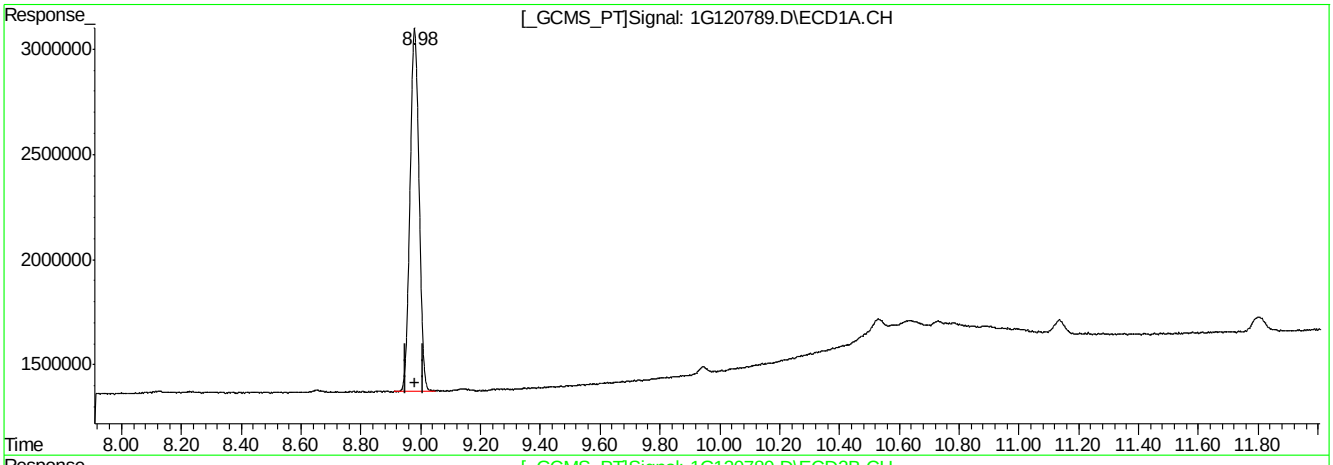
(+) = Expected Retention Time

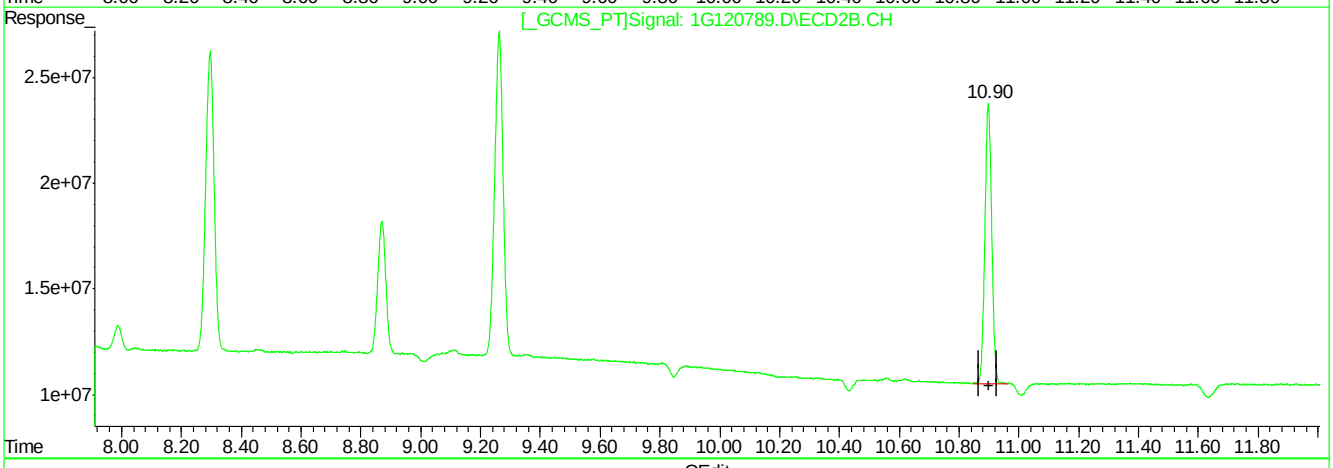
1G120789.D 1PST3933.M Mon Mar 14 19:38:33 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120789.D\ECD2B.CH
Acq On    : 3-14-16 02:02:58 PM                      Operator: dharas
Sample    : icv3933-25                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:38 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.98min 22.998PPB

response 36275525

(24) Decachlorobiphenyl #2 (SA)

10.90min 23.994PPB m

response 209703402

(+) = Expected Retention Time

1G120789.D 1PST3933.M Mon Mar 14 19:38:38 2016 RPT1

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD2B.CH
Acq On : 3-14-16 02:20:25 PM Operator: dharas
Sample : icv3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:37 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	58530656	794.6E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.19	1.55	58530656	794.6E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.19	1.55	58530656	794.6E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	6.58	9.19	34946130	244.6E6	24.691m	26.472m

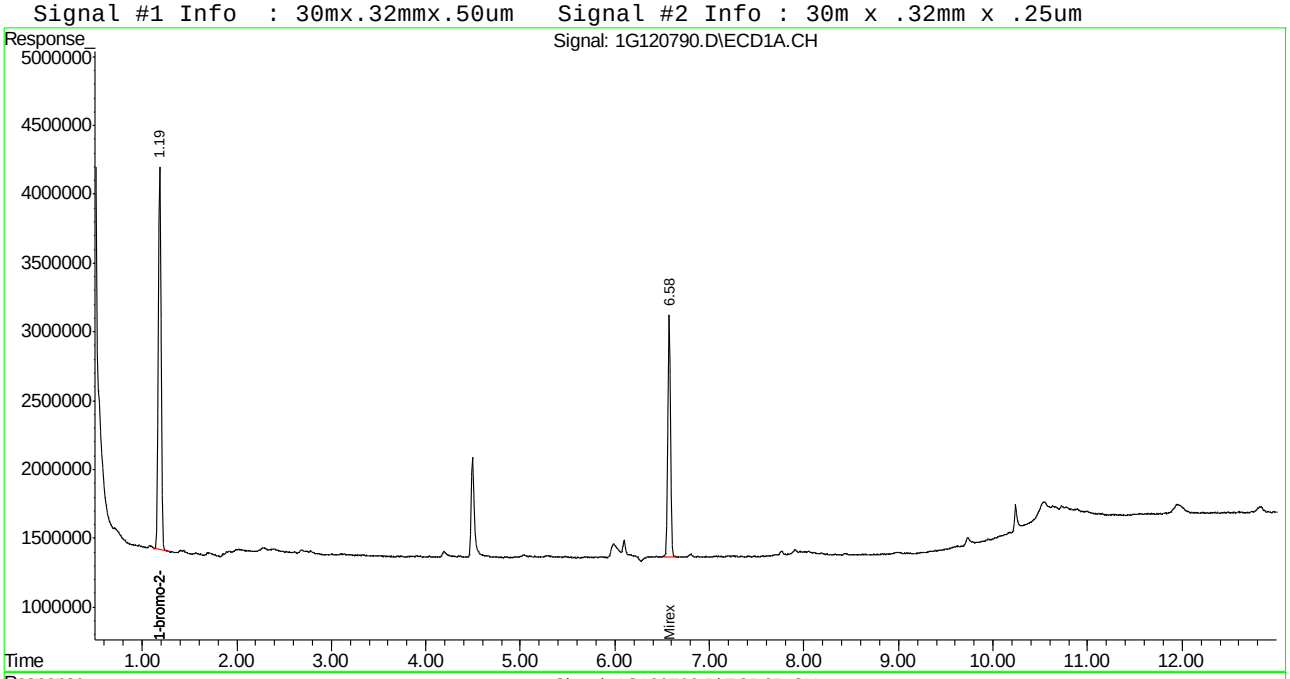
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120790.D 1PST3933.M Mon Mar 14 19:37:33 2016 RPT1

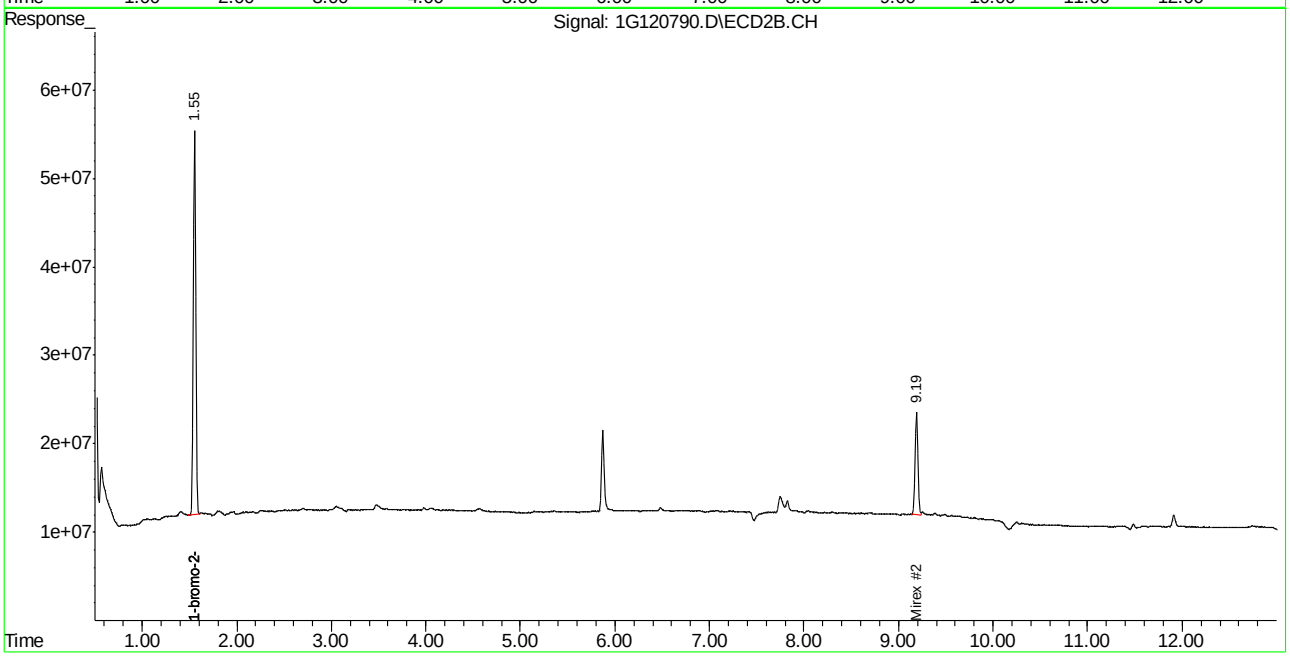
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD2B.CH
Acq On : 3-14-16 02:20:25 PM Operator: dharas
Sample : icv3933-25 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:37 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

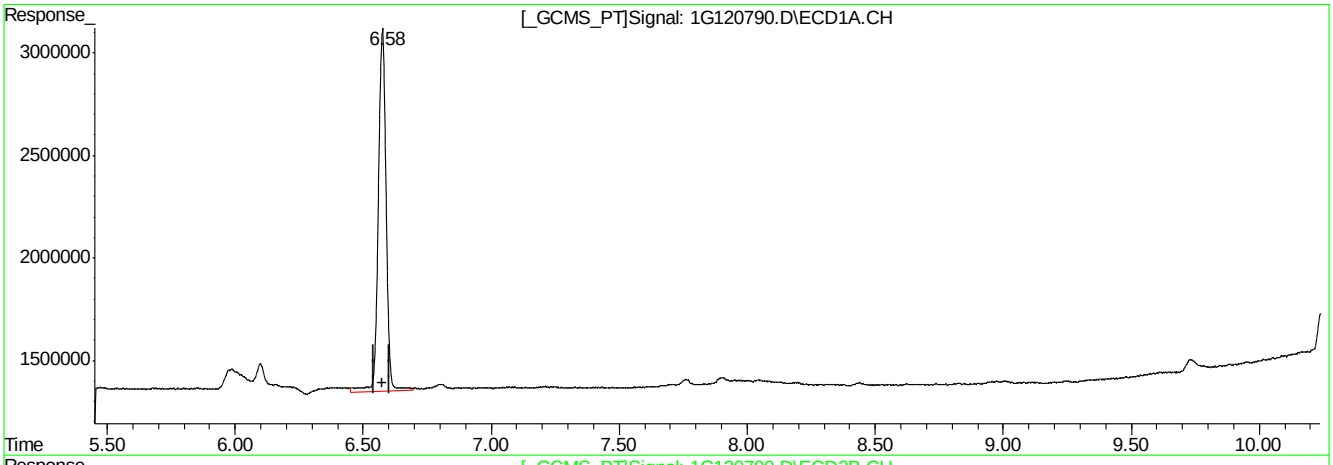
Sample Number:	G1G3933-ICV3933	**Method:**	EPA 608
Lab FileID:	1G120790.D	**Analyst approved:**	03/14/16 19:46 Joseph Ravino
Injection Time:	03/14/16 14:20	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

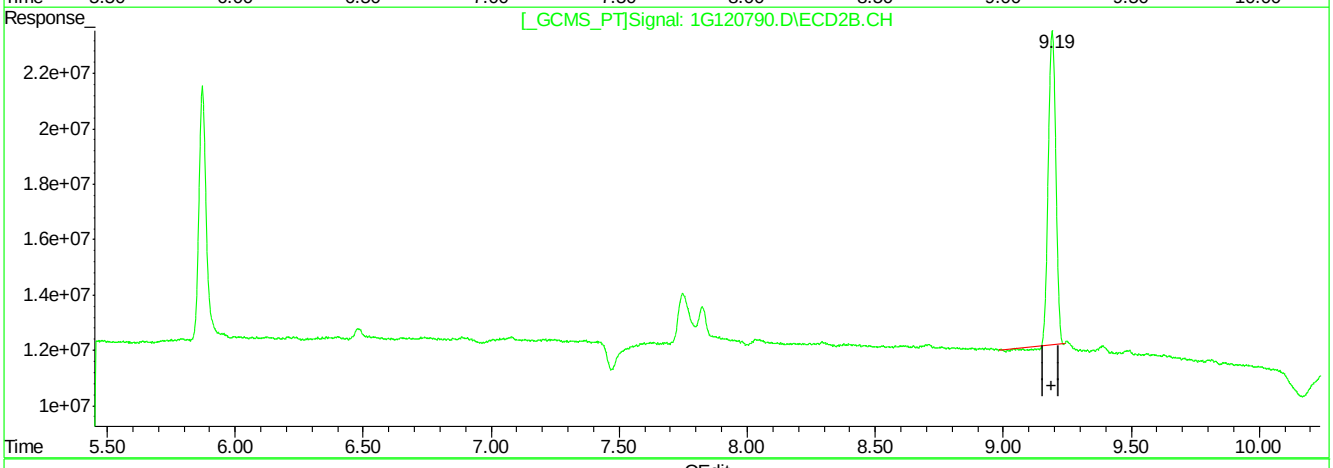
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	1	6.58	Poor instrument integration
Mirex	2385-85-5	2	9.19	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD2B.CH
Acq On    : 3-14-16 02:20:25 PM                      Operator: dharas
Sample    : icv3933-25                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:37 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.58min 26.393PPB

response 37354958

(22) Mirex #2

9.19min 24.592PPB

response 227200792

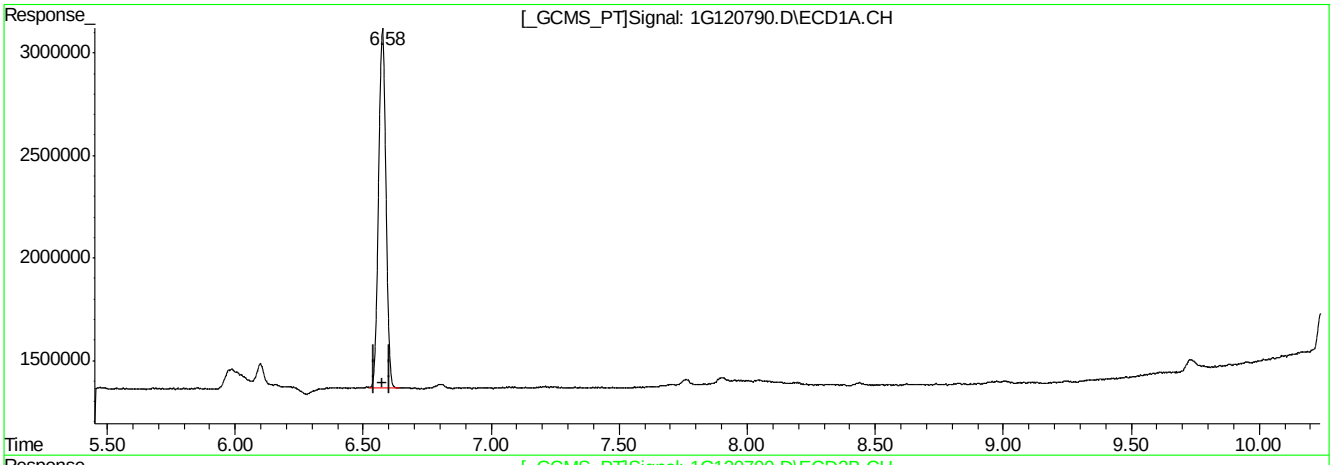
(+) = Expected Retention Time

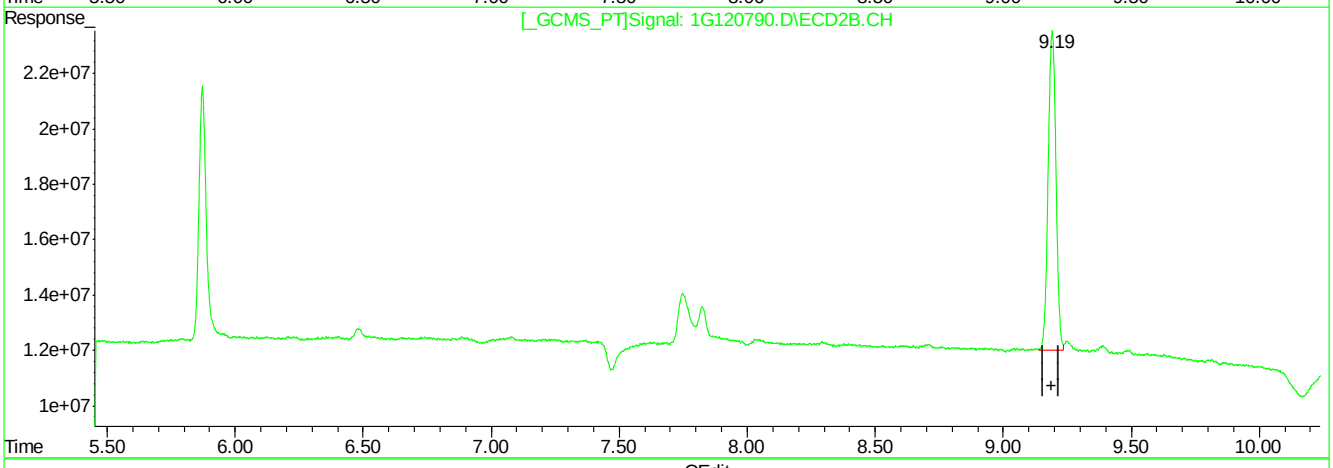
1G120790.D 1PST3933.M Mon Mar 14 19:37:23 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120790.D\ECD2B.CH
Acq On    : 3-14-16 02:20:25 PM                      Operator: dharas
Sample    : icv3933-25                               Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:37 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.58min 24.691PPB m

response 34946130

(22) Mirex #2

9.19min 26.472PPB m

response 244571065

(+) = Expected Retention Time

1G120790.D 1PST3933.M Mon Mar 14 19:37:31 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD2B.CH
Acq On : 3-14-16 02:37:51 PM Operator: dharas
Sample : icv3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:44 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.19	1.55	59370583	860.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.19	1.55	59370583	860.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.19	1.55	59370583	860.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	55567532	633.6E6	40.947	38.371
Spiked Amount	40.000	Range	30 - 150	Recovery	=	102.37%	95.93%
24) SA	Decachlorobiphen	8.98	10.90	68272620	395.1E6	41.911	41.261
Spiked Amount	40.000			Recovery	=	104.78%	103.15%
	Target Compounds						
32)	Chlordane {A}	2.92	3.88	24093004	301.9E6	556.729	531.107
33)	Chlordane {B}	3.47	4.72	27362416	261.9E6	493.129	464.484
34)	Chlordane {C}	4.18	5.64	83996237	865.0E6	460.766	456.581
35)	Chlordane {D}	4.34	5.86	136.4E6	1440.0E6	471.998	463.406m
36)	Chlordane {E}	5.37	7.33	21693522	232.5E6	511.545	445.454

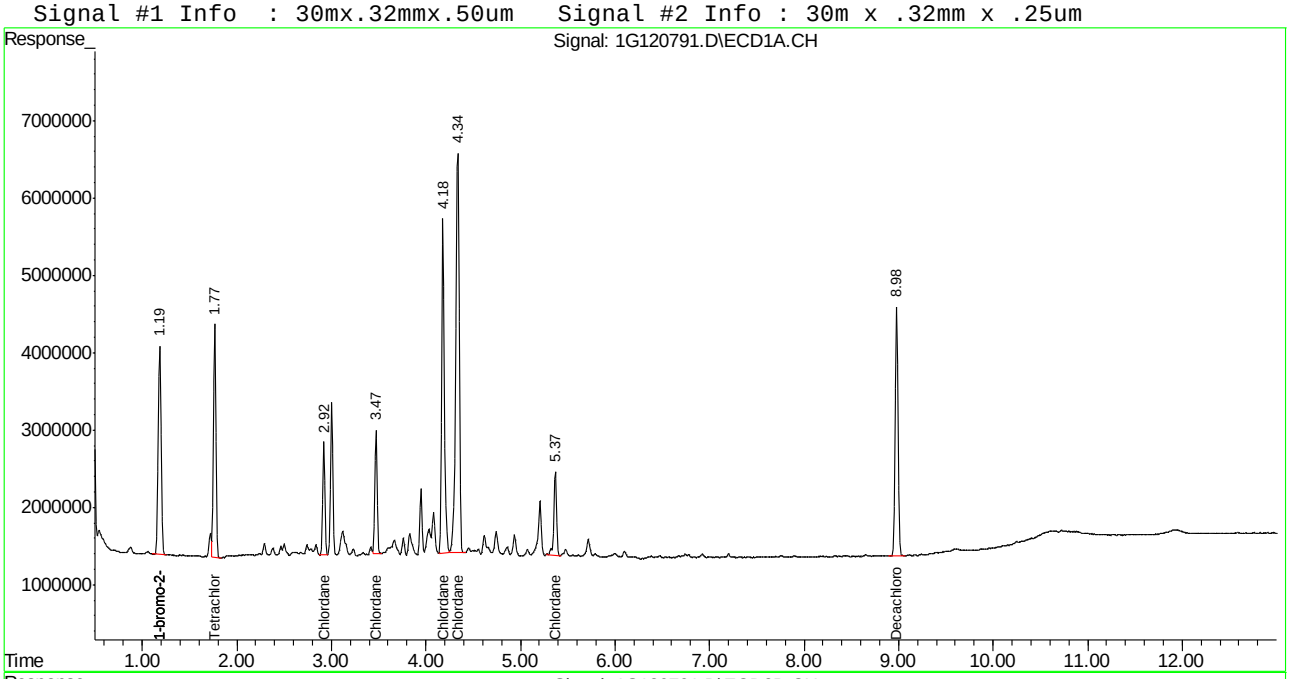
(f)=RT Delta > 1/2 Window (m)=manual int.
1G120791.D 1PST3933.M Mon Mar 14 19:44:57 2016 RPT1 Page 1

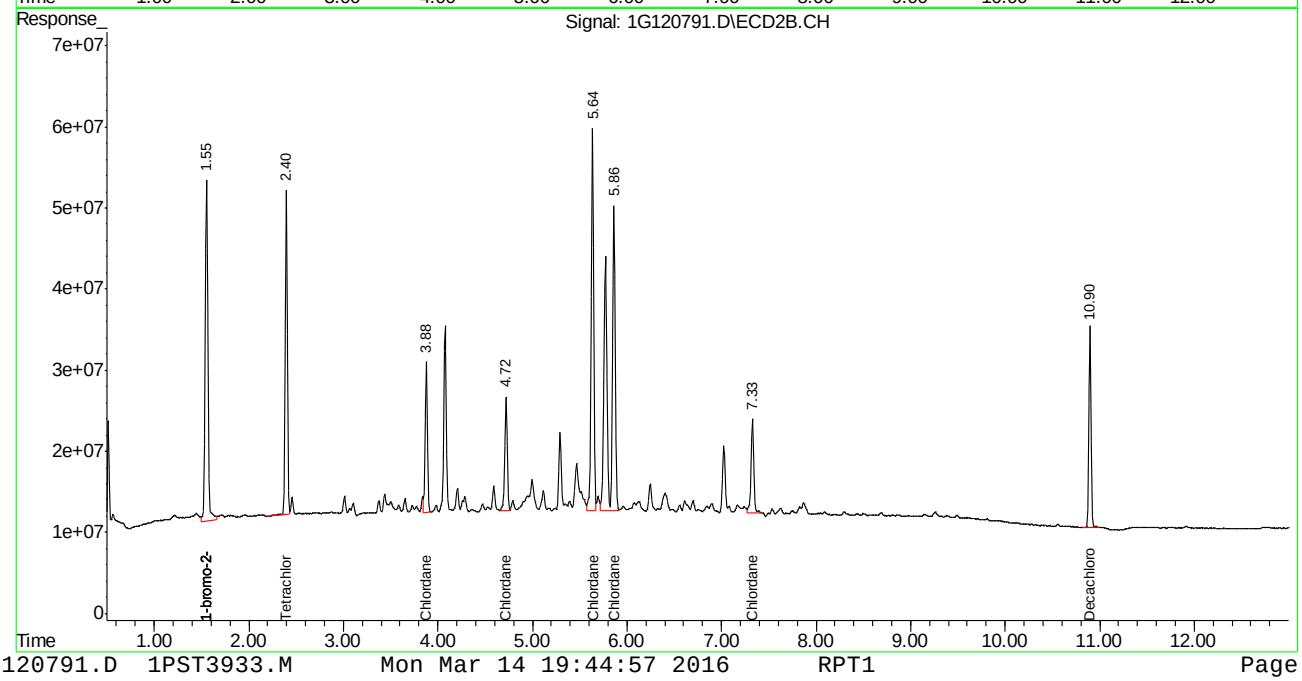
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD2B.CH
Acq On : 3-14-16 02:37:51 PM Operator: dharas
Sample : icv3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:44 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

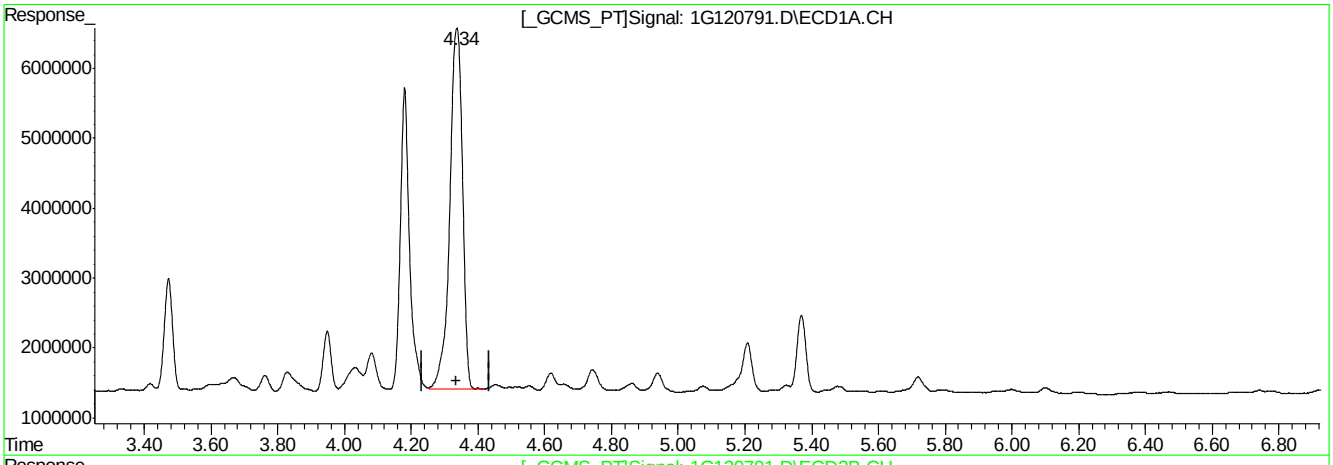
Sample Number:	G1G3933-ICV3933	**Method:**	EPA 608
Lab FileID:	1G120791.D	**Analyst approved:**	03/14/16 19:46 Joseph Ravino
Injection Time:	03/14/16 14:37	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

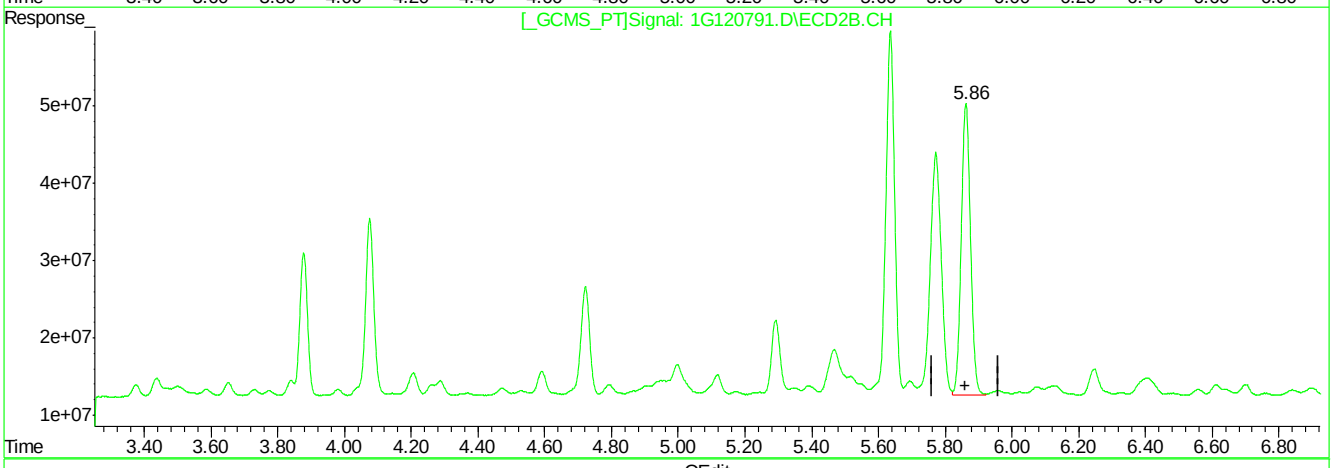
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.86	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD2B.CH
Acq On    : 3-14-16 02:37:51 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:44 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.34min 471.998PPB

response 136427159

(35) Chlordane {D} #2

5.86min 232.207PPB

response 721549371

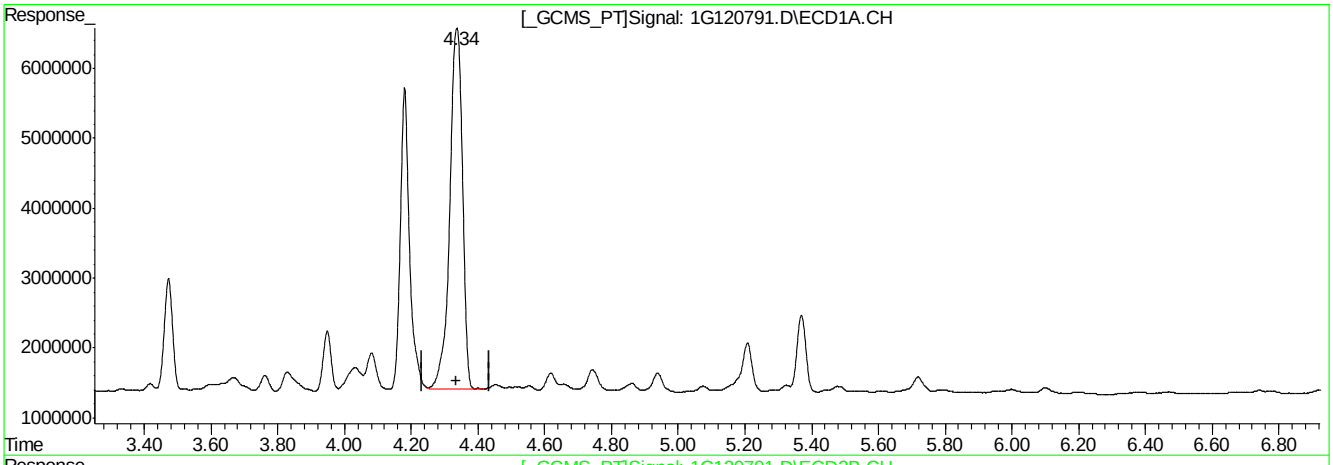
(+) = Expected Retention Time

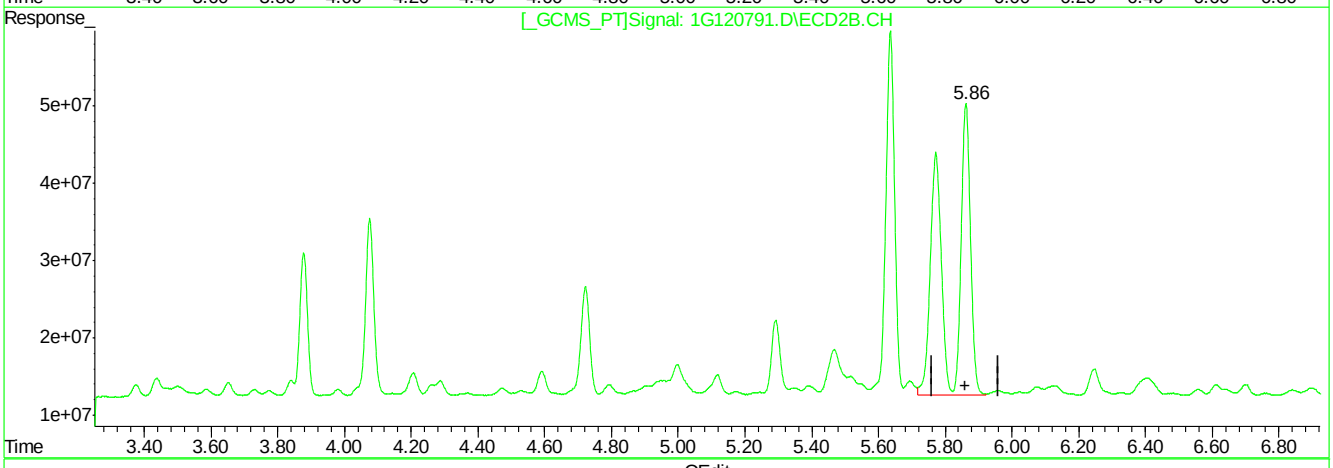
1G120791.D 1PST3933.M Mon Mar 14 19:44:45 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120791.D\ECD2B.CH
Acq On    : 3-14-16 02:37:51 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:44 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.34min 471.998PPB

response 136427159

(35) Chlordane {D} #2

5.86min 463.406PPB m

response 1439969536

(+) = Expected Retention Time

1G120791.D 1PST3933.M Mon Mar 14 19:44:51 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/15/16 13:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD2B.CH
Acq On : 3-14-16 02:55:19 PM Operator: dharas
Sample : icv3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:36 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.18	1.55	59547704	794.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.18	1.55	59547704	794.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.18	1.55	59547704	794.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.77	2.40	53777572	618.5E6	39.510	40.554
Spiked Amount	40.000	Range	30 - 150	Recovery	=	98.77%	101.39%
24) SA	Decachlorobiphen	8.98	10.90	66850880	389.4E6	40.916	44.022
Spiked Amount	40.000			Recovery	=	102.29%	110.05%
	Target Compounds						
26) L8	Toxaphene{A}	4.85	6.36	11848638	179.5E6	550.137	538.973
27) L8	Toxaphene{B}	5.46	7.22	29844467	229.8E6	530.283	594.087
28) L8	Toxaphene{C}	5.63	7.38	20050173	361.2E6	477.585	558.536
29) L8	Toxaphene{D}	5.97	7.82	21772058	214.9E6	562.333	552.248
30) L8	Toxaphene{E}	6.60	8.73	19888872	157.8E6	527.484	554.939

(f)=RT Delta > 1/2 Window (m)=manual int.

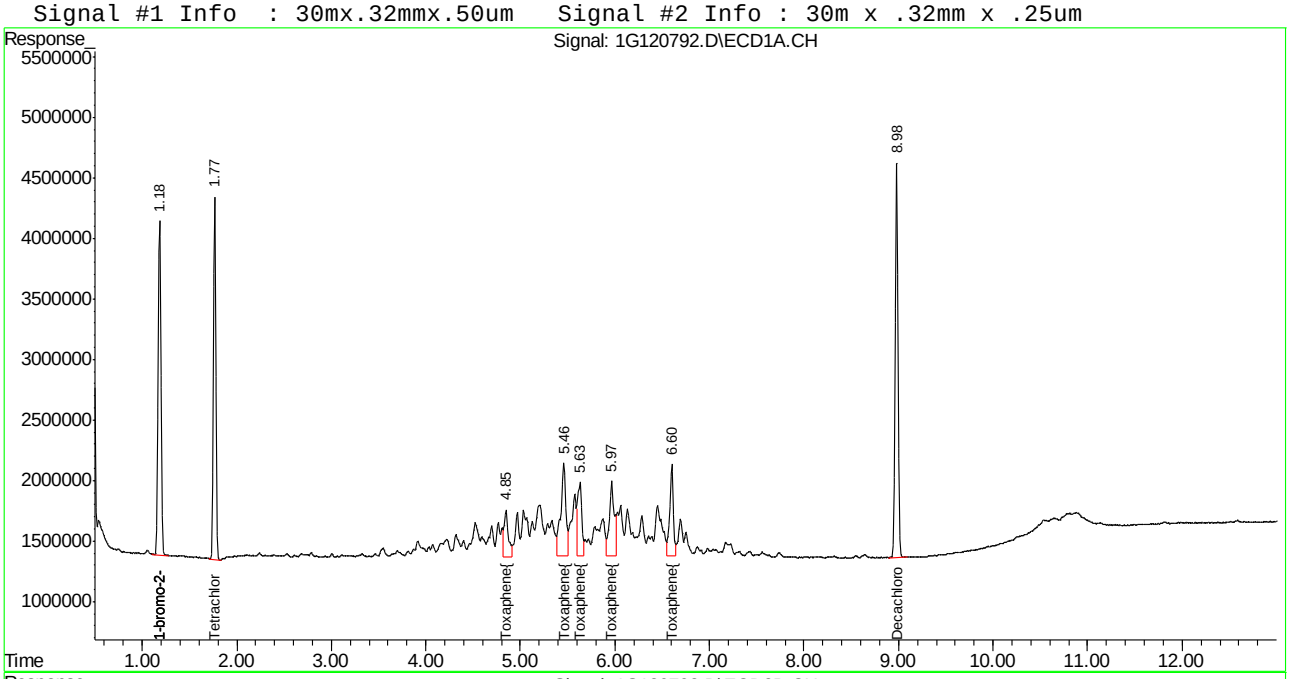
SGS ACCUTEST JC16312T

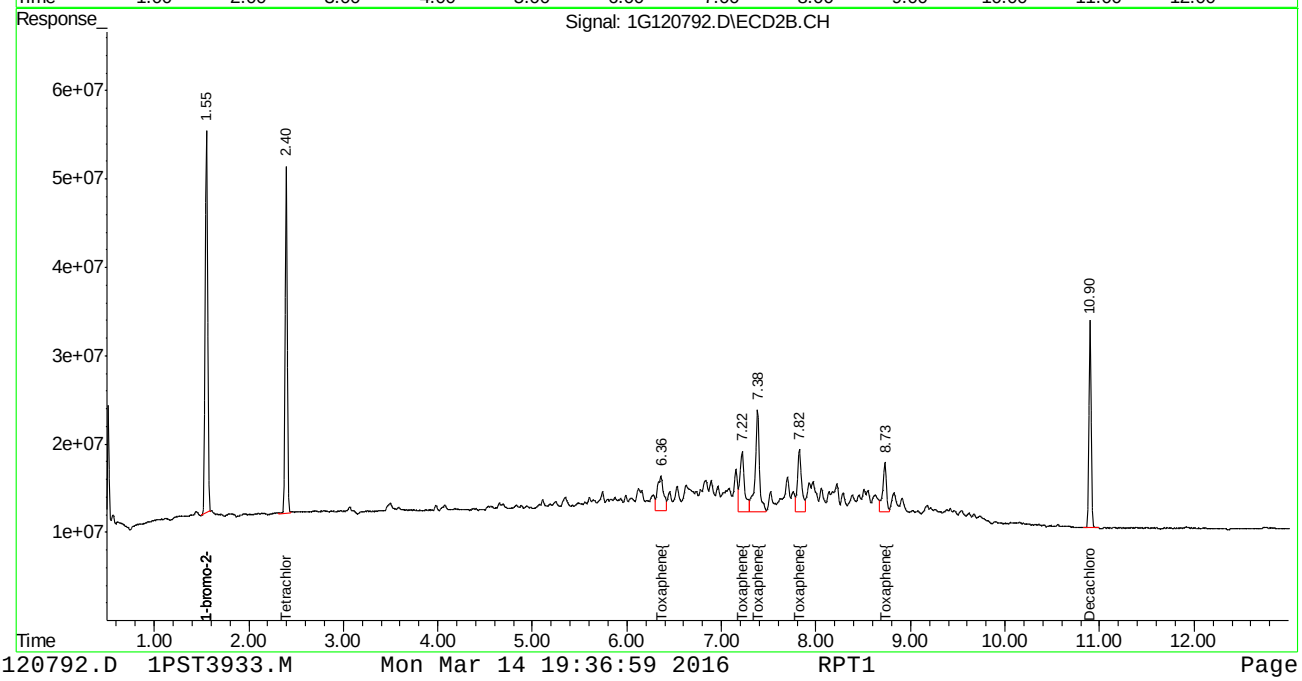
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD2B.CH
Acq On : 3-14-16 02:55:19 PM Operator: dharas
Sample : icv3933-500 Inst : GC1G
Misc : op91921,g1g3933,980,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:36 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

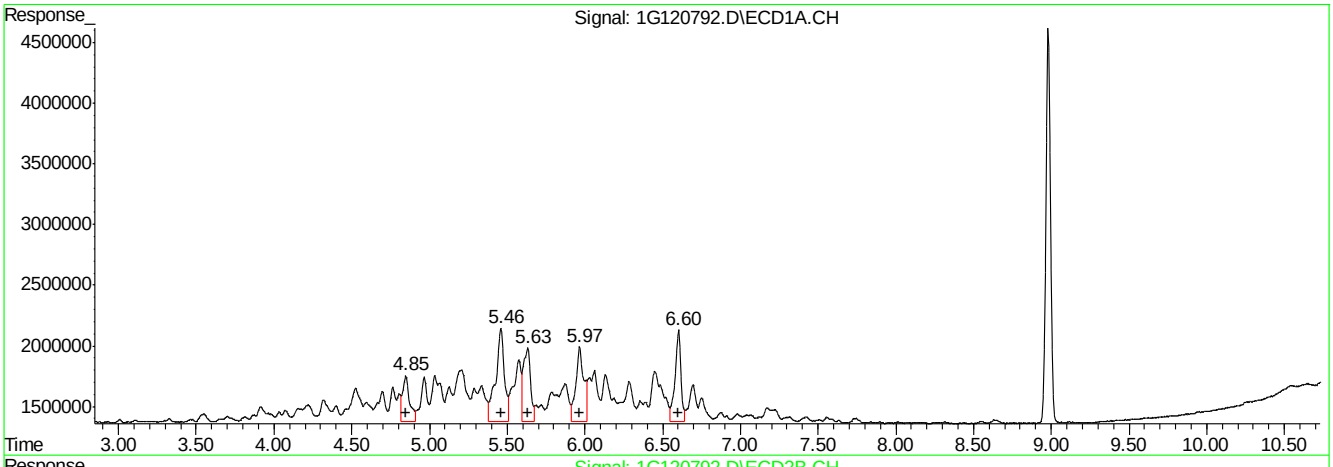
Sample Number:	G1G3933-ICV3933	**Method:**	EPA 608
Lab FileID:	1G120792.D	**Analyst approved:**	03/14/16 19:46 Joseph Ravino
Injection Time:	03/14/16 14:55	**Supervisor approved:**	03/15/16 13:13 Gwendolyn Burns

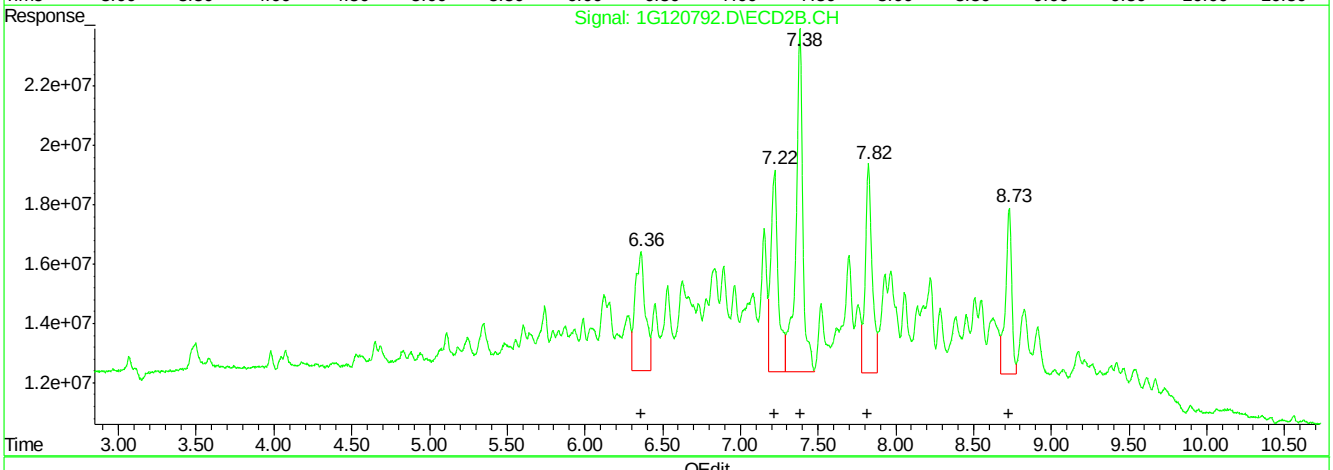
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-B		2	7.22	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD2B.CH
Acq On    : 3-14-16 02:55:19 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:36 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.85	11848638	550.14
5.46	29844467	530.28
5.63	20050173	477.58
5.97	21772058	562.33
6.60	19888872	527.48

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.36	179515316	538.97
7.22	229844592	594.09
7.38	361240237	558.54
7.82	214931417	552.25
8.73	157823520	554.94

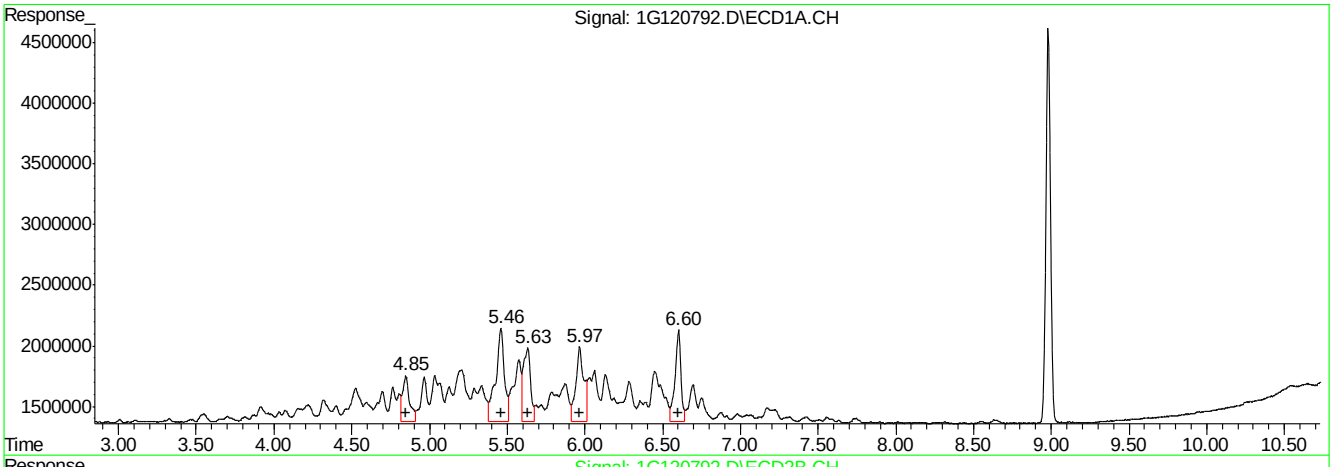
(+) = Expected Retention Time

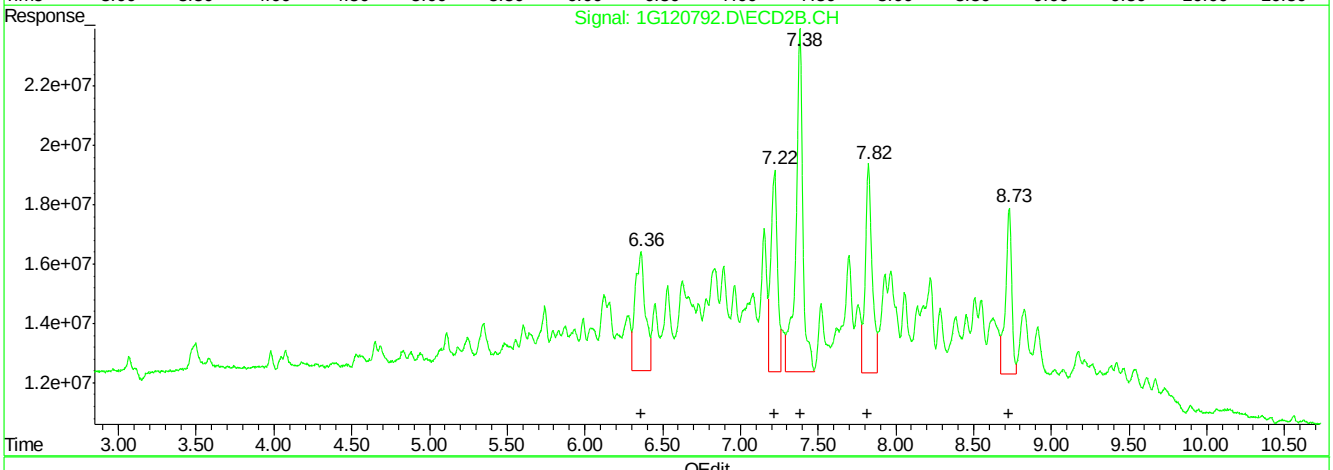
1G120792.D 1PST3933.M Mon Mar 14 19:42:04 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3933\1G120792.D\ECD2B.CH
Acq On    : 3-14-16 02:55:19 PM                      Operator: dharas
Sample    : icv3933-500                              Inst    : GC1G
Misc      : op91921,g1g3933,980,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 14 19:36 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Mar 14 19:32:23 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.85	11848638	550.14
5.46	29844467	530.28
5.63	20050173	477.58
5.97	21772058	562.33
6.60	19888872	527.48

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.36	179515316	538.97
7.22	204438230	528.42
7.38	361240237	558.54
7.82	214931417	552.25
8.73	157823520	554.94

(+) = Expected Retention Time

1G120792.D 1PST3933.M Mon Mar 14 19:42:37 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/25/16 09:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On : 3-24-16 08:59:20 AM Operator: rebeccak
Sample : cc3933-25 Inst : GC1G
Misc : op92347,g1g3944,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:44 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:42:18 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	63312381	840.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	63312381	840.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	63312381	840.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	31027576	347.5E6	21.440	21.530
Spiked Amount	40.000 Range	30 - 150	Recovery	=		53.60%	53.83%
24) SA	Decachlorobiphen	8.95	10.88	38153611	191.8E6	21.963	20.486
Spiked Amount	40.000		Recovery	=		54.91%	51.21%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	36539410	498.2E6	21.825m	20.769
4) MA	gamma-BHC	2.51	3.48	34215692	436.1E6	21.412	20.195
5) MA	Heptachlor	2.99	4.06	37261384	397.1E6	21.593	20.799
6) B	beta-BHC	2.59	3.57	17037348	183.8E6	20.188	19.754
7) B	delta-BHC	2.77	3.96	31064375	421.8E6	20.779	19.532
8) MB	Aldrin	3.31	4.51	32979218	381.8E6	21.411	20.196
9) B	Heptachlor Epoxi	4.00	5.33	31540268	340.8E6	20.009m	19.570
10) B	gamma-Chlordane	4.16	5.62	31533648	333.8E6	20.181	19.830
11) B	alpha-Chlordane	4.32	5.84	32086668	320.4E6	20.449	19.097
12) A	Endosulfan I	4.50	5.94	30597833	318.1E6	20.402	19.807
13) B	4,4'-DDE	4.44	6.11	28403603	330.1E6	21.512	19.938
14) MA	Dieldrin	4.81	6.37	30843050	350.1E6	20.638	19.929
15) MA	Endrin	5.13	6.88	29651493	326.0E6	21.975	20.091
16) A	4,4'-DDD	5.26	7.06	23846888	281.5E6	21.082	19.638
17) B	Endosulfan II	5.45	7.23	30138817	305.7E6	20.525	19.582
18) MA	4,4'-DDT	5.66	7.60	24738952	232.0E6	22.894	23.017
19) B	Endrin Aldehyde	6.07	7.81	24728947	232.9E6	20.275	19.675
20) B	Endosulfan Sulfa	6.75	8.28	28699389	265.9E6	20.793	19.974
21) A	Methoxychlor	6.44	8.85	17003787	123.7E6	21.745	23.378
22)	Mirex	6.55	9.17	30213296	192.4E6	19.735	19.679
23) B	Endrin Ketone	7.17	9.24	31026351	281.0E6	20.487	20.206

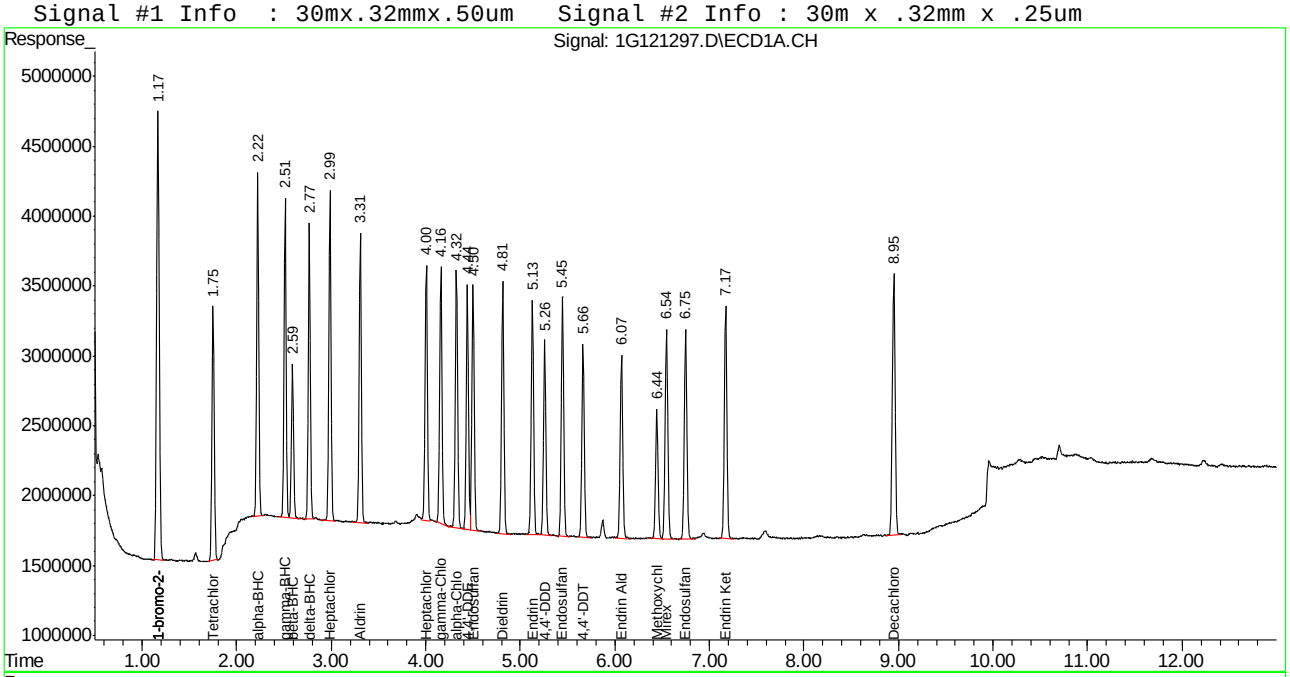
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121297.D 1PST3933.M Thu Mar 24 11:49:32 2016 RPT1 Page 1

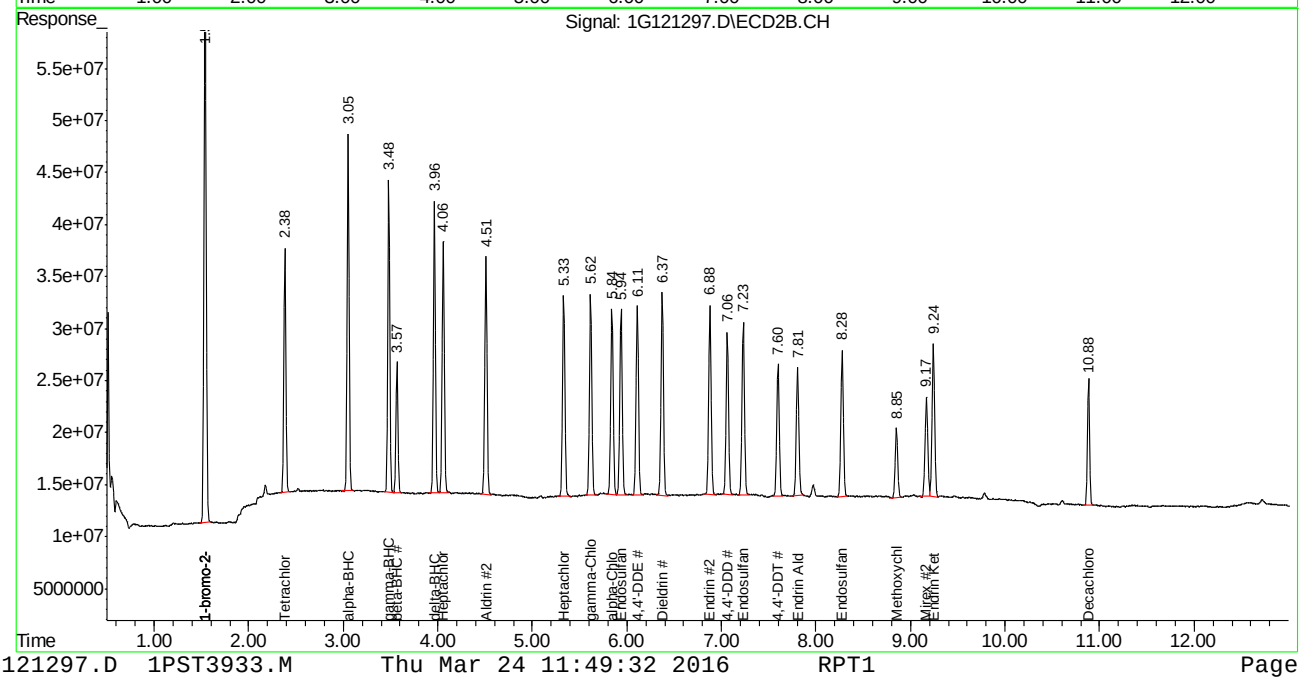
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On : 3-24-16 08:59:20 AM Operator: rebeccak
Sample : cc3933-25 Inst : GC1G
Misc : op92347,g1g3944,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:44 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:42:18 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

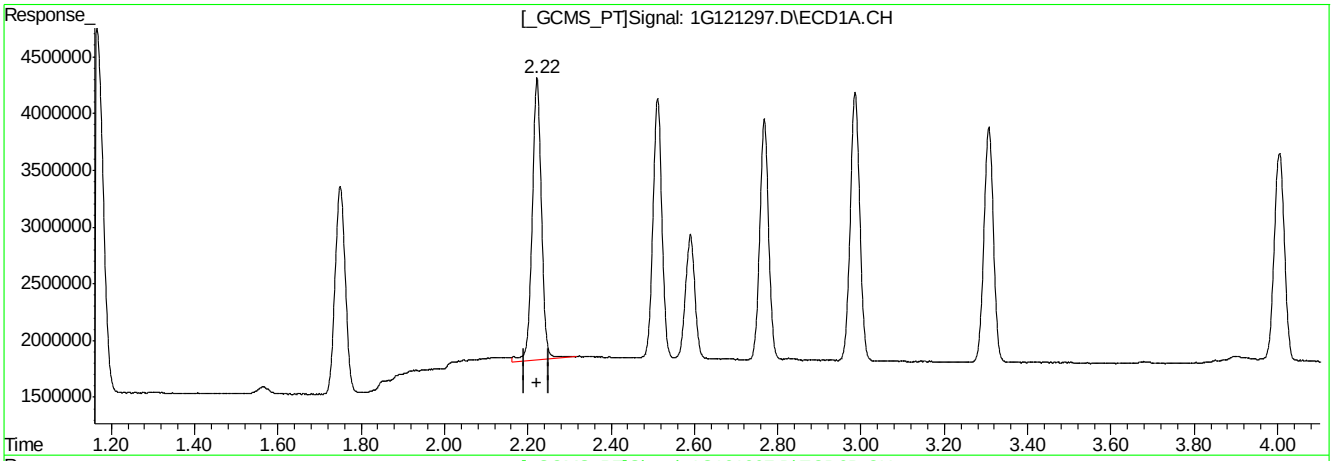
Sample Number:	G1G3944-CC3933	**Method:**	SW846 8081B
Lab FileID:	1G121297.D	**Analyst approved:**	03/24/16 11:47 Rebecca Krug
Injection Time:	03/24/16 08:59	**Supervisor approved:**	03/25/16 09:41 Gwendolyn Burns

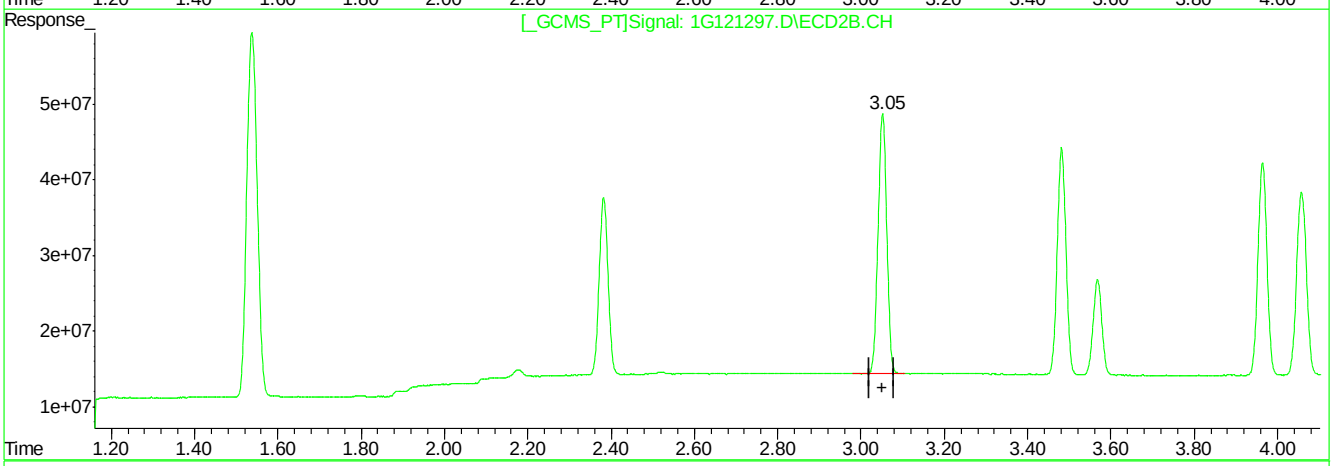
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poorly defined baseline
Heptachlor epoxide	1024-57-3	1	4.00	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On    : 3-24-16 08:59:20 AM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:42 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:42:18 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 23.148PPB

response 38754808

(3) alpha-BHC #2 (A)

3.05min 20.769PPB

response 498189093

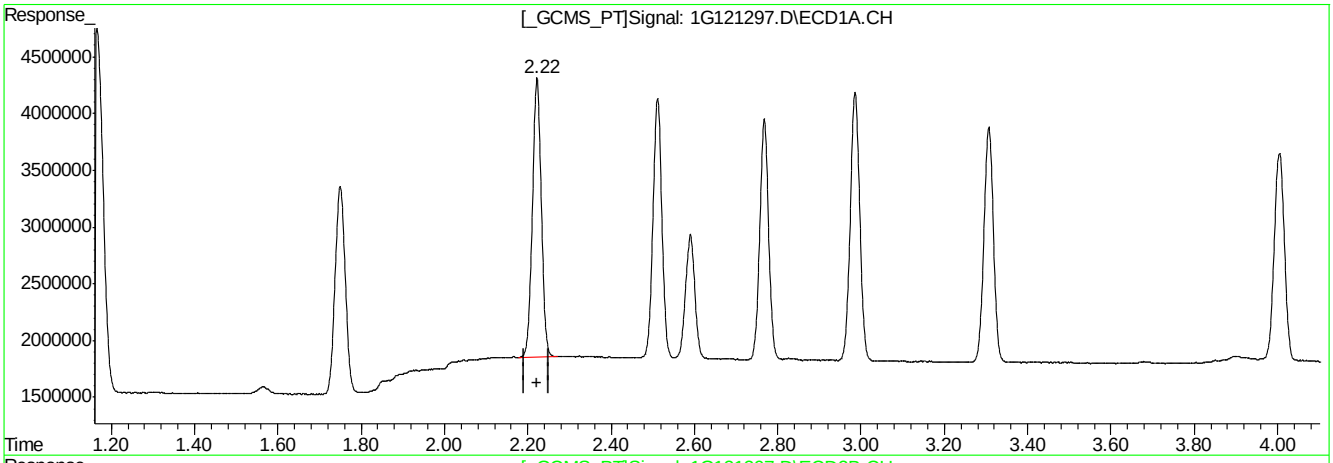
(+) = Expected Retention Time

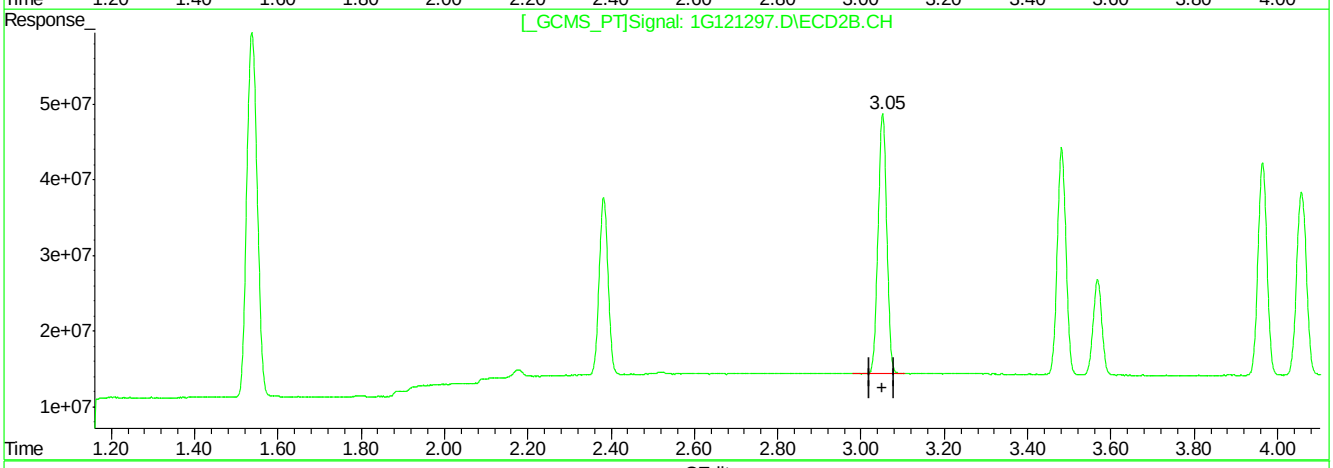
1G121297.D 1PST3933.M Thu Mar 24 11:43:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On    : 3-24-16 08:59:20 AM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:42 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:42:18 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 21.825PPB m

response 36539410

(3) alpha-BHC #2 (A)

3.05min 20.769PPB

response 498189093

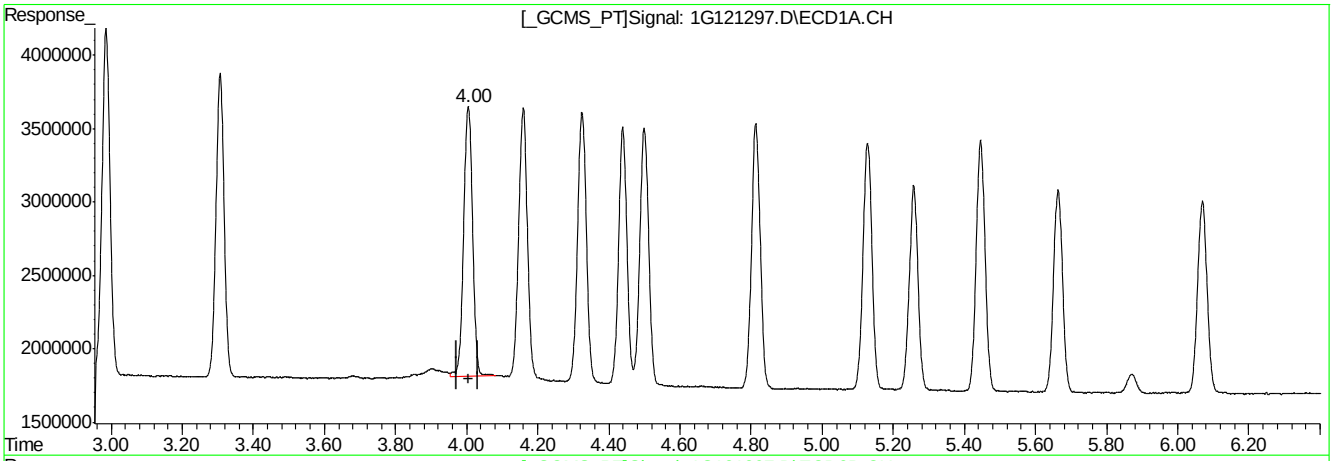
(+) = Expected Retention Time

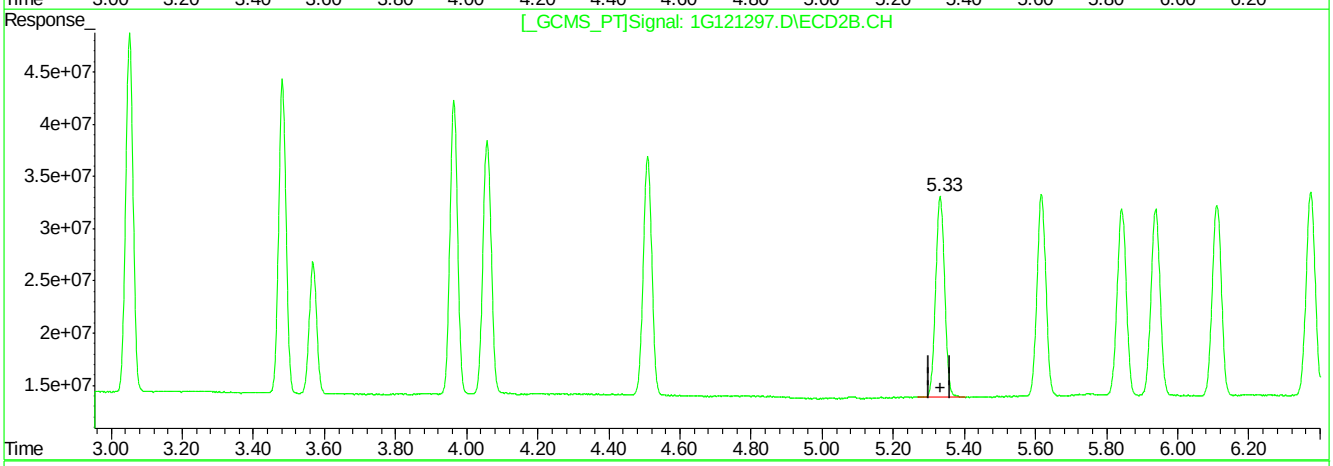
1G121297.D 1PST3933.M Thu Mar 24 11:43:15 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On    : 3-24-16 08:59:20 AM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:43 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:42:18 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 20.395PPB

response 32147720

(9) Heptachlor Epoxide #2 (B)

5.33min 19.570PPB

response 340764987

(+) = Expected Retention Time

1G121297.D 1PST3933.M Thu Mar 24 11:43:50 2016 RPT1

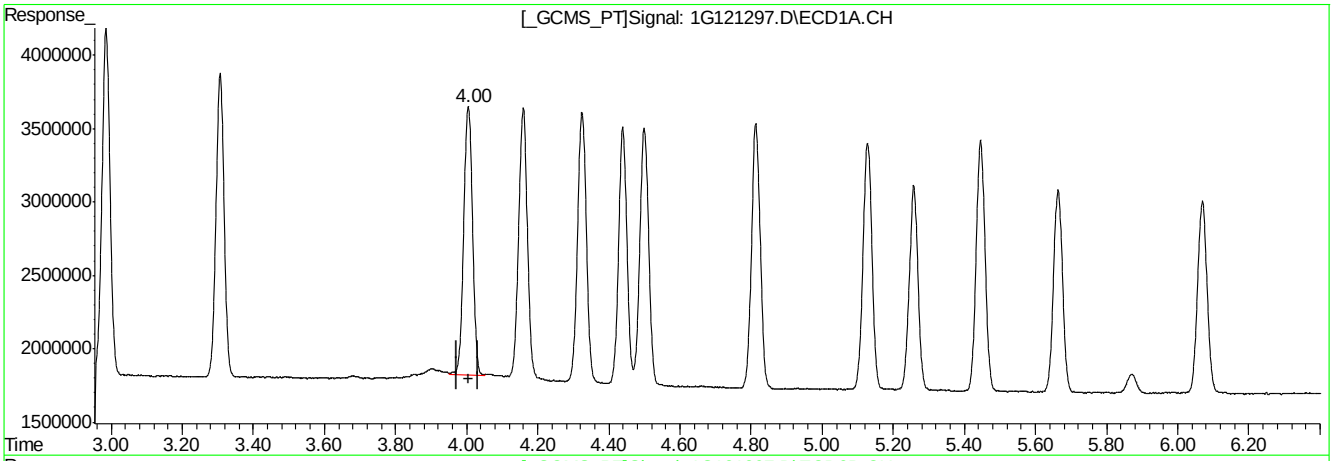
7.6.15.4

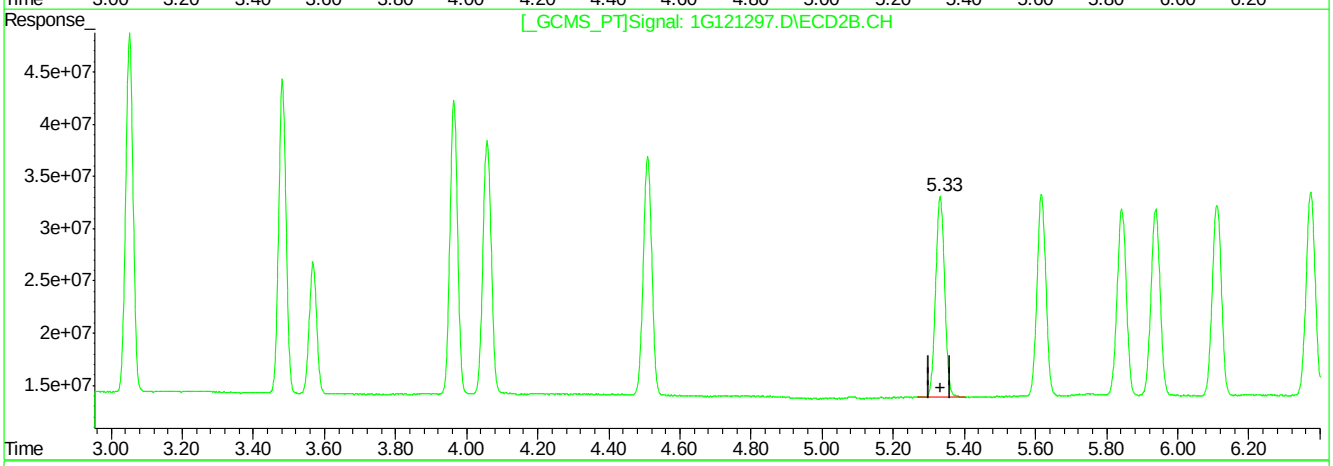
7

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121297.D\ECD2B.CH
Acq On    : 3-24-16 08:59:20 AM                      Operator: rebeccak
Sample    : cc3933-25                                Inst    : GC1G
Misc      : op92347,g1g3944,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Mar 24 11:43 2016  Quant Results File: 1PST3933.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Thu Mar 24 11:42:18 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 20.009PPB m

response 31540268

(9) Heptachlor Epoxide #2 (B)

5.33min 19.570PPB

response 340764987

(+) = Expected Retention Time

1G121297.D 1PST3933.M Thu Mar 24 11:44:27 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD2B.CH
Acq On : 3-24-16 03:53:54 PM Operator: rebeccak
Sample : cc3933-50 Inst : GC1G
Misc : op92344,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:12 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	63580557	872.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	63580557	872.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	63580557	872.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.39	68274221	759.8E6	46.979	45.384
Spiked Amount	40.000 Range	30 - 150	Recovery	=		117.45%	113.46%
24) SA	Decachlorobiphen	8.95	10.88	81288189	391.4E6	46.596	40.305
Spiked Amount	40.000		Recovery	=		116.49%	100.76%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	85543820	1095.9E6	50.879	44.044
4) MA	gamma-BHC	2.51	3.48	77626504	929.2E6	48.374	41.480
5) MA	Heptachlor	2.99	4.06	83658124	847.7E6	48.276	42.807
6) B	beta-BHC	2.59	3.57	36866711	387.7E6	43.500	40.168
7) B	delta-BHC	2.77	3.96	69249522	875.4E6	46.126	39.075
8) MB	Aldrin	3.31	4.51	74961720	795.9E6	48.462	40.589
9) B	Heptachlor Epoxi	4.01	5.33	69770707	710.8E6	44.076	39.354
10) B	gamma-Chlordane	4.16	5.62	69461537	701.2E6	44.267	40.157
11) B	alpha-Chlordane	4.32	5.84	70539632	672.1E6	44.765	38.621
12) A	Endosulfan I	4.50	5.94	68378550	669.2E6	45.401	40.165
13) B	4,4'-DDE	4.44	6.11	65213759	699.4E6	49.183	40.717
14) MA	Dieldrin	4.81	6.37	70075716	733.5E6	46.693	40.250
15) MA	Endrin	5.13	6.88	67201024	685.3E6	49.593	40.717
16) A	4,4'-DDD	5.26	7.06	53767636	588.7E6	47.334	39.599
17) B	Endosulfan II	5.45	7.23	66482660	638.3E6	45.084	39.425
18) MA	4,4'-DDT	5.66	7.60	58353428	543.2E6	53.774	51.958
19) B	Endrin Aldehyde	6.07	7.80	54253509	494.8E6	44.295	40.308
20) B	Endosulfan Sulfa	6.75	8.28	61797667	553.4E6	44.584	40.080
21) A	Methoxychlor	6.44	8.85	38030778	283.3E6	48.429	51.627
22)	Mirex	6.55	9.17	64338617	419.7E6	41.848	41.384
23) B	Endrin Ketone	7.17	9.24	68689994	588.9E6	45.165	40.830

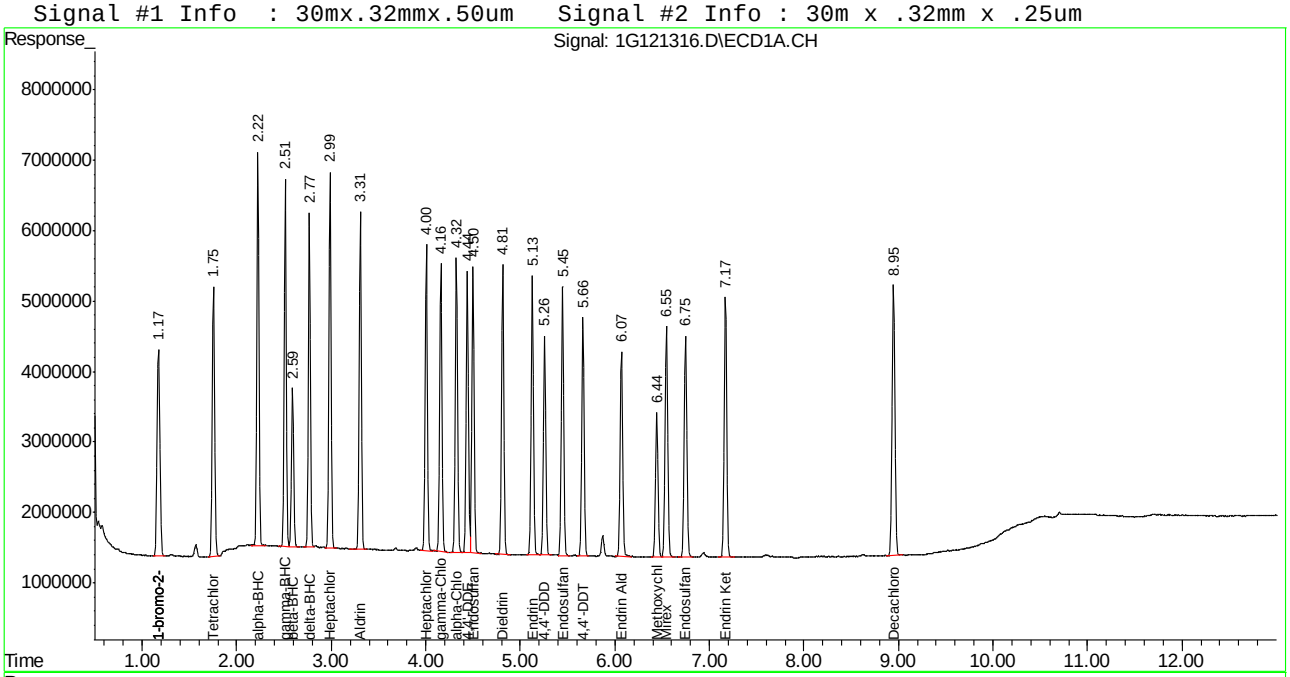
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121316.D 1PST3933.M Mon Mar 28 08:47:44 2016 RPT1 Page 1

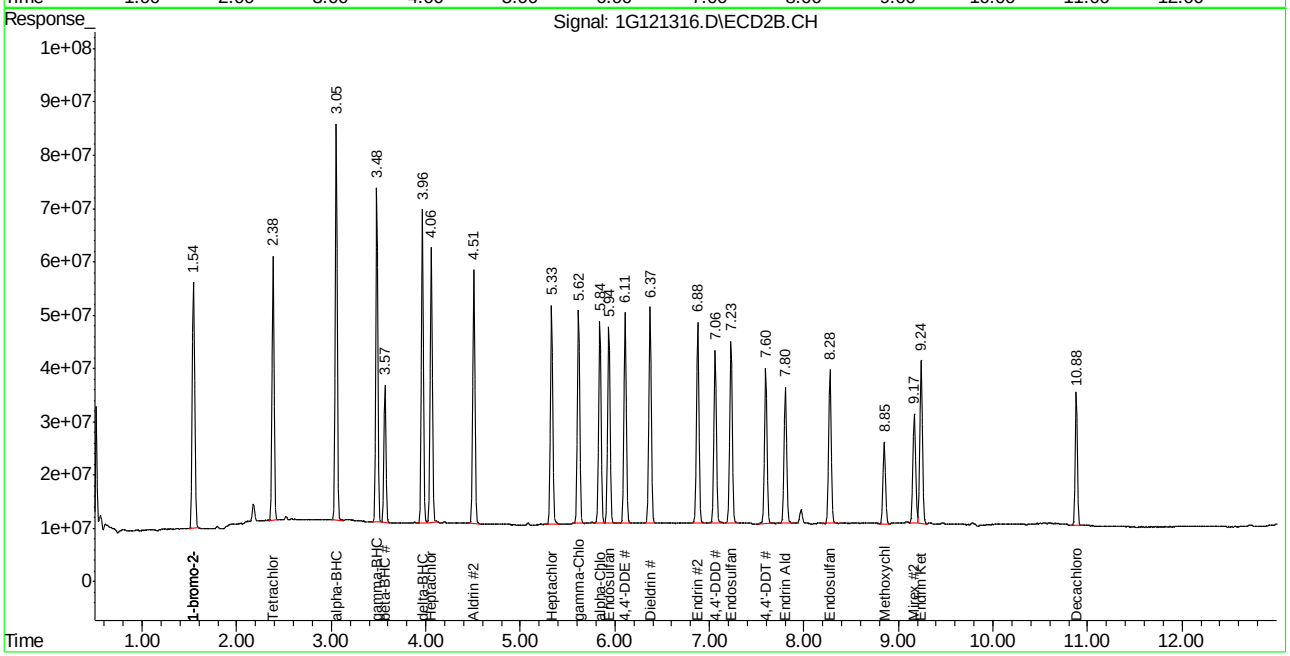
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121316.D\ECD2B.CH
Acq On : 3-24-16 03:53:54 PM Operator: rebeccak
Sample : cc3933-50 Inst : GC1G
Misc : op92344,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:12 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD2B.CH
Acq On : 3-24-16 09:46:29 PM Operator: rebeccak
Sample : cc3933-25 Inst : GC1G
Misc : op92408,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:19 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	71507472	998.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	71507472	998.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	71507472	998.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.39	36471010	443.0E6	22.314	23.122
Spiked Amount	40.000 Range	30 - 150	Recovery	=		55.78%	57.80%
24) SA	Decachlorobiphen	8.95	10.88	47496184	249.3E6	24.208	22.438
Spiked Amount	40.000		Recovery	=		60.52%	56.09%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	42462300	634.9E6	22.456	22.298
4) MA	gamma-BHC	2.51	3.48	40677758	568.4E6	22.539	22.172
5) MA	Heptachlor	2.99	4.06	43087680	497.4E6	22.108	21.949
6) B	beta-BHC	2.59	3.57	21096392	247.9E6	22.133	22.449
7) B	delta-BHC	2.77	3.97	34508750	519.6E6	20.438	20.269
8) MB	Aldrin	3.31	4.51	39505080	504.6E6	22.708	22.486
9) B	Heptachlor Epoxi	4.01	5.33	39680305	455.5E6	22.288	22.038
10) B	gamma-Chlordane	4.16	5.62	39078028	449.7E6	22.143	22.503
11) B	alpha-Chlordane	4.33	5.84	39194667	432.9E6	22.116	21.737
12) A	Endosulfan I	4.50	5.94	37337421	427.6E6	22.043	22.427
13) B	4,4'-DDE	4.44	6.11	34719819	444.5E6	23.283	22.612
14) MA	Dieldrin	4.81	6.37	37435229	463.4E6	22.179	22.222
15) MA	Endrin	5.13	6.88	33572988	404.9E6	22.030	21.021
16) A	4,4'-DDD	5.26	7.06	28375859	375.0E6	22.211	22.040
17) B	Endosulfan II	5.45	7.23	35832867	401.2E6	21.606	21.653
18) MA	4,4'-DDT	5.66	7.60	28725337	310.8E6	23.537	25.972
19) B	Endrin Aldehyde	6.07	7.80	30361229	316.9E6	22.040	22.558
20) B	Endosulfan Sulfa	6.75	8.28	31380884	322.6E6	20.130	20.415
21) A	Methoxychlor	6.45	8.85	19846600	163.4E6	22.471	26.011
22)	Mirex	6.55	9.17	37917811	262.2E6	21.929	22.594
23) B	Endrin Ketone	7.17	9.24	32948876	327.1E6	19.263	19.815

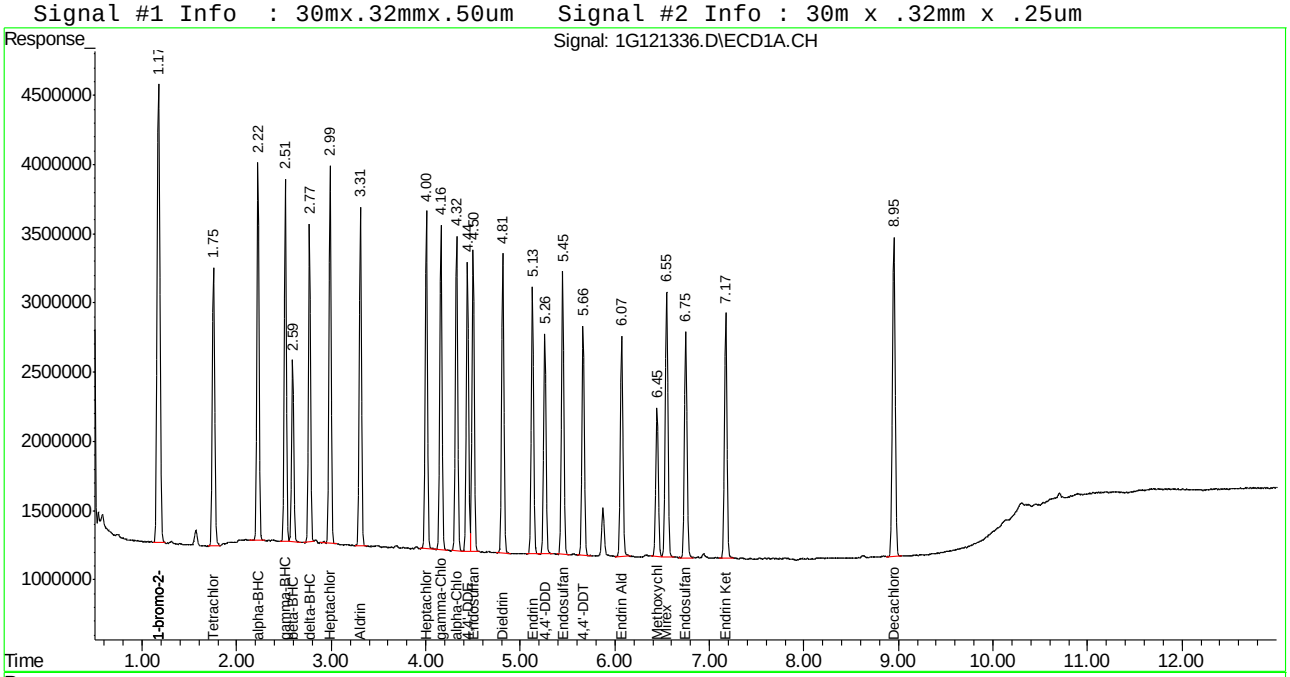
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121336.D 1PST3933.M Fri Mar 25 11:20:25 2016 RPT1 Page 1

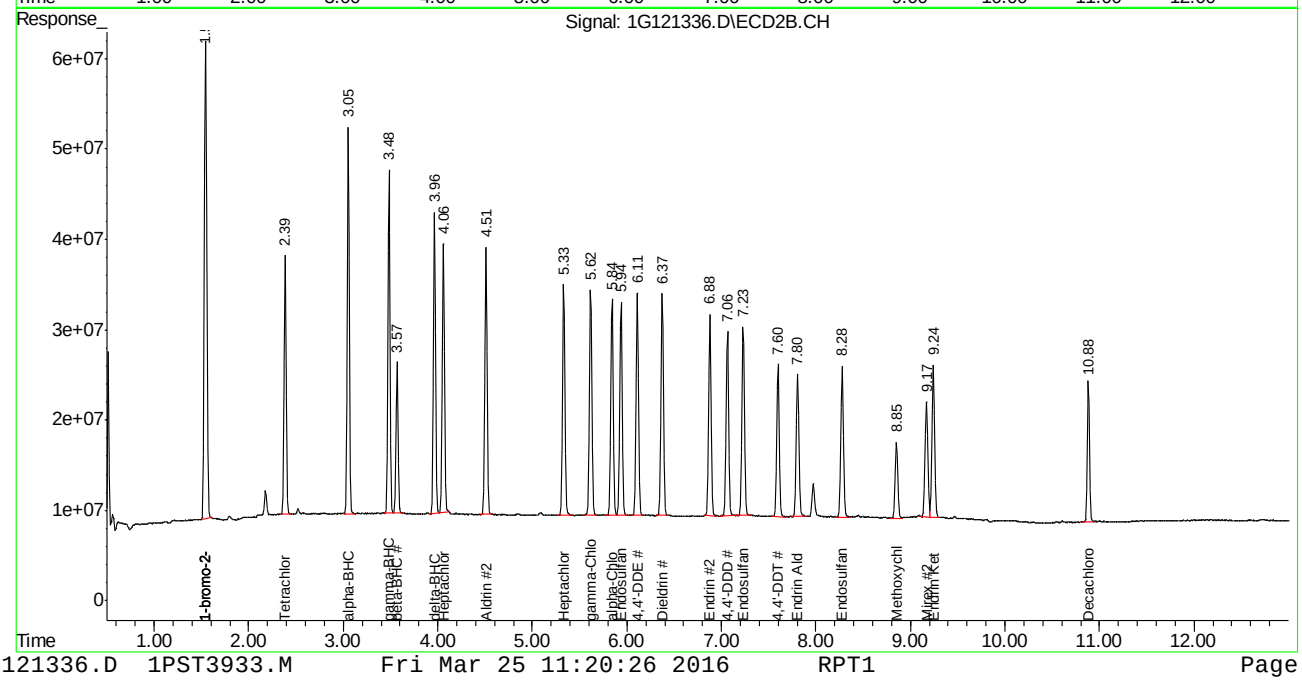
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3944\1G121336.D\ECD2B.CH
Acq On : 3-24-16 09:46:29 PM Operator: rebeccak
Sample : cc3933-25 Inst : GC1G
Misc : op92408,g1g3944,100,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Mar 25 11:19 2016 Quant Results File: 1PST3933.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3933.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Thu Mar 24 11:45:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3933.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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	2.229	232.2E6	223.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.608	3.007	4748359	4577207	1.115	1.048
	Spiked Amount 40.000 Range 30 - 150 Recovery =					2.79%#	2.62%#
24) SA	Decachlor...	9.812	11.220	5280260	3259561	1.193	1.034m
	Spiked Amount 40.000			Recovery =		2.98%	2.59%
	Target Compounds						
3) A	alpha-BHC	3.046	3.644	5588085	5396001	0.904m	0.919
4) MA	gamma-BHC	3.333	4.067	5289537	4743223	0.976m	0.901
5) MA	Heptachlor	3.603	4.642	5369256	5151033	1.024	0.979
6) B	beta-BHC	3.420	4.145	2537662	2042101	0.940m	0.861m
7) B	delta-BHC	3.817	4.545	5121059	4634488	0.983	0.977
8) MB	Aldrin	4.151	5.097	5339804	5507505	0.974	1.067
9) B	Heptachlo...	4.850	5.913	5150241	4393914	1.049	0.931
10) B	gamma-Chl...	5.018	6.199	5129896	4928230	1.065	1.029
11) B	alpha-Chl...	5.188	6.422	5268897	4518844	1.103	0.966
12) A	Endosulfan I	5.365	6.527	4816245	5217522	0.909	1.113
13) B	4,4'-DDE	5.304	6.672	4303223	4404148	1.074	0.977
14) MA	Dieldrin	5.684	6.962	5263248	4104278	1.064	0.869
15) MA	Endrin	6.011	7.470	4381290	3922291	0.957	0.926
16) A	4,4'-DDD	6.149	7.627	3302283	4289539	0.883m	1.127 #
17) B	Endosulfa...	6.335	7.820	4178832	4088503	0.946	0.990
18) MA	4,4'-DDT	6.555	8.165	1789273	1777297	1.902m	1.395 #
19) B	Endrin Al...	6.947	8.393	3365737	4202759	0.963m	1.315 #
20) B	Endosulfa...	7.628	8.864	3160728	3524180	0.877	0.968
21) A	Methoxychlor	7.355	9.390	1421777	1344536	0.978m	0.858m
22)	Mirex	7.523	9.710	3797006	3197641	1.060	0.975
23) B	Endrin Ke...	8.082	9.762	3903291	3382121	0.942m	0.831

SemiQuant Compounds - Not Calibrated on this Instrument

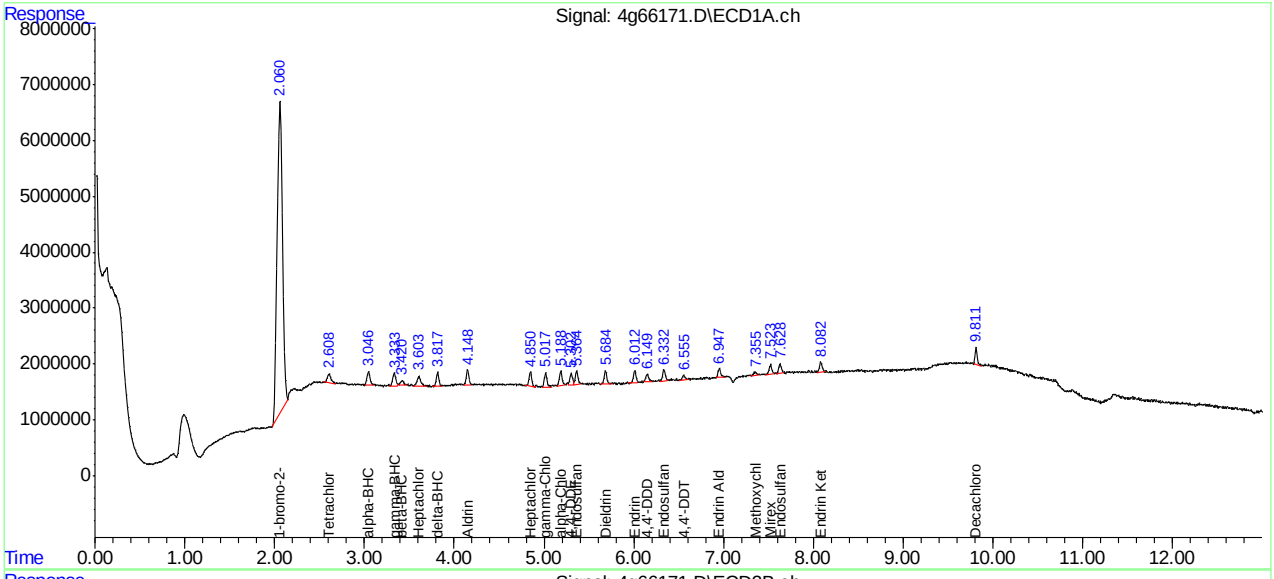
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

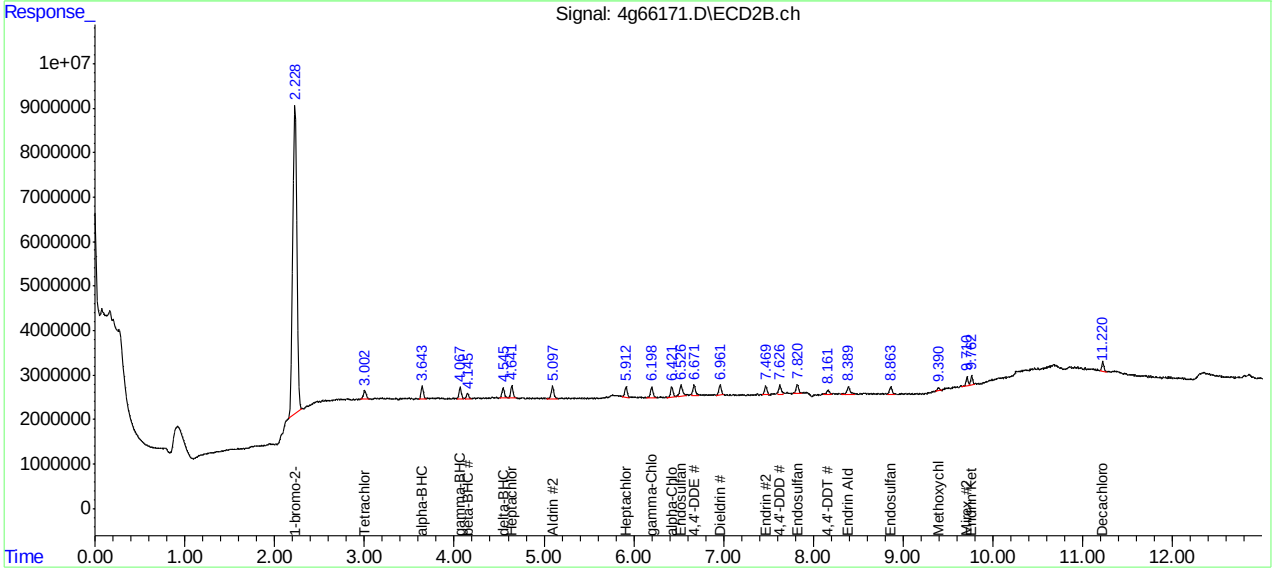
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 JC16312T

Manual Integration Approval Summary

Sample Number: G4G1741-IC1741 **Method:** SW846 8081B
Lab FileID: 4G66171.D **Analyst approved:** 03/19/16 12:57 Joseph Ravino
Injection Time: 03/18/16 18:14 **Supervisor approved:** 03/21/16 13:03 Gwendolyn Burns

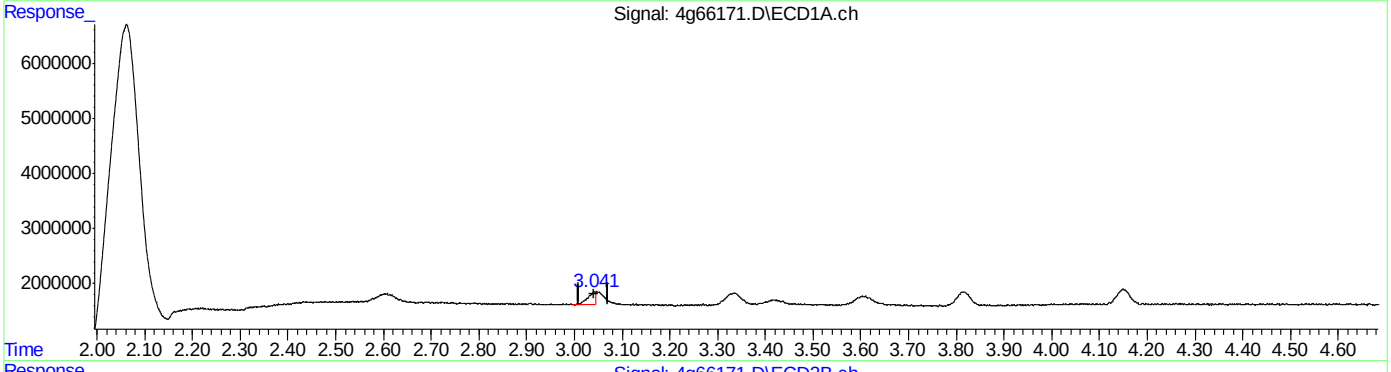
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	3.05	Poor instrument integration
gamma-BHC (Lindane)	58-89-9	1	3.33	Poor instrument integration
beta-BHC	319-85-7	1	3.42	Poor instrument integration
beta-BHC	319-85-7	2	4.15	Poor instrument integration
4,4'-DDD	72-54-8	1	6.15	Poor instrument integration
4,4'-DDT	50-29-3	1	6.55	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.95	Poor instrument integration
Methoxychlor	72-43-5	1	7.36	Poor instrument integration
Endrin ketone	53494-70-5	1	8.08	Poor instrument integration
Methoxychlor	72-43-5	2	9.39	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.22	Poor instrument integration

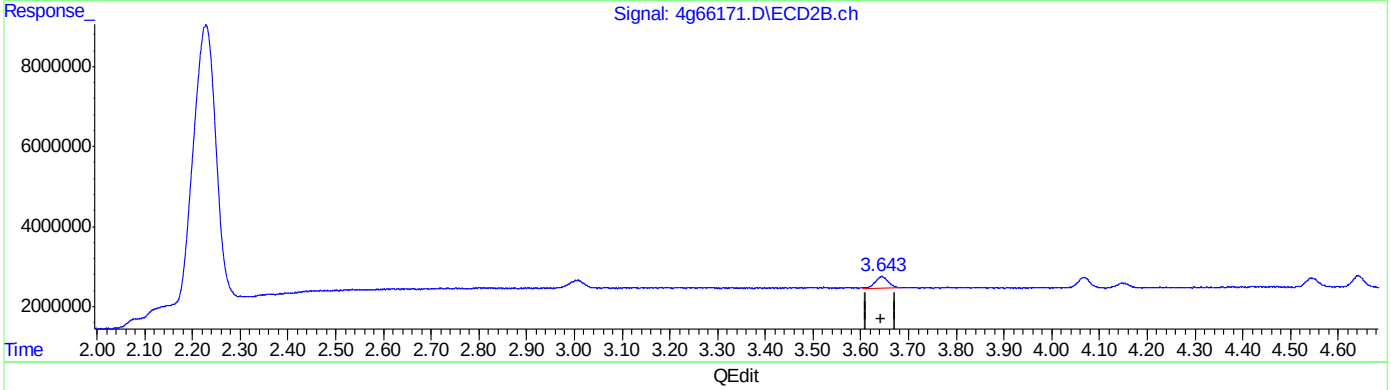
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   6:14 pm
Operator  : brittanp
Sample    : ic1741-1
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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

(3) alpha-BHC (A)
3.042min 0.394 PPB
response 2433872

(3) alpha-BHC #2 (A)
3.644min 0.919 PPB
response 5396001

(+) = Expected Retention Time

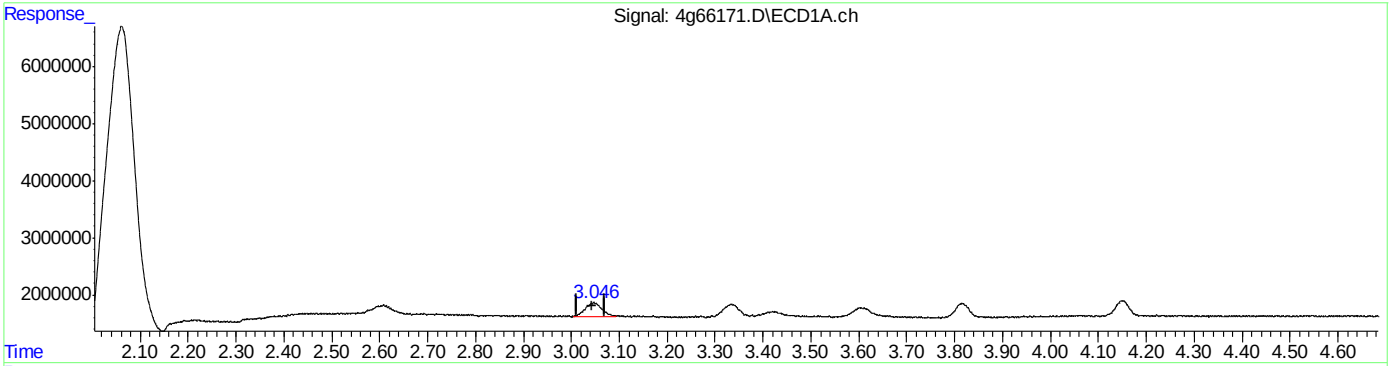
SGS ACCUTEST JC16312T

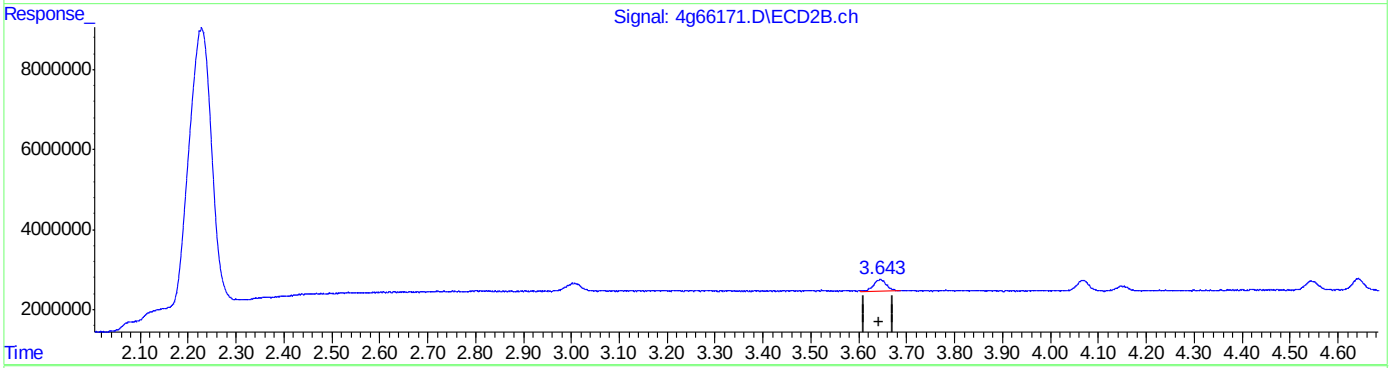
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   6:14 pm
Operator  : brittanp
Sample    : ic1741-1
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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

(3) alpha-BHC (A)
3.046min 0.904 PPB m
response 5588085

(3) alpha-BHC #2 (A)
3.644min 0.919 PPB
response 5396001

(+) = Expected Retention Time

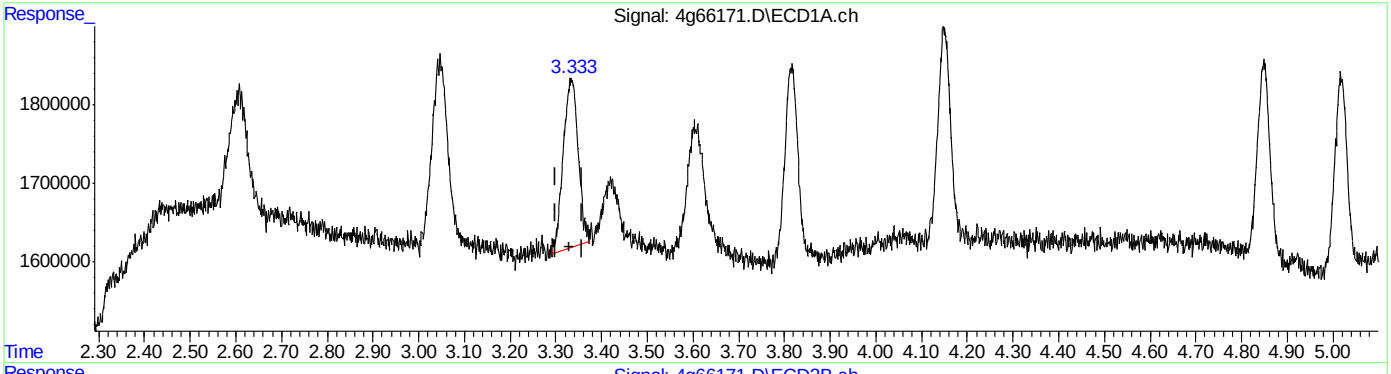
SGS ACCUTEST JC16312T

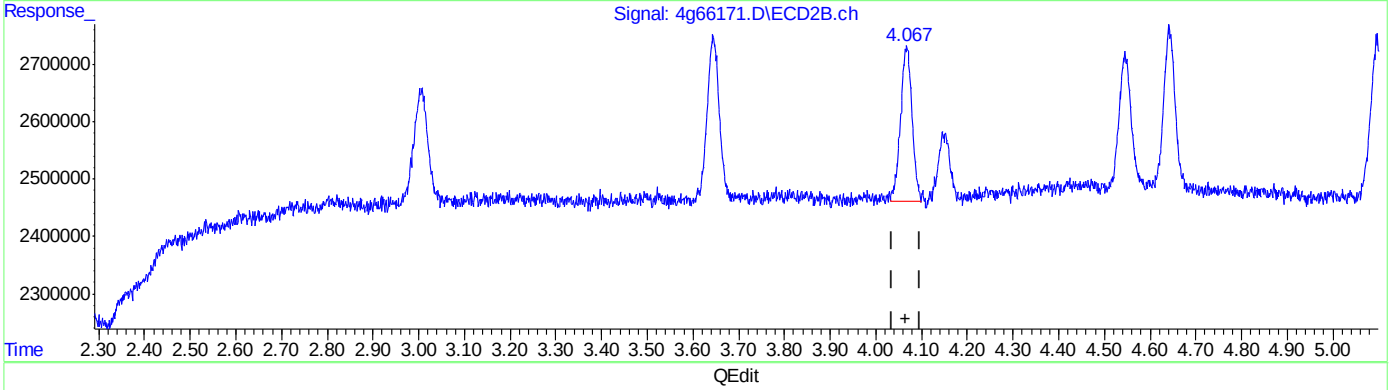
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
3.335min 0.899 PPB
response 4872980

(4) gamma-BHC #2 (MA)
4.067min 0.901 PPB
response 4743223

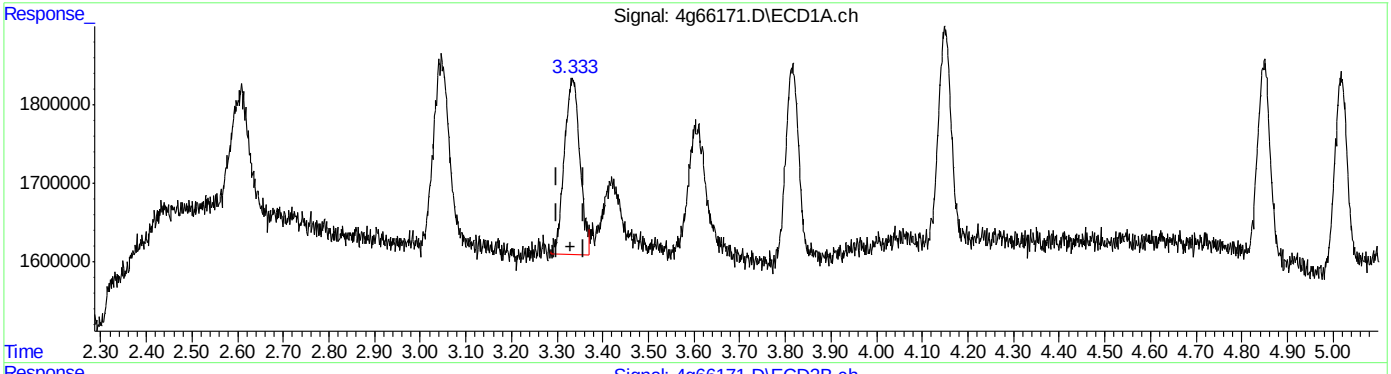
(+) = Expected Retention Time

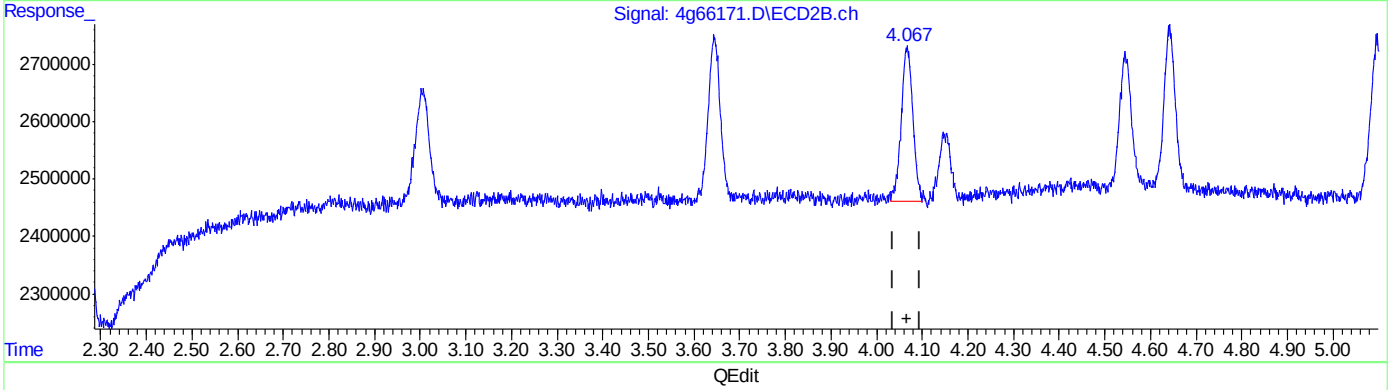
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
3.333min 0.976 PPB m
response 5289537

(4) gamma-BHC #2 (MA)
4.067min 0.901 PPB
response 4743223

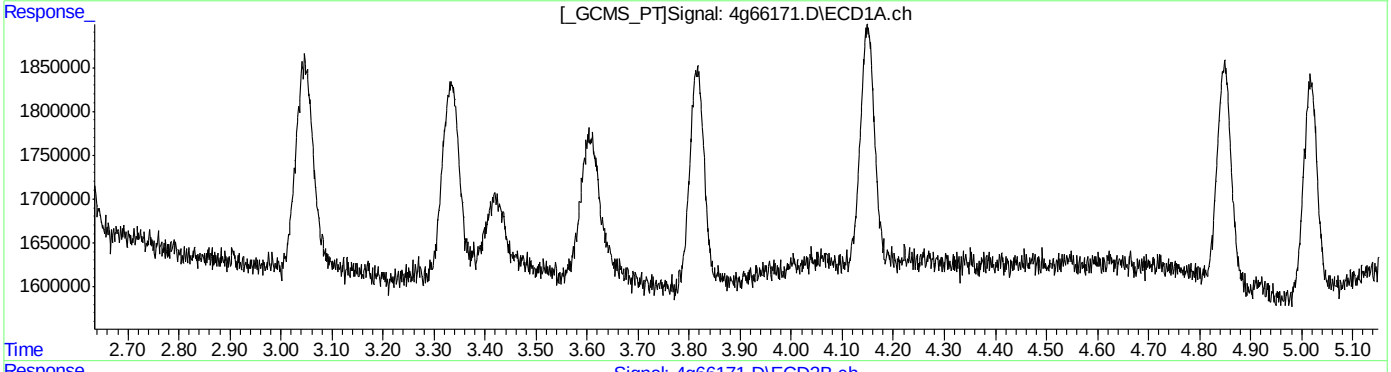
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:22:35 2016 RPT1

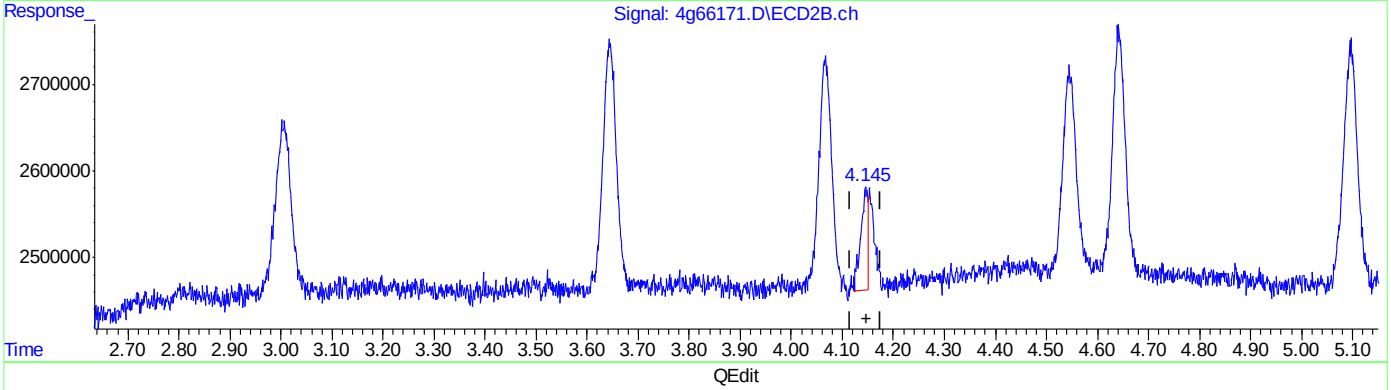
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
4.145min 0.462 PPB
response 1096323

(+) = Expected Retention Time

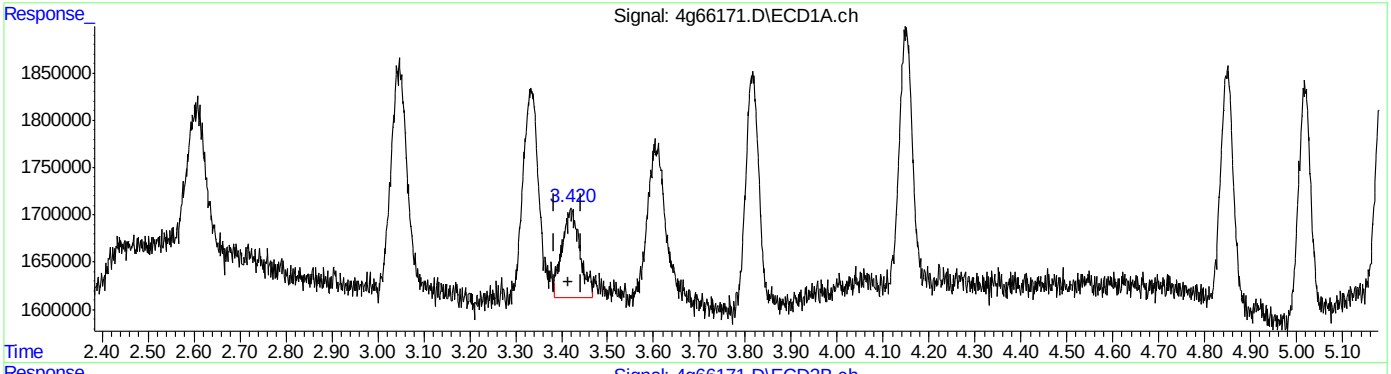
SGS ACCUTEST JC16312T

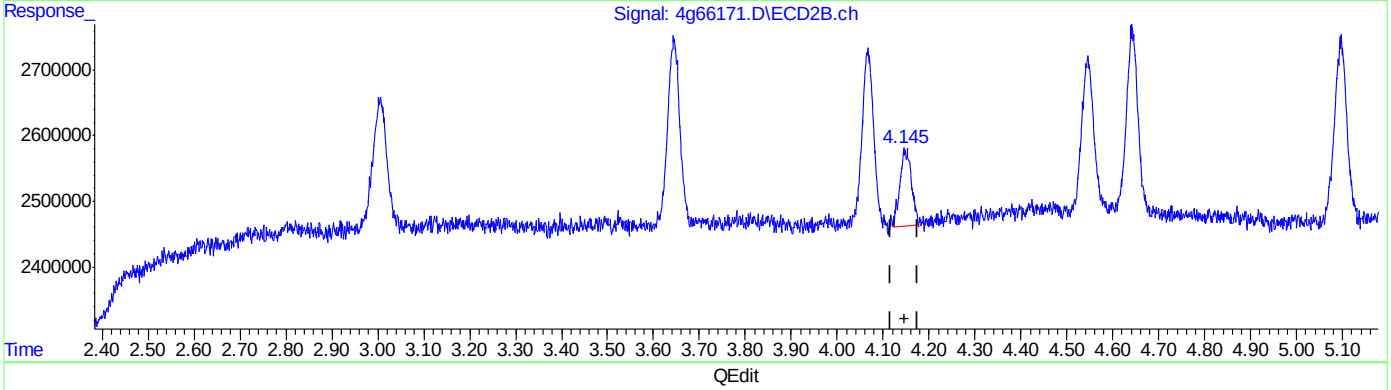
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
3.420min 0.940 PPB m
response 2537662

(6) beta-BHC #2 (B)
4.145min 0.861 PPB m
response 2042101

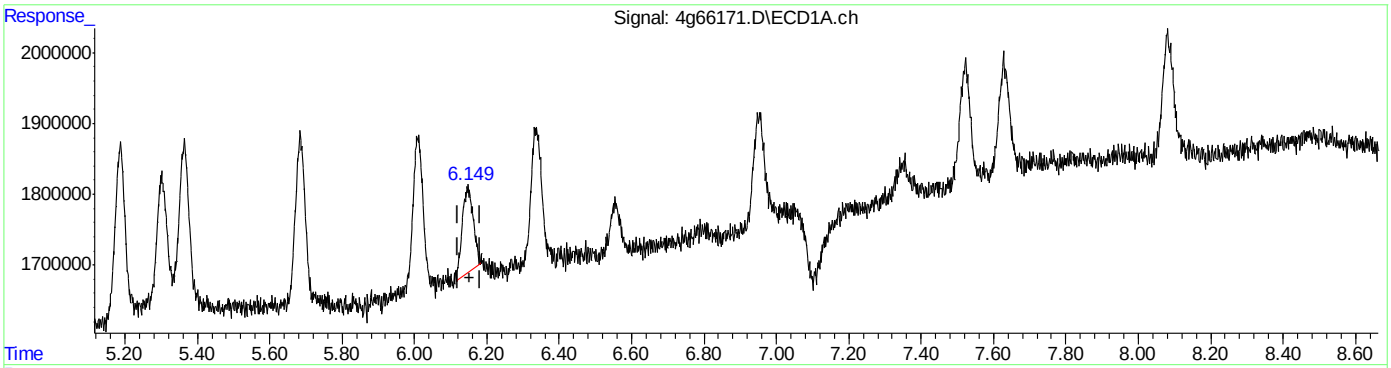
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:23:03 2016 RPT1

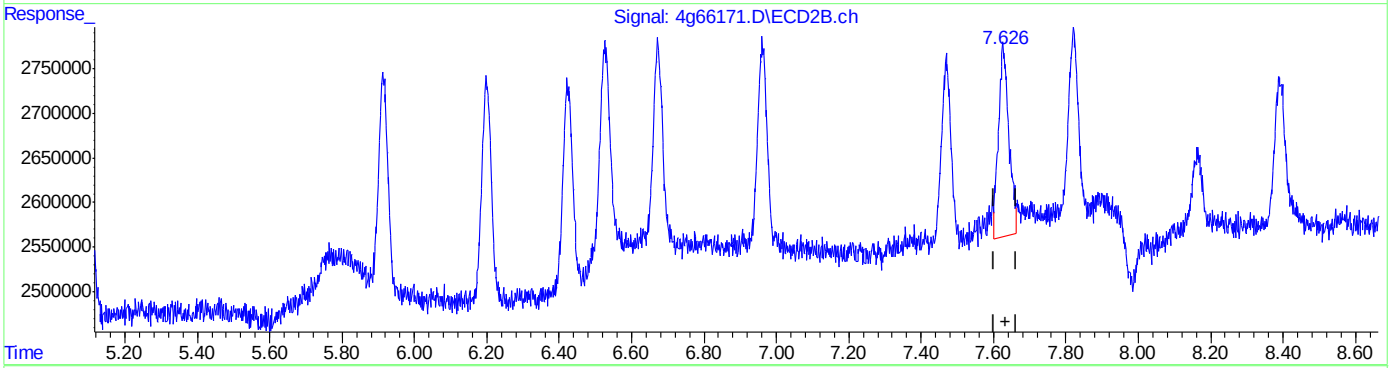
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.149min 0.679 PPB
response 2538502

(16) 4,4'-DDD #2 (A)
7.627min 1.127 PPB
response 4289539

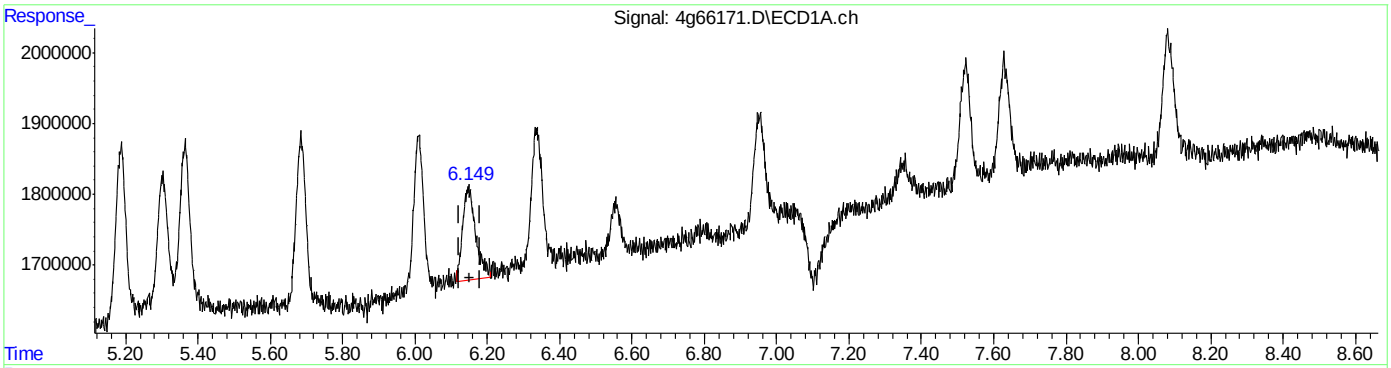
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:23:26 2016 RPT1

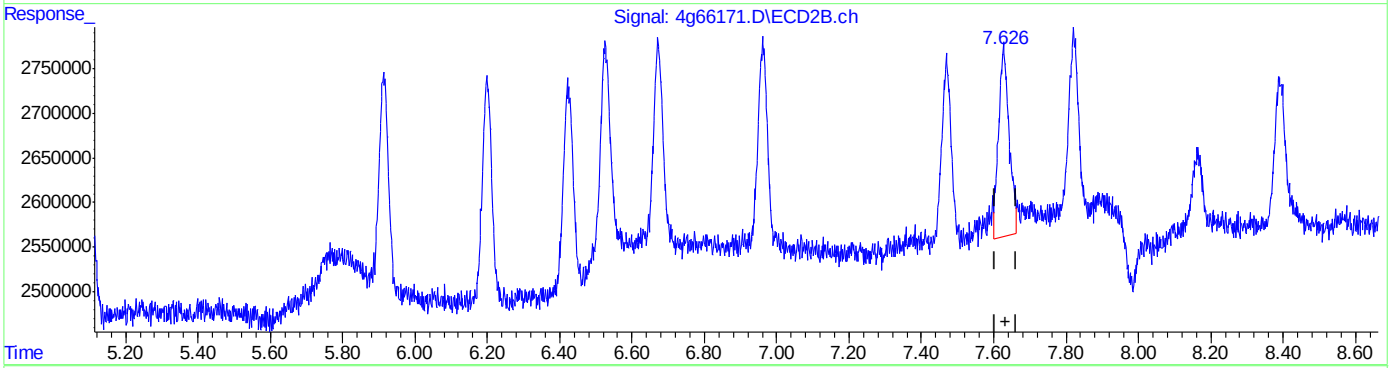
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.149min 0.883 PPB m
response 3302283

(16) 4,4'-DDD #2 (A)
7.627min 1.127 PPB
response 4289539

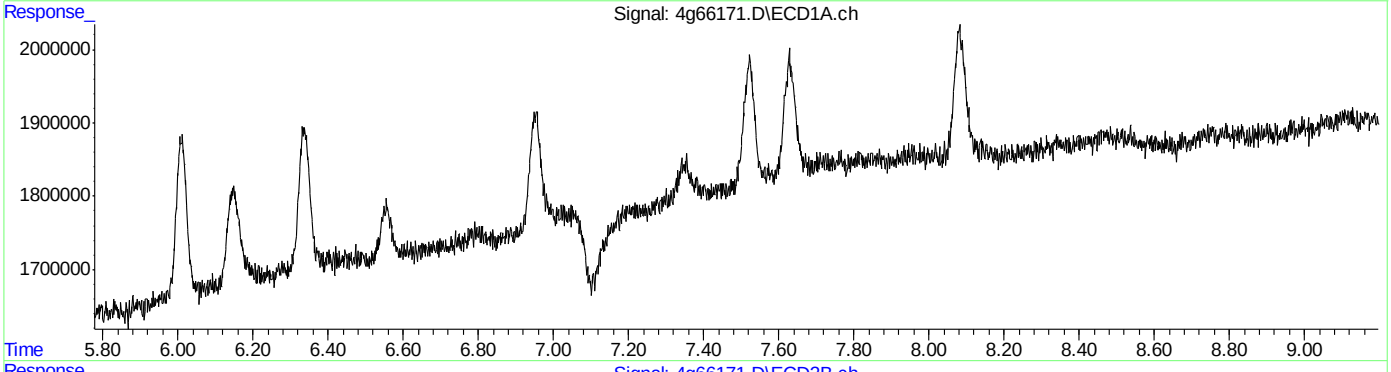
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:23:34 2016 RPT1

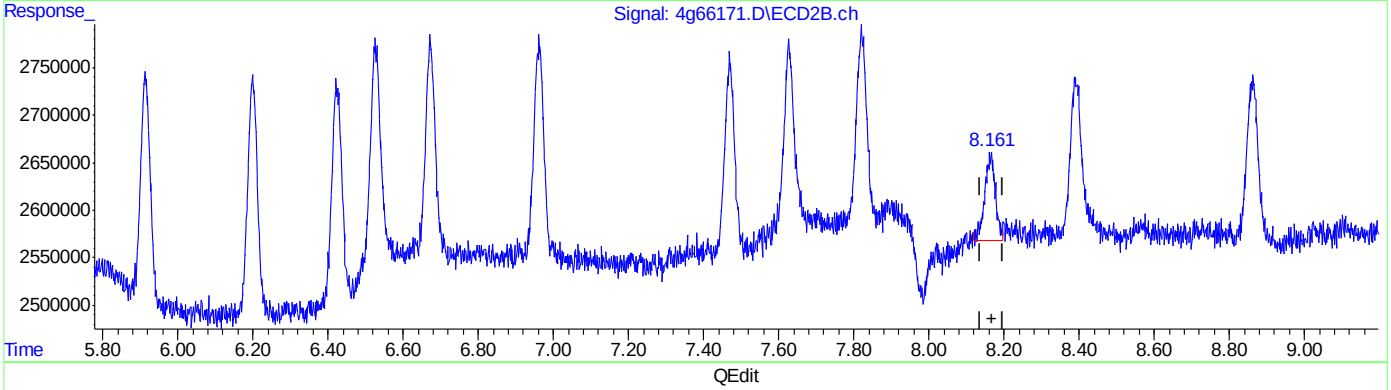
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
8.165min 1.395 PPB
response 1777297

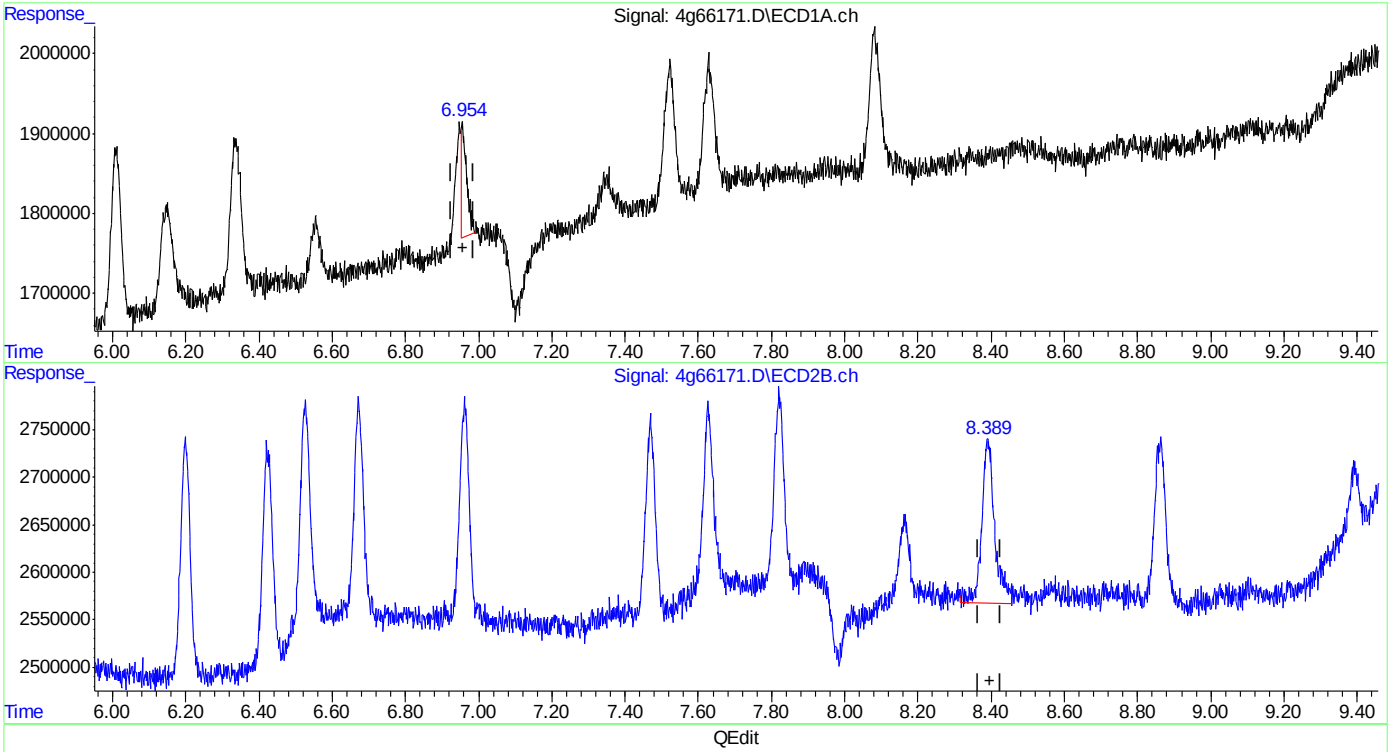
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.954min 0.435 PPB
response 1519479

(19) Endrin Aldehyde #2 (B)
8.393min 1.315 PPB
response 4202759

(+) = Expected Retention Time

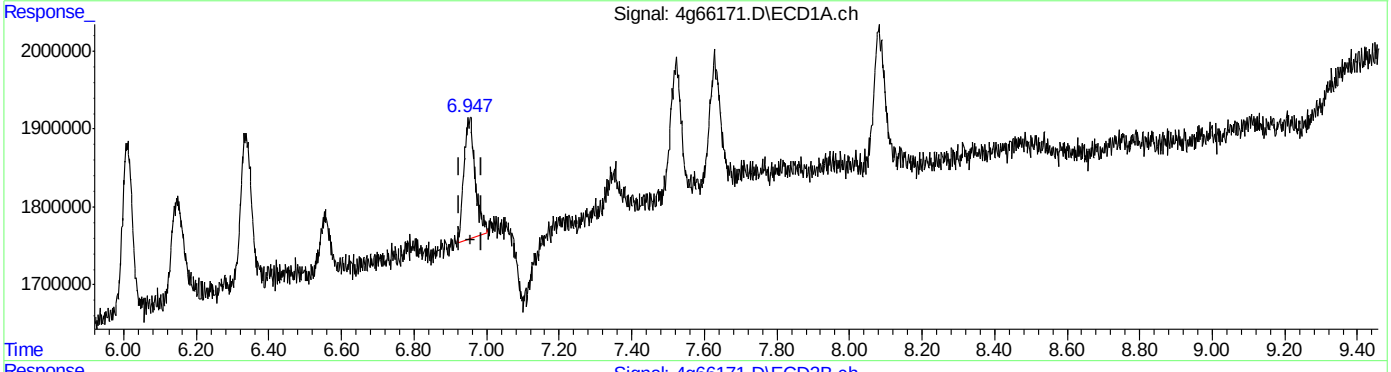
SGS ACCUTEST JC16312T

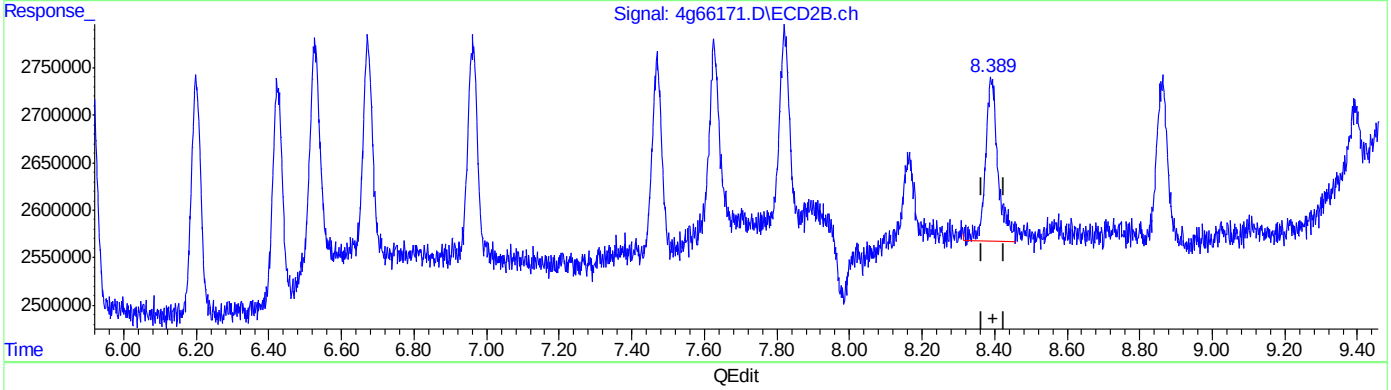
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.947min 0.963 PPB m
response 3365737

(19) Endrin Aldehyde #2 (B)
8.393min 1.315 PPB
response 4202759

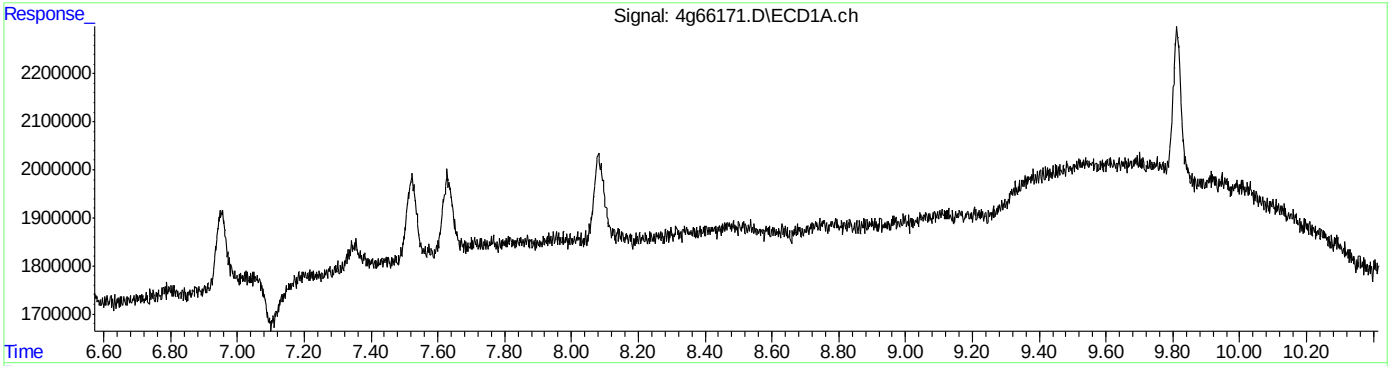
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:24:09 2016 RPT1

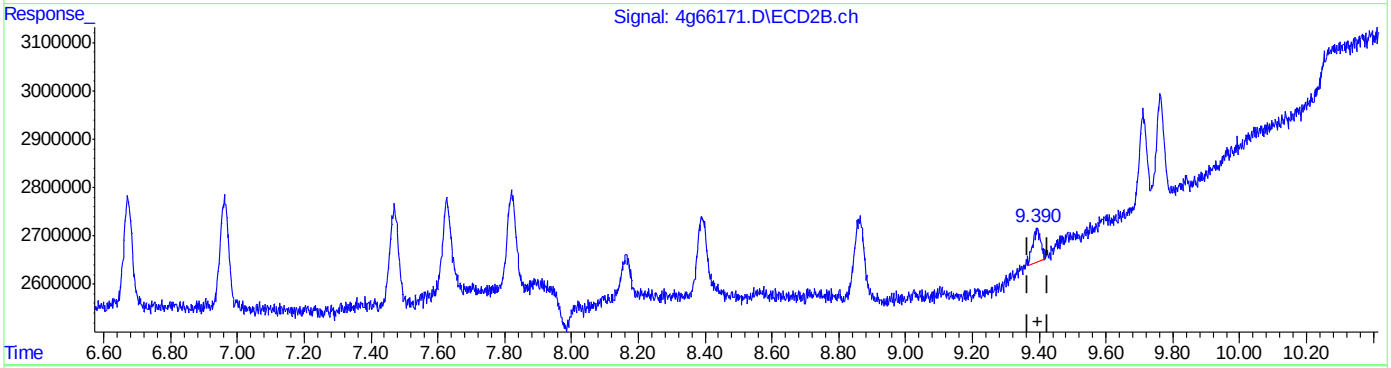
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
0.000min 0.000 PPB
response 0

(21) Methoxychlor #2 (A)
9.391min 0.699 PPB
response 1096381

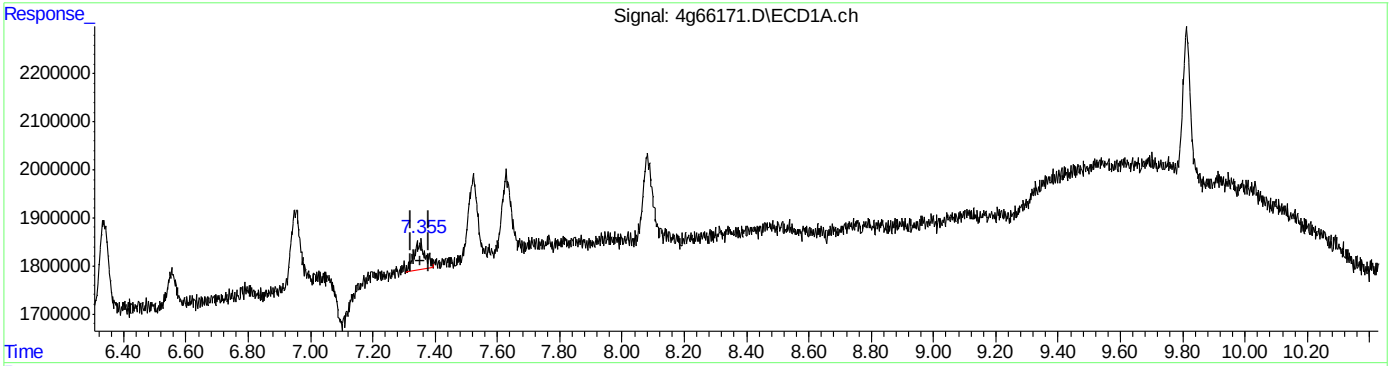
(+) = Expected Retention Time

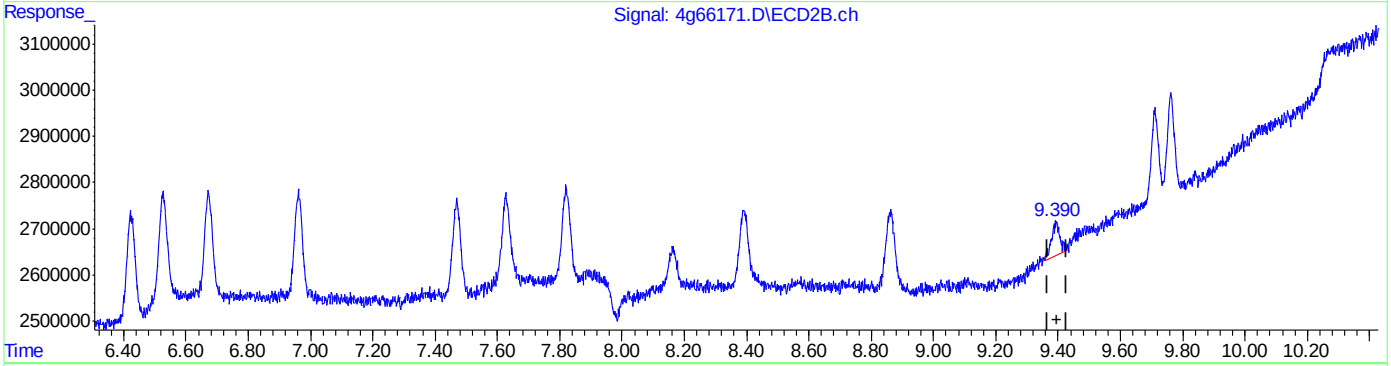
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
7.355min 0.978 PPB m
response 1421777

(21) Methoxychlor #2 (A)
9.390min 0.858 PPB m
response 1344536

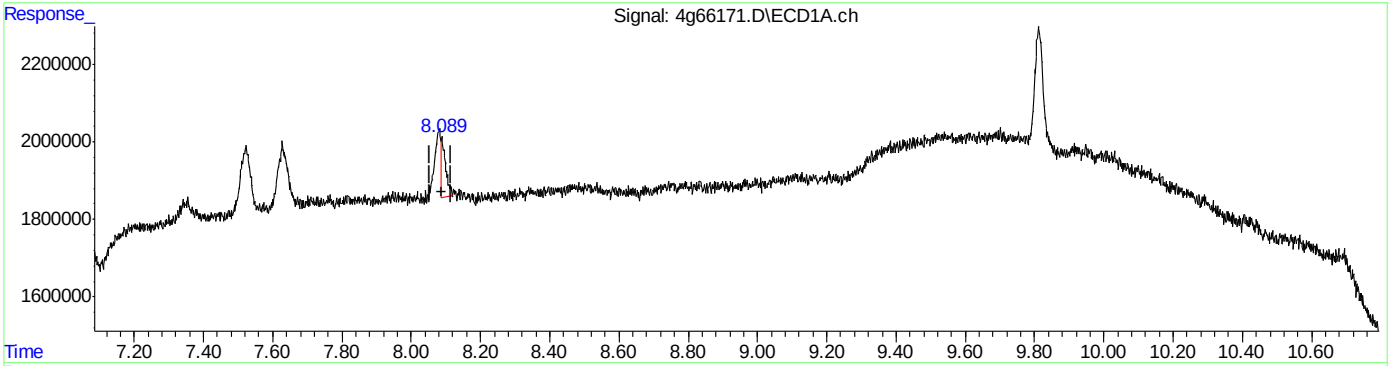
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:24:34 2016 RPT1

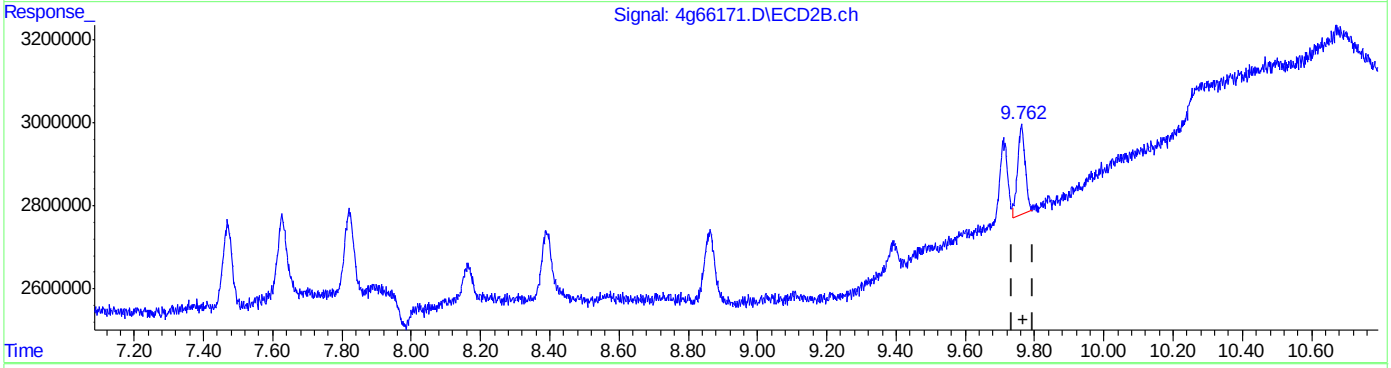
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
8.088min 0.351 PPB
response 1455433

(23) Endrin Ketone #2 (B)
9.762min 0.831 PPB
response 3382121

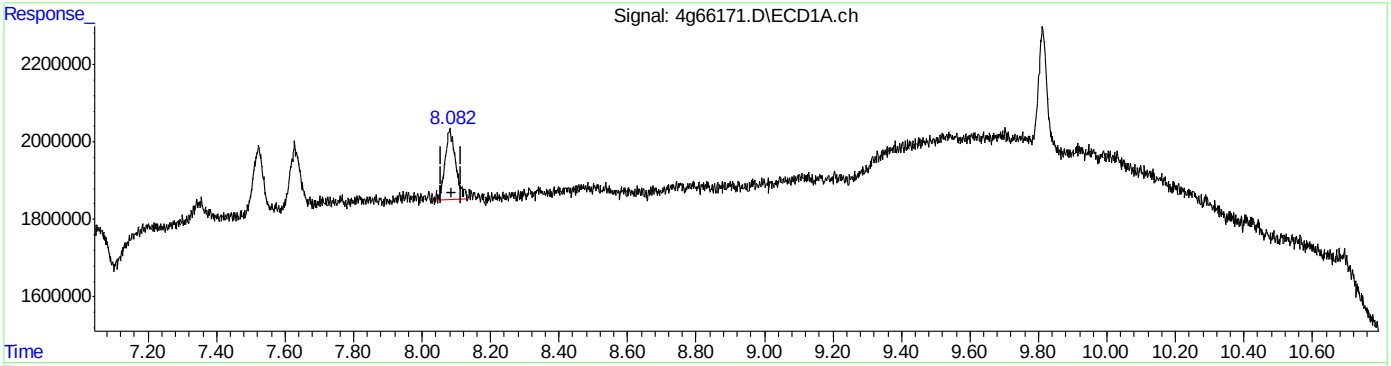
(+) = Expected Retention Time

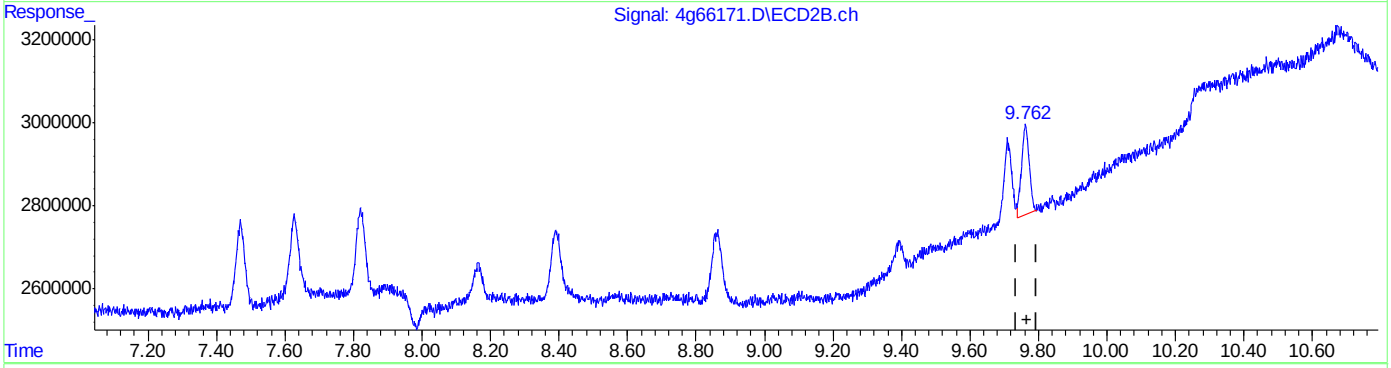
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
8.082min 0.942 PPB m
response 3903291

(23) Endrin Ketone #2 (B)
9.762min 0.831 PPB
response 3382121

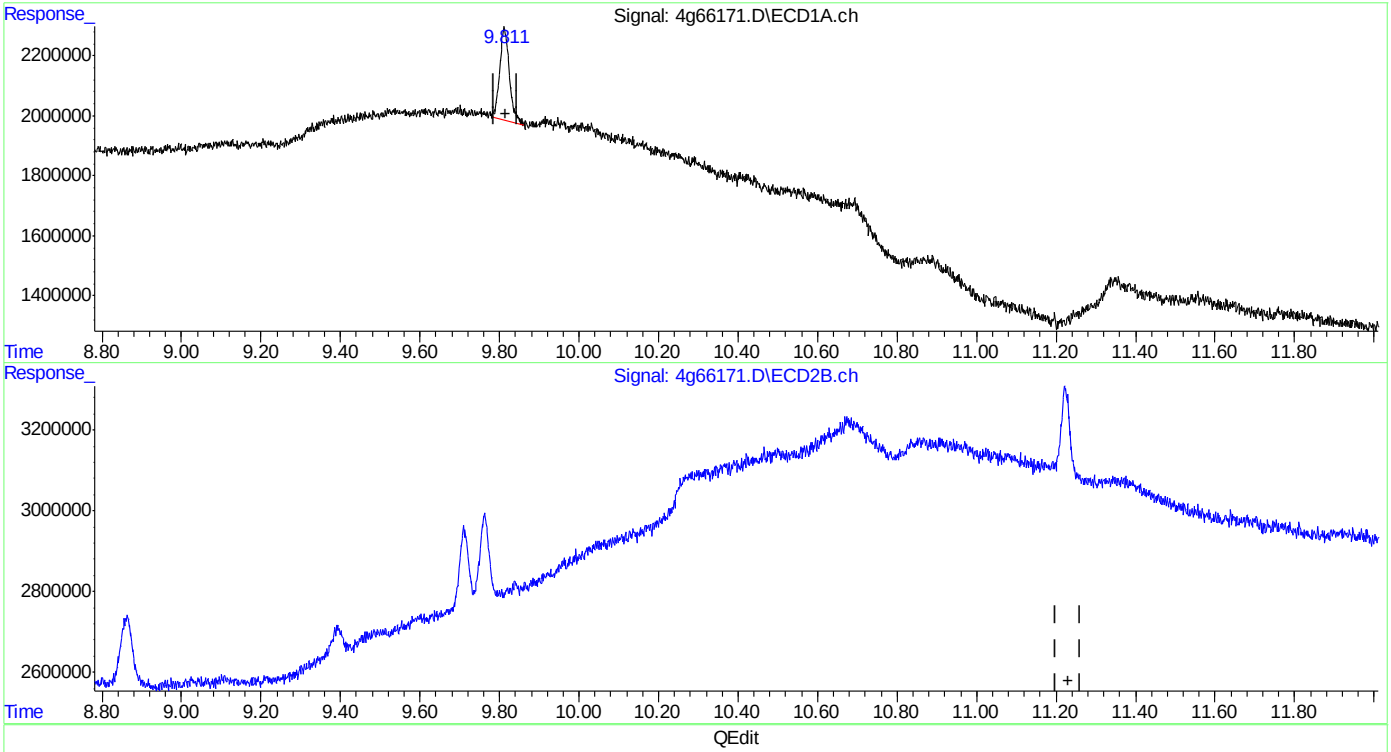
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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



(24) Decachlorobiphenyl (SA)
9.812min 1.193 PPB
response 5280260

(24) Decachlorobiphenyl #2 (SA)
0.000min 0.000 PPB
response 0

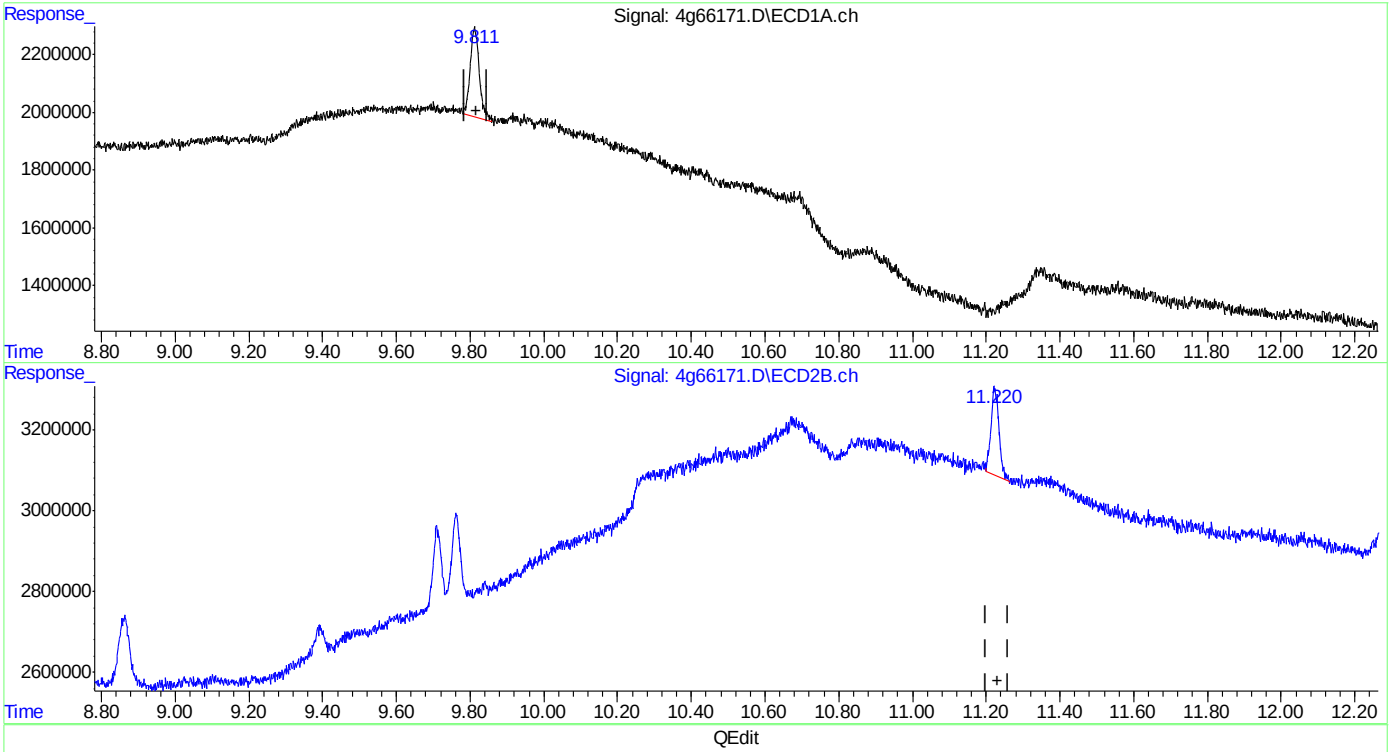
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:24:57 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:21:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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



(24) Decachlorobiphenyl (SA)
9.812min 1.193 PPB
response 5280260

(24) Decachlorobiphenyl #2 (SA)
11.220min 1.034 PPB m
response 3259561

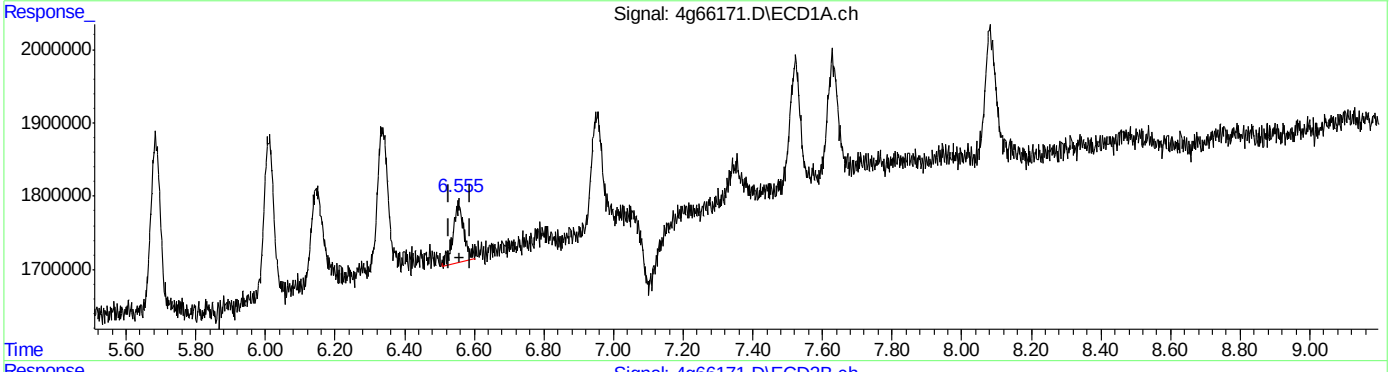
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:25:09 2016 RPT1

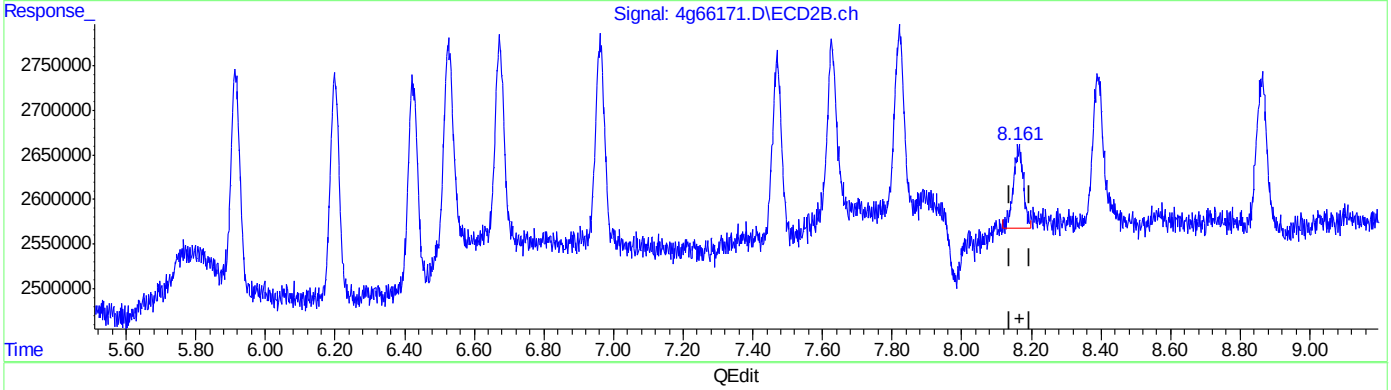
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:14 pm
Operator : brittanp
Sample : ic1741-1
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:25:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.555min 1.902 PPB m
response 1789273

(18) 4,4'-DDT #2 (MA)
8.165min 1.395 PPB
response 1777297

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:57:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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...	2.062	2.227	232.4E6	223.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.605	3.003	8425480	8378716	1.977	1.918
	Spiked Amount 40.000 Range 30 - 150 Recovery =					4.94%#	4.79%#
24) SA	Decachlor...	9.812	11.222	8904381	5943962	2.011	1.885
	Spiked Amount 40.000 Recovery =					5.03%	4.71%
	Target Compounds						
3) A	alpha-BHC	3.045	3.643	11392043	10526620	1.842	1.794
4) MA	gamma-BHC	3.333	4.066	10646374	9584879	1.962	1.821
5) MA	Heptachlor	3.606	4.642	9888944	9591422	1.885	1.824
6) B	beta-BHC	3.418	4.146	5439204	4180558	2.013	1.763
7) B	delta-BHC	3.813	4.546	10360923	8760652	1.987	1.847
8) MB	Aldrin	4.148	5.098	10194437	9501053	1.857	1.841
9) B	Heptachlo...	4.848	5.913	9855066	8816715	2.005	1.867
10) B	gamma-Chl...	5.017	6.197	9378217	8738574	1.946	1.824
11) B	alpha-Chl...	5.185	6.423	9394608	8931919	1.965	1.910
12) A	Endosulfan I	5.362	6.526	9600563	8084504	1.810	1.725
13) B	4,4'-DDE	5.301	6.671	8079197	8089776	2.015	1.794
14) MA	Dieldrin	5.685	6.962	9390718	8514750	1.896	1.803
15) MA	Endrin	6.010	7.469	8111488	8047348	1.770	1.900
16) A	4,4'-DDD	6.152	7.627	6136462	8062905	1.640m	2.119 #
17) B	Endosulfa...	6.336	7.820	8029802	7860175	1.816	1.903
18) MA	4,4'-DDT	6.552	8.160	3057971	3590730	2.356m	2.021
19) B	Endrin Al...	6.952	8.389	6431189	7159922	1.838	2.240
20) B	Endosulfa...	7.628	8.862	6472263	6704757	1.794	1.841
21) A	Methoxychlor	7.345	9.390	2204791	2736111	1.515m	1.745
22)	Mirex	7.519	9.712	7097047	6431750	1.979	1.961
23) B	Endrin Ke...	8.084	9.763	7328225	7245174	1.768	1.780

SemiQuant Compounds - Not Calibrated on this Instrument

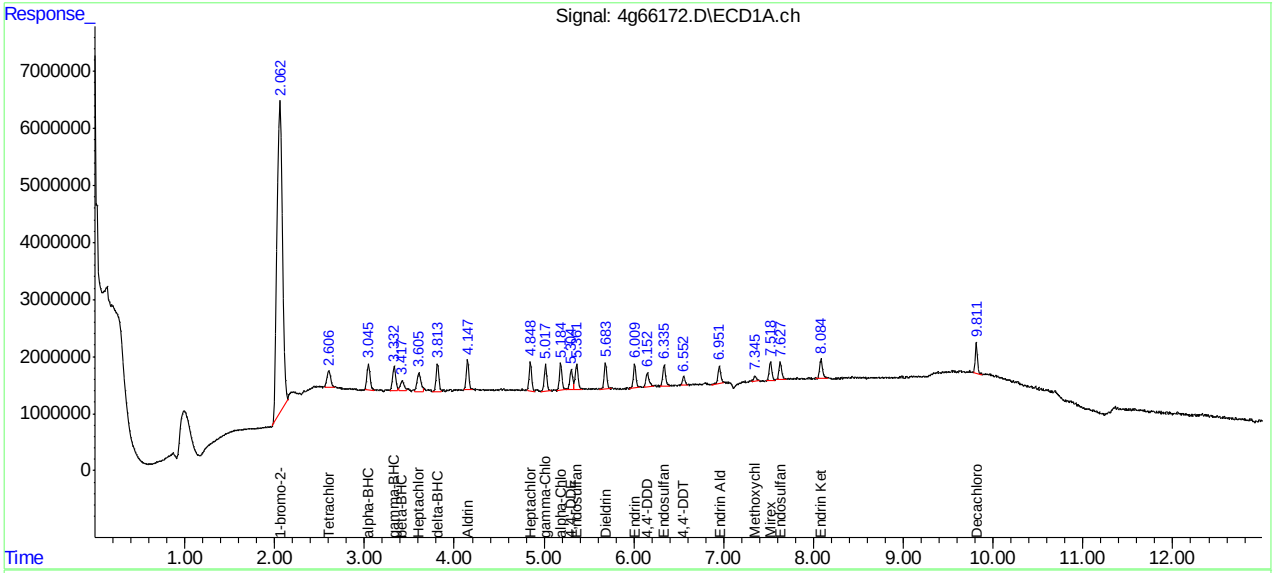
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

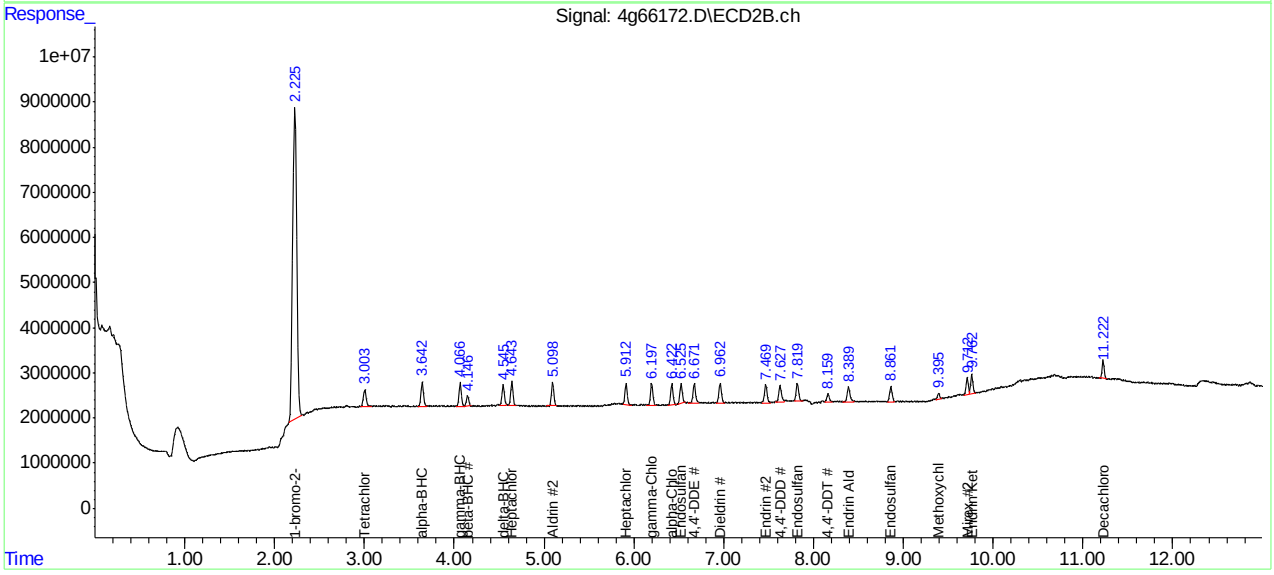
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:57:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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:	G4G1741-IC1741	**Method:**	SW846 8081B
Lab FileID:	4G66172.D	**Analyst approved:**	03/19/16 12:57 Joseph Ravino
Injection Time:	03/18/16 18:29	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

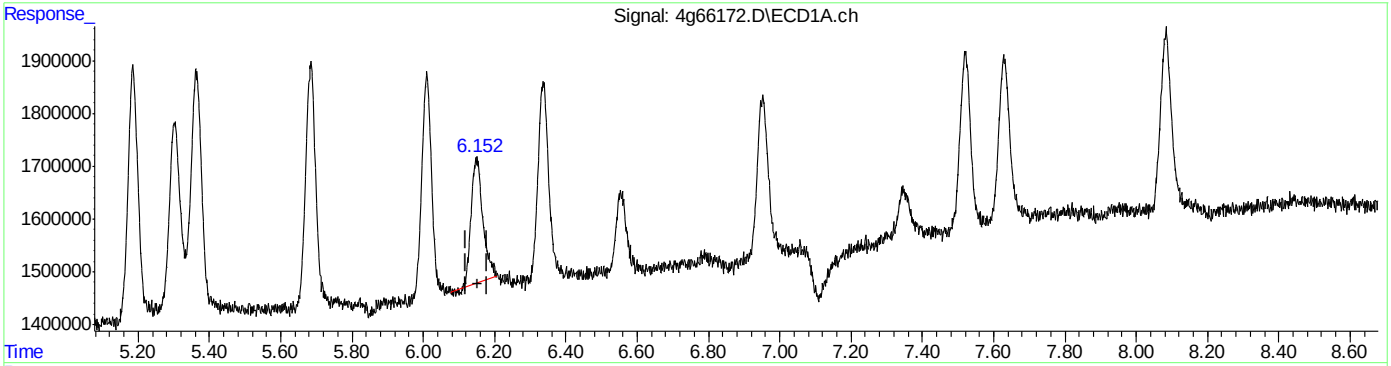
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDD	72-54-8	1	6.15	Poor instrument integration
4,4'-DDT	50-29-3	1	6.55	Poor instrument integration
Methoxychlor	72-43-5	1	7.34	Poor instrument integration

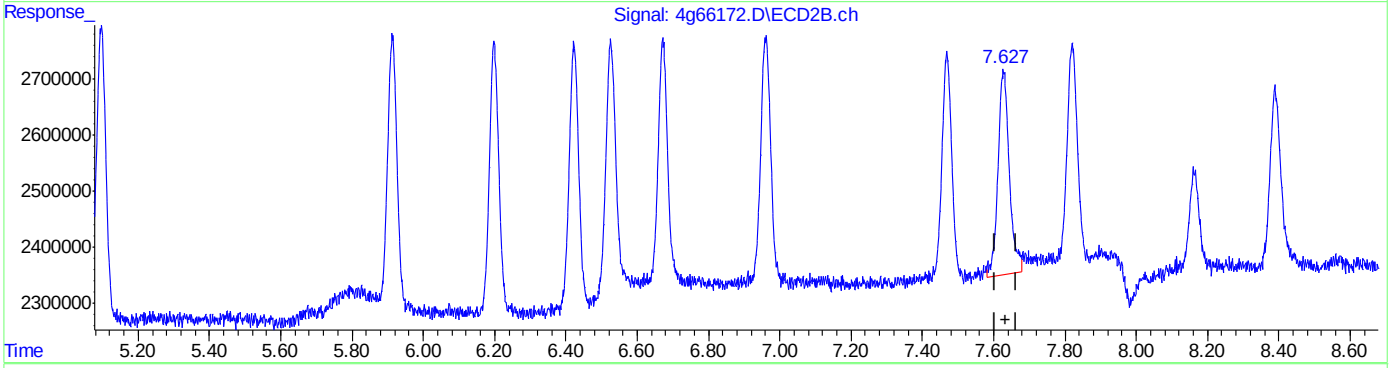
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.152min 1.457 PPB
response 5449046

(16) 4,4'-DDD #2 (A)
7.627min 2.119 PPB
response 8062905

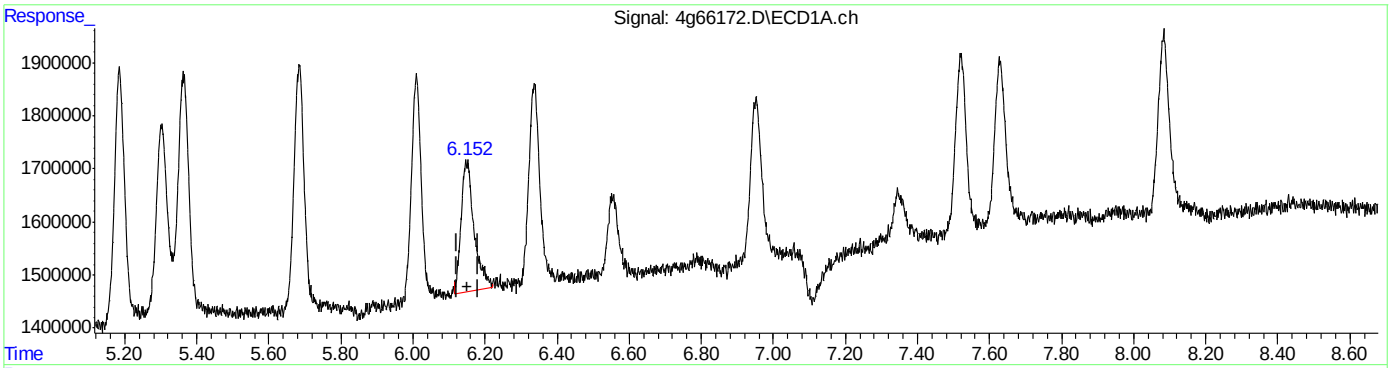
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:28:48 2016 RPT1

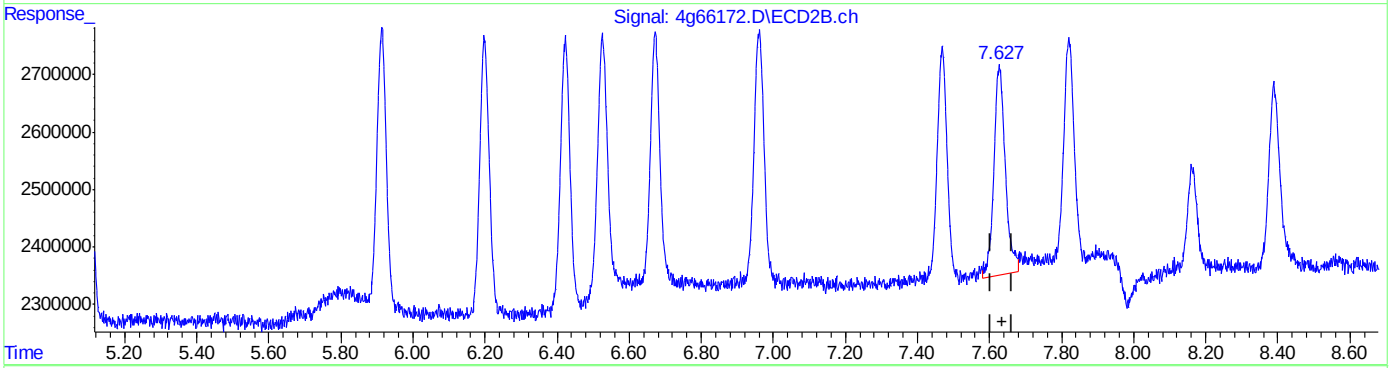
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.152min 1.640 PPB m
response 6136462

(16) 4,4'-DDD #2 (A)
7.627min 2.119 PPB
response 8062905

(+) = Expected Retention Time

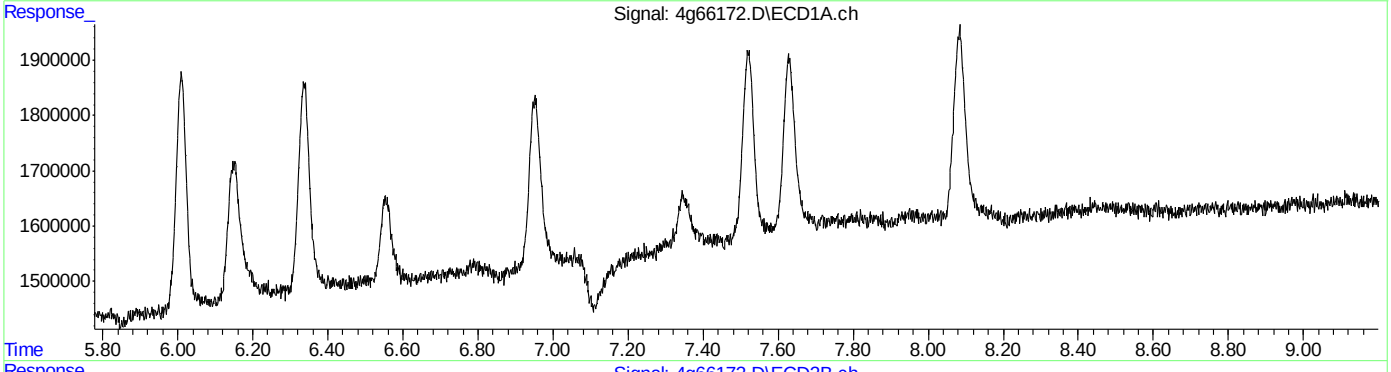
SGS ACCUTEST JC16312T

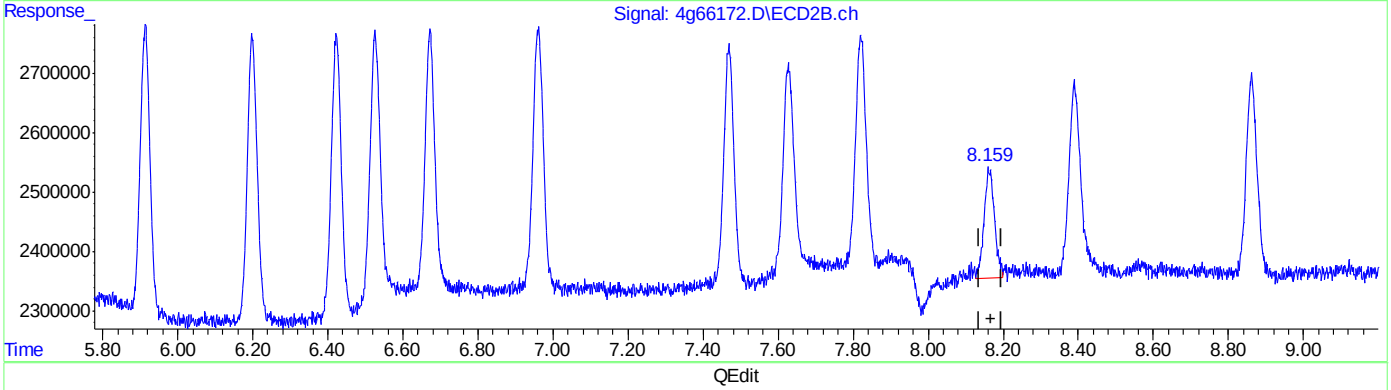
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
8.160min 2.021 PPB
response 3590730

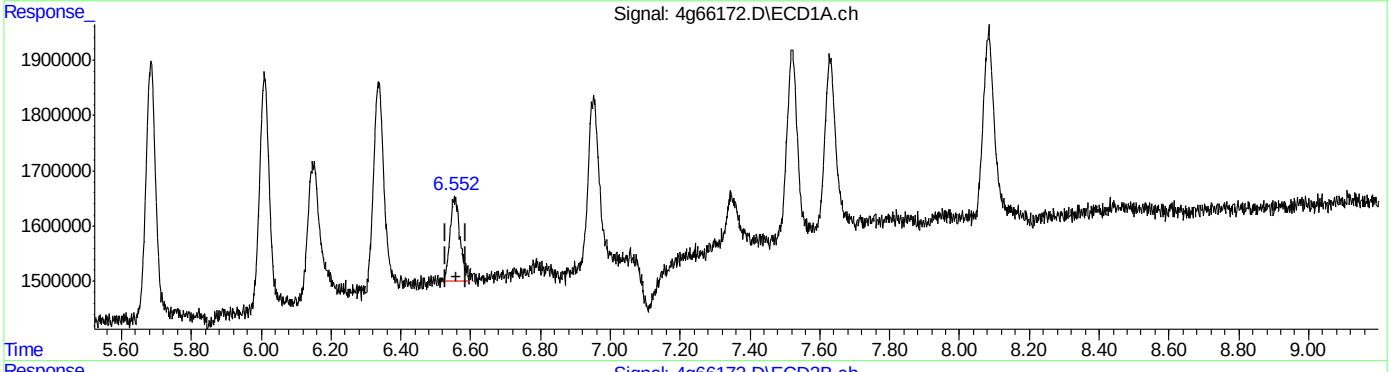
(+) = Expected Retention Time

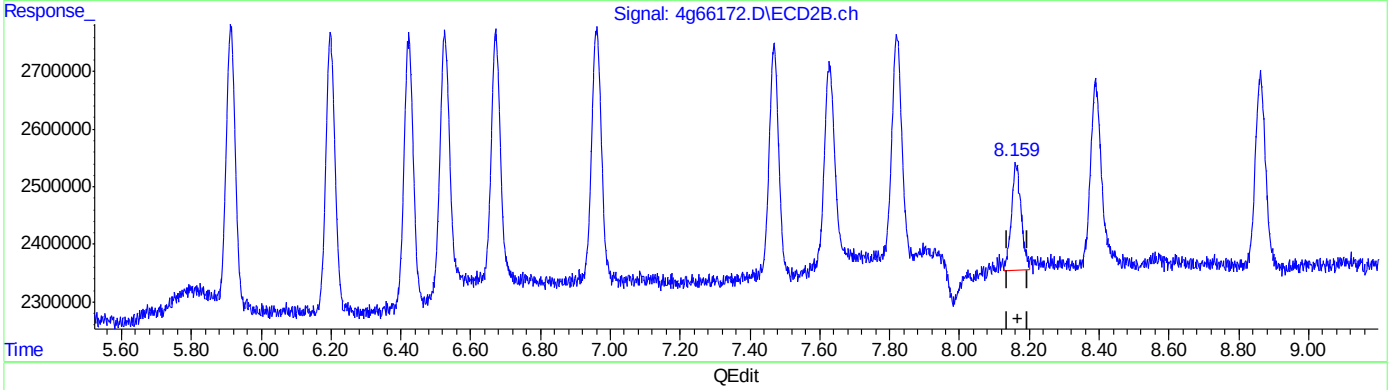
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
6.552min 2.356 PPB m
response 3057971

(18) 4,4'-DDT #2 (MA)
8.160min 2.021 PPB
response 3590730

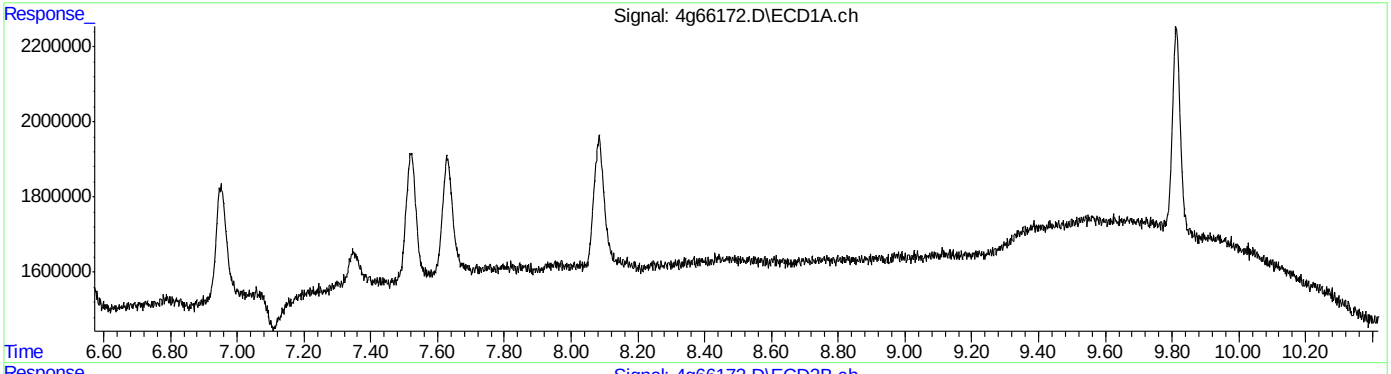
(+) = Expected Retention Time

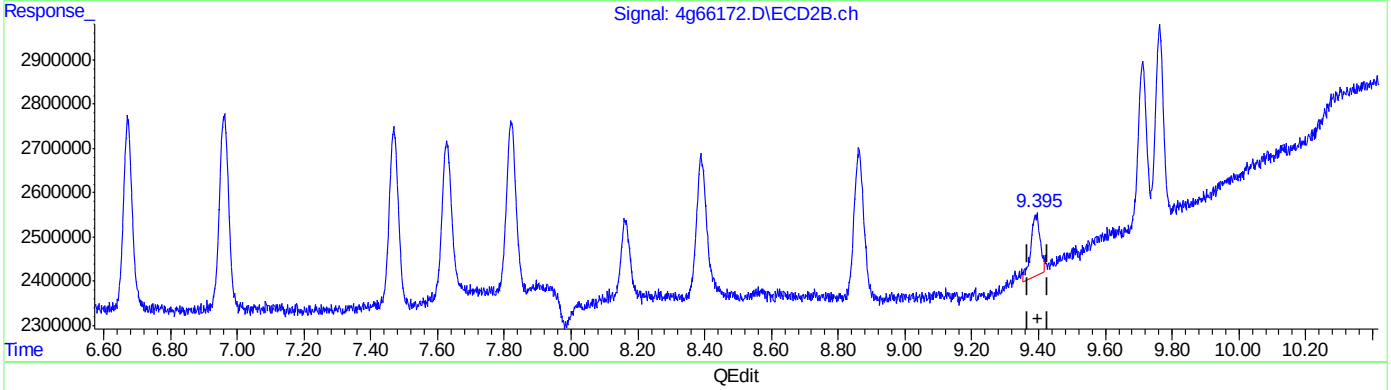
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
0.000min 0.000 PPB
response 0

(21) Methoxychlor #2 (A)
9.390min 1.745 PPB
response 2736111

(+) = Expected Retention Time

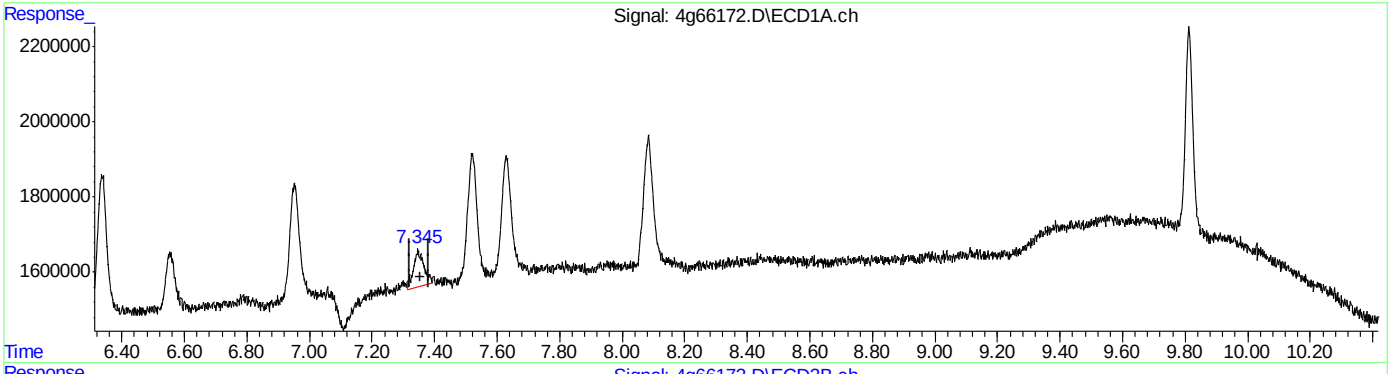
SGS ACCUTEST JC16312T

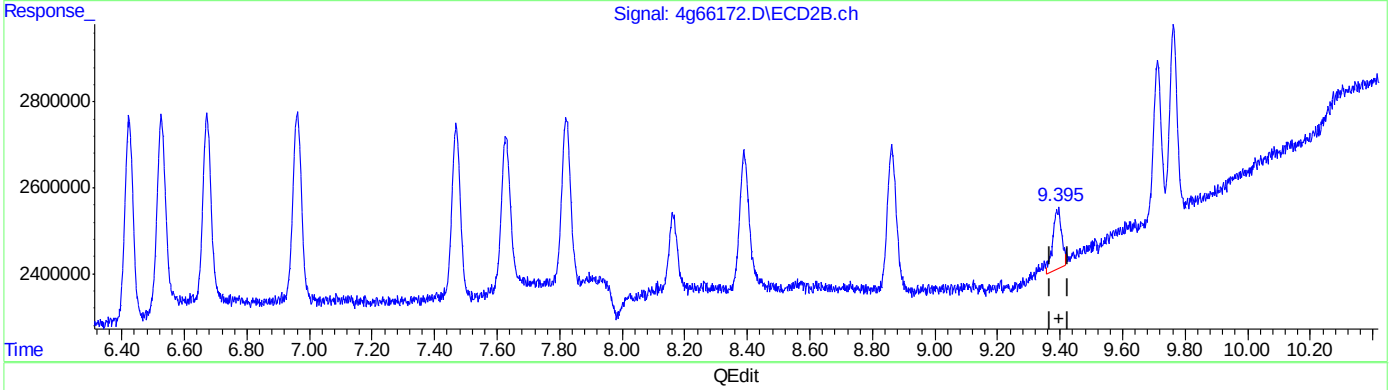
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:29 pm
Operator : brittanp
Sample : ic1741-2
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:27:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
7.345min 1.515 PPB m
response 2204791

(21) Methoxychlor #2 (A)
9.390min 1.745 PPB
response 2736111

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:44 pm
Operator : brittanp
Sample : ic1741-5
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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	2.219	240.0E6	226.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.602	3.001	22870581	20754397	5.197	4.691
Spiked Amount		40.000	Range	30 - 150	Recovery	= 12.99%#	11.73%#
24) SA	Decachlor...	9.813	11.224	23175600	16287586	5.067	5.100
Spiked Amount		40.000			Recovery	= 12.67%	12.75%
	Target Compounds						
3) A	alpha-BHC	3.043	3.642	30089762	26111549	4.710	4.393
4) MA	gamma-BHC	3.329	4.066	26986219	23734463	4.815	4.453
5) MA	Heptachlor	3.605	4.641	25322182	23929088	4.672	4.492
6) B	beta-BHC	3.418	4.147	15127844	10939195	5.420	4.555
7) B	delta-BHC	3.813	4.545	25641495	21757846	4.761	4.529
8) MB	Aldrin	4.147	5.096	26051794	23382807	4.595	4.474
9) B	Heptachlo...	4.847	5.913	24683763	21653337	4.862	4.528
10) B	gamma-Chl...	5.017	6.200	23607988	22159208	4.742	4.567
11) B	alpha-Chl...	5.186	6.423	22862053	22257535	4.631	4.699
12) A	Endosulfan I	5.363	6.526	24510010	21248966	4.474	4.477
13) B	4,4'-DDE	5.303	6.672	18707804	20362600	4.518	4.459
14) MA	Dieldrin	5.683	6.961	23221515	21683262	4.541	4.533
15) MA	Endrin	6.009	7.469	20973259	19982994	4.432	4.659
16) A	4,4'-DDD	6.149	7.628	16823710	18173035	4.354	4.716
17) B	Endosulfa...	6.336	7.821	20450551	19430447	4.477	4.644
18) MA	4,4'-DDT	6.555	8.163	10031570	11393639	4.719	4.647
19) B	Endrin Al...	6.951	8.391	16967572	15721325	4.694	4.856
20) B	Endosulfa...	7.629	8.863	16944908	16785782	4.546	4.552
21) A	Methoxychlor	7.346	9.392	5899221	7028585	3.924m	4.427
22)	Mirex	7.520	9.711	17657185	16180897	4.767	4.871
23) B	Endrin Ke...	8.083	9.762	19187568	19013756	4.482	4.613

SemiQuant Compounds - Not Calibrated on this Instrument

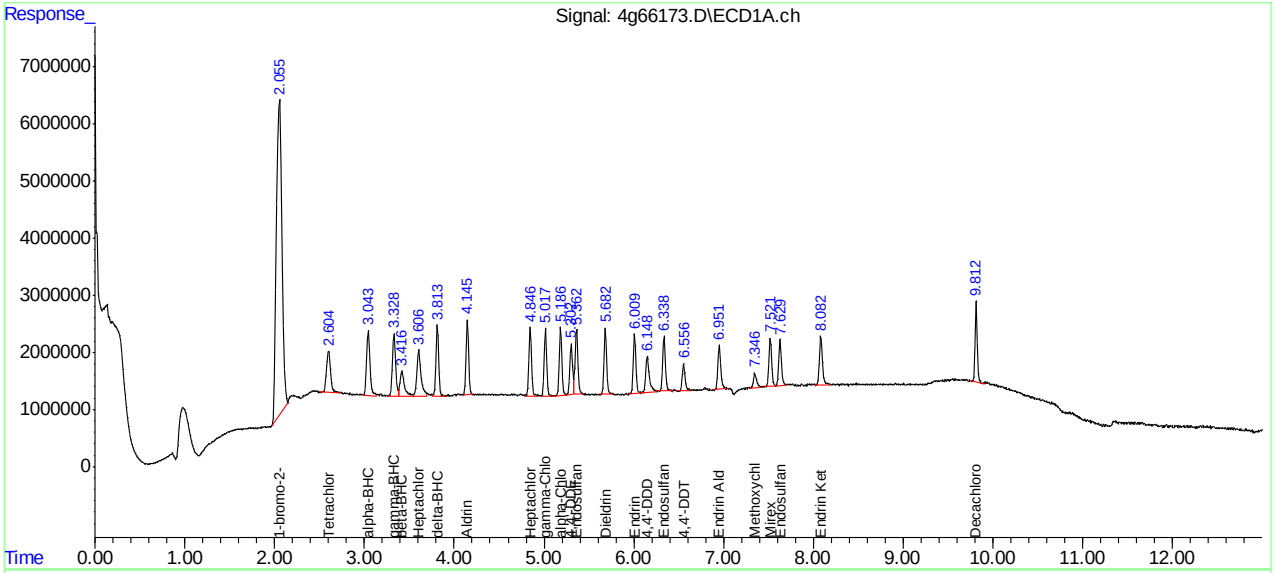
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

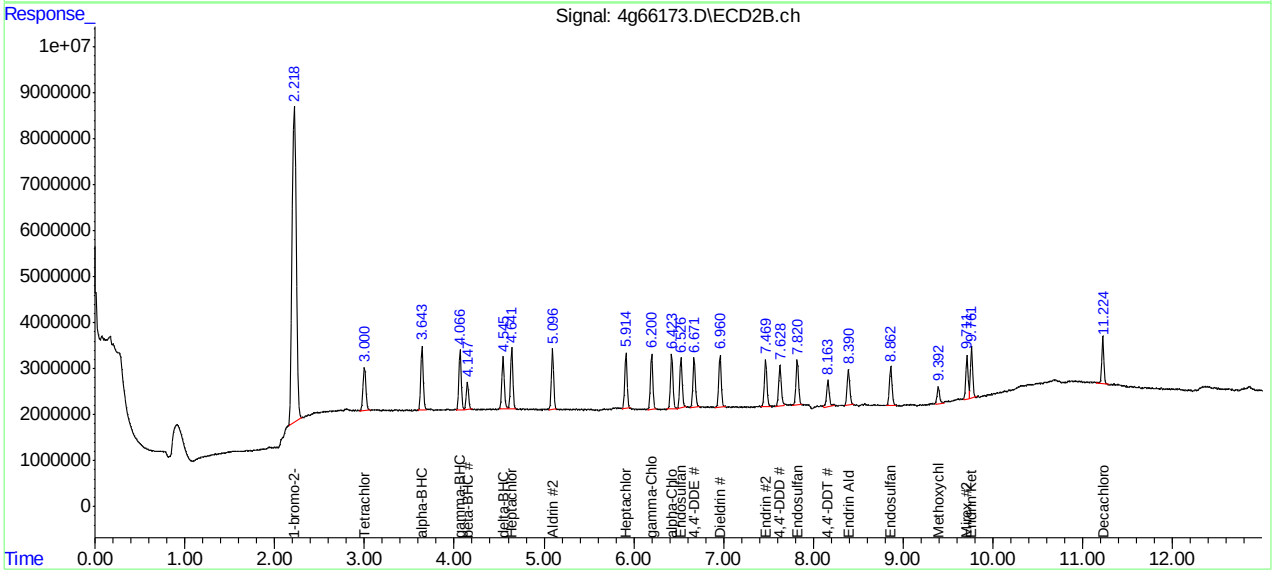
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:44 pm
Operator : brittanp
Sample : ic1741-5
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 JC16312T

Manual Integration Approval Summary

Sample Number:	G4G1741-IC1741	**Method:**	SW846 8081B
Lab FileID:	4G66173.D	**Analyst approved:**	03/19/16 12:57 Joseph Ravino
Injection Time:	03/18/16 18:44	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

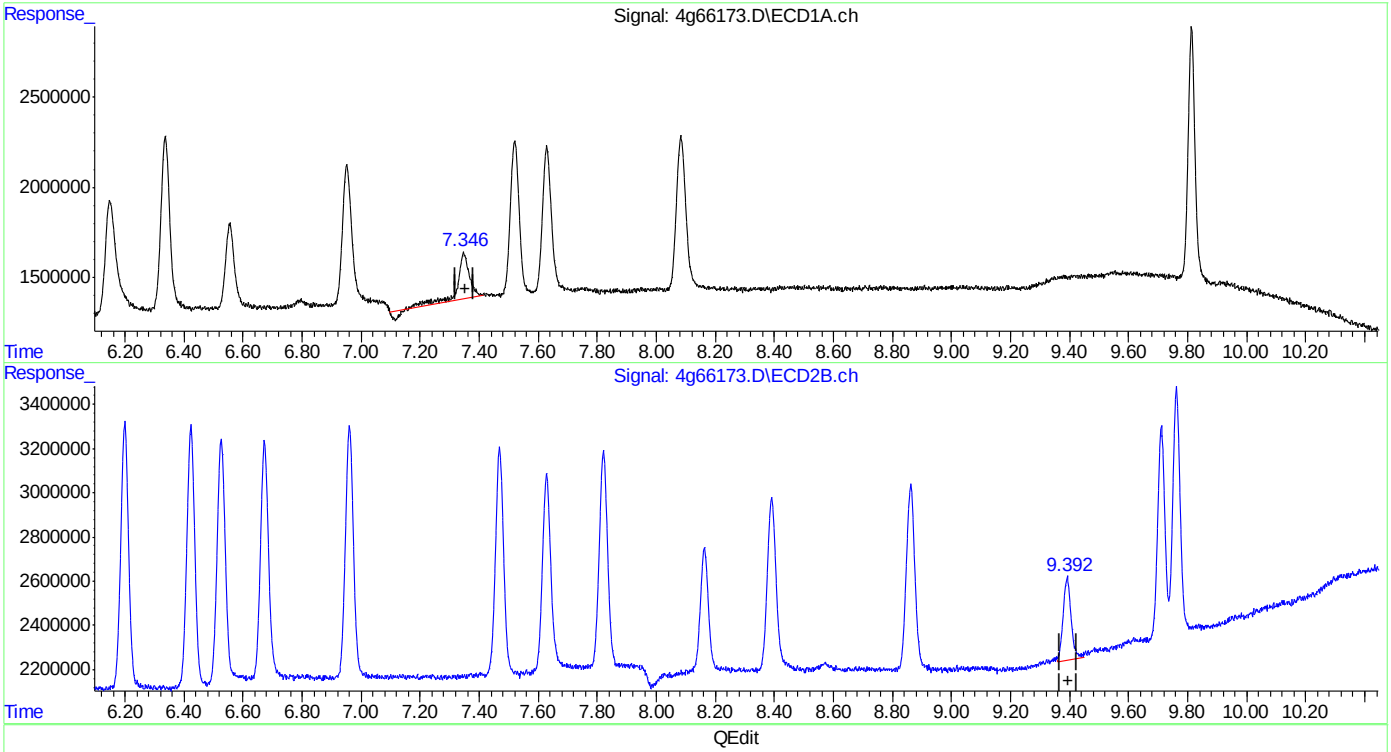
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	7.35	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:44 pm
Operator : brittanp
Sample : ic1741-5
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:30:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 4.574 PPB
response 6875787

(21) Methoxychlor #2 (A)
9.392min 4.427 PPB
response 7028585

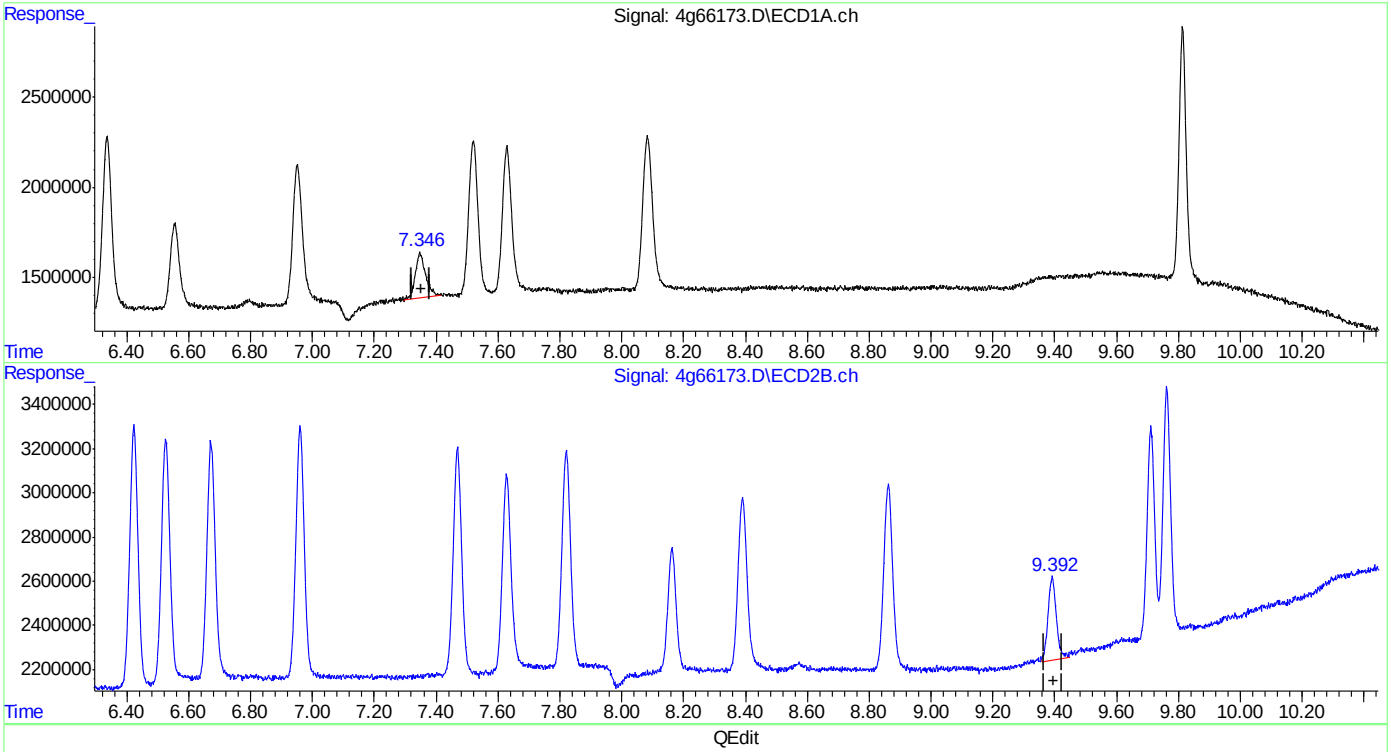
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:44 pm
Operator : brittanp
Sample : ic1741-5
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:30:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 3.924 PPB m
response 5899221

(21) Methoxychlor #2 (A)
9.392min 4.427 PPB
response 7028585

(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:31:25 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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...	2.060	2.226	233.5E6	223.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.607	3.005	45504417	40137454	10.630	9.182
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	26.58%#	22.96%#
24) SA	Decachlor...	9.813	11.225	45307084	30850098	10.183	9.777
	Spiked Amount 40.000			Recovery	=	25.46%	24.44%
	Target Compounds						
3) A	alpha-BHC	3.046	3.644	59527744	52838102	9.578	8.996
4) MA	gamma-BHC	3.333	4.067	52695955	47682943	9.666	9.054
5) MA	Heptachlor	3.607	4.642	50408518	48179406	9.562	9.154
6) B	beta-BHC	3.420	4.149	28185646	22530971	10.382	9.495
7) B	delta-BHC	3.815	4.545	50278763	43962631	9.597	9.260
8) MB	Aldrin	4.149	5.097	53675795	47595677	9.734	9.217
9) B	Heptachlo...	4.848	5.914	48374463	44452754	9.795	9.407
10) B	gamma-Chl...	5.018	6.199	47558825	44312537	9.821	9.242
11) B	alpha-Chl...	5.186	6.423	46852373	43816367	9.756	9.361
12) A	Endosulfan I	5.364	6.526	50006476	42138358	9.384	8.984
13) B	4,4'-DDE	5.304	6.672	38172934	41199388	9.476	9.131
14) MA	Dieldrin	5.685	6.960	46751697	43533154	9.398	9.210
15) MA	Endrin	6.009	7.469	41658895	38814076	9.050	9.158
16) A	4,4'-DDD	6.148	7.628	35453433	35462268	9.433	9.313
17) B	Endosulfa...	6.336	7.821	41736558	38737604	9.393	9.371
18) MA	4,4'-DDT	6.555	8.163	22516309	23312920	9.147	8.707
19) B	Endrin Al...	6.952	8.391	35352048	31657555	10.055	9.896
20) B	Endosulfa...	7.629	8.862	34302192	35425628	9.461	9.722
21) A	Methoxychlor	7.349	9.389	12892108	14198930	8.817	9.050m
22)	Mirex	7.520	9.711	35380115	32231093	9.820	9.819m
23) B	Endrin Ke...	8.083	9.762	39929186	39608280	9.588	9.724

SemiQuant Compounds - Not Calibrated on this Instrument

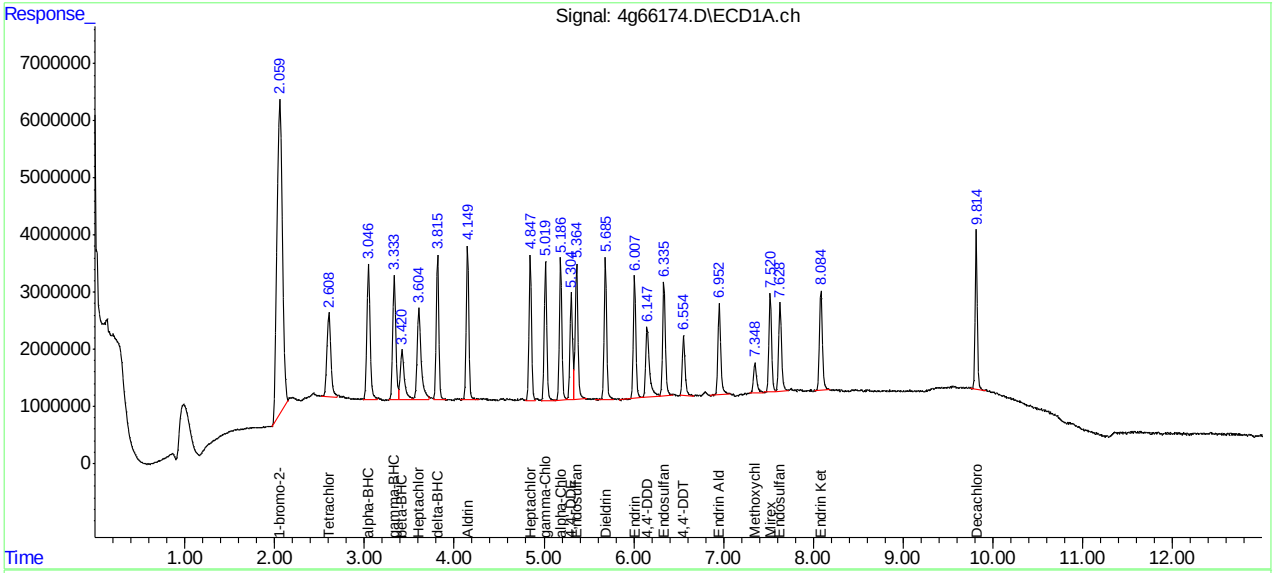
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

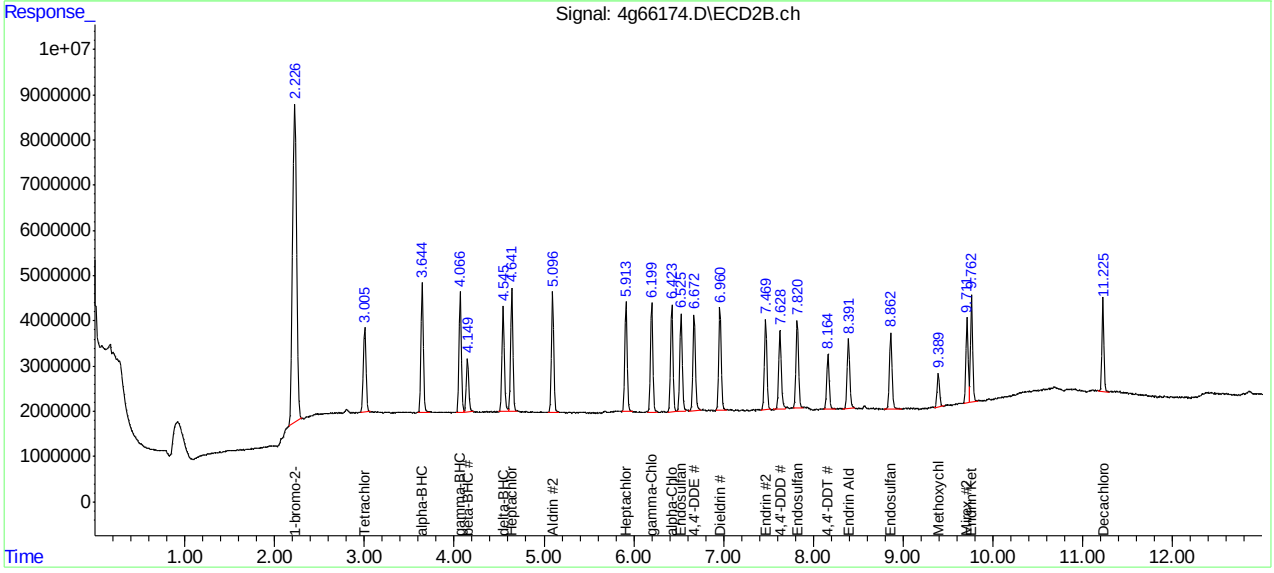
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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:	G4G1741-IC1741	**Method:**	SW846 8081B
Lab FileID:	4G66174.D	**Analyst approved:**	03/19/16 12:57 Joseph Ravino
Injection Time:	03/18/16 18:58	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

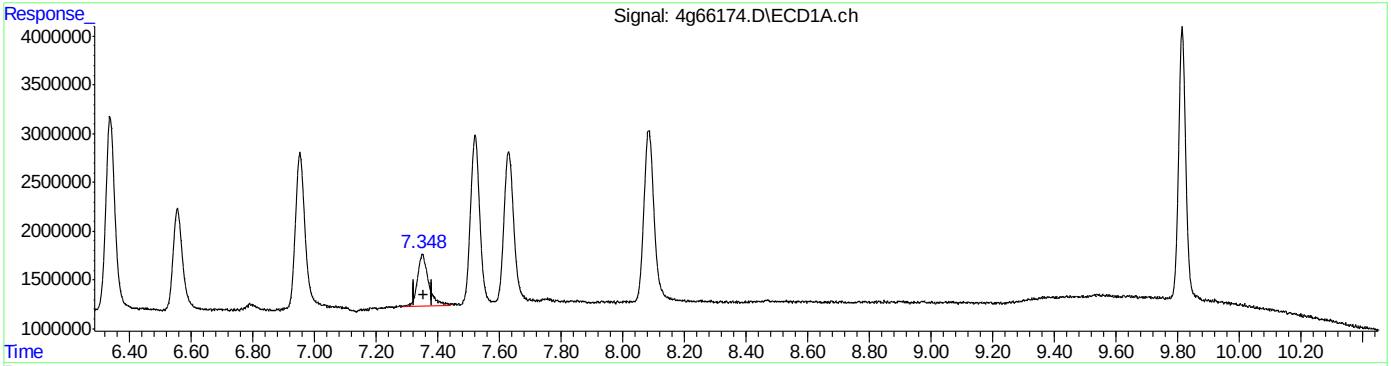
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.39	Poor instrument integration
Mirex	2385-85-5	2	9.71	Poor instrument integration

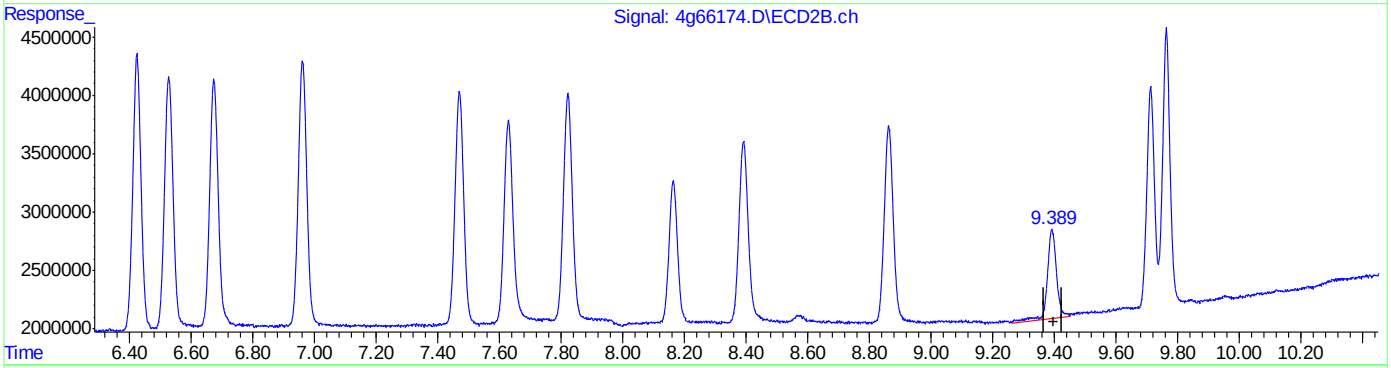
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
7.349min 8.817 PPB
response 12892108

(21) Methoxychlor #2 (A)
9.391min 10.141 PPB
response 15909681

(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:32:15 2016 RPT1

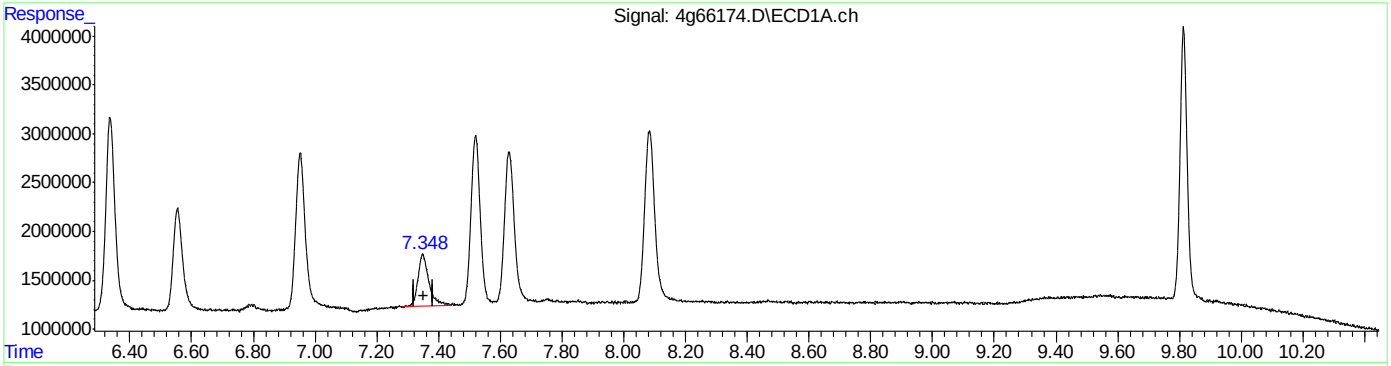
SGS ACCUTEST JC16312T

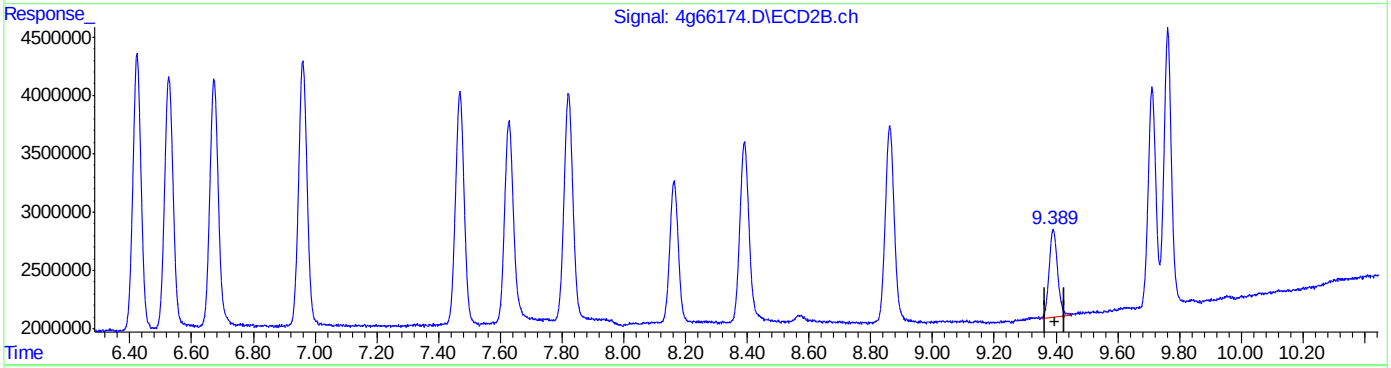
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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)
7.349min 8.817 PPB
response 12892108

(21) Methoxychlor #2 (A)
9.389min 9.050 PPB m
response 14198930

(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:32:24 2016 RPT1

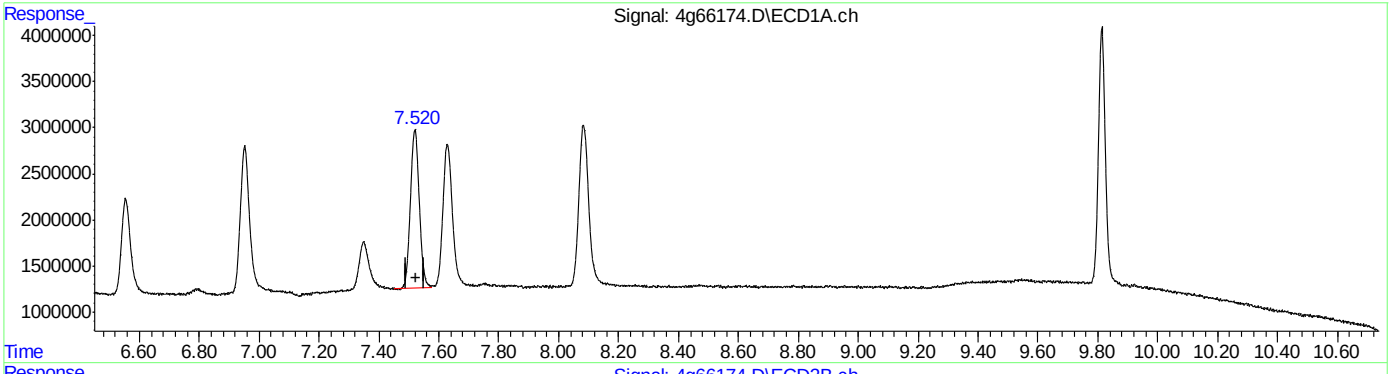
SGS ACCUTEST JC16312T

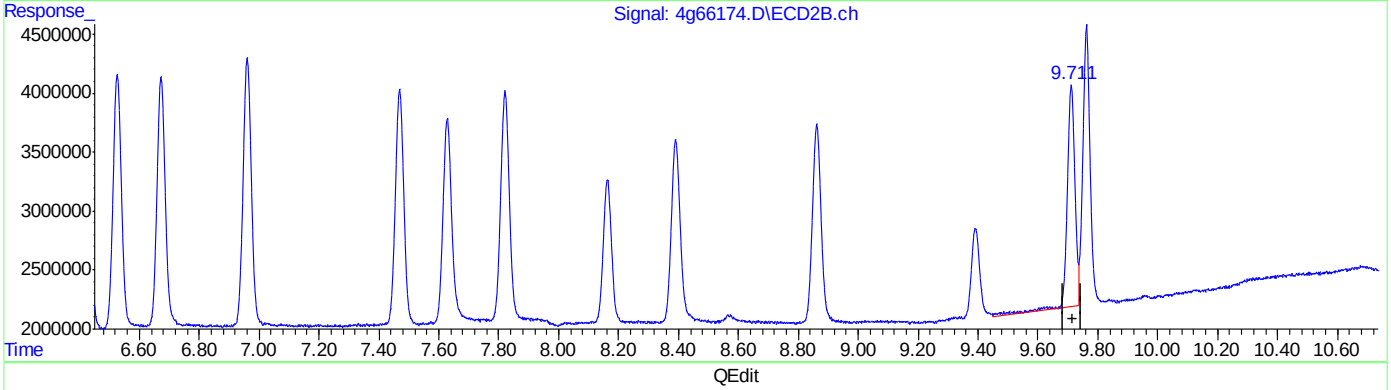
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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
7.520min 9.820 PPB
response 35380115

(22) Mirex #2
9.711min 10.212 PPB
response 33522887

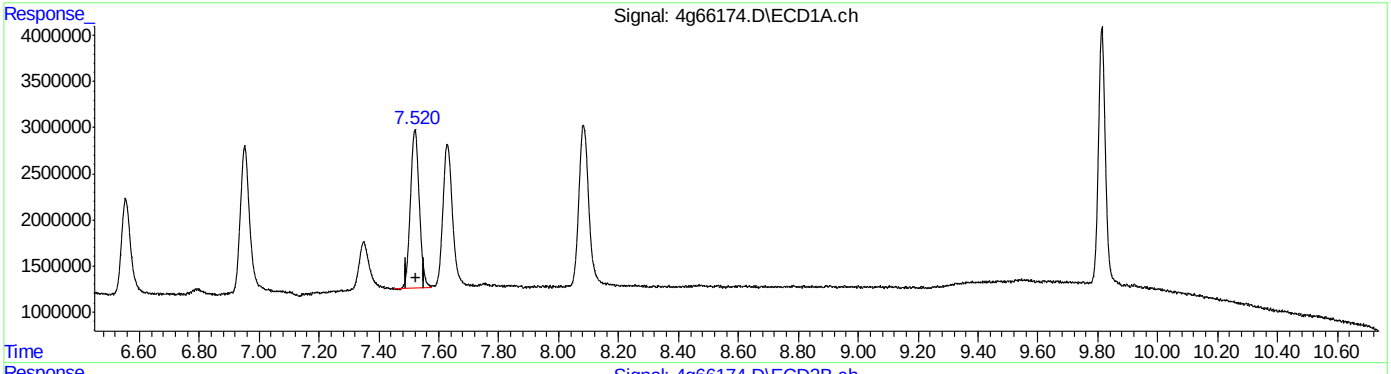
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:32:27 2016 RPT1

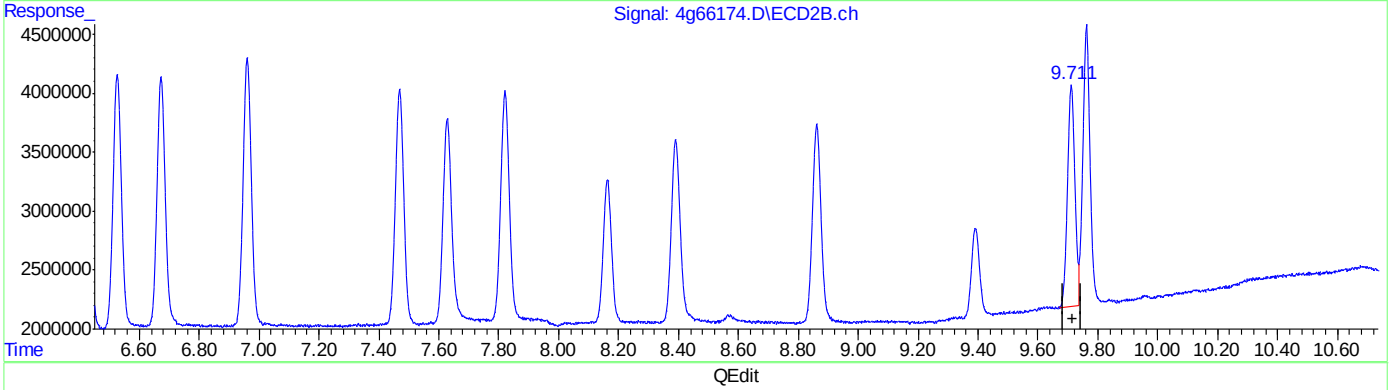
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 6:58 pm
Operator : brittanp
Sample : ic1741-10
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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
7.520min 9.820 PPB
response 35380115

(22) Mirex #2
9.711min 9.819 PPB m
response 32231093

(+) = Expected Retention Time
4PST1741.M Sat Mar 19 12:32:42 2016 RPT1

SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66175.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:13 pm
Operator : brittanp
Sample : icc1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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...	2.058	2.225	233.7E6	222.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.604	3.003	110.9E6	101.9E6	25.876	23.448
	Spiked Amount 40.000 Range 30 - 150 Recovery =					64.69%	58.62%
24) SA	Decachlor...	9.813	11.225	113.5E6	77173938	25.487	24.600
	Spiked Amount 40.000 Recovery =					63.72%	61.50%
	Target Compounds						
3) A	alpha-BHC	3.045	3.644	154.4E6	138.8E6	24.816	23.769
4) MA	gamma-BHC	3.333	4.067	135.8E6	124.5E6	24.885	23.786
5) MA	Heptachlor	3.604	4.642	132.9E6	125.1E6	25.176	23.911
6) B	beta-BHC	3.417	4.148	69503317	56424181	25.573	23.917
7) B	delta-BHC	3.814	4.545	129.6E6	115.6E6	24.704	24.491
8) MB	Aldrin	4.149	5.097	134.1E6	122.5E6	24.299	23.853
9) B	Heptachlo...	4.848	5.913	124.3E6	112.7E6	25.149	23.991
10) B	gamma-Chl...	5.017	6.199	122.5E6	113.0E6	25.273	23.698
11) B	alpha-Chl...	5.185	6.423	120.4E6	111.4E6	25.036	23.946
12) A	Endosulfan I	5.363	6.527	129.0E6	107.5E6	24.190	23.056
13) B	4,4'-DDE	5.303	6.673	99452342	108.3E6	24.663	24.143
14) MA	Dieldrin	5.684	6.961	122.7E6	112.6E6	24.636	23.954
15) MA	Endrin	6.010	7.469	108.8E6	99639368	23.621	23.647
16) A	4,4'-DDD	6.147	7.628	91212183	91236170	24.244	24.100
17) B	Endosulfa...	6.336	7.820	107.1E6	98803159	24.078	24.040
18) MA	4,4'-DDT	6.554	8.162	65819433	67789895	23.426	23.160
19) B	Endrin Al...	6.951	8.391	91028841	82465888	25.864	25.928
20) B	Endosulfa...	7.628	8.861	90817715	86297421	25.023	23.822
21) A	Methoxychlor	7.347	9.391	35461879	40832550	24.226	26.178
22)	Mirex	7.520	9.711	87550705	76916059	24.276	23.569
23) B	Endrin Ke...	8.082	9.762	107.7E6	103.9E6	25.828	25.659

SemiQuant Compounds - Not Calibrated on this Instrument

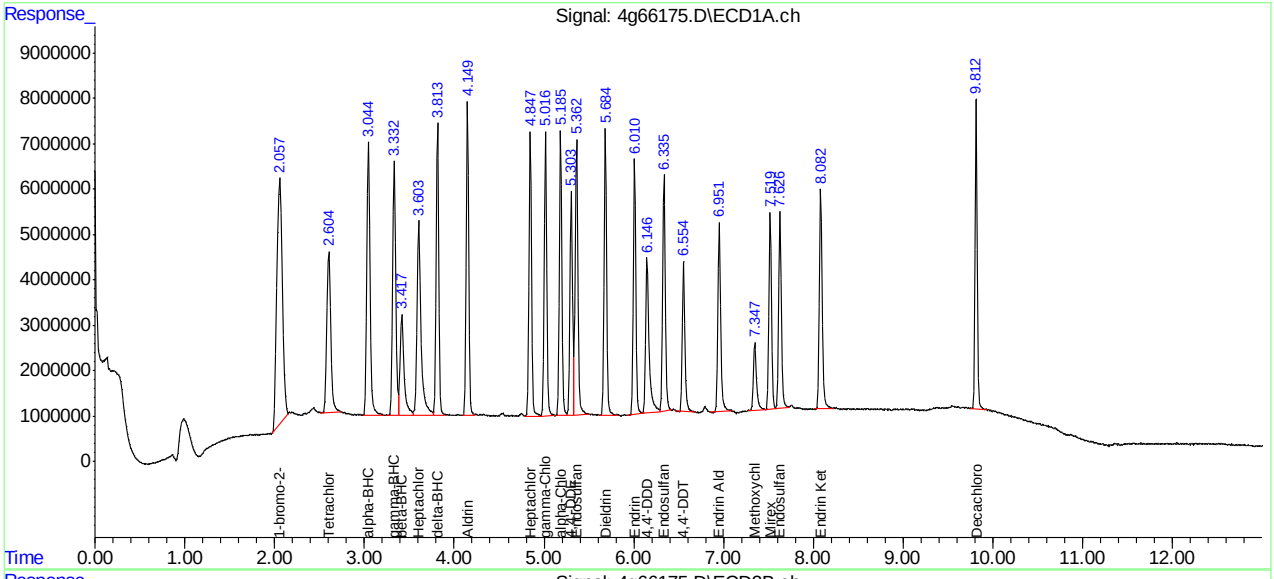
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

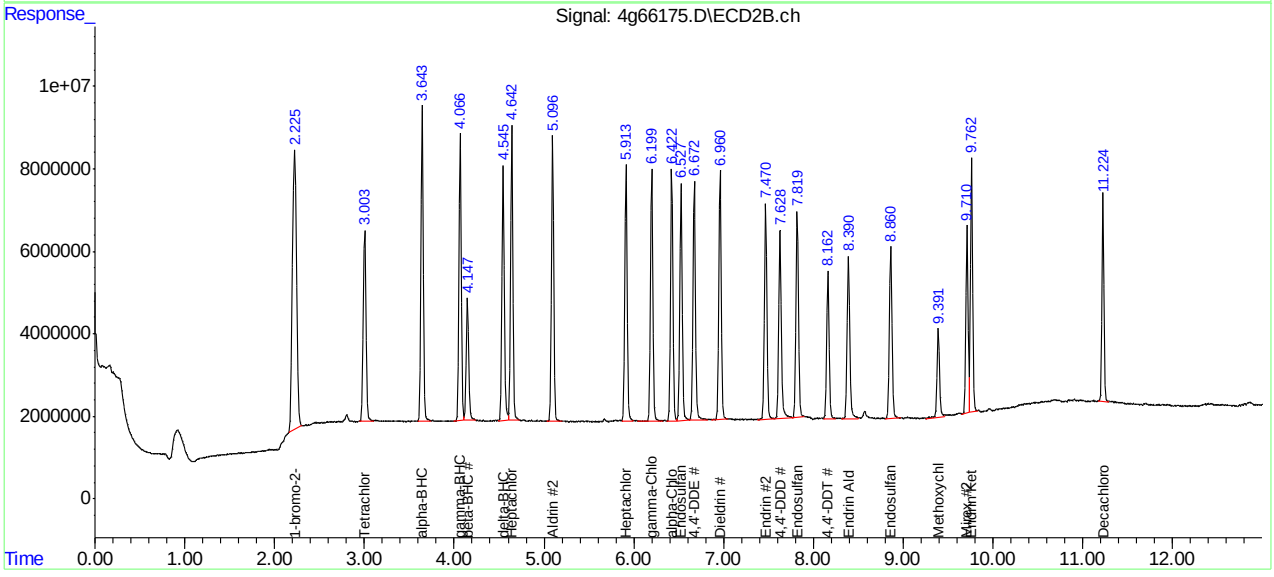
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66175.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:13 pm
Operator : brittanp
Sample : icc1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 JC16312T

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66176.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:28 pm
Operator : brittanp
Sample : ic1741-50
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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	2.227	227.1E6	214.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.607	3.005	231.2E6	207.7E6	55.539	49.427
	Spiked Amount 40.000 Range 30 - 150 Recovery = 138.85% 123.57%						
24) SA	Decachlor...	9.813	11.225	228.3E6	153.9E6	52.755	50.719
	Spiked Amount 40.000 Recovery = 131.89% 126.80%						
	Target Compounds						
3) A	alpha-BHC	3.047	3.645	323.8E6	297.4E6	53.581	52.661
4) MA	gamma-BHC	3.333	4.067	284.4E6	265.7E6	53.640	52.464
5) MA	Heptachlor	3.605	4.642	277.6E6	262.4E6	54.146	51.850
6) B	beta-BHC	3.416	4.148	138.9E6	118.3E6	52.591	51.837
7) B	delta-BHC	3.816	4.545	270.3E6	245.9E6	53.053	53.872
8) MB	Aldrin	4.151	5.097	280.9E6	256.2E6	52.374	51.600
9) B	Heptachlo...	4.849	5.914	256.3E6	233.4E6	53.353	51.382
10) B	gamma-Chl...	5.018	6.200	255.2E6	233.7E6	54.190	50.684
11) B	alpha-Chl...	5.187	6.423	248.8E6	226.2E6	53.282	50.255
12) A	Endosulfan I	5.364	6.526	266.8E6	218.8E6	51.487	48.521
13) B	4,4'-DDE	5.303	6.673	212.3E6	224.0E6	54.190	51.645
14) MA	Dieldrin	5.685	6.961	259.1E6	235.2E6	53.547	51.757
15) MA	Endrin	6.010	7.469	230.2E6	207.0E6	51.419	50.798
16) A	4,4'-DDD	6.145	7.628	192.4E6	192.5E6	52.649	52.571
17) B	Endosulfa...	6.335	7.821	225.7E6	211.6E6	52.226	53.240
18) MA	4,4'-DDT	6.553	8.162	152.5E6	151.3E6	50.598	49.360
19) B	Endrin Al...	6.950	8.391	194.7E6	165.1E6	56.942	53.683
20) B	Endosulfa...	7.627	8.861	192.1E6	174.0E6	54.472	49.656
21) A	Methoxychlor	7.344	9.391	78589411	83602916	55.265	55.425
22)	Mirex	7.519	9.711	179.3E6	151.5E6	51.176	47.994
23) B	Endrin Ke...	8.081	9.761	228.7E6	221.3E6	56.467	56.517

SemiQuant Compounds - Not Calibrated on this Instrument

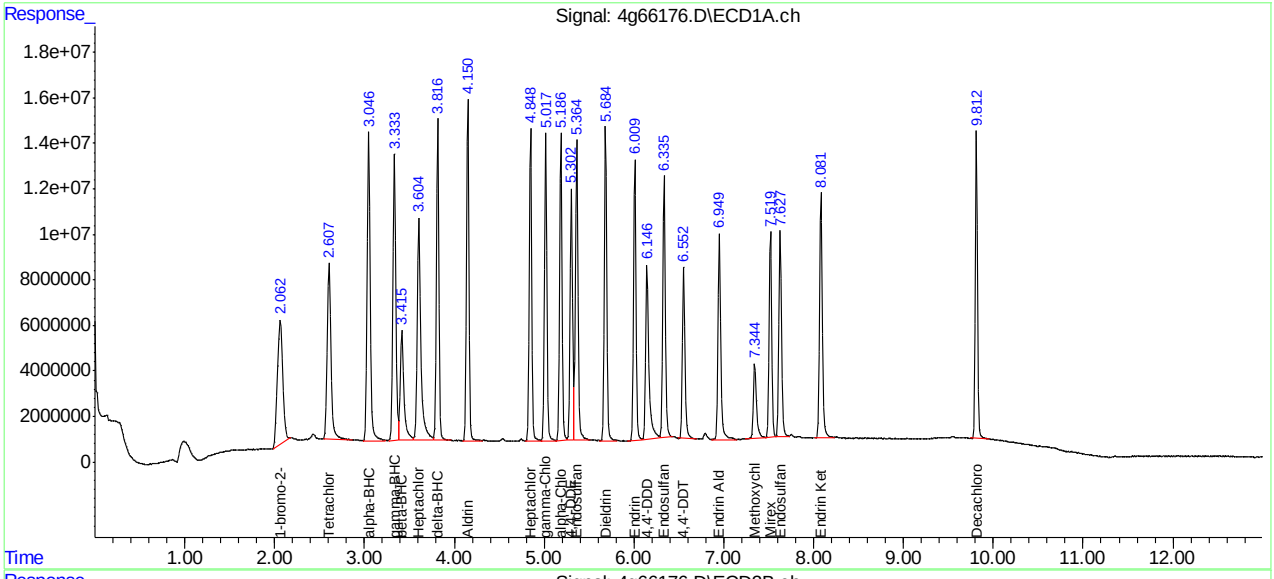
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

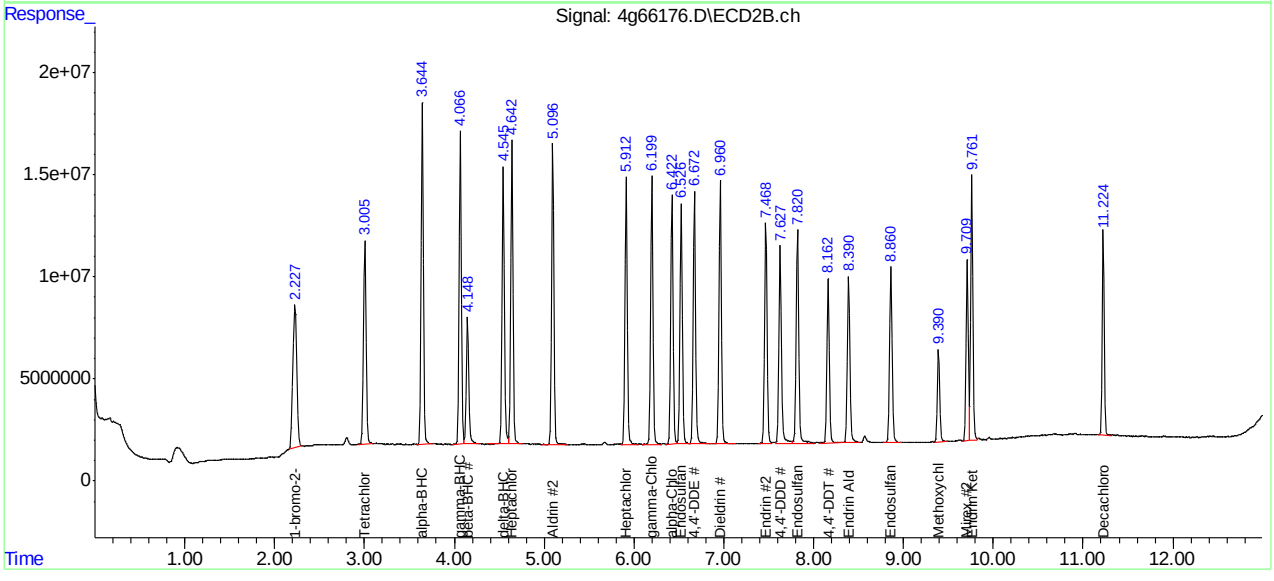
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66176.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:28 pm
Operator : brittanp
Sample : ic1741-50
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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\4G1741\
Data File : 4g66178.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:57 pm
Operator : brittanp
Sample : ic1741-100
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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...	2.062	2.225	231.8E6	218.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.606	3.004	472.4E6	431.5E6	111.160	101.091
	Spiked Amount 40.000 Range 30 - 150 Recovery = 277.90%# 252.73%#						
24) SA	Decachlor...	9.812	11.225	463.1E6	306.5E6	104.833	99.475
	Spiked Amount 40.000 Recovery = 262.08% 248.69%						
	Target Compounds						
3) A	alpha-BHC	3.047	3.644	680.9E6	638.0E6	110.345	111.235
4) MA	gamma-BHC	3.333	4.067	598.0E6	566.6E6	110.488	110.158
5) MA	Heptachlor	3.602	4.642	589.3E6	553.0E6	112.584	107.596
6) B	beta-BHC	3.414	4.147	279.5E6	244.8E6	103.686	105.633
7) B	delta-BHC	3.816	4.544	571.0E6	530.8E6	109.786	114.494
8) MB	Aldrin	4.150	5.096	586.3E6	542.7E6	107.078	107.610
9) B	Heptachlo...	4.849	5.914	529.6E6	485.2E6	108.013	105.155
10) B	gamma-Chl...	5.018	6.199	536.8E6	490.4E6	111.640	104.728
11) B	alpha-Chl...	5.187	6.423	520.1E6	474.6E6	109.095	103.830
12) A	Endosulfan I	5.364	6.526	554.9E6	454.8E6	104.887	99.289
13) B	4,4'-DDE	5.302	6.672	457.1E6	471.8E6	114.286	107.070
14) MA	Dieldrin	5.684	6.960	552.7E6	496.5E6	111.905	107.558
15) MA	Endrin	6.009	7.469	485.3E6	430.7E6	106.181	104.075
16) A	4,4'-DDD	6.142	7.627	411.3E6	399.5E6	110.220	107.436
17) B	Endosulfa...	6.335	7.820	479.3E6	434.7E6	108.654	107.678
18) MA	4,4'-DDT	6.552	8.162	353.0E6	331.0E6	100.844	95.501
19) B	Endrin Al...	6.949	8.389	405.6E6	338.3E6	116.205	108.287
20) B	Endosulfa...	7.627	8.861	422.8E6	356.4E6	117.467	100.178
21) A	Methoxychlor	7.344	9.391	172.5E6	177.0E6	118.854	115.515
22)	Mirex	7.519	9.711	387.5E6	310.1E6	108.329	96.737
23) B	Endrin Ke...	8.080	9.761	483.8E6	470.4E6	117.024	118.273

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

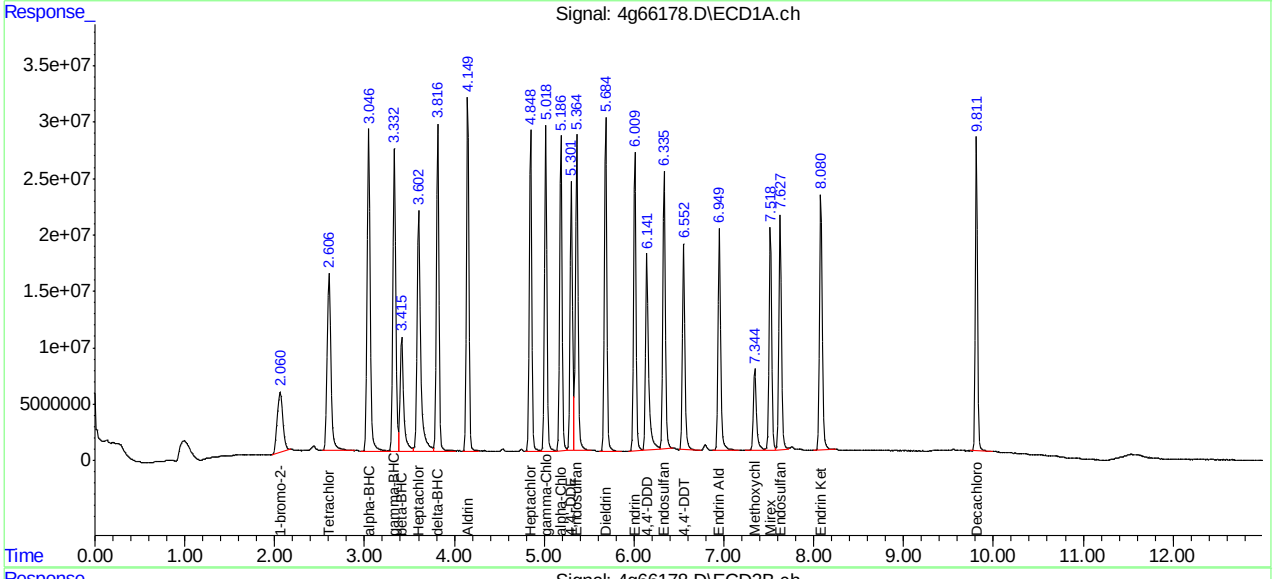
SGS ACCUTEST JC16312T

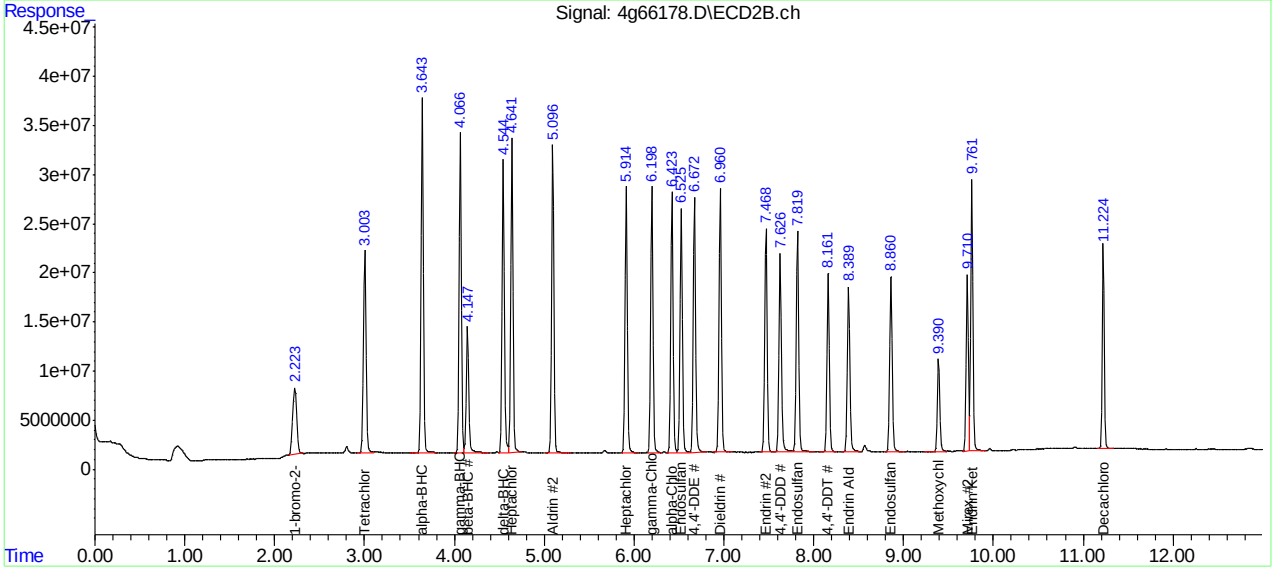
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66178.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 7:57 pm
Operator : brittanp
Sample : ic1741-100
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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 03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66179.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:12 pm
Operator : brittanp
Sample : ic1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:30:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:26:36 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						
31) I	1-bromo-2...	2.062	2.226	245.0E6	219.9E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane...	3.725	4.445	91808233	85139410	482.173	501.277
33)	Chlordane...	4.286	5.281	118.2E6	94010602	480.637	524.421
34)	Chlordane...	5.019	6.199	385.3E6	342.6E6	479.112	499.410
35)	Chlordane...	5.179	6.424	609.0E6	560.0E6	478.896	500.243m
36)	Chlordane...	6.250	7.900	85563726	83327919	480.461	524.869
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

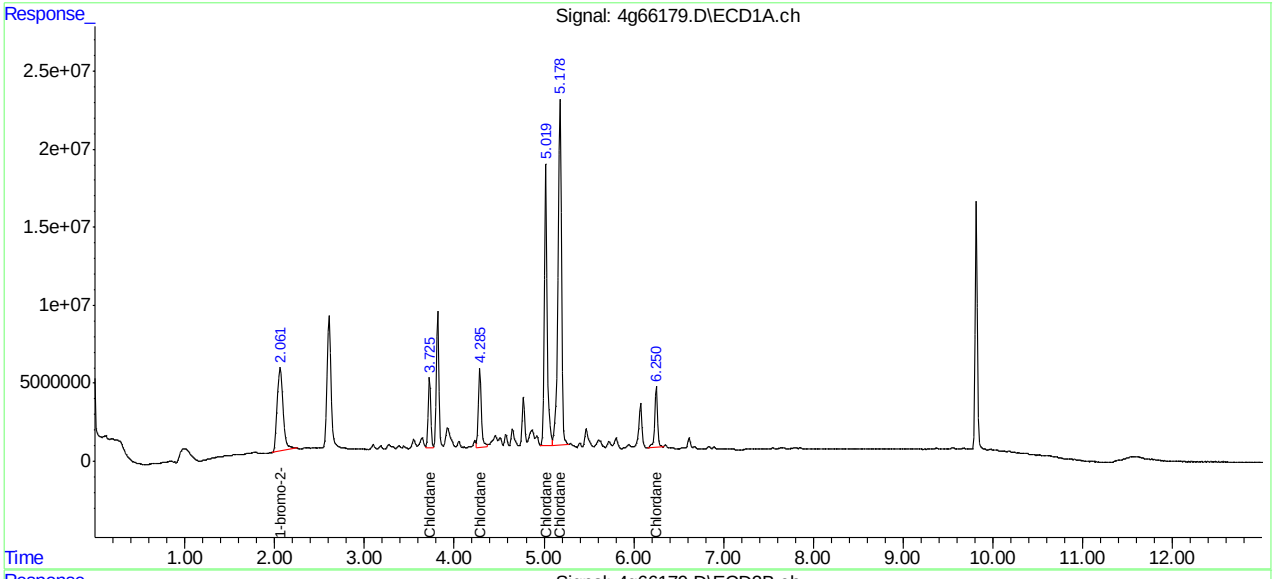
SGS ACCUTEST JC16312T

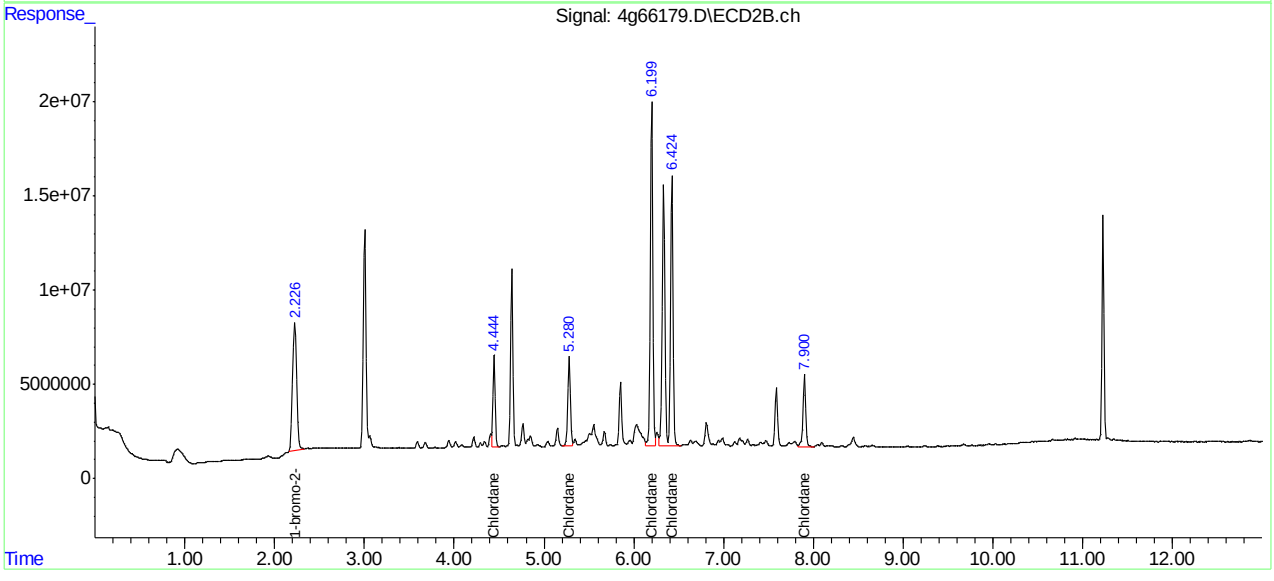
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66179.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:12 pm
Operator : brittanp
Sample : ic1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:30:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:26:36 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:	G4G1741-IC1741	**Method:**	SW846 8081B
Lab FileID:	4G66179.D	**Analyst approved:**	03/19/16 13:30 Joseph Ravino
Injection Time:	03/18/16 20:12	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

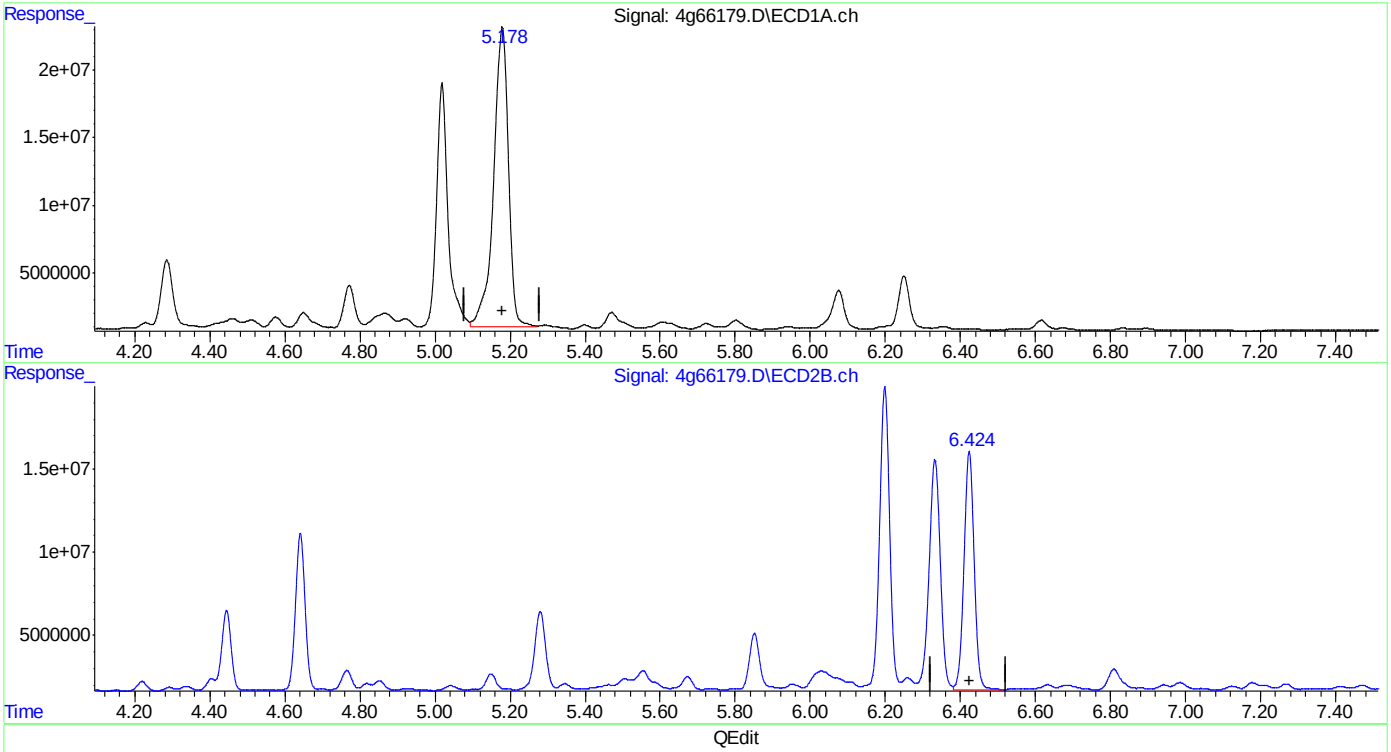
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.42	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66179.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:12 pm
Operator : brittanp
Sample : ic1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:27:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:26:36 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}
5.179min 478.896 PPB
response 608972749

(35) Chlordane {D} #2
6.424min 241.519 PPB
response 270367269

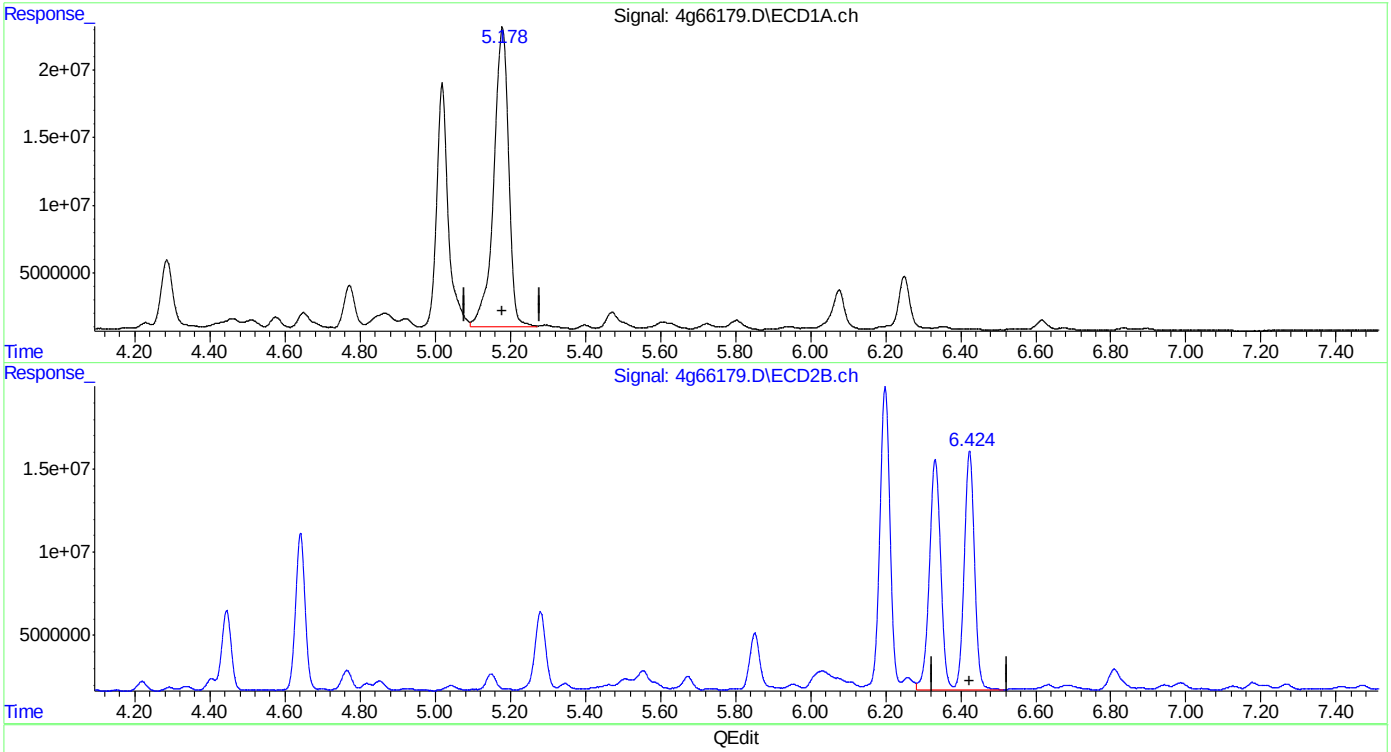
(+) = Expected Retention Time
4PST1741.M Sat Mar 19 13:28:45 2016 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66179.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 18 Mar 2016   8:12 pm
Operator  : brittanp
Sample    : ic1741-500
Misc      : op92130,g4g1741,15.0,,,10,1
ALS Vial  : 11   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:27:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 13:26:36 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}
5.179min 478.896 PPB
response 608972749

(35) Chlordane {D} #2
6.424min 500.243 PPB m
response 559993024

(+) = Expected Retention Time

4PST1741.M Sat Mar 19 13:28:58 2016 RPT1

SGS ACCUTEST JC16312T

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66180.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:26 pm
Operator : brittanp
Sample : ic1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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						
25) I	1-bromo-2...	2.067	2.226	226.8E6	213.9E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	6.060	6.923	93301966	43383357	725.511	837.548
27) L8	Toxaphene{B}	6.322	7.789	91657902	52971809	624.055	590.614
28) L8	Toxaphene{C}	6.491	7.953	78597418	90888659	623.342	609.474
29) L8	Toxaphene{D}	6.839	8.387	73237911	53530428	632.910	581.742
30) L8	Toxaphene{E}	7.497	9.301	57198385	41874410	689.913	543.060
	SemiQuant Compounds - Not Calibrated on this Instrument						

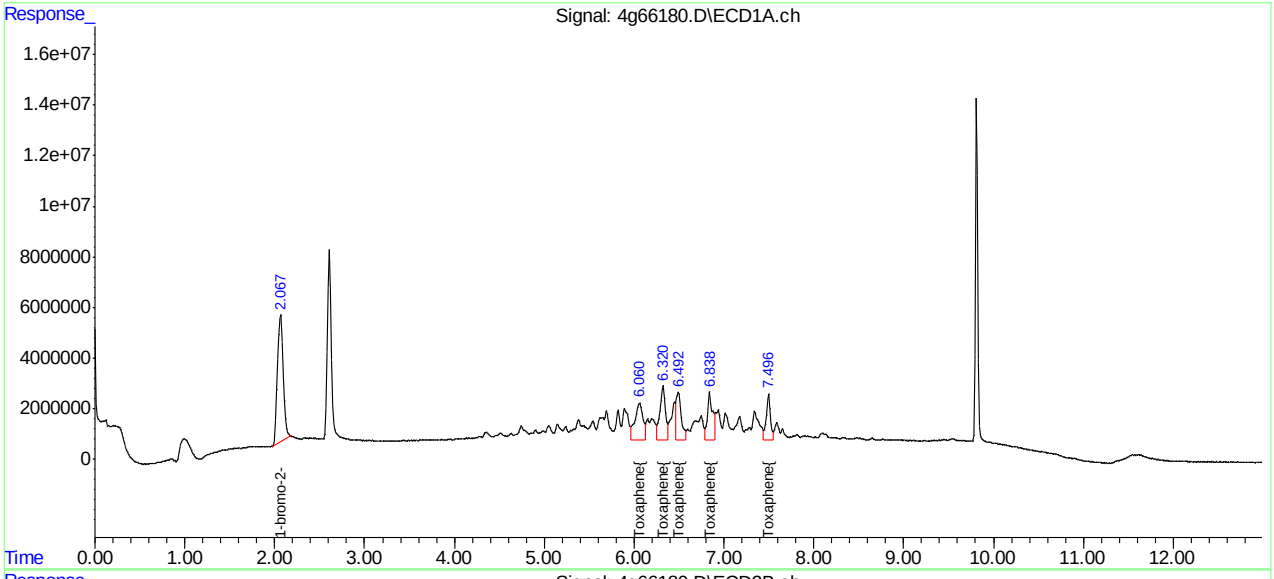
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

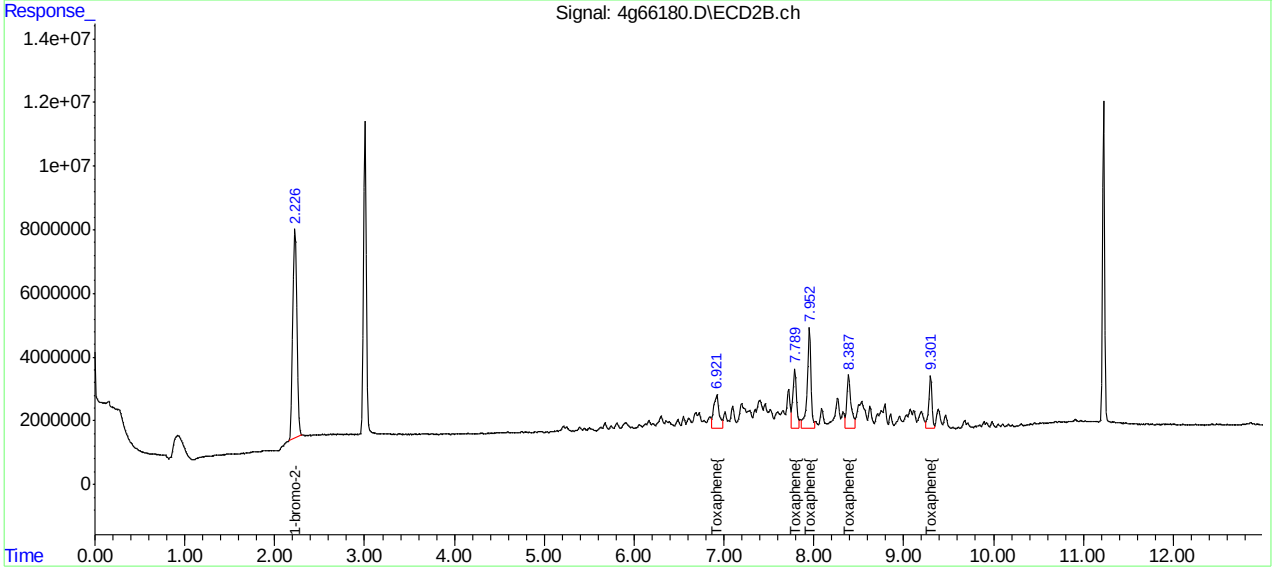
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66180.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:26 pm
Operator : brittanp
Sample : ic1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 12:58:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Fri Mar 18 06:17:02 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\4G1741\
Data File : 4g66181.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:41 pm
Operator : brittanp
Sample : icv1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:03:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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...	2.056	2.220	219.2E6	208.8E6	50.000	50.000
25) I	1-bromo-2...	2.056	2.220	219.2E6	208.8E6	50.000	50.000
31) I	1-bromo-2...	2.056	2.220	219.2E6	208.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.602	3.001	111.8E6	100.2E6	26.088	25.246
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	65.22%	63.12%
24) SA	Decachlor...	9.814	11.225	119.5E6	80563242	27.224	27.443
	Spiked Amount 40.000			Recovery	=	68.06%	68.61%
	Target Compounds						
3) A	alpha-BHC	3.044	3.642	150.2E6	136.6E6	26.138	25.954
4) MA	gamma-BHC	3.331	4.065	133.0E6	123.6E6	25.773	26.191
5) MA	Heptachlor	3.608	4.641	136.2E6	124.9E6	27.237	26.224
6) B	beta-BHC	3.419	4.147	68230709	56390581	26.095	26.750
7) B	delta-BHC	3.813	4.544	129.3E6	118.5E6	26.148	26.954
8) MB	Aldrin	4.148	5.096	134.0E6	120.8E6	26.315	25.521
9) B	Heptachlo...	4.847	5.913	122.8E6	113.7E6	25.909	26.692
10) B	gamma-Chl...	5.017	6.199	124.2E6	114.6E6	26.631	26.374
11) B	alpha-Chl...	5.186	6.423	119.0E6	110.7E6	25.863	26.056
12) A	Endosulfan I	5.364	6.526	130.9E6	103.3E6	27.359	24.780
13) B	4,4'-DDE	5.308	6.674	91200919	107.1E6	23.621	26.346
14) MA	Dieldrin	5.684	6.960	122.2E6	112.9E6	26.035	26.827
15) MA	Endrin	6.010	7.469	110.4E6	101.7E6	26.801	26.709
16) A	4,4'-DDD	6.154	7.629	92355028	93768525	27.579	25.789
17) B	Endosulfa...	6.337	7.821	111.3E6	104.8E6	27.543	27.465
18) MA	4,4'-DDT	6.557	8.162	66647122	66155056	25.515	24.682
19) B	Endrin Al...	6.953	8.390	90867126	84010987	26.906	25.914
20) B	Endosulfa...	7.630	8.861	92148566	85395780	27.487	26.122
21) A	Methoxychlor	7.353	9.393	32807488	37691234	25.099	26.336
23) B	Endrin Ke...	8.084	9.762	107.3E6	104.3E6	27.379	27.577

SemiQuant Compounds - Not Calibrated on this Instrument

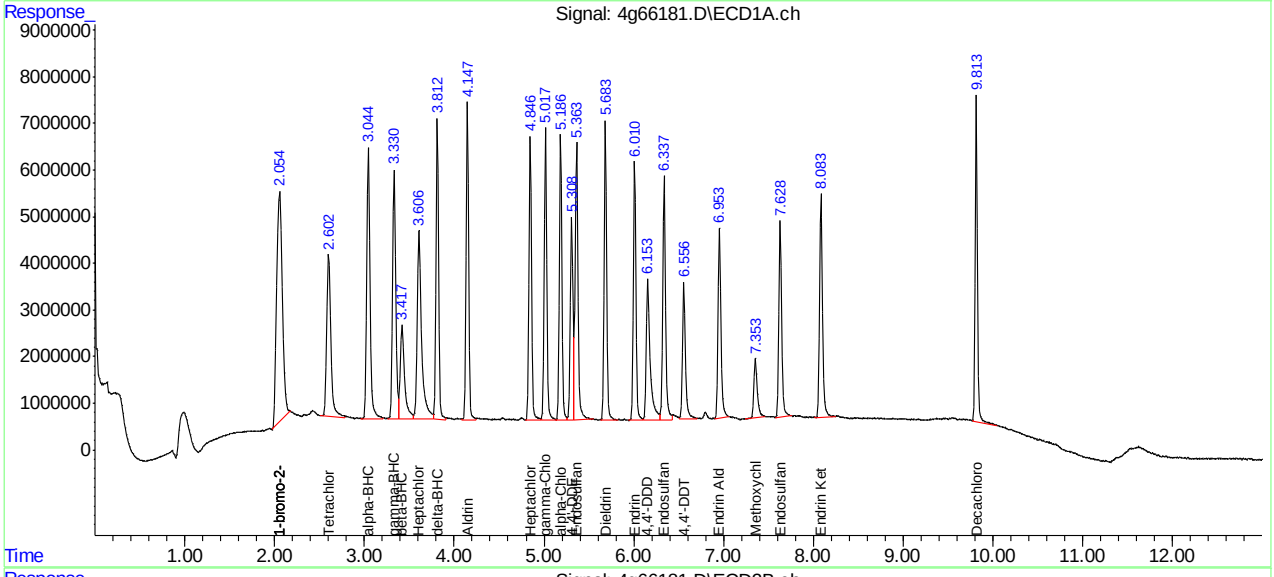
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

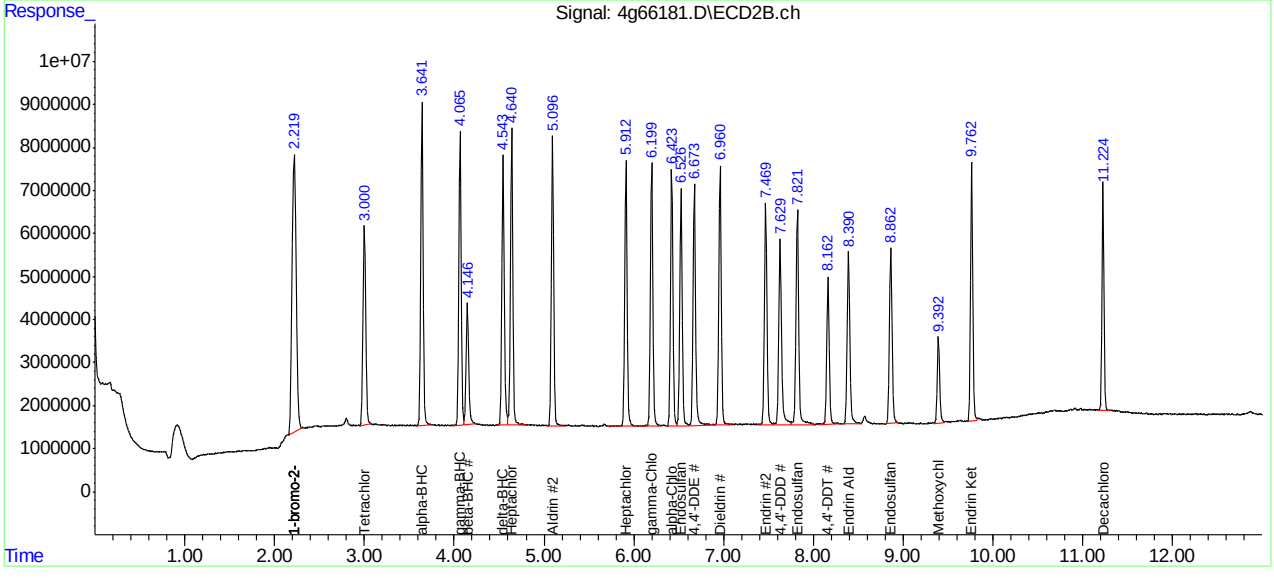
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66181.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:41 pm
Operator : brittanp
Sample : icv1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:03:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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\4G1741\
Data File : 4g66182.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:56 pm
Operator : brittanp
Sample : icv1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:04:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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...	2.065	2.229	213.6E6	199.2E6	50.000	50.000
25) I	1-bromo-2...	2.065	2.229	213.6E6	199.2E6	50.000	50.000
31) I	1-bromo-2...	2.065	2.229	213.6E6	199.2E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	7.520	9.711	93620427	84884832	28.158	29.944
	SemiQuant Compounds - Not Calibrated on this Instrument						

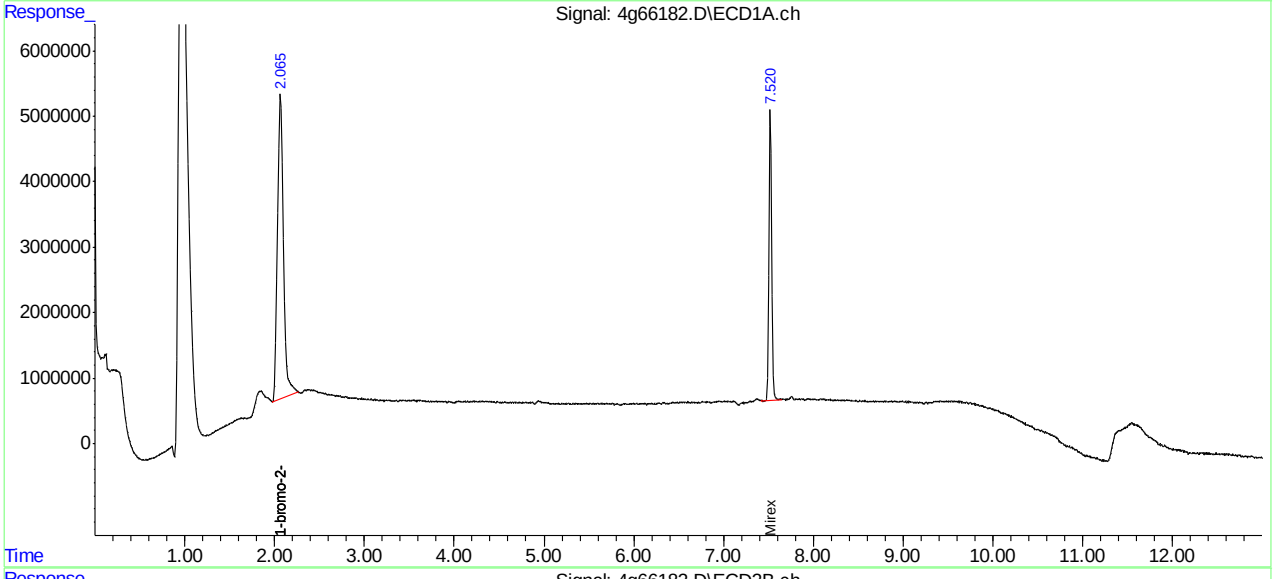
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

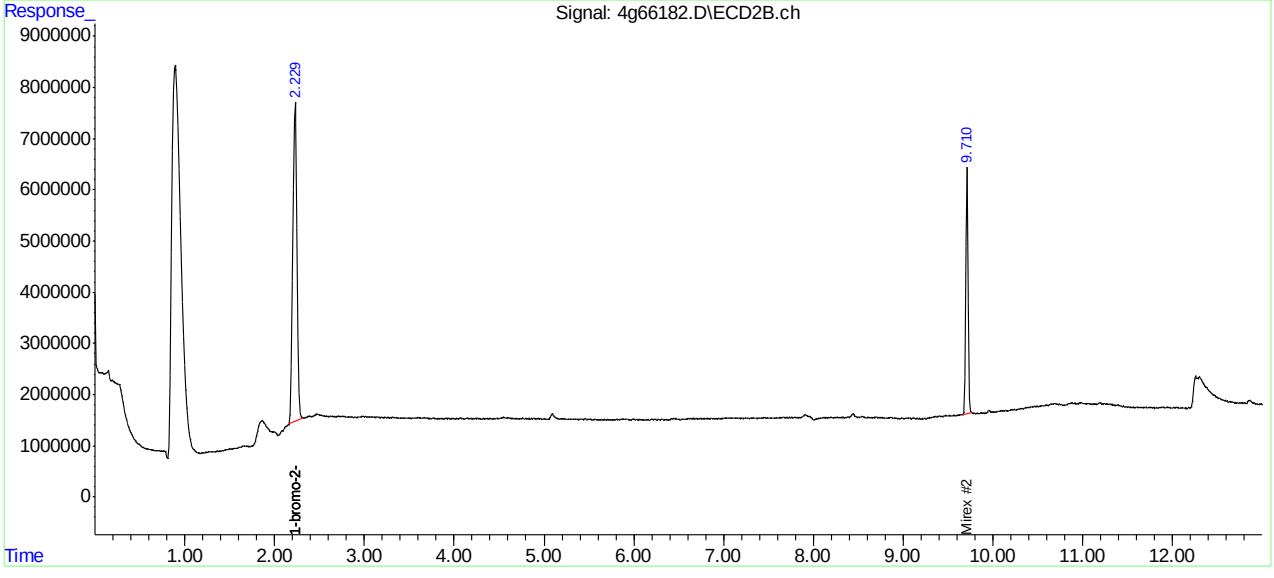
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66182.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 8:56 pm
Operator : brittanp
Sample : icv1741-25
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:04:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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 03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:34:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.055	2.219	235.7E6	231.3E6	50.000	50.000
25) I	1-bromo-2...	2.055	2.219	235.7E6	231.3E6	50.000	50.000
31) I	1-bromo-2...	2.055	2.219	235.7E6	231.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.602	3.001	204.0E6	198.4E6	44.278	45.137
Spiked Amount		40.000	Range	30 - 150	Recovery	= 110.69%	112.84%
24) SA	Decachlor...	9.812	11.225	224.7E6	152.3E6	47.627m	46.850m
Spiked Amount		40.000			Recovery	= 119.07%	117.13%
	Target Compounds						
32)	Chlordane...	3.722	4.444	96390358	88740031	545.650	495.616
33)	Chlordane...	4.284	5.280	112.4E6	90261407	494.069	456.543
34)	Chlordane...	5.017	6.198	336.7E6	291.5E6	454.132	404.645
35)	Chlordane...	5.177	6.422	539.9E6	484.6E6	460.723	411.518m
36)	Chlordane...	6.249	7.900	74972061	74838977	455.378	427.065

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

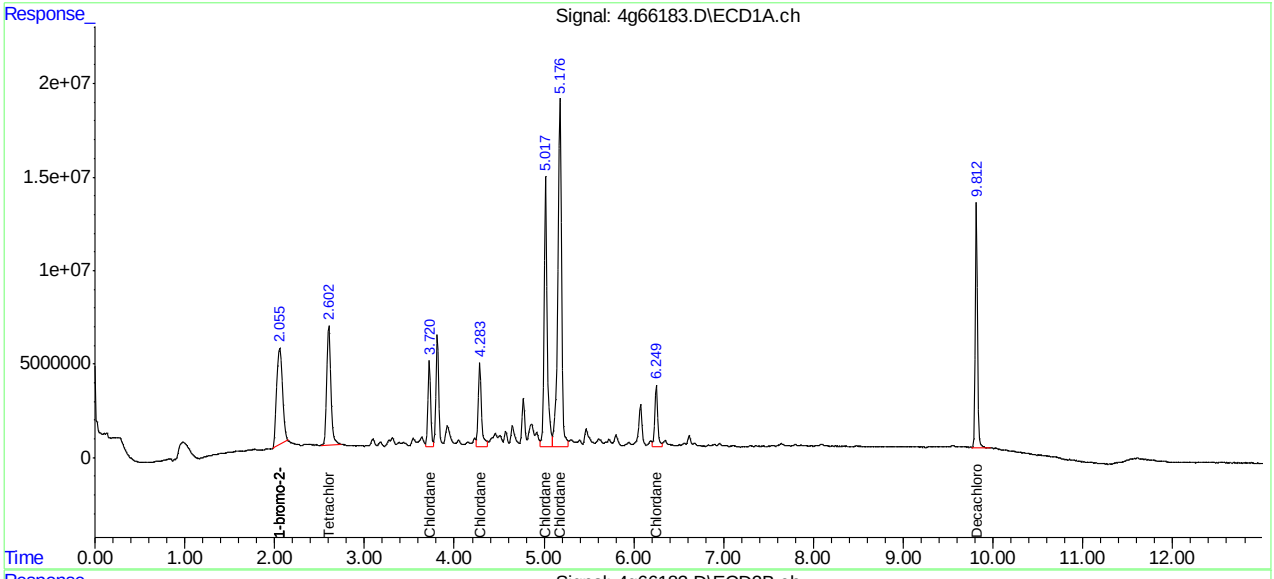
SGS ACCUTEST JC16312T

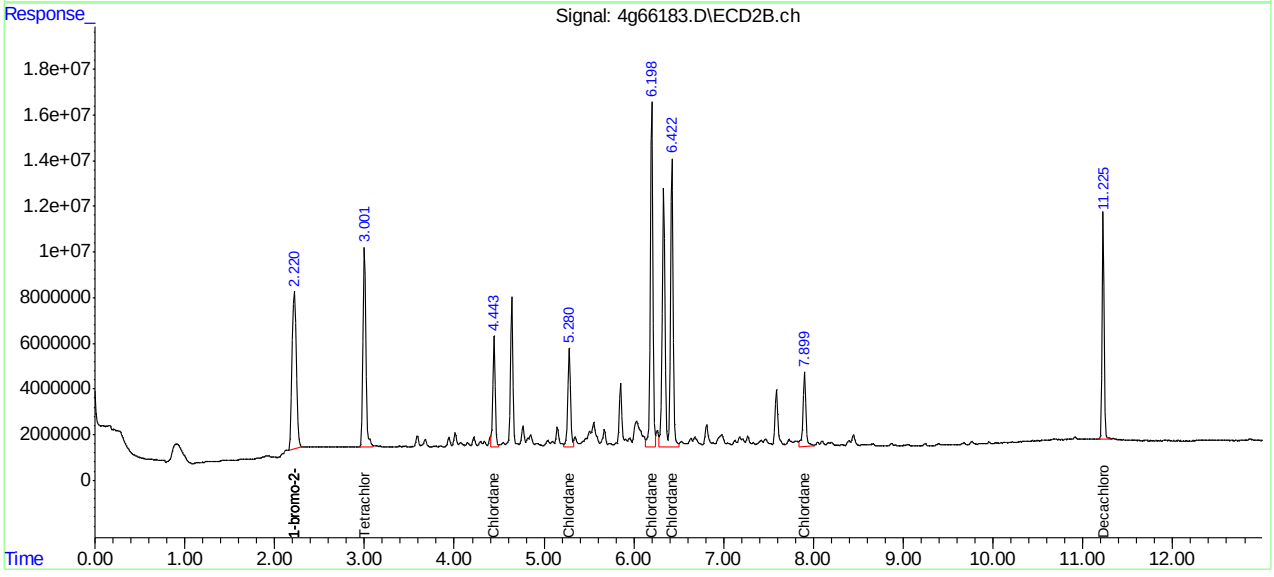
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:34:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





SGS ACCUTEST JC16312T

Manual Integration Approval Summary

Sample Number:	G4G1741-ICV1741	**Method:**	SW846 8081B
Lab FileID:	4G66183.D	**Analyst approved:**	03/19/16 13:36 Joseph Ravino
Injection Time:	03/18/16 21:10	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

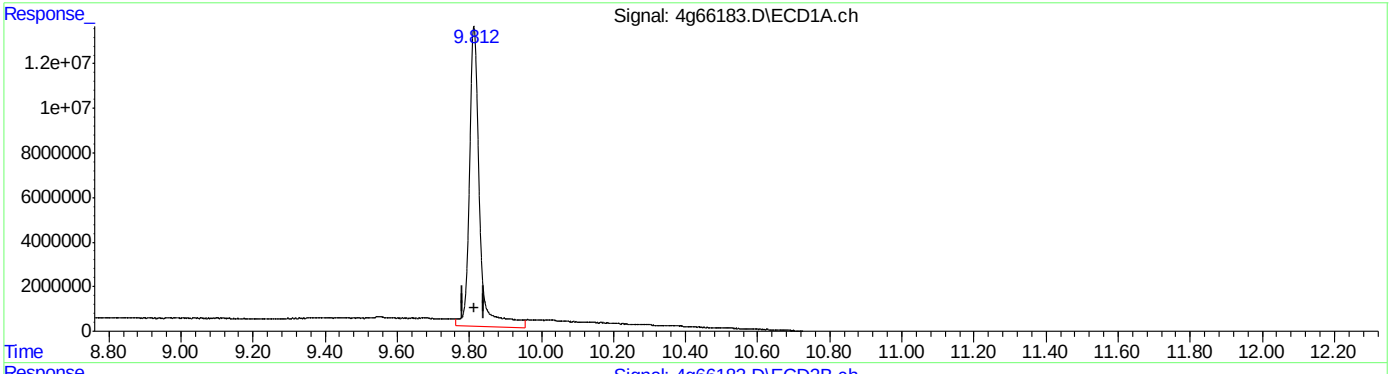
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.42	Split peak
Decachlorobiphenyl	2051-24-3	1	9.81	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.22	Poor instrument integration

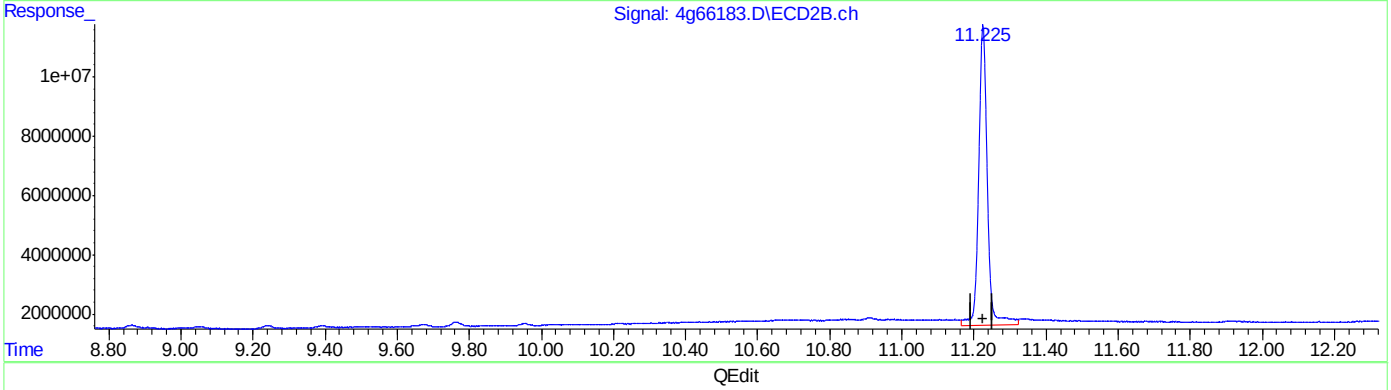
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(24) Decachlorobiphenyl (SA)
9.813min 55.906 PPB
response 263806195

(24) Decachlorobiphenyl #2 (SA)
11.225min 52.118 PPB
response 169426903

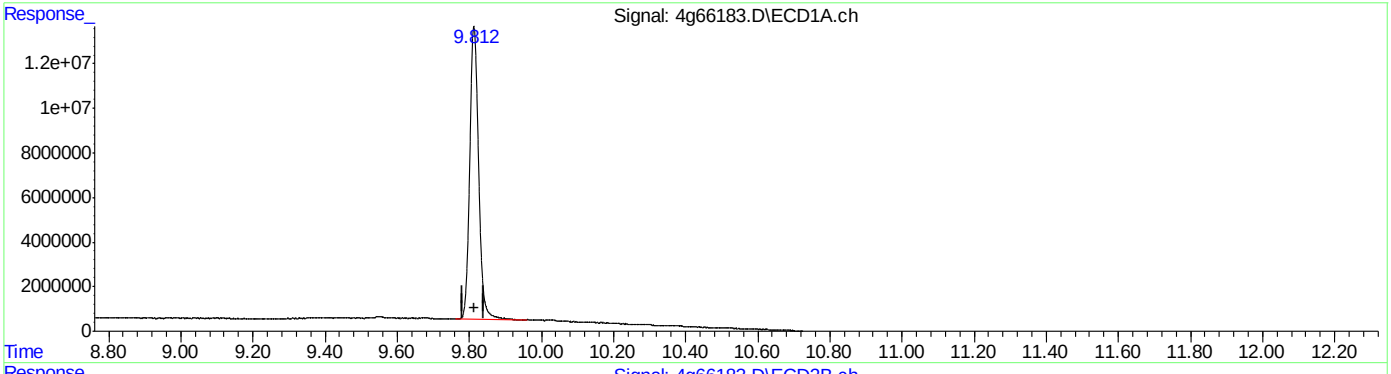
(+) = Expected Retention Time

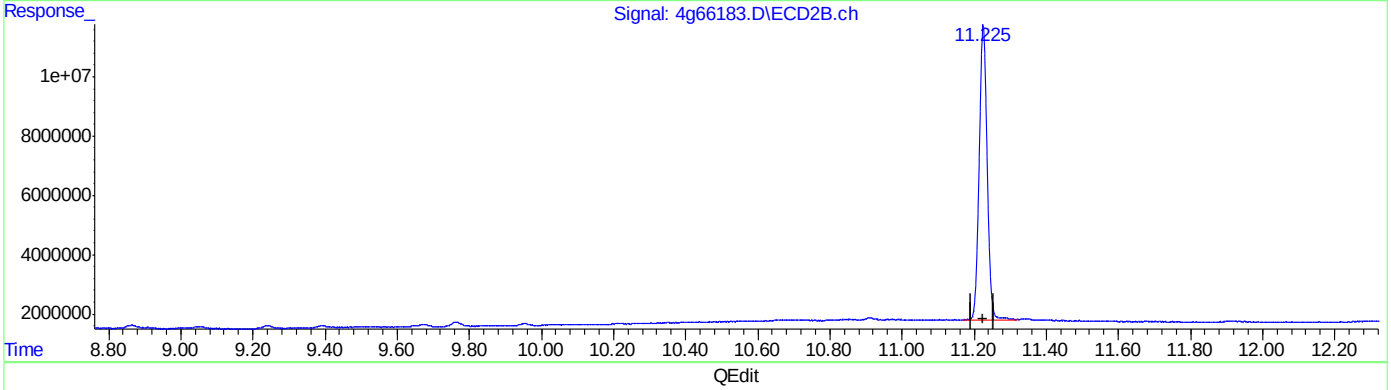
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(24) Decachlorobiphenyl (SA)
9.812min 47.627 PPB m
response 224737502

(24) Decachlorobiphenyl #2 (SA)
11.225min 46.850 PPB m
response 152302493

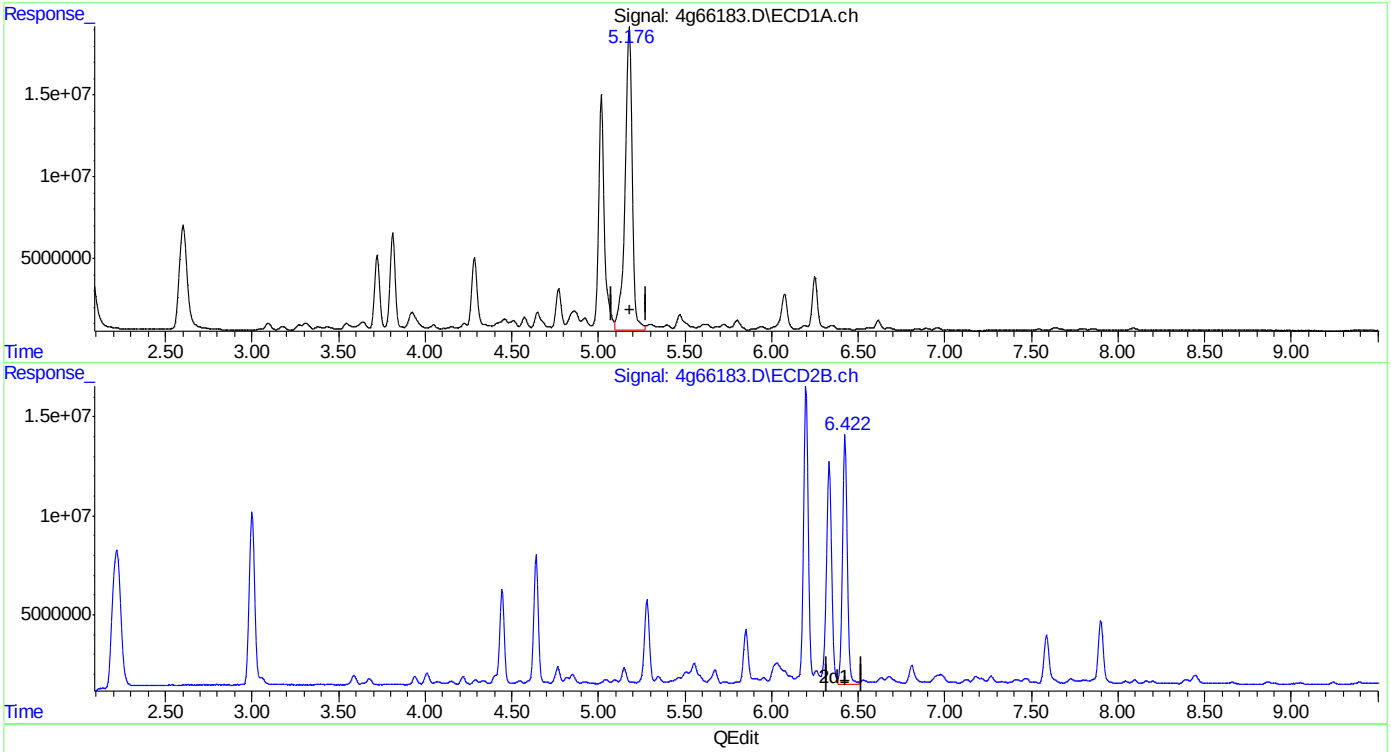
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(35) Chlordane {D}
5.177min 460.723 PPB
response 539853128

(35) Chlordane {D} #2
6.423min 207.156 PPB
response 243962358

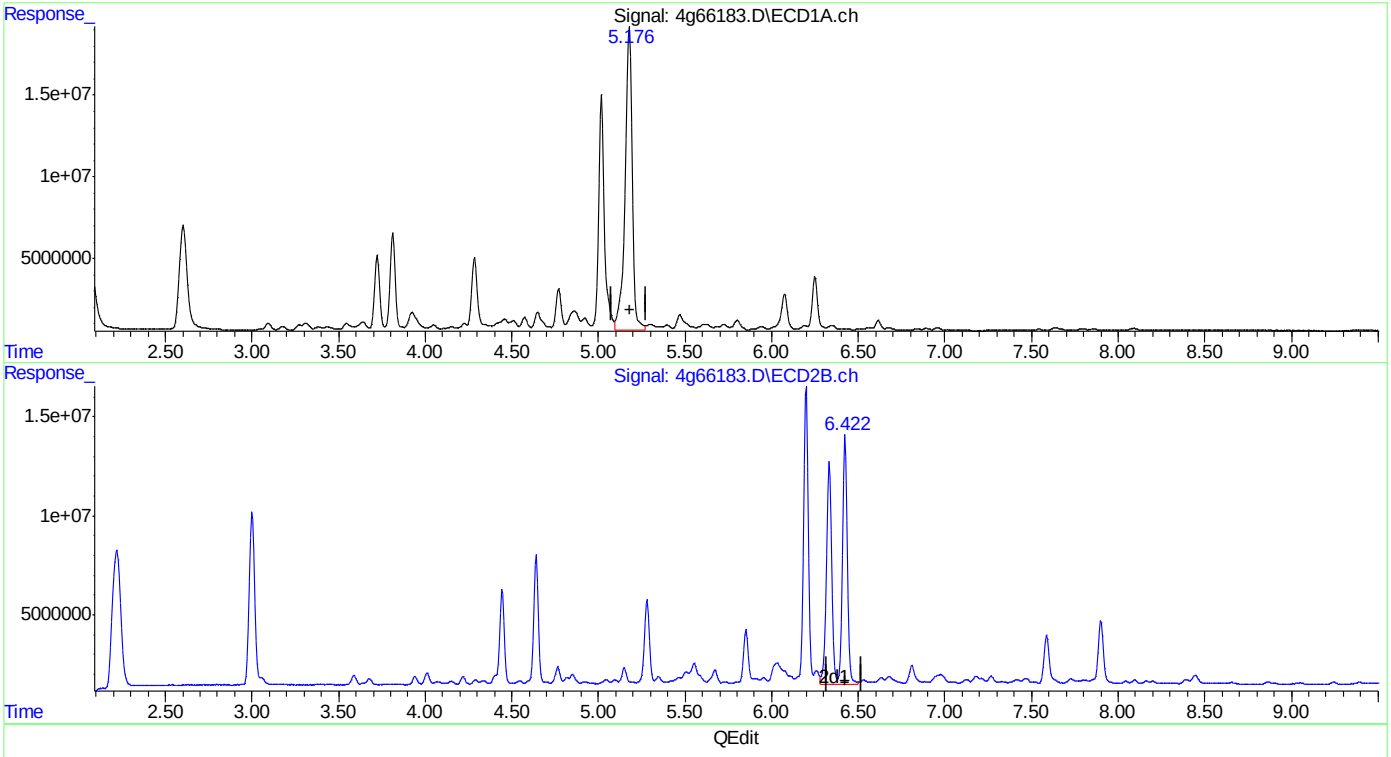
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66183.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:10 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(35) Chlordane {D}
5.177min 460.723 PPB
response 539853128

(35) Chlordane {D} #2
6.422min 411.518 PPB m
response 484634618

(+) = Expected Retention Time
4PST1741.M Sat Mar 19 13:34:34 2016 RPT1

SGS ACCUTEST JC16312T

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
03/21/16 13:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66184.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:25 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:12:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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	2.226	246.6E6	229.3E6	50.000	50.000
25) I 1-bromo-2...	2.063	2.226	246.6E6	229.3E6	50.000	50.000
31) I 1-bromo-2...	2.063	2.226	246.6E6	229.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.608	3.004	201.8E6	184.0E6	41.866	42.231
Spiked Amount 40.000	Range 30 - 150		Recovery = 104.67%		105.58%	
24) SA Decachlor...	9.814	11.226	218.9E6	144.4E6	44.341	44.803
Spiked Amount 40.000			Recovery = 110.85%		112.01%	
Target Compounds						
26) L8 Toxaphene{A}	6.054	6.923	94396674	50661286	465.240	544.714m
27) L8 Toxaphene{B}	6.324	7.789	94442996	60107149	473.817	529.294
28) L8 Toxaphene{C}	6.488	7.953	79861097	93299693	467.238	478.835
29) L8 Toxaphene{D}	6.839	8.387	77978693	56869598	489.610	495.559
30) L8 Toxaphene{E}	7.497	9.299	57067933	42733928	458.795	476.036
SemiQuant Compounds - Not Calibrated on this Instrument						

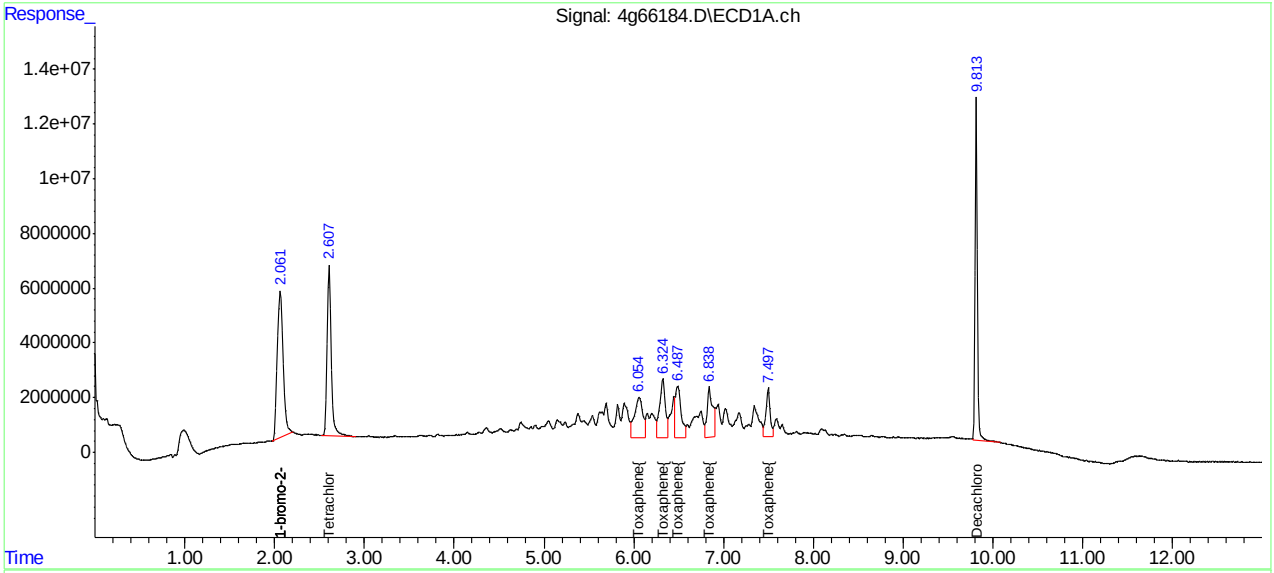
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

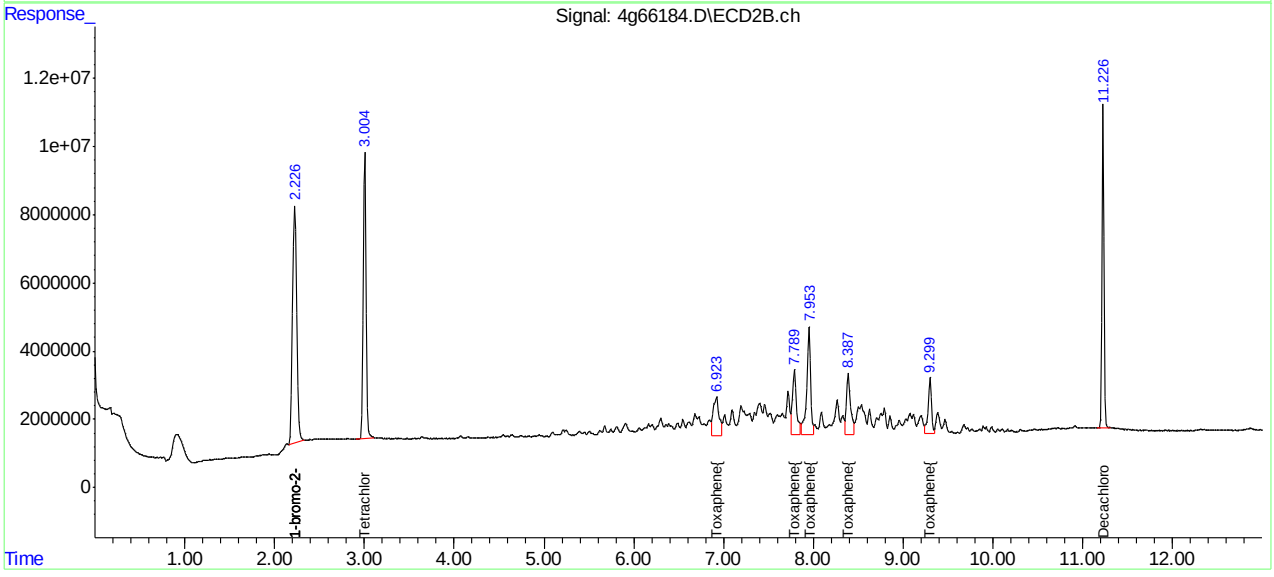
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66184.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:25 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:12:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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:	G4G1741-ICV1741	**Method:**	SW846 8081B
Lab FileID:	4G66184.D	**Analyst approved:**	03/19/16 13:17 Joseph Ravino
Injection Time:	03/18/16 21:25	**Supervisor approved:**	03/21/16 13:03 Gwendolyn Burns

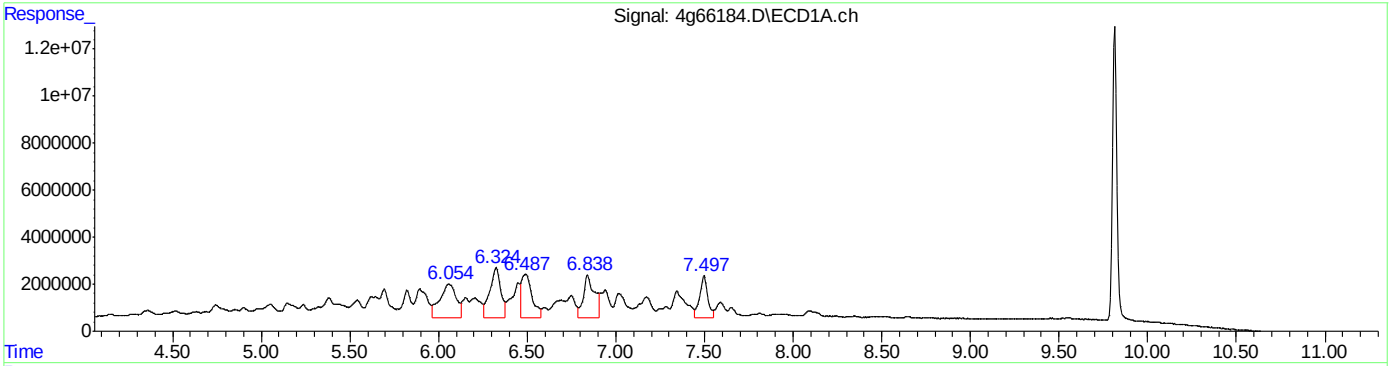
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.92	Split peak

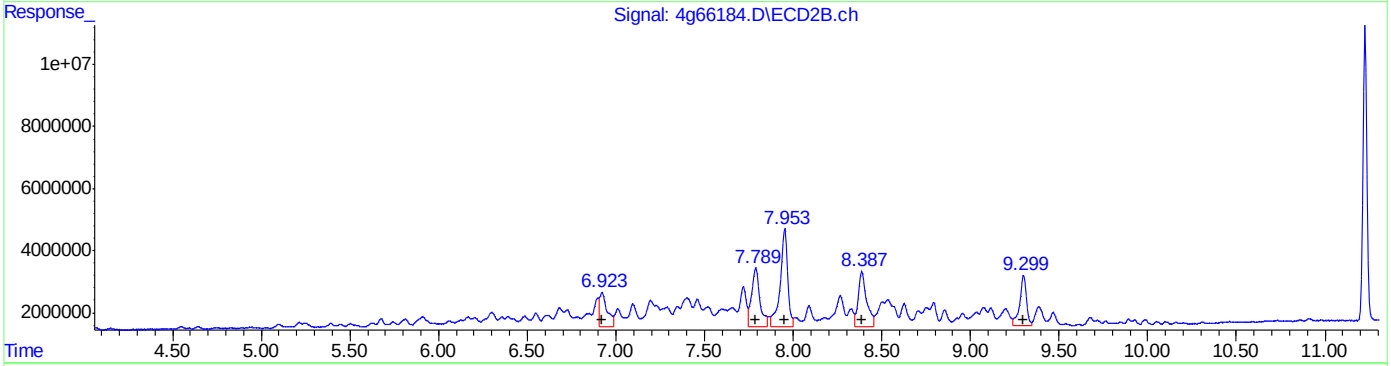
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66184.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:25 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:11:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
6.05	94396674	465.24
6.32	94442996	473.82
6.49	79861097	467.24
6.84	77978693	489.61
7.50	57067933	458.80

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.92	34141092	367.09
7.79	60107149	529.29
7.95	93299693	478.84
8.39	56869598	495.56
9.30	42733928	476.04

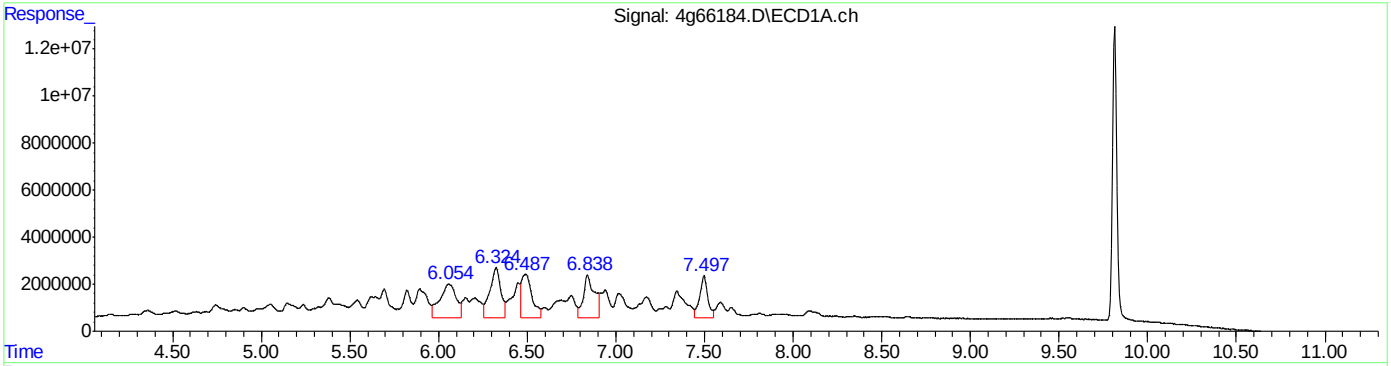
(+) = Expected Retention Time

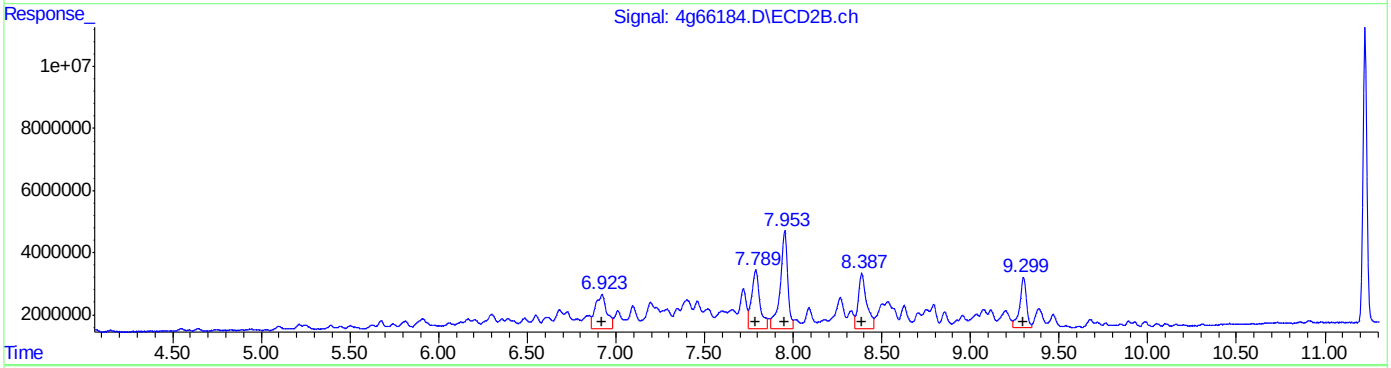
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1741\
Data File : 4g66184.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Mar 2016 9:25 pm
Operator : brittanp
Sample : icv1741-500
Misc : op92130,g4g1741,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 19 13:11:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:02:17 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

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
6.05	94396674	465.24
6.32	94442996	473.82
6.49	79861097	467.24
6.84	77978693	489.61
7.50	57067933	458.80

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.92	50661286	544.71
7.79	60107149	529.29
7.95	93299693	478.84
8.39	56869598	495.56
9.30	42733928	476.04

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 03/22/16 14:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:13 am
Operator : rebeccak
Sample : cc1741-25
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.070	2.233	194.5E6	199.4E6	50.000	50.000
25) I	1-bromo-2...	2.070	2.233	194.5E6	199.4E6	50.000	50.000
31) I	1-bromo-2...	2.070	2.233	194.5E6	199.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.606	3.004	106.0E6	102.6E6	27.876	27.064
	Spiked Amount 40.000 Range 30 - 150 Recovery = 69.69% 67.66%						
24) SA	Decachlor...	9.805	11.217	109.4E6	83752736	28.089	29.880
	Spiked Amount 40.000 Recovery = 70.22% 74.70%						
	Target Compounds						
3) A	alpha-BHC	3.044	3.640	142.9E6	137.0E6	28.020	27.255
4) MA	gamma-BHC	3.328	4.062	129.2E6	114.5E6	28.215	25.415
5) MA	Heptachlor	3.599	4.636	104.2E6	123.3E6	23.483	27.121
6) B	beta-BHC	3.411	4.143	61440959	51773902	26.479	25.722
7) B	delta-BHC	3.810	4.539	116.5E6	109.3E6	26.565	26.034
8) MB	Aldrin	4.144	5.091	120.7E6	117.6E6	26.704	26.024
9) B	Heptachlo...	4.841	5.907	100.0E6	105.2E6	23.777	25.877
10) B	gamma-Chl...	5.011	6.192	99438194	107.3E6	24.027	25.866
11) B	alpha-Chl...	5.179	6.416	105.0E6	104.3E6	25.716m	25.708
12) A	Endosulfan I	5.356	6.519	112.1E6	104.1E6	26.405	26.149
13) B	4,4'-DDE	5.294	6.665	93328588	102.6E6	27.238	26.439
14) MA	Dieldrin	5.676	6.953	106.9E6	107.5E6	25.659	26.768
15) MA	Endrin	6.002	7.461	98516340	99440524	26.961	27.359
16) A	4,4'-DDD	6.136	7.619	81021036	84899978	27.263	24.455
17) B	Endosulfa...	6.329	7.813	96891155	96170549	27.010	26.405
18) MA	4,4'-DDT	6.545	8.154	61340003	69607963	26.351	26.971
19) B	Endrin Al...	6.944	8.382	81165340	75485385	27.082	24.387
20) B	Endosulfa...	7.620	8.852	86900975	86147798	29.210	27.599
21) A	Methoxychlor	7.337	9.383	35283288	41651934	30.417m	30.482
22)	Mirex	7.512	9.703	82150355	76014310	27.123	26.784
23) B	Endrin Ke...	8.074	9.755	99820397	99641345	28.709	27.587

SemiQuant Compounds - Not Calibrated on this Instrument

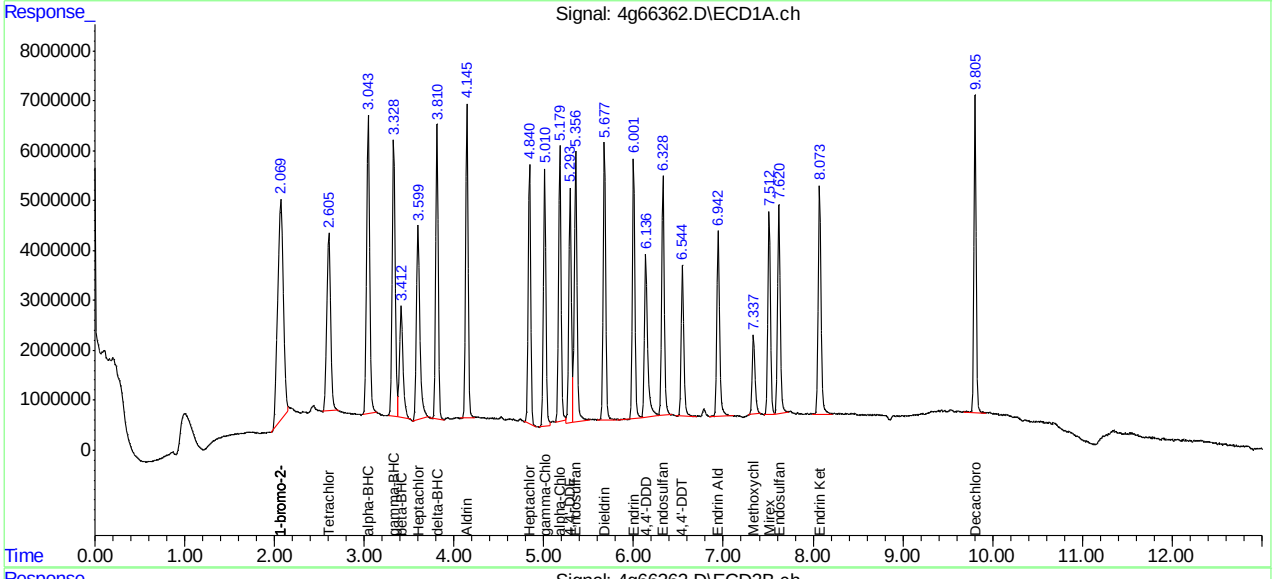
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

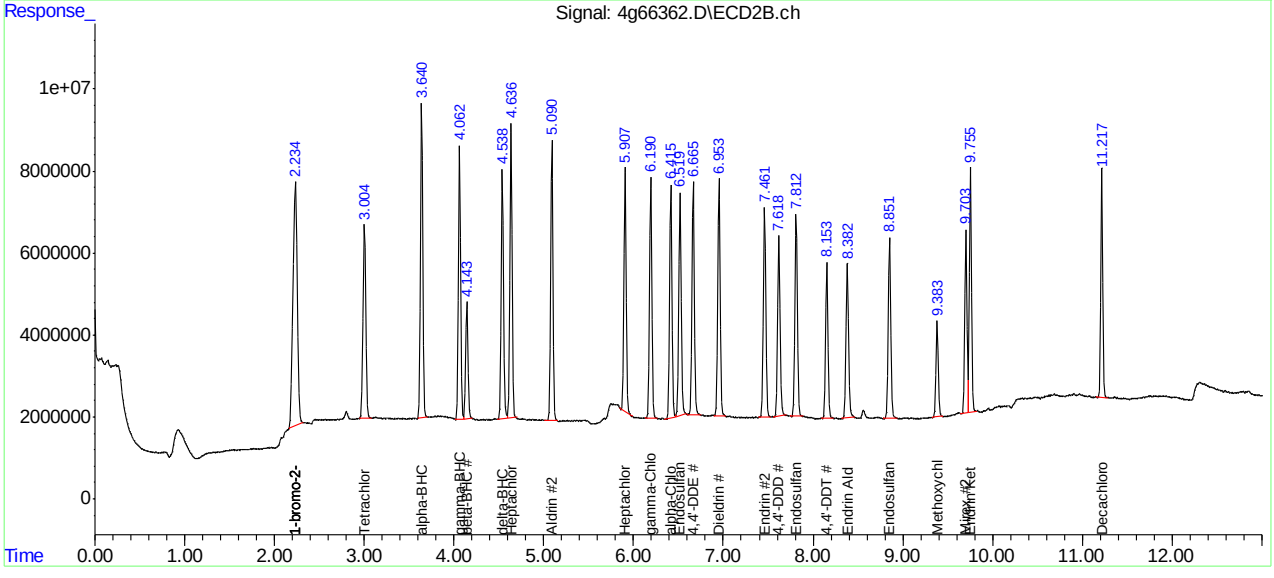
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:13 am
Operator : rebeccak
Sample : cc1741-25
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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 Integration Approval Summary

Sample Number:	G4G1746-CC1741	**Method:**	SW846 8081B
Lab FileID:	4G66362.D	**Analyst approved:**	03/22/16 11:55 Brittany Piercy
Injection Time:	03/22/16 08:13	**Supervisor approved:**	03/22/16 14:46 Gwendolyn Burns

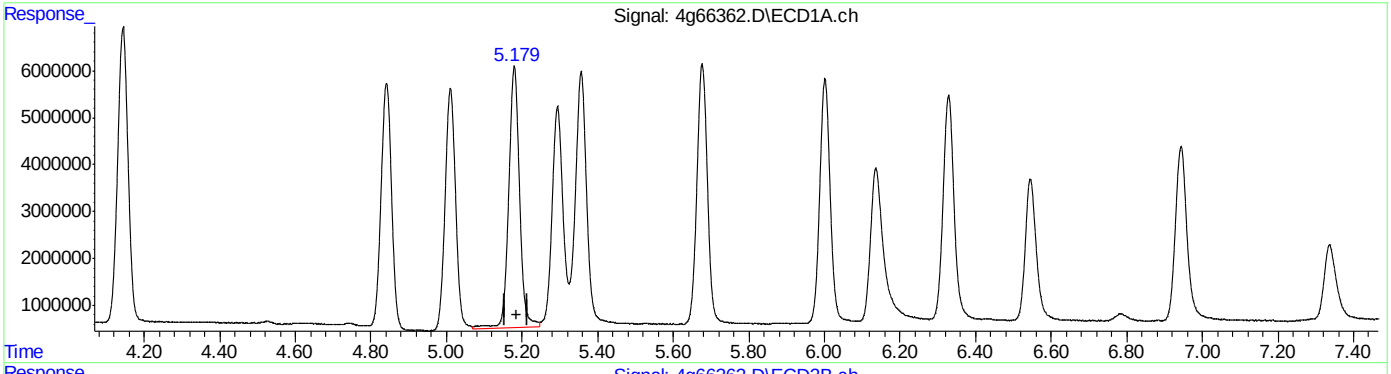
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-Chlordane	5103-71-9	1	5.18	Poor instrument integration
Methoxychlor	72-43-5	1	7.34	Poor instrument integration

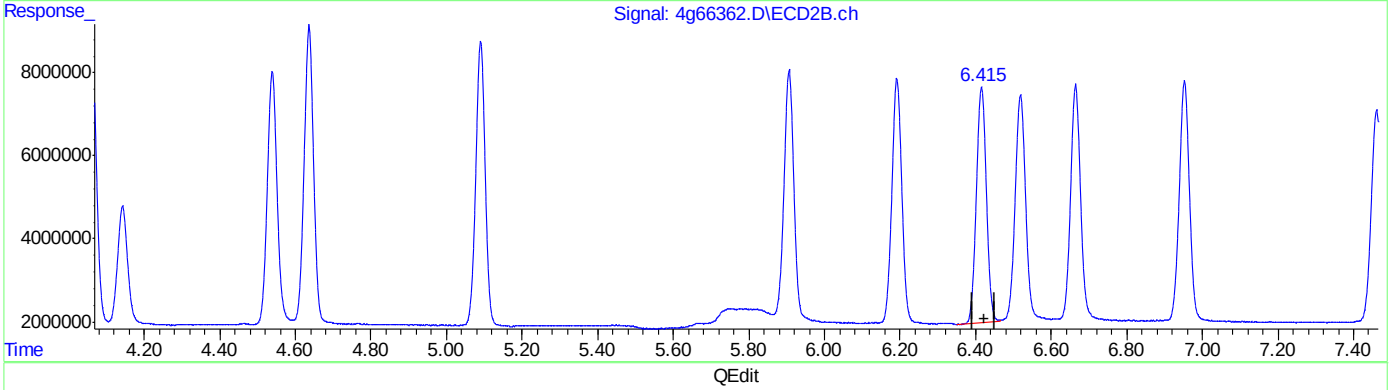
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:13 am
Operator : rebeccak
Sample : cc1741-25
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:28:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





QEdit

(11) alpha-Chlordane (B)
5.180min 27.386 PPB
response 111863795

(11) alpha-Chlordane #2 (B)
6.416min 25.708 PPB
response 104290697

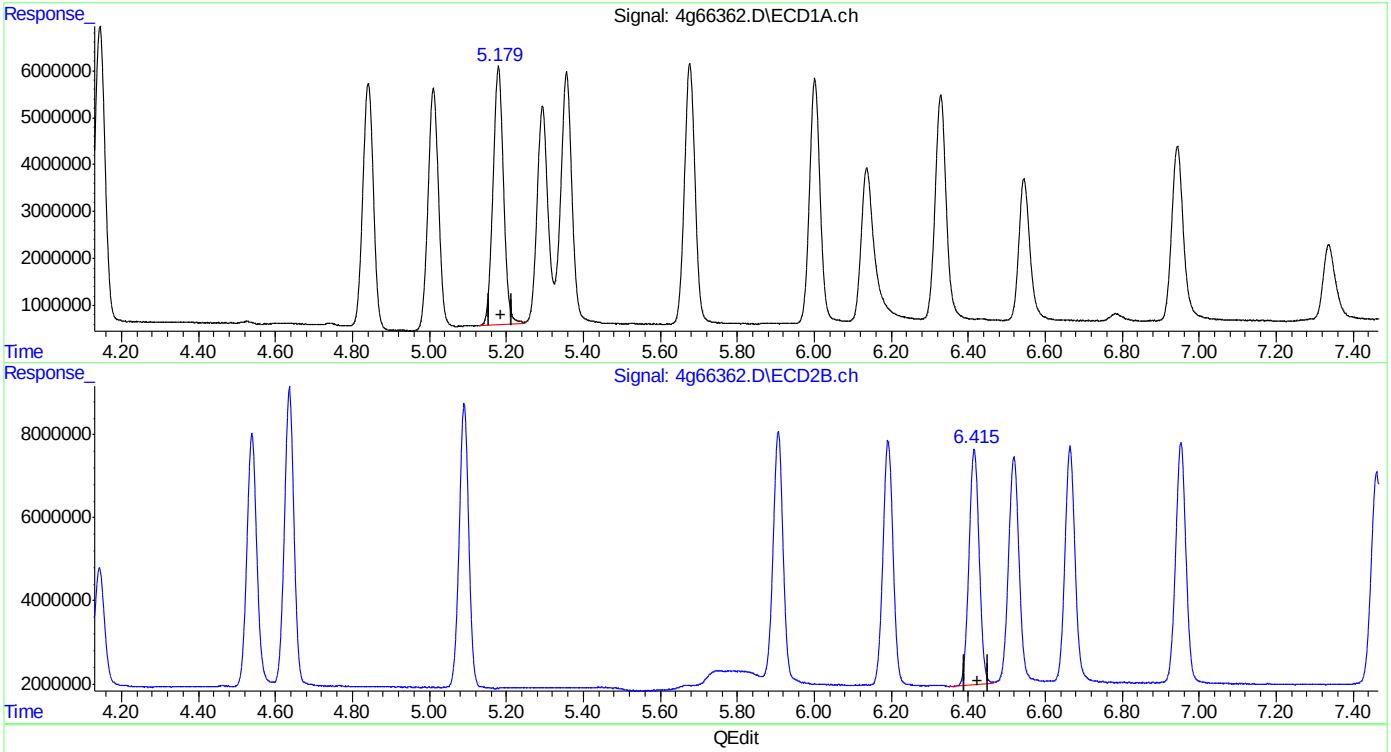
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Mar 2016   8:13 am
Operator  : rebeccak
Sample    : cc1741-25
Misc      : op92278,g4g1746,15.4,,,10,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:28:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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
```



QEdit

(11) alpha-Chlordane (B)

5.179min 25.716 PPB m

response 105041503

(11) alpha-Chlordane #2 (B)

6.416min 25.708 PPB

response 104290697

(+) = Expected Retention Time

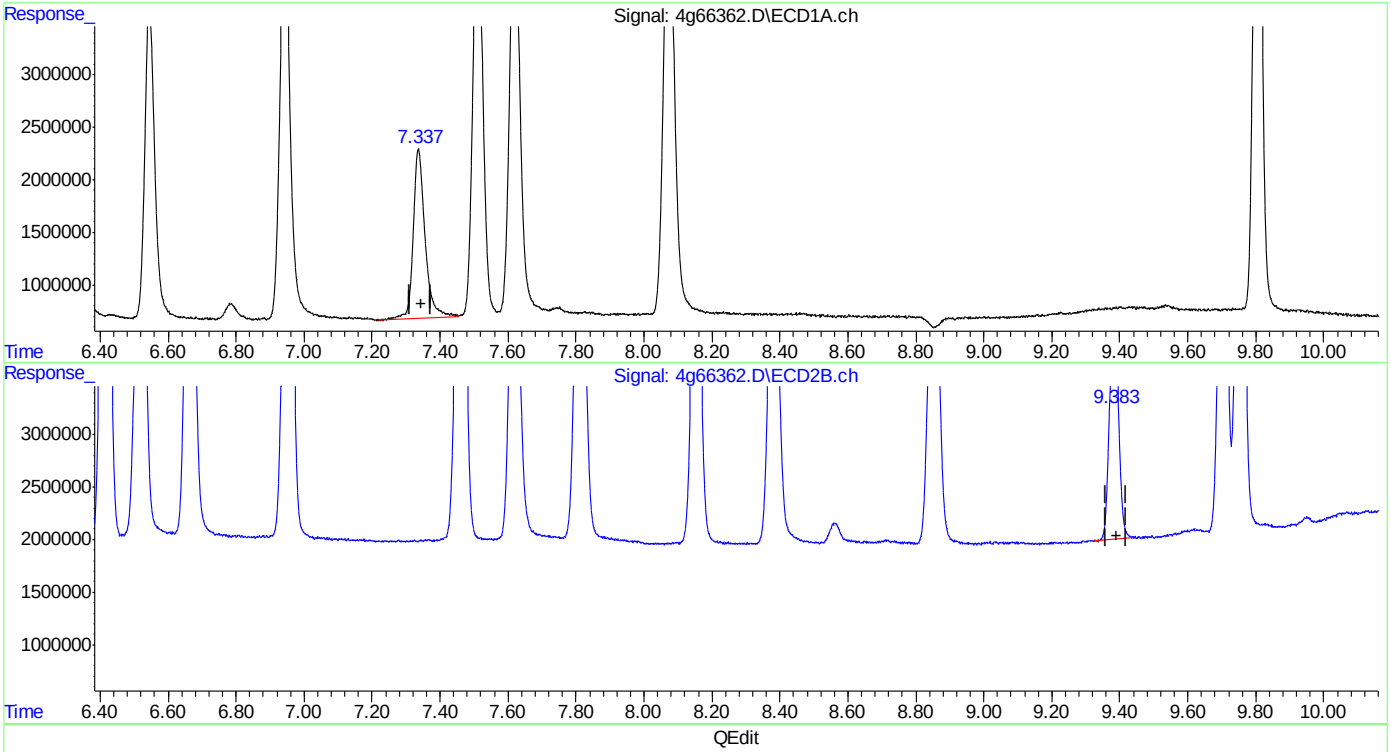
4PST1741.M Tue Mar 22 08:28:50 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:13 am
Operator : rebeccak
Sample : cc1741-25
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:30:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



QEdit

(21) Methoxychlor (A)
7.337min 33.235 PPB
response 38552711

(21) Methoxychlor #2 (A)
9.383min 30.482 PPB
response 41651934

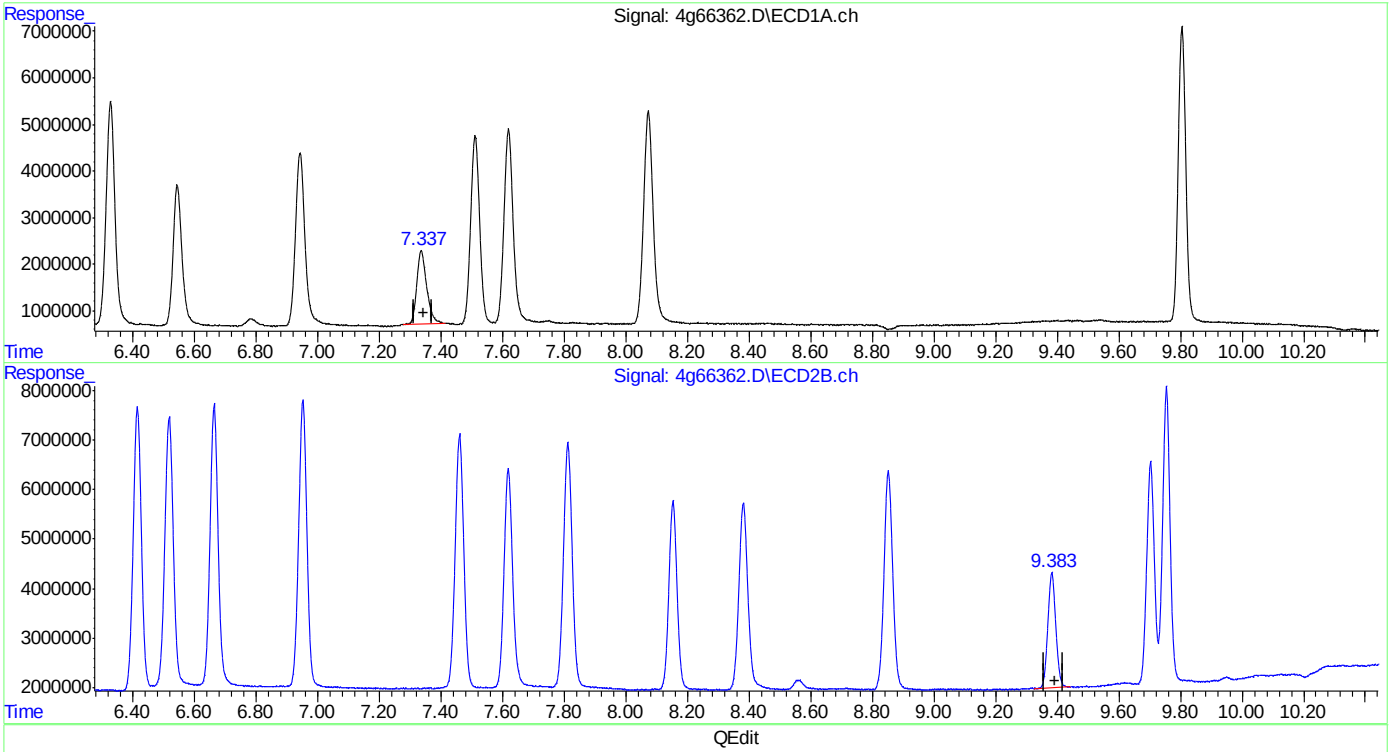
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:13 am
Operator : rebeccak
Sample : cc1741-25
Misc : op92278,g4g1746,15.4,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 08:30:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



(21) Methoxychlor (A)
7.337min 30.417 PPB m
response 35283288

(21) Methoxychlor #2 (A)
9.383min 30.482 PPB
response 41651934

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66376.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:57 am
Operator : brittanp
Sample : cc1741-50
Misc : op92235,g4g1746,990,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 12:16:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.075	2.232	229.2E6	205.5E6	50.000	50.000
25) I	1-bromo-2...	2.075	2.232	229.2E6	205.5E6	50.000	50.000
31) I	1-bromo-2...	2.075	2.232	229.2E6	205.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.609	3.004	235.9E6	221.6E6	52.658	56.729
	Spiked Amount 40.000 Range 30 - 150 Recovery = 131.65% 141.82%						
24) SA	Decachlor...	9.807	11.217	230.5E6	169.6E6	50.254	58.686
	Spiked Amount 40.000 Recovery = 125.63% 146.72%						
	Target Compounds						
3) A	alpha-BHC	3.047	3.642	328.0E6	312.6E6	54.619	60.338
4) MA	gamma-BHC	3.333	4.064	289.1E6	278.7E6	53.580	60.012
5) MA	Heptachlor	3.605	4.638	276.8E6	274.2E6	52.948	58.517
6) B	beta-BHC	3.417	4.145	145.4E6	125.3E6	53.179	60.384
7) B	delta-BHC	3.813	4.542	270.9E6	254.0E6	52.422	58.714
8) MB	Aldrin	4.147	5.092	280.3E6	269.1E6	52.651	57.747
9) B	Heptachlo...	4.845	5.908	257.5E6	245.5E6	51.956	58.574
10) B	gamma-Chl...	5.014	6.193	244.7E6	246.6E6	50.188	57.660
11) B	alpha-Chl...	5.183	6.417	244.7E6	235.8E6	50.858	56.393
12) A	Endosulfan I	5.360	6.520	267.2E6	224.4E6	53.437	54.709
13) B	4,4'-DDE	5.300	6.667	199.8E6	229.3E6	49.506	57.291
14) MA	Dieldrin	5.680	6.955	255.8E6	245.2E6	52.117	59.199
15) MA	Endrin	6.005	7.463	225.8E6	211.8E6	52.450	56.521
16) A	4,4'-DDD	6.142	7.622	188.2E6	197.2E6	53.766	55.108
17) B	Endosulfa...	6.330	7.814	231.1E6	216.5E6	54.684	57.668
18) MA	4,4'-DDT	6.549	8.156	139.6E6	147.1E6	46.855	51.749
19) B	Endrin Al...	6.945	8.384	184.9E6	197.4E6	52.383	61.865
20) B	Endosulfa...	7.622	8.855	187.2E6	185.9E6	53.430	57.772
21) A	Methoxychlor	7.343	9.385	74541249	80142073	54.551	56.896
22)	Mirex	7.514	9.705	174.2E6	162.2E6	48.832	55.427
23) B	Endrin Ke...	8.075	9.756	218.8E6	212.6E6	53.420	57.103

SemiQuant Compounds - Not Calibrated on this Instrument

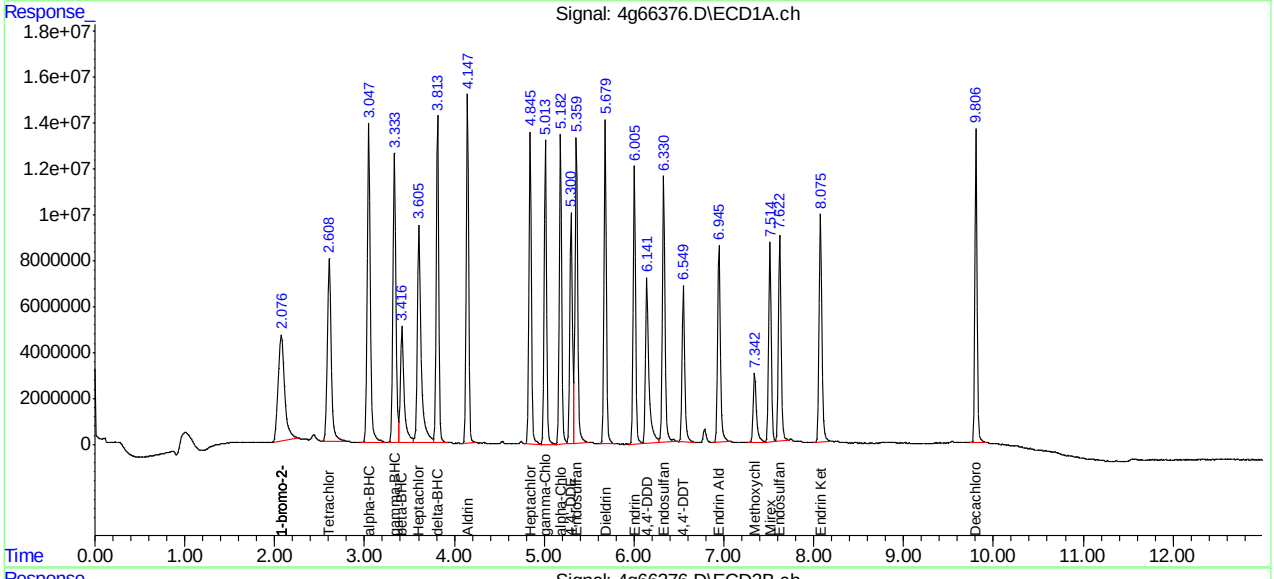
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

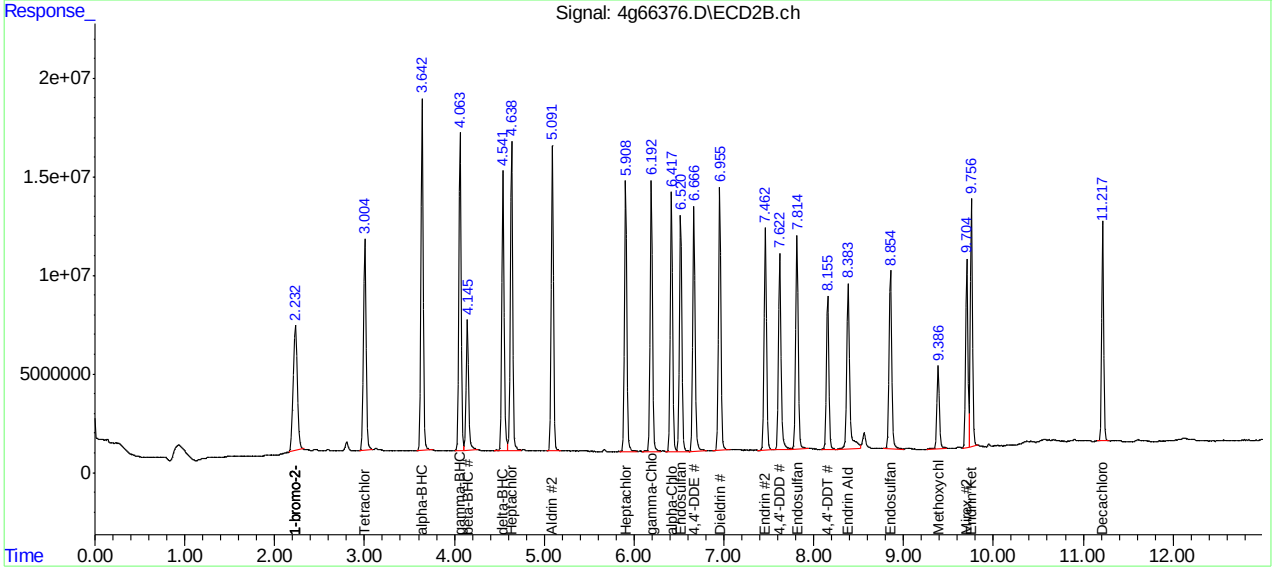
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66376.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 11:57 am
Operator : brittanp
Sample : cc1741-50
Misc : op92235,g4g1746,990,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 22 12:16:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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)
Gwendolyn Burns
03/23/16 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66398.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:11 pm
Operator : dharas
Sample : cc1741-25
Misc : op92190,g4g1746,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 08:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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...	2.058	2.219	226.8E6	204.1E6	50.000	50.000
25) I	1-bromo-2...	2.058	2.219	226.8E6	204.1E6	50.000	50.000
31) I	1-bromo-2...	2.058	2.219	226.8E6	204.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.598	2.997	111.3E6	107.7E6	25.101	27.772
Spiked Amount		40.000 Range	30 - 150	Recovery	=	62.75%	69.43%
24) SA	Decachlor...	9.807	11.218	116.1E6	81402506	25.566	28.374
Spiked Amount		40.000		Recovery	=	63.91%	70.93%
	Target Compounds						
3) A	alpha-BHC	3.039	3.636	153.6E6	144.9E6	25.837	28.170
4) MA	gamma-BHC	3.325	4.059	138.0E6	125.4E6	25.846	27.193
5) MA	Heptachlor	3.600	4.634	121.8E6	127.7E6	23.538	27.444
6) B	beta-BHC	3.411	4.140	72872709	57898850	26.940	28.104
7) B	delta-BHC	3.808	4.537	124.1E6	117.5E6	24.266	27.350
8) MB	Aldrin	4.142	5.089	133.7E6	125.4E6	25.378	27.100
9) B	Heptachlo...	4.842	5.906	120.1E6	115.0E6	24.492	27.625m
10) B	gamma-Chl...	5.011	6.192	107.6E6	114.8E6	22.299	27.040
11) B	alpha-Chl...	5.180	6.416	114.4E6	112.5E6	24.027	27.099
12) A	Endosulfan I	5.358	6.518	124.7E6	108.0E6	25.195	26.518
13) B	4,4'-DDE	5.297	6.665	93761335	109.0E6	23.473	27.422
14) MA	Dieldrin	5.678	6.953	118.2E6	114.1E6	24.328	27.748
15) MA	Endrin	6.003	7.461	100.9E6	97553030	23.688	26.222
16) A	4,4'-DDD	6.142	7.620	82832447	90784336	23.910	25.548
17) B	Endosulfa...	6.330	7.813	103.1E6	101.2E6	24.654	27.157
18) MA	4,4'-DDT	6.548	8.155	56859488	65417180	21.510	24.948
19) B	Endrin Al...	6.945	8.383	88372636	83435606	25.294	26.335
20) B	Endosulfa...	7.621	8.854	89328690	87553505	25.756	27.405
21) A	Methoxychlor	7.342	9.385	31922657	36076543	23.607	25.794
22)	Mirex	7.513	9.704	88944526	78758166	25.191	27.113
23) B	Endrin Ke...	8.075	9.755	102.3E6	101.1E6	25.231	27.347

SemiQuant Compounds - Not Calibrated on this Instrument

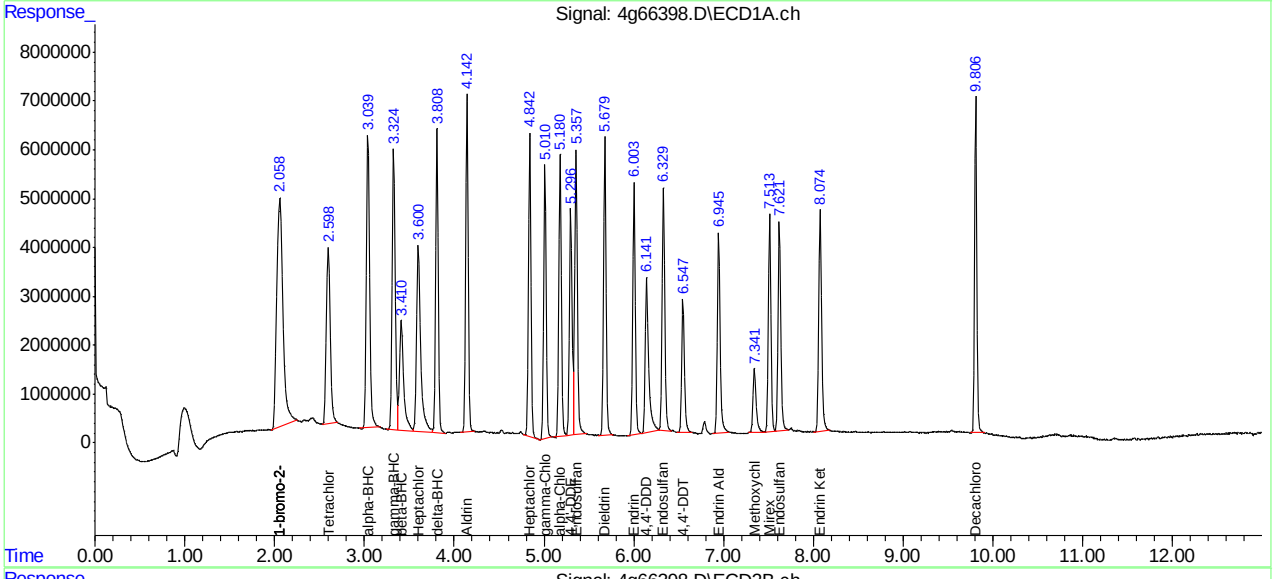
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

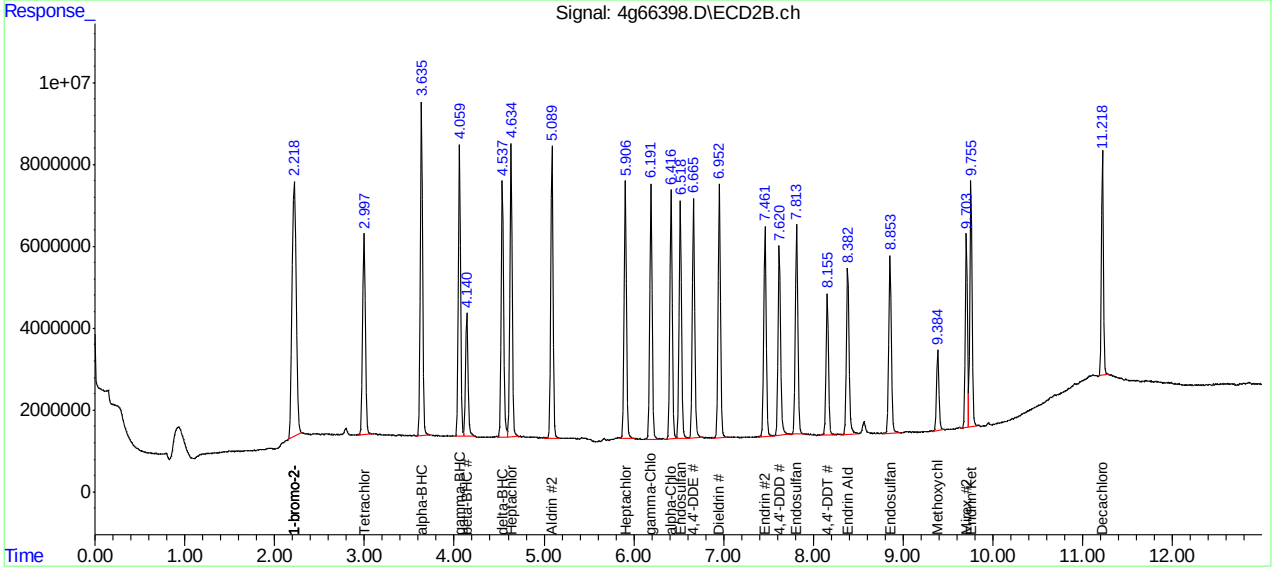
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66398.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:11 pm
Operator : dharas
Sample : cc1741-25
Misc : op92190,g4g1746,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 08:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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





SGS ACCUTEST JC16312T

Manual Integration Approval Summary

Sample Number:	G4G1746-CC1741	**Method:**	SW846 8081B
Lab FileID:	4G66398.D	**Analyst approved:**	03/23/16 08:48 Brittany Piercy
Injection Time:	03/22/16 20:11	**Supervisor approved:**	03/23/16 11:23 Gwendolyn Burns

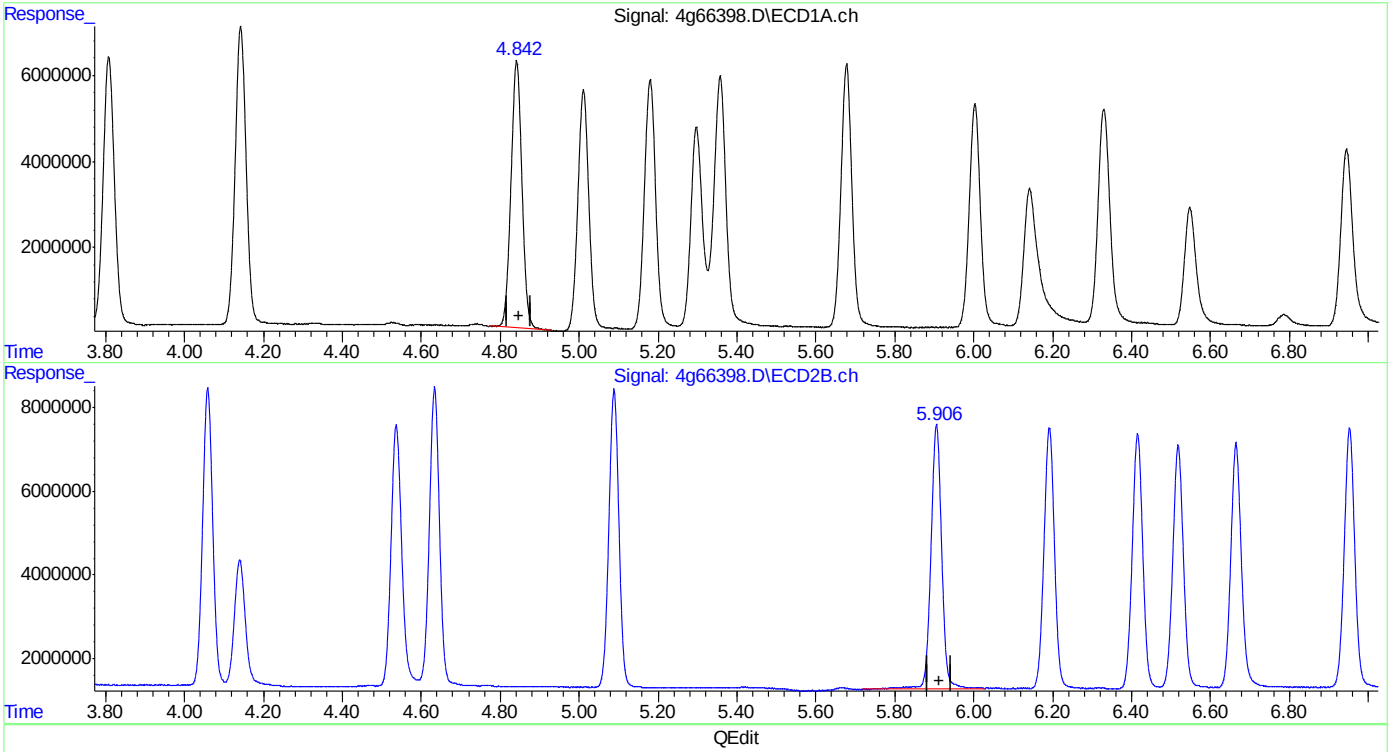
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	2	5.91	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66398.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 22 Mar 2016   8:11 pm
Operator  : dharas
Sample    : cc1741-25
Misc      : op92190,g4g1746,100,,,10,1
ALS Vial  : 2   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 08:17:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title  : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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
```



QEdit

(9) Heptachlor Epoxide (B)

4.842min 24.492 PPB

response 120109569

(9) Heptachlor Epoxide #2 (B)

5.906min 28.693 PPB

response 119419665

(+) = Expected Retention Time

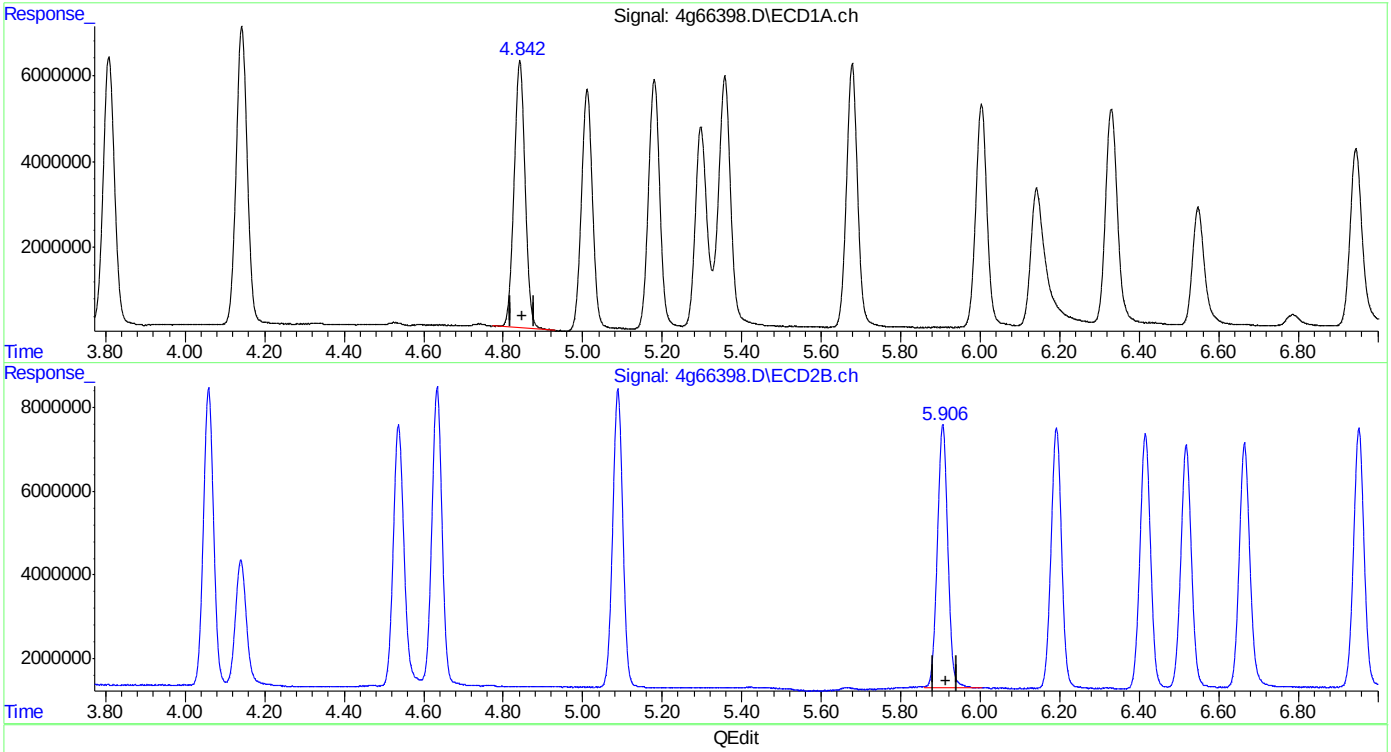
4PST1741.M Wed Mar 23 08:17:50 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1746\
Data File : 4g66398.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 22 Mar 2016 8:11 pm
Operator : dharas
Sample : cc1741-25
Misc : op92190,g4g1746,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 23 08:17:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1741.M
Quant Title : PEST/PCB
QLast Update : Sat Mar 19 13:31:47 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



QEdit

(9) Heptachlor Epoxide (B)
4.842min 24.492 PPB
response 120109569

(9) Heptachlor Epoxide #2 (B)
5.906min 27.625 PPB m
response 114975533

(+) = Expected Retention Time
4PST1741.M Wed Mar 23 08:17:59 2016 RPT1

ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3933

Date: 3/14/16

Analyst Signature: DK

Columns: 2DCLPI / 2DCLPII

Method 8081, 608

Initial Cal. Method 1 PST 3/14/16 3933

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.
151r0r-70A	Pest mix	1 ppb
-70B		2
-70C		5
-70D		10
161r74-84A		25
-84B		50
151r0r-70E		75
-70F		100
151r6h-134	mirex	250
161r74-95	pest mix 2nd	250

Standard Data

Lot #	Description	Conc.
161r74-79	PCM	10-250 ppb
-75	Pest ISTD	5 ppm
151r0r-144	IB	20 ppb
155q82	Hexane (Fisher)	-
161r74-20	chlordane 1st	10 ppm
-21	Toxaphene 1st	10 ppm
161r74-96	chlordane 2nd	500 ppb
-97	Toxaphene 2nd	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: JR Date: 3/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	12120777	dblt				1			/	ok	
	778	IB				2			/	ok	
	779	IC3933-1	1st Source	Pest mix		3			/	ok	
	780	-2				4			/	ok	
	781	-5				5			/	ok	
	782	-10				6			/	ok	
	783	ICC3933-25				7			/	ok	
	784	IC3933-50				8			/	ok	
	785	-75				9			/	ok	
	786	-100				10			/	ok	
	787	-500		CHL		11			/	ok	
	788	-500		TOX		12			/	ok	
	789	ICV3933-25	2nd Source	Pest		13			/	ok	
	790	-25		mirex		14				ok	
	791	-500		CHL		15			/	ok	
	792	-500		TOX		16			/	ok	

JR 3/14/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason 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: GC1G
Method: EPA 608

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	1G120783.D	03/14/16 12:18	G1G3933-ICC3933	DHARAS
Std#2	1G120793.D	03/14/16 15:59	G1G3934-CC3933	DHARAS
Std#3	1G120804.D	03/14/16 19:11	G1G3934-CC3933	DHARAS

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
1-Bromo-2-nitrobenzene	1	ISTD	1.18	1.19	1.18	1.18	0.006	+/- 0.030 [a]
1-Bromo-2-nitrobenzene	2	ISTD	1.55	1.56	1.55	1.55	0.006	+/- 0.030 [a]
Tetrachloro-m-xylene	1	SURR	1.77	1.78	1.77	1.77	0.006	+/- 0.030 [a]
Decachlorobiphenyl	1	SURR	8.98	9.00	8.98	8.99	0.012	+/- 0.035
Tetrachloro-m-xylene	2	SURR	2.40	2.40	2.40	2.40	0.000	+/- 0.030 [a]
Decachlorobiphenyl	2	SURR	10.90	10.91	10.90	10.90	0.006	+/- 0.030 [a]
alpha-BHC	1	REG	2.24	2.25	2.24	2.24	0.006	+/- 0.030 [a]
gamma-BHC (Lindane)	1	REG	2.53	2.54	2.53	2.53	0.006	+/- 0.030 [a]
beta-BHC	1	REG	2.61	2.62	2.61	2.61	0.006	+/- 0.030 [a]
delta-BHC	1	REG	2.79	2.80	2.79	2.79	0.006	+/- 0.030 [a]
Heptachlor	1	REG	3.00	3.02	3.00	3.01	0.012	+/- 0.035
Aldrin	1	REG	3.33	3.34	3.33	3.33	0.006	+/- 0.030 [a]
Heptachlor epoxide	1	REG	4.03	4.04	4.03	4.03	0.006	+/- 0.030 [a]
gamma-Chlordane	1	REG	4.18	4.20	4.18	4.19	0.012	+/- 0.035
alpha-Chlordane	1	REG	4.35	4.36	4.35	4.35	0.006	+/- 0.030 [a]
4,4'-DDE	1	REG	4.46	4.48	4.46	4.47	0.012	+/- 0.035
Endosulfan-I	1	REG	4.52	4.54	4.52	4.53	0.012	+/- 0.035
Dieldrin	1	REG	4.84	4.86	4.84	4.85	0.012	+/- 0.035
Endrin	1	REG	5.15	5.17	5.15	5.16	0.012	+/- 0.035
4,4'-DDD	1	REG	5.28	5.30	5.28	5.29	0.012	+/- 0.035
Endosulfan-II	1	REG	5.47	5.49	5.47	5.48	0.012	+/- 0.035
4,4'-DDT	1	REG	5.69	5.71	5.69	5.70	0.012	+/- 0.035
Endrin aldehyde	1	REG	6.10	6.12	6.10	6.11	0.012	+/- 0.035
Methoxychlor	1	REG	6.47	6.49	6.47	6.48	0.012	+/- 0.035
Mirex	1	REG	6.58	6.59	6.58	6.58	0.006	+/- 0.030 [a]
Endosulfan sulfate	1	REG	6.78	6.80	6.78	6.79	0.012	+/- 0.035
Endrin ketone	1	REG	7.20	7.22	7.20	7.21	0.012	+/- 0.035
alpha-BHC	2	REG	3.07	3.07	3.07	3.07	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	2	REG	3.50	3.50	3.50	3.50	0.000	+/- 0.030 [a]
beta-BHC	2	REG	3.58	3.59	3.58	3.58	0.006	+/- 0.030 [a]
delta-BHC	2	REG	3.98	3.99	3.98	3.98	0.006	+/- 0.030 [a]
Heptachlor	2	REG	4.08	4.08	4.08	4.08	0.000	+/- 0.030 [a]
Aldrin	2	REG	4.53	4.53	4.53	4.53	0.000	+/- 0.030 [a]
Heptachlor epoxide	2	REG	5.35	5.36	5.35	5.35	0.006	+/- 0.030 [a]
gamma-Chlordane	2	REG	5.64	5.64	5.64	5.64	0.000	+/- 0.030 [a]
alpha-Chlordane	2	REG	5.86	5.87	5.86	5.86	0.006	+/- 0.030 [a]
Endosulfan-I	2	REG	5.96	5.96	5.96	5.96	0.000	+/- 0.030 [a]
4,4'-DDE	2	REG	6.13	6.14	6.13	6.13	0.006	+/- 0.030 [a]
Dieldrin	2	REG	6.39	6.40	6.39	6.39	0.006	+/- 0.030 [a]
Endrin	2	REG	6.90	6.91	6.90	6.90	0.006	+/- 0.030 [a]

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC1G
Method: EPA 608

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	1G120783.D	03/14/16 12:18	G1G3933-ICC3933	DHARAS
Std#2	1G120793.D	03/14/16 15:59	G1G3934-CC3933	DHARAS
Std#3	1G120804.D	03/14/16 19:11	G1G3934-CC3933	DHARAS

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
4,4'-DDD	2	REG	7.08	7.09	7.08	7.08	0.006	+/- 0.030 [a]
Endosulfan-II	2	REG	7.25	7.26	7.25	7.25	0.006	+/- 0.030 [a]
4,4'-DDT	2	REG	7.62	7.63	7.62	7.62	0.006	+/- 0.030 [a]
Endrin aldehyde	2	REG	7.82	7.83	7.83	7.83	0.006	+/- 0.030 [a]
Endosulfan sulfate	2	REG	8.30	8.31	8.30	8.30	0.006	+/- 0.030 [a]
Methoxychlor	2	REG	8.87	8.88	8.87	8.87	0.006	+/- 0.030 [a]
Mirex	2	REG	9.19	9.20	9.19	9.19	0.006	+/- 0.030 [a]
Endrin ketone	2	REG	9.26	9.27	9.26	9.26	0.006	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3944

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 3/24/16

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method IPST 3933

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
1614M-101	Pest IBTD	5 ppm
-87	IB	20 ppb
-74	PGM	10-250 ppb
-107B	Pest mix	25 ppb
-107A	Pest mix	50 ↓
155482	Hexane (Fisher)	-

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 3/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1g121296	ddt				1			/	OK	
	297	cc3933-25				2			/	OK	mirex ↓ 1st various ↓ 2nd
	298	IB				3			/	OK	
	299	Pest Spike ~~OP92RK~~ 3/24/16 (2)				31				NG	Delta BHC ↓ OP16.1712.23B
	300	OP92374-MB1	92374	tcl 8081	W	32		/	/	OK	
	301	OP92374-BS1				33		/	/	OK	
	302	JC16487-12				34				not run	sequence cut to accomodate rushes
	303	JC16609-1				35				not run	↓
	304	OP92374-MS				36				not run	
	305	OP92374-MSD				37				not run	
	306	JC13380-20				38				not run	
	307	JC16312-6		beta BHC DDD/DDT 8081		39				not run	
	302	OP92384-MB1	92384	tcl 8081	S	34			/	not needed	
	303	OP92384-BS1				35			/	OK	
	304	JC16355-1				36			/	not using	moved to 6g
	305	-2				37				not using	↓
	306	-3				38				not using	
	307	-4				39				not run	
	308	-5				40				not run	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST JC16312T

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3944

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 3/24/16

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method IPST3933

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
16W2W101	Pest DSTD	5 ppm
-87	IB	20 ppb
-72	PCM	10-250 ppb
-108M	Pest mix	25 ppb
-108A	Pest mix	50 ↓
15H22	Hexane (filter)	–

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: 3/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1g121309	JC16355-6	92384	tcl 8081	S	41				not run	moved to 6g
	310	-7				42				not run	↓
	311	OP92408-MB1	92408	tclp 8081	W	43				ok	
	312	OP92408-BS1				44				ok	
	313	JC16666-2A				45				ok	
	314	JC16667-1A	92314-2	tclp 8081	W	46				ok	
	315	ddt				1				ok	
	316	CC3933-50				4				ok	various ↓ 2nd
	317	IB				3				ok	
	318	Pest Spike				51			↑	ng	OP16-1712.32A
	319	JC16487-12	92374	tcl 8081	W	52				ok	
	320	JC16609-1				53				ok	
	321	OP92374-MS				54				ok	
	322	OP92374-MSD				55				ok	
	323	JC13380-20				56				ok	
	324	JC16312-6				57				ok	
	325	OP92408-LS23	92408 MS	tclp 8081	W	58				ok	
	326	OP92408-MSD				59				ok	
	327	OP92408-LB28				60				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 JC16312T

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3944

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 3/24/16

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method IPST3933

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161	Pest IPSTD	5 ppm
-87	IB	20 ppb
-74	PEM	10-250 ppb
-108	Pest mix	25 ppb
-108A	Pest mix	50 ↓
155412	Hexane (Final)	–

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: 3/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	lg121328	JC16537-4A	92408	tclp 8081	W	61				OK	
	329	JC16538-9A				62				OK	
	330	JC16539-9A				63				OK	
	331	-13A				64				OK	
	332	-22A				65				OK	
	333	JC16641-1A				66				OK	
	334	JC16650-1				67				OK	
	335	OP92408-LB277				68				OK	
	336	CC3933-25				2				OK	EK ↓ Both
	337	IB				3				OK	
	338	OP92343-LB30	92343-2	tclp 8081	W	69				OK	
	339	OP92410-LS24/MS	92410	tclp 8081	W	70				OK	
	340	OP92410-MSD				71				OK	
	341	JC16589-1A				72				OK	
	342	JC16526-7A	92343			73				OK	
	343	-14A				74				OK	
	344	JC16528-7A				75				OK	
	345	-19A				76				OK	
	346	-25A				77				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: G1G3944

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 3/24/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
1614mix01	PCB IS/SD	50ppm

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method IPST3933

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: [illegible] Date: 3/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	lg121347	JC16536-7A	92410	tcl 8081	W	78		/	/	OK	
	348	OP92408-LB3	92028			79		/	/	OK	

3/24/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

27

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1741

Print Analyst Name: Brittany Piercy

Date: 03/18/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151808-149	Pem	10-250ppb
SV151879-75	Pest ISTD	5ppm
SV151808147	I.B.	20 ppb
155982	Hexane (Fisher)	—

Columns: ZB CLP I / ZB CLP II

Method 8081/608

Initial Cal. Method 4PST 1741

Injection Volume: 1 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:** 3/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G661169	DDT			W	1			/	ok	@ 5:45 PM
	170	I.B.				2			/	ok	
	171	IC1741-1	1st source	Pest Mix		3			/	ok	SV151808-70A
	172	-2				4			/	ok	-70B
	173	-5				5			/	ok	-70C
	174	-10				6			/	ok	-70D
	175	ICC1741-25				7			/	ok	SV151874-108B
	176	IC1741-50				8			/	ok	-108A
	177	-75				9				Not Using	Wrong standard Run SV151808-70E
	178	-100				10			/	ok	-70F
	179	-500		CHL		11			/	ok	SV151879-20
	180	-500		~~TOX~~		~~12~~			/	ok	-21
	181	ICV1741-25	2nd source	Pest Mix.		13			/	ok	SV151879-95 BP 3/18/16
	182	-25		Mirex		14				ok	SV151564-137
	183	-500		CHL		15			/	ok	SV151874-96
	184	-500		TOX		16			/	ok	-97

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

5

Form: OR016-08
Rev. Date: 1/19/16

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G66175.D	03/18/16 19:13	G4G1741-ICC1741	BRITTANP
Std#2	4G66186.D	03/18/16 21:40	G4G1742-CC1741	BRITTANP
Std#3	4G66207.D	03/19/16 02:48	G4G1742-CC1741	BRITTANP

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
1-Bromo-2-nitrobenzene	1	ISTD	2.06	2.06	2.06	2.06	0.000	+/- 0.030 [a]
1-Bromo-2-nitrobenzene	2	ISTD	2.22	2.22	2.22	2.22	0.000	+/- 0.030 [a]
Tetrachloro-m-xylene	1	SURR	2.60	2.60	2.61	2.60	0.006	+/- 0.030 [a]
Decachlorobiphenyl	1	SURR	9.81	9.81	9.81	9.81	0.000	+/- 0.030 [a]
Tetrachloro-m-xylene	2	SURR	3.00	3.00	3.00	3.00	0.000	+/- 0.030 [a]
Decachlorobiphenyl	2	SURR	11.22	11.23	11.22	11.22	0.006	+/- 0.030 [a]
alpha-BHC	1	REG	3.05	3.04	3.05	3.05	0.006	+/- 0.030 [a]
gamma-BHC (Lindane)	1	REG	3.33	3.33	3.33	3.33	0.000	+/- 0.030 [a]
beta-BHC	1	REG	3.42	3.42	3.42	3.42	0.000	+/- 0.030 [a]
Heptachlor	1	REG	3.60	3.61	3.61	3.61	0.006	+/- 0.030 [a]
delta-BHC	1	REG	3.81	3.81	3.81	3.81	0.000	+/- 0.030 [a]
Aldrin	1	REG	4.15	4.15	4.15	4.15	0.000	+/- 0.030 [a]
Heptachlor epoxide	1	REG	4.85	4.85	4.85	4.85	0.000	+/- 0.030 [a]
gamma-Chlordane	1	REG	5.02	5.02	5.02	5.02	0.000	+/- 0.030 [a]
alpha-Chlordane	1	REG	5.19	5.19	5.19	5.19	0.000	+/- 0.030 [a]
4,4'-DDE	1	REG	5.30	5.31	5.31	5.31	0.006	+/- 0.030 [a]
Endosulfan-I	1	REG	5.36	5.36	5.36	5.36	0.000	+/- 0.030 [a]
Dieldrin	1	REG	5.68	5.68	5.69	5.68	0.006	+/- 0.030 [a]
Endrin	1	REG	6.01	6.01	6.01	6.01	0.000	+/- 0.030 [a]
4,4'-DDD	1	REG	6.15	6.16	6.16	6.16	0.006	+/- 0.030 [a]
Endosulfan-II	1	REG	6.34	6.34	6.34	6.34	0.000	+/- 0.030 [a]
4,4'-DDT	1	REG	6.55	6.56	6.56	6.56	0.006	+/- 0.030 [a]
Endrin aldehyde	1	REG	6.95	6.95	6.95	6.95	0.000	+/- 0.030 [a]
Methoxychlor	1	REG	7.35	7.36	7.36	7.36	0.006	+/- 0.030 [a]
Mirex	1	REG	7.52	7.52	7.52	7.52	0.000	+/- 0.030 [a]
Endosulfan sulfate	1	REG	7.63	7.63	7.63	7.63	0.000	+/- 0.030 [a]
Endrin ketone	1	REG	8.08	8.09	8.09	8.09	0.006	+/- 0.030 [a]
alpha-BHC	2	REG	3.64	3.64	3.64	3.64	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	2	REG	4.07	4.06	4.07	4.07	0.006	+/- 0.030 [a]
beta-BHC	2	REG	4.15	4.15	4.15	4.15	0.000	+/- 0.030 [a]
delta-BHC	2	REG	4.55	4.54	4.54	4.54	0.006	+/- 0.030 [a]
Heptachlor	2	REG	4.64	4.64	4.64	4.64	0.000	+/- 0.030 [a]
Aldrin	2	REG	5.10	5.10	5.10	5.10	0.000	+/- 0.030 [a]
Heptachlor epoxide	2	REG	5.91	5.91	5.91	5.91	0.000	+/- 0.030 [a]
gamma-Chlordane	2	REG	6.20	6.20	6.20	6.20	0.000	+/- 0.030 [a]
alpha-Chlordane	2	REG	6.42	6.42	6.42	6.42	0.000	+/- 0.030 [a]
Endosulfan-I	2	REG	6.53	6.53	6.53	6.53	0.000	+/- 0.030 [a]
4,4'-DDE	2	REG	6.67	6.67	6.67	6.67	0.000	+/- 0.030 [a]
Dieldrin	2	REG	6.96	6.96	6.96	6.96	0.000	+/- 0.030 [a]
Endrin	2	REG	7.47	7.47	7.47	7.47	0.000	+/- 0.030 [a]

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G66175.D	03/18/16 19:13	G4G1741-ICC1741	BRITTANP
Std#2	4G66186.D	03/18/16 21:40	G4G1742-CC1741	BRITTANP
Std#3	4G66207.D	03/19/16 02:48	G4G1742-CC1741	BRITTANP

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
4,4'-DDD	2	REG	7.63	7.63	7.63	7.63	0.000	+/- 0.030 [a]
Endosulfan-II	2	REG	7.82	7.82	7.82	7.82	0.000	+/- 0.030 [a]
4,4'-DDT	2	REG	8.16	8.16	8.16	8.16	0.000	+/- 0.030 [a]
Endrin aldehyde	2	REG	8.39	8.39	8.39	8.39	0.000	+/- 0.030 [a]
Endosulfan sulfate	2	REG	8.86	8.86	8.86	8.86	0.000	+/- 0.030 [a]
Methoxychlor	2	REG	9.39	9.39	9.39	9.39	0.000	+/- 0.030 [a]
Mirex	2	REG	9.71	9.71	9.71	9.71	0.000	+/- 0.030 [a]
Endrin ketone	2	REG	9.76	9.76	9.76	9.76	0.000	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1746

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 3/22/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SY16874-101	Pest ISTD	5ppm
-79	Pem	10-250ppb
-108B	Pest Mix	25ppb
-108A	1	50 1
-87	I.B.	20 1
155982	Hexane (Fisher)	—

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method 4PST1741

Injection Volume: 1.0 L

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:** 3/24/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4g66361	ddt				1				OK	
	362	CC1741-25				2				OK	Methoxychlor ↑ BOTH
	363	IB				3				OK	
	364	OP92235-MB1	92235-1	BBHC +DDT +DDE 8081	W	4				OK	
	365	-BS1				5				OK	
	366	-BSD				6			↑	OK	Whole Batch sent to Rx.
	367	JC16312-1				7			↑	OK	N.D
	368	-2				8				OK	
	369	-3				9				OK	
	370	-4				10	BP 3/22/16 ④		↙	OK	RR 1:5 for I.S.
	371	-5				11				OK	
	372	-6				12			↑	OK	sent to Rx
	373	-7				13				OK	
	374	-8				14			↑	OK	sent to Rx
	375	-9				15				OK	
	376	CC1741-50				16				OK	Various ↑ ist.
	377	I.B.				3				OK	
	378	JC16196-2	92255-1	TCL 8081	S	17	5			OK	Ran Before "4g66376"
	379	JC16312-4				5	5			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
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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1746

Print Analyst Name: Brittany Percy

Analyst Signature: B.P

Date: 03/22/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1618741-101	Pest ISTD	5 ppm
-79	PEM	10-250 ppb
-108B	Pest Mix	25 ppb
-108A	1	50
-87	I.B	80
-104	TBA - Clean-up	—
155982	Hexane (Fisher)	—

Columns: ZBCLP I / ZBCLP II

Method 8081/608

Initial Cal. Method 4PST1741

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:** 3/24/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G66380A	JC16456-1	92255-1	8081 PPL	S	6				OK	Had TBA
	381A	JC15917-1	92200-1	TCL 8081	S	7				OK	↓
	382A	OP92190-LB11	92190-1	TCLP 8081	W	8				OK	Ran Before "4G66380A"
	383A	JC16190-9A				9				OK	
	384A	-13A				10				OK	
	385A	-17A				11				OK	
	386A	-33A				12				OK	
	387A	-43A				13				OK	
	388A	-48A				14				OK	
	389A	-57A				15				OK	
	390A	-67A				16				OK	
	391A	-77A				17				OK	
	392A	-87A				18				OK	
	393A	OP92190-LS8				19				OK	
	394A	-MSD				20				OK	
	395	Hexane				21				OK	
	396	↓ Hexane				21				OK	
	397	DDT			W	1 ~~22~~	BP 3/22/16			OK	
	398	CC1741-25				2				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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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1746

Print Analyst Name: Brittany Pierce

Analyst Signature: B.P.

Date: 03/22/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV168744401	Pest ISTD	5ppm
-79	PEM	10-250ppb
-108B	Pest Mix	25 ppb
-108A	1	50 1
-87	I.B.	20
155982	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 4PST1741

Injection Volume: 1µl

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AR Date: 3/24/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4G66399	I.B.				3				OK	
	400	OP92259-MB1	92259-1	TCL 8081	S	22				OK	
	401	-BS1				23				OK	
	402	JC15992-1A		TCL 8081		24				OK	
	403	-2A				25				OK	
	404	-3A				26				OK	
	405	JC16044-3				27				OK	
	406	JC16046-5				28				OK	
	407	JC16047-9				29				OK	
	408	JC16063-7				30				OK	
	409	JC16092-4				31				OK	
	410	JC16092-8				32				OK	
	411	-18				33				OK	
	412	-25				34				OK	
	413	OP92259-MS	92259-1			35				OK	
	414	-MSD				36				OK	
	415	JC16092-32				37				OK	
	416	JC16064-4				38				OK	RR 1:20
	417	JC16066-5				39				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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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1746

Print Analyst Name: Brittany Pierce

Analyst Signature: B.P.

Date: 03/22/2016

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 4PST1741

Injection Volume: 1µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
5116187401	Pest ISTD	5ppm
-79	Pem	10-25ppb
-108B	Pest Mix	25 ppb
-108A	1	50
-87	I.B.	20
155980	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR **Date:** 3/24/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4666418	JC16068-7	92259-1	TCL 8081	S	40		/	/	OK	
	419	CC1741-~~30~~ 50 BP				~~16~~ 4	BP 3/22/16 ④			NOT using	Various ↑ BOTH DDT & Methoxychlor ↓ BOTH
	420	I.B.				3					RR w/ Better cc.
	421	JC16076-5	92259-1	TCL 8081	S	41					
	421	JC16078-6				42					
	422	JC16078-11				43					
	423	JC16080-5				44					
	424	-6				45					
	425	Hexane				21				OK	Ran before "4616297"
	426	Hexane				21				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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6-1688

LOGBOOK ID:

Pest/PCB Extraction Log - Aqueous

Date Started: 3/21/16 Time Started: 1000
Date Finished: 3/21/16 Time Finished: 1400

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH #	GC 92235
RACK#	Pest-100
Extracted by:	BOZ, YB
Concentrated by:	EnC
Vialed by:	EnC, NA
Relinquished by:	
Accepted by:	
Supervisor Review:	3/21/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	1000	Clear	10		✓			
BS1				DI H2O	1000	CLEAR	10		✓			
BSD MS				DI H2O	1000	CLEAR	10		✓			
MSD												
BS												
MS												
MSD												
1 JC16312-1	Pest	3,4		Clear	940	CLEAR	10		✓			
2 -2		3,4		Clear	940	CLEAR	10		✓			
3 ~~-3~~		~~3,4~~		~~Yellow~~	~~1000~~	~~MW 3/21/16~~			✓			
4 -4		3,4		Peach	990	LT YELLOW	10		✓			
5 -5		2		LT Yellow	1000	CLEAR	10		✓			
6 -6		3,4		Yellow	940	CLEAR	10		✓			
7 ~~-7~~		~~3,4~~		~~Yellow~~	~~990~~	~~MW 3/21/16~~						
8 -8		3,4		Yellow	1000	LT YELLOW	10		✓			
9 -9		3,4		Yellow	990	CLEAR	10		✓			
10 -3		2		Yellow	970	CLEAR	10		✓			
11 -7		1		Yellow	1000	CLEAR	10		✓			
12												
13												
14												
15												
16												
17												
18												
19												
20												

Comments: JC16312-3,7 lost during concentration
Bottles 2 and 1, respectively, extracted

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2	65	–	–	ok
Buchi Chiller	B2	10.8	–	–	ok
Waterbath (70-80°C)	6,7	74,74.2	1.6,1.2	75.6,75.4	NA
Waterbath Chiller (GPM)	F2	4	–	–	1.8
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	1617219	400ppb	1mL

WITNESS SIGN: VP SPIKE SIGN: YB

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	1617223A	250ppb	1mL
PCB			

WITNESS SIGN: VP SPIKE SIGN: YB

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	160344	Fisher	60mL x3
HEXANE			

REAGENT	LOT #	BRAND
Sodium Sulfate	158459	Fisher
Glass Wool	02805-2	Lab
Filter Paper		
Copper	1617128	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking: please combine 2x500mls

Weights/Volumes: okay to proceed

Required MS/MSD: per PNR see email

Final Volume:

Other:

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6-1689

LOGBOOK ID:

Pest/PCB Extraction Log - Aqueous

Date Started: 03-23-16 Time Started: 9:15 AM

Date Finished: 03-23-16 Time Finished: 13:00

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other_____

Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 92374	RACK# Pest 3
Extracted by:	Eric
Concentrated by:	NL
Vialed by:	VP
Relinquished by:	
Accepted by:	
Supervisor Review:	3-23-16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	1000	Clear	10			✓		
BS1				DI H2O	1000	Clear	10			✓		
JC16609-1 MS		1		Brown	1000	Yellow	10			✓		
MSD		2		Brown	1000	Yellow	10			✓		
BS												
MS												
MSD												
1 ~~JC16312-6 rx~~	~~Pest~~	~~2~~		~~Yellow~~	~~1000~~	~~Yellow~~						
2 JC16487-12	Pest	5		Clear	1000	Clear	10			✓		
3 JC16609-1		3		Brown	1000	Yellow	10			✓		
4 JC13380-20		1		CLEAR	100	Clear	10			✓		
5 JC16312-6rx		1		Yellow	980	Yellow	10			✓		
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: high BSD

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

use 100 ml

Comments:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	—	—	ok
Buchi Chiller	B3	10.9	—	—	ok
Waterbath (70-80°C)	6,7	75/75	1.6/1.2	77/77	N/A
Waterbath Chiller (GPM)	F2	3	—	—	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	151719A	400	1

WITNESS SIGN: Eric 3-23-16 NL SPIKE SIGN: Eric

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	16171033A	250 ppb	1
PCB			

WITNESS SIGN: NL SPIKE SIGN: Eric

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	160344	Fisher	3/60
HEXANE	157197	Fisher	50

REAGENT	LOT #	BRAND
Sodium Sulfate	153169	Fisher
Glass Wool	09P29-2	lab
Filter Paper		
Copper	15162480	Aldrich
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

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[redacted]