



Cover Page

Order ID : O1233

Project ID : NYCDDC Phase II SCI Arthur Kill Road CEQR

Client : Louis Berger U.S., Inc., A WSP Company

Lab Sample Number

O1233-02
O1233-03
O1233-04
O1233-05
O1233-06
O1233-07
O1233-08
O1233-09
O1233-10
O1233-11
O1233-12

Client Sample Number

B-P34A
B-P34B
B-P36A
B-P36B
B-P37A
B-P37B
B-38A
B-P38B
WC-38
B-P38C
FB01

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 2/2/2023

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

Louis Berger U.S., Inc., A WSP Company

Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR

Project # N/A

Chemtech Project # O1233

Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 01/19/2023.

1 Water sample was received on 01/19/2023.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Pesticide-TCL.

C. Analytical Techniques:

The analysis was performed on instrument ECD_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. .The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

E. Additional Comments:

This data Package has been revised to correct the Client ID of sample # 08 as per client request.

The soil samples results are based on a dry weight basis.



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F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A**QA REVIEW GENERAL DOCUMENTATION**

Project #: 01233

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓**COVER PAGE:**

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓**CHAIN OF CUSTODY:**

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓**ANALYTICAL:**

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓1st Level QA Review Signature: SOHIL JODHANI

Date: 02/02/2023

2nd Level QA Review Signature: _____

Date: _____



284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID: O1233
Client: Louis Berger U.S., Inc., A WSP Company
Contact: Jonathan Ganz

OrderDate: 1/19/2023 1:53:00 PM
Project: NYCDDC Phase II SCI Arthur Kill Road CEQR
Location: N11,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
O1233-02	B-P34A	SOIL	PCB	8082A	01/18/23	01/20/23	01/20/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-03	B-P34B	SOIL	PCB	8082A	01/18/23	01/20/23	01/20/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-04	B-P36A	SOIL	PCB	8082A	01/18/23	01/20/23	01/20/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-05	B-P36B	SOIL	PCB	8082A	01/18/23	01/20/23	01/20/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-06	B-P37A	SOIL	PCB	8082A	01/18/23	01/20/23	01/21/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-07	B-P37B	SOIL	PCB	8082A	01/18/23	01/20/23	01/21/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-08	B-P38A	SOIL	PCB	8082A	01/18/23	01/20/23	01/21/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-09	B-P38B	SOIL	PCB	8082A	01/18/23	01/20/23	01/21/23	01/19/23
			Pesticide-TCL	8081B		01/20/23	01/21/23	
O1233-10	WC-38	SOIL	Diesel Range Organics	8015D	01/18/23	01/20/23	01/23/23	01/19/23



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LAB CHRONICLE

O1233-11	B-P38C	SOIL	Gasoline Range Organics	8015D	01/20/23	01/23/23	01/18/23	01/19/23
			PCB	8082A		01/21/23		
			PCB	8082A		01/21/23		
			Pesticide-TCL	8081B		01/21/23		



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Hit Summary Sheet
SW-846

SDG No.: O1233

Order ID: O1233

Client: Louis Berger U.S., Inc., A WSP Company

Project ID: NYCDDC Phase II SCI Arthur Kill Re

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : B-P37A								
O1233-06	B-P37A	SOIL	4,4-DDE	0.74	JP	0.20	1.90	ug/kg
O1233-06	B-P37A	SOIL	4,4-DDT	0.53	JP	0.24	1.90	ug/kg
O1233-06	B-P37A	SOIL	alpha-Chlordane	9.10	P	0.24	1.90	ug/kg
O1233-06	B-P37A	SOIL	gamma-Chlordane	3.50	P	0.24	1.90	ug/kg
Total Concentration:				13.870				
Client ID : B-P37B								
O1233-07	B-P37B	SOIL	4,4-DDE	0.55	J	0.22	2.00	ug/kg
O1233-07	B-P37B	SOIL	4,4-DDD	0.69	JP	0.25	2.00	ug/kg
O1233-07	B-P37B	SOIL	gamma-Chlordane	1.10	JP	0.25	2.00	ug/kg
Total Concentration:				2.340				

QC SUMMARY

Surrogate Summary

SDG No.: **O1233**

Client: **Louis Berger U.S., Inc., A WSP Company**

Analytical Method: **8081B**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PL080405.D	PIBLK-PL080405.D	Decachlorobiphenyl	1	20	23.3	116		27	142
		Tetrachloro-m-xylene	1	20	23.0	115		60	145
		Decachlorobiphenyl	2	20	20.9	104		27	142
		Tetrachloro-m-xylene	2	20	21.7	109		60	145
I.BLK-PL080426.D	PIBLK-PL080426.D	Decachlorobiphenyl	1	20	21.8	109		27	142
		Tetrachloro-m-xylene	1	20	20.5	102		60	145
		Decachlorobiphenyl	2	20	21.7	108		27	142
		Tetrachloro-m-xylene	2	20	20.8	104		60	145
PB150373BL	PB150373BL	Decachlorobiphenyl	1	20	18.6	93		12	143
		Tetrachloro-m-xylene	1	20	16.7	83		10	159
		Decachlorobiphenyl	2	20	18.2	91		12	143
		Tetrachloro-m-xylene	2	20	16.6	83		10	159
PB150373BS	PB150373BS	Decachlorobiphenyl	1	20	20.2	101		12	143
		Tetrachloro-m-xylene	1	20	18.3	91		10	159
		Decachlorobiphenyl	2	20	20.0	100		12	143
		Tetrachloro-m-xylene	2	20	18.4	92		10	159
I.BLK-PL080440.D	PIBLK-PL080440.D	Decachlorobiphenyl	1	20	21.8	109		27	142
		Tetrachloro-m-xylene	1	20	20.8	104		60	145
		Decachlorobiphenyl	2	20	20.9	104		27	142
		Tetrachloro-m-xylene	2	20	20.7	104		60	145
O1233-02	B-P34A	Decachlorobiphenyl	1	20	16.2	81		12	143
		Tetrachloro-m-xylene	1	20	18.4	92		10	159
		Decachlorobiphenyl	2	20	15.8	79		12	143
		Tetrachloro-m-xylene	2	20	18.6	93		10	159
O1233-02MS	B-P34AMS	Decachlorobiphenyl	1	20	15.5	77		12	143
		Tetrachloro-m-xylene	1	20	16.9	85		10	159
		Decachlorobiphenyl	2	20	15.1	75		12	143
		Tetrachloro-m-xylene	2	20	16.8	84		10	159
O1233-02MSD	B-P34AMSD	Decachlorobiphenyl	1	20	15.7	78		12	143
		Tetrachloro-m-xylene	1	20	17.1	85		10	159
		Decachlorobiphenyl	2	20	15.2	76		12	143
		Tetrachloro-m-xylene	2	20	17.1	85		10	159
O1233-03	B-P34B	Decachlorobiphenyl	1	20	21.0	105		12	143
		Tetrachloro-m-xylene	1	20	21.8	109		10	159
		Decachlorobiphenyl	2	20	20.5	102		12	143
		Tetrachloro-m-xylene	2	20	20.6	103		10	159
O1233-04	B-P36A	Decachlorobiphenyl	1	20	18.4	92		12	143
		Tetrachloro-m-xylene	1	20	19.7	99		10	159
		Decachlorobiphenyl	2	20	16.9	84		12	143
		Tetrachloro-m-xylene	2	20	19.9	99		10	159
O1233-05	B-P36B	Decachlorobiphenyl	1	20	18.1	90		12	143
		Tetrachloro-m-xylene	1	20	23.4	117		10	159
		Decachlorobiphenyl	2	20	17.7	88		12	143



Surrogate Summary

SDG No.: O1233Client: Louis Berger U.S., Inc., A WSP CompanyAnalytical Method: 8081B

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
O1233-05	B-P36B	Tetrachloro-m-xylene	2	20	19.6	98		10	159
O1233-06	B-P37A	Decachlorobiphenyl	1	20	17.6	88		12	143
		Tetrachloro-m-xylene	1	20	19.0	95		10	159
		Decachlorobiphenyl	2	20	17.5	87		12	143
		Tetrachloro-m-xylene	2	20	18.9	94		10	159
O1233-07	B-P37B	Decachlorobiphenyl	1	20	17.6	88		12	143
		Tetrachloro-m-xylene	1	20	20.4	102		10	159
		Decachlorobiphenyl	2	20	16.2	81		12	143
		Tetrachloro-m-xylene	2	20	20.0	100		10	159
O1233-08	B-P38A	Decachlorobiphenyl	1	20	10.3	52		12	143
		Tetrachloro-m-xylene	1	20	9.61	48		10	159
		Decachlorobiphenyl	2	20	10.4	52		12	143
		Tetrachloro-m-xylene	2	20	9.28	46		10	159
O1233-09	B-P38B	Decachlorobiphenyl	1	20	14.1	71		12	143
		Tetrachloro-m-xylene	1	20	17.4	87		10	159
		Decachlorobiphenyl	2	20	14.1	71		12	143
		Tetrachloro-m-xylene	2	20	17.7	88		10	159
O1233-11	B-P38C	Decachlorobiphenyl	1	20	16.9	84		12	143
		Tetrachloro-m-xylene	1	20	17.1	85		10	159
		Decachlorobiphenyl	2	20	16.6	83		12	143
		Tetrachloro-m-xylene	2	20	15.7	78		10	159
I.BLK-PL080453.D	PIBLK-PL080453.D	Decachlorobiphenyl	1	20	21.2	106		27	142
		Tetrachloro-m-xylene	1	20	20.5	103		60	145
		Decachlorobiphenyl	2	20	21.3	106		27	142
		Tetrachloro-m-xylene	2	20	20.3	102		60	145



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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: O1233

Client: Louis Berger U.S., Inc., A WSP Compan

Analytical Method: 8081B

DataFile : PL080443.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID: O1233-02MS	B-P34AMS											
	alpha-BHC	19.47	0	18.2	ug/kg	93				67	130	
	beta-BHC	19.47	0	17.7	ug/kg	91				63	134	
	delta-BHC	19.47	0	18.7	ug/kg	96				48	144	
	gamma-BHC (Lindane)	19.47	0	18.5	ug/kg	95				70	131	
	Heptachlor	19.47	0	18.4	ug/kg	95				65	131	
	Aldrin	19.47	0	19.0	ug/kg	98				67	134	
	Heptachlor epoxide	19.47	0	18.3	ug/kg	94				55	162	
	Endosulfan I	19.47	0	18.2	ug/kg	93				67	133	
	Dieldrin	19.47	0	19.2	ug/kg	99				47	161	
	4,4'-DDE	19.47	0	18.6	ug/kg	96				45	175	
	Endrin	19.47	0	19.7	ug/kg	101				47	158	
	Endosulfan II	19.47	0	20.8	ug/kg	107				57	149	
	4,4'-DDD	19.47	0	18.3	ug/kg	94				65	145	
	Endosulfan sulfate	19.47	0	18.6	ug/kg	96				62	139	
	4,4'-DDT	19.47	0	19.8	ug/kg	102				46	168	
	Methoxychlor	19.47	0	18.8	ug/kg	97				57	145	
	Endrin ketone	19.47	0	18.4	ug/kg	95				60	129	
	Endrin aldehyde	19.47	0	19.8	ug/kg	102				49	146	
	alpha-Chlordane	19.47	0	18.5	ug/kg	95				42	175	
	gamma-Chlordane	19.47	0	18.3	ug/kg	94				44	175	



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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: O1233

Client: Louis Berger U.S., Inc., A WSP Compan

Analytical Method: 8081B

DataFile : PL080444.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID: O1233-02MSD	B-P34AMSD											
	alpha-BHC	19.49	0	18.4	ug/kg	94		1		67	130	20
	beta-BHC	19.49	0	17.9	ug/kg	92		1		63	134	20
	delta-BHC	19.49	0	19.0	ug/kg	97		1		48	144	20
	gamma-BHC (Lindane)	19.49	0	18.8	ug/kg	96		1		70	131	20
	Heptachlor	19.49	0	18.6	ug/kg	95		0		65	131	20
	Aldrin	19.49	0	19.3	ug/kg	99		1		67	134	20
	Heptachlor epoxide	19.49	0	18.5	ug/kg	95		1		55	162	20
	Endosulfan I	19.49	0	18.4	ug/kg	94		1		67	133	20
	Dieldrin	19.49	0	19.4	ug/kg	100		1		47	161	20
	4,4'-DDE	19.49	0	18.9	ug/kg	97		1		45	175	20
	Endrin	19.49	0	19.9	ug/kg	102		1		47	158	20
	Endosulfan II	19.49	0	21.1	ug/kg	108		1		57	149	20
	4,4'-DDD	19.49	0	18.6	ug/kg	95		1		65	145	20
	Endosulfan sulfate	19.49	0	18.8	ug/kg	96		0		62	139	20
	4,4'-DDT	19.49	0	20.0	ug/kg	103		1		46	168	20
	Methoxychlor	19.49	0	19.0	ug/kg	97		0		57	145	20
	Endrin ketone	19.49	0	18.6	ug/kg	95		0		60	129	20
	Endrin aldehyde	19.49	0	20.1	ug/kg	103		1		49	146	20
	alpha-Chlordane	19.49	0	18.7	ug/kg	96		1		42	175	20
gamma-Chlordane	19.49	0	18.8	ug/kg	96		2		44	175	20	



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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: O1233

Client: Louis Berger U.S., Inc., A WSP Compan

Analytical Method: 8081B

Datafile : PL080430.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits	
								Qual	Low	High	RPD
PB150373BS	alpha-BHC	16.66	15.1	ug/kg	91				84	123	
	beta-BHC	16.66	14.3	ug/kg	86				82	123	
	delta-BHC	16.66	15.2	ug/kg	91				83	126	
	gamma-BHC (Lindane)	16.66	15.1	ug/kg	91				83	125	
	Heptachlor	16.66	15.2	ug/kg	91				83	122	
	Aldrin	16.66	15.5	ug/kg	93				82	124	
	Heptachlor epoxide	16.66	15.3	ug/kg	92				83	120	
	Endosulfan I	16.66	15.0	ug/kg	90				81	124	
	Dieldrin	16.66	15.9	ug/kg	95				85	121	
	4,4'-DDE	16.66	15.3	ug/kg	92				81	123	
	Endrin	16.66	16.5	ug/kg	99				76	130	
	Endosulfan II	16.66	17.4	ug/kg	104				80	125	
	4,4'-DDD	16.66	15.2	ug/kg	91				80	131	
	Endosulfan sulfate	16.66	15.6	ug/kg	94				81	122	
	4,4'-DDT	16.66	15.0	ug/kg	90				70	129	
	Methoxychlor	16.66	15.5	ug/kg	93				78	129	
	Endrin ketone	16.66	15.5	ug/kg	93				77	132	
	Endrin aldehyde	16.66	16.4	ug/kg	98				79	124	
	alpha-Chlordane	16.66	15.3	ug/kg	92				84	120	
	gamma-Chlordane	16.66	15.0	ug/kg	90				83	122	



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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB150373BL

Lab Name: CHEMTECH

Contract: loui01

Lab Code: CHEM Case No.: O1233

SAS No.: O1233 SDG NO.: O1233

Lab Sample ID: PB150373BL

Lab File ID: PL080429.D

Matrix: (soil/water) Solid

Extraction: (Type) SOXH

Sulfur Cleanup: (Y/N) N

Date Extracted: 01/20/2023

Date Analyzed (1): 01/20/2023

Date Analyzed (2): 01/20/2023

Time Analyzed (1): 20:42

Time Analyzed (2): 20:42

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column (1): ZB-MR2 ID: 0.32 (mm)

GC Column (2): ZB-MR1 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
PB150373BS	PB150373BS	PL080430.D	01/20/2023	01/20/2023
B-P34A	O1233-02	PL080442.D	01/21/2023	01/21/2023
B-P34AMS	O1233-02MS	PL080443.D	01/21/2023	01/21/2023
B-P34AMSD	O1233-02MSD	PL080444.D	01/21/2023	01/21/2023
B-P34B	O1233-03	PL080445.D	01/21/2023	01/21/2023
B-P36A	O1233-04	PL080446.D	01/21/2023	01/21/2023
B-P36B	O1233-05	PL080447.D	01/21/2023	01/21/2023
B-P37A	O1233-06	PL080448.D	01/21/2023	01/21/2023
B-P37B	O1233-07	PL080449.D	01/21/2023	01/21/2023
B-P38A	O1233-08	PL080450.D	01/21/2023	01/21/2023
B-P38B	O1233-09	PL080451.D	01/21/2023	01/21/2023
B-P38C	O1233-11	PL080452.D	01/21/2023	01/21/2023

COMMENTS:

SAMPLE DATA



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34A		SDG No.:	O1233	
Lab Sample ID:	O1233-02		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080442.D	1	01/20/23 10:35	01/21/23 00:24	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.28	U	0.28	2.00	ug/kg
319-85-7	beta-BHC	0.61	U	0.61	2.00	ug/kg
319-86-8	delta-BHC	0.48	U	0.48	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	0.26	U	0.26	2.00	ug/kg
76-44-8	Heptachlor	0.27	U	0.27	2.00	ug/kg
309-00-2	Aldrin	0.23	U	0.23	2.00	ug/kg
1024-57-3	Heptachlor epoxide	0.34	U	0.34	2.00	ug/kg
959-98-8	Endosulfan I	0.22	U	0.22	2.00	ug/kg
60-57-1	Dieldrin	0.21	U	0.21	2.00	ug/kg
72-55-9	4,4-DDE	0.21	U	0.21	2.00	ug/kg
72-20-8	Endrin	0.20	U	0.20	2.00	ug/kg
33213-65-9	Endosulfan II	0.26	U	0.26	2.00	ug/kg
72-54-8	4,4-DDD	0.25	U	0.25	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	0.21	U	0.21	2.00	ug/kg
50-29-3	4,4-DDT	0.25	U	0.25	2.00	ug/kg
72-43-5	Methoxychlor	0.29	U	0.29	2.00	ug/kg
53494-70-5	Endrin ketone	0.34	U	0.34	2.00	ug/kg
7421-93-4	Endrin aldehyde	0.34	U	0.34	2.00	ug/kg
5103-71-9	alpha-Chlordane	0.25	U	0.25	2.00	ug/kg
5103-74-2	gamma-Chlordane	0.25	U	0.25	2.00	ug/kg
8001-35-2	Toxaphene	7.80	U	7.80	38.6	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.2		12 - 143	81%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.6		10 - 159	93%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34A		SDG No.:	O1233	
Lab Sample ID:	O1233-02		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080442.D	1	01/20/23 10:35	01/21/23 00:24	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080442.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 00:24
Operator : AR\AJ
Sample : 01233-02
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-P34A

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:18:56 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	39491047	40872134	18.412	18.608
28)	SA Decachlor...	8.789	7.838	28352255	37551449	16.194	15.761

Target Compounds

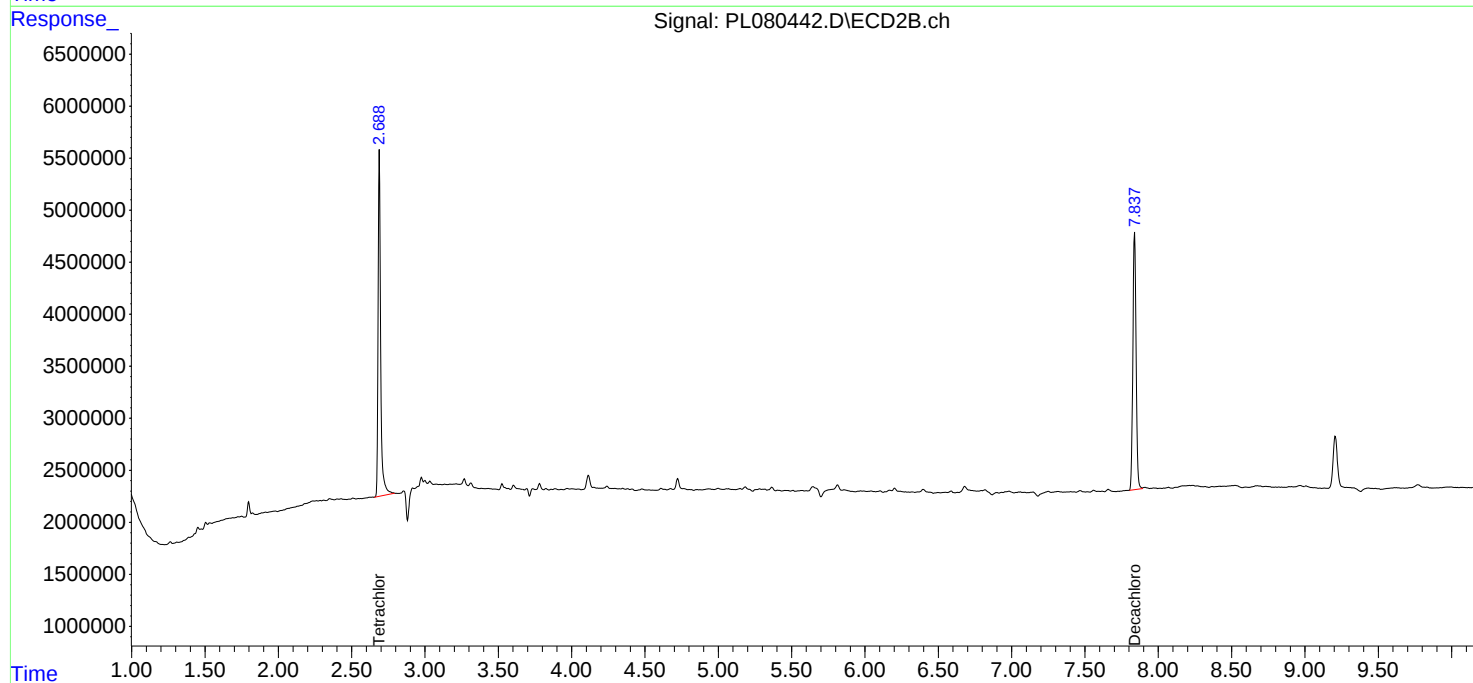
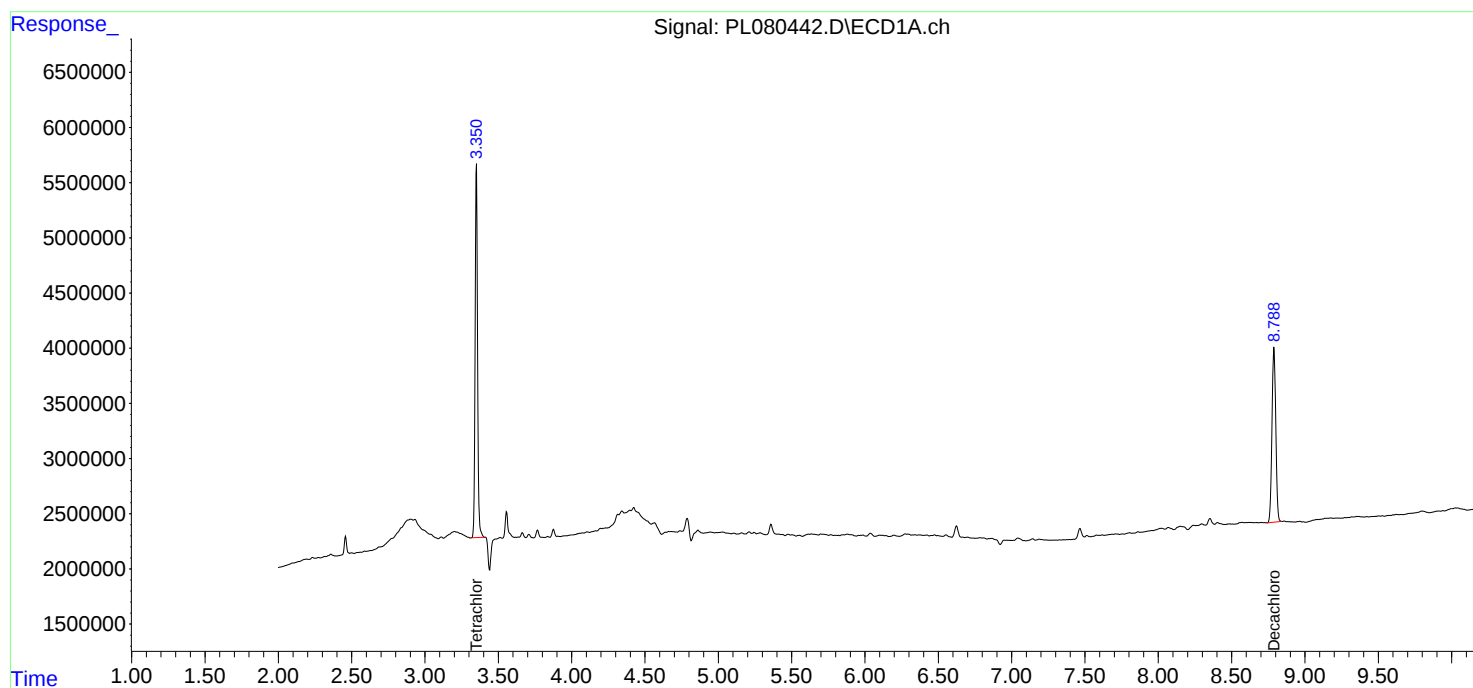
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

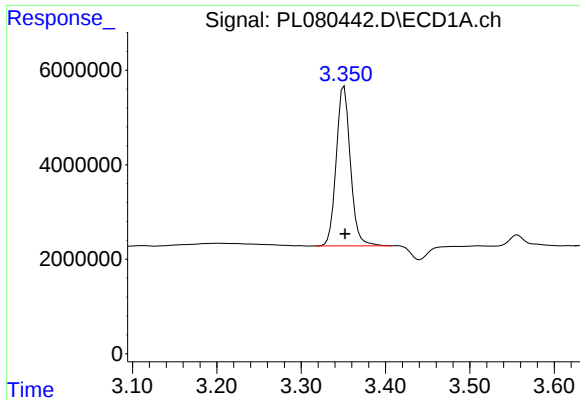
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080442.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 00:24
Operator : AR\AJ
Sample : 01233-02
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-P34A

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:18:56 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

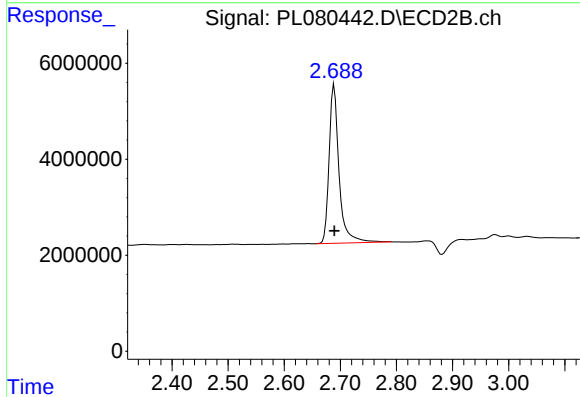




#1 Tetrachloro-m-xylene

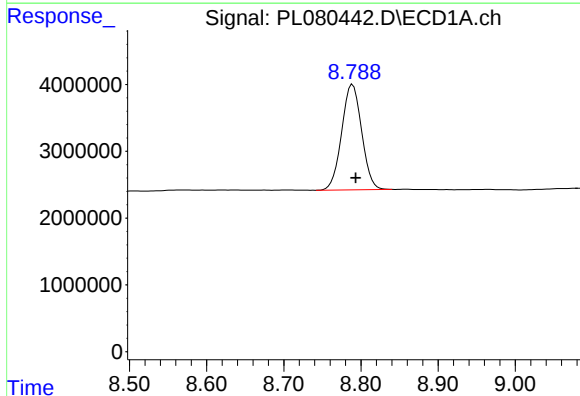
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 39491047
Conc: 18.41 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P34A



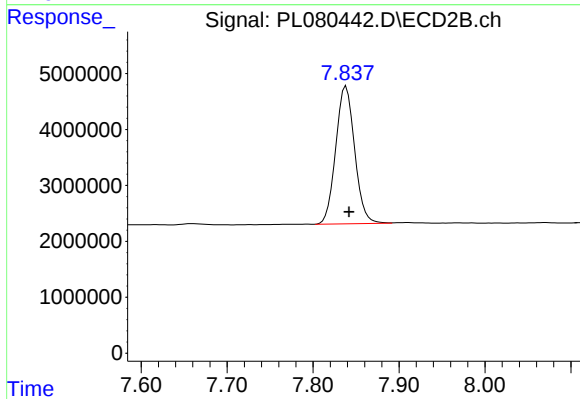
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 40872134
Conc: 18.61 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 28352255
Conc: 16.19 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.003 min
Response: 37551449
Conc: 15.76 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P34B	SDG No.:	O1233
Lab Sample ID:	O1233-03	Matrix:	SOIL
Analytical Method:	SW8081	% Solid:	90.7
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080445.D	1	01/20/23 10:35	01/21/23 01:05	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.26	U	0.26	1.90	ug/kg
319-85-7	beta-BHC	0.57	U	0.57	1.90	ug/kg
319-86-8	delta-BHC	0.45	U	0.45	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.24	U	0.24	1.90	ug/kg
76-44-8	Heptachlor	0.25	U	0.25	1.90	ug/kg
309-00-2	Aldrin	0.22	U	0.22	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.32	U	0.32	1.90	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21	1.90	ug/kg
60-57-1	Dieldrin	0.20	U	0.20	1.90	ug/kg
72-55-9	4,4-DDE	0.20	U	0.20	1.90	ug/kg
72-20-8	Endrin	0.19	U	0.19	1.90	ug/kg
33213-65-9	Endosulfan II	0.24	U	0.24	1.90	ug/kg
72-54-8	4,4-DDD	0.23	U	0.23	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.20	U	0.20	1.90	ug/kg
50-29-3	4,4-DDT	0.23	U	0.23	1.90	ug/kg
72-43-5	Methoxychlor	0.28	U	0.28	1.90	ug/kg
53494-70-5	Endrin ketone	0.32	U	0.32	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.32	U	0.32	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.23	U	0.23	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.23	U	0.23	1.90	ug/kg
8001-35-2	Toxaphene	7.30	U	7.30	36.4	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.0		12 - 143	105%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.8		10 - 159	109%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34B		SDG No.:	O1233	
Lab Sample ID:	O1233-03		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.7	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080445.D	1	01/20/23 10:35	01/21/23 01:05	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080445.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 01:05
 Operator : AR\AJ
 Sample : 01233-03
 Misc :
 ALS Vial : 43 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P34B

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:20:54 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	46809341	45318734	21.824	20.633
28)	SA Decachlor...	8.789	7.838	36688146	48741330	20.956	20.458

Target Compounds

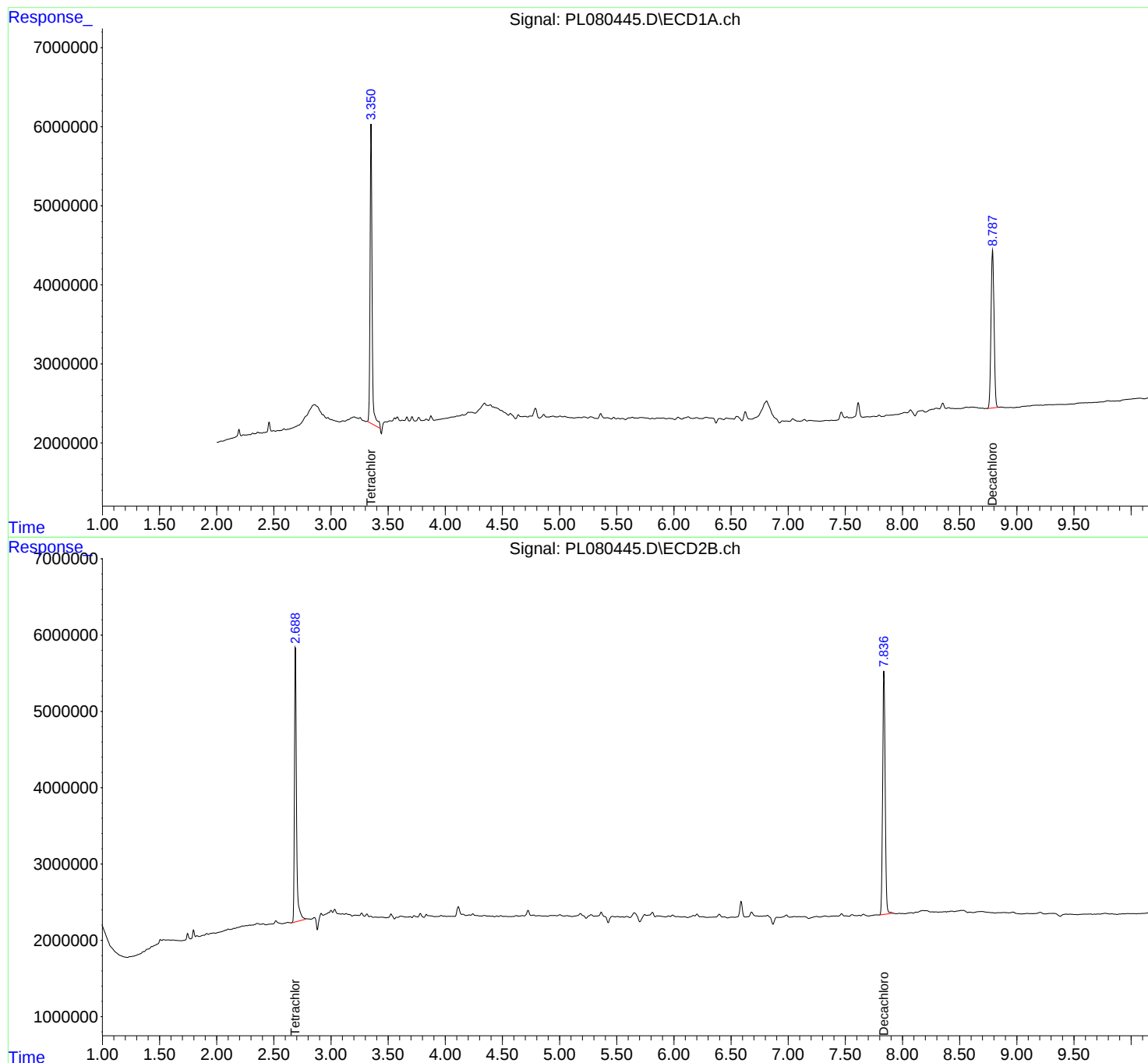
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

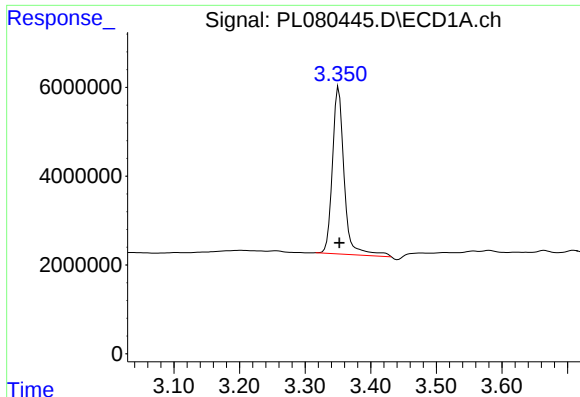
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080445.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 01:05
Operator : AR\AJ
Sample : 01233-03
Misc :
ALS Vial : 43 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-P34B

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:20:54 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

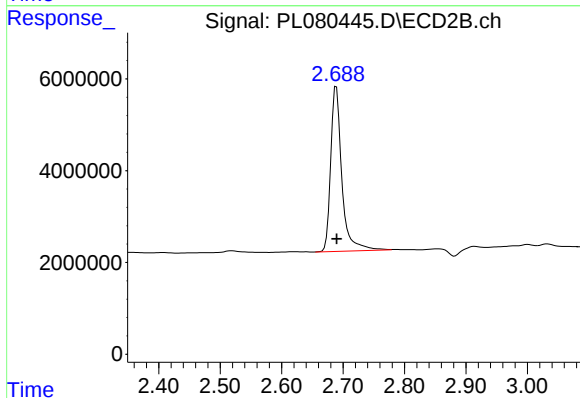




#1 Tetrachloro-m-xylene

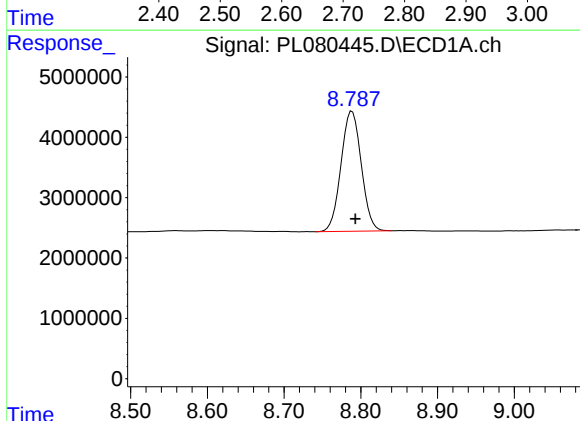
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 46809341
Conc: 21.82 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P34B



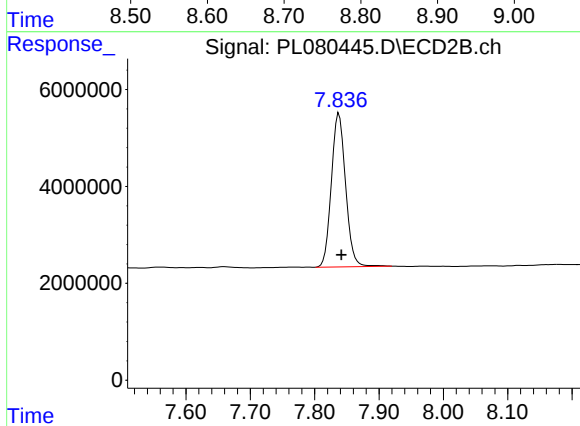
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 45318734
Conc: 20.63 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 36688146
Conc: 20.96 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 48741330
Conc: 20.46 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P36A		SDG No.:	O1233	
Lab Sample ID:	O1233-04		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	89.6	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080446.D	1	01/20/23 10:35	01/21/23 01:19	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.27	U	0.27	1.90	ug/kg
319-85-7	beta-BHC	0.58	U	0.58	1.90	ug/kg
319-86-8	delta-BHC	0.46	U	0.46	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.25	U	0.25	1.90	ug/kg
76-44-8	Heptachlor	0.26	U	0.26	1.90	ug/kg
309-00-2	Aldrin	0.22	U	0.22	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.32	U	0.32	1.90	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21	1.90	ug/kg
60-57-1	Dieldrin	0.20	U	0.20	1.90	ug/kg
72-55-9	4,4-DDE	0.20	U	0.20	1.90	ug/kg
72-20-8	Endrin	0.19	U	0.19	1.90	ug/kg
33213-65-9	Endosulfan II	0.25	U	0.25	1.90	ug/kg
72-54-8	4,4-DDD	0.23	U	0.23	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.20	U	0.20	1.90	ug/kg
50-29-3	4,4-DDT	0.23	U	0.23	1.90	ug/kg
72-43-5	Methoxychlor	0.28	U	0.28	1.90	ug/kg
53494-70-5	Endrin ketone	0.32	U	0.32	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.32	U	0.32	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.23	U	0.23	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.23	U	0.23	1.90	ug/kg
8001-35-2	Toxaphene	7.40	U	7.40	36.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.4		12 - 143	92%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.9		10 - 159	99%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P36A		SDG No.:	O1233	
Lab Sample ID:	O1233-04		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	89.6	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080446.D	1	01/20/23 10:35	01/21/23 01:19	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080446.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 01:19
 Operator : AR\AJ
 Sample : 01233-04
 Misc :
 ALS Vial : 44 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P36A

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:21:26 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.350	2.689	42299982	43650345	19.722m	19.873
2) SA Decachlor...	8.789	7.838	32194984	40145490	18.389	16.850

Target Compounds

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080446.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 01:19
Operator : AR\AJ
Sample : 01233-04
Misc :
ALS Vial : 44 Sample Multiplier: 1

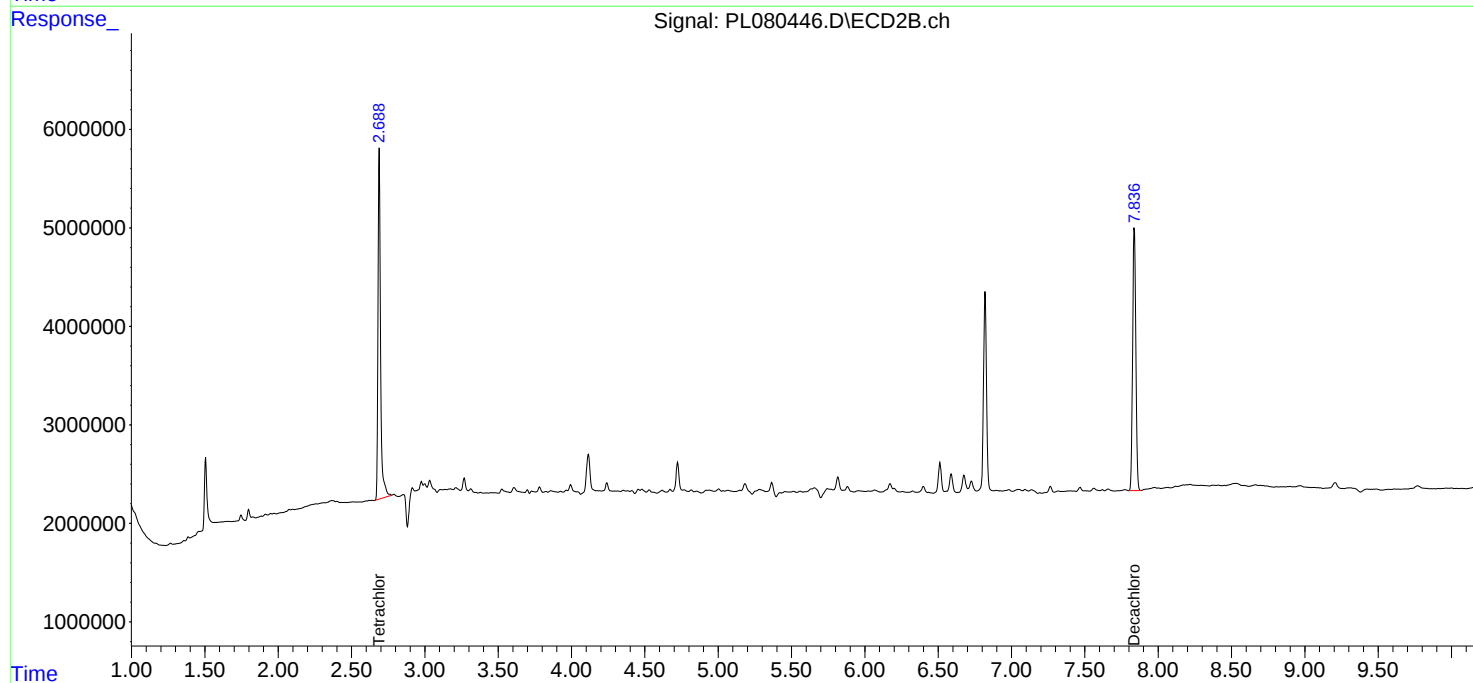
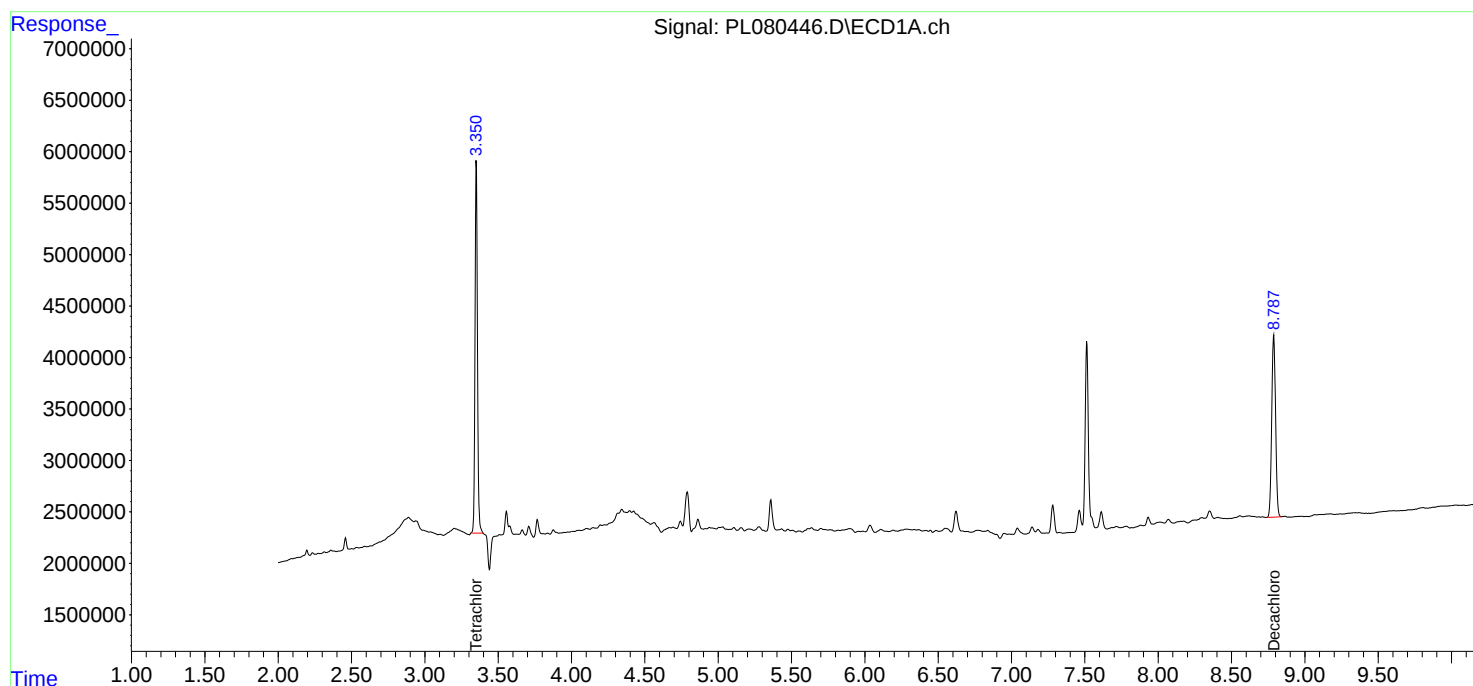
Instrument :
ECD_L
ClientSampleId :
B-P36A

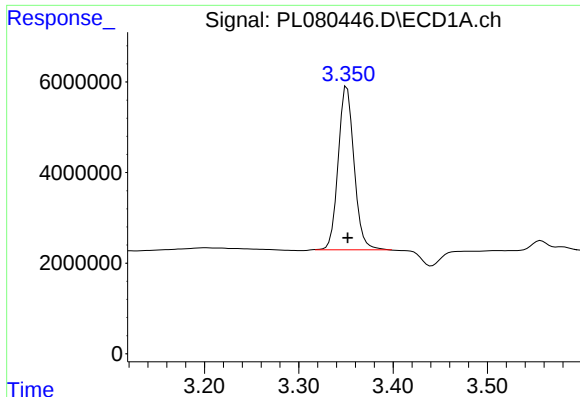
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:21:26 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





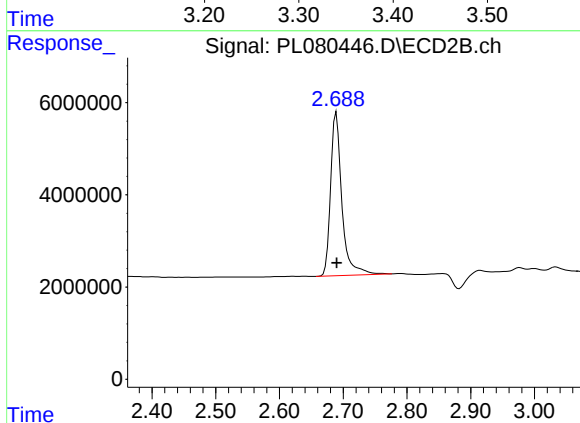
#1 Tetrachloro-m-xylene

R.T.: 3.350 min
Delta R.T.: -0.002 min
Response: 42299982
Conc: 19.72 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P36A

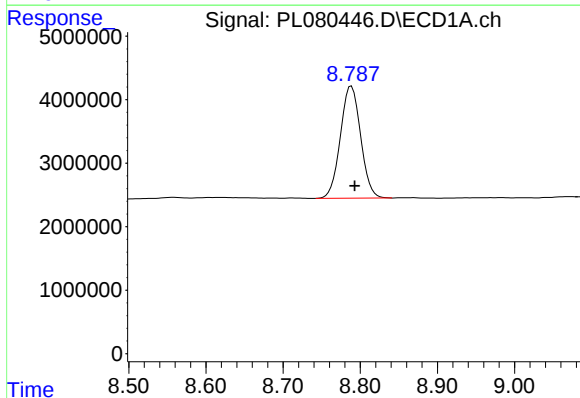
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



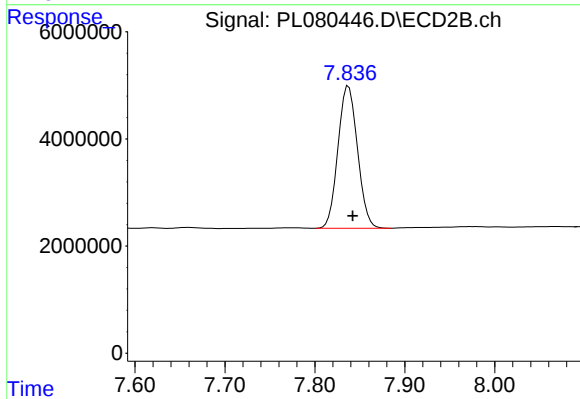
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 43650345
Conc: 19.87 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.005 min
Response: 32194984
Conc: 18.39 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 40145490
Conc: 16.85 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P36B	SDG No.:	O1233
Lab Sample ID:	O1233-05	Matrix:	SOIL
Analytical Method:	SW8081	% Solid:	90.4
Sample Wt/Vol:	30.06	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080447.D	1	01/20/23 10:35	01/21/23 01:33	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.27	U	0.27	1.90	ug/kg
319-85-7	beta-BHC	0.57	U	0.57	1.90	ug/kg
319-86-8	delta-BHC	0.45	U	0.45	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.24	U	0.24	1.90	ug/kg
76-44-8	Heptachlor	0.25	U	0.25	1.90	ug/kg
309-00-2	Aldrin	0.22	U	0.22	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.32	U	0.32	1.90	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21	1.90	ug/kg
60-57-1	Dieldrin	0.20	U	0.20	1.90	ug/kg
72-55-9	4,4-DDE	0.20	U	0.20	1.90	ug/kg
72-20-8	Endrin	0.19	U	0.19	1.90	ug/kg
33213-65-9	Endosulfan II	0.24	U	0.24	1.90	ug/kg
72-54-8	4,4-DDD	0.23	U	0.23	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.20	U	0.20	1.90	ug/kg
50-29-3	4,4-DDT	0.23	U	0.23	1.90	ug/kg
72-43-5	Methoxychlor	0.28	U	0.28	1.90	ug/kg
53494-70-5	Endrin ketone	0.32	U	0.32	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.32	U	0.32	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.23	U	0.23	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.23	U	0.23	1.90	ug/kg
8001-35-2	Toxaphene	7.30	U	7.30	36.4	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.1		12 - 143	90%	SPK: 20
877-09-8	Tetrachloro-m-xylene	23.4		10 - 159	117%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P36B		SDG No.:	O1233	
Lab Sample ID:	O1233-05		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.4	Decanted:
Sample Wt/Vol:	30.06	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080447.D	1	01/20/23 10:35	01/21/23 01:33	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	------------	-------

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080447.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 01:33
 Operator : AR\AJ
 Sample : 01233-05
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P36B

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:21:52 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.351	2.689	50224894	43143281	23.417m	19.642
2) SA Decachlor...	8.787	7.838	31650394	42149398	18.078	17.691

Target Compounds

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080447.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 01:33
Operator : AR\AJ
Sample : 01233-05
Misc :
ALS Vial : 45 Sample Multiplier: 1

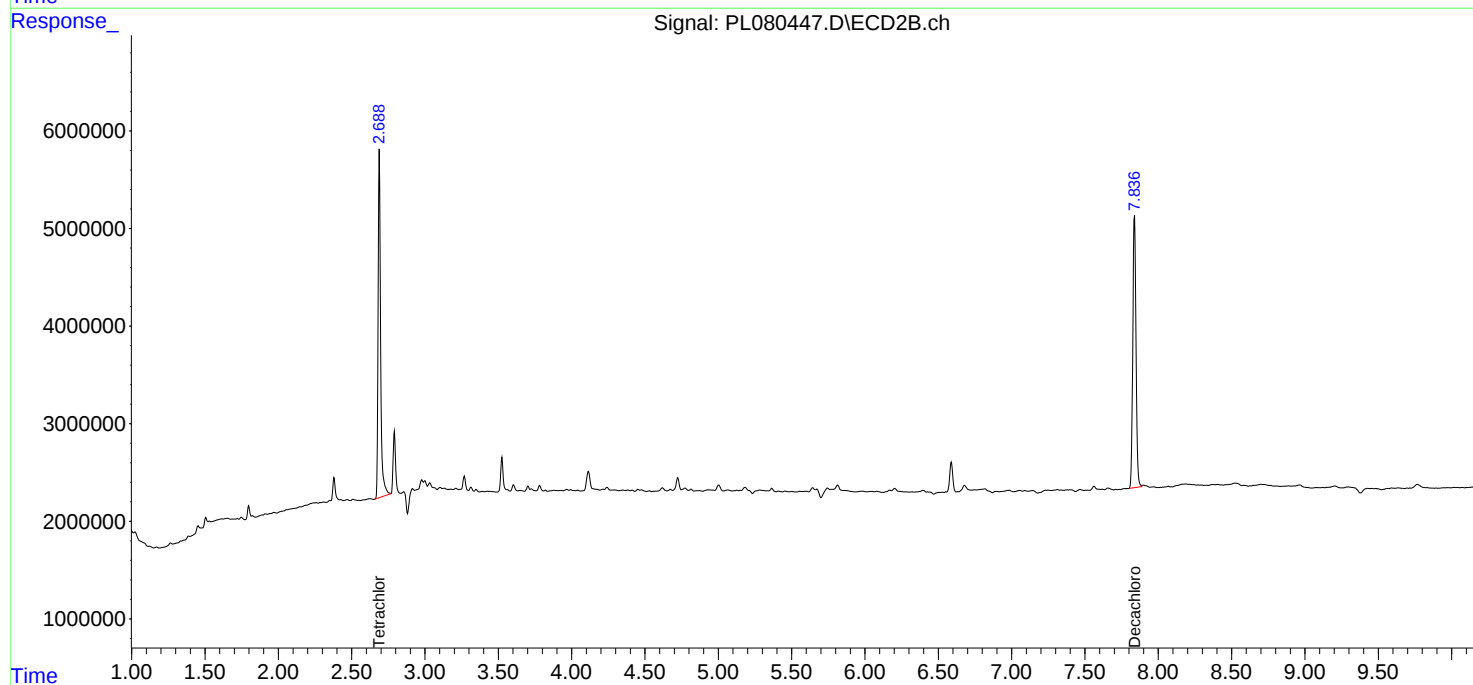
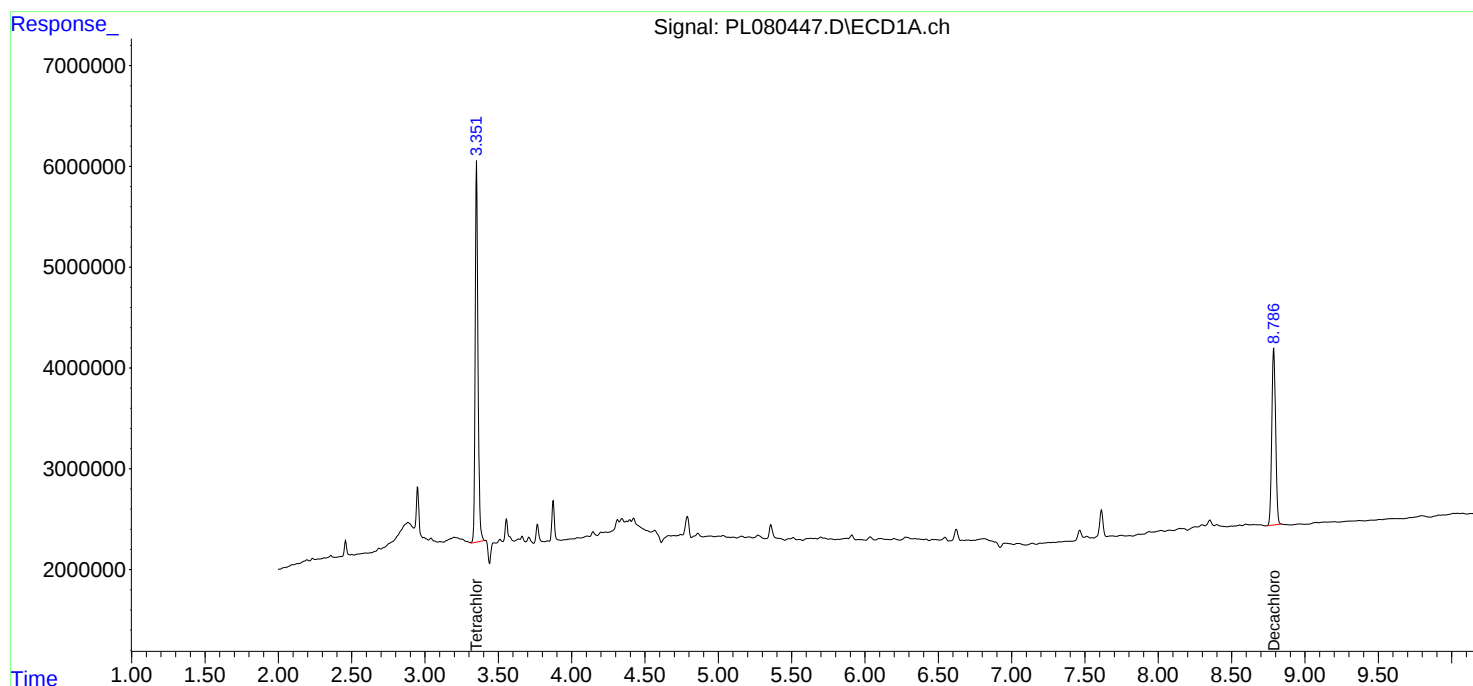
Instrument :
ECD_L
ClientSampleId :
B-P36B

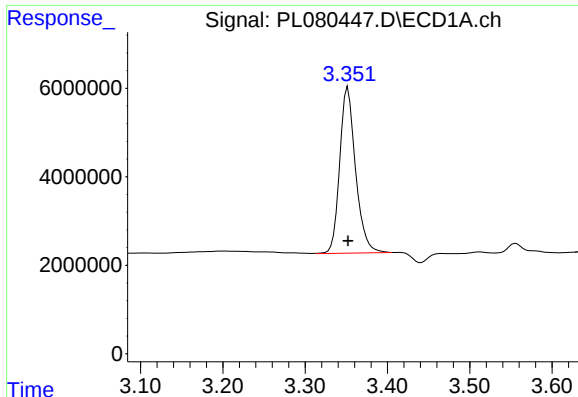
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:21:52 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





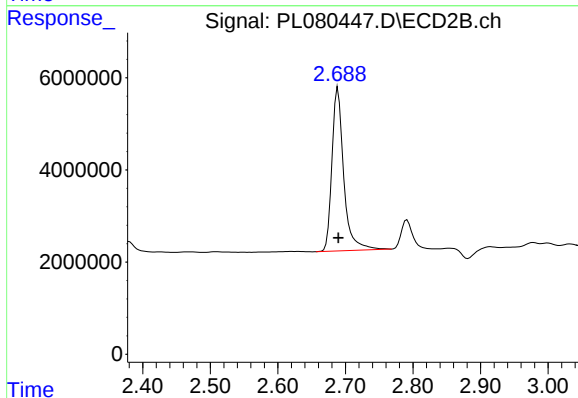
#1 Tetrachloro-m-xylene

R.T.: 3.351 min
Delta R.T.: -0.001 min
Response: 50224894
Conc: 23.42 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P36B

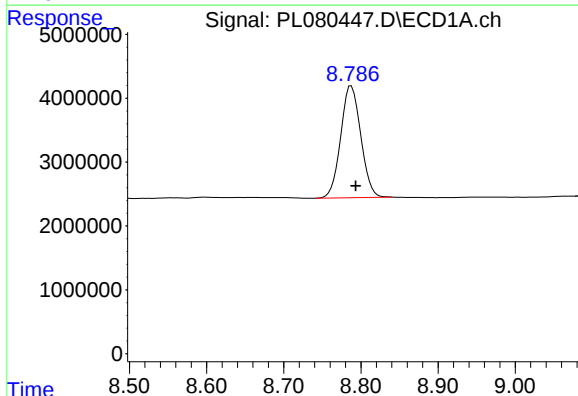
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



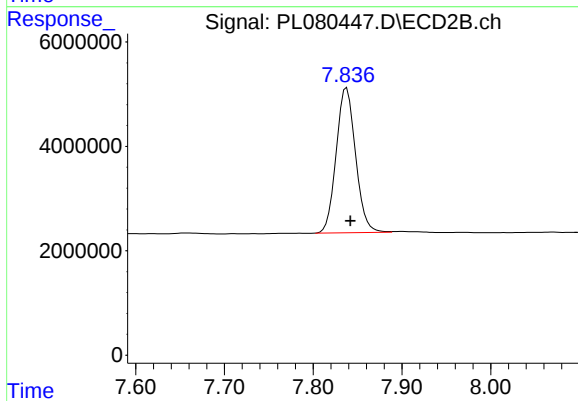
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 43143281
Conc: 19.64 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.787 min
Delta R.T.: -0.006 min
Response: 31650394
Conc: 18.08 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 42149398
Conc: 17.69 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P37A		SDG No.:	O1233	
Lab Sample ID:	O1233-06		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	87.9	Decanted:
Sample Wt/Vol:	30.09	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080448.D	1	01/20/23 10:35	01/21/23 01:47	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.27	U	0.27	1.90	ug/kg
319-85-7	beta-BHC	0.59	U	0.59	1.90	ug/kg
319-86-8	delta-BHC	0.47	U	0.47	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.25	U	0.25	1.90	ug/kg
76-44-8	Heptachlor	0.26	U	0.26	1.90	ug/kg
309-00-2	Aldrin	0.23	U	0.23	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.33	U	0.33	1.90	ug/kg
959-98-8	Endosulfan I	0.22	U	0.22	1.90	ug/kg
60-57-1	Dieldrin	0.20	U	0.20	1.90	ug/kg
72-55-9	4,4-DDE	0.74	JP	0.20	1.90	ug/kg
72-20-8	Endrin	0.19	U	0.19	1.90	ug/kg
33213-65-9	Endosulfan II	0.25	U	0.25	1.90	ug/kg
72-54-8	4,4-DDD	0.24	U	0.24	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.20	U	0.20	1.90	ug/kg
50-29-3	4,4-DDT	0.53	JP	0.24	1.90	ug/kg
72-43-5	Methoxychlor	0.28	U	0.28	1.90	ug/kg
53494-70-5	Endrin ketone	0.33	U	0.33	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.33	U	0.33	1.90	ug/kg
5103-71-9	alpha-Chlordane	9.10	P	0.24	1.90	ug/kg
5103-74-2	gamma-Chlordane	3.50	P	0.24	1.90	ug/kg
8001-35-2	Toxaphene	7.50	U	7.50	37.4	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	17.6		12 - 143	88%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.0		10 - 159	95%	SPK: 20



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P37A		SDG No.:	O1233	
Lab Sample ID:	O1233-06		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	87.9	Decanted:
Sample Wt/Vol:	30.09	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080448.D	1	01/20/23 10:35	01/21/23 01:47	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080448.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 01:47
 Operator : AR\AJ
 Sample : 01233-06
 Misc :
 ALS Vial : 46 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P37A

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:22:18 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.350	2.689	40827404	41398350	19.035m	18.848
28)	SA Decachlor...	8.788	7.837	30740059	41622850	17.558	17.470
Target Compounds							
10)	B gamma-Chl...	5.731	4.893	23557617	11607134	9.327	4.095m#
11)	B alpha-Chl...	5.814	4.956	60463724	27735115	23.953	9.682 #
12)	B 4,4'-DDE	5.986	5.149	4371513	3428070	1.963	1.453 #
17)	MA 4,4'-DDT	6.813	5.951	2129930	2960959	1.025	1.409m#

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080448.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 01:47
Operator : AR\AJ
Sample : 01233-06
Misc :
ALS Vial : 46 Sample Multiplier: 1

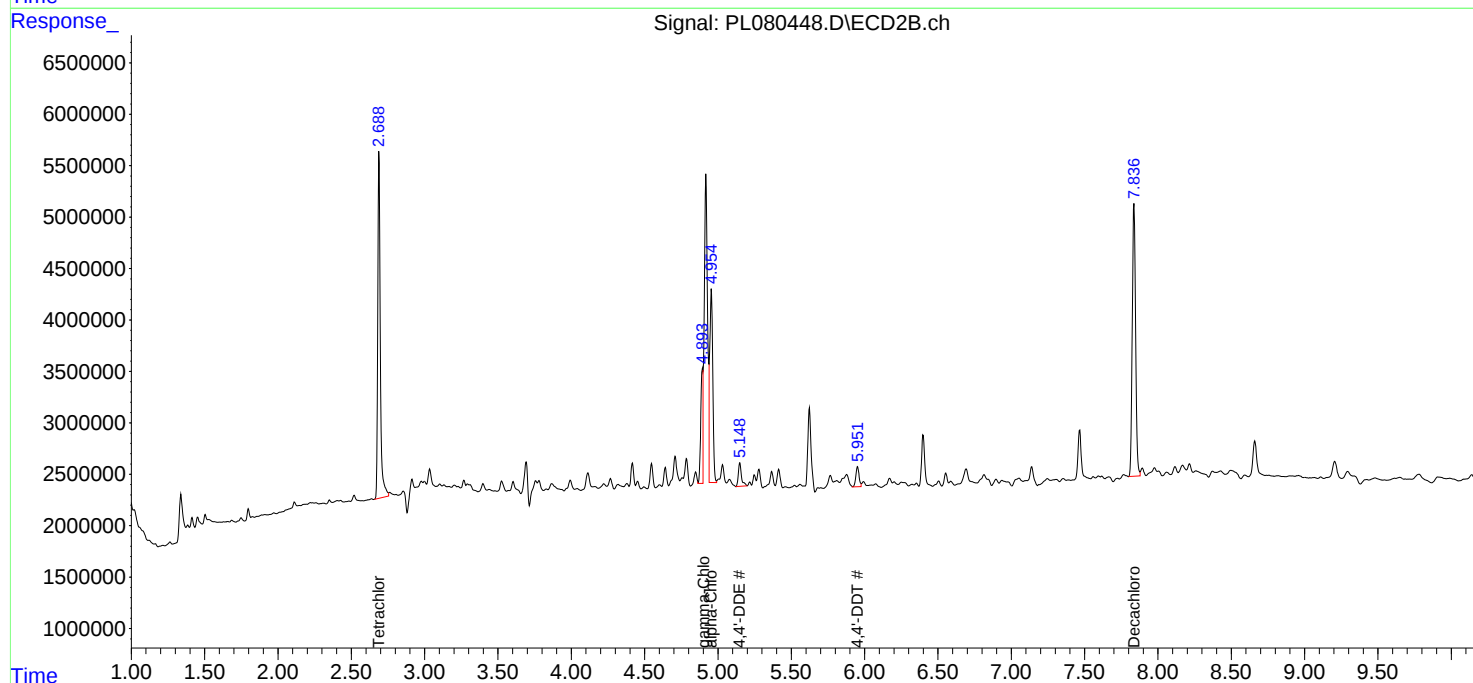
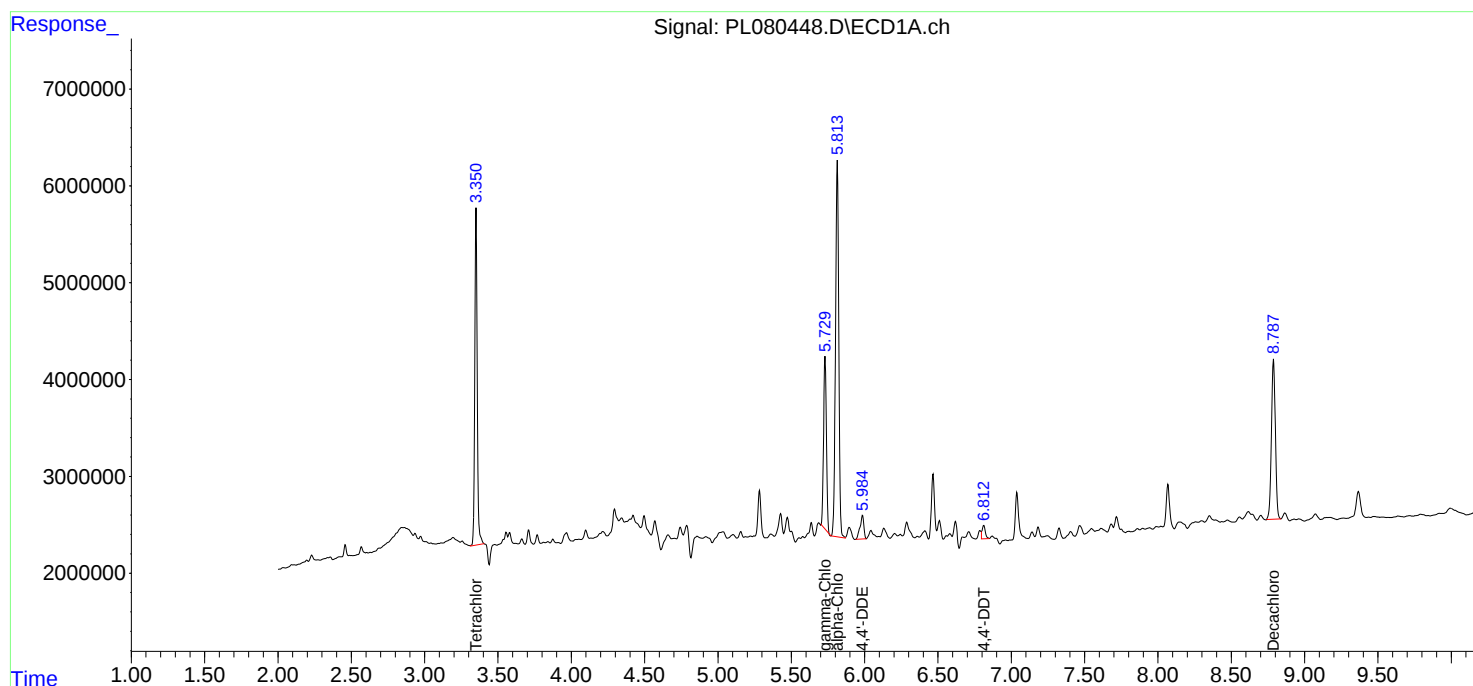
Instrument :
ECD_L
ClientSampleId :
B-P37A

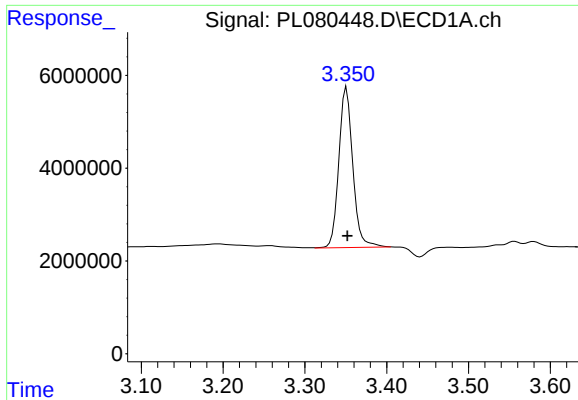
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:22:18 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





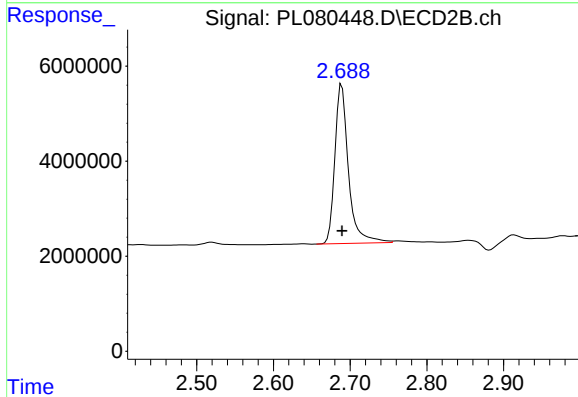
#1 Tetrachloro-m-xylene

R.T.: 3.350 min
Delta R.T.: -0.002 min
Response: 40827404
Conc: 19.04 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P37A

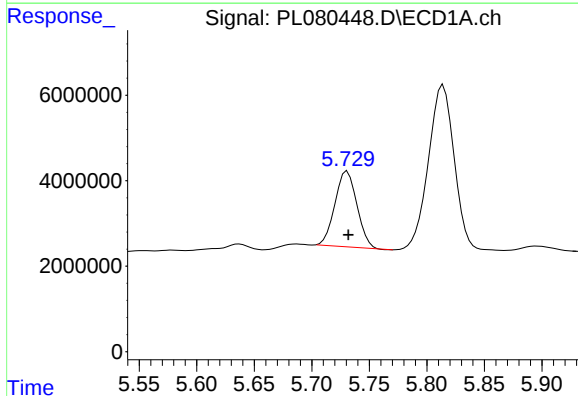
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



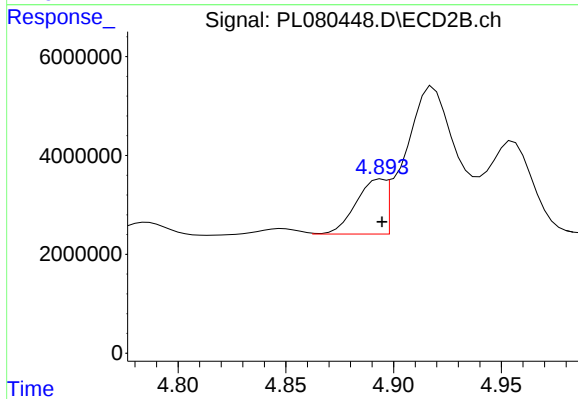
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 41398350
Conc: 18.85 ng/ml



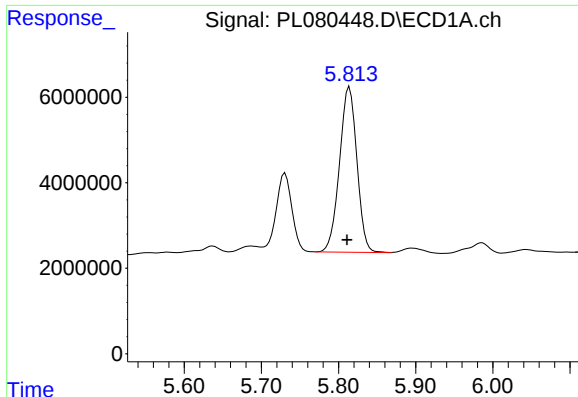
#10 gamma-Chlordane

R.T.: 5.731 min
Delta R.T.: 0.000 min
Response: 23557617
Conc: 9.33 ng/ml



#10 gamma-Chlordane

R.T.: 4.893 min
Delta R.T.: -0.001 min
Response: 11607134
Conc: 4.10 ng/ml m



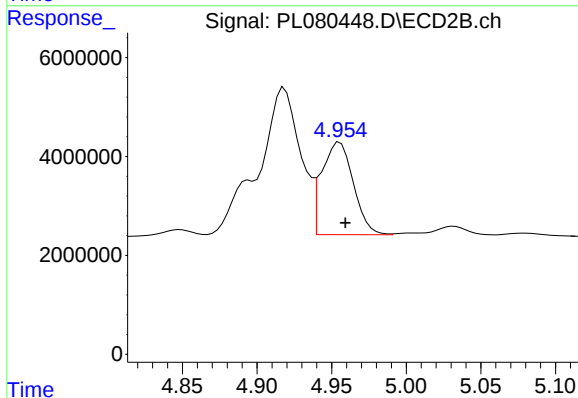
#11 alpha-Chlordane

R.T.: 5.814 min
Delta R.T.: 0.003 min
Response: 60463724
Conc: 23.95 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P37A

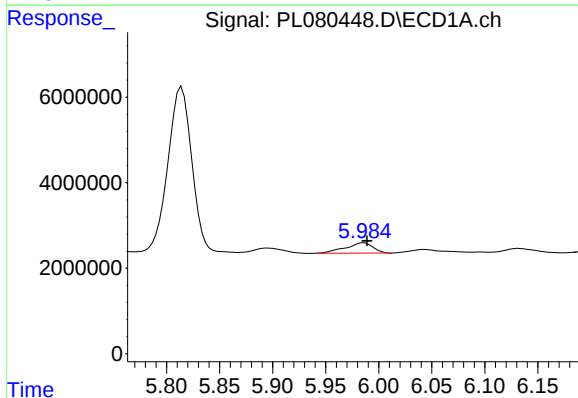
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



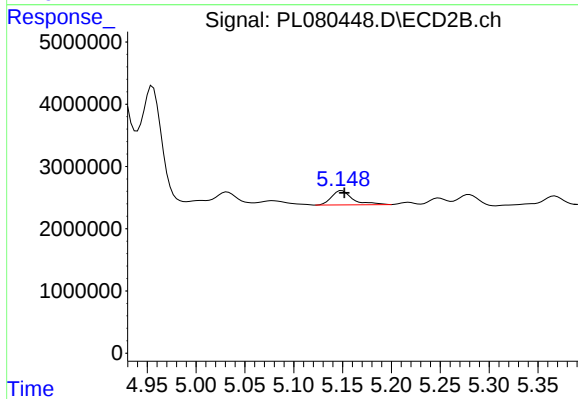
#11 alpha-Chlordane

R.T.: 4.956 min
Delta R.T.: -0.004 min
Response: 27735115
Conc: 9.68 ng/ml



#12 4,4'-DDE

R.T.: 5.986 min
Delta R.T.: -0.003 min
Response: 4371513
Conc: 1.96 ng/ml

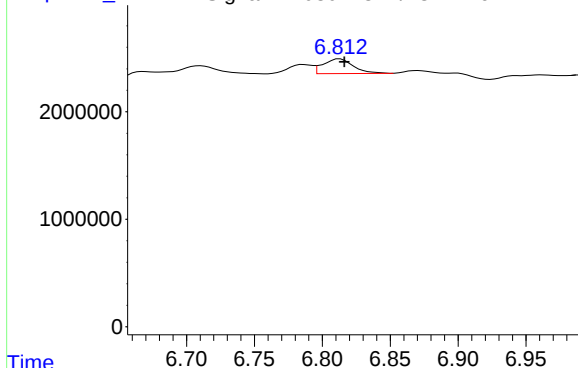


#12 4,4'-DDE

R.T.: 5.149 min
Delta R.T.: -0.003 min
Response: 3428070
Conc: 1.45 ng/ml

Response_ Signal: PL080448.D\ECD1A.ch

#17 4,4'-DDT



R.T.: 6.813 min
Delta R.T.: -0.003 min
Response: 2129930
Conc: 1.03 ng/ml

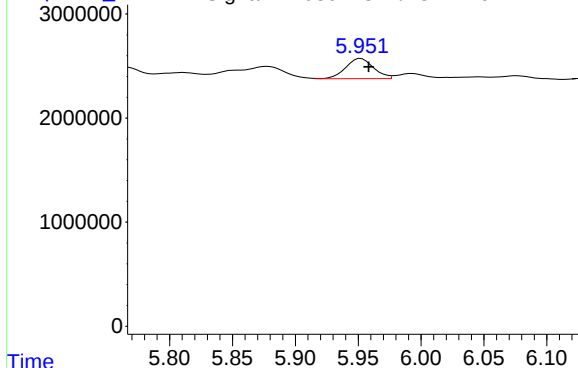
Instrument :
ECD_L
ClientSampleId :
B-P37A

**Manual Integrations
APPROVED**

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023

Time Response_ Signal: PL080448.D\ECD2B.ch

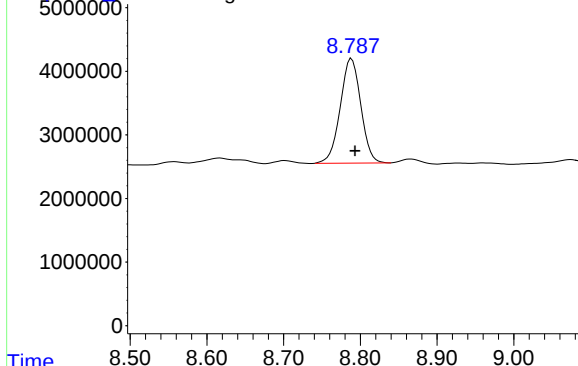
#17 4,4'-DDT



R.T.: 5.951 min
Delta R.T.: -0.007 min
Response: 2960959
Conc: 1.41 ng/ml m

Time Response_ Signal: PL080448.D\ECD1A.ch

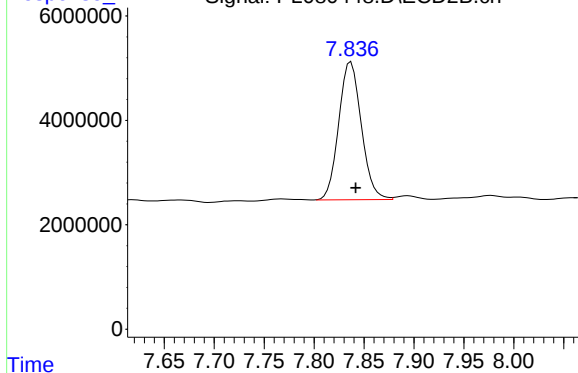
#28 Decachlorobiphenyl



R.T.: 8.788 min
Delta R.T.: -0.005 min
Response: 30740059
Conc: 17.56 ng/ml

Time Response_ Signal: PL080448.D\ECD2B.ch

#28 Decachlorobiphenyl



R.T.: 7.837 min
Delta R.T.: -0.005 min
Response: 41622850
Conc: 17.47 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P37B		SDG No.:	O1233	
Lab Sample ID:	O1233-07		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	83.5	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080449.D	1	01/20/23 10:35	01/21/23 02:01	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.29	U	0.29	2.00	ug/kg
319-85-7	beta-BHC	0.62	U	0.62	2.00	ug/kg
319-86-8	delta-BHC	0.49	U	0.49	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	0.26	U	0.26	2.00	ug/kg
76-44-8	Heptachlor	0.28	U	0.28	2.00	ug/kg
309-00-2	Aldrin	0.24	U	0.24	2.00	ug/kg
1024-57-3	Heptachlor epoxide	0.35	U	0.35	2.00	ug/kg
959-98-8	Endosulfan I	0.23	U	0.23	2.00	ug/kg
60-57-1	Dieldrin	0.22	U	0.22	2.00	ug/kg
72-55-9	4,4-DDE	0.55	J	0.22	2.00	ug/kg
72-20-8	Endrin	0.20	U	0.20	2.00	ug/kg
33213-65-9	Endosulfan II	0.26	U	0.26	2.00	ug/kg
72-54-8	4,4-DDD	0.69	JP	0.25	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	0.22	U	0.22	2.00	ug/kg
50-29-3	4,4-DDT	0.25	U	0.25	2.00	ug/kg
72-43-5	Methoxychlor	0.30	U	0.30	2.00	ug/kg
53494-70-5	Endrin ketone	0.35	U	0.35	2.00	ug/kg
7421-93-4	Endrin aldehyde	0.35	U	0.35	2.00	ug/kg
5103-71-9	alpha-Chlordane	0.25	U	0.25	2.00	ug/kg
5103-74-2	gamma-Chlordane	1.10	JP	0.25	2.00	ug/kg
8001-35-2	Toxaphene	7.90	U	7.90	39.5	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	17.6		12 - 143	88%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.4		10 - 159	102%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P37B		SDG No.:	O1233	
Lab Sample ID:	O1233-07		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	83.5	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080449.D	1	01/20/23 10:35	01/21/23 02:01	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	------------	-------

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080449.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 02:01
 Operator : AR\AJ
 Sample : 01233-07
 Misc :
 ALS Vial : 47 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P37B

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
 Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:22:48 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.350	2.689	43829765	43966450	20.435m	20.017
28) SA Decachlor...	8.789	7.837	30791014	38646406	17.587	16.221
Target Compounds						
10) B gamma-Chl...	5.731	4.893	6915675	4488557	2.738	1.584 #
12) B 4,4'-DDE	5.985	5.148	3057685	2798309	1.373m	1.186
16) A 4,4'-DDD	6.500	5.702	3189687	1358089	1.741m	0.723m#

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080449.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:01
Operator : AR\AJ
Sample : 01233-07
Misc :
ALS Vial : 47 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

B-P37B

Manual Integrations

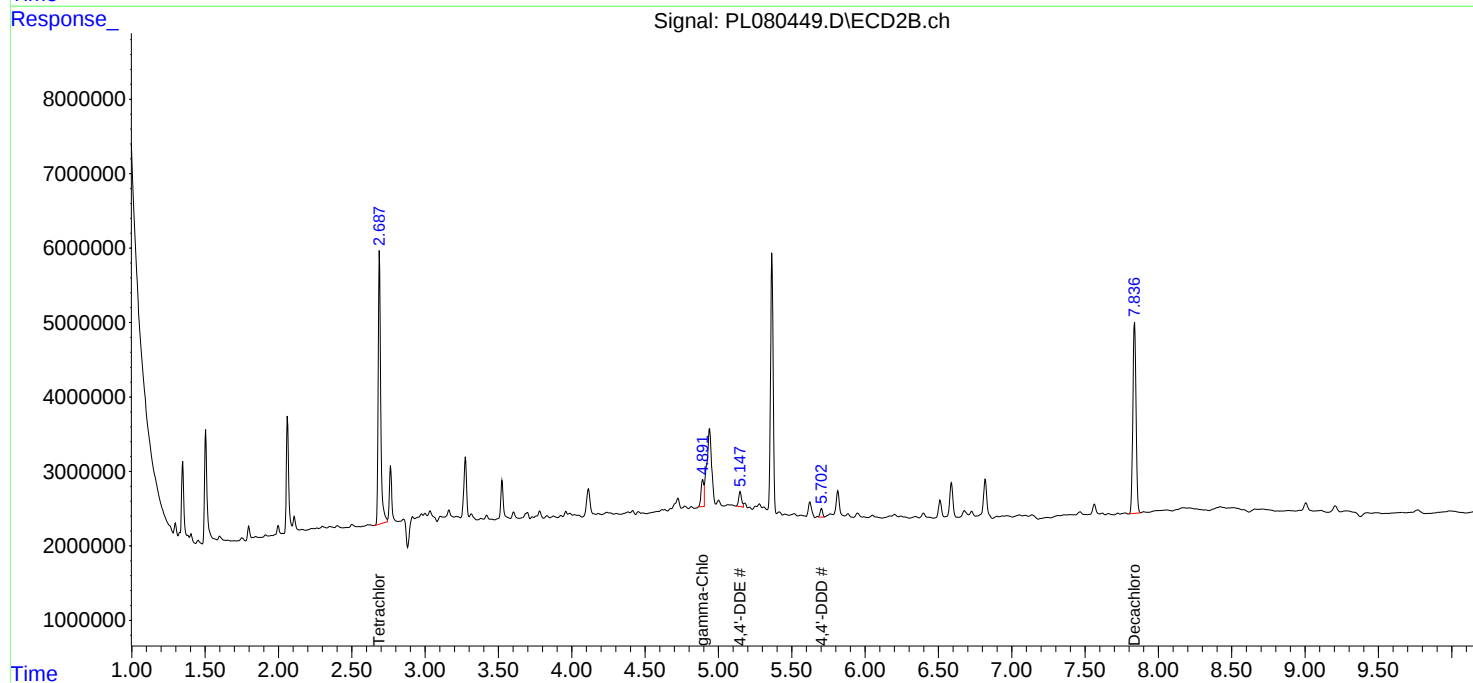
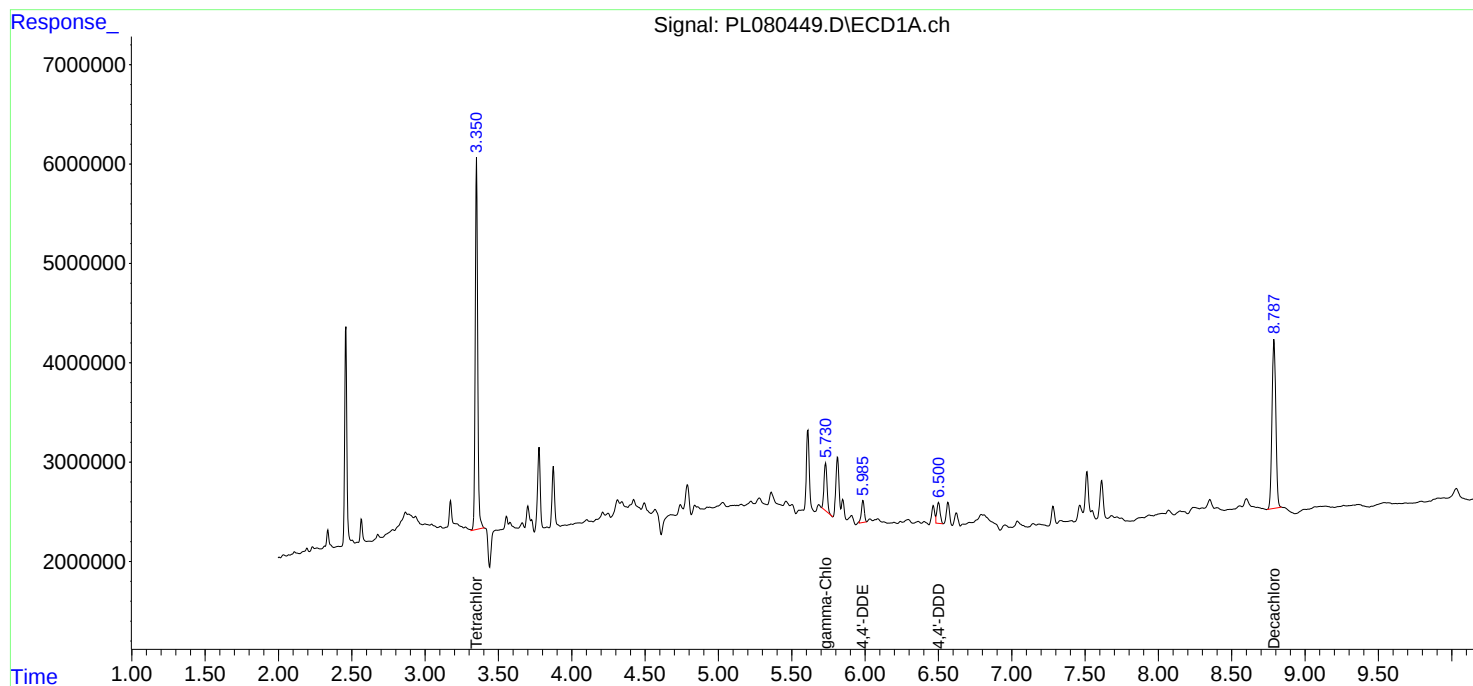
APPROVED

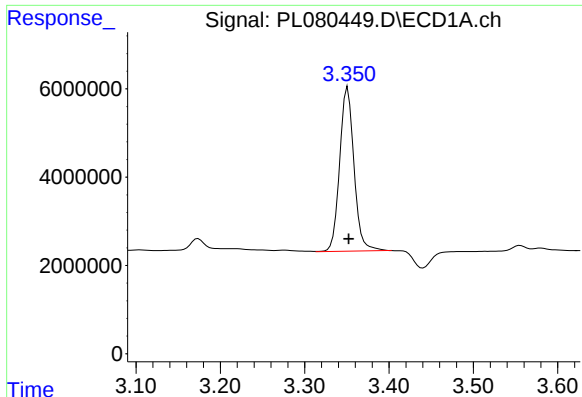
Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:22:48 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





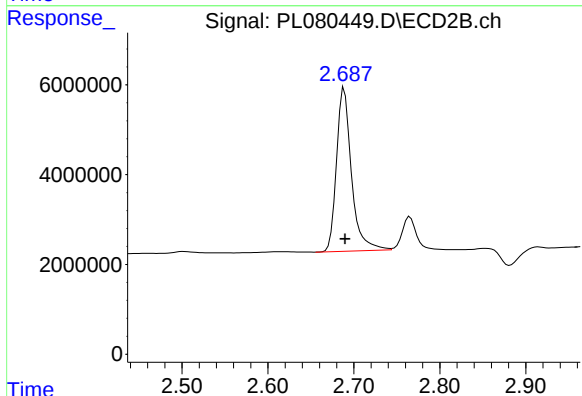
#1 Tetrachloro-m-xylene

R.T.: 3.350 min
Delta R.T.: -0.002 min
Response: 43829765
Conc: 20.44 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P37B

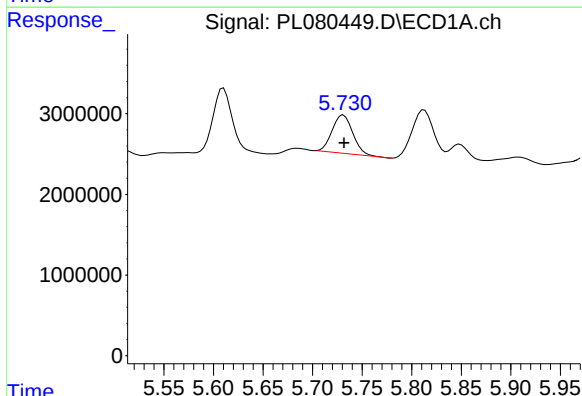
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



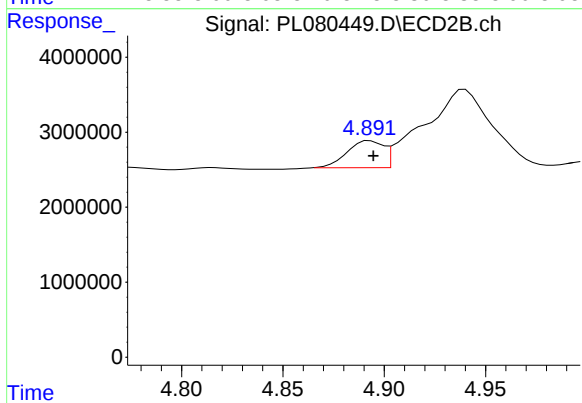
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 43966450
Conc: 20.02 ng/ml



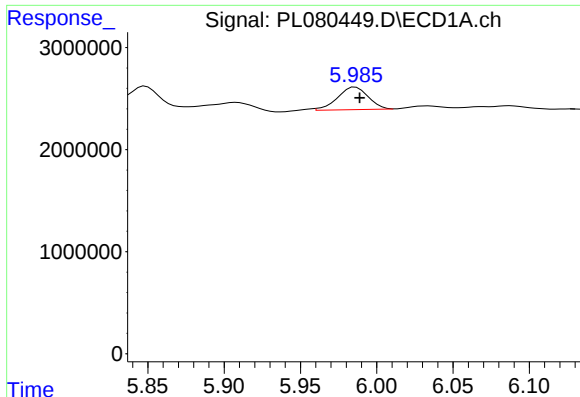
#10 gamma-Chlordane

R.T.: 5.731 min
Delta R.T.: 0.000 min
Response: 6915675
Conc: 2.74 ng/ml



#10 gamma-Chlordane

R.T.: 4.893 min
Delta R.T.: -0.002 min
Response: 4488557
Conc: 1.58 ng/ml



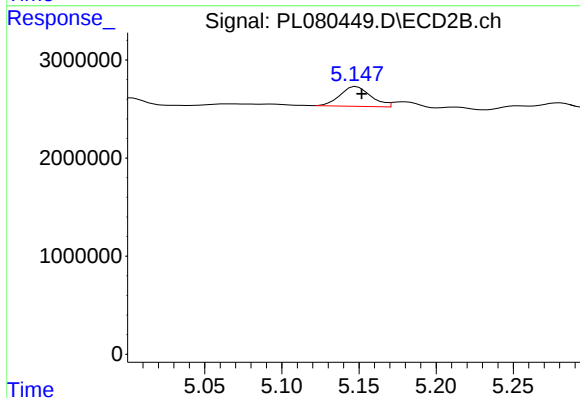
#12 4,4'-DDE

R.T.: 5.985 min
Delta R.T.: -0.004 min
Response: 3057685
Conc: 1.37 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P37B

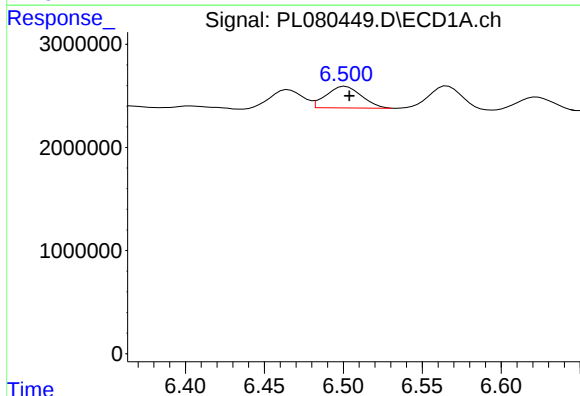
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



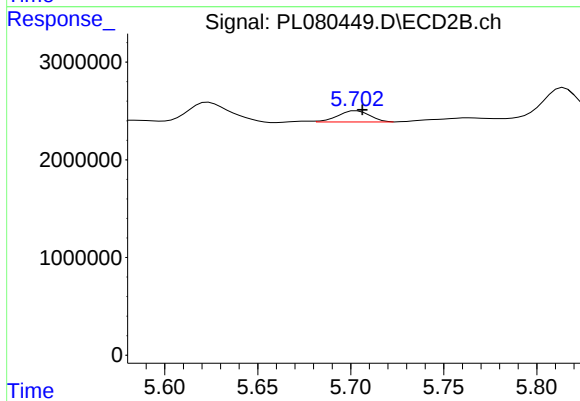
#12 4,4'-DDE

R.T.: 5.148 min
Delta R.T.: -0.003 min
Response: 2798309
Conc: 1.19 ng/ml



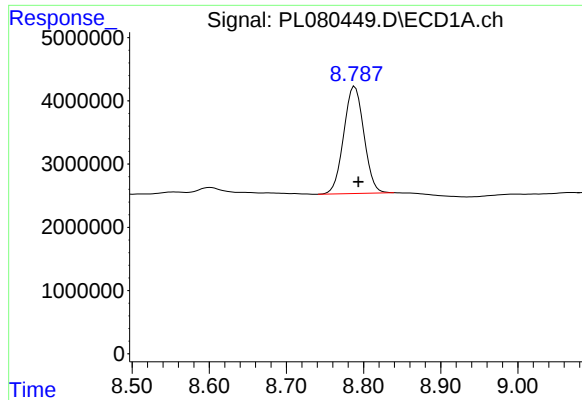
#16 4,4'-DDD

R.T.: 6.500 min
Delta R.T.: -0.004 min
Response: 3189687
Conc: 1.74 ng/ml m



#16 4,4'-DDD

R.T.: 5.702 min
Delta R.T.: -0.004 min
Response: 1358089
Conc: 0.72 ng/ml m



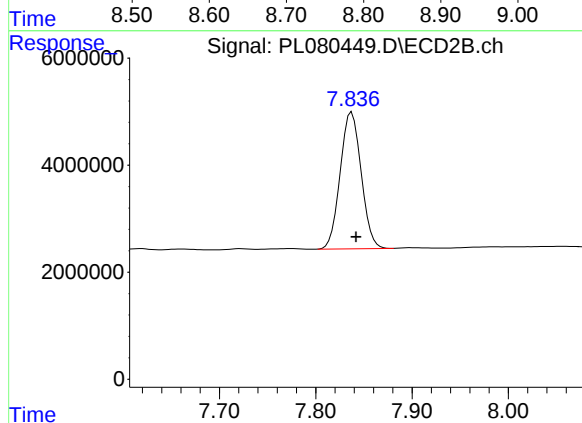
#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 30791014
Conc: 17.59 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P37B

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 01/23/2023
Supervised By :Ankita Jodhani 01/23/2023



#28 Decachlorobiphenyl

R.T.: 7.837 min
Delta R.T.: -0.004 min
Response: 38646406
Conc: 16.22 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P38A		SDG No.:	O1233	
Lab Sample ID:	O1233-08		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	89.3	Decanted:
Sample Wt/Vol:	30.07	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080450.D	1	01/20/23 10:35	01/21/23 02:15	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.27	U	0.27	1.90	ug/kg
319-85-7	beta-BHC	0.58	U	0.58	1.90	ug/kg
319-86-8	delta-BHC	0.46	U	0.46	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	0.25	U	0.25	1.90	ug/kg
76-44-8	Heptachlor	0.26	U	0.26	1.90	ug/kg
309-00-2	Aldrin	0.22	U	0.22	1.90	ug/kg
1024-57-3	Heptachlor epoxide	0.32	U	0.32	1.90	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21	1.90	ug/kg
60-57-1	Dieldrin	0.20	U	0.20	1.90	ug/kg
72-55-9	4,4-DDE	0.20	U	0.20	1.90	ug/kg
72-20-8	Endrin	0.19	U	0.19	1.90	ug/kg
33213-65-9	Endosulfan II	0.25	U	0.25	1.90	ug/kg
72-54-8	4,4-DDD	0.23	U	0.23	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	0.20	U	0.20	1.90	ug/kg
50-29-3	4,4-DDT	0.23	U	0.23	1.90	ug/kg
72-43-5	Methoxychlor	0.28	U	0.28	1.90	ug/kg
53494-70-5	Endrin ketone	0.32	U	0.32	1.90	ug/kg
7421-93-4	Endrin aldehyde	0.32	U	0.32	1.90	ug/kg
5103-71-9	alpha-Chlordane	0.23	U	0.23	1.90	ug/kg
5103-74-2	gamma-Chlordane	0.23	U	0.23	1.90	ug/kg
8001-35-2	Toxaphene	7.40	U	7.40	36.9	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	10.4		12 - 143	52%	SPK: 20
877-09-8	Tetrachloro-m-xylene	9.61		10 - 159	48%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P38A	SDG No.:	O1233
Lab Sample ID:	O1233-08	Matrix:	SOIL
Analytical Method:	SW8081	% Solid:	89.3
Sample Wt/Vol:	30.07	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080450.D	1	01/20/23 10:35	01/21/23 02:15	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
------------	-----------	-------	-----------	-----	------------	-------

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080450.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:15
Operator : AR\AJ
Sample : 01233-08
Misc :
ALS Vial : 48 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-38A

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:23:34 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	20609213	20393354	9.609	9.285
28)	SA Decachlor...	8.787	7.838	18079555	24791175	10.327	10.405

Target Compounds

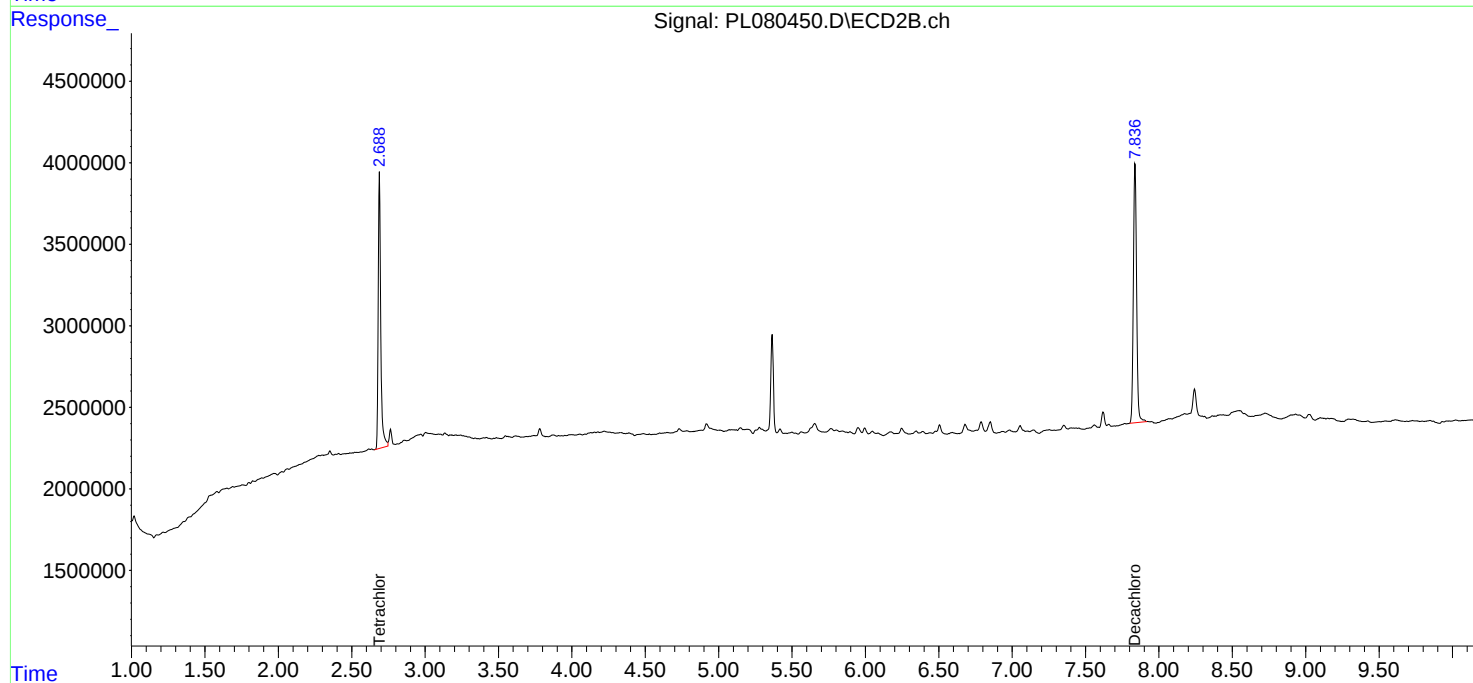
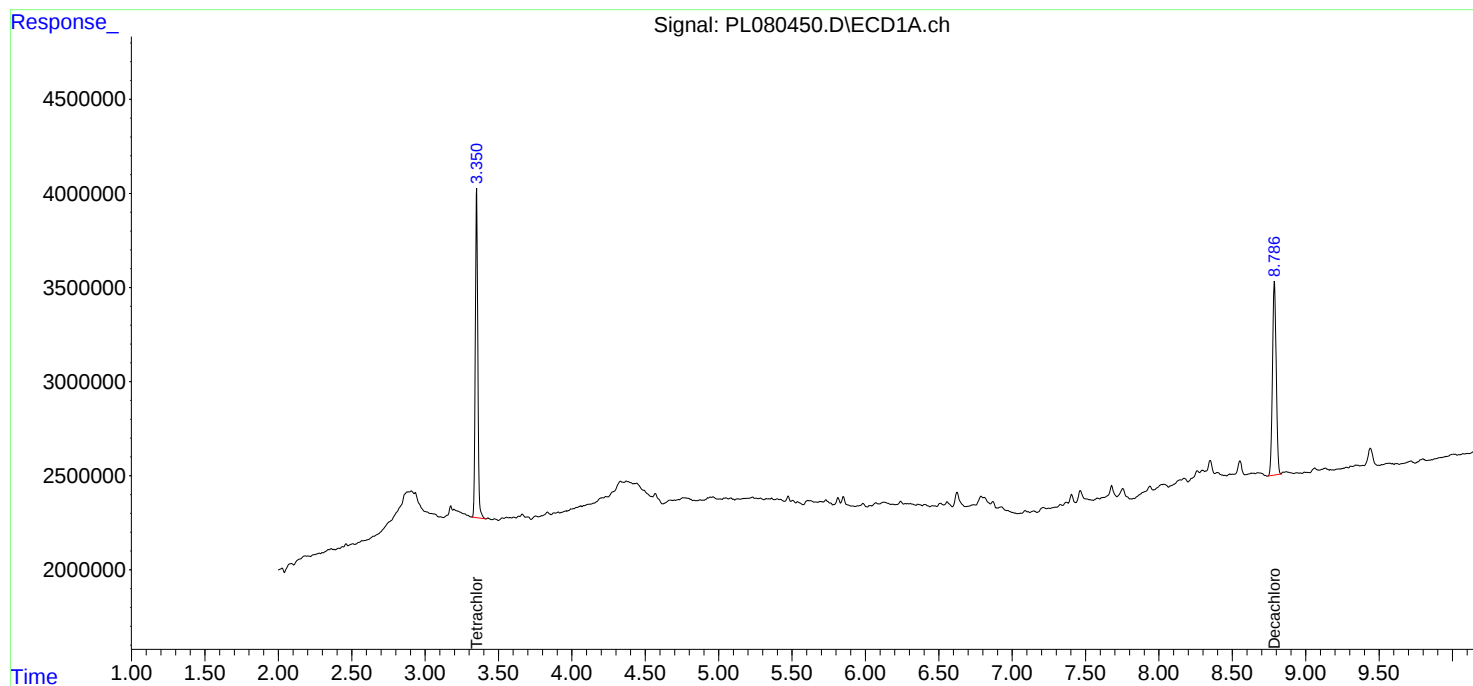
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

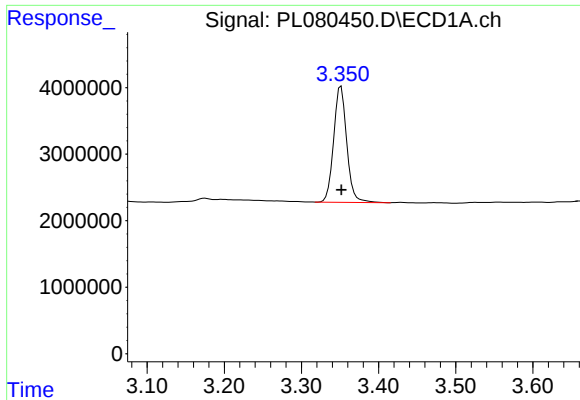
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080450.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:15
Operator : AR\AJ
Sample : 01233-08
Misc :
ALS Vial : 48 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-38A

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:23:34 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

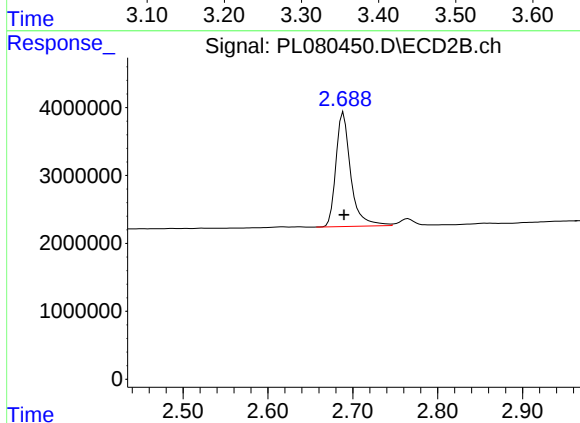




#1 Tetrachloro-m-xylene

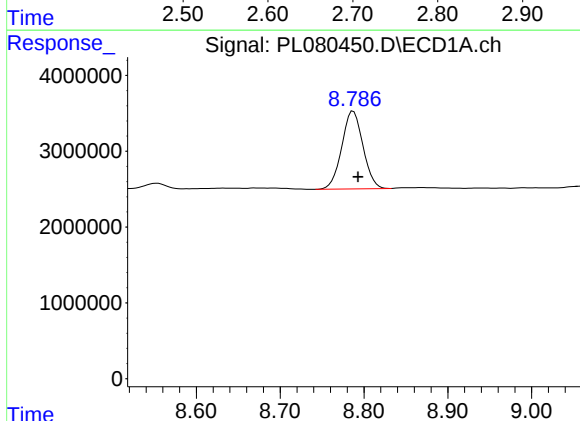
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 20609213
Conc: 9.61 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-38A



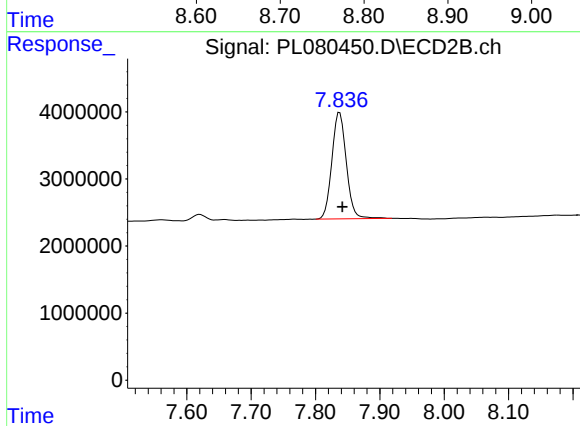
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 20393354
Conc: 9.28 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.787 min
Delta R.T.: -0.006 min
Response: 18079555
Conc: 10.33 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 24791175
Conc: 10.41 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P38B		SDG No.:	O1233	
Lab Sample ID:	O1233-09		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	80.7	Decanted:
Sample Wt/Vol:	30.1	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080451.D	1	01/20/23 10:35	01/21/23 02:29	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.30	U	0.30	2.10	ug/kg
319-85-7	beta-BHC	0.64	U	0.64	2.10	ug/kg
319-86-8	delta-BHC	0.51	U	0.51	2.10	ug/kg
58-89-9	gamma-BHC (Lindane)	0.27	U	0.27	2.10	ug/kg
76-44-8	Heptachlor	0.28	U	0.28	2.10	ug/kg
309-00-2	Aldrin	0.25	U	0.25	2.10	ug/kg
1024-57-3	Heptachlor epoxide	0.36	U	0.36	2.10	ug/kg
959-98-8	Endosulfan I	0.23	U	0.23	2.10	ug/kg
60-57-1	Dieldrin	0.22	U	0.22	2.10	ug/kg
72-55-9	4,4-DDE	0.22	U	0.22	2.10	ug/kg
72-20-8	Endrin	0.21	U	0.21	2.10	ug/kg
33213-65-9	Endosulfan II	0.27	U	0.27	2.10	ug/kg
72-54-8	4,4-DDD	0.26	U	0.26	2.10	ug/kg
1031-07-8	Endosulfan Sulfate	0.22	U	0.22	2.10	ug/kg
50-29-3	4,4-DDT	0.26	U	0.26	2.10	ug/kg
72-43-5	Methoxychlor	0.31	U	0.31	2.10	ug/kg
53494-70-5	Endrin ketone	0.36	U	0.36	2.10	ug/kg
7421-93-4	Endrin aldehyde	0.36	U	0.36	2.10	ug/kg
5103-71-9	alpha-Chlordane	0.26	U	0.26	2.10	ug/kg
5103-74-2	gamma-Chlordane	0.26	U	0.26	2.10	ug/kg
8001-35-2	Toxaphene	8.20	U	8.20	40.8	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	14.1		12 - 143	71%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.7		10 - 159	88%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P38B		SDG No.:	O1233	
Lab Sample ID:	O1233-09		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	80.7	Decanted:
Sample Wt/Vol:	30.1	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080451.D	1	01/20/23 10:35	01/21/23 02:29	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080451.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 02:29
 Operator : AR\AJ
 Sample : 01233-09
 Misc :
 ALS Vial : 49 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P38B

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:24:00 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	37267955	38791947	17.376	17.661
28)	SA Decachlor...	8.788	7.838	24718368	33618842	14.119	14.111

Target Compounds

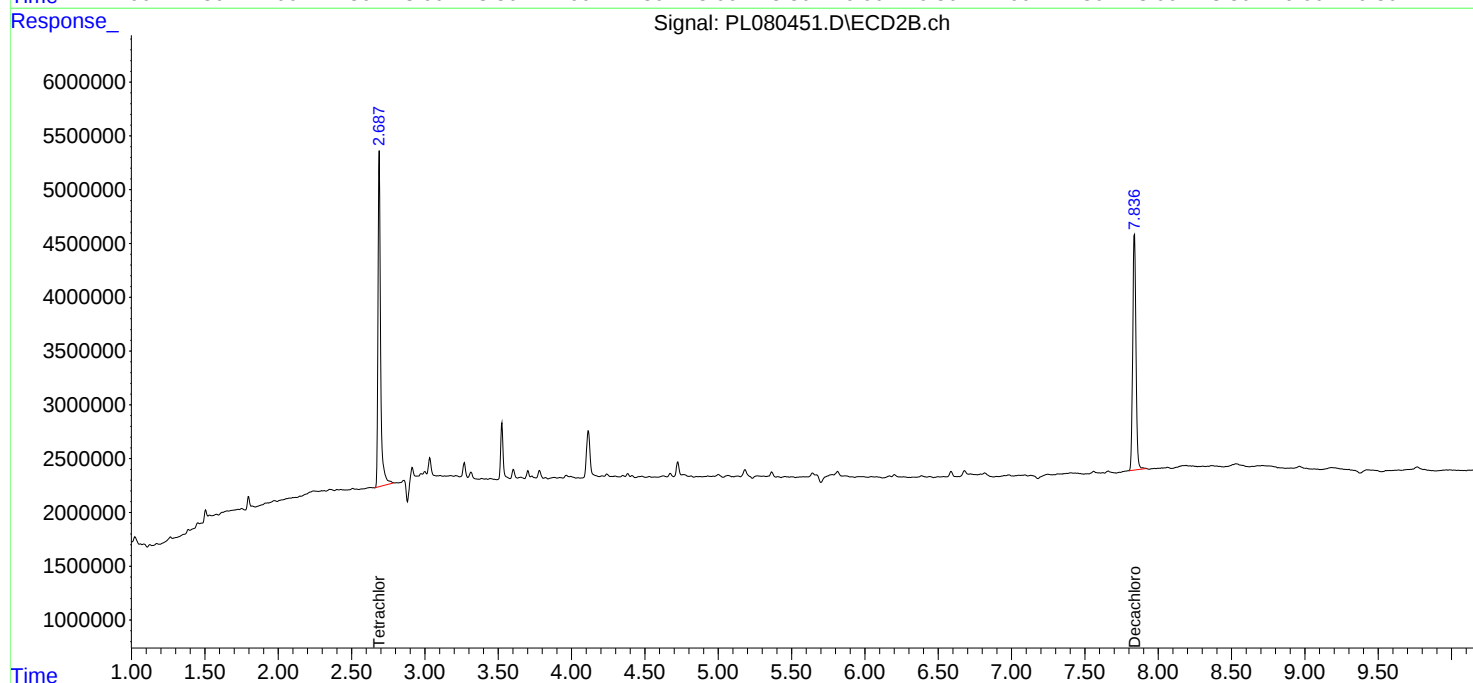
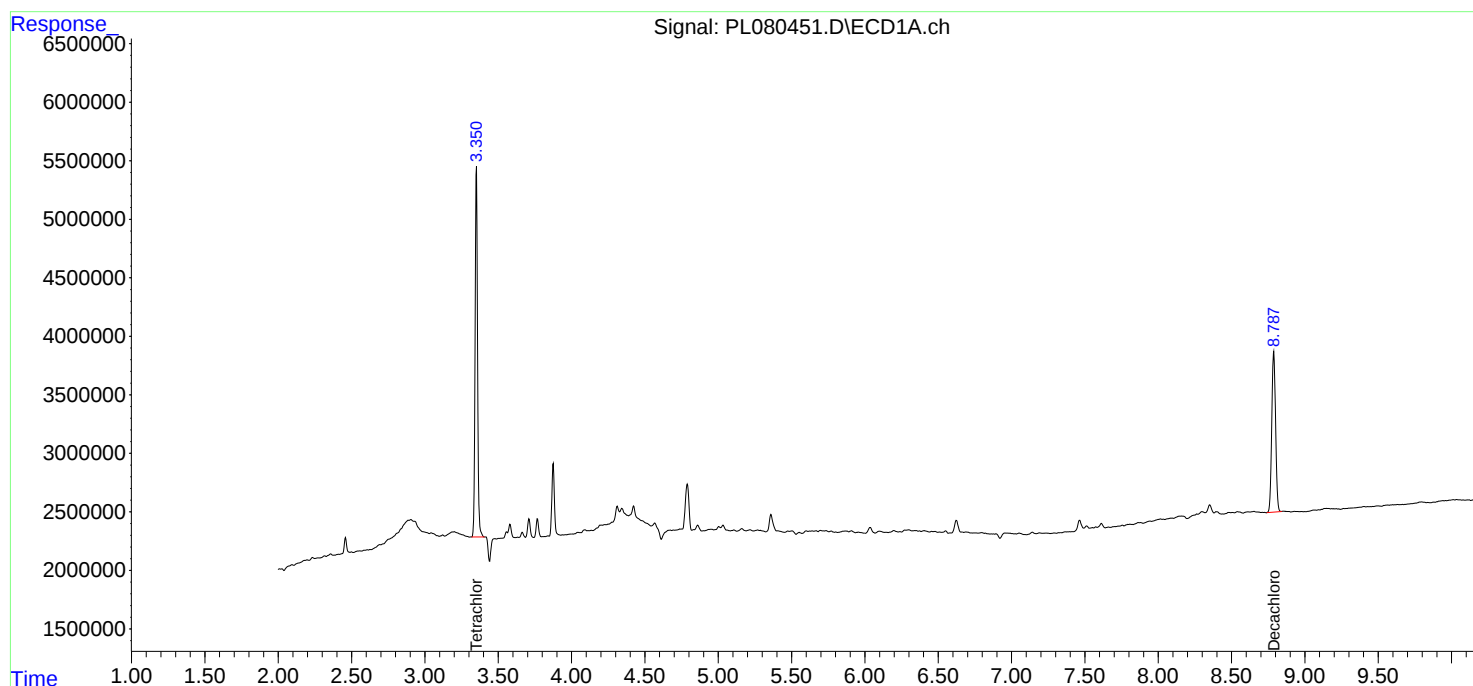
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

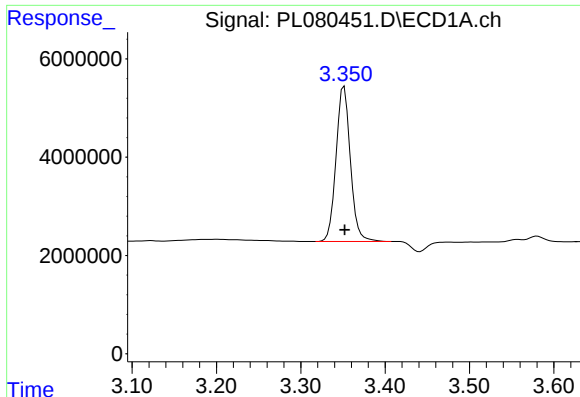
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080451.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:29
Operator : AR\AJ
Sample : 01233-09
Misc :
ALS Vial : 49 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-P38B

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:24:00 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

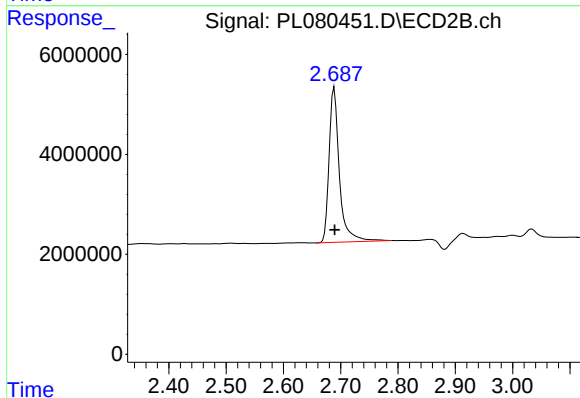




#1 Tetrachloro-m-xylene

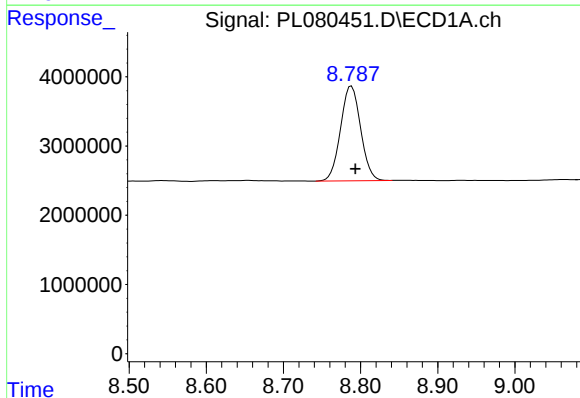
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 37267955
Conc: 17.38 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P38B



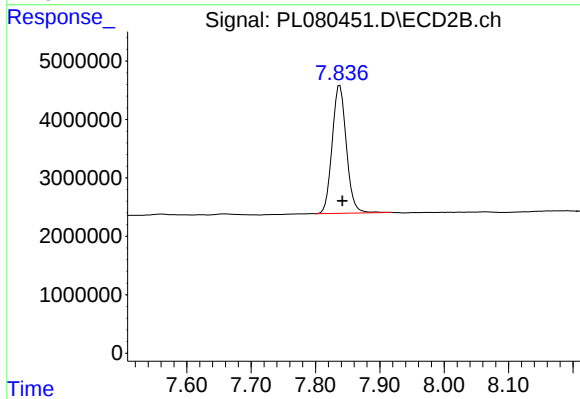
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 38791947
Conc: 17.66 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.788 min
Delta R.T.: -0.005 min
Response: 24718368
Conc: 14.12 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 33618842
Conc: 14.11 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P38C		SDG No.:	O1233	
Lab Sample ID:	O1233-11		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.9	Decanted:
Sample Wt/Vol:	30.09	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080452.D	1	01/20/23 10:35	01/21/23 02:43	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.28	U	0.28	2.00	ug/kg
319-85-7	beta-BHC	0.60	U	0.60	2.00	ug/kg
319-86-8	delta-BHC	0.48	U	0.48	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	0.26	U	0.26	2.00	ug/kg
76-44-8	Heptachlor	0.27	U	0.27	2.00	ug/kg
309-00-2	Aldrin	0.23	U	0.23	2.00	ug/kg
1024-57-3	Heptachlor epoxide	0.34	U	0.34	2.00	ug/kg
959-98-8	Endosulfan I	0.22	U	0.22	2.00	ug/kg
60-57-1	Dieldrin	0.21	U	0.21	2.00	ug/kg
72-55-9	4,4-DDE	0.21	U	0.21	2.00	ug/kg
72-20-8	Endrin	0.20	U	0.20	2.00	ug/kg
33213-65-9	Endosulfan II	0.26	U	0.26	2.00	ug/kg
72-54-8	4,4-DDD	0.24	U	0.24	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	0.21	U	0.21	2.00	ug/kg
50-29-3	4,4-DDT	0.24	U	0.24	2.00	ug/kg
72-43-5	Methoxychlor	0.29	U	0.29	2.00	ug/kg
53494-70-5	Endrin ketone	0.34	U	0.34	2.00	ug/kg
7421-93-4	Endrin aldehyde	0.34	U	0.34	2.00	ug/kg
5103-71-9	alpha-Chlordane	0.24	U	0.24	2.00	ug/kg
5103-74-2	gamma-Chlordane	0.24	U	0.24	2.00	ug/kg
8001-35-2	Toxaphene	7.70	U	7.70	38.3	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.9		12 - 143	84%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.1		10 - 159	85%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P38C		SDG No.:	O1233	
Lab Sample ID:	O1233-11		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.9	Decanted:
Sample Wt/Vol:	30.09	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080452.D	1	01/20/23 10:35	01/21/23 02:43	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080452.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 02:43
 Operator : AR\AJ
 Sample : 01233-11
 Misc :
 ALS Vial : 50 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P38C

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:24:22 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.688	36608985	34430061	17.068	15.675
28)	SA Decachlor...	8.789	7.838	29515589	39537445	16.859	16.595

Target Compounds

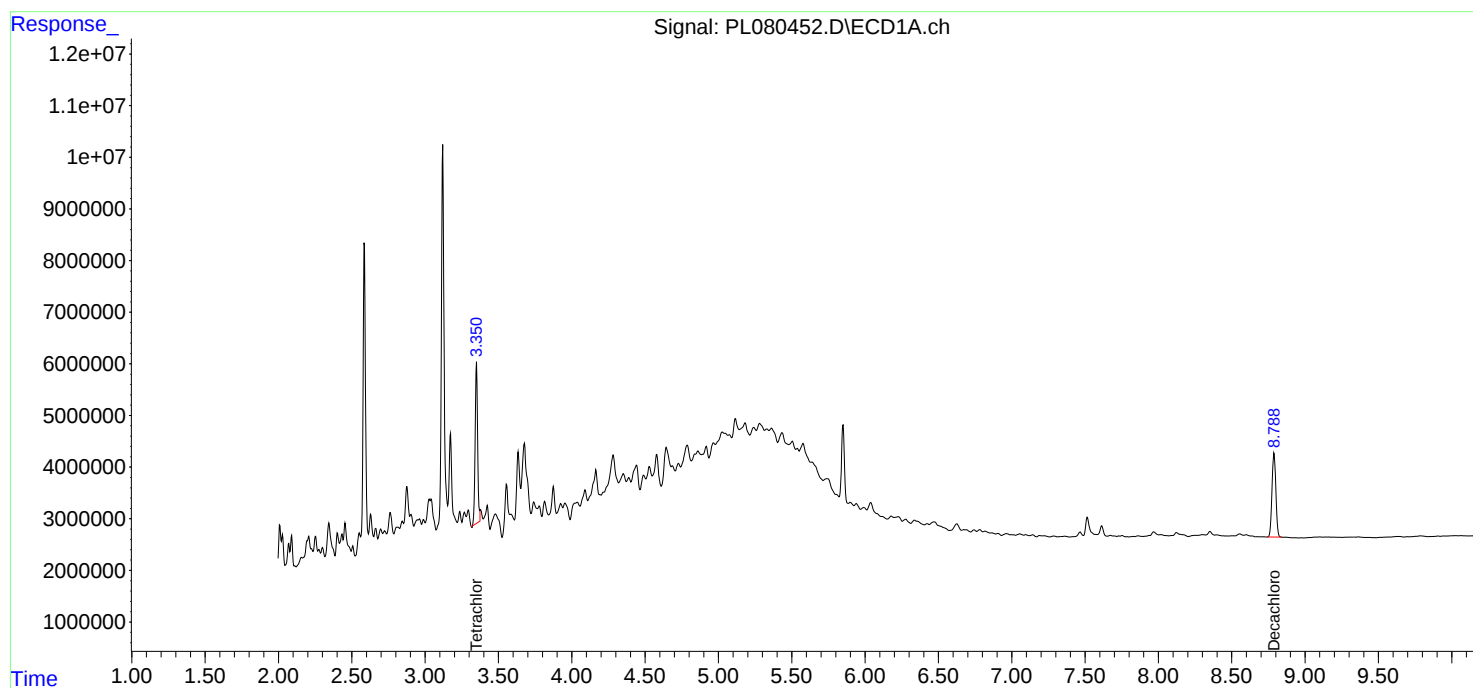
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

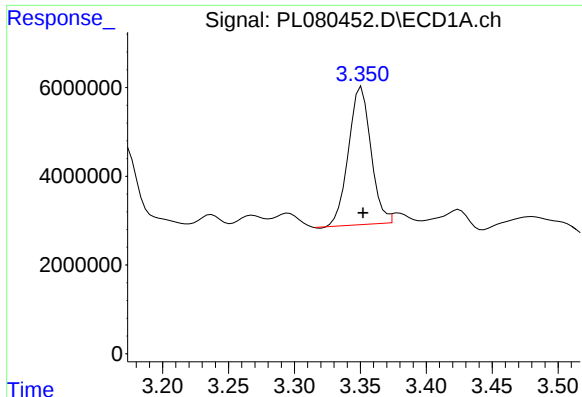
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080452.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:43
Operator : AR\AJ
Sample : 01233-11
Misc :
ALS Vial : 50 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
B-P38C

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:24:22 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

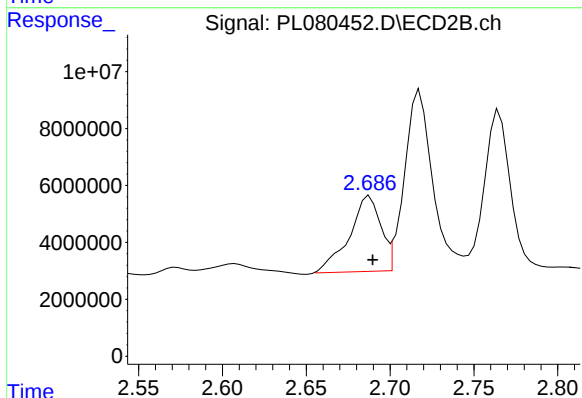




#1 Tetrachloro-m-xylene

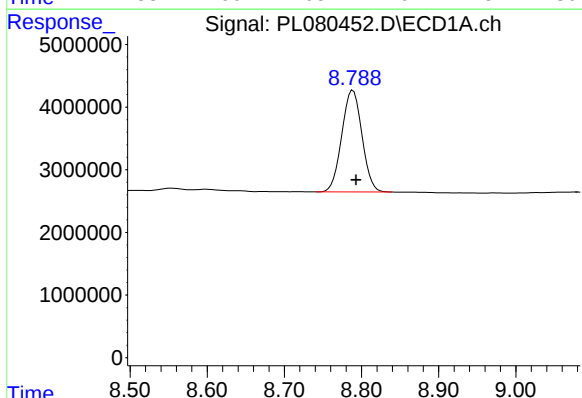
R.T.: 3.351 min
Delta R.T.: -0.001 min
Response: 36608985
Conc: 17.07 ng/ml

Instrument :
ECD_L
ClientSampleId :
B-P38C



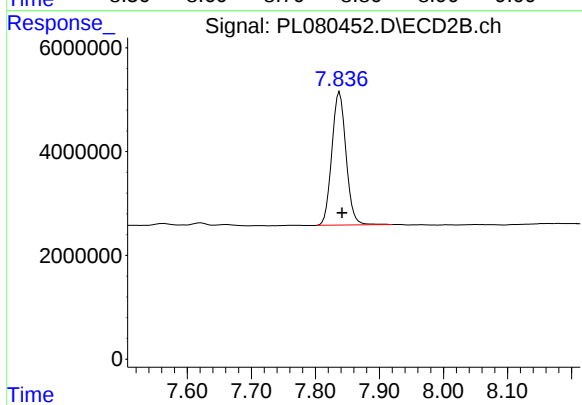
#1 Tetrachloro-m-xylene

R.T.: 2.688 min
Delta R.T.: -0.002 min
Response: 34430061
Conc: 15.68 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 29515589
Conc: 16.86 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 39537445
Conc: 16.59 ng/ml

CALIBRATION SUMMARY

GC Column: ZB-MR2 ID: 0.32 (mm)

[illegible]

RETENTION TIMES OF INITIAL CALIBRATION

Contract:	<u>loui01</u>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>O1233</u>	SAS No.:	<u>O1233</u>	SDG NO.:	<u>O1233</u>
Instrument ID:	<u>ECD_L</u>	Calibration Date(s):		<u>01/20/2023</u>	<u>01/20/2023</u>		
		Calibration Times:		<u>14:41</u>	<u>15:36</u>		

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:	RT 100 =	<u>PL080408.D</u>	RT 075 =	<u>PL080409.D</u>
	RT 050 =	PL080410.D	RT 025 =	PL080411.D
			RT 005 =	PL080412.D

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: loui01

Lab Code: CHEM Case No.: 01233 SAS No.: 01233 SDG NO.: 01233

Instrument ID: ECD_L Calibration Date(s): 01/20/2023 01/20/2023

Calibration Times: 14:41 15:36

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:		CF 100 =	<u>PL080408.D</u>	CF 075 =	<u>PL080409.D</u>		
	CF 050 =	<u>PL080410.D</u>	CF 025 =	<u>PL080411.D</u>	CF 005 =	<u>PL080412.D</u>	
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	1905610000	1862000000	1887350000	1782240000	1722740000	1831990000	4
4,4'-DDE	2372610000	2301620000	2301670000	2141800000	2019030000	2227350000	6
4,4'-DDT	2121650000	2069360000	2105420000	2030590000	2061320000	2077670000	2
Aldrin	2860500000	2790820000	2808060000	2638150000	2581390000	2735780000	4
alpha-BHC	3459050000	3348520000	3326130000	3010010000	2696430000	3168030000	10
alpha-Chlordane	2569670000	2528060000	2582020000	2479710000	2461870000	2524270000	2
beta-BHC	1294560000	1302560000	1356950000	1344950000	1526100000	1365020000	7
Decachlorobiphenyl	1672970000	1677850000	1760440000	1790370000	1852150000	1750750000	4
delta-BHC	3060650000	3002620000	3011640000	2759300000	2640780000	2895000000	6
Dieldrin	2493900000	2438180000	2465990000	2329280000	2239460000	2393360000	4
Endosulfan I	2387790000	2351460000	2408380000	2317780000	2341910000	2361460000	2
Endosulfan II	2093230000	2100820000	2170130000	2223780000	2873670000	2292330000	14
Endosulfan sulfate	2062490000	2046210000	2111090000	2059180000	2070610000	2069910000	1
Endrin	2204570000	2155500000	2194160000	2079990000	2179270000	2162700000	2
Endrin aldehyde	1635600000	1625400000	1687620000	1663640000	1704770000	1663410000	2
Endrin ketone	2216140000	2194410000	2263130000	2186320000	2171720000	2206340000	2
gamma-BHC (Lindane)	3150720000	3065120000	3082440000	2837110000	2563450000	2939770000	8
gamma-Chlordane	2594350000	2547200000	2592760000	2465730000	2428580000	2525720000	3
Heptachlor	3043160000	2998050000	3040850000	2897830000	2796200000	2955220000	4
Heptachlor epoxide	2583000000	2553540000	2617140000	2527330000	2654290000	2587060000	2
Methoxychlor	1070870000	1072560000	1121380000	1119940000	1131700000	1103290000	3
Tetrachloro-m-xylene	2180590000	2154690000	2203650000	2127540000	2057690000	2144830000	3

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

Instrument ID: ECD_L Calibration Date(s): 01/20/2023 01/20/2023

Calibration Times: 14:41 15:36

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:		CF 100 =	<u>PL080408.D</u>	CF 075 =	<u>PL080409.D</u>		
CF 050 =	<u>PL080410.D</u>	CF 025 =	<u>PL080411.D</u>	CF 005 =	<u>PL080412.D</u>		
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	2062880000	1990630000	1979590000	1798820000	1564090000	1879200000	11
4,4'-DDE	2603080000	2510310000	2474640000	2228870000	1977270000	2358830000	11
4,4'-DDT	2281330000	2209920000	2184000000	2010350000	1821830000	2101490000	9
Aldrin	3198240000	3090160000	3084560000	2816020000	2558890000	2949570000	9
alpha-BHC	3512950000	3389760000	3354830000	2995570000	2648950000	3180410000	11
alpha-Chlordane	2975110000	2908520000	2947310000	2785580000	2706870000	2864680000	4
beta-BHC	1331220000	1320290000	1367170000	1324970000	1329490000	1334630000	1
Decachlorobiphenyl	2264360000	2256580000	2379210000	2418120000	2594410000	2382540000	6
delta-BHC	3173510000	3070820000	3053200000	2725940000	2398720000	2884440000	11
Dieldrin	2915090000	2817980000	2814250000	2585500000	2392010000	2704970000	8
Endosulfan I	2719000000	2661400000	2696990000	2535860000	2393420000	2601340000	5
Endosulfan II	2247480000	2196770000	2218270000	2027050000	1729060000	2083730000	10
Endosulfan sulfate	2371950000	2330180000	2387060000	2290720000	2248450000	2325670000	2
Endrin	2455220000	2388810000	2416400000	2249330000	2096050000	2321160000	6
Endrin aldehyde	1820760000	1800700000	1844580000	1803290000	1861220000	1826110000	1
Endrin ketone	2628620000	2575270000	2643990000	2517280000	2400980000	2553230000	4
gamma-BHC (Lindane)	3253830000	3149320000	3144020000	2848560000	2540790000	2987310000	10
gamma-Chlordane	2995300000	2918520000	2933430000	2741630000	2582290000	2834240000	6
Heptachlor	3367270000	3281190000	3309620000	3080600000	2873130000	3182360000	6
Heptachlor epoxide	2894640000	2832800000	2871620000	2708730000	2603910000	2782340000	4
Methoxychlor	1210100000	1199400000	1243480000	1222610000	1191730000	1213470000	2
Tetrachloro-m-xylene	2253200000	2223250000	2272190000	2174740000	2058890000	2196450000	4

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

Instrument ID: ECD_L Date(s) Analyzed: 01/20/2023 01/20/2023

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	500	1	6.03	5.93	6.13	16579700
		2	6.84	6.74	6.94	67395000
		3	6.93	6.83	7.03	48523600
		4	7.03	6.93	7.13	26898900
		5	7.35	7.25	7.45	37572200

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

Instrument ID: ECD_L Date(s) Analyzed: 01/20/2023 01/20/2023

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	500	1	5.24	5.14	5.34	13842900
		2	5.88	5.78	5.98	16444600
		3	6.52	6.42	6.62	53738800
		4	6.65	6.55	6.75	73380200
		5	6.96	6.86	7.06	31164000

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080408.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 14:41
 Operator : AR\AJ
 Sample : PSTDICC100
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDICC100

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:02:54 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:01:50 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.353	2.690	218.1E6	225.3E6	98.954	99.164
28)	SA Decachlor...	8.793	7.841	167.3E6	226.4E6	95.032	95.173
Target Compounds							
2)	A alpha-BHC	3.801	3.192	345.9E6	351.3E6	103.997	104.713
3)	MA gamma-BHC...	4.130	3.520	315.1E6	325.4E6	102.215	103.493
4)	MA Heptachlor	4.714	3.862	304.3E6	336.7E6	100.076	101.742
5)	MB Aldrin	5.053	4.141	286.1E6	319.8E6	101.868	103.686
6)	B beta-BHC	4.326	3.816	129.5E6	133.1E6	95.402	97.370
7)	B delta-BHC	4.569	4.046	306.1E6	317.4E6	101.627	103.941
8)	B Heptachlo...	5.477	4.644	258.3E6	289.5E6	98.696	100.802
9)	A Endosulfan I	5.859	5.013	238.8E6	271.9E6	99.145	100.816
10)	B gamma-Chl...	5.733	4.895	259.4E6	299.5E6	100.061	102.109
11)	B alpha-Chl...	5.811	4.959	257.0E6	297.5E6	99.522	100.943
12)	B 4,4'-DDE	5.990	5.152	237.3E6	260.3E6	103.082	105.190
13)	MA Dieldrin	6.134	5.279	249.4E6	291.5E6	101.132	103.583
14)	MA Endrin	6.361	5.554	220.5E6	245.5E6	100.474	101.607
15)	B Endosulfa...	6.580	5.847	209.3E6	224.7E6	96.456	101.317
16)	A 4,4'-DDD	6.503	5.706	190.6E6	206.3E6	100.968	104.207
17)	MA 4,4'-DDT	6.816	5.958	212.2E6	228.1E6	100.771	104.457
18)	B Endrin al...	6.709	6.028	163.6E6	182.1E6	96.917	98.709
19)	B Endosulfa...	6.943	6.251	206.2E6	237.2E6	97.698	99.367
20)	A Methoxychlor	7.295	6.536	107.1E6	121.0E6	95.496	97.315
21)	B Endrin ke...	7.424	6.756	221.6E6	262.9E6	97.924	99.419
22)	Mirex	7.895	6.940	162.6E6	218.3E6	94.008	94.845

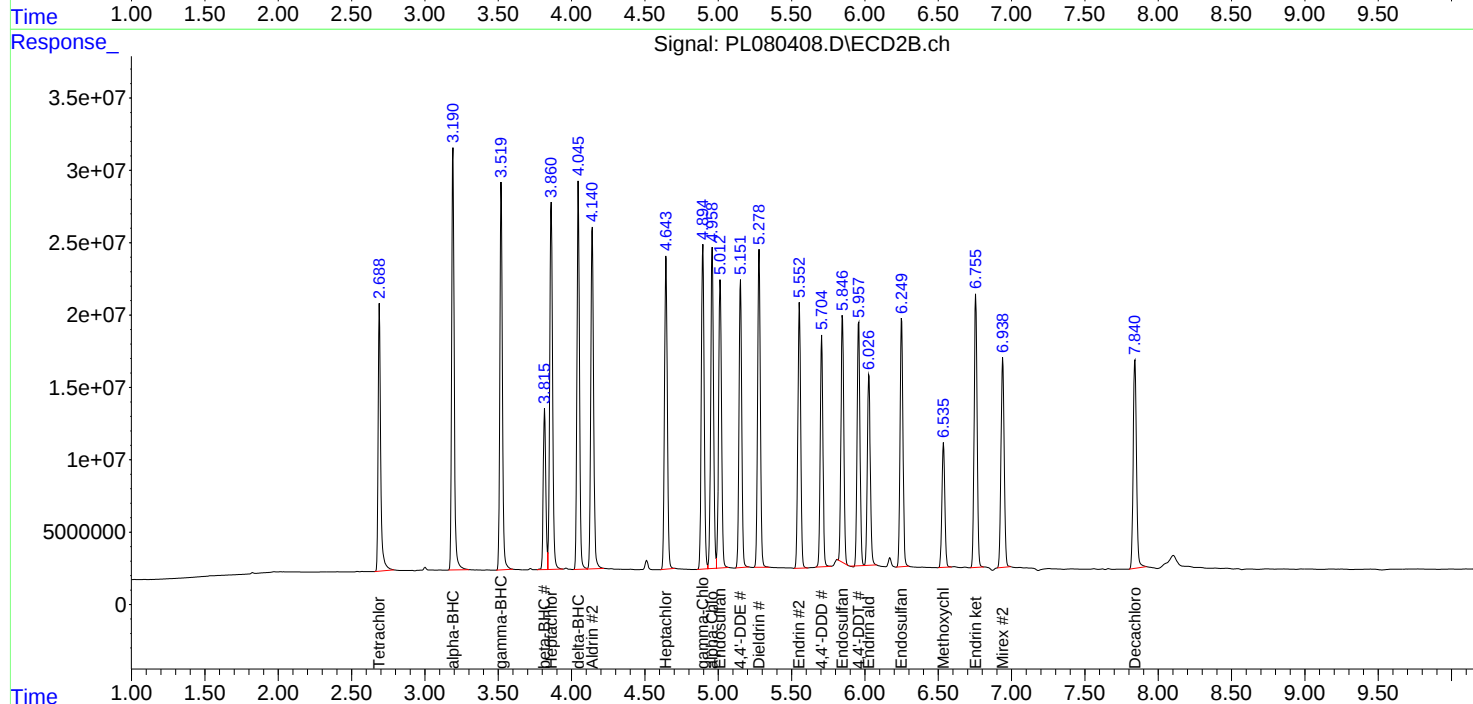
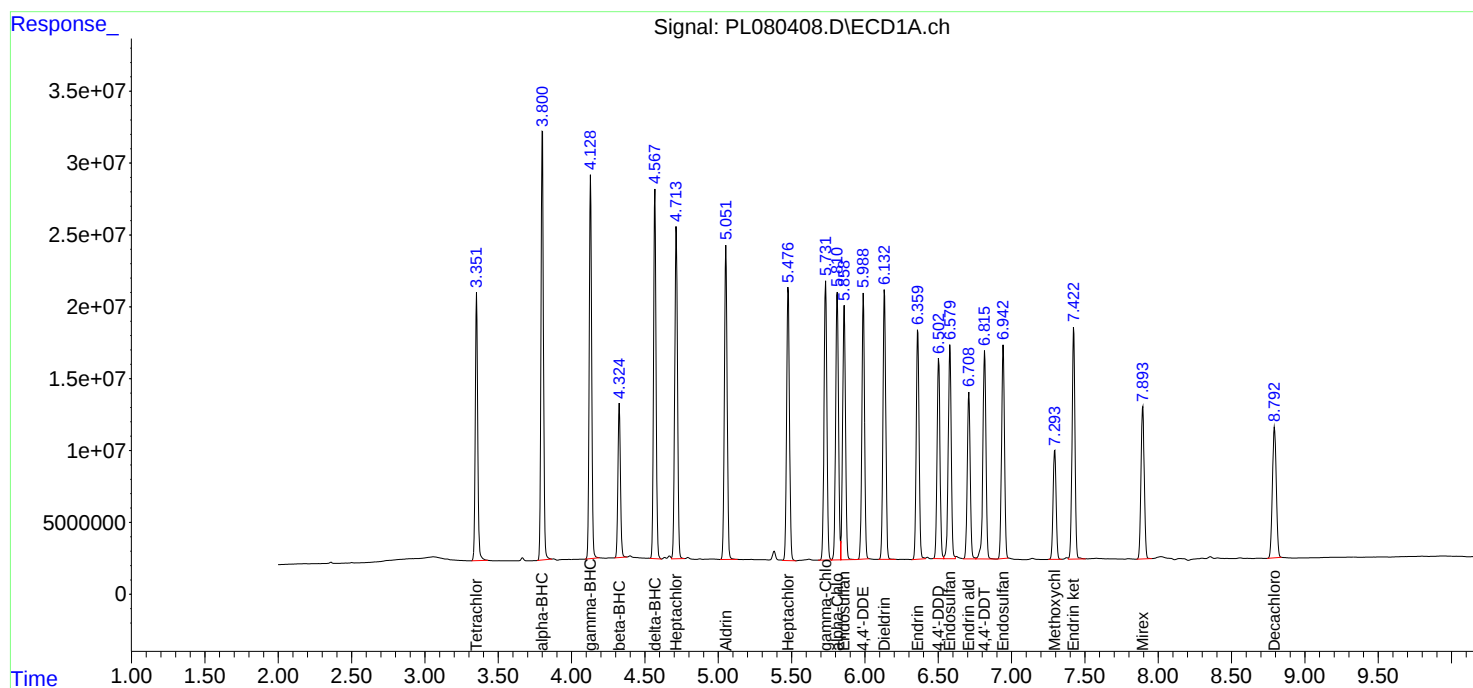
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080408.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 14:41
Operator : AR\AJ
Sample : PSTDICC100
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PSTDICC100

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:02:54 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:01:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080409.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 14:54
 Operator : AR\AJ
 Sample : PSTDICC075
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDICC075

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:03:05 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:01:50 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	161.6E6	166.7E6	73.334	73.385
2)	SA Decachlor...	8.792	7.841	125.8E6	169.2E6	71.481	71.134
Target Compounds							
2)	A alpha-BHC	3.801	3.192	251.1E6	254.2E6	75.505	75.781
3)	MA gamma-BHC...	4.129	3.520	229.9E6	236.2E6	74.579	75.126
4)	MA Heptachlor	4.713	3.861	224.9E6	246.1E6	73.944	74.356
5)	MB Aldrin	5.052	4.141	209.3E6	231.8E6	74.540	75.136
6)	B beta-BHC	4.325	3.816	97691688	99021898	71.994	72.428
7)	B delta-BHC	4.568	4.046	225.2E6	230.3E6	74.775	75.433
8)	B Heptachlo...	5.477	4.644	191.5E6	212.5E6	73.178	73.986
9)	A Endosulfan I	5.859	5.013	176.4E6	199.6E6	73.228	74.010
10)	B gamma-Chl...	5.732	4.894	191.0E6	218.9E6	73.682	74.619
11)	B alpha-Chl...	5.811	4.959	189.6E6	218.1E6	73.433	74.013
12)	B 4,4'-DDE	5.989	5.152	172.6E6	188.3E6	74.998	76.081
13)	MA Dieldrin	6.133	5.279	182.9E6	211.3E6	74.154	75.099
14)	MA Endrin	6.361	5.553	161.7E6	179.2E6	73.678	74.144
15)	B Endosulfa...	6.579	5.848	157.6E6	164.8E6	72.605	74.273
16)	A 4,4'-DDD	6.504	5.706	139.7E6	149.3E6	73.993	75.418
17)	MA 4,4'-DDT	6.816	5.957	155.2E6	165.7E6	73.715	75.890
18)	B Endrin al...	6.709	6.027	121.9E6	135.1E6	72.235	73.216
19)	B Endosulfa...	6.943	6.251	153.5E6	174.8E6	72.695	73.213
20)	A Methoxychlor	7.294	6.535	80441905	89954879	71.735	72.341
21)	B Endrin ke...	7.423	6.756	164.6E6	193.1E6	72.723	73.050
22)	Mirex	7.894	6.940	122.2E6	163.6E6	70.627	71.086

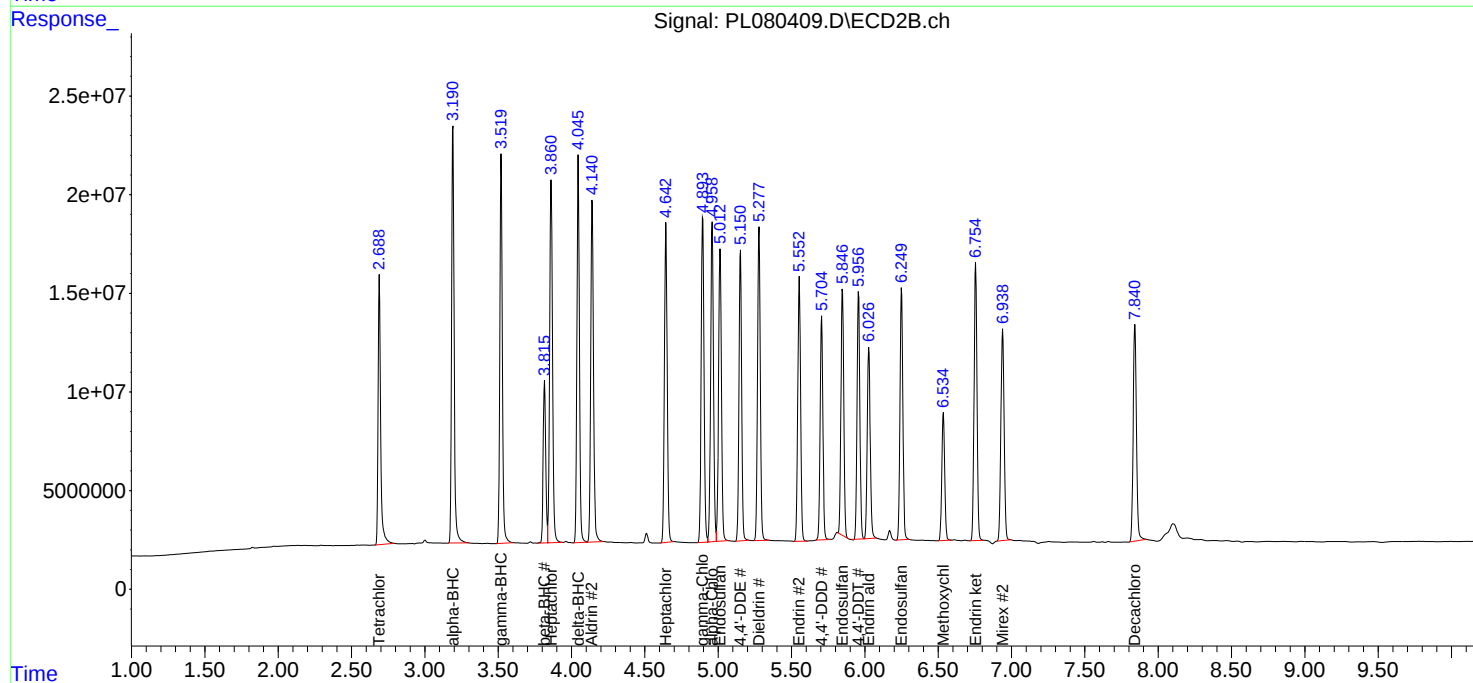
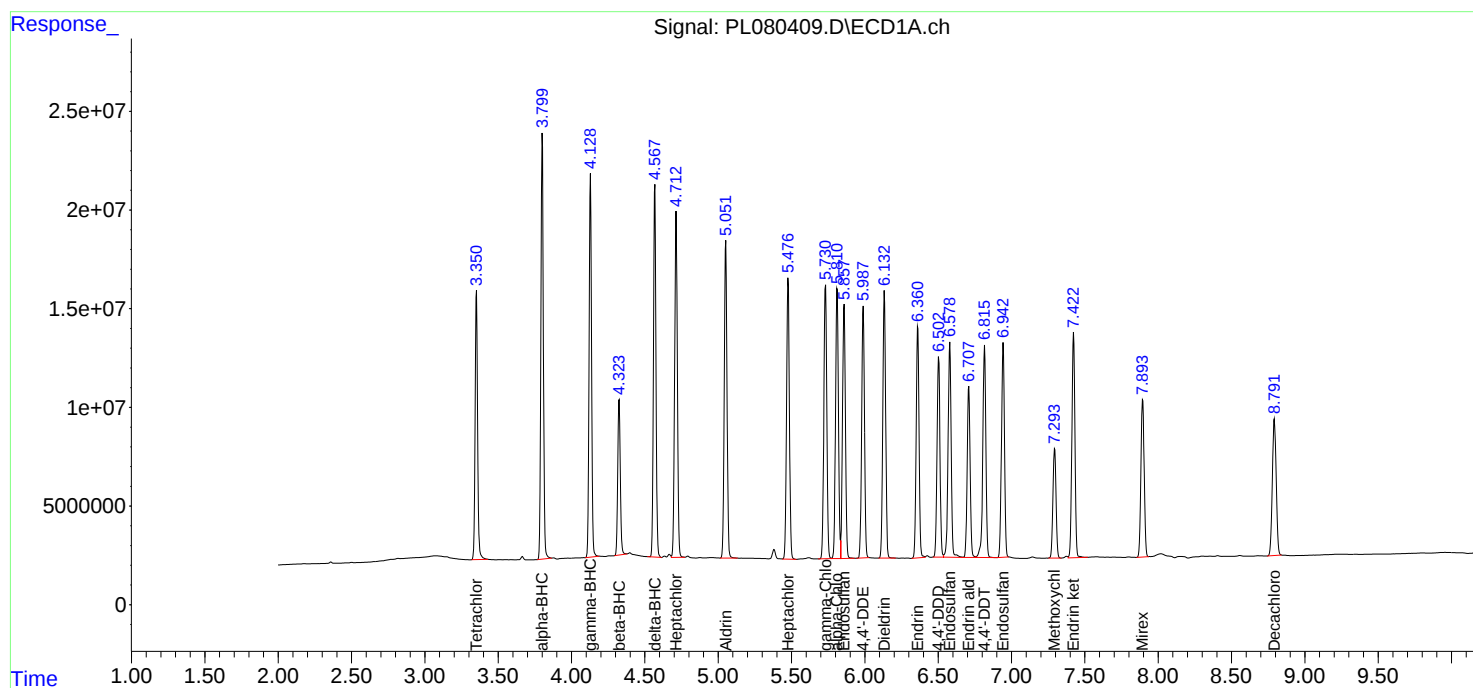
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080409.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 14:54
Operator : AR\AJ
Sample : PSTDICC075
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PSTDICC075

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:03:05 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:01:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080410.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 15:08
 Operator : AR\AJ
 Sample : PSTDICC050
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDICC050

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:09:24 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:09:13 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	110.2E6	113.6E6	50.000	50.000
28)	SA Decachlor...	8.793	7.842	88021824	119.0E6	50.000	50.000
Target Compounds							
2)	A alpha-BHC	3.801	3.191	166.3E6	167.7E6	50.000	50.000
3)	MA gamma-BHC...	4.129	3.520	154.1E6	157.2E6	50.000	50.000
4)	MA Heptachlor	4.713	3.862	152.0E6	165.5E6	50.000	50.000
5)	MB Aldrin	5.052	4.141	140.4E6	154.2E6	50.000	50.000
6)	B beta-BHC	4.325	3.816	67847547	68358632	50.000	50.000
7)	B delta-BHC	4.568	4.046	150.6E6	152.7E6	50.000	50.000
8)	B Heptachlo...	5.477	4.644	130.9E6	143.6E6	50.000	50.000
9)	A Endosulfan I	5.859	5.013	120.4E6	134.8E6	50.000	50.000
10)	B gamma-Chl...	5.732	4.895	129.6E6	146.7E6	50.000	50.000
11)	B alpha-Chl...	5.811	4.959	129.1E6	147.4E6	50.000	50.000
12)	B 4,4'-DDE	5.989	5.152	115.1E6	123.7E6	50.000	50.000
13)	MA Dieldrin	6.133	5.279	123.3E6	140.7E6	50.000	50.000
14)	MA Endrin	6.361	5.554	109.7E6	120.8E6	50.000	50.000
15)	B Endosulfa...	6.580	5.848	108.5E6	110.9E6	50.000	50.000
16)	A 4,4'-DDD	6.504	5.706	94367278	98979716	50.000	50.000
17)	MA 4,4'-DDT	6.816	5.958	105.3E6	109.2E6	50.000	50.000
18)	B Endrin al...	6.709	6.028	84381242	92228794	50.000	50.000
19)	B Endosulfa...	6.943	6.251	105.6E6	119.4E6	50.000	50.000
20)	A Methoxychlor	7.294	6.536	56068977	62174204	50.000	50.000
21)	B Endrin ke...	7.424	6.756	113.2E6	132.2E6	50.000	50.000
22)	Mirex	7.896	6.940	86496872	115.1E6	50.000	50.000

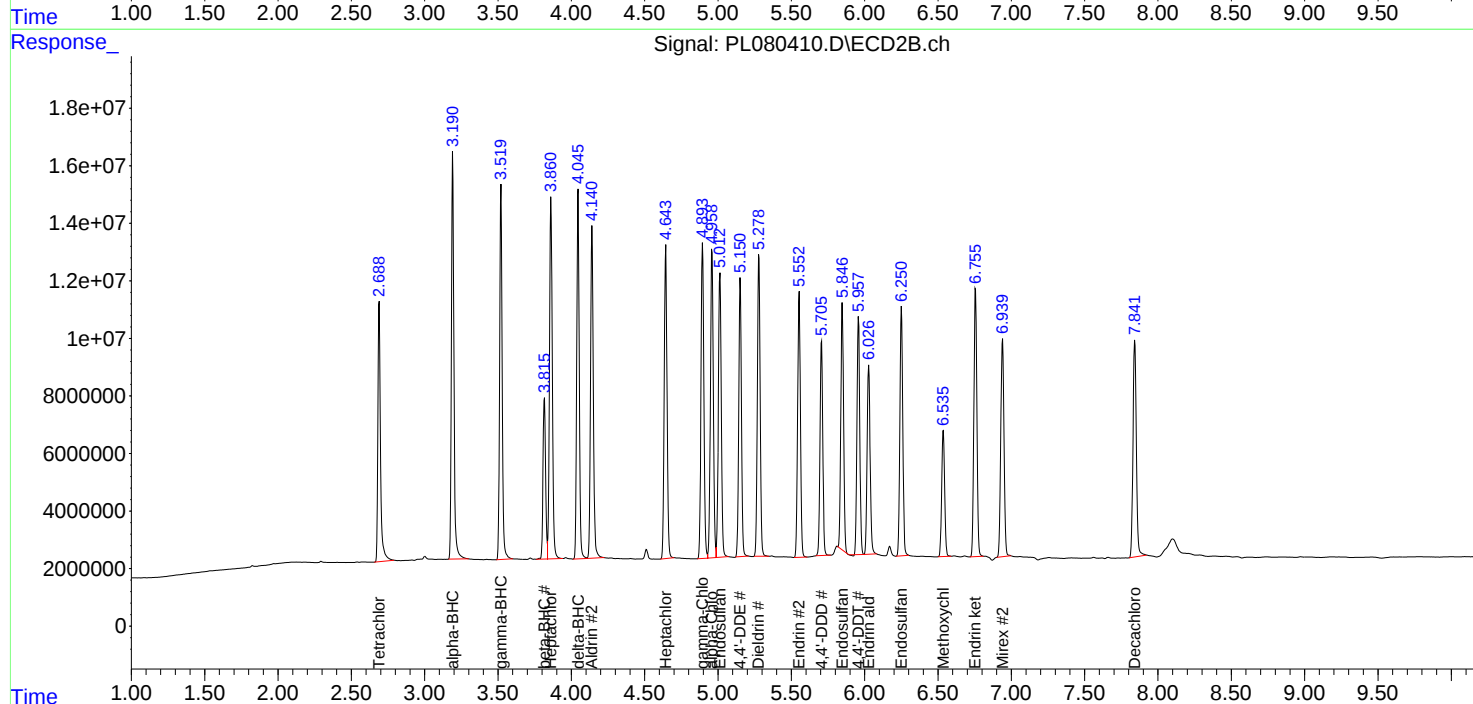
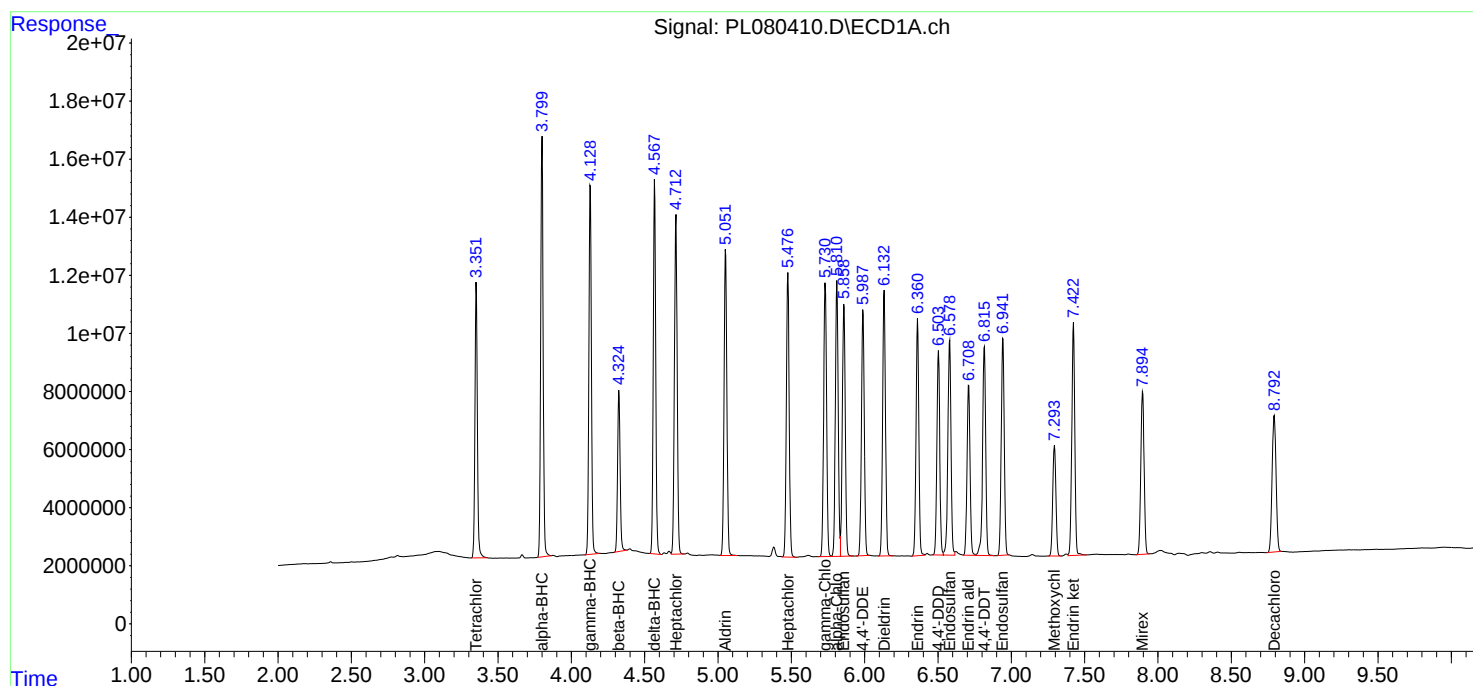
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080410.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 15:08
Operator : AR\AJ
Sample : PSTDICC050
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PSTDICC050

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:09:24 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:09:13 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080411.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 15:22
 Operator : AR\AJ
 Sample : PSTDICC025
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDICC025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:03:32 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:01:50 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	53188507	54368623	24.137	23.928
28)	SA Decachlor...	8.791	7.840	44759298	60452943	25.425	25.409
Target Compounds							
2)	A alpha-BHC	3.800	3.191	75250181	74889284	22.624	22.323
3)	MA gamma-BHC...	4.129	3.520	70927661	71214114	23.010	22.651
4)	MA Heptachlor	4.713	3.860	72445868	77015000	23.824	23.270
5)	MB Aldrin	5.051	4.140	65953669	70400601	23.487	22.824
6)	B beta-BHC	4.325	3.816	33623679	33124139	24.779	24.228
7)	B delta-BHC	4.568	4.045	68982384	68148551	22.905	22.320
8)	B Heptachlo...	5.476	4.643	63183216	67718145	24.142	23.582
9)	A Endosulfan I	5.858	5.012	57944430	63396466	24.060	23.506
10)	B gamma-Chl...	5.731	4.894	61643262	68540813	23.775	23.365
11)	B alpha-Chl...	5.810	4.958	61992861	69639529	24.009	23.628
12)	B 4,4'-DDE	5.988	5.151	53544911	55721716	23.263	22.517
13)	MA Dieldrin	6.133	5.278	58231995	64637479	23.614	22.968
14)	MA Endrin	6.359	5.552	51999815	56233217	23.699	23.272
15)	B Endosulfa...	6.578	5.846	55594538	50676266	25.618	22.845
16)	A 4,4'-DDD	6.502	5.705	44555956	44970607	23.608	22.717
17)	MA 4,4'-DDT	6.815	5.957	50764649	50258684	24.111	23.012
18)	B Endrin al...	6.708	6.027	41590958	45082226	24.645	24.440
19)	B Endosulfa...	6.942	6.250	51479399	57268005	24.385	23.991
20)	A Methoxychlor	7.293	6.535	27998549	30565170	24.968	24.580
21)	B Endrin ke...	7.421	6.755	54657942	62931883	24.151	23.802
22)	Mirex	7.893	6.938	44232710	58205264	25.569	25.289

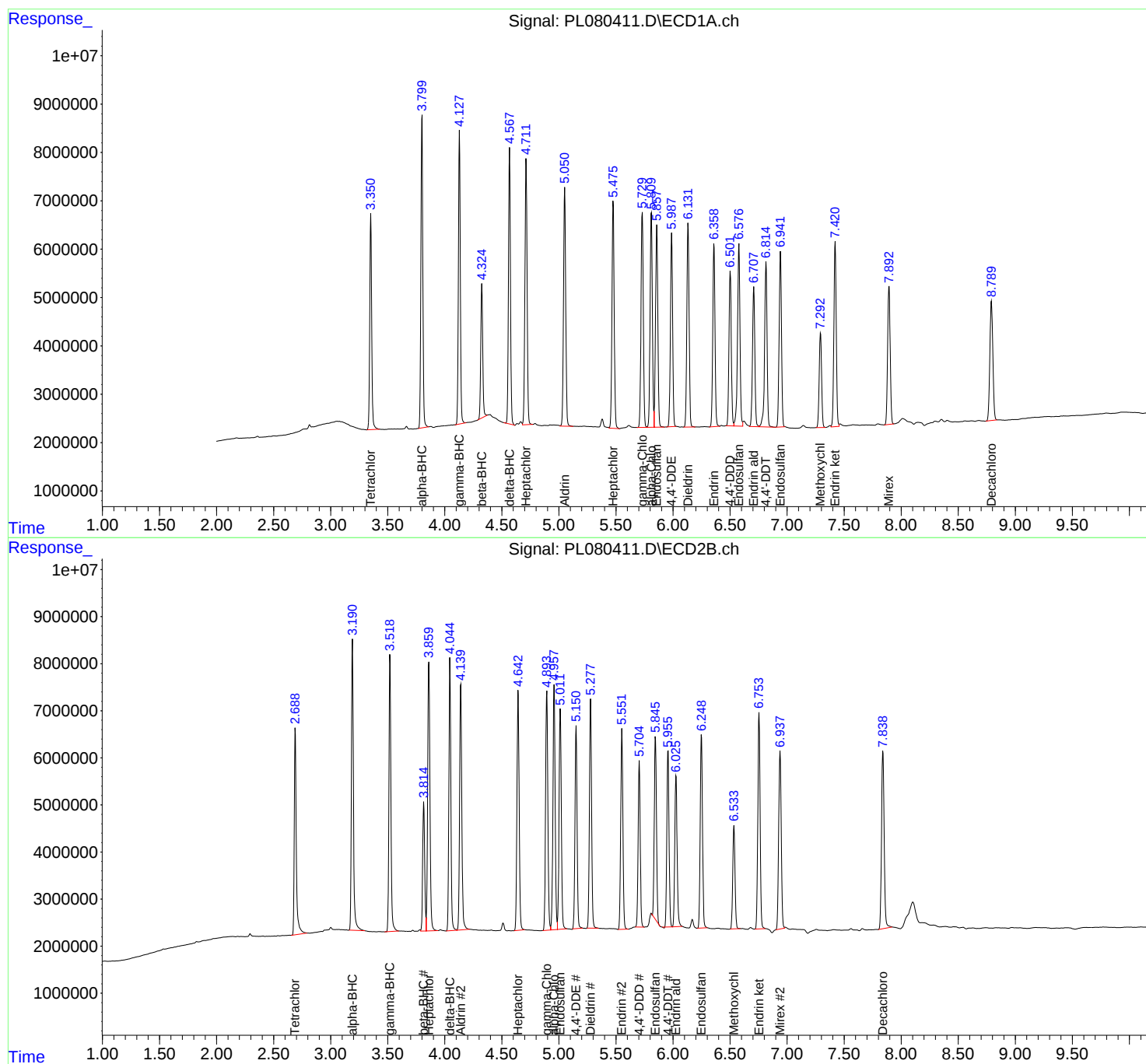
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080411.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 15:22
Operator : AR\AJ
Sample : PSTDICC025
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PSTDICC025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:03:32 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:01:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080412.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 15:36
 Operator : AR\AJ
 Sample : PSTDICC005
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDICC005

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:03:45 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:01:50 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.352	2.689	10288432	10294474	4.669	4.531
28) SA Decachlor...	8.791	7.840	9260735	12972064	5.260	5.452
Target Compounds						
2) A alpha-BHC	3.800	3.191	13482141	13244734	4.053	3.948
3) MA gamma-BHC...	4.129	3.520	12817255	12703974	4.158	4.041
4) MA Heptachlor	4.713	3.861	13981008	14365649	4.598	4.341
5) MB Aldrin	5.051	4.140	12906943	12794435	4.596	4.148
6) B beta-BHC	4.326	3.816	7630508	6647467	5.623	4.862
7) B delta-BHC	4.568	4.045	13203887	11993582	4.384	3.928
8) B Heptachlo...	5.477	4.643	13271460	13019550	5.071	4.534
9) A Endosulfan I	5.858	5.012	11709560	11967113	4.862	4.437
10) B gamma-Chl...	5.731	4.894	12142915	12911457	4.683	4.401
11) B alpha-Chl...	5.810	4.958	12309363	13534331	4.767	4.592
12) B 4,4'-DDE	5.988	5.151	10095150	9886329	4.386	3.995
13) MA Dieldrin	6.132	5.278	11197293	11960063	4.541	4.250
14) MA Endrin	6.359	5.552	10896354	10480247	4.966	4.337
15) B Endosulfa...	6.576	5.845	14368339	8645323	6.621m	3.897m#
16) A 4,4'-DDD	6.502	5.704	8613695	7820439	4.564	3.951m
17) MA 4,4'-DDT	6.815	5.955	10306598	9109135	4.895	4.171m
18) B Endrin al...	6.708	6.028	8523862	9306116	5.051	5.045
19) B Endosulfa...	6.941	6.250	10353055	11242263	4.904	4.710
20) A Methoxychlor	7.293	6.535	5658480	5958670	5.046	4.792
21) B Endrin ke...	7.423	6.755	10858588	12004892	4.798	4.540
22) Mirex	7.894	6.939	9221743	11946182	5.331	5.190

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080412.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 15:36
Operator : AR\AJ
Sample : PSTDICC005
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

PSTDICC005

Manual Integrations

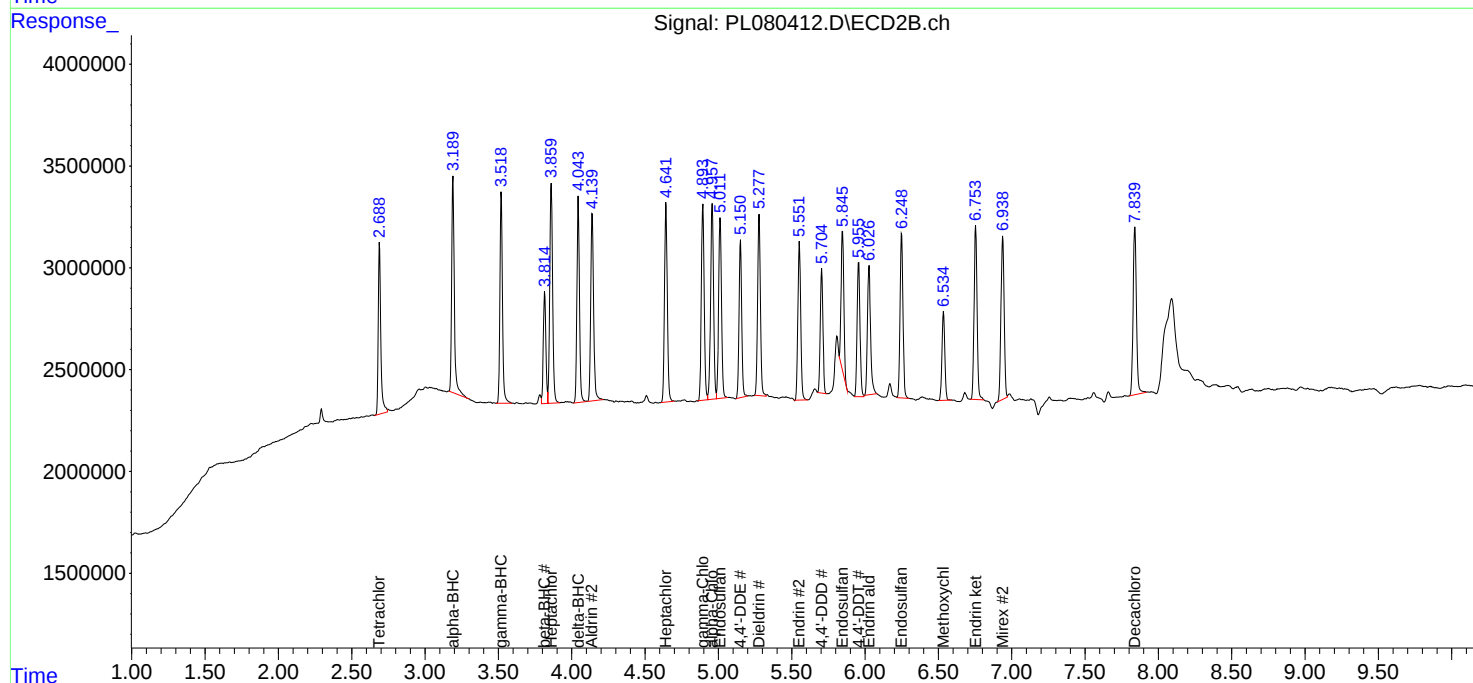
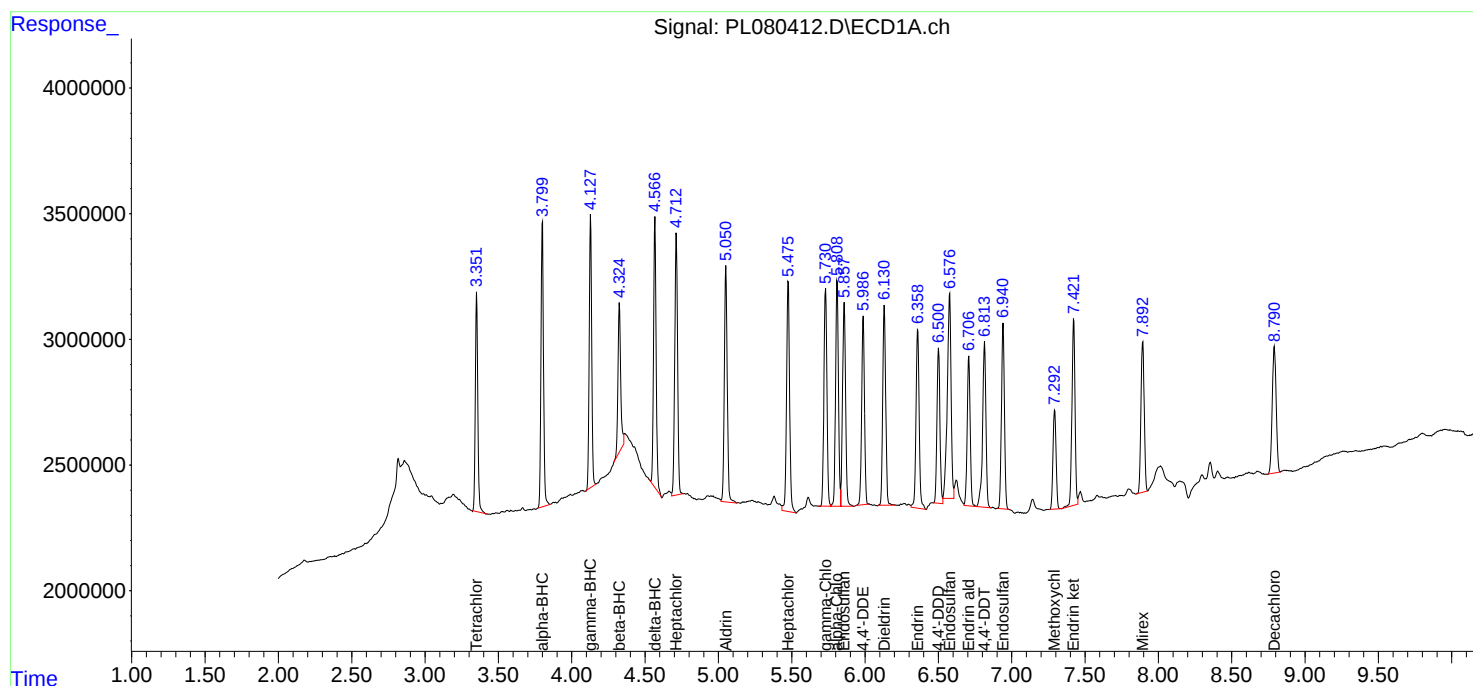
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:03:45 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:01:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080415.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 16:18
 Operator : AR\AJ
 Sample : PCHLORICC500
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PCHLORICC500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 16:53:13 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 16:52:24 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.353	2.690	106.6E6	141.1E6	50.000	50.000
28)	SA Decachlor...	8.792	7.840	99894251	125.3E6	50.000	50.000
Target Compounds							
23)	Chlordane-1	4.500	3.687	44654651	41568591	500.000	500.000
24)	Chlordane-2	5.027	4.264	48243138	45860768	500.000	500.000
25)	Chlordane-3	5.732	4.894	173.5E6	134.3E6	500.000	500.000
26)	Chlordane-4	5.814	4.957	221.5E6	138.1E6	500.000	500.000
27)	Chlordane-5	6.656	5.625	37393004	36077954	500.000	500.000

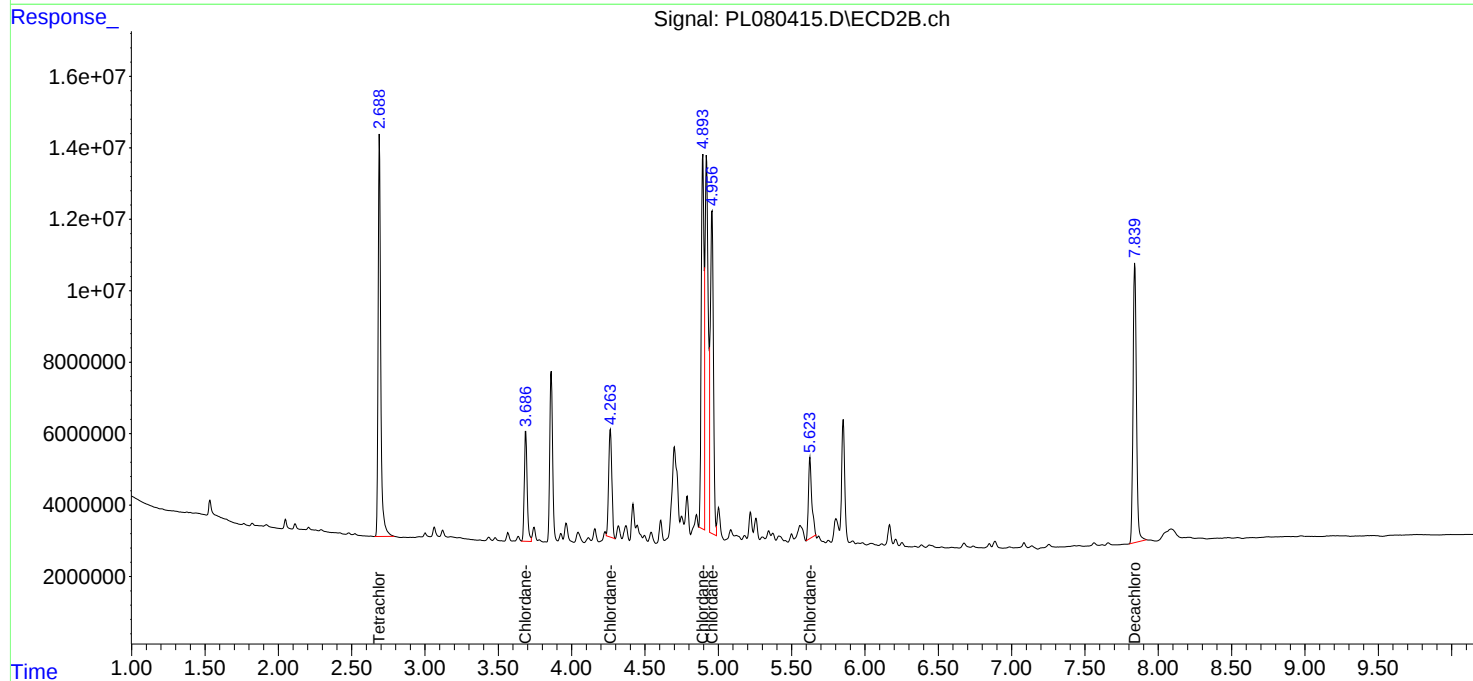
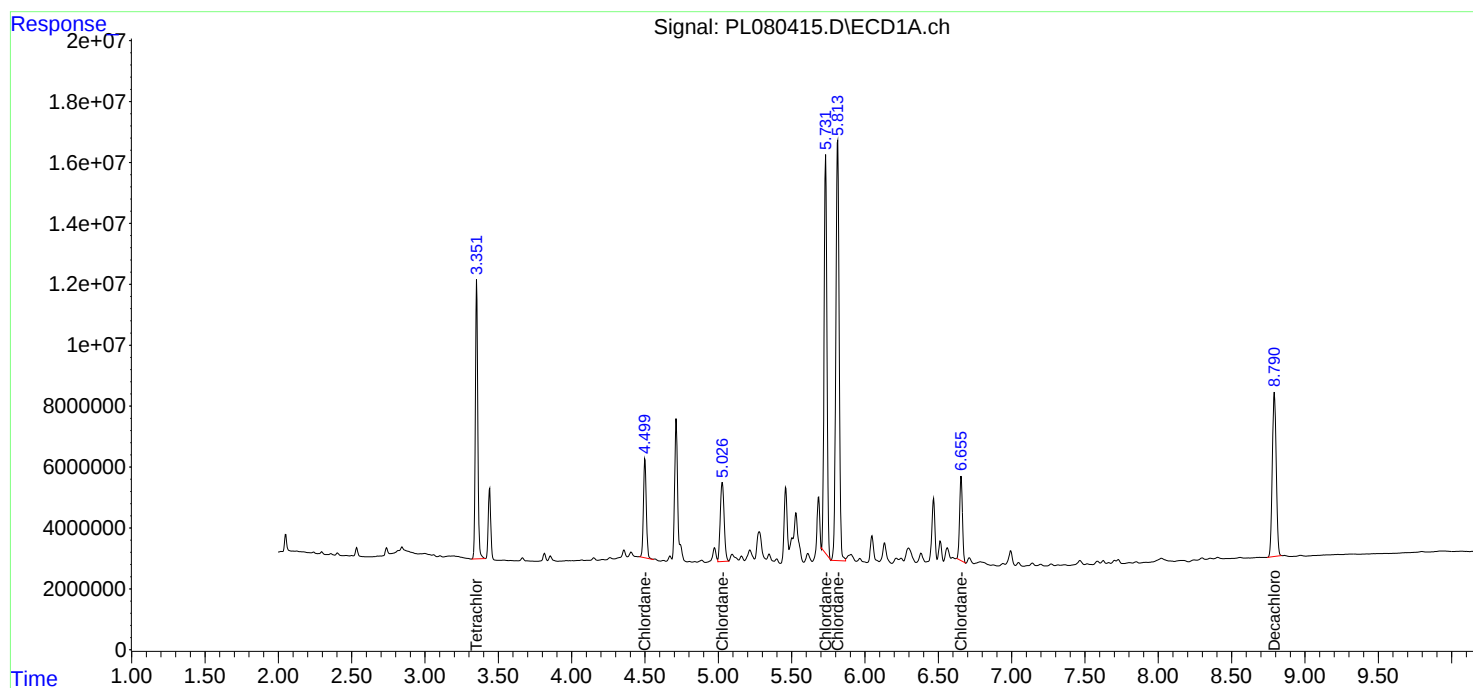
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080415.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 16:18
Operator : AR\AJ
Sample : PCHLORICC500
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PCHLORICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 16:53:13 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 16:52:24 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080420.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 17:27
 Operator : AR\AJ
 Sample : PTOXICC500
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PTOXICC500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 17:40:44 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\LTX012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:40:03 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 µl
 Signal #1 Phase : Rtx-CLPesticide 1 Signal #2 Phase: Rtx-CLPesticide 1
 Signal #1 Info : 30M x 0.32mm x0.3 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
1) SA Tetrachlo...	3.352	2.689	104.2E6	110.2E6	50.000	50.000
7) SA Decachlor...	8.789	7.838	86283730	113.2E6	50.000	50.000
Target Compounds						
2) Toxaphene-1	6.027	5.243	8289856	6921468	500.000	500.000
3) Toxaphene-2	6.843	5.884	33697475	8222283	500.000	500.000
4) Toxaphene-3	6.933	6.517	24261822	26869417	500.000	500.000
5) Toxaphene-4	7.030	6.645	13449429	36690110	500.000	500.000
6) Toxaphene-5	7.351	6.959	18786103	15581994	500.000	500.000

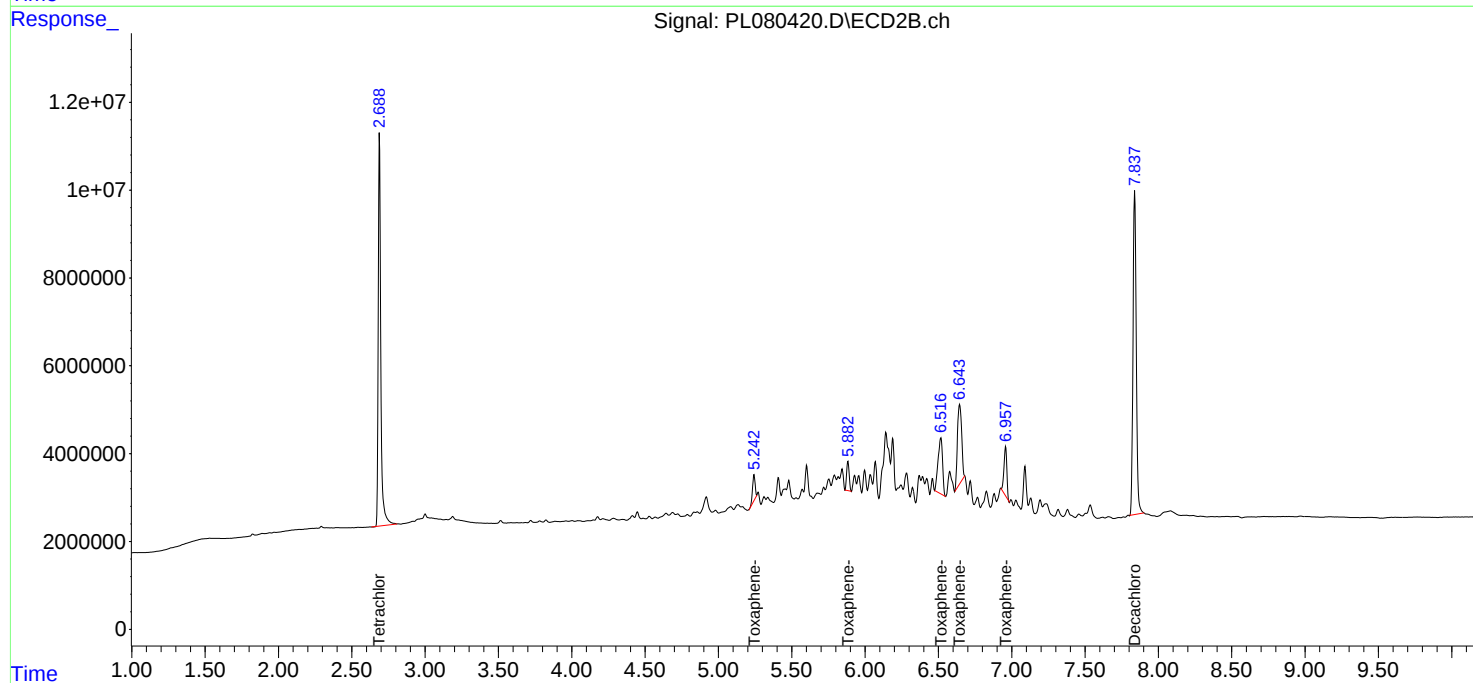
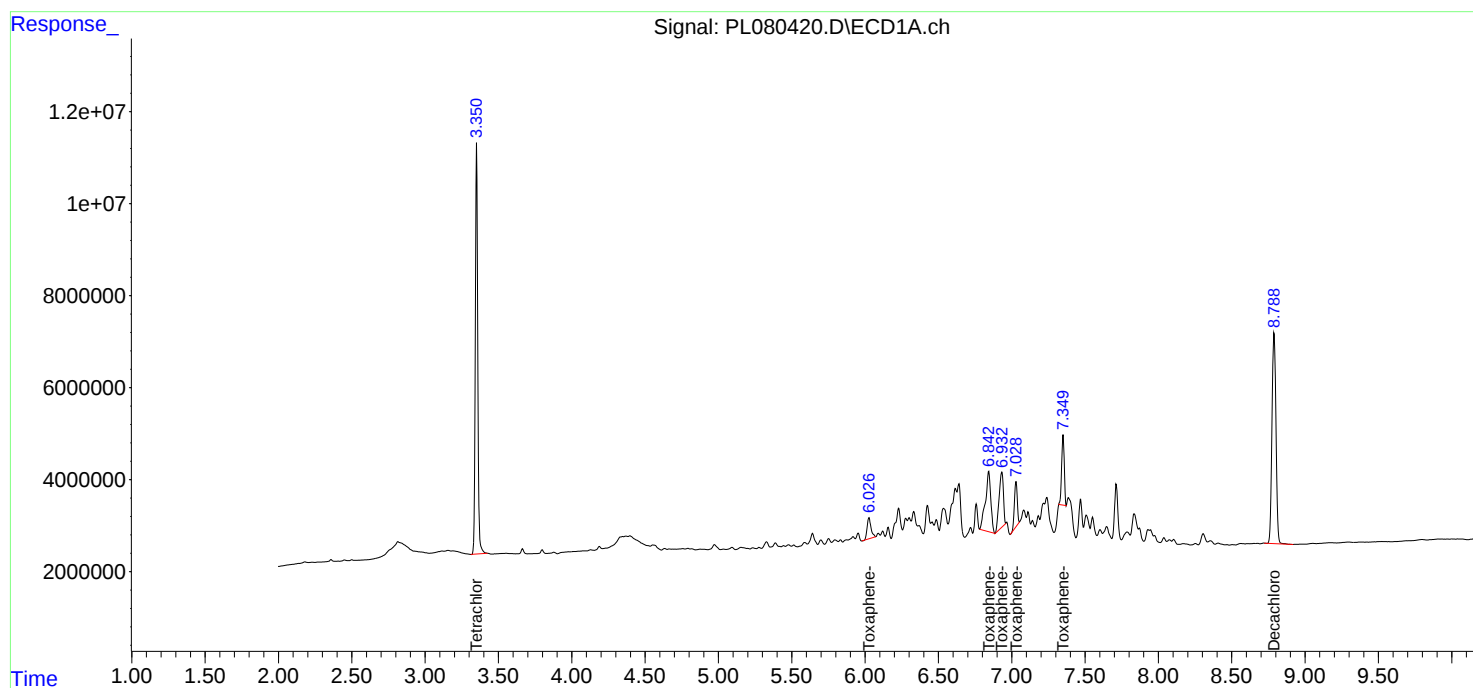
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080420.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 17:27
Operator : AR\AJ
Sample : PTOXICC500
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PTOXICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 20 17:40:44 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\LTX012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:40:03 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 µl
Signal #1 Phase : Rtx-CLPesticide 1 Signal #2 Phase: Rtx-CLPesticide 1
Signal #1 Info : 30M x 0.32mm x0.3 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080423.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 18:09
 Operator : AR\AJ
 Sample : PSTDICV050
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 ICVPL012023

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 18:22:25 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	107.9E6	113.2E6	50.321	51.529
28)	SA Decachlor...	8.790	7.840	85755776	115.0E6	48.982	48.249
Target Compounds							
2)	A alpha-BHC	3.800	3.191	163.3E6	167.2E6	51.535	52.558
3)	MA gamma-BHC...	4.128	3.520	151.8E6	155.9E6	51.648	52.181
4)	MA Heptachlor	4.713	3.861	150.2E6	163.8E6	50.835	51.473
5)	MB Aldrin	5.051	4.141	138.5E6	152.9E6	50.611	51.829
6)	B beta-BHC	4.324	3.815	67356846	67193785	49.345	50.346
7)	B delta-BHC	4.568	4.045	148.7E6	150.0E6	51.358	52.006
8)	B Heptachlo...	5.476	4.643	128.2E6	142.4E6	49.564	51.162
9)	A Endosulfan I	5.857	5.012	117.7E6	132.6E6	49.841	50.977
10)	B gamma-Chl...	5.729	4.895	127.5E6	144.0E6	50.491m	50.810
11)	B alpha-Chl...	5.809	4.958	126.4E6	144.9E6	50.072	50.592
12)	B 4,4'-DDE	5.987	5.151	112.7E6	120.5E6	50.605	51.091
13)	MA Dieldrin	6.132	5.278	120.8E6	138.4E6	50.459	51.178
14)	MA Endrin	6.359	5.552	107.6E6	120.3E6	49.772	51.840
15)	B Endosulfa...	6.578	5.845	99650266	109.3E6	43.471	52.451m
16)	A 4,4'-DDD	6.502	5.705	90578353	96310151	49.443	51.251
17)	MA 4,4'-DDT	6.814	5.956	101.2E6	107.9E6	48.703	51.325
18)	B Endrin al...	6.707	6.026	80868833	90116594	48.616	49.349
19)	B Endosulfa...	6.941	6.249	103.1E6	116.3E6	49.820	49.988
20)	A Methoxychlor	7.292	6.535	54443671	60228389	49.347	49.633
21)	B Endrin ke...	7.421	6.755	109.2E6	128.3E6	49.501	50.266
22)	Mirex	7.893	6.938	84610848	113.5E6	49.198	49.852

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080423.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 18:09
 Operator : AR\AJ
 Sample : PSTDICV050
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

ICVPL012023

Manual Integrations

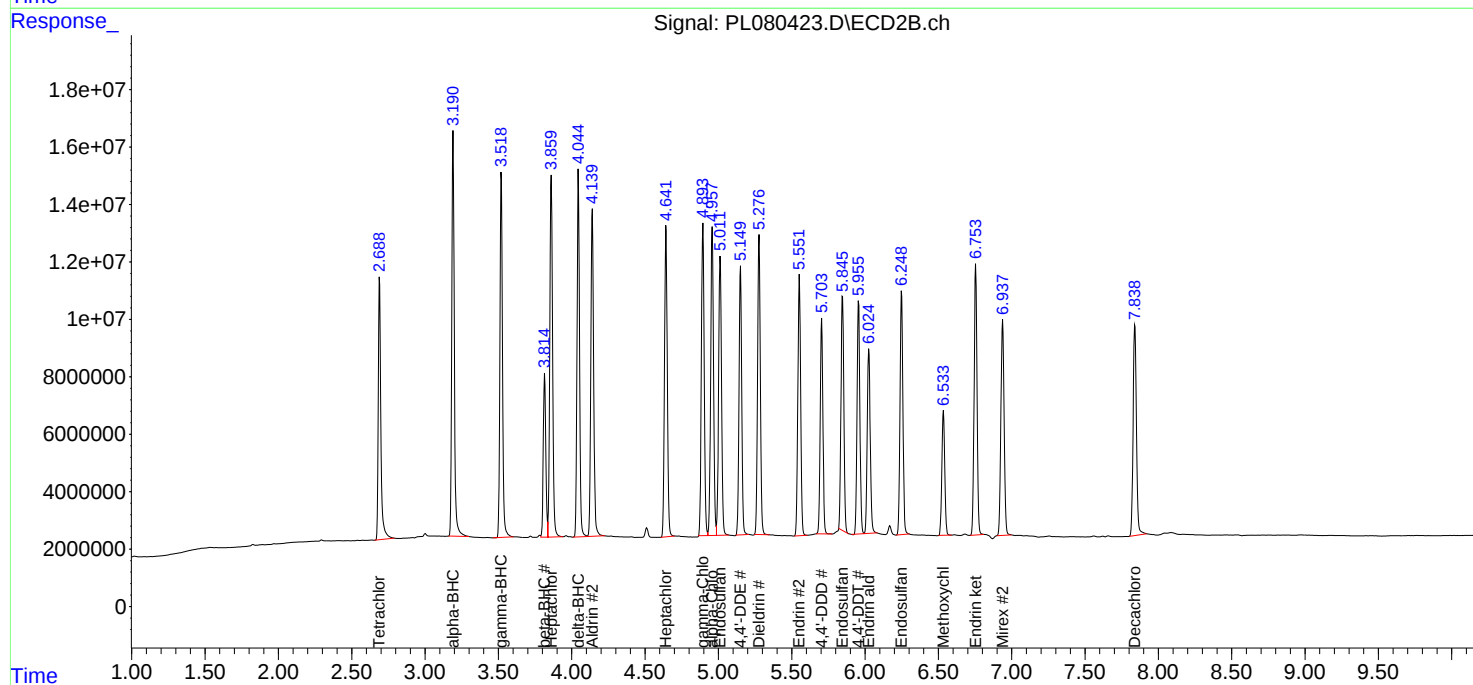
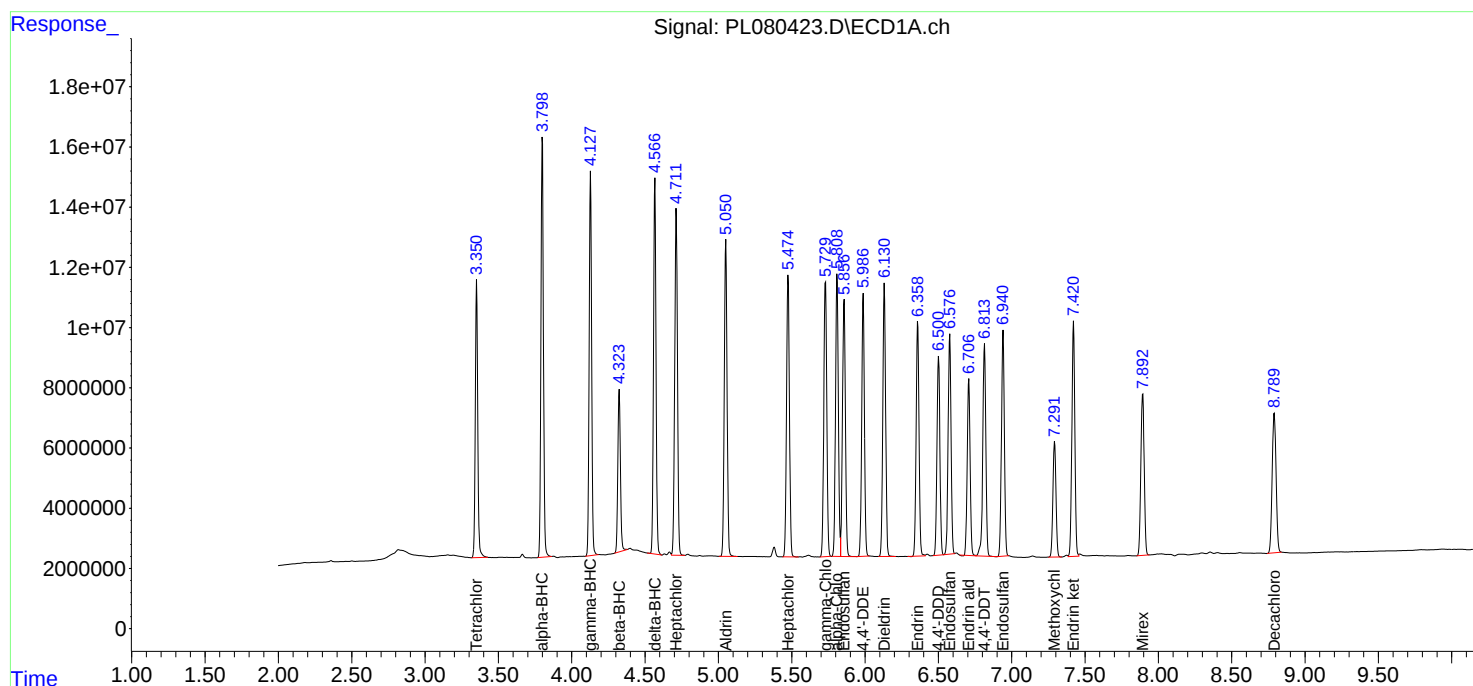
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 20 18:22:25 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080424.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 18:37
 Operator : AR\AJ
 Sample : PCHLORICV500
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 ICVPL012023CHLOR

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 22 23:57:34 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Sun Jan 22 23:55:33 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	107.8E6	138.9E6	51.539	51.511
28)	SA Decachlor...	8.788	7.838	87300597	118.5E6	47.759	48.528
Target Compounds							
23)	Chlordane-1	4.499	3.686	45135118	42034961	529.883	516.229
24)	Chlordane-2	5.026	4.263	49295336	46601630	511.100	516.888
25)	Chlordane-3	5.731	4.894	175.2E6	136.5E6	518.581	517.708
26)	Chlordane-4	5.813	4.957	223.1E6	138.7E6	517.138	515.053
27)	Chlordane-5	6.655	5.625	37315066	37544445	529.806	527.639

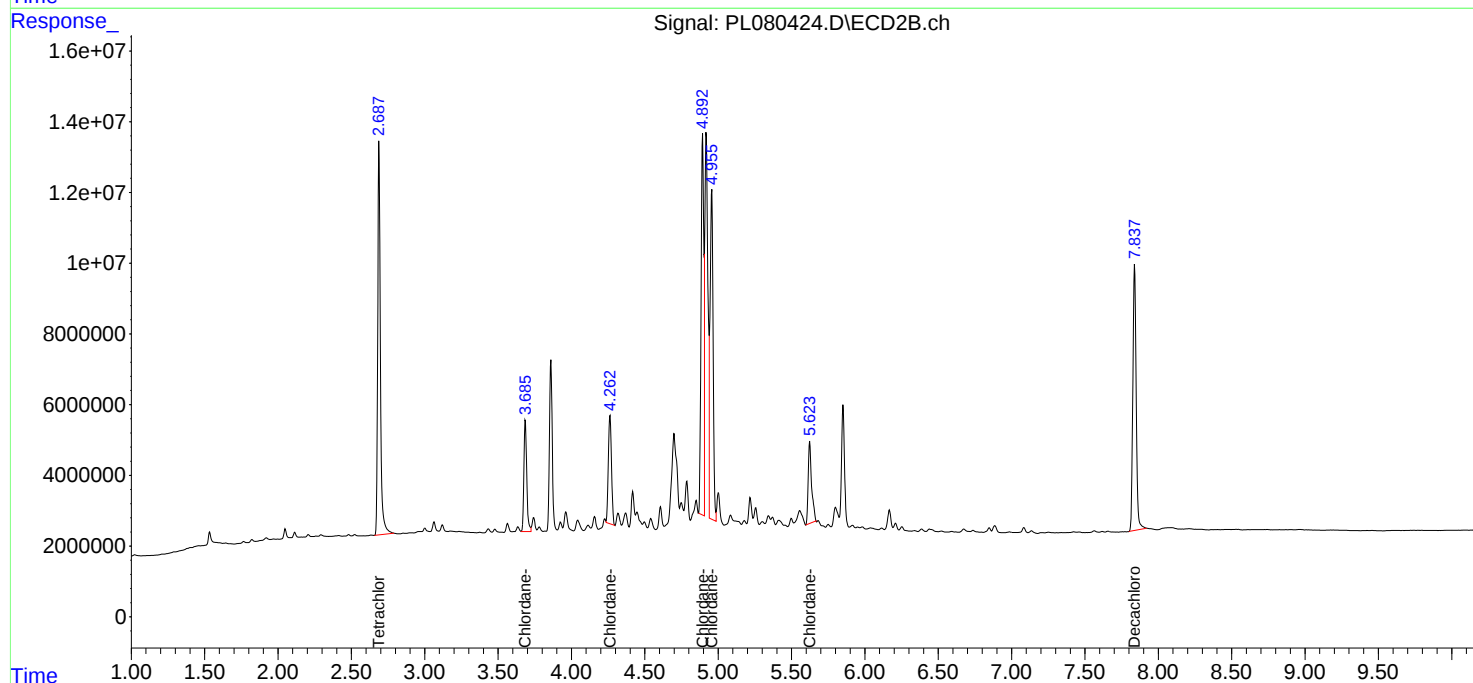
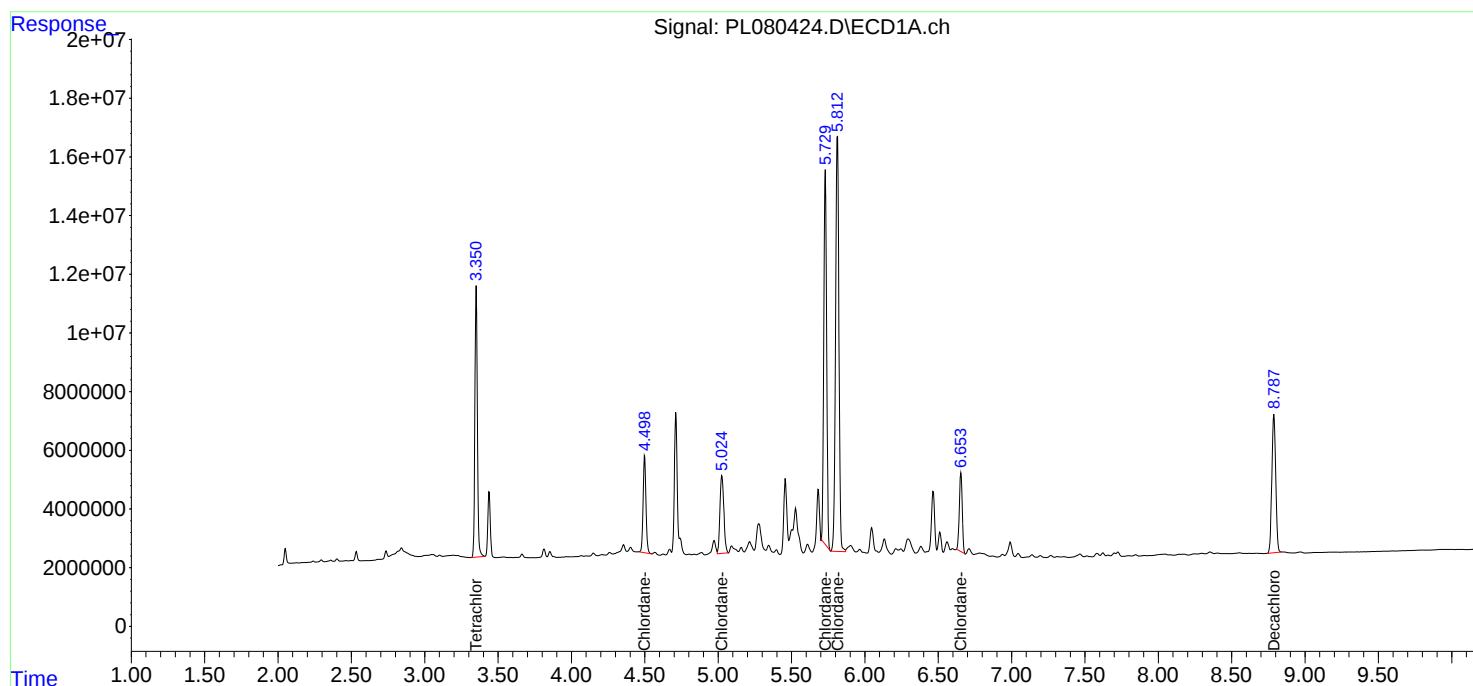
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080424.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 18:37
Operator : AR\AJ
Sample : PCHLORICV500
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
ICVPL012023CHLOR

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 22 23:57:34 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Sun Jan 22 23:55:33 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080425.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 19:04
 Operator : AR\AJ
 Sample : PTOXICV500
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 ICVPL012023TOX

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 22 23:51:23 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\LTX012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 18:13:48 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 2 µl
 Signal #1 Phase : Rtx-CLPesticide 1 Signal #2 Phase: Rtx-CLPesticide 1
 Signal #1 Info : 30M x 0.32mm x0.3 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	104.5E6	110.5E6	51.281	51.437
7)	SA Decachlor...	8.791	7.840	85137765	112.6E6	49.557	49.724
Target Compounds							
2)	Toxaphene-1	6.028	5.243	8513866	7005720	525.606	514.599
3)	Toxaphene-2	6.844	5.884	33879698	8417053	510.593	531.160
4)	Toxaphene-3	6.932	6.517	24318394	26945454	510.781	529.273
5)	Toxaphene-4	7.031	6.646	13999764	37356088	527.307	536.912
6)	Toxaphene-5	7.351	6.959	19935393	16040181	542.177	532.792

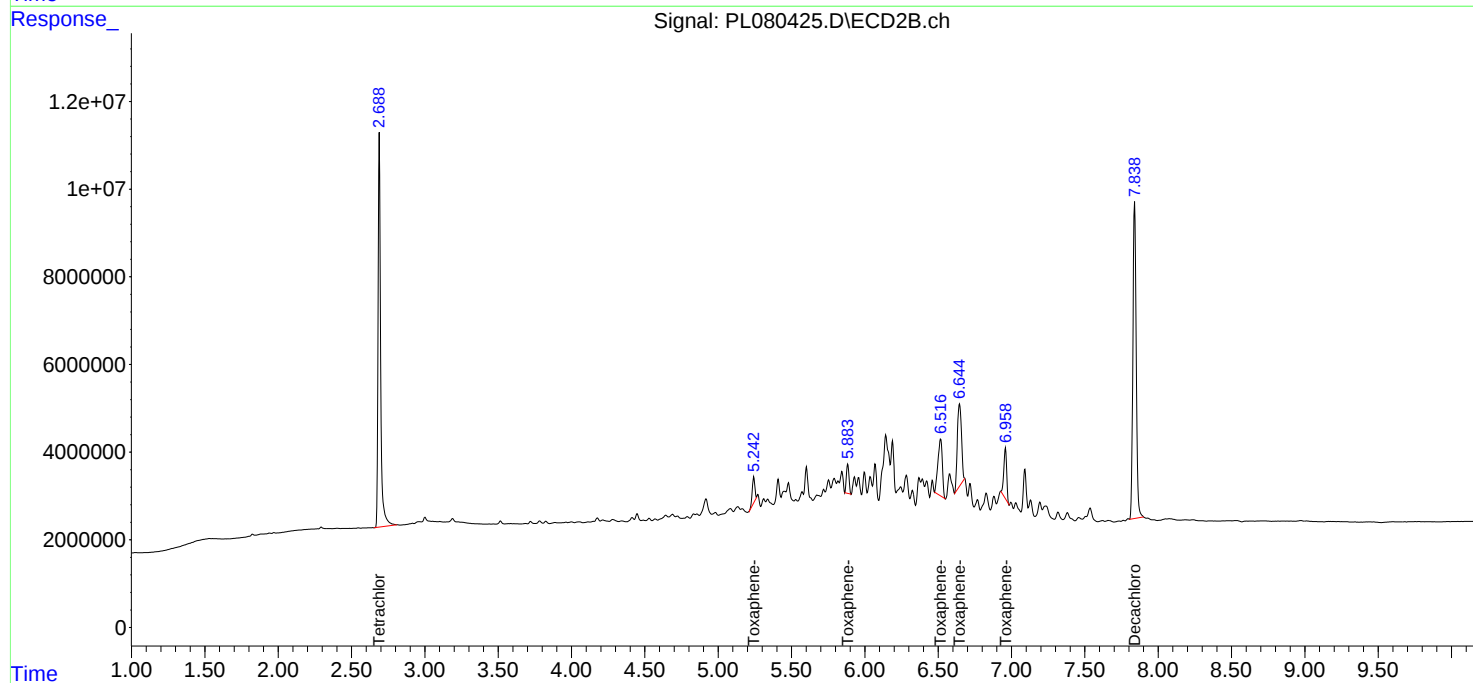
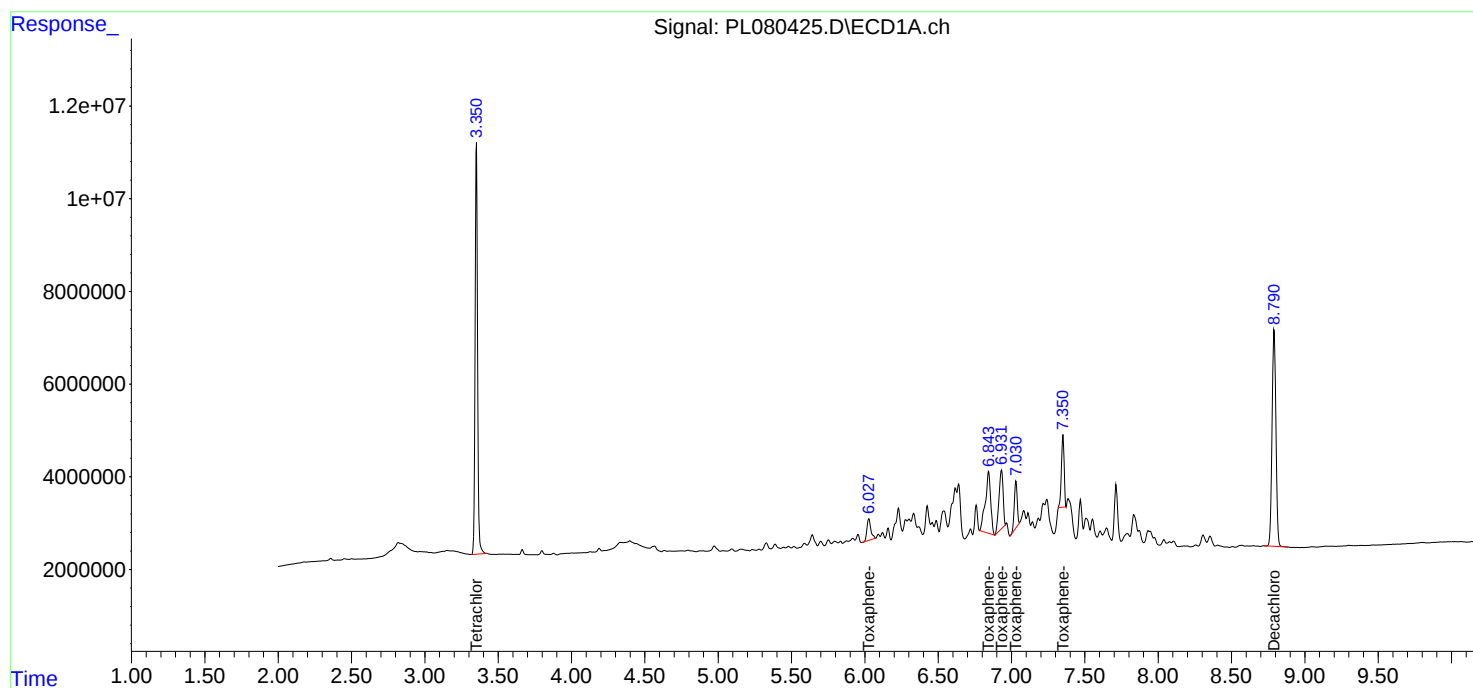
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080425.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 19:04
Operator : AR\AJ
Sample : PTOXICV500
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
ICVPL012023TOX

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 22 23:51:23 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\LTX012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 18:13:48 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 2 µl
Signal #1 Phase : Rtx-CLPesticide 1 Signal #2 Phase: Rtx-CLPesticide 1
Signal #1 Info : 30M x 0.32mm x0.3 Signal #2 Info : 30M x 0.32mm x 0.25µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/20/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 20:00 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	8.79	8.79	8.69	8.89	0.00
Tetrachloro-m-xylene	3.35	3.35	3.25	3.45	0.00
alpha-BHC	3.80	3.80	3.70	3.90	0.00
beta-BHC	4.33	4.33	4.23	4.43	0.01
delta-BHC	4.57	4.57	4.47	4.67	0.00
gamma-BHC (Lindane)	4.13	4.13	4.03	4.23	0.00
Heptachlor	4.71	4.71	4.61	4.81	0.00
Aldrin	5.05	5.05	4.95	5.15	0.00
Heptachlor epoxide	5.48	5.48	5.38	5.58	0.01
Endosulfan I	5.86	5.86	5.76	5.96	0.00
Dieldrin	6.13	6.13	6.03	6.23	0.00
4,4'-DDE	5.99	5.99	5.89	6.09	0.00
Endrin	6.36	6.36	6.26	6.46	0.00
Endosulfan II	6.58	6.58	6.48	6.68	0.00
4,4'-DDD	6.50	6.50	6.40	6.60	0.00
Endosulfan sulfate	6.94	6.94	6.84	7.04	0.00
4,4'-DDT	6.82	6.82	6.72	6.92	0.00
Methoxychlor	7.29	7.29	7.19	7.39	0.00
Endrin ketone	7.42	7.42	7.32	7.52	0.00
Endrin aldehyde	6.71	6.71	6.61	6.81	0.00
alpha-Chlordane	5.81	5.81	5.71	5.91	0.00
gamma-Chlordane	5.73	5.73	5.63	5.83	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/20/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 20:00 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	7.84	7.84	7.74	7.94	0.00
Tetrachloro-m-xylene	2.69	2.69	2.59	2.79	0.00
alpha-BHC	3.19	3.19	3.09	3.29	0.00
beta-BHC	3.82	3.82	3.72	3.92	0.00
delta-BHC	4.05	4.05	3.95	4.15	0.00
gamma-BHC (Lindane)	3.52	3.52	3.42	3.62	0.00
Heptachlor	3.86	3.86	3.76	3.96	0.00
Aldrin	4.14	4.14	4.04	4.24	0.00
Heptachlor epoxide	4.64	4.64	4.54	4.74	0.00
Endosulfan I	5.01	5.01	4.91	5.11	0.00
Dieldrin	5.28	5.28	5.18	5.38	0.00
4,4'-DDE	5.15	5.15	5.05	5.25	0.00
Endrin	5.55	5.55	5.45	5.65	0.00
Endosulfan II	5.85	5.85	5.75	5.95	0.01
4,4'-DDD	5.70	5.71	5.61	5.81	0.01
Endosulfan sulfate	6.25	6.25	6.15	6.35	0.00
4,4'-DDT	5.96	5.96	5.86	6.06	0.01
Methoxychlor	6.53	6.54	6.44	6.64	0.01
Endrin ketone	6.75	6.76	6.66	6.86	0.01
Endrin aldehyde	6.03	6.03	5.93	6.13	0.00
alpha-Chlordane	4.96	4.96	4.86	5.06	0.00
gamma-Chlordane	4.89	4.90	4.80	5.00	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023Client Sample No.: CCAL01 Date Analyzed: 01/20/2023Lab Sample No.: PSTDCCC050 Data File : PL080428.D Time Analyzed: 20:00

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.501	6.404	6.604	48.270	50.000	-3.5
4,4'-DDE	5.987	5.889	6.089	49.010	50.000	-2.0
4,4'-DDT	6.815	6.716	6.916	47.330	50.000	-5.3
Aldrin	5.051	4.952	5.152	49.400	50.000	-1.2
alpha-BHC	3.800	3.701	3.901	50.520	50.000	1.0
alpha-Chlordane	5.810	5.711	5.911	48.940	50.000	-2.1
beta-BHC	4.325	4.225	4.425	48.490	50.000	-3.0
Decachlorobiphenyl	8.789	8.693	8.893	47.530	50.000	-4.9
delta-BHC	4.568	4.468	4.668	50.330	50.000	0.7
Dieldrin	6.132	6.033	6.233	49.250	50.000	-1.5
Endosulfan I	5.857	5.759	5.959	48.760	50.000	-2.5
Endosulfan II	6.577	6.480	6.680	42.260	50.000	-15.5
Endosulfan sulfate	6.941	6.843	7.043	48.650	50.000	-2.7
Endrin	6.359	6.261	6.461	48.680	50.000	-2.6
Endrin aldehyde	6.707	6.609	6.809	47.960	50.000	-4.1
Endrin ketone	7.421	7.324	7.524	48.690	50.000	-2.6
gamma-BHC (Lindane)	4.129	4.029	4.229	50.730	50.000	1.5
gamma-Chlordane	5.730	5.632	5.832	48.470	50.000	-3.1
Heptachlor	4.713	4.613	4.813	49.780	50.000	-0.4
Heptachlor epoxide	5.475	5.377	5.577	48.460	50.000	-3.1
Methoxychlor	7.292	7.194	7.394	48.170	50.000	-3.7
Tetrachloro-m-xylene	3.352	3.252	3.452	49.310	50.000	-1.4



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023Client Sample No.: CCAL01 Date Analyzed: 01/20/2023Lab Sample No.: PSTDCCC050 Data File : PL080428.D Time Analyzed: 20:00

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.704	5.606	5.806	49.820	50.000	-0.4
4,4'-DDE	5.150	5.052	5.252	49.440	50.000	-1.1
4,4'-DDT	5.955	5.858	6.058	49.440	50.000	-1.1
Aldrin	4.140	4.041	4.241	50.500	50.000	1.0
alpha-BHC	3.191	3.091	3.291	51.440	50.000	2.9
alpha-Chlordane	4.957	4.859	5.059	49.040	50.000	-1.9
beta-BHC	3.815	3.716	3.916	49.090	50.000	-1.8
Decachlorobiphenyl	7.839	7.742	7.942	47.380	50.000	-5.2
delta-BHC	4.045	3.946	4.146	50.630	50.000	1.3
Dieldrin	5.277	5.179	5.379	49.990	50.000	0.0
Endosulfan I	5.012	4.913	5.113	49.610	50.000	-0.8
Endosulfan II	5.845	5.748	5.948	42.630	50.000	-14.7
Endosulfan sulfate	6.248	6.151	6.351	48.840	50.000	-2.3
Endrin	5.551	5.454	5.654	50.540	50.000	1.1
Endrin aldehyde	6.026	5.928	6.128	47.890	50.000	-4.2
Endrin ketone	6.754	6.656	6.856	49.490	50.000	-1.0
gamma-BHC (Lindane)	3.519	3.420	3.620	51.000	50.000	2.0
gamma-Chlordane	4.893	4.795	4.995	48.920	50.000	-2.2
Heptachlor	3.860	3.762	3.962	50.210	50.000	0.4
Heptachlor epoxide	4.642	4.544	4.744	49.890	50.000	-0.2
Methoxychlor	6.534	6.436	6.636	48.220	50.000	-3.6
Tetrachloro-m-xylene	2.690	2.590	2.790	50.300	50.000	0.6

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080428.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 20:00
 Operator : AR\AJ
 Sample : PSTDCCC050
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDCCC050

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:11:58 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	105.8E6	110.5E6	49.311	50.296
2)	SA Decachlor...	8.789	7.839	83207085	112.9E6	47.526	47.383
Target Compounds							
2)	A alpha-BHC	3.800	3.191	160.0E6	163.6E6	50.515	51.440
3)	MA gamma-BHC...	4.129	3.519	149.1E6	152.4E6	50.726	51.001
4)	MA Heptachlor	4.713	3.860	147.1E6	159.8E6	49.781	50.207
5)	MB Aldrin	5.051	4.140	135.1E6	148.9E6	49.400	50.498
6)	B beta-BHC	4.325	3.815	66194305	65519869	48.493	49.092
7)	B delta-BHC	4.568	4.045	145.7E6	146.0E6	50.332	50.628
8)	B Heptachlo...	5.475	4.642	125.4E6	138.8E6	48.458	49.887
9)	A Endosulfan I	5.857	5.012	115.2E6	129.0E6	48.763	49.609
10)	B gamma-Chl...	5.730	4.893	122.4E6	138.6E6	48.465	48.919
11)	B alpha-Chl...	5.810	4.957	123.5E6	140.5E6	48.939	49.037
12)	B 4,4'-DDE	5.987	5.150	109.2E6	116.6E6	49.006	49.439
13)	MA Dieldrin	6.132	5.277	117.9E6	135.2E6	49.254	49.990
14)	MA Endrin	6.359	5.551	105.3E6	117.3E6	48.678	50.545
15)	B Endosulfa...	6.577	5.845	96873972	88823360	42.260	42.627
16)	A 4,4'-DDD	6.501	5.704	88428992	93627128	48.269	49.823
17)	MA 4,4'-DDT	6.815	5.955	98340547	103.9E6	47.332	49.436
18)	B Endrin al...	6.707	6.026	79773004	87457342	47.958	47.893
19)	B Endosulfa...	6.941	6.248	100.7E6	113.6E6	48.650	48.838
20)	A Methoxychlor	7.292	6.534	53141374	58508001	48.166	48.216
21)	B Endrin ke...	7.421	6.754	107.4E6	126.3E6	48.691	49.486
22)	Mirex	7.893	6.938	83408247	111.5E6	48.499	48.987

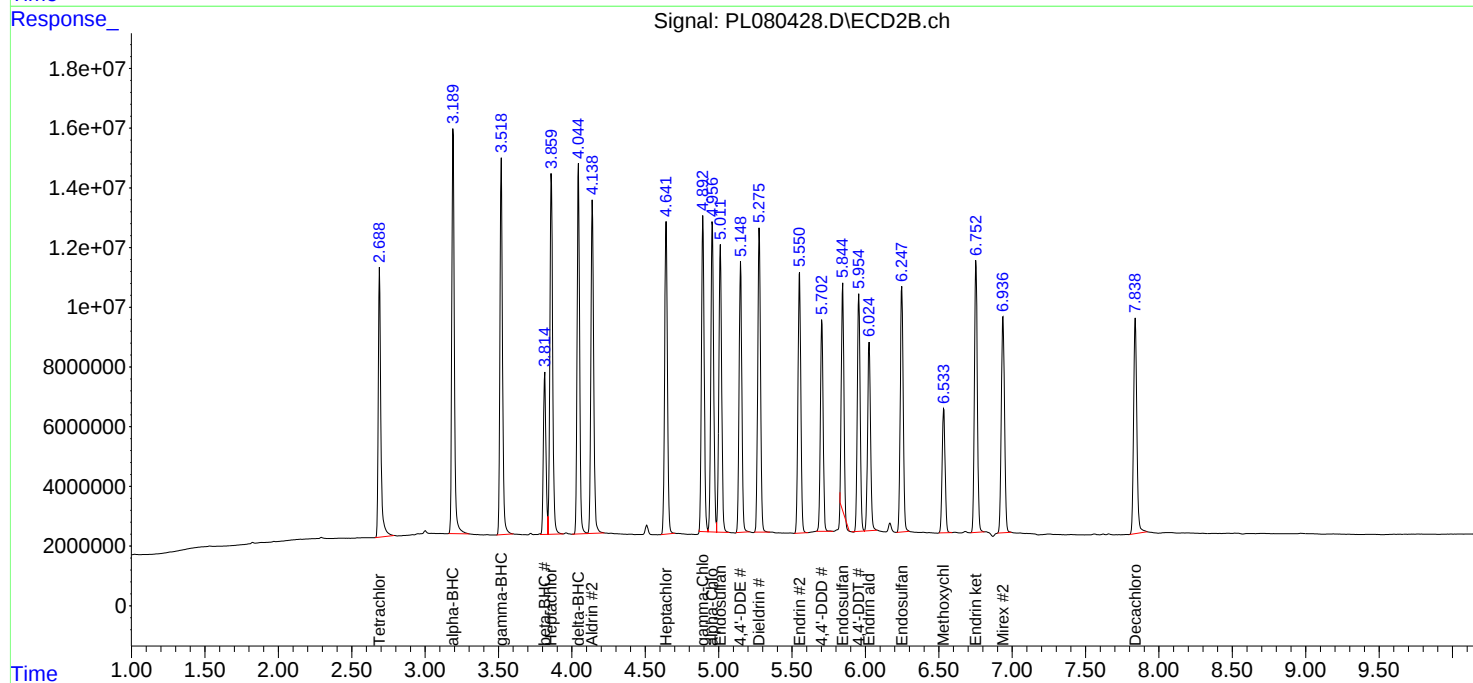
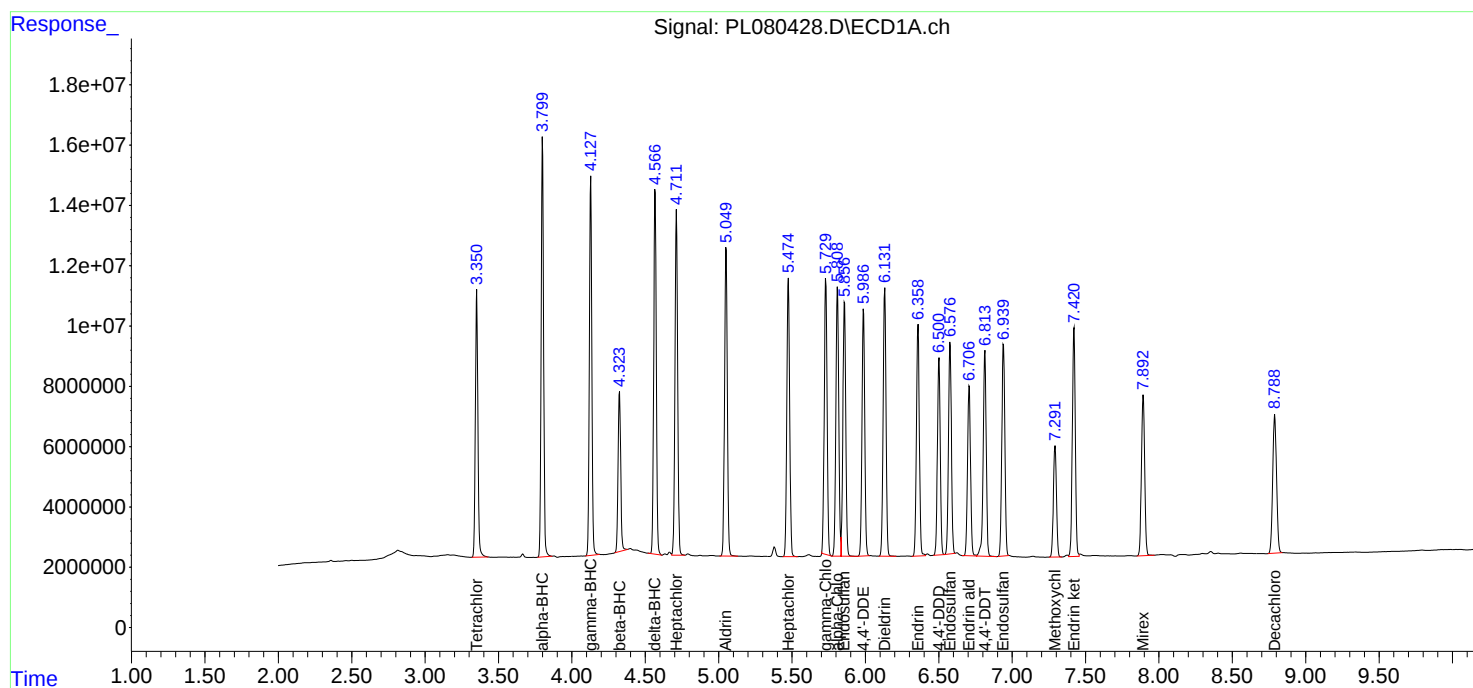
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080428.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 20:00
Operator : AR\AJ
Sample : PSTDCCC050
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PSTDCCC050

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:11:58 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/20/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 23:28 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	8.79	8.79	8.69	8.89	0.00
Tetrachloro-m-xylene	3.35	3.35	3.25	3.45	0.00
alpha-BHC	3.80	3.80	3.70	3.90	0.00
beta-BHC	4.33	4.33	4.23	4.43	0.01
delta-BHC	4.57	4.57	4.47	4.67	0.00
gamma-BHC (Lindane)	4.13	4.13	4.03	4.23	0.00
Heptachlor	4.71	4.71	4.61	4.81	0.00
Aldrin	5.05	5.05	4.95	5.15	0.00
Heptachlor epoxide	5.48	5.48	5.38	5.58	0.00
Endosulfan I	5.86	5.86	5.76	5.96	0.00
Dieldrin	6.13	6.13	6.03	6.23	0.00
4,4'-DDE	5.99	5.99	5.89	6.09	0.00
Endrin	6.36	6.36	6.26	6.46	0.00
Endosulfan II	6.58	6.58	6.48	6.68	0.00
4,4'-DDD	6.50	6.50	6.40	6.60	0.00
Endosulfan sulfate	6.94	6.94	6.84	7.04	0.00
4,4'-DDT	6.81	6.82	6.72	6.92	0.01
Methoxychlor	7.29	7.29	7.19	7.39	0.00
Endrin ketone	7.42	7.42	7.32	7.52	0.00
Endrin aldehyde	6.71	6.71	6.61	6.81	0.00
alpha-Chlordane	5.81	5.81	5.71	5.91	0.00
gamma-Chlordane	5.73	5.73	5.63	5.83	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/20/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 23:28 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	7.84	7.84	7.74	7.94	0.00
Tetrachloro-m-xylene	2.69	2.69	2.59	2.79	0.00
alpha-BHC	3.19	3.19	3.09	3.29	0.00
beta-BHC	3.82	3.82	3.72	3.92	0.00
delta-BHC	4.05	4.05	3.95	4.15	0.00
gamma-BHC (Lindane)	3.52	3.52	3.42	3.62	0.00
Heptachlor	3.86	3.86	3.76	3.96	0.00
Aldrin	4.14	4.14	4.04	4.24	0.00
Heptachlor epoxide	4.64	4.64	4.54	4.74	0.00
Endosulfan I	5.01	5.01	4.91	5.11	0.00
Dieldrin	5.28	5.28	5.18	5.38	0.00
4,4'-DDE	5.15	5.15	5.05	5.25	0.00
Endrin	5.55	5.55	5.45	5.65	0.00
Endosulfan II	5.85	5.85	5.75	5.95	0.00
4,4'-DDD	5.70	5.71	5.61	5.81	0.01
Endosulfan sulfate	6.25	6.25	6.15	6.35	0.00
4,4'-DDT	5.96	5.96	5.86	6.06	0.00
Methoxychlor	6.53	6.54	6.44	6.64	0.01
Endrin ketone	6.75	6.76	6.66	6.86	0.01
Endrin aldehyde	6.03	6.03	5.93	6.13	0.00
alpha-Chlordane	4.96	4.96	4.86	5.06	0.00
gamma-Chlordane	4.89	4.90	4.80	5.00	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023Client Sample No.: CCAL02 Date Analyzed: 01/20/2023Lab Sample No.: PSTDCCC050 Data File : PL080441.D Time Analyzed: 23:28

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.501	6.404	6.604	49.740	50.000	-0.5
4,4'-DDE	5.987	5.889	6.089	50.360	50.000	0.7
4,4'-DDT	6.814	6.716	6.916	48.460	50.000	-3.1
Aldrin	5.051	4.952	5.152	50.590	50.000	1.2
alpha-BHC	3.800	3.701	3.901	51.970	50.000	3.9
alpha-Chlordane	5.810	5.711	5.911	50.070	50.000	0.1
beta-BHC	4.325	4.225	4.425	49.540	50.000	-0.9
Decachlorobiphenyl	8.790	8.693	8.893	48.360	50.000	-3.3
delta-BHC	4.568	4.468	4.668	51.780	50.000	3.6
Dieldrin	6.132	6.033	6.233	50.140	50.000	0.3
Endosulfan I	5.857	5.759	5.959	49.840	50.000	-0.3
Endosulfan II	6.578	6.480	6.680	42.850	50.000	-14.3
Endosulfan sulfate	6.941	6.843	7.043	49.600	50.000	-0.8
Endrin	6.359	6.261	6.461	50.110	50.000	0.2
Endrin aldehyde	6.707	6.609	6.809	48.570	50.000	-2.9
Endrin ketone	7.421	7.324	7.524	49.160	50.000	-1.7
gamma-BHC (Lindane)	4.129	4.029	4.229	52.070	50.000	4.1
gamma-Chlordane	5.729	5.632	5.832	50.420	50.000	0.8
Heptachlor	4.713	4.613	4.813	51.320	50.000	2.6
Heptachlor epoxide	5.476	5.377	5.577	50.250	50.000	0.5
Methoxychlor	7.292	7.194	7.394	49.050	50.000	-1.9
Tetrachloro-m-xylene	3.352	3.252	3.452	50.350	50.000	0.7



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023Client Sample No.: CCAL02 Date Analyzed: 01/20/2023Lab Sample No.: PSTDCCC050 Data File : PL080441.D Time Analyzed: 23:28

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.704	5.606	5.806	50.880	50.000	1.8
4,4'-DDE	5.150	5.052	5.252	50.190	50.000	0.4
4,4'-DDT	5.956	5.858	6.058	50.430	50.000	0.9
Aldrin	4.140	4.041	4.241	51.080	50.000	2.2
alpha-BHC	3.191	3.091	3.291	51.540	50.000	3.1
alpha-Chlordane	4.958	4.859	5.059	49.130	50.000	-1.7
beta-BHC	3.815	3.716	3.916	49.710	50.000	-0.6
Decachlorobiphenyl	7.838	7.742	7.942	47.060	50.000	-5.9
delta-BHC	4.045	3.946	4.146	51.450	50.000	2.9
Dieldrin	5.277	5.179	5.379	49.860	50.000	-0.3
Endosulfan I	5.012	4.913	5.113	49.140	50.000	-1.7
Endosulfan II	5.846	5.748	5.948	45.360	50.000	-9.3
Endosulfan sulfate	6.249	6.151	6.351	48.910	50.000	-2.2
Endrin	5.552	5.454	5.654	50.510	50.000	1.0
Endrin aldehyde	6.026	5.928	6.128	47.660	50.000	-4.7
Endrin ketone	6.754	6.656	6.856	49.070	50.000	-1.9
gamma-BHC (Lindane)	3.519	3.420	3.620	51.170	50.000	2.3
gamma-Chlordane	4.894	4.795	4.995	49.400	50.000	-1.2
Heptachlor	3.860	3.762	3.962	50.430	50.000	0.9
Heptachlor epoxide	4.643	4.544	4.744	49.840	50.000	-0.3
Methoxychlor	6.534	6.436	6.636	48.860	50.000	-2.3
Tetrachloro-m-xylene	2.690	2.590	2.790	50.670	50.000	1.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080441.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 23:28
 Operator : AR\AJ
 Sample : PSTDCCC050
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:18:17 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	108.0E6	111.3E6	50.346	50.674
28)	SA Decachlor...	8.790	7.838	84669230	112.1E6	48.362	47.061
Target Compounds							
2)	A alpha-BHC	3.800	3.191	164.6E6	163.9E6	51.967	51.535
3)	MA gamma-BHC...	4.129	3.519	153.1E6	152.9E6	52.065	51.175
4)	MA Heptachlor	4.713	3.860	151.7E6	160.5E6	51.318	50.433
5)	MB Aldrin	5.051	4.140	138.4E6	150.7E6	50.589	51.084
6)	B beta-BHC	4.325	3.815	67616599	66340945	49.535	49.707
7)	B delta-BHC	4.568	4.045	149.9E6	148.4E6	51.781	51.453
8)	B Heptachlo...	5.476	4.643	130.0E6	138.7E6	50.249	49.836
9)	A Endosulfan I	5.857	5.012	117.7E6	127.8E6	49.840	49.143
10)	B gamma-Chl...	5.729	4.894	127.3E6	140.0E6	50.419m	49.396
11)	B alpha-Chl...	5.810	4.958	126.4E6	140.7E6	50.065	49.132
12)	B 4,4'-DDE	5.987	5.150	112.2E6	118.4E6	50.362	50.189
13)	MA Dieldrin	6.132	5.277	120.0E6	134.9E6	50.144	49.863
14)	MA Endrin	6.359	5.552	108.4E6	117.2E6	50.109	50.509
15)	B Endosulfa...	6.578	5.846	98222849	94520874	42.849	45.361
16)	A 4,4'-DDD	6.501	5.704	91126693	95623128	49.742	50.885
17)	MA 4,4'-DDT	6.814	5.956	100.7E6	106.0E6	48.464	50.430
18)	B Endrin al...	6.707	6.026	80795772	87040737	48.572	47.665
19)	B Endosulfa...	6.941	6.249	102.7E6	113.7E6	49.597	48.909
20)	A Methoxychlor	7.292	6.534	54120755	59284897	49.054	48.856
21)	B Endrin ke...	7.421	6.754	108.5E6	125.3E6	49.165	49.067
22)	Mirex	7.893	6.938	84614334	108.9E6	49.200	47.814

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080441.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 23:28
Operator : AR\AJ
Sample : PSTDCCC050
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

PSTDCCC050

Manual Integrations

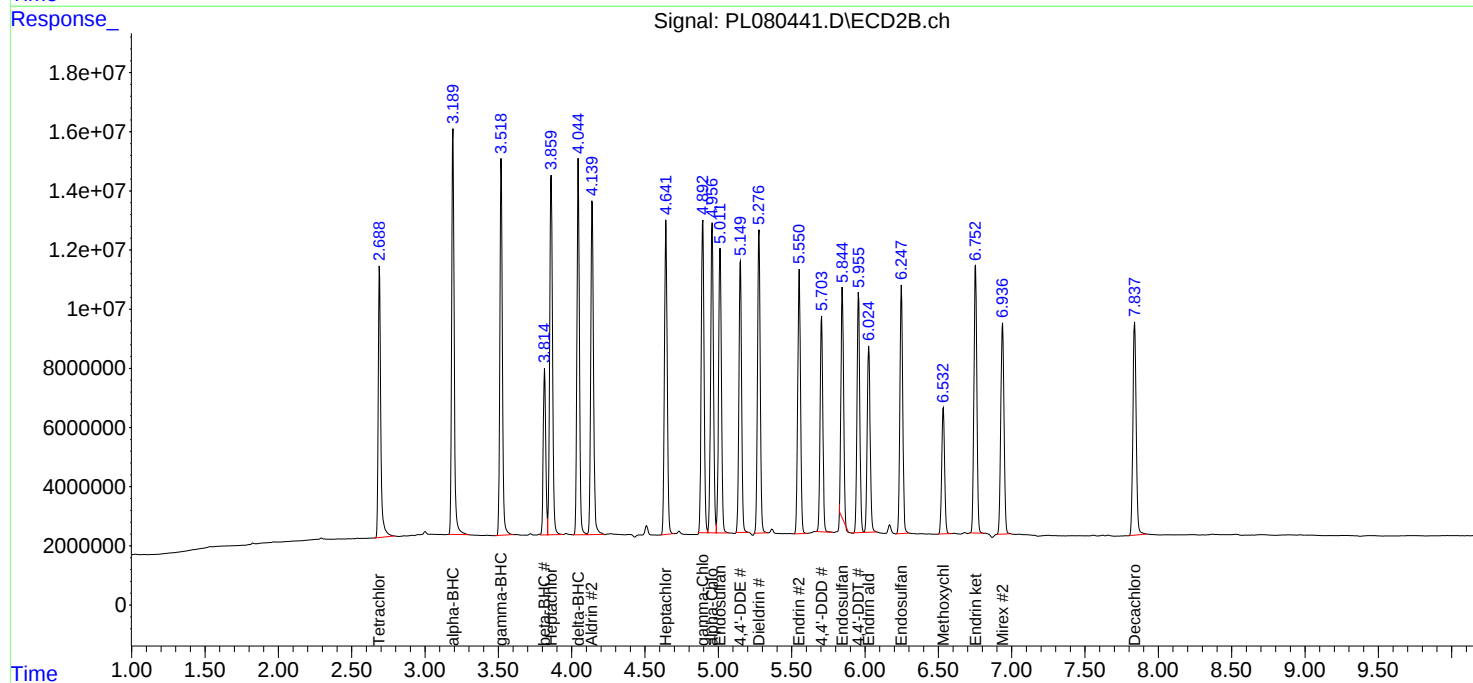
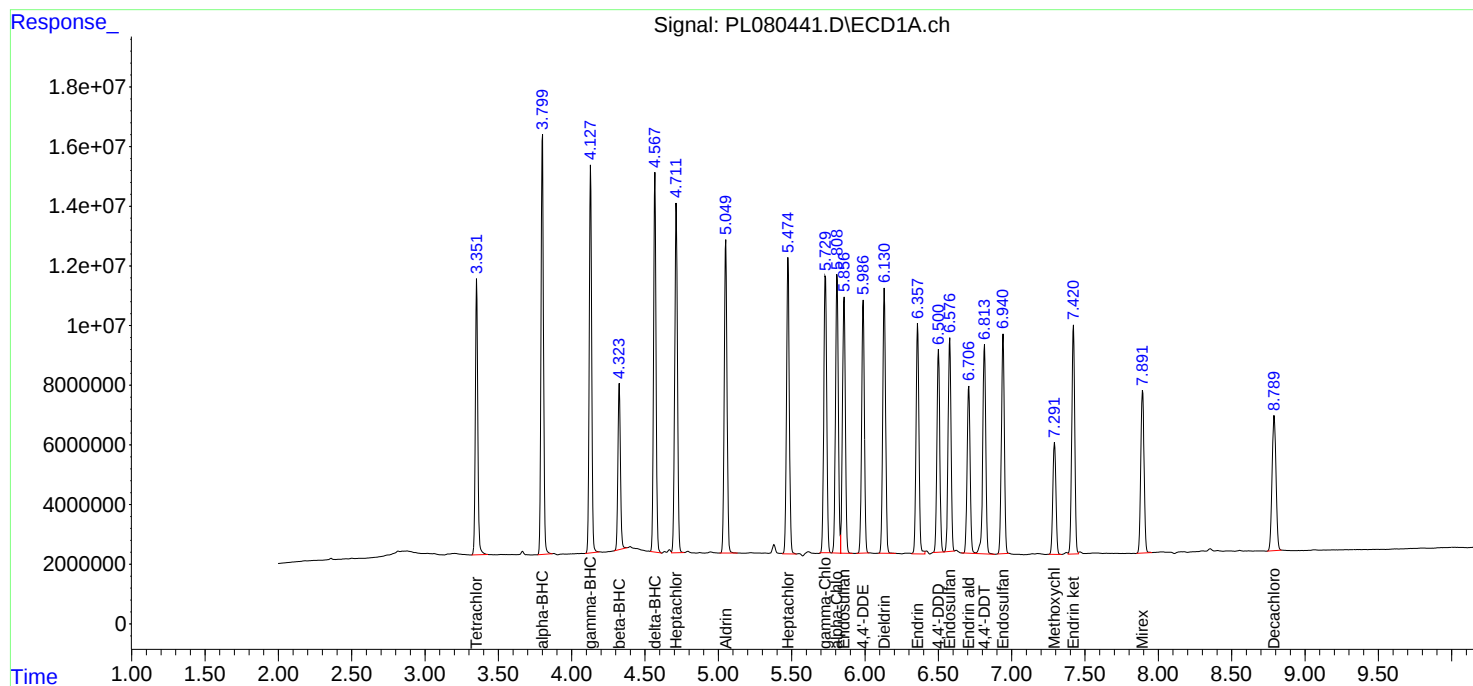
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:18:17 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/21/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 03:10 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	8.79	8.79	8.69	8.89	0.00
Tetrachloro-m-xylene	3.35	3.35	3.25	3.45	0.00
alpha-BHC	3.80	3.80	3.70	3.90	0.00
beta-BHC	4.32	4.33	4.23	4.43	0.01
delta-BHC	4.57	4.57	4.47	4.67	0.00
gamma-BHC (Lindane)	4.13	4.13	4.03	4.23	0.00
Heptachlor	4.71	4.71	4.61	4.81	0.00
Aldrin	5.05	5.05	4.95	5.15	0.00
Heptachlor epoxide	5.48	5.48	5.38	5.58	0.01
Endosulfan I	5.86	5.86	5.76	5.96	0.00
Dieldrin	6.13	6.13	6.03	6.23	0.00
4,4'-DDE	5.99	5.99	5.89	6.09	0.00
Endrin	6.36	6.36	6.26	6.46	0.00
Endosulfan II	6.58	6.58	6.48	6.68	0.00
4,4'-DDD	6.50	6.50	6.40	6.60	0.00
Endosulfan sulfate	6.94	6.94	6.84	7.04	0.00
4,4'-DDT	6.81	6.82	6.72	6.92	0.01
Methoxychlor	7.29	7.29	7.19	7.39	0.00
Endrin ketone	7.42	7.42	7.32	7.52	0.00
Endrin aldehyde	6.71	6.71	6.61	6.81	0.00
alpha-Chlordane	5.81	5.81	5.71	5.91	0.00
gamma-Chlordane	5.73	5.73	5.63	5.83	0.00



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233Continuing Calib Date: 01/21/2023 Initial Calibration Date(s): 01/20/2023 01/20/2023Continuing Calib Time: 03:10 Initial Calibration Time(s): 14:41 15:36GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
Decachlorobiphenyl	7.84	7.84	7.74	7.94	0.00
Tetrachloro-m-xylene	2.69	2.69	2.59	2.79	0.00
alpha-BHC	3.19	3.19	3.09	3.29	0.00
beta-BHC	3.82	3.82	3.72	3.92	0.00
delta-BHC	4.05	4.05	3.95	4.15	0.00
gamma-BHC (Lindane)	3.52	3.52	3.42	3.62	0.00
Heptachlor	3.86	3.86	3.76	3.96	0.00
Aldrin	4.14	4.14	4.04	4.24	0.00
Heptachlor epoxide	4.64	4.64	4.54	4.74	0.00
Endosulfan I	5.01	5.01	4.91	5.11	0.00
Dieldrin	5.28	5.28	5.18	5.38	0.00
4,4'-DDE	5.15	5.15	5.05	5.25	0.00
Endrin	5.55	5.55	5.45	5.65	0.00
Endosulfan II	5.84	5.85	5.75	5.95	0.01
4,4'-DDD	5.70	5.71	5.61	5.81	0.01
Endosulfan sulfate	6.25	6.25	6.15	6.35	0.00
4,4'-DDT	5.96	5.96	5.86	6.06	0.01
Methoxychlor	6.53	6.54	6.44	6.64	0.01
Endrin ketone	6.75	6.76	6.66	6.86	0.01
Endrin aldehyde	6.03	6.03	5.93	6.13	0.00
alpha-Chlordane	4.96	4.96	4.86	5.06	0.00
gamma-Chlordane	4.89	4.90	4.80	5.00	0.01



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No.: CCAL03 Date Analyzed: 01/21/2023

Lab Sample No.: PSTDCCC050 Data File : PL080454.D Time Analyzed: 03:10

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	6.501	6.404	6.604	50.450	50.000	0.9
4,4'-DDE	5.987	5.889	6.089	50.250	50.000	0.5
4,4'-DDT	6.814	6.716	6.916	48.260	50.000	-3.5
Aldrin	5.050	4.952	5.152	50.390	50.000	0.8
alpha-BHC	3.799	3.701	3.901	51.560	50.000	3.1
alpha-Chlordane	5.809	5.711	5.911	50.040	50.000	0.1
beta-BHC	4.324	4.225	4.425	49.280	50.000	-1.4
Decachlorobiphenyl	8.789	8.693	8.893	48.200	50.000	-3.6
delta-BHC	4.567	4.468	4.668	51.820	50.000	3.6
Dieldrin	6.131	6.033	6.233	50.070	50.000	0.1
Endosulfan I	5.857	5.759	5.959	50.130	50.000	0.3
Endosulfan II	6.577	6.480	6.680	43.040	50.000	-13.9
Endosulfan sulfate	6.940	6.843	7.043	50.000	50.000	0.0
Endrin	6.358	6.261	6.461	53.860	50.000	7.7
Endrin aldehyde	6.706	6.609	6.809	48.530	50.000	-2.9
Endrin ketone	7.421	7.324	7.524	49.890	50.000	-0.2
gamma-BHC (Lindane)	4.128	4.029	4.229	51.830	50.000	3.7
gamma-Chlordane	5.728	5.632	5.832	50.570	50.000	1.1
Heptachlor	4.712	4.613	4.813	50.890	50.000	1.8
Heptachlor epoxide	5.475	5.377	5.577	51.910	50.000	3.8
Methoxychlor	7.292	7.194	7.394	48.720	50.000	-2.6
Tetrachloro-m-xylene	3.351	3.252	3.452	50.200	50.000	0.4



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No.: CCAL03 Date Analyzed: 01/21/2023

Lab Sample No.: PSTDCCC050 Data File : PL080454.D Time Analyzed: 03:10

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.703	5.606	5.806	51.750	50.000	3.5
4,4'-DDE	5.150	5.052	5.252	50.440	50.000	0.9
4,4'-DDT	5.955	5.858	6.058	50.090	50.000	0.2
Aldrin	4.139	4.041	4.241	52.640	50.000	5.3
alpha-BHC	3.190	3.091	3.291	51.070	50.000	2.1
alpha-Chlordane	4.957	4.859	5.059	48.930	50.000	-2.1
beta-BHC	3.815	3.716	3.916	49.760	50.000	-0.5
Decachlorobiphenyl	7.838	7.742	7.942	48.250	50.000	-3.5
delta-BHC	4.045	3.946	4.146	51.970	50.000	3.9
Dieldrin	5.276	5.179	5.379	50.620	50.000	1.2
Endosulfan I	5.011	4.913	5.113	47.620	50.000	-4.8
Endosulfan II	5.844	5.748	5.948	52.940	50.000	5.9
Endosulfan sulfate	6.248	6.151	6.351	49.390	50.000	-1.2
Endrin	5.551	5.454	5.654	50.690	50.000	1.4
Endrin aldehyde	6.026	5.928	6.128	47.950	50.000	-4.1
Endrin ketone	6.753	6.656	6.856	49.690	50.000	-0.6
gamma-BHC (Lindane)	3.519	3.420	3.620	50.960	50.000	1.9
gamma-Chlordane	4.893	4.795	4.995	49.060	50.000	-1.9
Heptachlor	3.860	3.762	3.962	49.840	50.000	-0.3
Heptachlor epoxide	4.642	4.544	4.744	49.640	50.000	-0.7
Methoxychlor	6.534	6.436	6.636	48.790	50.000	-2.4
Tetrachloro-m-xylene	2.689	2.590	2.790	49.770	50.000	-0.5

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080454.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 03:10
 Operator : AR\AJ
 Sample : PSTDCCC050
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:25:12 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	107.7E6	109.3E6	50.204	49.768
28)	SA Decachlor...	8.789	7.838	84385503	114.9E6	48.199	48.247
Target Compounds							
2)	A alpha-BHC	3.799	3.190	163.3E6	162.4E6	51.556	51.071
3)	MA gamma-BHC...	4.128	3.519	152.4E6	152.2E6	51.826	50.958
4)	MA Heptachlor	4.712	3.860	150.4E6	158.6E6	50.893	49.836
5)	MB Aldrin	5.050	4.139	137.9E6	155.3E6	50.394	52.637
6)	B beta-BHC	4.324	3.815	67273072	66409435	49.283	49.759
7)	B delta-BHC	4.567	4.045	150.0E6	149.9E6	51.821	51.965
8)	B Heptachlo...	5.475	4.642	134.3E6	138.1E6	51.914	49.636
9)	A Endosulfan I	5.857	5.011	118.4E6	123.9E6	50.127	47.618
10)	B gamma-Chl...	5.728	4.893	127.7E6	139.0E6	50.571m	49.060
11)	B alpha-Chl...	5.809	4.957	126.3E6	140.2E6	50.041	48.933
12)	B 4,4'-DDE	5.987	5.150	111.9E6	119.0E6	50.246	50.437
13)	MA Dieldrin	6.131	5.276	119.8E6	136.9E6	50.066	50.620
14)	MA Endrin	6.358	5.551	116.5E6	117.7E6	53.860	50.687
15)	B Endosulfa...	6.577	5.844	98666088	110.3E6	43.042	52.937m
16)	A 4,4'-DDD	6.501	5.703	92427191	97240017	50.452	51.745
17)	MA 4,4'-DDT	6.814	5.955	100.3E6	105.3E6	48.264	50.085
18)	B Endrin al...	6.706	6.026	80728403	87565036	48.532	47.952
19)	B Endosulfa...	6.940	6.248	103.5E6	114.9E6	50.004	49.385
20)	A Methoxychlor	7.292	6.534	53756626	59205784	48.724	48.791
21)	B Endrin ke...	7.421	6.753	110.1E6	126.9E6	49.889	49.689
22)	Mirex	7.893	6.937	84909365	110.4E6	49.372	48.511

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080454.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 03:10
Operator : AR\AJ
Sample : PSTDCCC050
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

PSTDCCC050

Manual Integrations

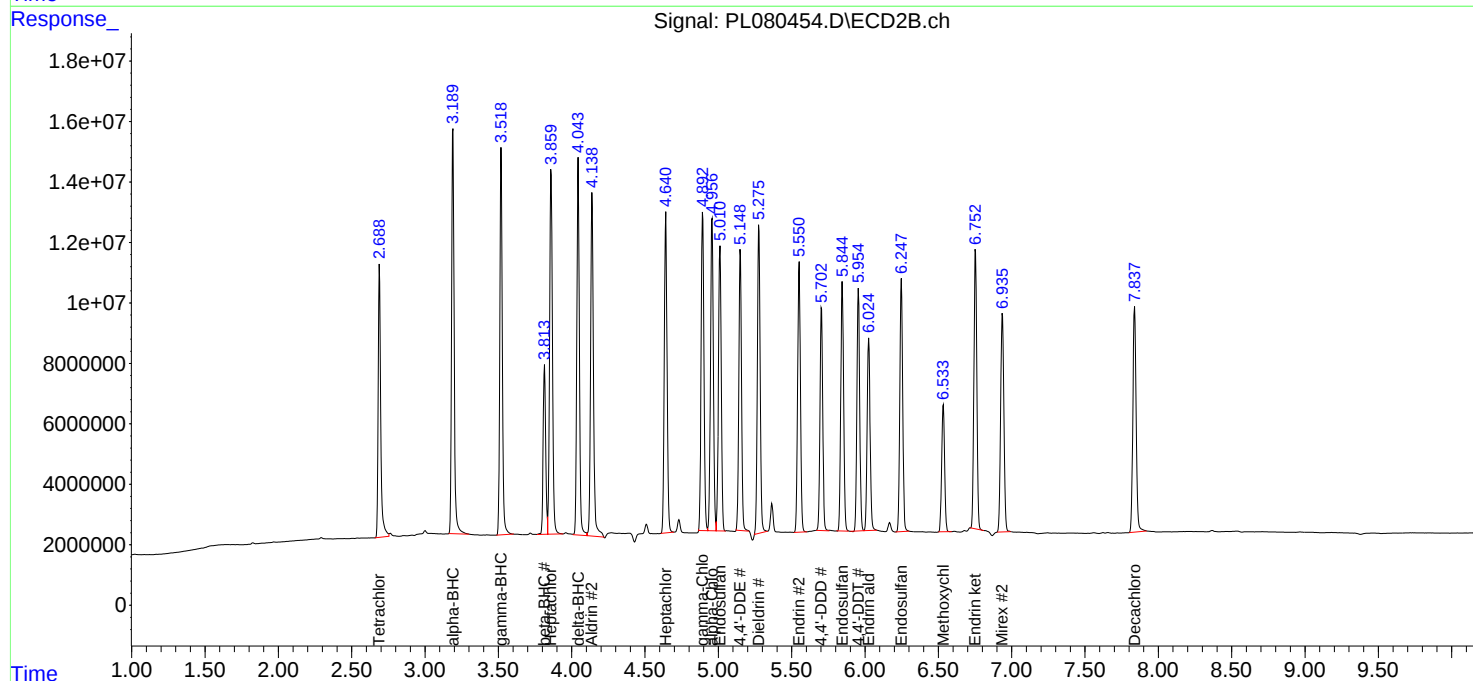
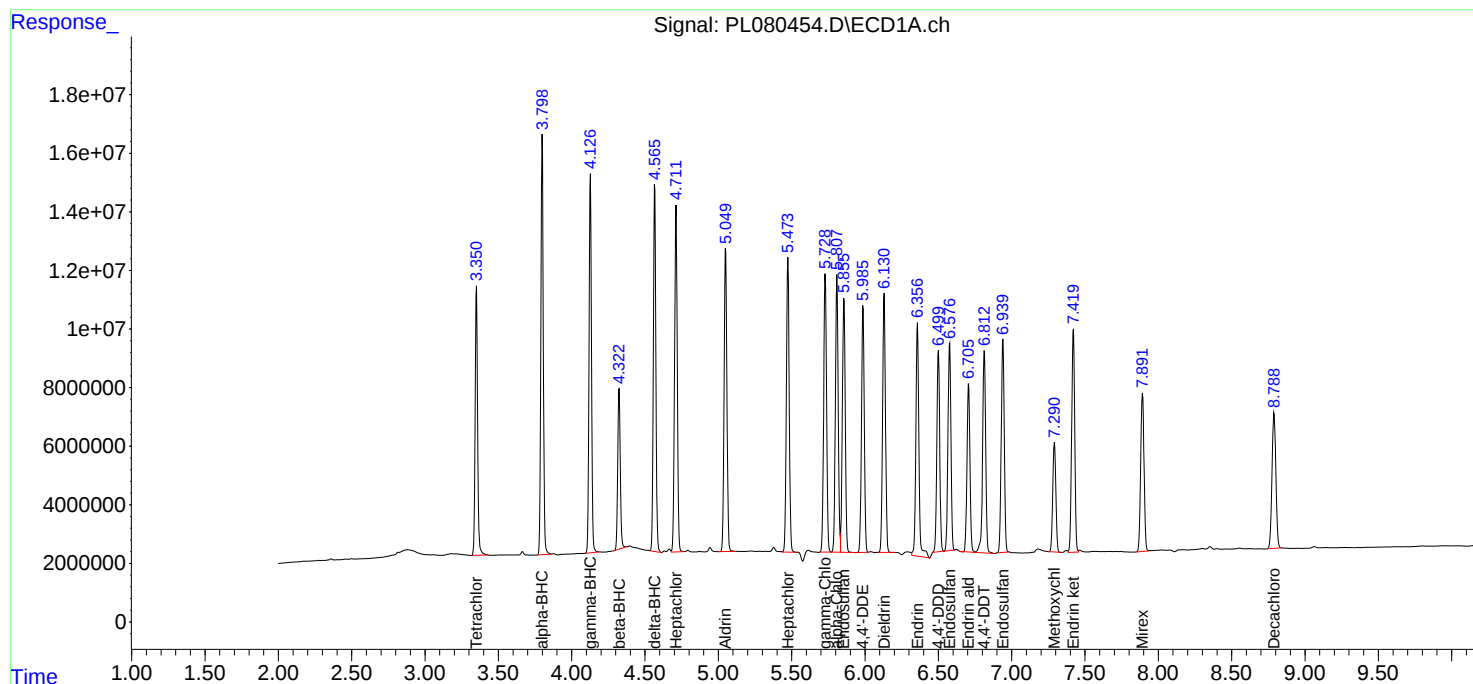
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:25:12 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No. (PEM): PEM - PL080406.D Date Analyzed: 01/20/2023

Lab Sample No.(PEM): PEM Time Analyzed: 09:30

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	8.792	8.690	8.890	21.460	20.000	7.3
Tetrachloro-m-xylene	3.353	3.300	3.400	21.770	20.000	8.9
alpha-BHC	3.801	3.750	3.850	9.970	10.000	-0.3
beta-BHC	4.325	4.270	4.380	11.340	10.000	13.4
gamma-BHC (Lindane)	4.130	4.080	4.180	10.430	10.000	4.3
Endrin	6.359	6.290	6.430	45.030	50.000	-9.9
4,4'-DDT	6.816	6.750	6.890	85.130	100.000	-14.9
Methoxychlor	7.294	7.220	7.360	208.720	250.000	-16.5

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No. (PEM): PEM - PL080406.D Date Analyzed: 01/20/2023

Lab Sample No.(PEM): PEM Time Analyzed: 09:30

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	7.840	7.740	7.940	19.940	20.000	-0.3
Tetrachloro-m-xylene	2.691	2.640	2.740	21.040	20.000	5.2
alpha-BHC	3.192	3.140	3.240	9.280	10.000	-7.2
beta-BHC	3.817	3.770	3.870	11.130	10.000	11.3
gamma-BHC (Lindane)	3.520	3.470	3.570	9.560	10.000	-4.4
Endrin	5.553	5.480	5.620	44.960	50.000	-10.1
4,4'-DDT	5.957	5.890	6.030	92.760	100.000	-7.2
Methoxychlor	6.535	6.460	6.610	206.490	250.000	-17.4

p
PEM

Data File Name PL080406.D

Operator AR\AJ

Date Acquired

1/20/2023 9:30

DDT BREAKDOWN**COLUMN#1**

Name	RT	Response	Response (DDT+DDE+DDD)	Response DDE+DDD	%Break Down
4,4'-DDT	8.4	176882117.9	195248521.7	18366403.83	9.41
4,4'-DDE	7.56	742872.394			
4,4'-DDD	8.14	17623531.43			

COLUMN#2

Name	RT	Response	Response (DDT+DDE+DDD)	Response DDE+DDD	%Break Down
4,4'-DDT #2	9.35	194928831.1	208540045.4	13611214.3	6.53
4,4'-DDE #2	8.49	520855.994			
4,4'-DDD #2	9.03	13090358.31			

ENDRIN BREAKDOWN**COLUMN#1**

Name	RT	Response	Response (E+EA+EK)	Response (EA+EK)	%Break Down
Endrin	6.36	97394137.15	111042086.5	13647949.35	12.29
Endrin aldehyde	6.71	3839072.697			
Endrin ketone	7.42	9808876.651			

COLUMN#2

Name	RT	Response	Response (E+EA+EK)	Response (EA+EK)	%Break Down
Endrin #2	5.55	104349837.2	119142570.4	14792733.13	12.42
Endrin aldehyde #2	6.03	4279744.117			
Endrin ketone #2	6.75	10512989.01			

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080406.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 09:30
 Operator : AR\AJ
 Sample : PEM
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PEM

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:08:30 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.353	2.691	46682513	46206677	21.765	21.037
28)	SA Decachlor...	8.792	7.840	37571508	47500027	21.460	19.937
Target Compounds							
2)	A alpha-BHC	3.801	3.192	31590558	29520387	9.972	9.282
3)	MA gamma-BHC...	4.130	3.520	30657385	28569478	10.429	9.564
6)	B beta-BHC	4.325	3.817	15484799	14847959	11.344	11.125
12)	B 4,4'-DDE	5.989	5.151	742872	520856	0.334m	0.221m#
14)	MA Endrin	6.359	5.553	97394137	104.3E6	45.034m	44.956
16)	A 4,4'-DDD	6.503	5.705	17623531	13090358	9.620	6.966 #
17)	MA 4,4'-DDT	6.816	5.957	176.9E6	194.9E6	85.135	92.758
18)	B Endrin al...	6.709	6.028	3839073	4279744	2.308	2.344
20)	A Methoxychlor	7.294	6.535	230.3E6	250.6E6	208.720	206.488
21)	B Endrin ke...	7.422	6.754	9808877	10512989	4.446	4.118

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080406.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 09:30
Operator : AR\AJ
Sample : PEM
Misc :
ALS Vial : 3 Sample Multiplier: 1

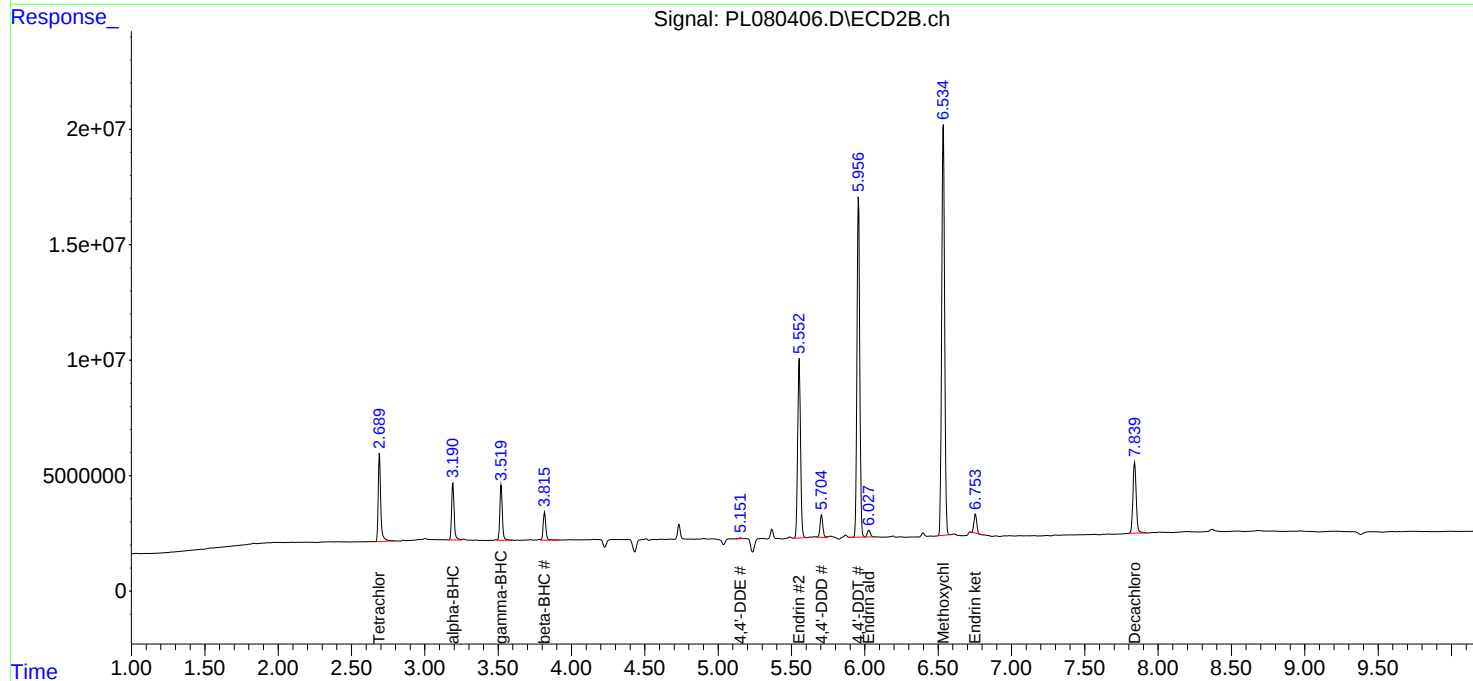
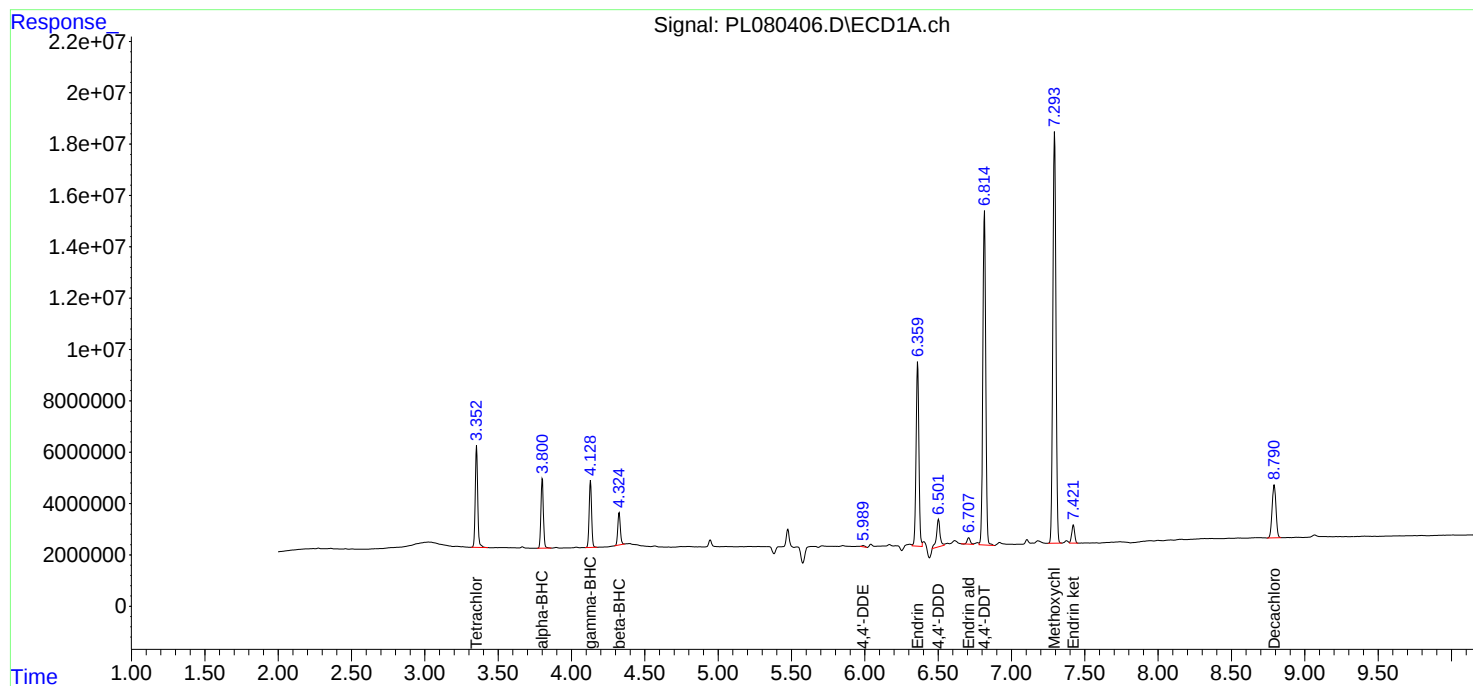
Instrument :
ECD_L
ClientSampleId :
PEM

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:08:30 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: loui01

Lab Code: CHEM Case No.: O1233 SAS No.: O1233 SDG NO.: O1233

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No. (PEM): PEM - PL080427.D Date Analyzed: 01/20/2023

Lab Sample No.(PEM): PEM Time Analyzed: 19:46

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	8.790	8.690	8.890	19.820	20.000	-0.9
Tetrachloro-m-xylene	3.351	3.300	3.400	19.090	20.000	-4.6
alpha-BHC	3.799	3.750	3.850	8.770	10.000	-12.3
beta-BHC	4.324	4.270	4.370	10.600	10.000	6.0
gamma-BHC (Lindane)	4.128	4.080	4.180	9.260	10.000	-7.4
Endrin	6.358	6.290	6.430	44.080	50.000	-11.8
4,4'-DDT	6.815	6.740	6.890	91.710	100.000	-8.3
Methoxychlor	7.292	7.220	7.360	230.100	250.000	-8.0

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/20/2023 01/20/2023

Client Sample No. (PEM): PEM - PL080427.D Date Analyzed: 01/20/2023

Lab Sample No.(PEM): PEM Time Analyzed: 19:46

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.839	7.740	7.940	19.650	20.000	-1.8
Tetrachloro-m-xylene	2.689	2.640	2.740	19.380	20.000	-3.1
alpha-BHC	3.190	3.140	3.240	8.910	10.000	-10.9
beta-BHC	3.815	3.760	3.870	10.100	10.000	1.0
gamma-BHC (Lindane)	3.519	3.470	3.570	9.010	10.000	-9.9
Endrin	5.551	5.480	5.620	46.440	50.000	-7.1
4,4'-DDT	5.956	5.890	6.030	101.350	100.000	1.4
Methoxychlor	6.534	6.460	6.600	231.440	250.000	-7.4

p
PEM

Data File Name PL080427.D

Operator AR\AJ

Date Acquired

1/20/2023 19:46

DDT BREAKDOWN**COLUMN#1**

Name	RT	Response	Response (DDT+DDE+DDD)	Response DDE+DDD	%Break Down
4,4'-DDT	8.4	190533269.7	191382892.4	849622.636	0.44
4,4'-DDE	7.56	0			
4,4'-DDD	8.14	849622.636			

COLUMN#2

Name	RT	Response	Response (DDT+DDE+DDD)	Response DDE+DDD	%Break Down
4,4'-DDT #2	9.35	212976820.5	213748031.5	771210.977	0.36
4,4'-DDE #2	8.49	0			
4,4'-DDD #2	9.03	771210.977			

ENDRIN BREAKDOWN**COLUMN#1**

Name	RT	Response	Response (E+EA+EK)	Response (EA+EK)	%Break Down
Endrin	6.36	95337936.94	102127221.9	6789285.01	6.65
Endrin aldehyde	6.71	1832237.053			
Endrin ketone	7.42	4957047.957			

COLUMN#2

Name	RT	Response	Response (E+EA+EK)	Response (EA+EK)	%Break Down
Endrin #2	5.55	107793365.1	115820576.3	8027211.192	6.93
Endrin aldehyde #2	6.03	2269539.876			
Endrin ketone #2	6.75	5757671.316			

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080427.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 19:46
 Operator : AR\AJ
 Sample : PEM
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PEM

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:11:04 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	40942413	42567067	19.089	19.380
28)	SA Decachlor...	8.790	7.839	34694099	46818039	19.817	19.651
Target Compounds							
2)	A alpha-BHC	3.799	3.190	27782034	28331547	8.770	8.908
3)	MA gamma-BHC...	4.128	3.519	27210544	26914215	9.256	9.010
6)	B beta-BHC	4.324	3.815	14473423	13479618	10.603	10.100
14)	MA Endrin	6.358	5.551	95337937	107.8E6	44.083	46.439
16)	A 4,4'-DDD	6.502	5.703	849623	771211	0.464	0.410m
17)	MA 4,4'-DDT	6.815	5.956	190.5E6	213.0E6	91.705	101.346
18)	B Endrin al...	6.707	6.027	1832237	2269540	1.101	1.243m
20)	A Methoxychlor	7.292	6.534	253.9E6	280.8E6	230.103	231.444
21)	B Endrin ke...	7.421	6.753	4957048	5757671	2.247	2.255

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080427.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 19:46
Operator : AR\AJ
Sample : PEM
Misc :
ALS Vial : 27 Sample Multiplier: 1

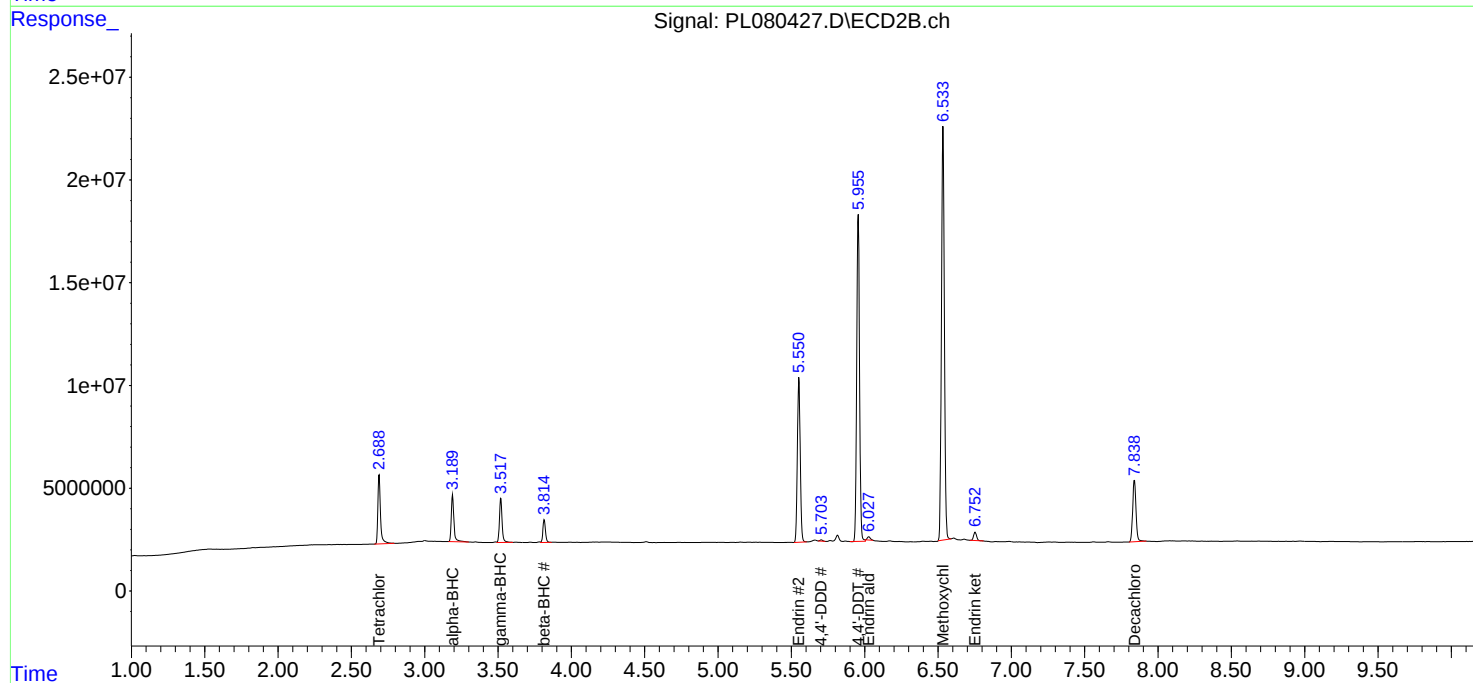
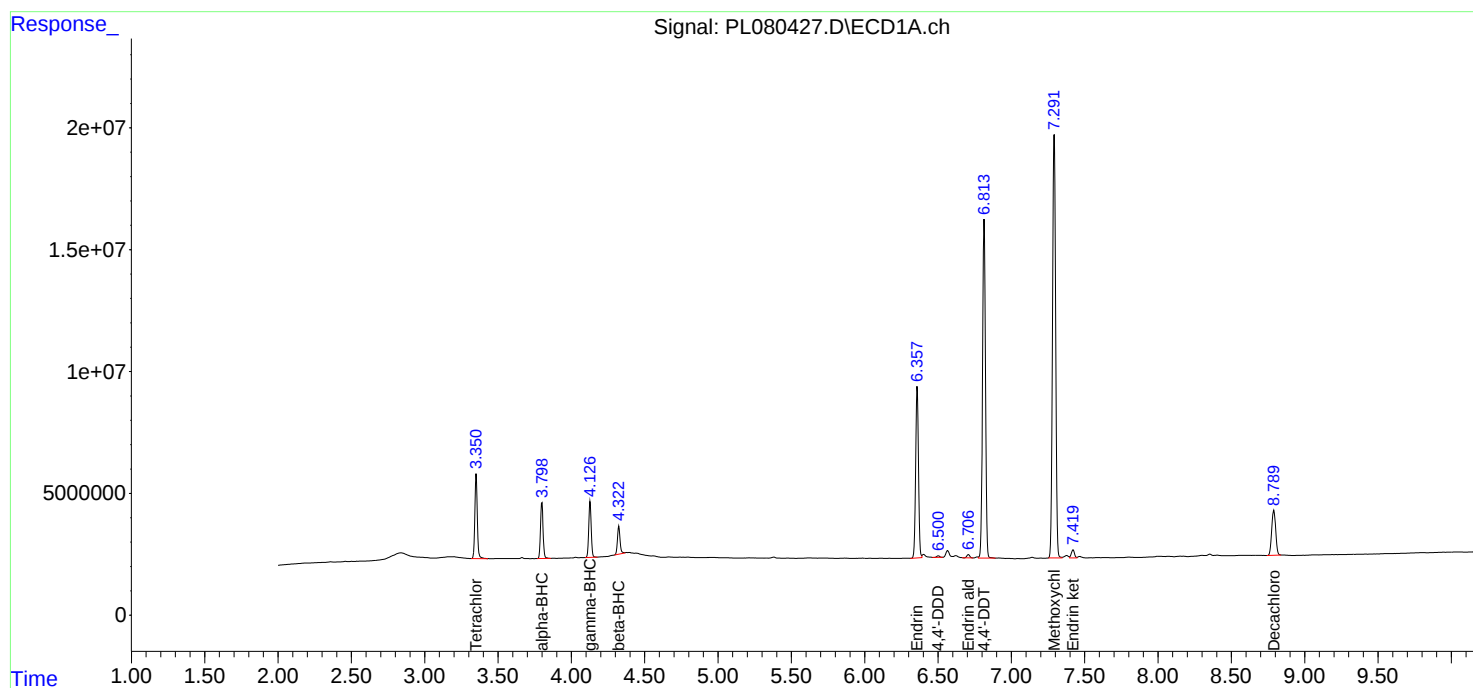
Instrument :
ECD_L
ClientSampleId :
PEM

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:11:04 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080407.D
Acq On : 20 Jan 2023 14:27
Operator : AR\AJ
Sample : RESCHK
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e

Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Title : GC Extractables
Last Update : Sun Jan 22 23:56:48 2023
Integrator: ChemStation

RT#1	RT#2	Resolution
3.352	5.731	100.00%
5.731	5.859	100.00%
5.859	5.989	100.00%
5.989	6.133	100.00%
6.133	6.943	100.00%
6.943	7.295	100.00%
7.295	7.423	100.00%
7.423	8.792	100.00%

Signal #2

2.690	4.894	100.00%
4.894	5.013	100.00%
5.013	5.152	100.00%
5.152	5.279	100.00%
5.279	6.251	100.00%
6.251	6.536	100.00%
6.536	6.756	100.00%
6.756	7.842	100.00%

PL012023.M Wed Feb 08 11:00:13 2023

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080407.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 14:27
 Operator : AR\AJ
 Sample : RESCHK
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 RESCHK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:09:01 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.690	47882169	49110047	22.324	22.359
28)	SA Decachlor...	8.792	7.842	39815830	53749391	22.742	22.560
Target Compounds							
9)	A Endosulfan I	5.859	5.013	25338660	26959317	10.730	10.364
10)	B gamma-Chl...	5.731	4.894	26038842	29601378	10.309	10.444
12)	B 4,4'-DDE	5.989	5.152	46142996	48109928	20.717	20.396
13)	MA Dieldrin	6.133	5.279	51267165	56412520	21.421	20.855
19)	B Endosulfa...	6.943	6.251	42116613	47165693	20.347	20.280
20)	A Methoxychlor	7.295	6.536	115.2E6	128.6E6	104.443	105.961
21)	B Endrin ke...	7.423	6.756	48082488	55507197	21.793	21.740

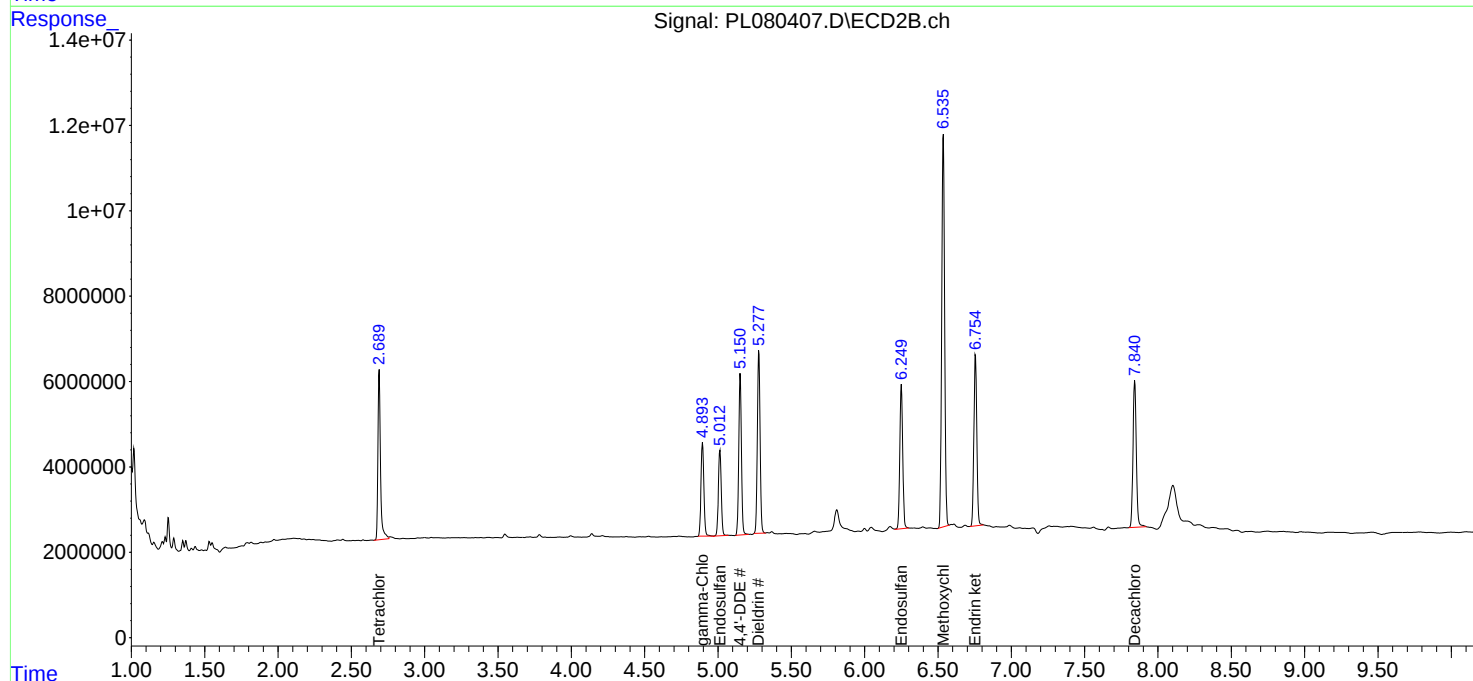
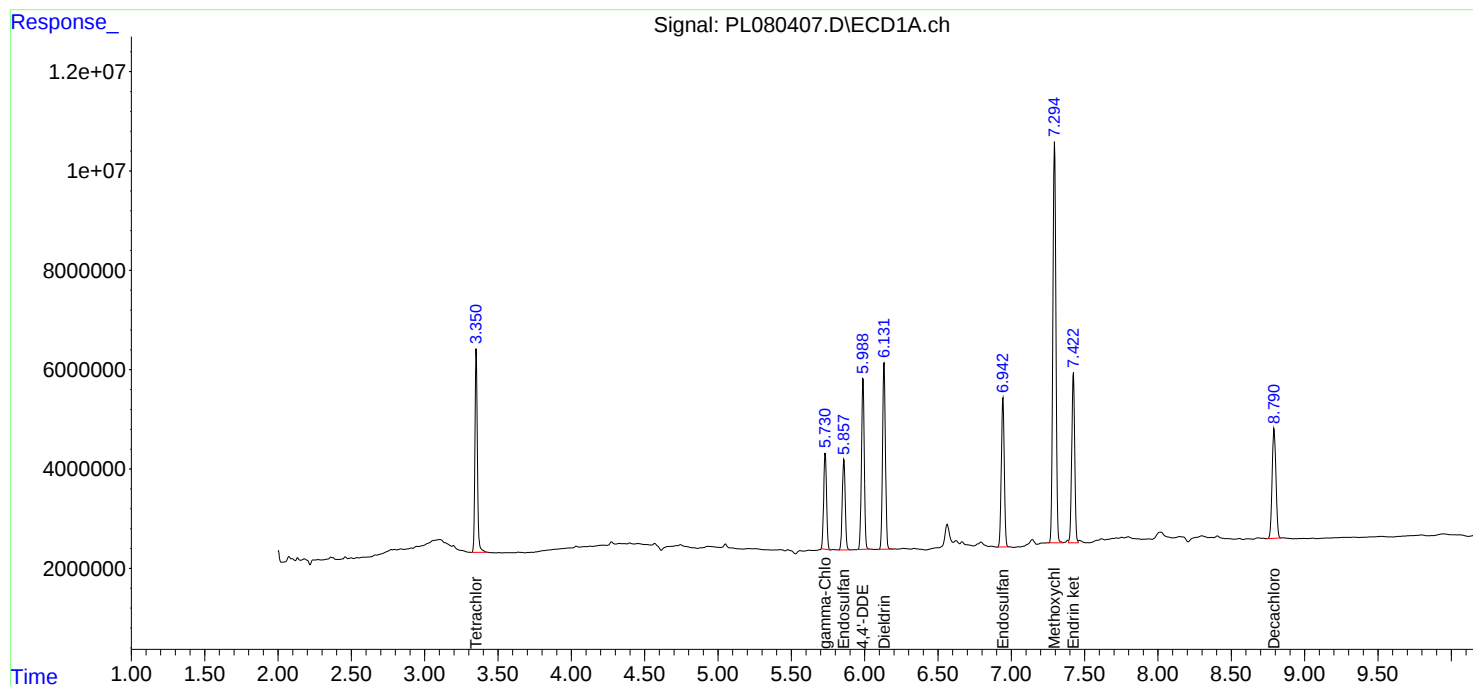
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080407.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 14:27
Operator : AR\AJ
Sample : RESCHK
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
RESCHK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:09:01 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Analytical Sequence

Client: Louis Berger U.S., Inc., A WSP Company

SDG No.: O1233

Project: NYCDDC Phase II SCI Arthur Kill Road CE

Instrument ID: ECD_L

GC Column: ZB-MR2

ID: 0.32 (mm)

Inst. Calib. Date(s): 01/20/2023

01/20/2023

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	01/20/2023	09:16	PL080405.D	8.79	3.35
PEM	PEM	01/20/2023	09:30	PL080406.D	8.79	3.35
RESCHK	RESCHK	01/20/2023	14:27	PL080407.D	8.79	3.35
PSTDICC100	PSTDICC100	01/20/2023	14:41	PL080408.D	8.79	3.35
PSTDICC075	PSTDICC075	01/20/2023	14:54	PL080409.D	8.79	3.35
PSTDICC050	PSTDICC050	01/20/2023	15:08	PL080410.D	8.79	3.35
PSTDICC025	PSTDICC025	01/20/2023	15:22	PL080411.D	8.79	3.35
PSTDICC005	PSTDICC005	01/20/2023	15:36	PL080412.D	8.79	3.35
PCHLORICC500	PCHLORICC500	01/20/2023	16:18	PL080415.D	8.79	3.35
PTOXICC500	PTOXICC500	01/20/2023	17:27	PL080420.D	8.79	3.35
IBLK	IBLK	01/20/2023	19:32	PL080426.D	8.79	3.35
PEM	PEM	01/20/2023	19:46	PL080427.D	8.79	3.35
PSTDCCC050	PSTDCCC050	01/20/2023	20:00	PL080428.D	8.79	3.35
PB150373BL	PB150373BL	01/20/2023	20:42	PL080429.D	8.79	3.35
PB150373BS	PB150373BS	01/20/2023	20:55	PL080430.D	8.79	3.35
IBLK	IBLK	01/20/2023	23:14	PL080440.D	8.79	3.35
PSTDCCC050	PSTDCCC050	01/20/2023	23:28	PL080441.D	8.79	3.35
B-P34A	O1233-02	01/21/2023	00:24	PL080442.D	8.79	3.35
B-P34AMS	O1233-02MS	01/21/2023	00:38	PL080443.D	8.79	3.35
B-P34AMSD	O1233-02MSD	01/21/2023	00:51	PL080444.D	8.79	3.35
B-P34B	O1233-03	01/21/2023	01:05	PL080445.D	8.79	3.35
B-P36A	O1233-04	01/21/2023	01:19	PL080446.D	8.79	3.35
B-P36B	O1233-05	01/21/2023	01:33	PL080447.D	8.79	3.35
B-P37A	O1233-06	01/21/2023	01:47	PL080448.D	8.79	3.35
B-P37B	O1233-07	01/21/2023	02:01	PL080449.D	8.79	3.35
B-P38A	O1233-08	01/21/2023	02:15	PL080450.D	8.79	3.35
B-P38B	O1233-09	01/21/2023	02:29	PL080451.D	8.79	3.35
B-P38C	O1233-11	01/21/2023	02:43	PL080452.D	8.79	3.35
IBLK	IBLK	01/21/2023	02:57	PL080453.D	8.79	3.35
PSTDCCC050	PSTDCCC050	01/21/2023	03:10	PL080454.D	8.79	3.35



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Analytical Sequence

Client: Louis Berger U.S., Inc., A WSP Company

SDG No.: O1233

Project: NYCDDC Phase II SCI Arthur Kill Road CE

Instrument ID: ECD_L

GC Column: ZB-MR1

ID: 0.32 (mm)

Inst. Calib. Date(s): 01/20/2023

01/20/2023

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
IBLK	IBLK	01/20/2023	09:16	PL080405.D	7.84	2.69
PEM	PEM	01/20/2023	09:30	PL080406.D	7.84	2.69
RESCHK	RESCHK	01/20/2023	14:27	PL080407.D	7.84	2.69
PSTDICC100	PSTDICC100	01/20/2023	14:41	PL080408.D	7.84	2.69
PSTDICC075	PSTDICC075	01/20/2023	14:54	PL080409.D	7.84	2.69
PSTDICC050	PSTDICC050	01/20/2023	15:08	PL080410.D	7.84	2.69
PSTDICC025	PSTDICC025	01/20/2023	15:22	PL080411.D	7.84	2.69
PSTDICC005	PSTDICC005	01/20/2023	15:36	PL080412.D	7.84	2.69
PCHLORICC500	PCHLORICC500	01/20/2023	16:18	PL080415.D	7.84	2.69
PTOXICC500	PTOXICC500	01/20/2023	17:27	PL080420.D	7.84	2.69
IBLK	IBLK	01/20/2023	19:32	PL080426.D	7.84	2.69
PEM	PEM	01/20/2023	19:46	PL080427.D	7.84	2.69
PSTDCCC050	PSTDCCC050	01/20/2023	20:00	PL080428.D	7.84	2.69
PB150373BL	PB150373BL	01/20/2023	20:42	PL080429.D	7.84	2.69
PB150373BS	PB150373BS	01/20/2023	20:55	PL080430.D	7.84	2.69
IBLK	IBLK	01/20/2023	23:14	PL080440.D	7.84	2.69
PSTDCCC050	PSTDCCC050	01/20/2023	23:28	PL080441.D	7.84	2.69
B-P34A	O1233-02	01/21/2023	00:24	PL080442.D	7.84	2.69
B-P34AMS	O1233-02MS	01/21/2023	00:38	PL080443.D	7.84	2.69
B-P34AMSD	O1233-02MSD	01/21/2023	00:51	PL080444.D	7.84	2.69
B-P34B	O1233-03	01/21/2023	01:05	PL080445.D	7.84	2.69
B-P36A	O1233-04	01/21/2023	01:19	PL080446.D	7.84	2.69
B-P36B	O1233-05	01/21/2023	01:33	PL080447.D	7.84	2.69
B-P37A	O1233-06	01/21/2023	01:47	PL080448.D	7.84	2.69
B-P37B	O1233-07	01/21/2023	02:01	PL080449.D	7.84	2.69
B-P38A	O1233-08	01/21/2023	02:15	PL080450.D	7.84	2.69
B-P38B	O1233-09	01/21/2023	02:29	PL080451.D	7.84	2.69
B-P38C	O1233-11	01/21/2023	02:43	PL080452.D	7.84	2.69
IBLK	IBLK	01/21/2023	02:57	PL080453.D	7.84	2.69
PSTDCCC050	PSTDCCC050	01/21/2023	03:10	PL080454.D	7.84	2.69

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P34AMS

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-02MS

Date(s) Analyzed: 01/21/2023
01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2 ID: 0.32 (mm)

GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.50	6.45	6.55	18.3	1.7
	2	5.70	5.65	5.75	18.0	
4,4'-DDE	1	5.99	5.94	6.04	18.6	1.6
	2	5.15	5.10	5.20	18.3	
4,4'-DDT	1	6.81	6.76	6.86	19.8	6.8
	2	5.96	5.91	6.01	18.5	
Aldrin	1	5.05	5.00	5.10	19.0	0.5
	2	4.14	4.09	4.19	18.9	
alpha-BHC	1	3.80	3.75	3.85	18.2	1.7
	2	3.19	3.14	3.24	17.9	
alpha-Chlordane	1	5.81	5.76	5.86	18.5	3.9
	2	4.96	4.91	5.01	17.8	
beta-BHC	1	4.32	4.27	4.37	17.7	2.3
	2	3.82	3.77	3.87	17.3	
delta-BHC	1	4.57	4.52	4.62	18.7	2.7
	2	4.05	4.00	4.10	18.2	
Endosulfan II	1	6.58	6.53	6.63	16.8	21.3
	2	5.84	5.79	5.89	20.8	
Endrin aldehyde	1	6.71	6.66	6.76	19.8	2
	2	6.03	5.98	6.08	19.4	
Endosulfan sulfate	1	6.94	6.89	6.99	18.6	1.6
	2	6.25	6.20	6.30	18.3	
Methoxychlor	1	7.29	7.24	7.34	18.8	1.6
	2	6.53	6.48	6.58	18.5	
Endrin ketone	1	7.42	7.37	7.47	18.4	0
	2	6.75	6.70	6.80	18.4	
gamma-BHC (Lindane)	1	4.13	4.08	4.18	18.5	2.7
	2	3.52	3.47	3.57	18.0	



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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P34AMS

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-02MS

Date(s) Analyzed: 01/21/2023

01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2 ID: 0.32 (mm)

GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Heptachlor	1	4.71	4.66	4.76	18.4	2.2
	2	3.86	3.81	3.91	18.0	
Heptachlor epoxide	1	5.48	5.43	5.53	18.3	1.1
	2	4.64	4.59	4.69	18.1	
Endosulfan I	1	5.86	5.81	5.91	18.2	2.2
	2	5.01	4.96	5.06	17.8	
gamma-Chlordane	1	5.73	5.68	5.78	18.3	2.2
	2	4.89	4.84	4.94	17.9	
Dieldrin	1	6.13	6.08	6.18	19.2	2.1
	2	5.28	5.23	5.33	18.8	
Endrin	1	6.36	6.31	6.41	19.0	3.6
	2	5.55	5.50	5.60	19.7	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P34AMSD

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-02MSD

Date(s) Analyzed: 01/21/2023
01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2

ID: 0.32 (mm)

GC Column:(2): ZB-MR1

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Heptachlor epoxide	1	5.48	5.43	5.53	18.5	0.5
	2	4.64	4.59	4.69	18.4	
gamma-Chlordane	1	5.73	5.68	5.78	18.8	3.8
	2	4.89	4.84	4.94	18.1	
Endosulfan II	1	6.58	6.53	6.63	17.0	21.5
	2	5.84	5.79	5.89	21.1	
4,4'-DDD	1	6.50	6.45	6.55	18.6	2.2
	2	5.70	5.65	5.75	18.2	
4,4'-DDT	1	6.81	6.76	6.86	20.0	5.7
	2	5.96	5.91	6.01	18.9	
Endrin aldehyde	1	6.71	6.66	6.76	20.1	2
	2	6.03	5.98	6.08	19.7	
Endosulfan sulfate	1	6.94	6.89	6.99	18.8	1.1
	2	6.25	6.20	6.30	18.6	
Endrin ketone	1	7.42	7.37	7.47	18.6	0
	2	6.75	6.70	6.80	18.6	
alpha-BHC	1	3.80	3.75	3.85	18.4	1.6
	2	3.19	3.14	3.24	18.1	
gamma-BHC (Lindane)	1	4.13	4.08	4.18	18.8	3.2
	2	3.52	3.47	3.57	18.2	
Aldrin	1	5.05	5.00	5.10	19.3	1
	2	4.14	4.09	4.19	19.1	
beta-BHC	1	4.32	4.27	4.37	17.9	1.7
	2	3.82	3.77	3.87	17.6	
delta-BHC	1	4.57	4.52	4.62	19.0	2.7
	2	4.04	3.99	4.09	18.5	
Endosulfan I	1	5.86	5.81	5.91	18.4	2.2
	2	5.01	4.96	5.06	18.0	



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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P34AMSD

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-02MSD

Date(s) Analyzed: 01/21/2023

01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2

ID: 0.32 (mm)

GC Column:(2): ZB-MR1

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
alpha-Chlordane	1	5.81	5.76	5.86	18.7	3.8
	2	4.96	4.91	5.01	18.0	
4,4'-DDE	1	5.99	5.94	6.04	18.9	1.6
	2	5.15	5.10	5.20	18.6	
Dieldrin	1	6.13	6.08	6.18	19.4	2.1
	2	5.28	5.23	5.33	19.0	
Endrin	1	6.36	6.31	6.41	19.3	3.1
	2	5.55	5.50	5.60	19.9	
Methoxychlor	1	7.29	7.24	7.34	19.0	1.6
	2	6.53	6.48	6.58	18.7	
Heptachlor	1	4.71	4.66	4.76	18.6	1.6
	2	3.86	3.81	3.91	18.3	



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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P37A

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-06

Date(s) Analyzed: 01/21/2023 01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2 ID: 0.32 (mm)

GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDT	1	6.81	6.76	6.86	0.39	31.2
	2	5.95	5.90	6.00	0.53	
gamma-Chlordane	1	5.73	5.68	5.78	3.50	74.5
	2	4.89	4.84	4.94	1.60	
alpha-Chlordane	1	5.81	5.76	5.86	9.10	84.4
	2	4.96	4.91	5.01	3.70	
4,4'-DDE	1	5.99	5.94	6.04	0.74	29.9
	2	5.15	5.10	5.20	0.55	



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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

B-P37B

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: O1233-07

Date(s) Analyzed: 01/21/2023 01/21/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2 ID: 0.32 (mm)

GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.50	6.45	6.55	0.69	82.9
	2	5.70	5.65	5.75	0.29	
gamma-Chlordane	1	5.73	5.68	5.78	1.10	54.3
	2	4.89	4.84	4.94	0.63	
4,4'-DDE	1	5.99	5.94	6.04	0.55	14.1
	2	5.15	5.10	5.20	0.47	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB150373BS

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: PB150373BS

Date(s) Analyzed: 01/20/2023
01/20/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2

ID: 0.32 (mm)

GC Column:(2): ZB-MR1

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan II	1	6.58	6.53	6.63	14.2	20.3
	2	5.84	5.79	5.89	17.4	
4,4'-DDD	1	6.50	6.45	6.55	15.1	0.7
	2	5.70	5.65	5.75	15.2	
4,4'-DDT	1	6.82	6.77	6.87	14.5	3.4
	2	5.96	5.91	6.01	15.0	
Endrin aldehyde	1	6.71	6.66	6.76	16.4	0.6
	2	6.03	5.98	6.08	16.3	
Endosulfan sulfate	1	6.94	6.89	6.99	15.6	1.3
	2	6.25	6.20	6.30	15.4	
Methoxychlor	1	7.29	7.24	7.34	15.5	2.6
	2	6.53	6.48	6.58	15.1	
Endrin ketone	1	7.42	7.37	7.47	15.4	0.6
	2	6.75	6.70	6.80	15.5	
alpha-BHC	1	3.80	3.75	3.85	15.0	0.7
	2	3.19	3.14	3.24	15.1	
gamma-BHC (Lindane)	1	4.13	4.08	4.18	15.1	0
	2	3.52	3.47	3.57	15.1	
Heptachlor	1	4.71	4.66	4.76	15.2	1.3
	2	3.86	3.81	3.91	15.0	
Aldrin	1	5.05	5.00	5.10	15.5	0
	2	4.14	4.09	4.19	15.5	
beta-BHC	1	4.32	4.27	4.37	14.3	0.7
	2	3.82	3.77	3.87	14.2	
delta-BHC	1	4.57	4.52	4.62	15.2	1.3
	2	4.05	4.00	4.10	15.0	
Heptachlor epoxide	1	5.48	5.43	5.53	15.0	2
	2	4.64	4.59	4.69	15.3	



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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB150373BS

Contract: loui01

Lab Code: CHEM

Case No.: O1233

SAS No.: O1233

SDG NO.: O1233

Lab Sample ID: PB150373BS

Date(s) Analyzed: 01/20/2023 01/20/2023

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR2 ID: 0.32 (mm)

GC Column:(2): ZB-MR1 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan I	1	5.86	5.81	5.91	15.0	0
	2	5.01	4.96	5.06	15.0	
gamma-Chlordane	1	5.73	5.68	5.78	15.0	1.3
	2	4.89	4.84	4.94	14.8	
alpha-Chlordane	1	5.81	5.76	5.86	15.3	2.6
	2	4.96	4.91	5.01	14.9	
4,4'-DDE	1	5.99	5.94	6.04	15.3	2
	2	5.15	5.10	5.20	15.0	
Dieldrin	1	6.13	6.08	6.18	15.9	0.6
	2	5.28	5.23	5.33	15.8	
Endrin	1	6.36	6.31	6.41	15.7	5
	2	5.55	5.50	5.60	16.5	

QC SAMPLE DATA



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:		
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:		
Client Sample ID:	PB150373BL		SDG No.:	O1233	
Lab Sample ID:	PB150373BL		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080429.D	1	01/20/23 10:35	01/20/23 20:42	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.24	U	0.24	1.70	ug/kg
319-85-7	beta-BHC	0.52	U	0.52	1.70	ug/kg
319-86-8	delta-BHC	0.41	U	0.41	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	0.22	U	0.22	1.70	ug/kg
76-44-8	Heptachlor	0.23	U	0.23	1.70	ug/kg
309-00-2	Aldrin	0.20	U	0.20	1.70	ug/kg
1024-57-3	Heptachlor epoxide	0.29	U	0.29	1.70	ug/kg
959-98-8	Endosulfan I	0.19	U	0.19	1.70	ug/kg
60-57-1	Dieldrin	0.18	U	0.18	1.70	ug/kg
72-55-9	4,4-DDE	0.18	U	0.18	1.70	ug/kg
72-20-8	Endrin	0.17	U	0.17	1.70	ug/kg
33213-65-9	Endosulfan II	0.22	U	0.22	1.70	ug/kg
72-54-8	4,4-DDD	0.21	U	0.21	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	0.18	U	0.18	1.70	ug/kg
50-29-3	4,4-DDT	0.21	U	0.21	1.70	ug/kg
72-43-5	Methoxychlor	0.25	U	0.25	1.70	ug/kg
53494-70-5	Endrin ketone	0.29	U	0.29	1.70	ug/kg
7421-93-4	Endrin aldehyde	0.29	U	0.29	1.70	ug/kg
5103-71-9	alpha-Chlordane	0.21	U	0.21	1.70	ug/kg
5103-74-2	gamma-Chlordane	0.21	U	0.21	1.70	ug/kg
8001-35-2	Toxaphene	6.60	U	6.60	33.0	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.6		12 - 143	93%	SPK: 20
877-09-8	Tetrachloro-m-xylene	16.7		10 - 159	83%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:		
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:		
Client Sample ID:	PB150373BL		SDG No.:	O1233	
Lab Sample ID:	PB150373BL		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080429.D	1	01/20/23 10:35	01/20/23 20:42	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080429.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 20:42
 Operator : AR\AJ
 Sample : PB150373BL
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PB150373BL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:12:35 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	35753042	36378836	16.669	16.563
28)	SA Decachlor...	8.789	7.838	32630997	43431148	18.638	18.229

Target Compounds

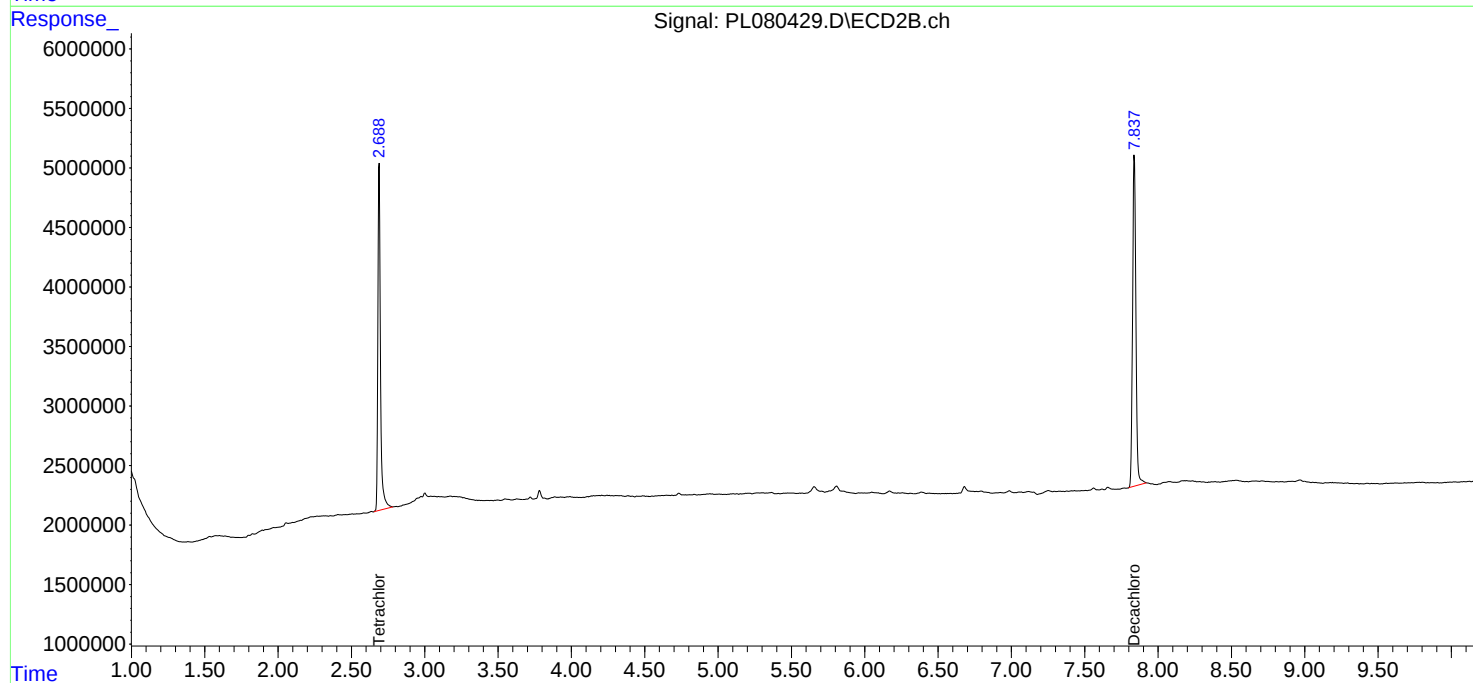
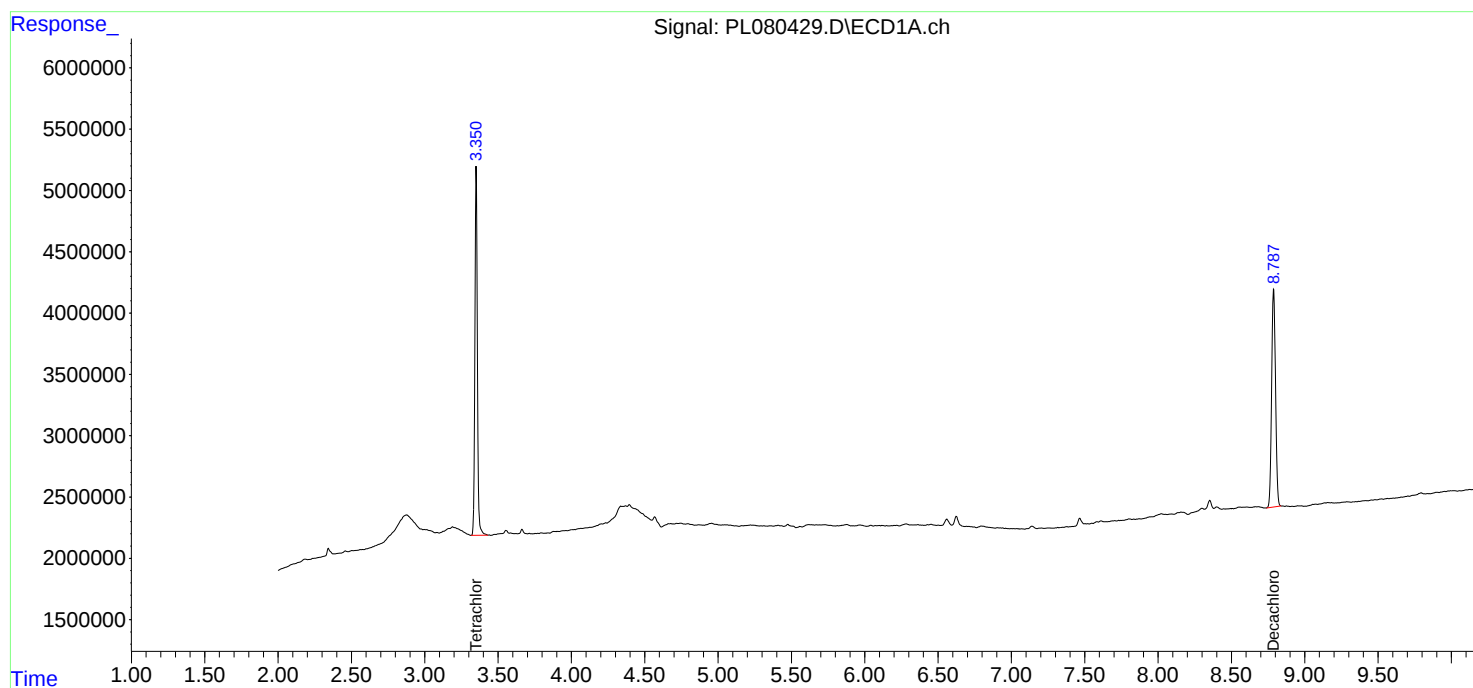
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

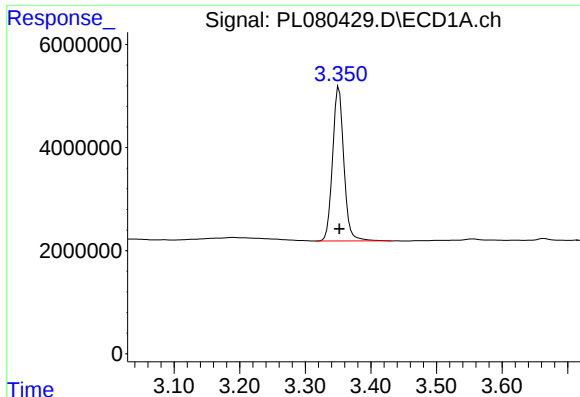
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080429.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 20:42
Operator : AR\AJ
Sample : PB150373BL
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
PB150373BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:12:35 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

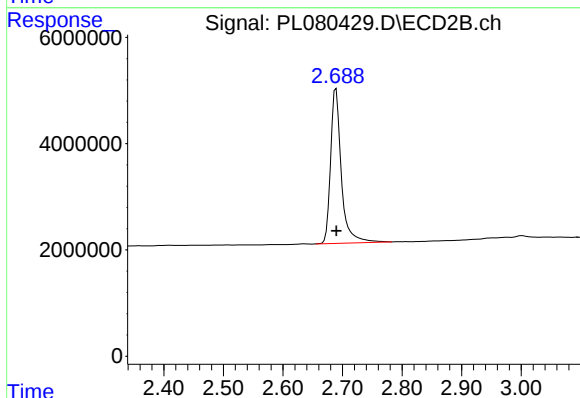




#1 Tetrachloro-m-xylene

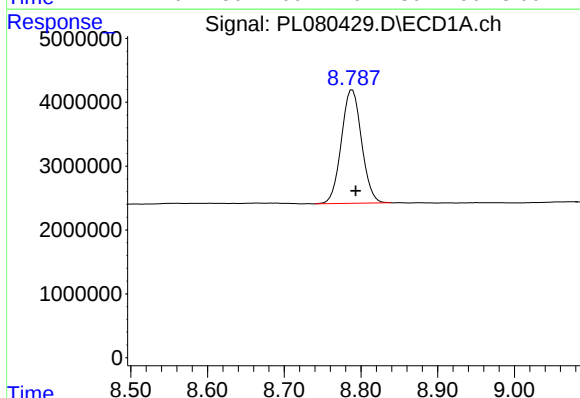
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 35753042
Conc: 16.67 ng/ml

Instrument :
ECD_L
ClientSampleId :
PB150373BL



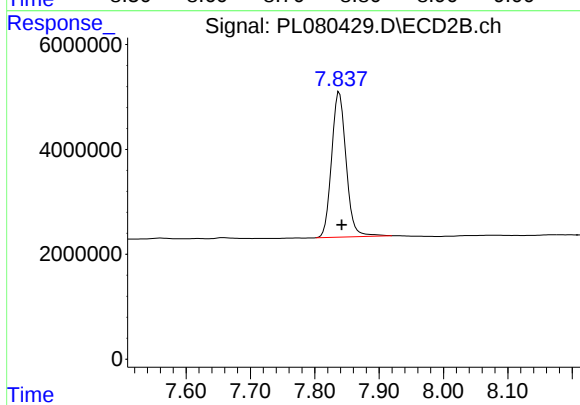
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 36378836
Conc: 16.56 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 32630997
Conc: 18.64 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 43431148
Conc: 18.23 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/20/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/20/23
Client Sample ID:	PIBLK-PL080405.D	SDG No.:	O1233
Lab Sample ID:	I.BLK-PL080405.D	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080405.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0078	U	0.0078	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.012	U	0.012	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0064	U	0.0064	0.050	ug/L
76-44-8	Heptachlor	0.0073	U	0.0073	0.050	ug/L
309-00-2	Aldrin	0.0071	U	0.0071	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.010	U	0.010	0.050	ug/L
959-98-8	Endosulfan I	0.0059	U	0.0059	0.050	ug/L
60-57-1	Dieldrin	0.0054	U	0.0054	0.050	ug/L
72-55-9	4,4-DDE	0.0059	U	0.0059	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0076	U	0.0076	0.050	ug/L
72-54-8	4,4-DDD	0.0084	U	0.0084	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0051	U	0.0051	0.050	ug/L
50-29-3	4,4-DDT	0.0065	U	0.0065	0.050	ug/L
72-43-5	Methoxychlor	0.0066	U	0.0066	0.050	ug/L
53494-70-5	Endrin ketone	0.0084	U	0.0084	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0070	U	0.0070	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0074	U	0.0074	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0065	U	0.0065	0.050	ug/L
8001-35-2	Toxaphene	0.18	U	0.18	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	23.3		27 - 142	116%	SPK: 20
877-09-8	Tetrachloro-m-xylene	23.0		60 - 145	115%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/20/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/20/23
Client Sample ID:	PIBLK-PL080405.D	SDG No.:	O1233
Lab Sample ID:	I.BLK-PL080405.D	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080405.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080405.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 09:16
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 I.BLK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:08:01 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.354	2.691	49289316	47699889	22.981	21.717
28)	SA Decachlor...	8.794	7.841	40757911	49664339	23.280	20.845

Target Compounds

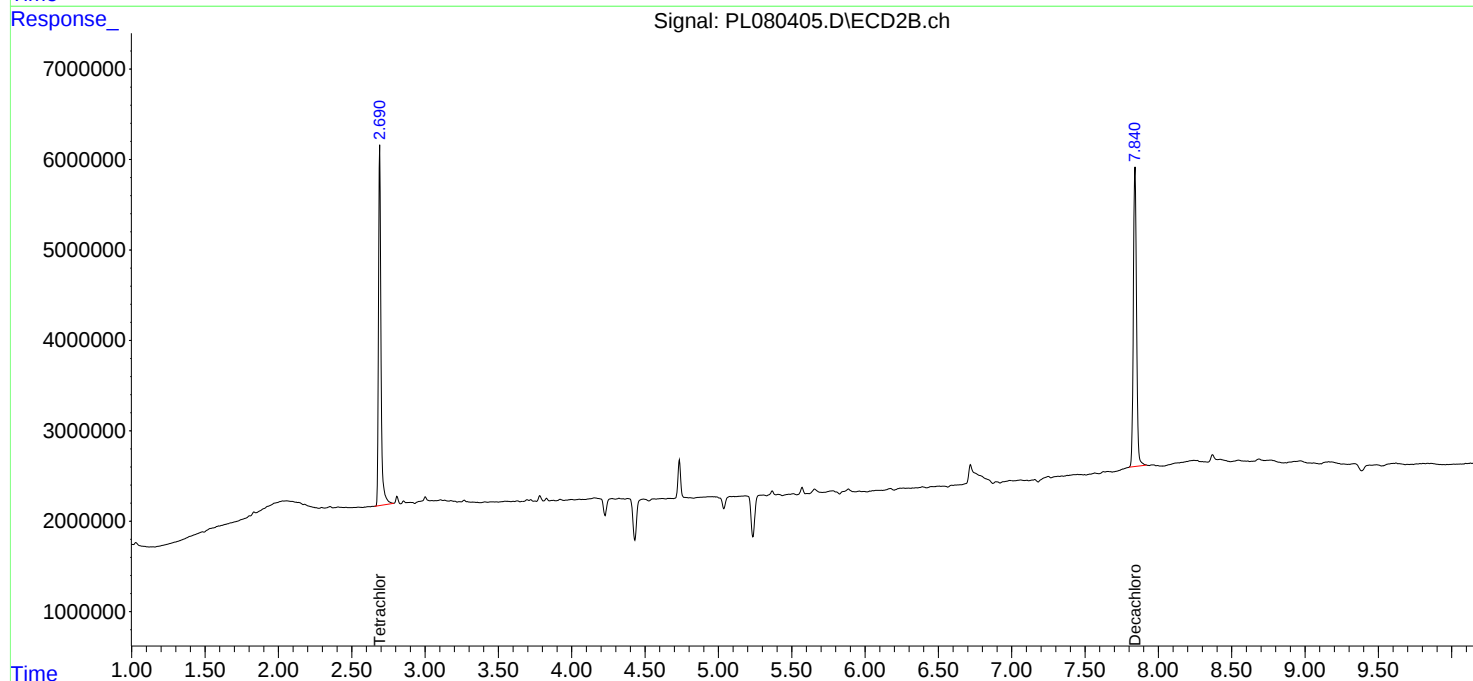
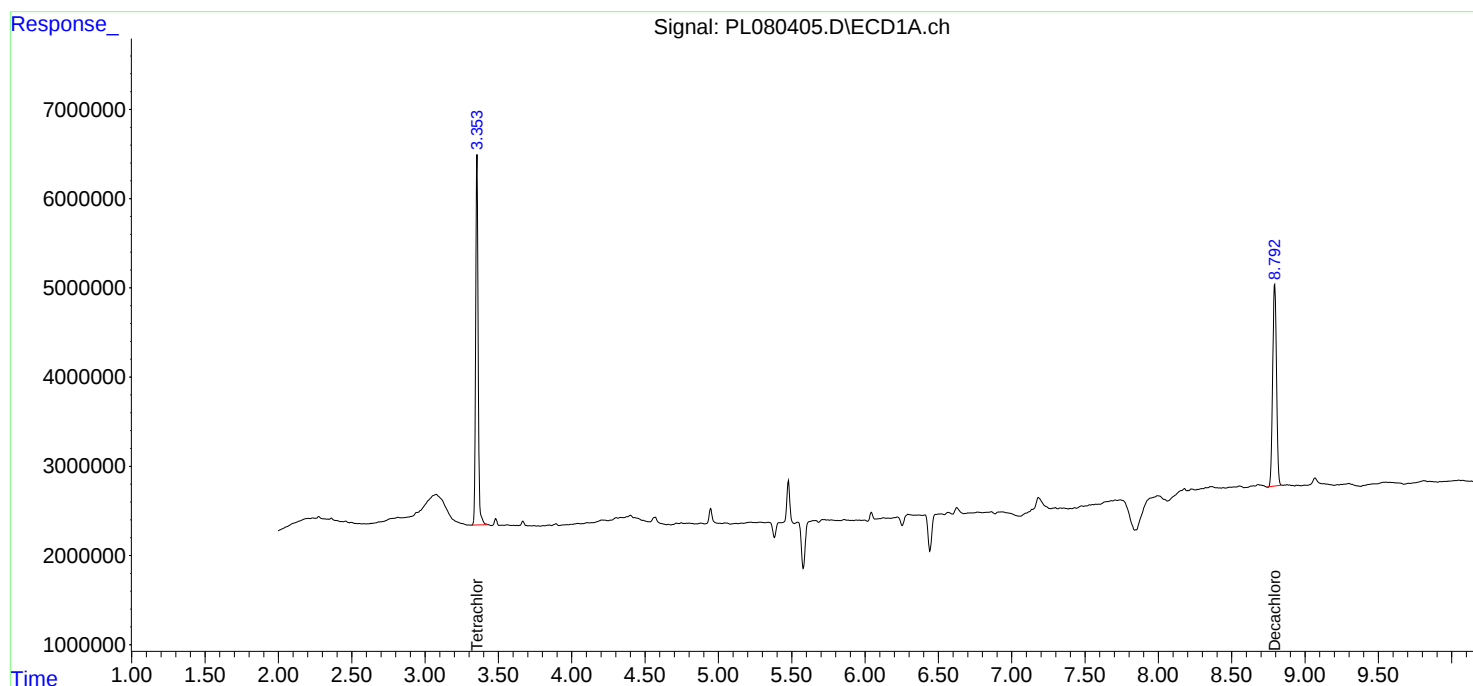
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

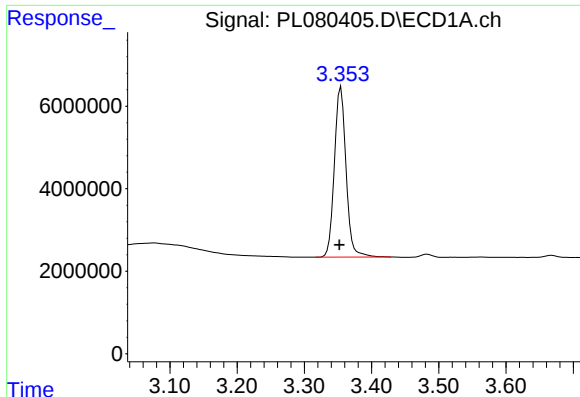
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080405.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 09:16
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:08:01 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

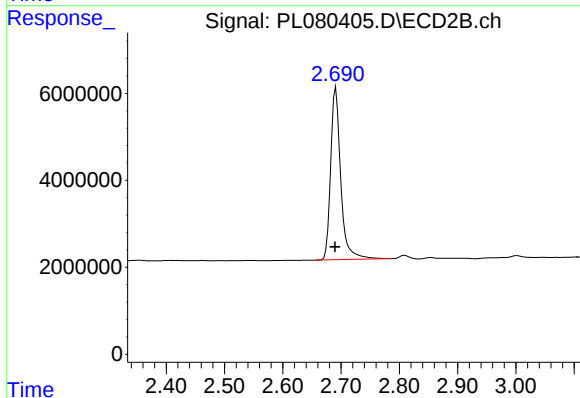




#1 Tetrachloro-m-xylene

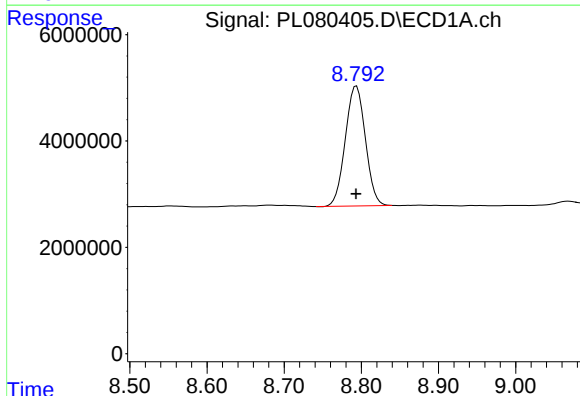
R.T.: 3.354 min
Delta R.T.: 0.002 min
Response: 49289316
Conc: 22.98 ng/ml

Instrument :
ECD_L
ClientSampleId :
I.BLK



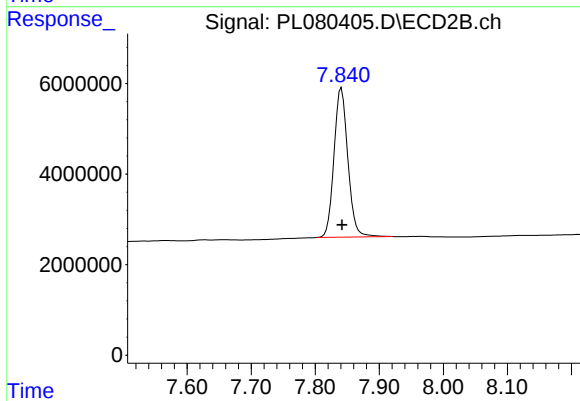
#1 Tetrachloro-m-xylene

R.T.: 2.691 min
Delta R.T.: 0.001 min
Response: 47699889
Conc: 21.72 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.794 min
Delta R.T.: 0.000 min
Response: 40757911
Conc: 23.28 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.841 min
Delta R.T.: 0.000 min
Response: 49664339
Conc: 20.85 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/20/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/20/23	
Client Sample ID:	PIBLK-PL080426.D		SDG No.:	O1233	
Lab Sample ID:	I.BLK-PL080426.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080426.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0078	U	0.0078	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.012	U	0.012	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0064	U	0.0064	0.050	ug/L
76-44-8	Heptachlor	0.0073	U	0.0073	0.050	ug/L
309-00-2	Aldrin	0.0071	U	0.0071	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.010	U	0.010	0.050	ug/L
959-98-8	Endosulfan I	0.0059	U	0.0059	0.050	ug/L
60-57-1	Dieldrin	0.0054	U	0.0054	0.050	ug/L
72-55-9	4,4-DDE	0.0059	U	0.0059	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0076	U	0.0076	0.050	ug/L
72-54-8	4,4-DDD	0.0084	U	0.0084	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0051	U	0.0051	0.050	ug/L
50-29-3	4,4-DDT	0.0065	U	0.0065	0.050	ug/L
72-43-5	Methoxychlor	0.0066	U	0.0066	0.050	ug/L
53494-70-5	Endrin ketone	0.0084	U	0.0084	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0070	U	0.0070	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0074	U	0.0074	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0065	U	0.0065	0.050	ug/L
8001-35-2	Toxaphene	0.18	U	0.18	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.8		27 - 142	109%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.8		60 - 145	104%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/20/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/20/23	
Client Sample ID:	PIBLK-PL080426.D		SDG No.:	O1233	
Lab Sample ID:	I.BLK-PL080426.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080426.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080426.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 19:32
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:10:16 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	43946612	45634691	20.490	20.777
28)	SA Decachlor...	8.790	7.840	38201840	51664472	21.820	21.685

Target Compounds

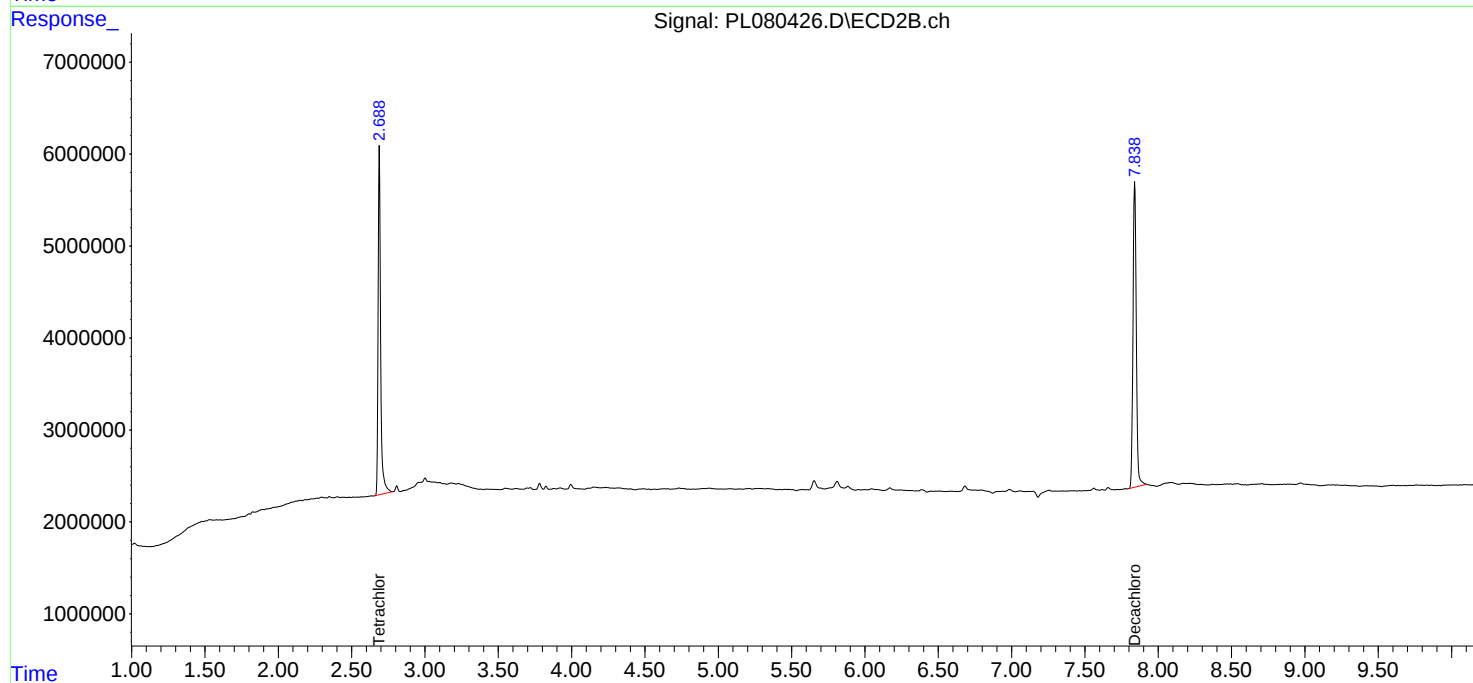
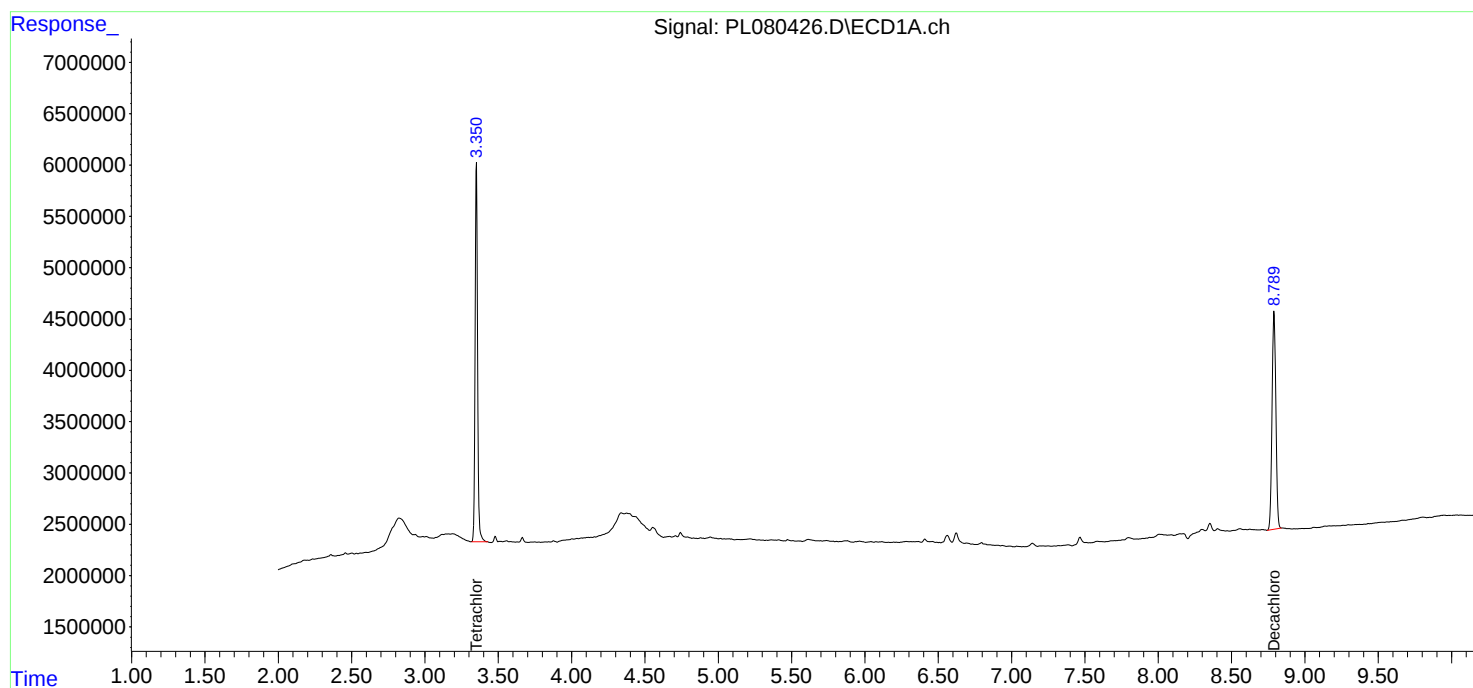
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

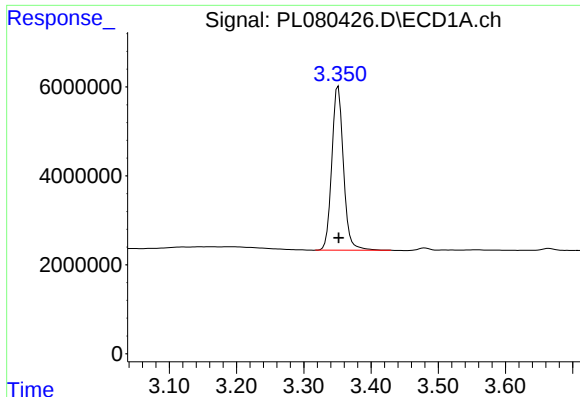
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080426.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 19:32
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:10:16 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

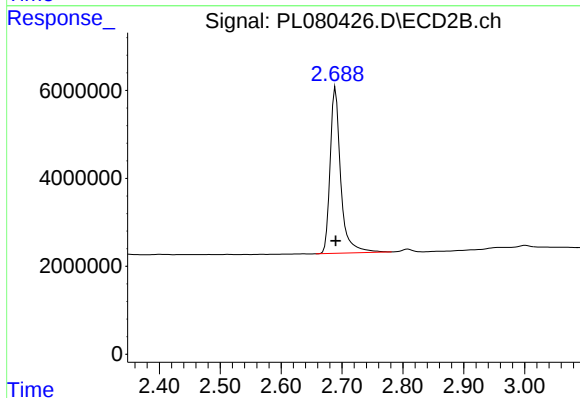




#1 Tetrachloro-m-xylene

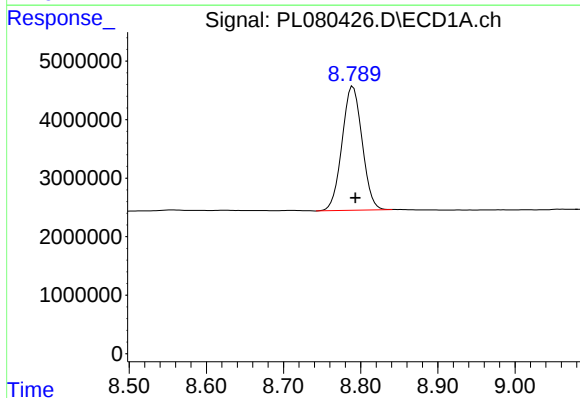
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 43946612
Conc: 20.49 ng/ml

Instrument :
ECD_L
ClientSampleId :
I.BLK



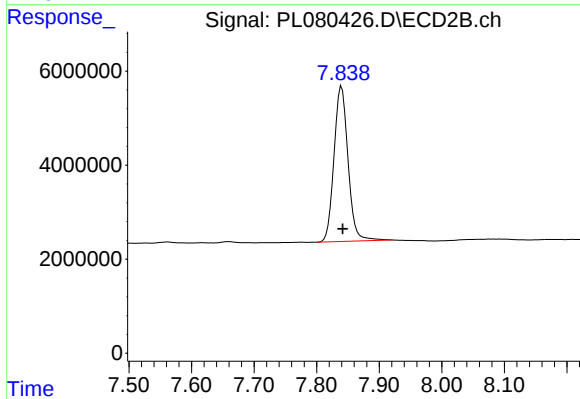
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 45634691
Conc: 20.78 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.790 min
Delta R.T.: -0.003 min
Response: 38201840
Conc: 21.82 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.840 min
Delta R.T.: -0.002 min
Response: 51664472
Conc: 21.68 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/20/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/20/23	
Client Sample ID:	PIBLK-PL080440.D		SDG No.:	O1233	
Lab Sample ID:	I.BLK-PL080440.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080440.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0078	U	0.0078	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.012	U	0.012	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0064	U	0.0064	0.050	ug/L
76-44-8	Heptachlor	0.0073	U	0.0073	0.050	ug/L
309-00-2	Aldrin	0.0071	U	0.0071	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.010	U	0.010	0.050	ug/L
959-98-8	Endosulfan I	0.0059	U	0.0059	0.050	ug/L
60-57-1	Dieldrin	0.0054	U	0.0054	0.050	ug/L
72-55-9	4,4-DDE	0.0059	U	0.0059	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0076	U	0.0076	0.050	ug/L
72-54-8	4,4-DDD	0.0084	U	0.0084	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0051	U	0.0051	0.050	ug/L
50-29-3	4,4-DDT	0.0065	U	0.0065	0.050	ug/L
72-43-5	Methoxychlor	0.0066	U	0.0066	0.050	ug/L
53494-70-5	Endrin ketone	0.0084	U	0.0084	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0070	U	0.0070	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0074	U	0.0074	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0065	U	0.0065	0.050	ug/L
8001-35-2	Toxaphene	0.18	U	0.18	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.8		27 - 142	109%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.8		60 - 145	104%	SPK: 20



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/20/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/20/23	
Client Sample ID:	PIBLK-PL080440.D		SDG No.:	O1233	
Lab Sample ID:	I.BLK-PL080440.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080440.D	1		01/20/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080440.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 23:14
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 I.BLK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:17:49 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	44600344	45534004	20.794	20.731
28)	SA Decachlor...	8.789	7.838	38205480	49788655	21.822	20.897

Target Compounds

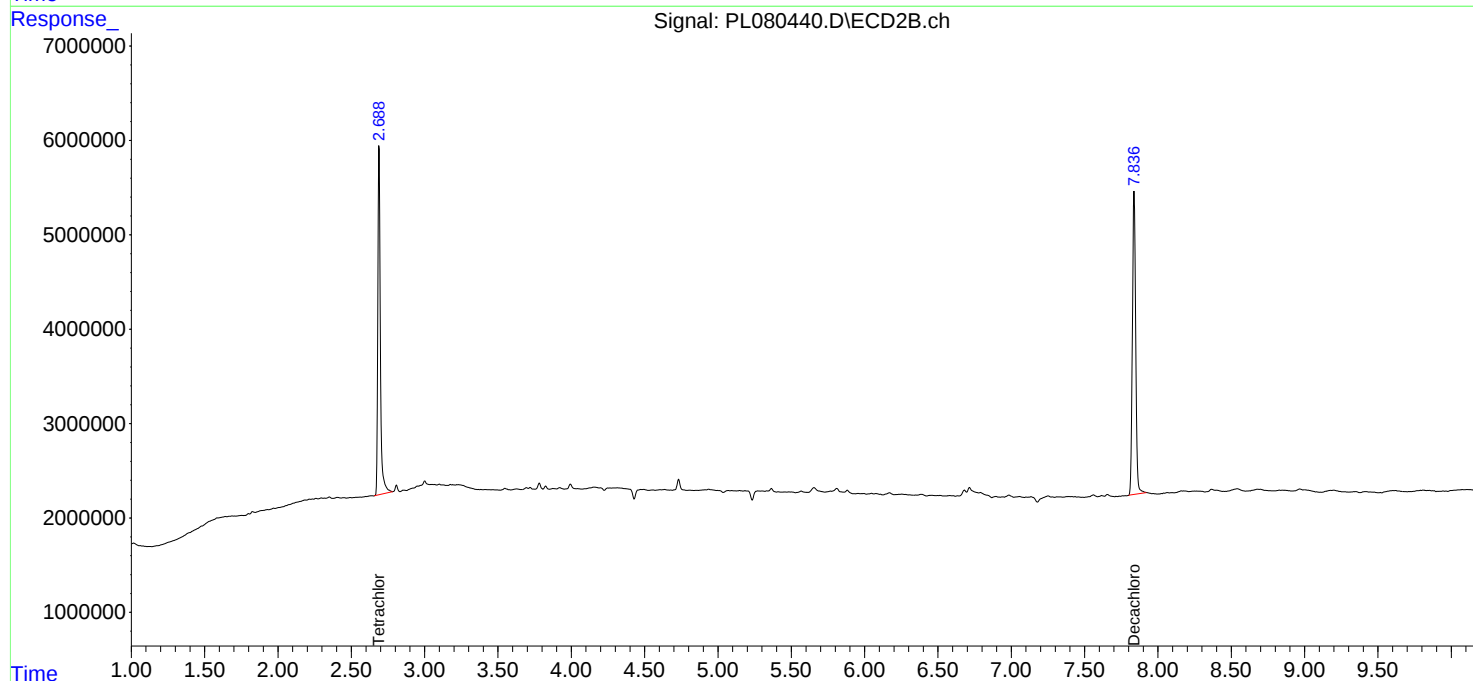
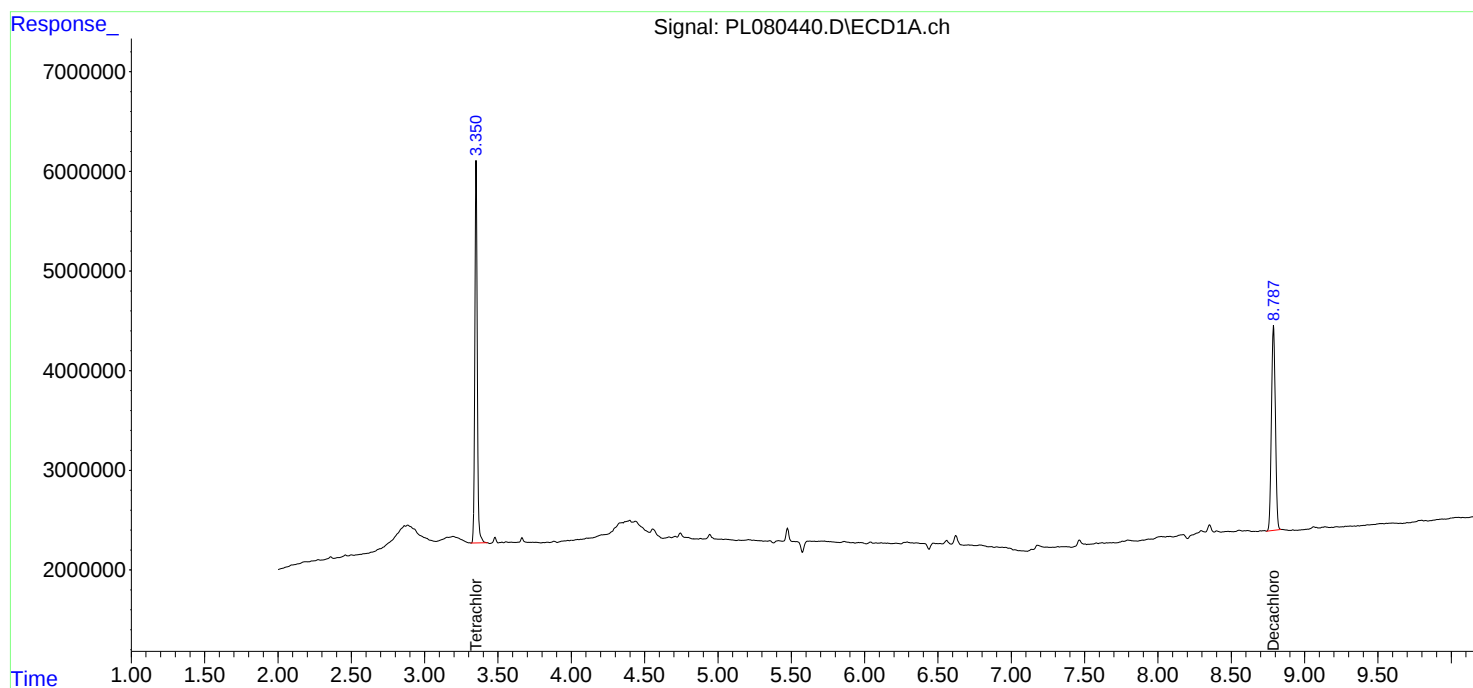
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

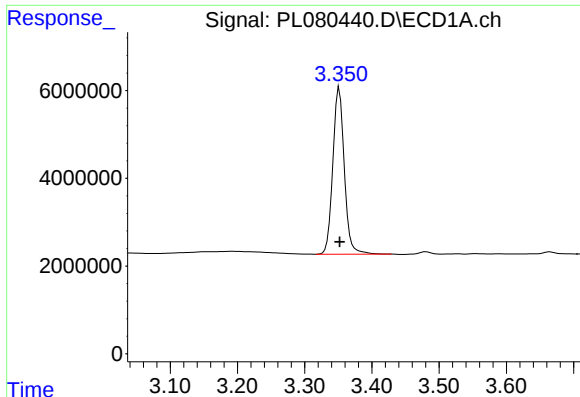
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080440.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 23:14
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:17:49 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

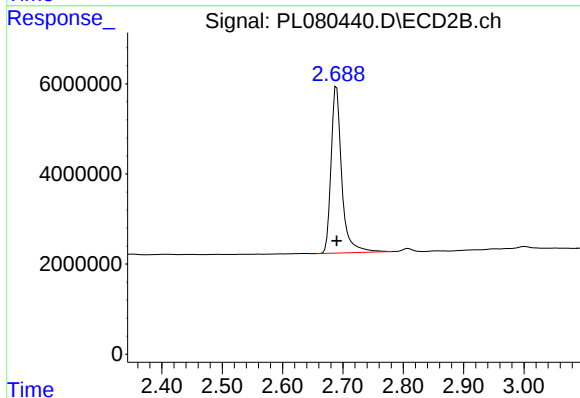




#1 Tetrachloro-m-xylene

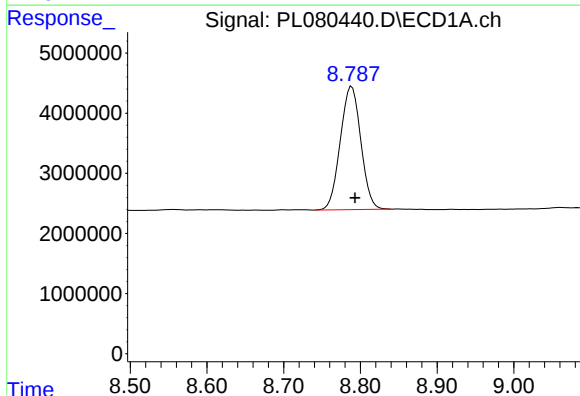
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 44600344
Conc: 20.79 ng/ml

Instrument :
ECD_L
ClientSampleId :
I.BLK



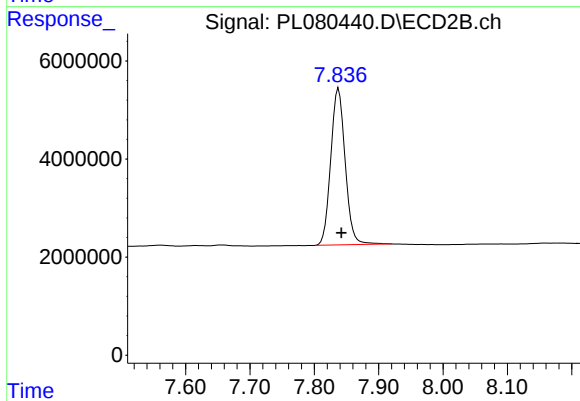
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 45534004
Conc: 20.73 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.789 min
Delta R.T.: -0.004 min
Response: 38205480
Conc: 21.82 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.838 min
Delta R.T.: -0.004 min
Response: 49788655
Conc: 20.90 ng/ml



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/21/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/21/23	
Client Sample ID:	PIBLK-PL080453.D		SDG No.:	O1233	
Lab Sample ID:	I.BLK-PL080453.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080453.D	1		01/21/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.0078	U	0.0078	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.012	U	0.012	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0064	U	0.0064	0.050	ug/L
76-44-8	Heptachlor	0.0073	U	0.0073	0.050	ug/L
309-00-2	Aldrin	0.0071	U	0.0071	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.010	U	0.010	0.050	ug/L
959-98-8	Endosulfan I	0.0059	U	0.0059	0.050	ug/L
60-57-1	Dieldrin	0.0054	U	0.0054	0.050	ug/L
72-55-9	4,4-DDE	0.0059	U	0.0059	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0076	U	0.0076	0.050	ug/L
72-54-8	4,4-DDD	0.0084	U	0.0084	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0051	U	0.0051	0.050	ug/L
50-29-3	4,4-DDT	0.0065	U	0.0065	0.050	ug/L
72-43-5	Methoxychlor	0.0066	U	0.0066	0.050	ug/L
53494-70-5	Endrin ketone	0.0084	U	0.0084	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0070	U	0.0070	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0074	U	0.0074	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0065	U	0.0065	0.050	ug/L
8001-35-2	Toxaphene	0.18	U	0.18	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.3		27 - 142	106%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.5		60 - 145	103%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/21/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/21/23
Client Sample ID:	PIBLK-PL080453.D	SDG No.:	O1233
Lab Sample ID:	I.BLK-PL080453.D	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Pesticide-TCL
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080453.D	1		01/21/23	pl012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080453.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 02:57
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 I.BLK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:24:46 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	44041255	44592802	20.534	20.302
28)	SA Decachlor...	8.788	7.837	37174445	50685572	21.233	21.274

Target Compounds

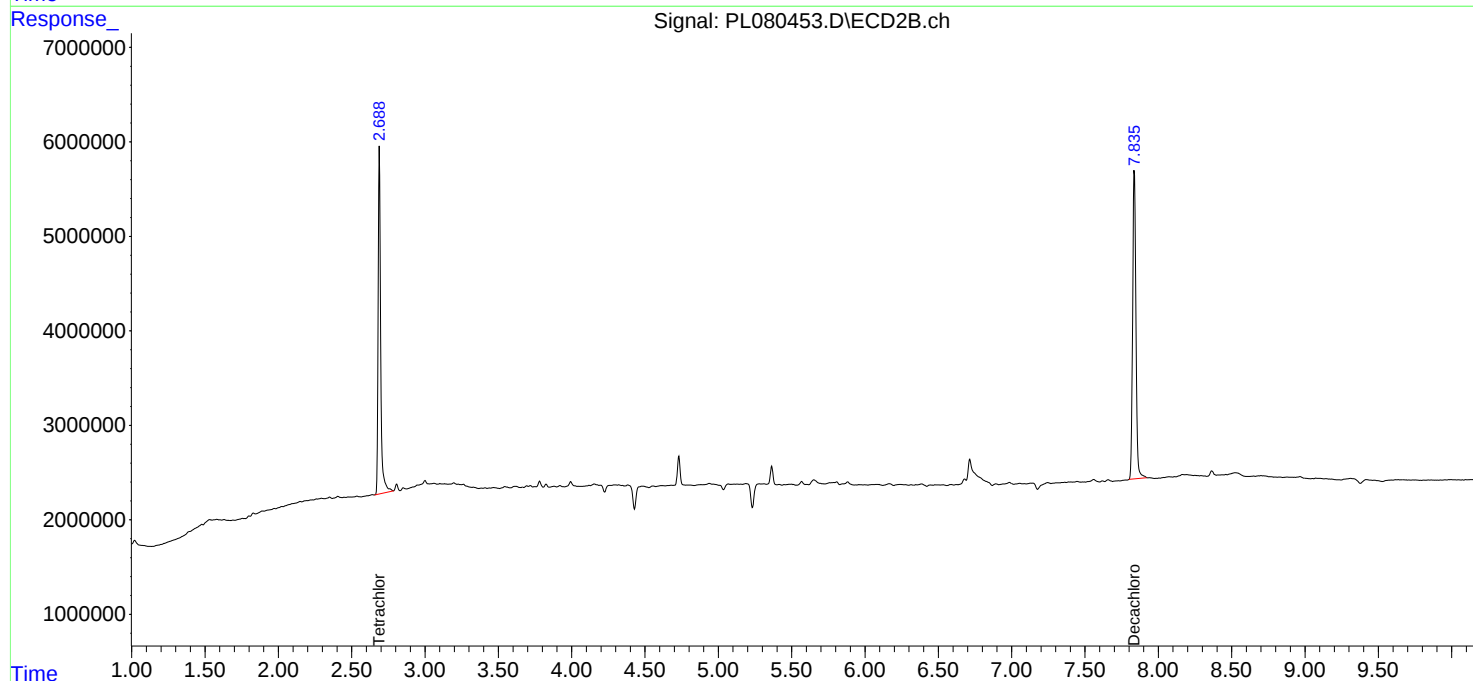
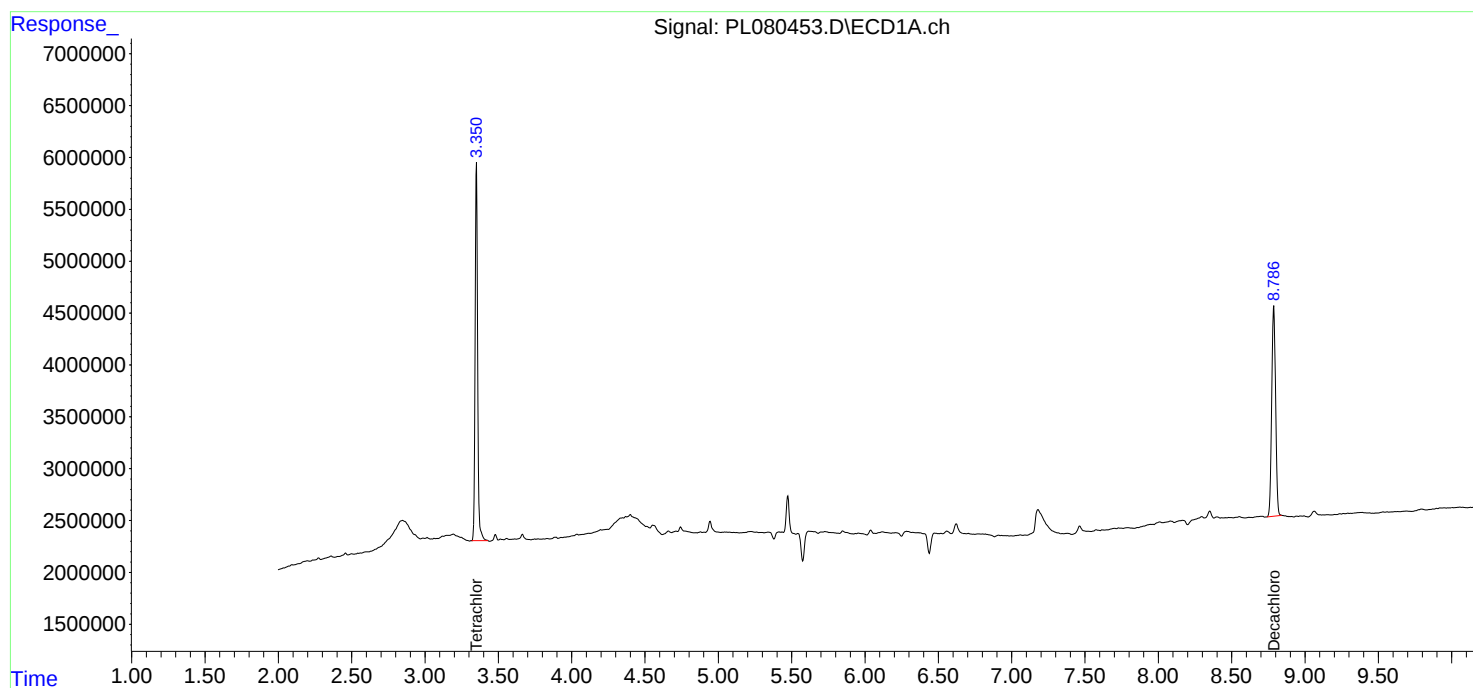
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

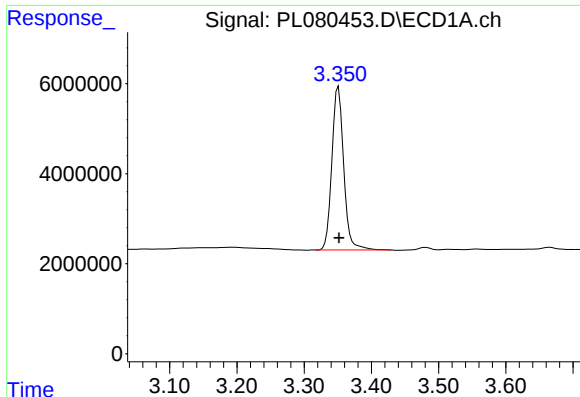
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080453.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 02:57
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
ECD_L
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:24:46 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

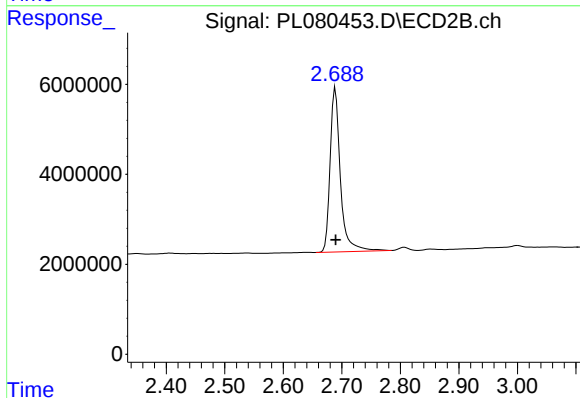




#1 Tetrachloro-m-xylene

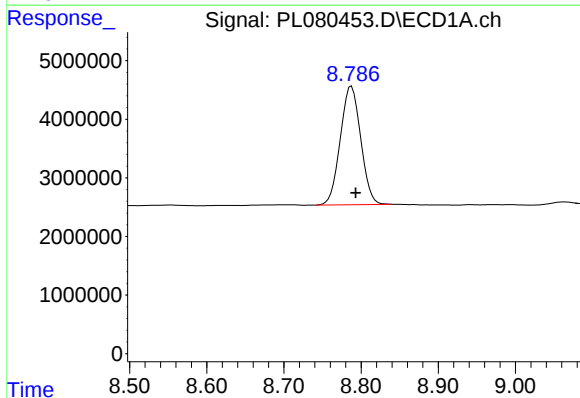
R.T.: 3.351 min
Delta R.T.: 0.000 min
Response: 44041255
Conc: 20.53 ng/ml

Instrument :
ECD_L
ClientSampleId :
I.BLK



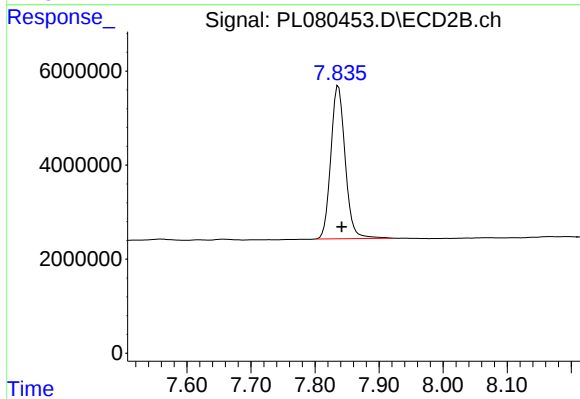
#1 Tetrachloro-m-xylene

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 44592802
Conc: 20.30 ng/ml



#28 Decachlorobiphenyl

R.T.: 8.788 min
Delta R.T.: -0.006 min
Response: 37174445
Conc: 21.23 ng/ml



#28 Decachlorobiphenyl

R.T.: 7.837 min
Delta R.T.: -0.005 min
Response: 50685572
Conc: 21.27 ng/ml



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:		
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:		
Client Sample ID:	PB150373BS		SDG No.:	O1233	
Lab Sample ID:	PB150373BS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080430.D	1	01/20/23 10:35	01/20/23 20:55	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	15.1		0.24	1.70	ug/kg
319-85-7	beta-BHC	14.3		0.52	1.70	ug/kg
319-86-8	delta-BHC	15.2		0.41	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	15.1		0.22	1.70	ug/kg
76-44-8	Heptachlor	15.2		0.23	1.70	ug/kg
309-00-2	Aldrin	15.5		0.20	1.70	ug/kg
1024-57-3	Heptachlor epoxide	15.3		0.29	1.70	ug/kg
959-98-8	Endosulfan I	15.0		0.19	1.70	ug/kg
60-57-1	Dieldrin	15.9		0.18	1.70	ug/kg
72-55-9	4,4-DDE	15.3		0.18	1.70	ug/kg
72-20-8	Endrin	16.5		0.17	1.70	ug/kg
33213-65-9	Endosulfan II	17.4		0.22	1.70	ug/kg
72-54-8	4,4-DDD	15.2		0.21	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	15.6		0.18	1.70	ug/kg
50-29-3	4,4-DDT	15.0		0.21	1.70	ug/kg
72-43-5	Methoxychlor	15.5		0.25	1.70	ug/kg
53494-70-5	Endrin ketone	15.5		0.29	1.70	ug/kg
7421-93-4	Endrin aldehyde	16.4		0.29	1.70	ug/kg
5103-71-9	alpha-Chlordane	15.3		0.21	1.70	ug/kg
5103-74-2	gamma-Chlordane	15.0		0.21	1.70	ug/kg
8001-35-2	Toxaphene	6.60	U	6.60	33.0	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.2		12 - 143	101%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.4		10 - 159	92%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:		
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:		
Client Sample ID:	PB150373BS		SDG No.:	O1233	
Lab Sample ID:	PB150373BS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080430.D	1	01/20/23 10:35	01/20/23 20:55	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080430.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 20 Jan 2023 20:55
 Operator : AR\AJ
 Sample : PB150373BS
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 PB150373BS

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:12:59 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	39182270	40489999	18.268	18.434
28)	SA Decachlor...	8.790	7.839	35399616	47662736	20.220	20.005
Target Compounds							
2)	A alpha-BHC	3.800	3.191	142.4E6	144.5E6	44.938	45.434
3)	MA gamma-BHC...	4.128	3.519	133.2E6	135.2E6	45.307	45.259
4)	MA Heptachlor	4.712	3.860	134.7E6	143.5E6	45.584	45.078
5)	MB Aldrin	5.050	4.140	127.6E6	137.6E6	46.656	46.645
6)	B beta-BHC	4.324	3.815	58430550	56882017	42.806	42.620
7)	B delta-BHC	4.567	4.045	131.7E6	130.0E6	45.484	45.057
8)	B Heptachlo...	5.475	4.642	116.8E6	127.8E6	45.132	45.918
9)	A Endosulfan I	5.857	5.012	106.3E6	116.8E6	45.033	44.895
10)	B gamma-Chl...	5.730	4.894	113.9E6	126.2E6	45.087	44.530
11)	B alpha-Chl...	5.809	4.957	115.6E6	127.9E6	45.788	44.637
12)	B 4,4'-DDE	5.987	5.150	102.4E6	106.2E6	45.996	45.008
13)	MA Dieldrin	6.131	5.277	113.9E6	128.1E6	47.590	47.370
14)	MA Endrin	6.358	5.552	101.9E6	115.0E6	47.121	49.532
15)	B Endosulfa...	6.578	5.844	97349432	108.9E6	42.468	52.240m
16)	A 4,4'-DDD	6.501	5.704	82866986	85491572	45.233	45.494
17)	MA 4,4'-DDT	6.815	5.955	90601712	94556365	43.607	44.995
18)	B Endrin al...	6.707	6.026	81908151	89463150	49.241	48.991
19)	B Endosulfa...	6.941	6.249	96840253	107.5E6	46.785	46.227
20)	A Methoxychlor	7.292	6.534	51212061	55025954	46.418	45.346
21)	B Endrin ke...	7.420	6.754	101.9E6	118.9E6	46.196	46.586
22)	Mirex	7.893	6.938	82811754	109.2E6	48.152	47.943

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080430.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Jan 2023 20:55
Operator : AR\AJ
Sample : PB150373BS
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

PB150373BS

Manual Integrations

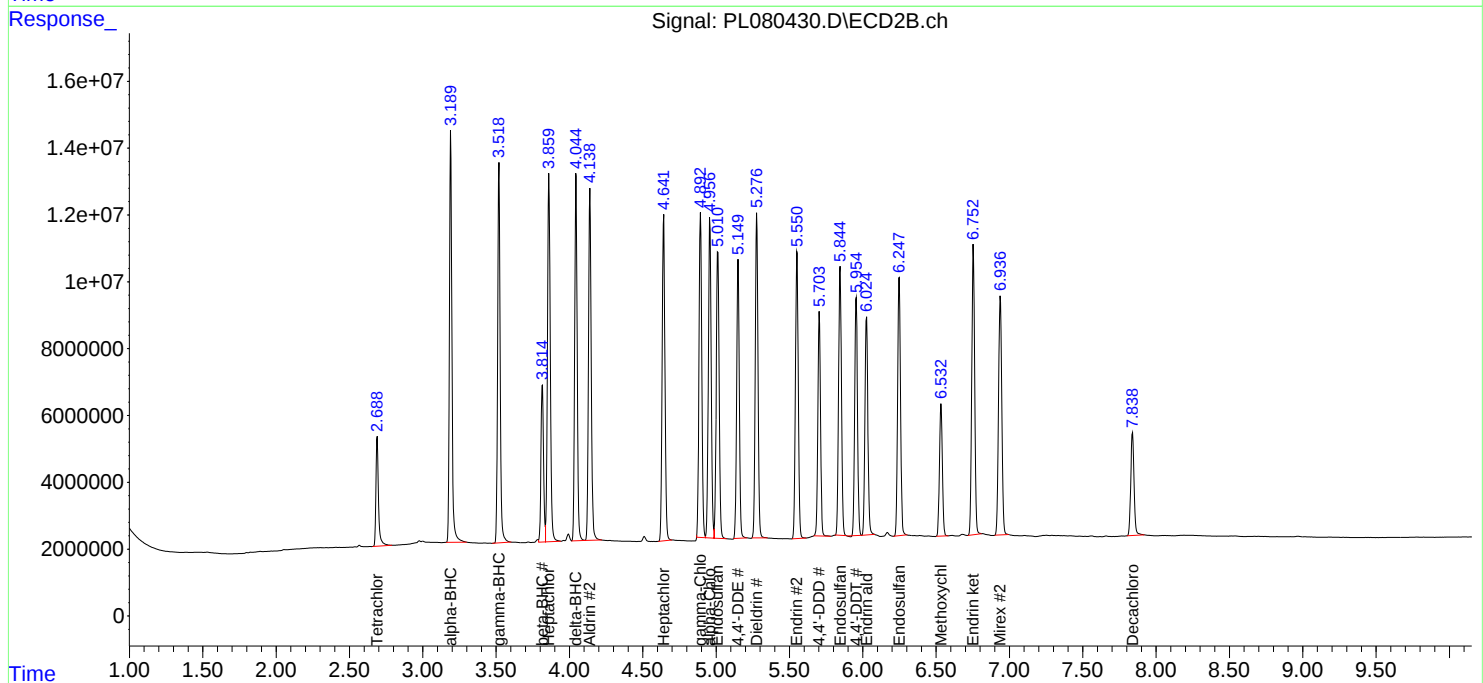
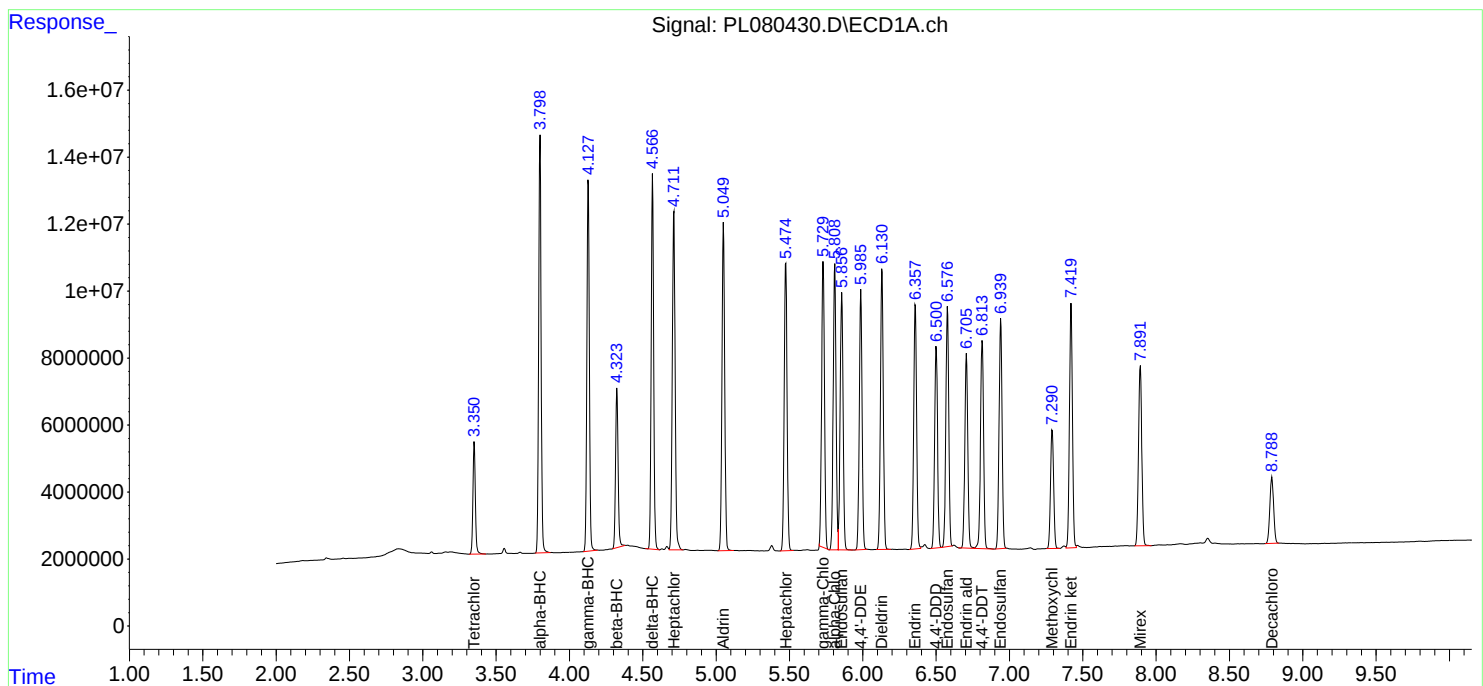
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:12:59 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34AMS		SDG No.:	O1233	
Lab Sample ID:	O1233-02MS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.1	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080443.D	1	01/20/23 10:35	01/21/23 00:38	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	18.2		0.28	2.00	ug/kg
319-85-7	beta-BHC	17.7		0.61	2.00	ug/kg
319-86-8	delta-BHC	18.7		0.48	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	18.5		0.26	2.00	ug/kg
76-44-8	Heptachlor	18.4		0.27	2.00	ug/kg
309-00-2	Aldrin	19.0		0.23	2.00	ug/kg
1024-57-3	Heptachlor epoxide	18.3		0.34	2.00	ug/kg
959-98-8	Endosulfan I	18.2		0.22	2.00	ug/kg
60-57-1	Dieldrin	19.2		0.21	2.00	ug/kg
72-55-9	4,4-DDE	18.6		0.21	2.00	ug/kg
72-20-8	Endrin	19.7		0.20	2.00	ug/kg
33213-65-9	Endosulfan II	20.8		0.26	2.00	ug/kg
72-54-8	4,4-DDD	18.3		0.25	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	18.6		0.21	2.00	ug/kg
50-29-3	4,4-DDT	19.8		0.25	2.00	ug/kg
72-43-5	Methoxychlor	18.8		0.29	2.00	ug/kg
53494-70-5	Endrin ketone	18.4		0.34	2.00	ug/kg
7421-93-4	Endrin aldehyde	19.8		0.34	2.00	ug/kg
5103-71-9	alpha-Chlordane	18.5		0.25	2.00	ug/kg
5103-74-2	gamma-Chlordane	18.3		0.25	2.00	ug/kg
8001-35-2	Toxaphene	7.70	U	7.70	38.6	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	15.5		12 - 143	77%	SPK: 20
877-09-8	Tetrachloro-m-xylene	16.9		10 - 159	85%	SPK: 20



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34AMS		SDG No.:	O1233	
Lab Sample ID:	O1233-02MS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.1	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080443.D	1	01/20/23 10:35	01/21/23 00:38	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080443.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 00:38
 Operator : AR\AJ
 Sample : 01233-02MS
 Misc :
 ALS Vial : 41 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P34AMS

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 01/23/2023
 Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:19:59 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.352	2.689	36322312	36835188	16.935	16.770
28)	SA Decachlor...	8.789	7.838	27116198	35876222	15.488	15.058
Target Compounds							
2)	A alpha-BHC	3.800	3.191	147.7E6	146.4E6	46.616	46.027
3)	MA gamma-BHC...	4.129	3.519	139.8E6	138.3E6	47.571	46.303
4)	MA Heptachlor	4.712	3.861	139.6E6	147.2E6	47.249	46.253
5)	MB Aldrin	5.051	4.140	133.8E6	142.9E6	48.894	48.463
6)	B beta-BHC	4.324	3.815	62151340	59274237	45.531	44.413
7)	B delta-BHC	4.568	4.045	139.0E6	134.7E6	48.003	46.708
8)	B Heptachlo...	5.476	4.643	121.4E6	129.3E6	46.923	46.473
9)	A Endosulfan I	5.857	5.012	110.2E6	119.0E6	46.674	45.747
10)	B gamma-Chl...	5.730	4.893	118.7E6	129.9E6	47.006	45.839
11)	B alpha-Chl...	5.809	4.958	119.8E6	130.8E6	47.475	45.644
12)	B 4,4'-DDE	5.987	5.151	106.4E6	110.8E6	47.756	46.952
13)	MA Dieldrin	6.132	5.277	117.8E6	130.5E6	49.228	48.228
14)	MA Endrin	6.359	5.552	105.5E6	117.3E6	48.777	50.514
15)	B Endosulfa...	6.577	5.844	98607198	111.4E6	43.016	53.473m
16)	A 4,4'-DDD	6.501	5.704	86135574	86882665	47.018	46.234
17)	MA 4,4'-DDT	6.814	5.956	105.5E6	99735988	50.798	47.460
18)	B Endrin al...	6.707	6.026	84539838	90977085	50.823	49.820
19)	B Endosulfa...	6.941	6.249	98657386	109.3E6	47.663	47.004
20)	A Methoxychlor	7.292	6.534	53132501	57569101	48.158	47.442
21)	B Endrin ke...	7.421	6.754	104.5E6	120.3E6	47.356	47.122
22)	Mirex	7.891	6.938	84331662	109.0E6	49.036	47.883

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080443.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 00:38
Operator : AR\AJ
Sample : 01233-02MS
Misc :
ALS Vial : 41 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

B-P34AMS

Manual Integrations

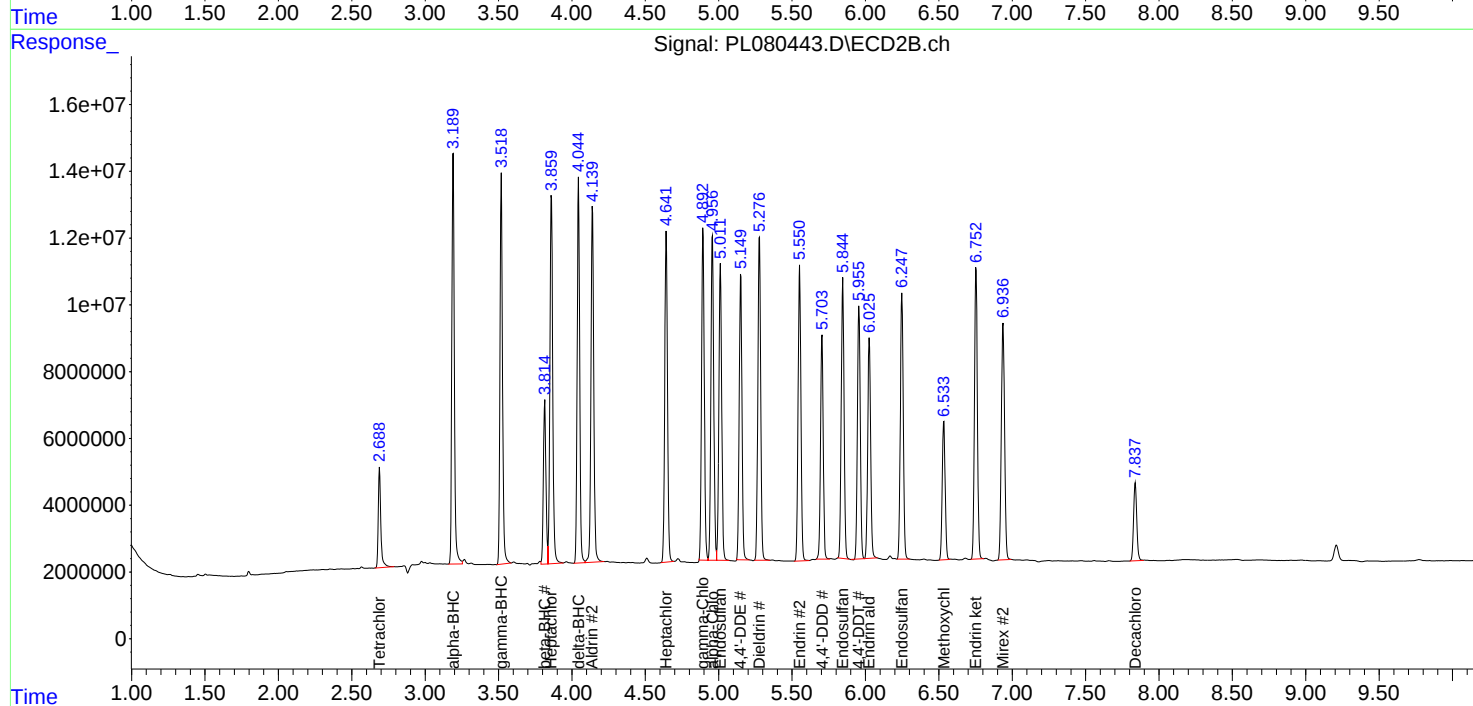
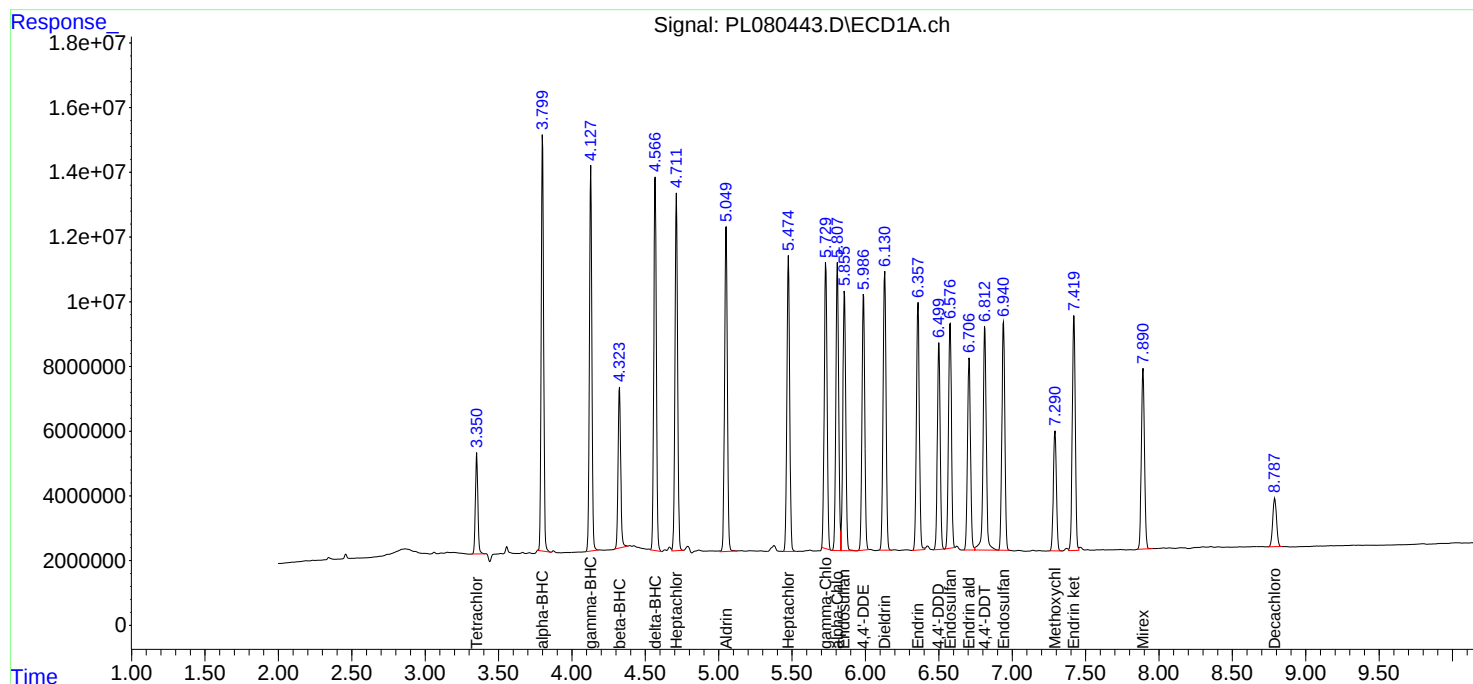
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:19:59 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34AMSD		SDG No.:	O1233	
Lab Sample ID:	O1233-02MSD		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.08	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080444.D	1	01/20/23 10:35	01/21/23 00:51	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	18.4		0.28	2.00	ug/kg
319-85-7	beta-BHC	17.9		0.61	2.00	ug/kg
319-86-8	delta-BHC	19.0		0.48	2.00	ug/kg
58-89-9	gamma-BHC (Lindane)	18.8		0.26	2.00	ug/kg
76-44-8	Heptachlor	18.6		0.27	2.00	ug/kg
309-00-2	Aldrin	19.3		0.23	2.00	ug/kg
1024-57-3	Heptachlor epoxide	18.5		0.34	2.00	ug/kg
959-98-8	Endosulfan I	18.4		0.22	2.00	ug/kg
60-57-1	Dieldrin	19.4		0.21	2.00	ug/kg
72-55-9	4,4-DDE	18.9		0.21	2.00	ug/kg
72-20-8	Endrin	19.9		0.20	2.00	ug/kg
33213-65-9	Endosulfan II	21.1		0.26	2.00	ug/kg
72-54-8	4,4-DDD	18.6		0.25	2.00	ug/kg
1031-07-8	Endosulfan Sulfate	18.8		0.21	2.00	ug/kg
50-29-3	4,4-DDT	20.0		0.25	2.00	ug/kg
72-43-5	Methoxychlor	19.0		0.29	2.00	ug/kg
53494-70-5	Endrin ketone	18.6		0.34	2.00	ug/kg
7421-93-4	Endrin aldehyde	20.1		0.34	2.00	ug/kg
5103-71-9	alpha-Chlordane	18.7		0.25	2.00	ug/kg
5103-74-2	gamma-Chlordane	18.8		0.25	2.00	ug/kg
8001-35-2	Toxaphene	7.70	U	7.70	38.6	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	15.7		12 - 143	78%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.1		10 - 159	85%	SPK: 20



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company		Date Collected:	01/18/23	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR		Date Received:	01/19/23	
Client Sample ID:	B-P34AMSD		SDG No.:	O1233	
Lab Sample ID:	O1233-02MSD		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	85.3	Decanted:
Sample Wt/Vol:	30.08	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	Pesticide-TCL	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL080444.D	1	01/20/23 10:35	01/21/23 00:51	PB150373

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
 Data File : PL080444.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jan 2023 00:51
 Operator : AR\AJ
 Sample : 01233-02MSD
 Misc :
 ALS Vial : 42 Sample Multiplier: 1

Instrument :
 ECD_L
 ClientSampleId :
 B-P34AMSD

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 01/23/2023
 Supervised By : Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jan 21 06:20:27 2023
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
 Quant Title : GC Extractables
 QLast Update : Fri Jan 20 17:01:11 2023
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
 Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
1)	SA Tetrachlo...	3.351	2.689	36573496	37450852	17.052	17.051
28)	SA Decachlor...	8.788	7.838	27434968	36111258	15.670	15.157
Target Compounds							
2)	A alpha-BHC	3.800	3.190	149.5E6	148.1E6	47.203	46.555
3)	MA gamma-BHC...	4.128	3.519	141.9E6	139.8E6	48.255	46.808
4)	MA Heptachlor	4.712	3.860	141.4E6	149.5E6	47.844	46.978
5)	MB Aldrin	5.050	4.140	135.4E6	144.8E6	49.482	49.089
6)	B beta-BHC	4.324	3.815	62552089	60182071	45.825	45.093
7)	B delta-BHC	4.567	4.044	141.0E6	136.6E6	48.688	47.347
8)	B Heptachlo...	5.475	4.642	122.9E6	131.1E6	47.509	47.130
9)	A Endosulfan I	5.856	5.011	111.4E6	120.3E6	47.171	46.227
10)	B gamma-Chl...	5.728	4.893	122.0E6	131.8E6	48.321m	46.519
11)	B alpha-Chl...	5.808	4.957	121.1E6	132.6E6	47.987	46.285
12)	B 4,4'-DDE	5.987	5.150	107.9E6	112.8E6	48.432	47.830
13)	MA Dieldrin	6.130	5.277	119.4E6	132.1E6	49.893	48.832
14)	MA Endrin	6.358	5.551	107.2E6	118.8E6	49.561	51.177
15)	B Endosulfa...	6.577	5.844	99781778	112.8E6	43.529	54.133m
16)	A 4,4'-DDD	6.501	5.704	87226011	87825667	47.613	46.736
17)	MA 4,4'-DDT	6.813	5.955	106.7E6	101.8E6	51.351	48.419
18)	B Endrin al...	6.706	6.025	85638943	92189742	51.484	50.484
19)	B Endosulfa...	6.940	6.248	99662413	110.7E6	48.148	47.617
20)	A Methoxychlor	7.292	6.534	53862644	58346072	48.820	48.082
21)	B Endrin ke...	7.420	6.753	105.2E6	121.6E6	47.688	47.634
22)	Mirex	7.892	6.937	84888706	110.2E6	49.360	48.401

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_L\Data\PL012023\
Data File : PL080444.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Jan 2023 00:51
Operator : AR\AJ
Sample : 01233-02MSD
Misc :
ALS Vial : 42 Sample Multiplier: 1

Instrument :

ECD_L

ClientSampleId :

B-P34AMSD

Manual Integrations

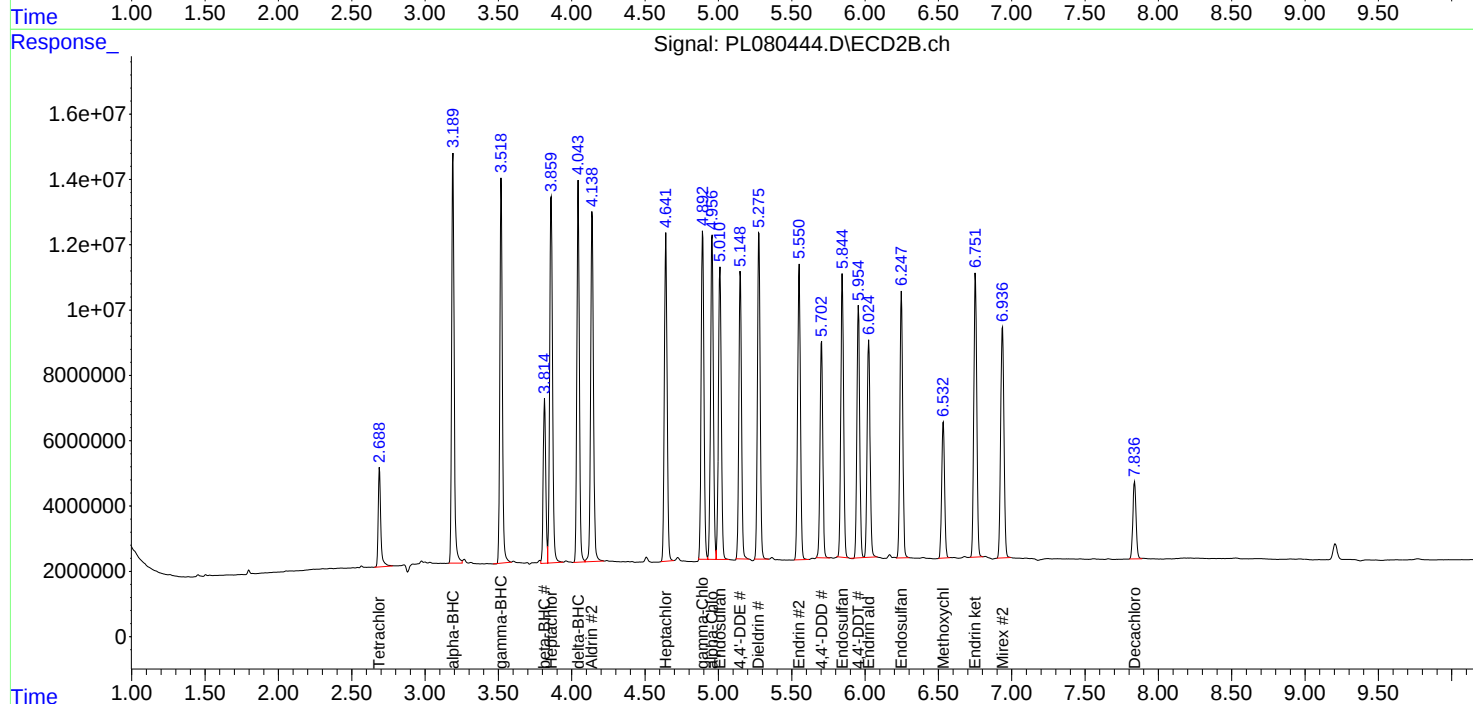
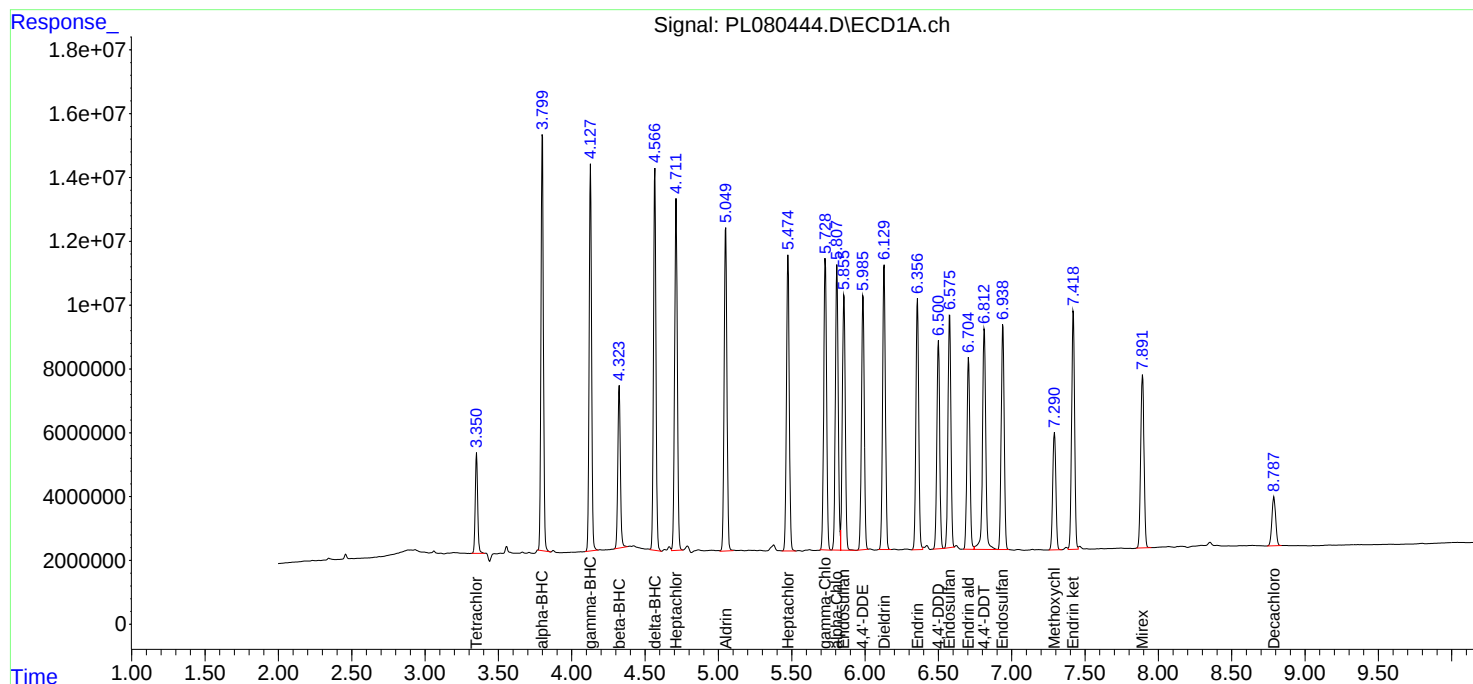
APPROVED

Reviewed By :Abdul Mirza 01/23/2023

Supervised By :Ankita Jodhani 01/23/2023

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 21 06:20:27 2023
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_L\methods\PL012023.M
Quant Title : GC Extractables
QLast Update : Fri Jan 20 17:01:11 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR2 Signal #2 Phase: ZB-MR1
Signal #1 Info : 30M x 0.32mm x0.2 Signal #2 Info : 30M x 0.32mm x0.5µm





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:

pl012023

Instrument

ECD_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PEM	PL080406.D	4,4"-DDE	Abdul	1/23/2023 11:07:02 AM	Ankita	1/23/2023 11:18:38	Peak Integrated by Software
PEM	PL080406.D	4,4"-DDE #2	Abdul	1/23/2023 11:07:02 AM	Ankita	1/23/2023 11:18:38	Peak Integrated by Software
PEM	PL080406.D	Endrin	Abdul	1/23/2023 11:07:02 AM	Ankita	1/23/2023 11:18:38	Peak Integrated by Software
PSTDICC005	PL080412.D	4,4"-DDD #2	Abdul	1/23/2023 11:07:06 AM	Ankita	1/23/2023 11:18:39	Peak Integrated by Software
PSTDICC005	PL080412.D	4,4"-DDT #2	Abdul	1/23/2023 11:07:06 AM	Ankita	1/23/2023 11:18:39	Peak Integrated by Software
PSTDICC005	PL080412.D	Endosulfan II	Abdul	1/23/2023 11:07:06 AM	Ankita	1/23/2023 11:18:39	Peak Integrated by Software
PSTDICC005	PL080412.D	Endosulfan II #2	Abdul	1/23/2023 11:07:06 AM	Ankita	1/23/2023 11:18:39	Peak Integrated by Software
PSTDICV050	PL080423.D	Endosulfan II #2	Abdul	1/23/2023 11:07:25 AM	Ankita	1/23/2023 11:18:45	Peak Integrated by Software
PSTDICV050	PL080423.D	gamma-Chlordane	Abdul	1/23/2023 11:07:25 AM	Ankita	1/23/2023 11:18:45	Peak Integrated by Software
PEM	PL080427.D	4,4"-DDD #2	Abdul	1/23/2023 11:07:31 AM	Ankita	1/23/2023 11:18:46	Peak Integrated by Software
PEM	PL080427.D	Endrin aldehyde #2	Abdul	1/23/2023 11:07:31 AM	Ankita	1/23/2023 11:18:46	Peak Integrated by Software
PB150373BS	PL080430.D	Endosulfan II #2	Abdul	1/23/2023 11:07:41 AM	Ankita	1/23/2023 11:18:48	Peak Integrated by Software
PSTDCCC050	PL080441.D	gamma-Chlordane	Abdul	1/23/2023 11:07:54 AM	Ankita	1/23/2023 11:18:54	Peak Integrated by Software



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:

pl012023

Instrument

ECD_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
O1233-02MS	PL080443.D	Endosulfan II #2	Abdul	1/23/2023 11:08:38 AM	Ankita	1/23/2023 11:18:56	Peak Integrated by Software
O1233-02MSD	PL080444.D	Endosulfan II #2	Abdul	1/23/2023 11:07:59 AM	Ankita	1/23/2023 11:18:58	Peak Integrated by Software
O1233-02MSD	PL080444.D	gamma-Chlordane	Abdul	1/23/2023 11:07:59 AM	Ankita	1/23/2023 11:18:58	Peak Integrated by Software
O1233-04	PL080446.D	Tetrachloro-m-xylene	Abdul	1/23/2023 11:08:03 AM	Ankita	1/23/2023 11:19:00	Peak Integrated by Software
O1233-05	PL080447.D	Tetrachloro-m-xylene	Abdul	1/23/2023 11:08:08 AM	Ankita	1/23/2023 11:19:01	Peak Integrated by Software
O1233-06	PL080448.D	4,4"-DDT #2	Abdul	1/23/2023 11:08:12 AM	Ankita	1/23/2023 11:19:03	Peak Integrated by Software
O1233-06	PL080448.D	gamma-Chlordane #2	Abdul	1/23/2023 11:08:12 AM	Ankita	1/23/2023 11:19:03	Peak Integrated by Software
O1233-06	PL080448.D	Tetrachloro-m-xylene	Abdul	1/23/2023 11:08:12 AM	Ankita	1/23/2023 11:19:03	Peak Integrated by Software
O1233-07	PL080449.D	4,4"-DDD	Abdul	1/23/2023 11:08:16 AM	Ankita	1/23/2023 11:19:05	Peak Integrated by Software
O1233-07	PL080449.D	4,4"-DDD #2	Abdul	1/23/2023 11:08:16 AM	Ankita	1/23/2023 11:19:05	Peak Integrated by Software
O1233-07	PL080449.D	4,4"-DDE	Abdul	1/23/2023 11:08:16 AM	Ankita	1/23/2023 11:19:05	Peak Integrated by Software
O1233-07	PL080449.D	Tetrachloro-m-xylene	Abdul	1/23/2023 11:08:16 AM	Ankita	1/23/2023 11:19:05	Peak Integrated by Software
PSTDCCC050	PL080454.D	Endosulfan II #2	Abdul	1/23/2023 11:08:21 AM	Ankita	1/23/2023 11:19:20	Peak Integrated by Software



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Manual Integration Report

Sequence:	pl012023	Instrument	ECD_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PSTDCCC050	PL080454.D	gamma-Chlordane	Abdul	1/23/2023 11:08:21 AM	Ankita	1/23/2023 11:19:20	Peak Integrated by Software



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081
STD. NAME	STD REF.#		
Tune/Reschk	PP21328,P10886		
Initial Calibration Stds	PP20668,PP20676,PP20677,PP20678,PP20679,PP20674,PP20680,PP20681,PP20682,PP20683,PP20684,PP20686,PP20687,PP20688,PP20689		
CCC	PP20677,PP20681,PP20687		
Internal Standard/PEM			
ICV/I.BLK	PP20716,PP20717,PP20718		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	Sampled	Data File Name	Date-Time	Operator	Status
1	HEXANE	PL080404.D	20 Jan 2023 09:02	AR\AJ	Ok
2	I.BLK	PL080405.D	20 Jan 2023 09:16	AR\AJ	Ok
3	PEM	PL080406.D	20 Jan 2023 09:30	AR\AJ	Ok,M
4	RESCHK	PL080407.D	20 Jan 2023 14:27	AR\AJ	Ok
5	PSTDICC100	PL080408.D	20 Jan 2023 14:41	AR\AJ	Ok
6	PSTDICC075	PL080409.D	20 Jan 2023 14:54	AR\AJ	Ok
7	PSTDICC050	PL080410.D	20 Jan 2023 15:08	AR\AJ	Ok
8	PSTDICC025	PL080411.D	20 Jan 2023 15:22	AR\AJ	Ok
9	PSTDICC005	PL080412.D	20 Jan 2023 15:36	AR\AJ	Ok,M
10	PCHLORICC1000	PL080413.D	20 Jan 2023 15:50	AR\AJ	Ok
11	PCHLORICC750	PL080414.D	20 Jan 2023 16:04	AR\AJ	Ok
12	PCHLORICC500	PL080415.D	20 Jan 2023 16:18	AR\AJ	Ok
13	PCHLORICC250	PL080416.D	20 Jan 2023 16:31	AR\AJ	Ok
14	PCHLORICC050	PL080417.D	20 Jan 2023 16:45	AR\AJ	Ok,M
15	PTOXICC1000	PL080418.D	20 Jan 2023 16:59	AR\AJ	Ok
16	PTOXICC750	PL080419.D	20 Jan 2023 17:13	AR\AJ	Ok
17	PTOXICC500	PL080420.D	20 Jan 2023 17:27	AR\AJ	Ok
18	PTOXICC250	PL080421.D	20 Jan 2023 17:41	AR\AJ	Ok,M
19	PTOXICC100	PL080422.D	20 Jan 2023 17:55	AR\AJ	Ok
20	PSTDICV050	PL080423.D	20 Jan 2023 18:09	AR\AJ	Ok,M
21	PCHLORICV500	PL080424.D	20 Jan 2023 18:37	AR\AJ	Ok
22	PTOXICV500	PL080425.D	20 Jan 2023 19:04	AR\AJ	Ok
23	I.BLK	PL080426.D	20 Jan 2023 19:32	AR\AJ	Ok



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081

STD. NAME	STD REF.#
Tune/Reschk	PP21328,P10886
Initial Calibration Stds	PP20668,PP20676,PP20677,PP20678,PP20679,PP20674,PP20680,PP20681,PP20682,PP20683,PP20684,PP20686,PP20687,PP20688,PP20689
CCC	PP20677,PP20681,PP20687
Internal Standard/PEM	
ICV/I.BLK	PP20716,PP20717,PP20718
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

24	PEM	PL080427.D	20 Jan 2023 19:46	AR\AJ	Ok,M
25	PSTDCCC050	PL080428.D	20 Jan 2023 20:00	AR\AJ	Ok
26	PB150373BL	PL080429.D	20 Jan 2023 20:42	AR\AJ	Ok
27	PB150373BS	PL080430.D	20 Jan 2023 20:55	AR\AJ	Ok,M
28	O1232-01	PL080431.D	20 Jan 2023 21:09	AR\AJ	Ok,M
29	O1232-02	PL080432.D	20 Jan 2023 21:23	AR\AJ	Ok
30	O1232-04	PL080433.D	20 Jan 2023 21:37	AR\AJ	Ok,M
31	O1232-05	PL080434.D	20 Jan 2023 21:51	AR\AJ	Ok
32	O1232-06	PL080435.D	20 Jan 2023 22:05	AR\AJ	Ok
33	O1232-07	PL080436.D	20 Jan 2023 22:19	AR\AJ	Not Ok
34	O1232-08	PL080437.D	20 Jan 2023 22:33	AR\AJ	Ok
35	O1232-09	PL080438.D	20 Jan 2023 22:47	AR\AJ	Ok
36	O1232-10	PL080439.D	20 Jan 2023 23:00	AR\AJ	Ok
37	I.BLK	PL080440.D	20 Jan 2023 23:14	AR\AJ	Ok
38	PSTDCCC050	PL080441.D	20 Jan 2023 23:28	AR\AJ	Ok,M
39	O1233-02	PL080442.D	21 Jan 2023 00:24	AR\AJ	Ok
40	O1233-02MS	PL080443.D	21 Jan 2023 00:38	AR\AJ	Ok,M
41	O1233-02MSD	PL080444.D	21 Jan 2023 00:51	AR\AJ	Ok,M
42	O1233-03	PL080445.D	21 Jan 2023 01:05	AR\AJ	Ok
43	O1233-04	PL080446.D	21 Jan 2023 01:19	AR\AJ	Ok,M
44	O1233-05	PL080447.D	21 Jan 2023 01:33	AR\AJ	Ok,M
45	O1233-06	PL080448.D	21 Jan 2023 01:47	AR\AJ	Ok,M
46	O1233-07	PL080449.D	21 Jan 2023 02:01	AR\AJ	Ok,M
47	O1233-08	PL080450.D	21 Jan 2023 02:15	AR\AJ	Ok
48	O1233-09	PL080451.D	21 Jan 2023 02:29	AR\AJ	Ok



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Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081

STD. NAME	STD REF.#
Tune/Reschk	PP21328,P10886
Initial Calibration Stds	PP20668,PP20676,PP20677,PP20678,PP20679,PP20674,PP20680,PP20681,PP20682,PP20683,PP20684,PP20686,PP20687,PP20688,PP20689
CCC	PP20677,PP20681,PP20687
Internal Standard/PEM	
ICV/I.BLK	PP20716,PP20717,PP20718
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

49	O1233-11	PL080452.D	21 Jan 2023 02:43	AR\AJ	Ok
50	I.BLK	PL080453.D	21 Jan 2023 02:57	AR\AJ	Ok
51	PSTDCCC050	PL080454.D	21 Jan 2023 03:10	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM				
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM				
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081				
STD. NAME		STD REF.#					
Tune/Reschk		PP21328,P10886					
Initial Calibration Stds		PP20668,PP20676,PP20677,PP20678,PP20679,PP20674,PP20680,PP20681,PP20682,PP20683,PP20684,PP20686,PP20687,PP20688,PP20689					
CCC		PP20677,PP20681,PP20687					
Internal Standard/PEM							
ICV/I.BLK		PP20716,PP20717,PP20718					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PL080404.D	20 Jan 2023 09:02		AR\AJ	Ok
2	I.BLK	I.BLK	PL080405.D	20 Jan 2023 09:16		AR\AJ	Ok
3	PEM	PEM	PL080406.D	20 Jan 2023 09:30		AR\AJ	Ok,M
4	RESCHK	RESCHK	PL080407.D	20 Jan 2023 14:27		AR\AJ	Ok
5	PSTDICC100	PSTDICC100	PL080408.D	20 Jan 2023 14:41		AR\AJ	Ok
6	PSTDICC075	PSTDICC075	PL080409.D	20 Jan 2023 14:54		AR\AJ	Ok
7	PSTDICC050	PSTDICC050	PL080410.D	20 Jan 2023 15:08		AR\AJ	Ok
8	PSTDICC025	PSTDICC025	PL080411.D	20 Jan 2023 15:22		AR\AJ	Ok
9	PSTDICC005	PSTDICC005	PL080412.D	20 Jan 2023 15:36		AR\AJ	Ok,M
10	PCHLORICC1000	PCHLORICC1000	PL080413.D	20 Jan 2023 15:50		AR\AJ	Ok
11	PCHLORICC750	PCHLORICC750	PL080414.D	20 Jan 2023 16:04		AR\AJ	Ok
12	PCHLORICC500	PCHLORICC500	PL080415.D	20 Jan 2023 16:18		AR\AJ	Ok
13	PCHLORICC250	PCHLORICC250	PL080416.D	20 Jan 2023 16:31		AR\AJ	Ok
14	PCHLORICC050	PCHLORICC050	PL080417.D	20 Jan 2023 16:45		AR\AJ	Ok,M
15	PTOXICC1000	PTOXICC1000	PL080418.D	20 Jan 2023 16:59		AR\AJ	Ok
16	PTOXICC750	PTOXICC750	PL080419.D	20 Jan 2023 17:13		AR\AJ	Ok
17	PTOXICC500	PTOXICC500	PL080420.D	20 Jan 2023 17:27		AR\AJ	Ok
18	PTOXICC250	PTOXICC250	PL080421.D	20 Jan 2023 17:41		AR\AJ	Ok,M
19	PTOXICC100	PTOXICC100	PL080422.D	20 Jan 2023 17:55		AR\AJ	Ok

Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081
STD. NAME	STD REF.#		
Tune/Reschk	PP21328, P10886		
Initial Calibration Stds	PP20668, PP20676, PP20677, PP20678, PP20679, PP20674, PP20680, PP20681, PP20682, PP20683, PP20684, PP20686, PP20687, PP20688, PP20689		
CCC	PP20677, PP20681, PP20687		
Internal Standard/PEM			
ICV/I.BLK	PP20716, PP20717, PP20718		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			
20	PSTDICV050	ICVPL012023	PL080423.D 20 Jan 2023 18:09 AR\AJ Ok,M
21	PCHLORICV500	ICVPL012023CHLOR	PL080424.D 20 Jan 2023 18:37 AR\AJ Ok
22	PTOXICV500	ICVPL012023TOX	PL080425.D 20 Jan 2023 19:04 AR\AJ Ok
23	I.BLK	I.BLK	PL080426.D 20 Jan 2023 19:32 AR\AJ Ok
24	PEM	PEM	PL080427.D 20 Jan 2023 19:46 AR\AJ Ok,M
25	PSTDCCC050	PSTDCCC050	PL080428.D 20 Jan 2023 20:00 AR\AJ Ok
26	PB150373BL	PB150373BL	PL080429.D 20 Jan 2023 20:42 AR\AJ Ok
27	PB150373BS	PB150373BS	PL080430.D 20 Jan 2023 20:55 AR\AJ Ok,M
28	O1232-01	B-P17A	PL080431.D 20 Jan 2023 21:09 AR\AJ Ok,M
29	O1232-02	B-P17B	PL080432.D 20 Jan 2023 21:23 AR\AJ Ok
30	O1232-04	B-P18A	PL080433.D 20 Jan 2023 21:37 AR\AJ Ok,M
31	O1232-05	B-P18B	PL080434.D 20 Jan 2023 21:51 AR\AJ Ok
32	O1232-06	B-P19A	PL080435.D 20 Jan 2023 22:05 AR\AJ Ok
33	O1232-07	B-P19B	PL080436.D 20 Jan 2023 22:19 need clean up AR\AJ Not Ok
34	O1232-08	B-P35A	PL080437.D 20 Jan 2023 22:33 AR\AJ Ok
35	O1232-09	B-P35B	PL080438.D 20 Jan 2023 22:47 AR\AJ Ok
36	O1232-10	DUP01	PL080439.D 20 Jan 2023 23:00 AR\AJ Ok
37	I.BLK	I.BLK	PL080440.D 20 Jan 2023 23:14 AR\AJ Ok
38	PSTDCCC050	PSTDCCC050	PL080441.D 20 Jan 2023 23:28 AR\AJ Ok,M
39	O1233-02	B-P34A	PL080442.D 21 Jan 2023 00:24 AR\AJ Ok

Instrument ID: ECD_L

Daily Analysis Runlog For Sequence/QC Batch ID # PL012023

Review By	Abdul	Review On	1/23/2023 11:09:07 AM
Supervise By	Ankita	Supervise On	1/23/2023 11:19:29 AM
SubDirectory	PL012023	HP Acquire Method	HP Processing Method pl012023 8081

STD. NAME	STD REF.#
Tune/Reschk	PP21328, P10886
Initial Calibration Stds	PP20668, PP20676, PP20677, PP20678, PP20679, PP20674, PP20680, PP20681, PP20682, PP20683, PP20684, PP20686, PP20687, PP20688, PP20689
CCC	PP20677, PP20681, PP20687
Internal Standard/PEM	
ICV/I.BLK	PP20716, PP20717, PP20718
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

40	O1233-02MS	B-P34AMS	PL080443.D	21 Jan 2023 00:38		AR\AJ	Ok,M
41	O1233-02MSD	B-P34AMSD	PL080444.D	21 Jan 2023 00:51		AR\AJ	Ok,M
42	O1233-03	B-P34B	PL080445.D	21 Jan 2023 01:05		AR\AJ	Ok
43	O1233-04	B-P36A	PL080446.D	21 Jan 2023 01:19		AR\AJ	Ok,M
44	O1233-05	B-P36B	PL080447.D	21 Jan 2023 01:33		AR\AJ	Ok,M
45	O1233-06	B-P37A	PL080448.D	21 Jan 2023 01:47		AR\AJ	Ok,M
46	O1233-07	B-P37B	PL080449.D	21 Jan 2023 02:01		AR\AJ	Ok,M
47	O1233-08	B-P38A	PL080450.D	21 Jan 2023 02:15		AR\AJ	Ok
48	O1233-09	B-P38B	PL080451.D	21 Jan 2023 02:29		AR\AJ	Ok
49	O1233-11	B-P38C	PL080452.D	21 Jan 2023 02:43		AR\AJ	Ok
50	I.BLK	I.BLK	PL080453.D	21 Jan 2023 02:57		AR\AJ	Ok
51	PSTDCCC050	PSTDCCC050	PL080454.D	21 Jan 2023 03:10		AR\AJ	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC:LB123747

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
O1229-01	OK-02-011923	1	1.12	8.72	9.84	8.73	87.3	
O1229-02	OK-02-011923-EPH-2	2	1.12	8.72	9.84	8.73	87.3	
O1230-01	BBC	3	1.15	8.45	9.6	9.47	98.5	
O1231-01	BBC	4	1.19	8.53	9.72	9.57	98.2	
O1232-01	B-P-17A	18	1.15	8.78	9.93	9.00	89.4	
O1232-02	B-P-17B	19	1.15	8.41	9.56	8.46	86.9	
O1232-03	WC-17	20	1.13	8.64	9.77	9.03	91.4	
O1232-04	B-P-18A	21	1.13	8.57	9.7	8.63	87.5	
O1232-05	B-P-18B	22	1.15	8.83	9.98	9.22	91.4	
O1232-06	B-P-19A	23	1.12	8.57	9.69	8.68	88.2	
O1232-07	B-P-19B	24	1.18	8.35	9.53	8.53	88.0	
O1232-08	B-P-35A	25	1.13	8.62	9.75	9.00	91.3	
O1232-09	B-P-35B	26	1.17	8.53	9.7	9.13	93.3	
O1232-10	DUP01	27	1.15	8.80	9.95	9.08	90.1	
O1233-02	B-P34A	28	1.13	8.76	9.89	8.6	85.3	
O1233-03	B-P34B	29	1.13	8.71	9.84	9.03	90.7	
O1233-04	B-P36A	30	1.16	8.75	9.91	9.00	89.6	
O1233-05	B-P36B	31	1.13	8.84	9.97	9.12	90.4	
O1233-06	B-P37A	32	1.18	8.60	9.78	8.74	87.9	
O1233-07	B-P37B	33	1.18	8.38	9.56	8.18	83.5	
O1233-08	B-P38A	34	1.12	8.66	9.78	8.85	89.3	
O1233-09	B-P38B	35	1.15	8.81	9.96	8.26	80.7	
O1233-10	WC-38	36	1.18	8.59	9.77	8.47	84.9	
O1233-11	B-P38C	37	1.15	8.82	9.97	8.73	85.9	
O1234-01	EO-02-11923	5	1.14	8.82	9.96	8.72	85.9	
O1234-02	EO-02-11923	6	1.12	8.54	9.66	8.48	86.2	
O1235-04	12X52	7	1.12	7.08	8.2	6.57	77.0	
O1235-05	12X53	8	1.16	5.17	6.33	5.91	91.9	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC:LB123747

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
O1235-06	12X54	9	1.11	8.50	9.61	5.73	54.4	
O1235-07	12X55	10	1.13	8.43	9.56	7.14	71.3	
O1237-01	COMP-1-2-3A	11	1.18	8.72	9.9	9.24	92.4	
O1237-02	3A	12	1.13	8.44	9.57	9.33	97.2	
O1238-01	RBRB22281-OILY-DEBRIS	13	1.00	1.00	2.00	2.00	100.0	OILY DEBRIS
O1239-01	BORING-3	14	1.17	8.73	9.9	8.29	81.6	
O1239-03	BORING-3-EPH-2	15	1.13	8.64	9.77	8.31	83.1	
O1240-01	TR-05-011923	16	1.18	8.50	9.68	8.38	84.7	
O1240-02	TR-05-011923-EPH-2	17	1.17	8.67	9.84	8.73	87.2	
O1241-01	34326-FRONT	38	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-02	34326-BACK	39	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-03	34327-FRONT	40	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-04	34327-BACK	41	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-05	34328-FRONT	42	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-06	34328BACK	43	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-07	343269-FRONT	44	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-08	34329-BACK	45	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1243-01	TJRC-11823-B4-0-10	60	1.12	8.65	9.77	8.54	85.8	
O1243-02	TJRC-11823-B4-0-10	61	1.14	8.45	9.59	8.02	81.4	
O1243-03	TJRC-11823-B4-10-20	62	1.15	8.81	9.96	8.85	87.4	
O1243-04	TJRC-11823-B4-10-20	63	1.17	8.57	9.74	8.16	81.6	
O1243-05	TJRC-11923-B4-20-30	64	1.15	8.75	9.9	8.28	81.5	
O1243-06	TJRC-11923-B4-20-30	65	1.13	8.70	9.83	8.43	83.9	
O1243-07	TJRC-11923-B4-30-40	66	1.16	8.77	9.93	8.29	81.3	
O1243-08	TJRC-11923-B4-30-40	67	1.14	8.83	9.97	8.47	83.0	
O1244-01	VNJ-223	46	1.12	8.62	9.74	8.59	86.7	
O1244-02	VNJ-223	47	1.16	8.80	9.96	8.62	84.8	
O1248-05	SVOC-GPC-BLANK	50	1.00	1.00	2.00	2.00	100.0	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC:LB123747

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
O1248-06	PEST-GPC-BLANK	51	1.00	1.00	2.00	2.00	100.0	
O1248-07	PEST-GPC-BLANK-SPIKE	52	1.00	1.00	2.00	2.00	100.0	
O1248-08	PCB-GPC-BLANK	53	1.00	1.00	2.00	2.00	100.0	
O1248-09	PCB-GPC-BLANK-SPIKE	54	1.00	1.00	2.00	2.00	100.0	
O1248-10	SVOC-GPC2-BLANK	55	1.00	1.00	2.00	2.00	100.0	
O1248-11	PEST-GPC2-BLANK	56	1.00	1.00	2.00	2.00	100.0	
O1248-12	PEST-GPC2-BLANK-SPIKE	57	1.00	1.00	2.00	2.00	100.0	
O1248-13	PCB-GCP2-BLANK	58	1.00	1.00	2.00	2.00	100.0	
O1248-14	PCB-GCP2-BLANK-SPIKE	59	1.00	1.00	2.00	2.00	100.0	
O1251-01	COMP-1	68	1.13	8.43	9.56	8.44	86.7	
O1251-03	EPH-1	69	1.11	8.51	9.62	8.47	86.5	
O1251-05	TOT-VOC-1	70	1.00	1.00	2.00	2.00	100.0	no jar
O1251-06	TOT-VOC-2	71	1.00	1.00	2.00	2.00	100.0	no jar
O1251-07	COMP-2	72	1.12	8.74	9.86	8.75	87.3	
O1251-09	EPH-2	73	1.14	8.80	9.94	8.8	87.0	
O1251-11	TOT-VOC-3	74	1.00	1.00	2.00	2.00	100.0	no jar
O1251-12	TOT-VOC-4	75	1.00	1.00	2.00	2.00	100.0	no jar
O1252-01	MH-9	48	1.14	8.84	9.98	9.47	94.2	
O1252-02	MH-9-EPH	49	1.12	8.46	9.58	8.67	89.2	
O1253-01	SU-04-012023	79	1.12	8.47	9.59	8.99	92.9	
O1253-02	SU-04-012023-EPH-2	80	1.18	8.69	9.87	9.17	91.9	
O1254-01	HR-04-012023	81	1.13	8.66	9.79	9.09	91.9	
O1254-02	HR-04-012023-EPH-2	82	1.16	8.69	9.85	8.95	89.6	
O1255-01	BORING-1	76	1.18	8.61	9.79	8.32	82.9	
O1255-03	BORING-1-EPH-2	77	1.11	8.78	9.89	8.35	82.5	
O1256-01	OR-02-012023	83	1.15	8.81	9.96	9.09	90.1	
O1256-02	OR-02-012023-EPH-2	84	1.1	8.87	9.97	8.66	85.2	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC:LB123747

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
O1258-01	WASTE-VOA-2	78	1.12	8.58	9.7	8.62	87.4	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

123747

WorkList Name : %1-012023

WorkList ID : 166715

Department : Wet-Chemistry

Date : 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/24/2023	Solid	O1229-01	Percent Solids	Cool 4 deg C	PSEG05	N11	OK-02-011923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1229-02	Percent Solids	Cool 4 deg C	PSEG05	N11	OK-02-011923-EPH-2	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1230-01	Percent Solids	Cool 4 deg C	EART12	N11	BBC	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1231-01	Percent Solids	Cool 4 deg C	EART12	N11	BBC	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1232-01	Percent Solids	Cool 4 deg C	loui01	N11	B-P-17A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-02	Percent Solids	Cool 4 deg C	loui01	N11	B-P-17B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-03	Percent Solids	Cool 4 deg C	loui01	N11	WC-17	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-04	Percent Solids	Cool 4 deg C	loui01	N11	B-P-18A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-05	Percent Solids	Cool 4 deg C	loui01	N11	B-P-18B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-06	Percent Solids	Cool 4 deg C	loui01	N11	B-P-19A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-07	Percent Solids	Cool 4 deg C	loui01	N11	B-P-19B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-08	Percent Solids	Cool 4 deg C	loui01	N11	B-P-35A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-09	Percent Solids	Cool 4 deg C	loui01	N11	B-P-35B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-10	Percent Solids	Cool 4 deg C	loui01	N11	DUP01	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-02	Percent Solids	Cool 4 deg C	loui01	N11	B-P-34A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-03	Percent Solids	Cool 4 deg C	loui01	N11	B-P-34B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-04	Percent Solids	Cool 4 deg C	loui01	N11	B-P-36A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-05	Percent Solids	Cool 4 deg C	loui01	N11	B-P-36B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-06	Percent Solids	Cool 4 deg C	loui01	N11	B-P-37A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-07	Percent Solids	Cool 4 deg C	loui01	N11	B-P-37B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-08	Percent Solids	Cool 4 deg C	loui01	N11	B-P-38A	01/18/2023	Chemtech -SO

Date/Time 01-20-23 15:45

Date/Time 01-20-23

17:25

Raw Sample Received by: 70 (w2c)

Raw Sample Received by:

JD CSM

Raw Sample Relinquished by:

JD CSM

Raw Sample Relinquished by:

JD CSM

123747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-012023 WorkList ID : 166715 Department : Wet-Chemistry Date : 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/26/2023	Solid	O1233-09	Percent Solids	Cool 4 deg C	loui01	N11	B-P38B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-10	Percent Solids	Cool 4 deg C	loui01	N11	WC-38	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-11	Percent Solids	Cool 4 deg C	loui01	N11	B-P38C	01/18/2023	Chemtech -SO
01/24/2023	Solid	O1234-01	Percent Solids	Cool 4 deg C	PSEG05	N11	EO-02-11923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1234-02	Percent Solids	Cool 4 deg C	PSEG05	N11	EO-02-11923	01/19/2023	Chemtech -SO
01/28/2023	Solid	O1235-04	Percent Solids	Cool 4 deg C	ATCE02	N11	12X52	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-05	Percent Solids	Cool 4 deg C	ATCE02	N11	12X53	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-06	Percent Solids	Cool 4 deg C	ATCE02	N11	12X54	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-07	Percent Solids	Cool 4 deg C	ATCE02	N11	12X55	01/18/2023	Chemtech -SO
01/24/2023	Solid	O1237-01	Percent Solids	Cool 4 deg C	PSEG03	N12	COMP-1-2-3A	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1237-02	Percent Solids	Cool 4 deg C	PSEG03	N12	3A	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1238-01	Percent Solids	Cool 4 deg C	PSEG03	N12	RBRB22281-OILY-DEBRIS	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1239-01	Percent Solids	Cool 4 deg C	PSEG03	N12	BORING-3	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1239-03	Percent Solids	Cool 4 deg C	PSEG03	N12	BORING-3-EPH-2	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1240-01	Percent Solids	Cool 4 deg C	PSEG05	N12	TR-05-011923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1240-02	Percent Solids	Cool 4 deg C	PSEG05	N12	TR-05-011923-EPH-2	01/19/2023	Chemtech -SO
01/27/2023	Solid	O1241-01	Percent Solids	Cool 4 deg C	PSEG03	N11	34326-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-02	Percent Solids	Cool 4 deg C	PSEG03	N11	34326-BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-03	Percent Solids	Cool 4 deg C	PSEG03	N11	34327-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-04	Percent Solids	Cool 4 deg C	PSEG03	N11	34327-BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-05	Percent Solids	Cool 4 deg C	PSEG03	N11	34328-FRONT	01/20/2023	Chemtech -SO

Date/Time 01-20-23 15:45
 Raw Sample Received by: JO (WCC)
 Raw Sample Relinquished by: JO CSM

Date/Time 01-20-23 17:25
 Raw Sample Received by: JDCSM
 Raw Sample Relinquished by: JO (WCC)

123747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-01/2023 WorkList ID : 166715 Department : Wet-Chemistry Date : 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/27/2023	Solid	O1241-06	Percent Solids	Cool 4 deg C	PSEG03	N11	34328BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-07	Percent Solids	Cool 4 deg C	PSEG03	N11	343269-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-08	Percent Solids	Cool 4 deg C	PSEG03	N11	34329-BACK	01/20/2023	Chemtech -SO
01/28/2023	Solid	O1243-01	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-0-10	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-02	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-0-10	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-03	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-10-20	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-04	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-10-20	01/18/2023	Chemtech -SO
01/29/2023	Solid	O1243-05	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-20-30	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-06	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-20-30	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-07	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-30-40	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-08	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-30-40	01/19/2023	Chemtech -SO
01/27/2023	Solid	O1244-01	Percent Solids	Cool 4 deg C	PSEG03	N11	VNJ-223	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1244-02	Percent Solids	Cool 4 deg C	PSEG03	N11	VNJ-223	01/20/2023	Chemtech -SO
01/23/2023	Solid	O1248-05	Percent Solids	Cool 4 deg C	CHEM02	N11	SVOC-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-06	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-07	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-08	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-09	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GPC-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-10	Percent Solids	Cool 4 deg C	CHEM02	N11	SVOC-GPC2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-11	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-12	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC2-BLANK-SPIKE	01/13/2023	Chemtech -SO

Date/Time: 01/20/23 15:45 Date/Time: 01/20/23 17:25
 Raw Sample Received by: JP(WC) Raw Sample Received by: JDCSM2
 Raw Sample Relinquished by: JDCSM2 Raw Sample Relinquished by: JP(WC)

2523747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-012023 WorkList ID : 166715 Department : Wet-Chemistry Date : 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/23/2023	Solid	O1248-13	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GCP2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-14	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GCP2-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/25/2023	Solid	O1251-01	Percent Solids	Cool 4 deg C	SOUN03	N11	COMP-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-03	Percent Solids	Cool 4 deg C	SOUN03	N11	EPH-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-05	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-06	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-07	Percent Solids	Cool 4 deg C	SOUN03	N11	COMP-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-09	Percent Solids	Cool 4 deg C	SOUN03	N11	EPH-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-11	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-3	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-12	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-4	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1252-01	Percent Solids	Cool 4 deg C	PSEG03	N11	MH-9	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1252-02	Percent Solids	Cool 4 deg C	PSEG03	N11	MH-9-EPH	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1253-01	Percent Solids	Cool 4 deg C	PSEG05	N13	SU-04-012023	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1253-02	Percent Solids	Cool 4 deg C	PSEG05	N13	SU-04-012023-EPH-2	01/20/2023	Chemtech -SO
01/26/2023	Solid	O1254-01	Percent Solids	Cool 4 deg C	PSEG05	N11	HR-04-012023	01/20/2023	Chemtech -SO
01/26/2023	Solid	O1254-02	Percent Solids	Cool 4 deg C	PSEG05	N11	HR-04-012023-EPH-2	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1255-01	Percent Solids	Cool 4 deg C	PSEG03	N11	BORING-1	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1255-03	Percent Solids	Cool 4 deg C	PSEG03	N11	BORING-1-EPH-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1256-01	Percent Solids	Cool 4 deg C	PSEG05	N11	OR-02-012023	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1256-02	Percent Solids	Cool 4 deg C	PSEG05	N11	OR-02-012023-EPH-2	01/20/2023	Chemtech -SO
01/23/2023	Solid	O1258-01	Percent Solids	Cool 4 deg C	RMJE02	N11	WASTE-VOA-2	01/20/2023	Chemtech -SO

Date/Time 01-20-23 15:43
Raw Sample Received by: JP (wc)
Raw Sample Relinquished by: JDCSM

Date/Time 01-20-23 17:25
Raw Sample Received by: JDCSM
Raw Sample Relinquished by: JP (wc)

SOP ID: M3541-ASE Extraction-14

Clean Up SOP #: Florisil

Matrix : Solid

Weigh By: RJ

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 01/20/2023

Extraction Start Time : 10:35

Extraction End Date : 01/20/2023

Extraction End Time : 15:35

Concentration By: RS

Supervisor By : rajesh

Extraction Method: ☐ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	500 PPB	PP21237
Surrogate	1.0ML	200 PPB	PP21357
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Hexane/Acetone /9:1	N/A	EP2294
Baked Na2SO4	N/A	EP2279
Hexane	N/A	E3455
Filter Paper	N/A	E3403
Sand	N/A	E2865
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

40 ML Vial lot# 03-40 BTS721.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NE VAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/20/23	R? (get lab)	AJ [167] [167] [167]
15:40	Preparation Group	Analysis Group

Analytical Method: M3541-ASE Extraction-14

Concentration Date: 01/20/2023

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB150373BL	PBLK373	Pesticide-TCL	30.03	N/A	ritesh	RUPESH	10			U1-1
PB150373BS	PLCS373	Pesticide-TCL	30.01	N/A	ritesh	RUPESH	10			2
O1232-01	B-P-17A	Pesticide-TCL	30.04	N/A	ritesh	RUPESH	10			3
O1232-02	B-P-17B	Pesticide-TCL	30.08	N/A	ritesh	RUPESH	10			4
O1232-04	B-P-18A	Pesticide-TCL	30.06	N/A	ritesh	RUPESH	10			5
O1232-05	B-P-18B	Pesticide-TCL	30.01	N/A	ritesh	RUPESH	10			6
O1232-06	B-P-19A	Pesticide-TCL	30.07	N/A	ritesh	RUPESH	10			U4-1
O1232-07	B-P-19B	Pesticide-TCL	30.10	N/A	ritesh	RUPESH	10			2
O1232-08	B-P-35A	Pesticide-TCL	30.05	N/A	ritesh	RUPESH	10			3
O1232-09	B-P-35B	Pesticide-TCL	30.03	N/A	ritesh	RUPESH	10			4
O1232-10	DUP01	Pesticide-TCL	30.09	N/A	ritesh	RUPESH	10			5
O1233-02	B-P34A	Pesticide-TCL	30.04	N/A	ritesh	RUPESH	10			6
O1233-02MS	B-P34AMS	Pesticide-TCL	30.10	N/A	ritesh	RUPESH	10			U5-1
O1233-02MS D	B-P34AMSD	Pesticide-TCL	30.08	N/A	ritesh	RUPESH	10			2
O1233-03	B-P34B	Pesticide-TCL	30.01	N/A	ritesh	RUPESH	10			3
O1233-04	B-P36A	Pesticide-TCL	30.03	N/A	ritesh	RUPESH	10			4
O1233-05	B-P36B	Pesticide-TCL	30.06	N/A	ritesh	RUPESH	10			5
O1233-06	B-P37A	Pesticide-TCL	30.09	N/A	ritesh	RUPESH	10			6
O1233-07	B-P37B	Pesticide-TCL	30.04	N/A	ritesh	RUPESH	10			U6-1
O1233-08	B-P38A	Pesticide-TCL	30.07	N/A	ritesh	RUPESH	10			2
O1233-09	B-P38B	Pesticide-TCL	30.10	N/A	ritesh	RUPESH	10			3
O1233-11	B-P38C	Pesticide-TCL	30.09	N/A	ritesh	RUPESH	10		Gasoline Smell	4

* Extracts relinquished on the same date as received.

2
1/20/23

WORKLIST(Hardcopy Internal Chain)

WorkList Name : O1233

WorkList ID : 166732

Department : Extraction

Date : 01-20-2023 10:30:30

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/26/2023	Solid	O1232-01	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-17A	01/18/2023	8081B
01/26/2023	Solid	O1232-02	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-17B	01/18/2023	8081B
01/26/2023	Solid	O1232-04	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-18A	01/18/2023	8081B
01/26/2023	Solid	O1232-05	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-18B	01/18/2023	8081B
01/26/2023	Solid	O1232-06	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-19A	01/18/2023	8081B
01/26/2023	Solid	O1232-07	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-19B	01/18/2023	8081B
01/26/2023	Solid	O1232-08	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-35A	01/18/2023	8081B
01/26/2023	Solid	O1232-09	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P-35B	01/18/2023	8081B
01/26/2023	Solid	O1232-10	Pesticide-TCL	Cool 4 deg C	loui01	N11	DUP01	01/18/2023	8081B
01/26/2023	Solid	O1233-02	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P34A	01/18/2023	8081B
01/26/2023	Solid	O1233-03	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P34B	01/18/2023	8081B
01/26/2023	Solid	O1233-04	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P36A	01/18/2023	8081B
01/26/2023	Solid	O1233-05	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P36B	01/18/2023	8081B
01/26/2023	Solid	O1233-06	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P37A	01/18/2023	8081B
01/26/2023	Solid	O1233-07	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P37B	01/18/2023	8081B
01/26/2023	Solid	O1233-08	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P38A	01/18/2023	8081B
01/26/2023	Solid	O1233-09	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P38B	01/18/2023	8081B
01/26/2023	Solid	O1233-11	Pesticide-TCL	Cool 4 deg C	loui01	N11	B-P38C	01/18/2023	8081B

Date/Time 01/26/23 10:30
 Raw Sample Received by: CP sm
 Raw Sample Relinquished by: CP sm

Date/Time 01/28/23 10:35
 Raw Sample Received by: CP sm
 Raw Sample Relinquished by: CP sm

Prep Standard - Chemical Standard Summary**Order ID :** O1233**Test :** Pesticide-TCL**Prepbatch ID :** PB150373,**Sequence ID/Qc Batch ID:** pl012023,**Standard ID :**

EP2279,EP2294,PP20663,PP20664,PP20666,PP20667,PP20668,PP20674,PP20675,PP20676,PP20677,PP20678,PP20679,PP20680,PP20681,PP20682,PP20683,PP20684,PP20685,PP20686,PP20687,PP20688,PP20689,PP20714,PP20715,PP20716,PP20717,PP20718,PP21237,PP21328,PP21357,

Chemical ID :

E2865,E3390,E3393,E3403,E3412,E3435,E3436,E3453,E3455,E3456,P10278,P10581,P10711,P10786,P10886,P11061,P11790,P11811,P8733,P8742,P9648,P9653,W2938,W2939,

CHEMTECH

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Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2279	11/28/2022	04/13/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/28/2022

FROM 4000.00000gram of E3412 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
230	1:1ACETONE/HEXANE	EP2294	01/17/2023	07/16/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 01/17/2023

FROM 8000.00000ml of E3455 + 8000.00000ml of E3456 = Final Quantity: 16000.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
84	Pest/PCB Surrogate Stock 20 PPM	PP20663	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 1.00000ml of P10581 + 9.00000ml of E3390 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3629	20 PPM PEST stock Solution 1st source(RESTEK)	PP20664	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 1.00000ml of P9653 + 9.00000ml of E3390 = Final Quantity: 10.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1273	20 PPM Mirex Stock (Primary Source)	PP20666	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 1.00000ml of P8733 + 9.00000ml of E3390 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3663	20 PPM MIREX Stock STD (Secondary source)	PP20667	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 1.00000ml of P9648 + 9.00000ml of E3390 = Final Quantity: 10.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3630	100/100 PPB PEST Working std.1st Source(RESTEK)	PP20668	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 98.50000ml of E3390 + 0.50000ml of PP20663 + 0.50000ml of PP20664 + 0.50000ml of PP20666 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
386	1000/100 PPB Chlordane STD (Restek)	PP20674	09/01/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.10000ml of P8742 + 99.40000ml of E3393 + 0.50000ml of PP20663 = Final Quantity: 100.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3746	1000/100 ppb Chlordane STD-RESTEK 2ND SOURCE	PP20675	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.10000ml of P10278 + 0.50000ml of P8742 + 99.40000ml of W2939 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3631	75 PPB ICAL PEST STD(RESTEK)	PP20676	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.25000ml of W2938 + 0.75000ml of PP20668 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3632	50 PPB ICAL PEST STD(RESTEK)	PP20677	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.50000ml of W2938 + 0.50000ml of PP20668 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3633	25 PPB ICAL PEST STD(RESTEK)	PP20678	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.75000ml of W2938 + 0.25000ml of PP20668 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3634	5 PPB ICAL PEST STD(RESTEK)	PP20679	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.90000ml of W2938 + 0.10000ml of PP20677 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
528	CHLOR 750 PPB STD	PP20680	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.25000ml of W2938 + 0.75000ml of PP20674 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
529	CHLOR 500 PPB STD	PP20681	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.50000ml of W2938 + 0.50000ml of PP20674 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
530	CHLOR 250 PPB STD	PP20682	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.75000ml of W2938 + 0.25000ml of PP20674 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3408	CHLOR 50 PPB STD	PP20683	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.90000ml of W2938 + 0.10000ml of PP20681 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
383	1000/100 PPB Toxaphene STD (Restek)	PP20684	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.10000ml of P10711 + 99.40000ml of W2938 + 0.50000ml of PP20663 = Final Quantity: 100.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3669	1000/100 PPB TOXAPHENE STD 2nd source (RESTEK)	PP20685	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.10000ml of P11811 + 99.40000ml of W2939 + 0.50000ml of PP20663 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
533	TOX 750 PPB STD	PP20686	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.25000ml of W2939 + 0.75000ml of PP20684 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
534	TOX 500 PPB STD	PP20687	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.50000ml of W2939 + 0.50000ml of PP20684 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
535	TOX 250 PPB STD	PP20688	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.75000ml of W2939 + 0.25000ml of PP20684 = Final Quantity: 1.000 ml

CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2217	TOX 100 PPB STD	PP20689	09/01/2022	02/23/2023	Abdul Mirza	None	None	Ankita Jodhani
09/09/2022								

FROM 0.90000ml of W2939 + 0.10000ml of PP20684 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1472	20 PPM Pest Stock Solution 2nd Source	PP20714	09/07/2022	03/07/2023	Ankita Jodhani	None	None	Yogesh Patel
09/09/2022								

FROM 1.00000ml of P11061 + 9.00000ml of E3393 = Final Quantity: 10.000 ml

CHEMTECH

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
80	100/100 PPB Pesticide Working Solution 2nd Source	PP20715	09/07/2022	03/01/2023	Ankita Jodhani	None	None	Yogesh Patel
								09/09/2022

FROM 98.50000ml of E3393 + 0.50000ml of PP20663 + 0.50000ml of PP20667 + 0.50000ml of PP20714 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3988	50 PPB PEST ICV STD(RESTEK)	PP20716	09/07/2022	03/01/2023	Ankita Jodhani	None	None	Yogesh Patel
								09/09/2022

FROM 0.50000ml of E3393 + 0.50000ml of PP20715 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
532	CHLOR 500 PPB ICV STD	PP20717	09/07/2022	02/23/2023	Ankita Jodhani	None	None	Yogesh Patel
09/09/2022								

FROM 0.50000ml of E3393 + 0.50000ml of PP20675 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3670	TOX 500 PPB ICV std (RESTEK)	PP20718	09/07/2022	02/23/2023	Ankita Jodhani	None	None	Yogesh Patel
09/09/2022								

FROM 0.50000ml of E3393 + 0.50000ml of PP20685 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
79	500 PPB Pesticide Spike Solution	PP21237	12/06/2022	03/01/2023	Abdul Mirza	None	None	Ankita Jodhani
12/07/2022								

FROM 95.00000ml of E3435 + 2.50000ml of PP20667 + 2.50000ml of PP20714 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
758	PEM Mix w/Surr	PP21328	01/04/2023	07/03/2023	Abdul Mirza	None	None	Ankita Jodhani
01/05/2023								

FROM 1.00000ml of P11790 + 99.00000ml of E3453 = Final Quantity: 100.000 ml

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<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
465	200 PPB Pest/PCB Surrogate Spike	PP21357	01/10/2023	06/08/2023	Abdul Mirza	None	None	Ankita Jodhani 01/12/2023
<u>FROM</u>	1.00000ml of P10786 + 999.00000ml of E3436 = Final Quantity: 1000.000 ml							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	21L2662004	03/01/2023	09/01/2022 / Rajesh	08/24/2022 / Rajesh	E3390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	21L2662004	03/07/2023	09/07/2022 / Rajesh	08/31/2022 / Rajesh	E3393

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
phenomenex	FS0006 / Cleanert SPE Silica, 1000 mg/6ml, 30PK	X0607-FS	03/23/2023	10/28/2022 / Sohil	09/23/2022 / Rajesh	E3403

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	139404	10/23/2023	10/18/2022 / Rajesh	10/13/2022 / Rajesh	E3412

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	22D1162003	06/05/2023	12/05/2022 / Rajesh	12/05/2022 / Rajesh	E3435

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	22E1562001	06/08/2023	12/08/2022 / Rajesh	12/05/2022 / Rajesh	E3436

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	22G0362002	07/03/2023	01/03/2023 / Rajesh	01/03/2023 / Rajesh	E3453

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	22G0362002	07/16/2023	01/16/2023 / Rajesh	01/11/2023 / Rajesh	E3455

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	9005-05 / Acetone Ultra (cs/4x4L)	22J0461011	07/17/2023	01/17/2023 / Rajesh	01/11/2023 / Rajesh	E3456

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32021 / Pesticide Mix, chlordane (technical), 1000ug/mL, hexane, 1mL,	A0162956	03/01/2023	09/01/2022 / Abdul	03/04/2021 / Abdul	P10278

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	A0171211	03/01/2023	09/01/2022 / Abdul	05/24/2021 / Abdul	P10581

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0169056	03/01/2023	09/01/2022 / Abdul	06/17/2021 / dhaval	P10711

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32000 / Pesticide Mix, CLP method, Pesticide Surrogate Mix, 200ug/mL, Acetone, 1mL	A0172332	07/10/2023	01/10/2023 / Abdul	06/17/2021 / dhaval	P10786

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
ULTRA Scientific	CLP-242 / Pesticide Resolution Check Mixture	0006617274	07/18/2023	01/18/2023 / Ankita	07/13/2021 / Ankita	P10886

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
ULTRA Scientific	CLP-242 / Pesticide Resolution Check Mixture	0006617274	07/18/2023	01/18/2023 / Ankita	07/13/2021 / Ankita	P10886

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32291 / Pesticide Mix, CLP method, organochlorine Std AB#1, 200ug/mL, hexane/toluene, 1mL/ampul	A0168439	03/07/2023	09/07/2022 / Ankita	09/29/2021 / Abdul	P11061

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32074 / Pesticide Performance Evaluation Mix w/Surrogate	A0183168	07/04/2023	01/04/2023 / Abdul	05/27/2022 / Sohil	P11790

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32005 / Toxaphene Standard	A0177326	03/01/2023	09/01/2022 / Abdul	06/17/2022 / Ankita	P11811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	79136 / Mirex, 1000 ug/ml	030818	03/01/2023	09/01/2022 / Abdul	07/30/2019 / Ankita	P8733

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32021 / Pesticide Mix, chlordane (technical), 1000ug/mL, hexane, 1mL,	A0144623	03/01/2023	09/01/2022 / Abdul	07/30/2019 / somina	P8742

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	79136 / Mirex, 1000 ug/ml	061820	03/01/2023	09/01/2022 / Abdul	06/19/2020 / Sohil	P9648

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32291 / Pesticide Mix, CLP method, organochlorine Std AB#1, 200ug/mL, hexane/toluene, 1mL/ampul	A0154466	03/01/2023	09/01/2022 / Abdul	06/22/2020 / Sohil	P9653

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	2280762004	02/23/2023	07/25/2022 / JIGNESH	07/25/2022 / JIGNESH	W2938



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	2280762004	02/23/2023	07/25/2022 / JIGNESH	07/25/2022 / JIGNESH	W2939



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

DD
06/17/2021

Catalog No.: 32000 Lot No.: A0172332
Description: Pesticide Surrogate Mix
Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: August 31, 2027 Storage: 10°C or colder
Handling: Contains PCBs - sonicate prior to use. Ship: Ambient

P10783
To - (10)
P10792

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene CAS # 877-09-8 (Lot 0052481) Purity 98%	200.7 µg/mL	+/- 1.1840 µg/mL Gravimetric +/- 6.3622 µg/mL Unstressed +/- 8.3106 µg/mL Stressed
2	Decachlorobiphenyl (BZ# 209) CAS # 2051-24-3 (Lot 30679) Purity 99%	200.2 µg/mL	+/- 1.1810 µg/mL Gravimetric +/- 6.3463 µg/mL Unstressed +/- 8.2897 µg/mL Stressed
Solvent:	Acetone CAS # 67-64-1 Purity 99%		

Column:

30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

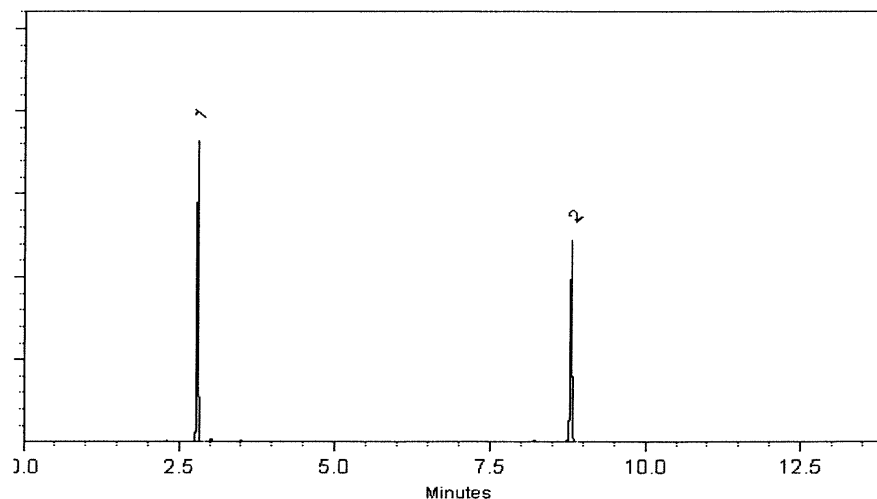
250°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 12-May-2021

Balance: B707717271

Alexis Shelow
Alexis Shelow - Operations Tech I

Date Passed: 14-May-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32005 Lot No.: A0169056
Description : Toxaphene Standard
Toxaphene Standard 1000 µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : May 31, 2025 Storage: 10°C or colder
Ship: Ambient

DD
06/17/2021
P10708
To - (S)
P10712

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Toxaphene	1,000.0 µg/mL	+/- 5.9397 µg/mL Gravimetric
	CAS # 8001-35-2 (Lot 1051817)		+/- 31.7072 µg/mL Unstressed
	Purity ----%		+/- 41.4130 µg/mL Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

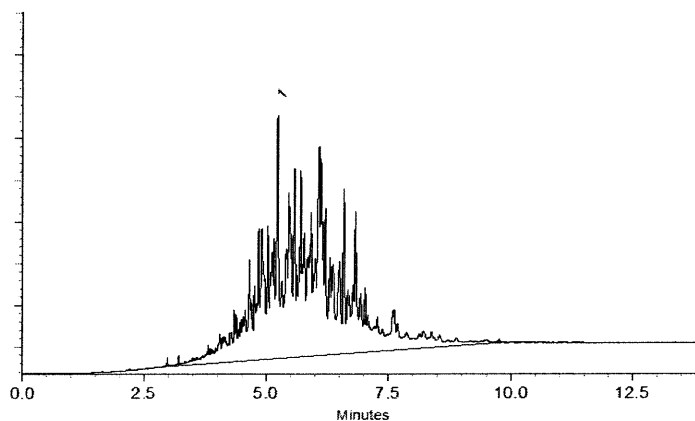
250°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 14-Feb-2021

Balance: B707717271

Justine Alibertson
Justine Alibertson - Operations Tech-ARM QC

Date Passed: 18-Feb-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

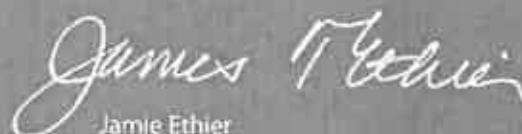
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent



Material No.: 9262-03
Batch No.: 21L2662004
Manufactured Date: 2021-11-24
Expiration Date: 2023-02-23
Revision No.: 0

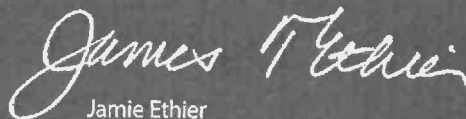
Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	< 1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD
Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 8/24/22

E33901


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent



Material No.: 9262-03
Batch No.: 21L2662004
Manufactured Date: 2021-11-24
Expiration Date: 2023-02-23
Revision No.: 0

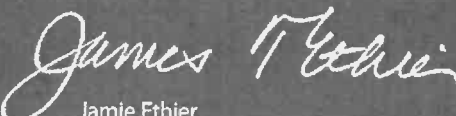
Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	< 1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD
Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 8/31/22

E3393


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Cleanert Florisil

1g/6ml 30/pkg

LOT#:X0607-FS

MFG#:E01389



CAT# FS0006



Made in China

 Agela Technologies

E3403





**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**



MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT : SODIUM SULFATE CRYSTALS ANHYDROUS
QUALITY : ACS (CODE RMB3375) **FORMULA :** Na₂SO₄
SPECIFICATION NUMBER : 6399 **RELEASE DATE:** OCT/28/2021
LOT NUMBER : 139404

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.0
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.002 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	97.6 %
Through US Standard No. 60 sieve	Max. 5%	2.1 %
Through US Standard No. 100 sieve	Max. 10%	0.2 %
COMMENTS		
 QC: PhC Irma Belmares		

If you need further details, please call our factory or contact our local distributor.

E 3412

Recd. by RP on 10/13/22

RE-02-01, Ed. 3

Material No.: 9254-03
Batch No.: 22D1162003
Manufactured Date: 2022-03-20
Expiration Date: 2025-03-19
Revision No.: 0

Certificate of Analysis

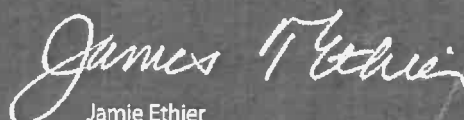
Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	< 1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 12/5/22

E 3435


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis



Material No.: 9254-03
Batch No.: 22E1562001
Manufactured Date: 2022-05-03
Expiration Date: 2025-05-02
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 12/5/22

E3436

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent



Material No.: 9262-03
Batch No.: 22G0362002
Manufactured Date: 2022-06-17
Expiration Date: 2023-09-16
Revision No.: 0

Certificate of Analysis

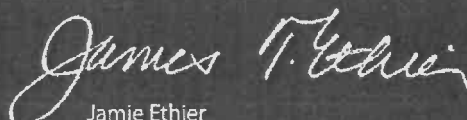
Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	2
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.5 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	97 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 01/03/23

E 3453


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Page 1 of 1

Material No.: 9262-03
Batch No.: 22G0362002
Manufactured Date: 2022-06-17
Expiration Date: 2023-09-16
Revision No.: 0

Certificate of Analysis

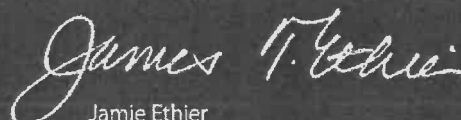
Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	2
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.5 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	97 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RL on 11/11/23

E 3455


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Page 1 of 1

Acetone
CMOS



Material No.: 9005-05
Batch No.: 22J0461011
Manufactured Date: 2022-09-29
Retest Date: 2027-09-28
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.5 %	99.8 %
Color (APHA)	≤ 10	< 5
Residue after Evaporation	≤ 5 ppm	< 1 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.5	0.1
Water (H ₂ O)	≤ 0.5 %	0.2 %
Solubility in H ₂ O	Passes Test	Passes Test
Chloride (Cl)	≤ 0.2 ppm	< 0.2 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.05 ppm
Trace Impurities – Aluminum (Al)	≤ 50.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 5.0 ppb
Trace Impurities – Barium (Ba)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 25.0 ppb	4.9 ppb
Trace Impurities – Chromium (Cr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Trace Impurities – Iron (Fe)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb

Recd. by R2 on 01/11/23

>>> Continued on page 2 >>>

E 3456

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Acetone
CMOS



Material No.: 9005-05
Batch No.: 22J0461011

Test	Specification	Result
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 50.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	1.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater (Rion KS42AF)	≤ 100 par/ml	4 par/ml
Particle Count – 1.0 µm and greater (Rion KS42AF)	≤ 8 par/ml	2 par/ml

>>> Continued on page 3 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Acetone
CMOS

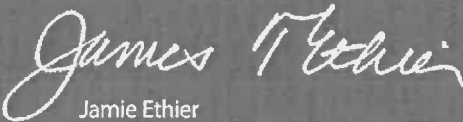


Material No.: 9005-05
Batch No.: 22J0461011

Test	Specification	Result
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For Microelectronic Use

Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

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CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32021 Lot No.: A0162956
Description : Chlordane Standard
Chlordane Standard 1000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : October 31, 2026 Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Chlordane	1,007.0 µg/mL	+/-	5.9813	µg/mL	Gravimetric
	CAS # 57-74-9 (Lot 142990)		+/-	31.9292	µg/mL	Unstressed
	Purity ----%		+/-	41.7029	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P 10275
P 10276
P 10277
P 10278
P 10279
AR
03.05.2021

Tech Tips:

CAS #57-74-9 nomenclature is based on EPA method 8081B.

Column:

30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

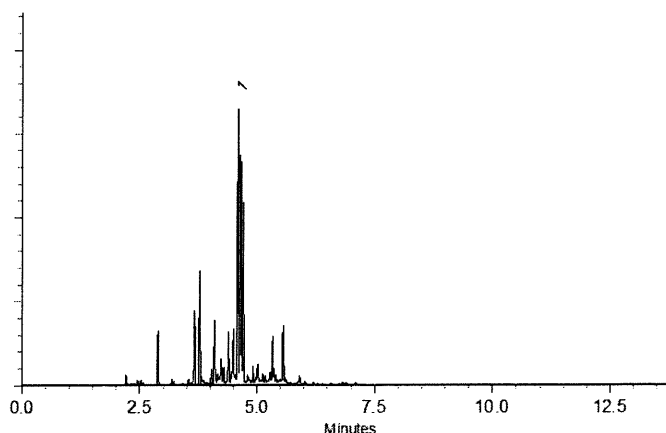
250°C

Det. Temp:

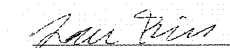
300°C

Det. Type:

ECD

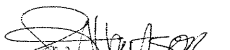


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 27-Jul-2020

Balance: 1127510105


Justine Albertson - Operations Tech-ARM QC

Date Passed: 29-Jul-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 Lot No.: A0171211
Description : Pesticide Surrogate Mix
Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : July 31, 2027 Storage: 10°C or colder
Handling: Contains PCBs - sonicate prior to use. Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene CAS # 877-09-8 (Lot 0052481) Purity 98%	199.9 µg/mL	+/- 1.1875 µg/mL Gravimetric +/- 6.3389 µg/mL Unstressed +/- 8.2793 µg/mL Stressed
2	Decachlorobiphenyl (BZ# 209) CAS # 2051-24-3 (Lot ER071509-01) Purity 99%	200.0 µg/mL	+/- 1.1879 µg/mL Gravimetric +/- 6.3414 µg/mL Unstressed +/- 8.2826 µg/mL Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

P 10573
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P 10582
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05/25/2021

Column:

30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

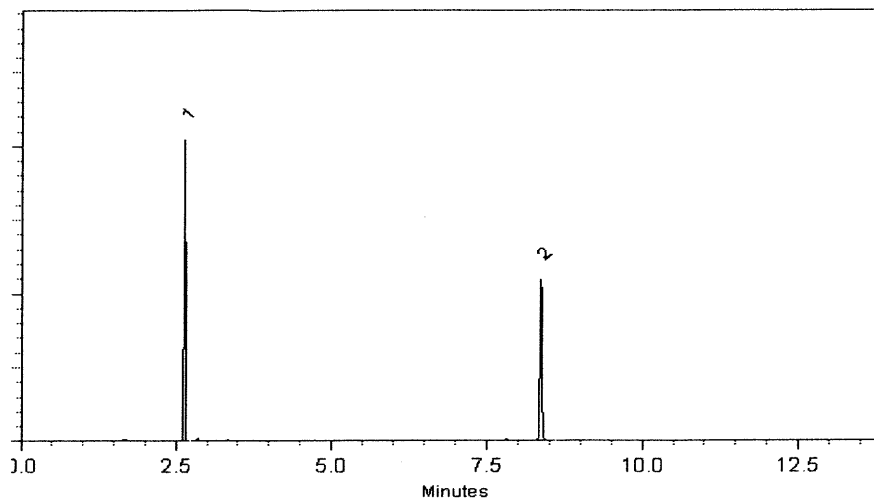
250°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jeremy Johnson - Mfg. Supervisor

Date Mixed: 12-Apr-2021

Balance: 1128342314

Marlina Cowan - Operations Tech I

Date Passed: 19-Apr-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



Certificate of Analysis

Product Name: Pesticides Resolution Check Standard

Product Number: CLP-242-1

Lot Issue Date: 08-Jul-2021

Lot Number: 0006617274

Expiration Date: 31-Aug-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration $\pm$ Uncertainty
trans-chlordane	005103-74-2	RM02726	10.0 $\pm$ 0.1 ng/mL
4,4'-DDE	000072-55-9	RM02892	20.1 $\pm$ 0.1 ng/mL
decachlorobiphenyl (BZ # 209)	002051-24-3	RM01256	20.1 $\pm$ 0.1 ng/mL
dieldrin	000060-57-1	RM16038	20.0 $\pm$ 0.1 ng/mL
endosulfan I	000959-98-8	RM15536	10.0 $\pm$ 0.1 ng/mL
endosulfan sulfate	001031-07-8	RM15389	20.0 $\pm$ 0.1 ng/mL
endrin ketone	053494-70-5	NT00720	20.0 $\pm$ 0.1 ng/mL
methoxychlor	000072-43-5	RM14186	100.1 $\pm$ 0.5 ng/mL
2,4,5,6-tetrachloro-m-xylene	000877-09-8	RM13844	20.1 $\pm$ 0.1 ng/mL

Matrix: hexane

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

P 10883
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P 10902

AJ
07/13/21



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Product Number: CLP-242-1

Lot Number: 0006617274

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

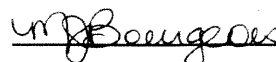
Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:



Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937



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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32291 **Lot No.:** A0168439

Description : Organochlorine Pesticide Mix AB #1

Organochlorine Pesticide Mix AB #1 200µg/mL, Hexane/Toluene(50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

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AR
9/30/2024

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	alpha-BHC CAS # 319-84-6 (Lot 0012018BHC) Purity 99%	200.5 µg/mL	+/- 1.4217 µg/mL Gravimetric +/- 9.1674 µg/mL Unstressed +/- 13.2104 µg/mL Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 (Lot 10972000) Purity 97%	200.8 µg/mL	+/- 1.4238 µg/mL Gravimetric +/- 9.1807 µg/mL Unstressed +/- 13.2295 µg/mL Stressed
3	beta-BHC CAS # 319-85-7 (Lot SL210106) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 9.1446 µg/mL Unstressed +/- 13.1774 µg/mL Stressed
4	delta-BHC CAS # 319-86-8 (Lot ER02101401) Purity 98%	199.9 µg/mL	+/- 1.4176 µg/mL Gravimetric +/- 9.1409 µg/mL Unstressed +/- 13.1722 µg/mL Stressed
5	Heptachlor CAS # 76-44-8 (Lot 0006540595) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 9.1446 µg/mL Unstressed +/- 13.1774 µg/mL Stressed
6	Aldrin CAS # 309-00-2 (Lot 11129800) Purity 97%	199.8 µg/mL	+/- 1.4169 µg/mL Gravimetric +/- 9.1363 µg/mL Unstressed +/- 13.1656 µg/mL Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 (Lot 10039000) Purity 99%	200.5 µg/mL	+/- 1.4217 µg/mL Gravimetric +/- 9.1674 µg/mL Unstressed +/- 13.2104 µg/mL Stressed

8	trans-Chlordane CAS # 5103-74-2 Purity 99%	(Lot 32095)	200.5 µg/mL	+/- +/- +/-	1.4217 9.1674 13.2104	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	cis-Chlordane CAS # 5103-71-9 Purity 99%	(Lot 31707)	200.0 µg/mL	+/- +/- +/-	1.4182 9.1446 13.1774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Endosulfan I CAS # 959-98-8 Purity 99%	(Lot BCBS8631)	200.5 µg/mL	+/- +/- +/-	1.4217 9.1674 13.2104	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	4,4'-DDE CAS # 72-55-9 Purity 99%	(Lot GHYQG)	200.0 µg/mL	+/- +/- +/-	1.4182 9.1446 13.1774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Dieldrin CAS # 60-57-1 Purity 98%	(Lot 10714300)	200.4 µg/mL	+/- +/- +/-	1.4211 9.1633 13.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Endrin CAS # 72-20-8 Purity 98%	(Lot 11129700)	199.9 µg/mL	+/- +/- +/-	1.4176 9.1409 13.1722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	4,4'-DDD CAS # 72-54-8 Purity 99%	(Lot HAN02)	200.5 µg/mL	+/- +/- +/-	1.4217 9.1674 13.2104	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Endosulfan II CAS # 33213-65-9 Purity 99%	(Lot 11129400)	201.0 µg/mL	+/- +/- +/-	1.4253 9.1903 13.2433	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	4,4'-DDT CAS # 50-29-3 Purity 99%	(Lot S37912V)	200.0 µg/mL	+/- +/- +/-	1.4182 9.1446 13.1774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Endrin aldehyde CAS # 7421-93-4 Purity 98%	(Lot 30455)	200.9 µg/mL	+/- +/- +/-	1.4245 9.1857 13.2367	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Endosulfan sulfate CAS # 1031-07-8 Purity 99%	(Lot BCCB0424)	200.0 µg/mL	+/- +/- +/-	1.4182 9.1446 13.1774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Methoxychlor CAS # 72-43-5 Purity 97%	(Lot 10720900)	199.8 µg/mL	+/- +/- +/-	1.4169 9.1363 13.1656	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Endrin ketone CAS # 53494-70-5 Purity 97%	(Lot 11129600)	199.8 µg/mL	+/- +/- +/-	1.4169 9.1363 13.1656	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent: Hexane/Toluene (50:50) CAS # 110-54-3/108-88-3 Purity 99%							

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

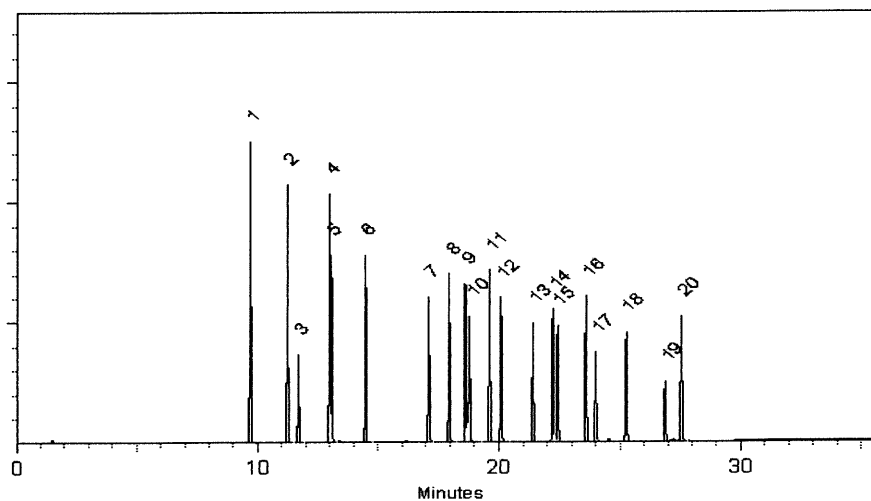
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD

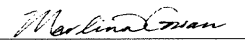


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Matt Fragassi - Mix Technician

Date Mixed: 25-Jan-2021

Balance: 1128342314


Marlene Cowan - Operations Tech I

Date Passed: 29-Jan-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

P11061
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P11065
AR
9/30/2021

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

P11789 to P11793

Received by SJ 5/27/2022



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32074 **Lot No.:** A0183168

Description : Pesticide Performance Eval Mix w/Surrogate

Performance Evaluation Std. 3/90 SOW w/surrogates 1-25µg/mL,
Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2026 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,5,6-Tetrachloro-m-xylene CAS # 877-09-8 (Lot 0052481) Purity 98%	2.0 µg/mL	+/- 0.1220 +/- 0.1523 +/- 0.1799	µg/mL Gravimetric Unstressed Stressed
2	alpha-BHC CAS # 319-84-6 (Lot 12469000) Purity 99%	1.0 µg/mL	+/- 0.0610 +/- 0.0762 +/- 0.0900	µg/mL Gravimetric Unstressed Stressed
3	gamma-BHC (Lindane) CAS # 58-89-9 (Lot 12642100) Purity 99%	1.0 µg/mL	+/- 0.0610 +/- 0.0762 +/- 0.0900	µg/mL Gravimetric Unstressed Stressed
4	beta-BHC CAS # 319-85-7 (Lot BCCCC6425) Purity 99%	1.0 µg/mL	+/- 0.0610 +/- 0.0762 +/- 0.0900	µg/mL Gravimetric Unstressed Stressed
5	Endrin CAS # 72-20-8 (Lot 13000500) Purity 99%	5.1 µg/mL	+/- 0.3045 +/- 0.3805 +/- 0.4496	µg/mL Gravimetric Unstressed Stressed
6	4,4'-DDT CAS # 50-29-3 (Lot 210916JLM) Purity 99%	10.1 µg/mL	+/- 0.6090 +/- 0.7609 +/- 0.8992	µg/mL Gravimetric Unstressed Stressed
7	Methoxychlor CAS # 72-43-5 (Lot 12555700) Purity 98%	25.2 µg/mL	+/- 1.5221 +/- 1.9018 +/- 2.2475	µg/mL Gravimetric Unstressed Stressed

8	Decachlorobiphenyl (BZ# 209)	2.0 µg/mL	+/- 0.1221	µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot 30679)		+/- 0.1524	µg/mL	Unstressed
	Purity 99%		+/- 0.1800	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2µm
Rtx-CLP II (cat.# 11323)

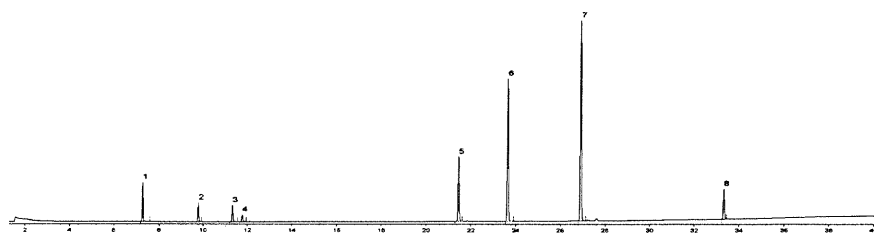
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

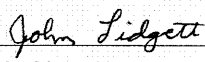
Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brittany Federinko - Operations Tech I

Date Mixed: 22-Mar-2022 **Balance:** 1128360905


John Lidgett - AD Chemist

Date Passed: 24-Mar-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

P11794 to P11798

Received by SJ 5/27/2022



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32074 **Lot No.:** A0183168

Description : Pesticide Performance Eval Mix w/Surrogate

Performance Evaluation Std. 3/90 SOW w/surrogates 1-25µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2026 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4,5,6-Tetrachloro-m-xylene CAS # 877-09-8 (Lot 0052481) Purity 98%	2.0 µg/mL	+/- 0.1220 µg/mL Gravimetric +/- 0.1523 µg/mL Unstressed +/- 0.1799 µg/mL Stressed
2	alpha-BHC CAS # 319-84-6 (Lot 12469000) Purity 99%	1.0 µg/mL	+/- 0.0610 µg/mL Gravimetric +/- 0.0762 µg/mL Unstressed +/- 0.0900 µg/mL Stressed
3	gamma-BHC (Lindane) CAS # 58-89-9 (Lot 12642100) Purity 99%	1.0 µg/mL	+/- 0.0610 µg/mL Gravimetric +/- 0.0762 µg/mL Unstressed +/- 0.0900 µg/mL Stressed
4	beta-BHC CAS # 319-85-7 (Lot BCCC6425) Purity 99%	1.0 µg/mL	+/- 0.0610 µg/mL Gravimetric +/- 0.0762 µg/mL Unstressed +/- 0.0900 µg/mL Stressed
5	Endrin CAS # 72-20-8 (Lot 13000500) Purity 99%	5.1 µg/mL	+/- 0.3045 µg/mL Gravimetric +/- 0.3805 µg/mL Unstressed +/- 0.4496 µg/mL Stressed
6	4,4'-DDT CAS # 50-29-3 (Lot 210916JLM) Purity 99%	10.1 µg/mL	+/- 0.6090 µg/mL Gravimetric +/- 0.7609 µg/mL Unstressed +/- 0.8992 µg/mL Stressed
7	Methoxychlor CAS # 72-43-5 (Lot 12555700) Purity 98%	25.2 µg/mL	+/- 1.5221 µg/mL Gravimetric +/- 1.9018 µg/mL Unstressed +/- 2.2475 µg/mL Stressed

8	Decachlorobiphenyl (BZ# 209)	2.0 µg/mL	+/- 0.1221	µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot 30679)		+/- 0.1524	µg/mL	Unstressed
	Purity 99%		+/- 0.1800	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

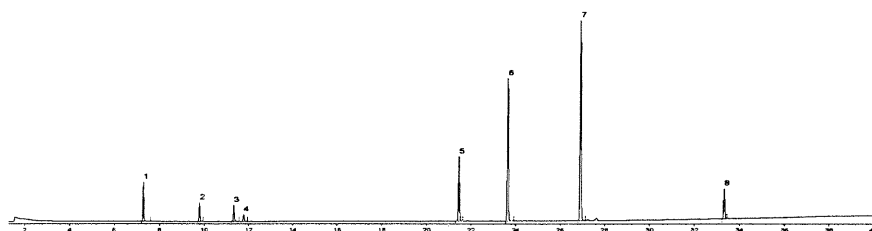
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

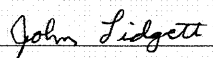
Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brittany Federinko - Operations Tech I

Date Mixed: 22-Mar-2022 **Balance:** 1128360905


John Lidgett - AD Chemist

Date Passed: 24-Mar-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32005 Lot No.: A0177326
Description: Toxaphene Standard
Toxaphene Standard 1000 µg/mL, Hexane, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: January 31, 2026 Storage: 10°C or colder
Ship: Ambient

P11811
✓
P11819
AJ
06/17/22

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Toxaphene	1,004.7 µg/mL	+/- 5.9674 µg/mL Gravimetric
	CAS # 8001-35-2 (Lot 1051817)		+/- 31.8552 µg/mL Unstressed
	Purity ----%		+/- 41.6063 µg/mL Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:

30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

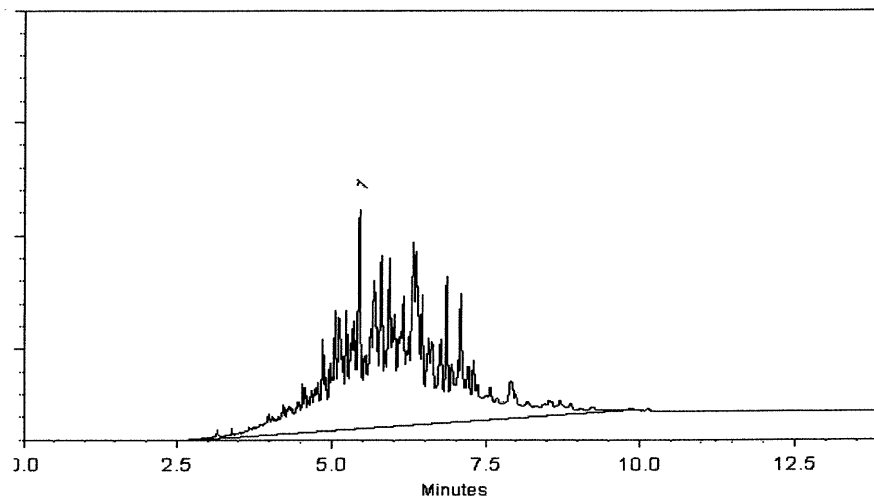
250°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler

Sam Moodler - Operations Tech I

Date Mixed: 11-Oct-2021

Balance: B442140311

Marlina Cowan

Marlina Cowan - Operations Tech I

Date Passed: 14-Oct-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

Solvent(s):
Acetone

Lot#
81025

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:

030823
Refrigerate (4 °C)
1000

Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.057 Flask Uncertainty

100.0

2506734D

Formulated By:	Gabriel Heiland	030818
DATE		
Reviewed By:	Pedro L. Rentas	030818
DATE		

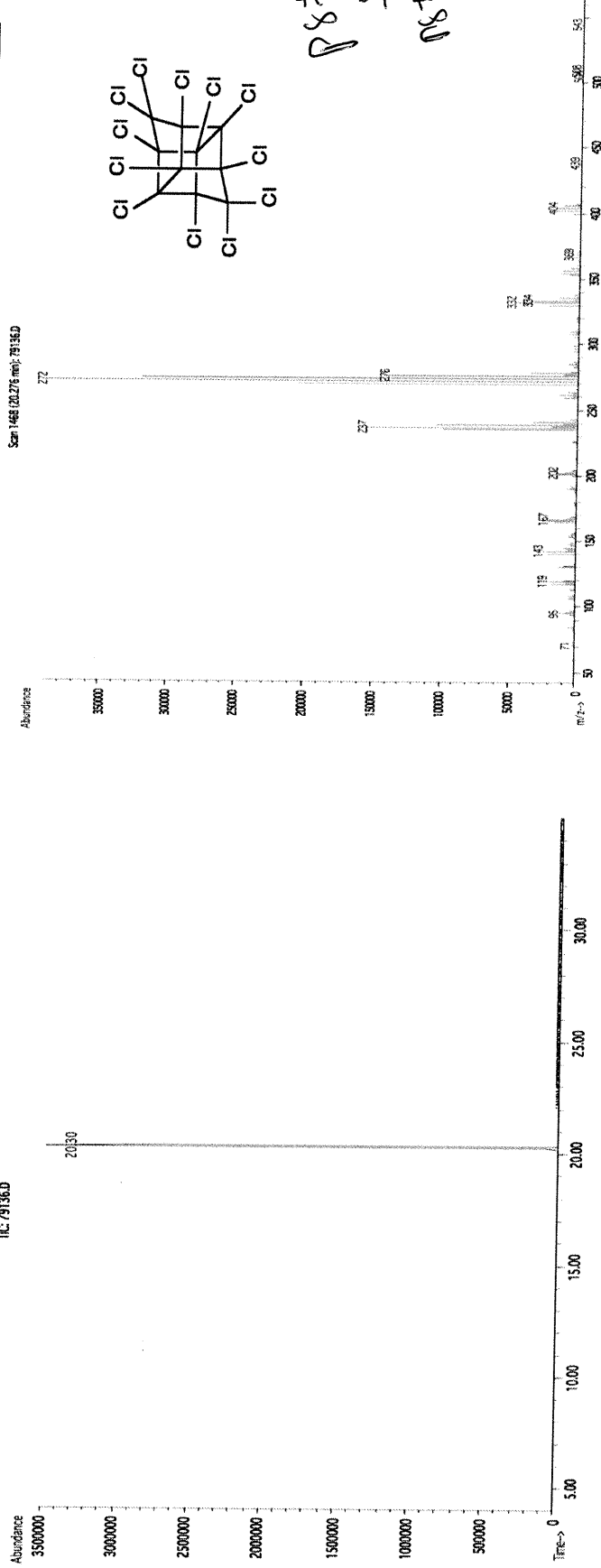
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information
										(Solvent Safety Info. On Attached pg.)
										OSHA PEL (TWA)
										LD50

1. Mirex

437 7018700 1000 99.5 0.5 0.10051 0.10065 1001.4 10.2 2385-85-5 N/A orf-rat 306mg/kg

Method GC7MSD-1.M: Column: SPB-608 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 150°C (4min.), Temp 2 = 290°C (13.5 min.), Rate = 8°C/min., Injector B= 200°C, Detector B = 290°C. Split Ratio = 100:1, Scan Rate = 2. Analysis performed by Candice Warren.

TIC: 79136.D

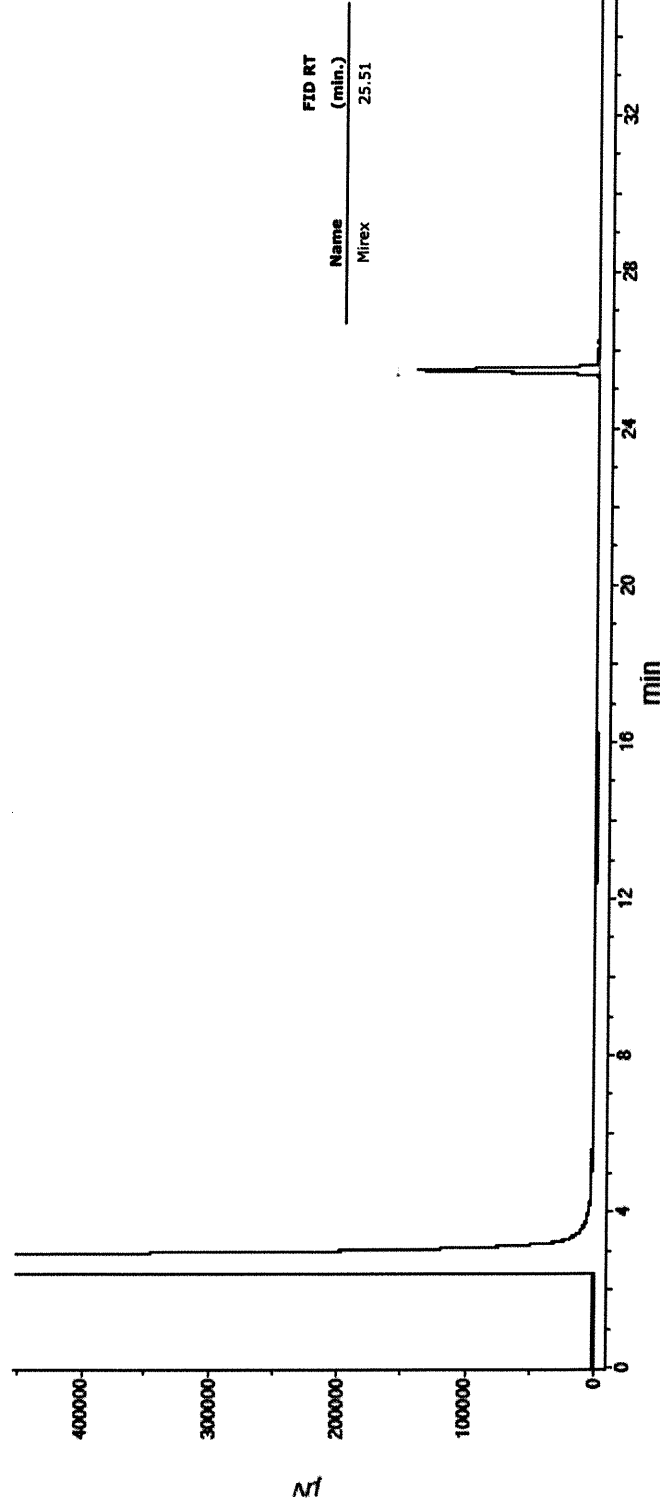


**Run 25, "P79136 L030818 [1000µg/mL in Acetone]"**

Run Length: 35.00 min, 21000 points at 10 points/second.
Created: Fri, Mar 9, 2018 at 3:46:52 AM.
Sampled: Sequence "030818-GC3M1", Method "GC3-M1".
Analyzed using Method "GC3-M1".

Comments

GC3-M1 Analysis by Candice Warren
Column ID SPB-608 30 meter X 0.53mm X5µm film thickness
Flow rates: Helium (carrier) = 5mL/min, Helium (make-up) = 25mL/min
Hydrogen (make-up) = 30mL/min, Air (make-up) = 350mL/min
Oven Profile: Temp 1 = 150°C (Time 1 = 4 min), Temp 2 = 290°C (Time 2 = 13.5 min)
Rate = 8°C/min, Total run time = 35 min
Injector temp. = 200°C, FID Temp. = 300°C. FID Signal = Edaq Channel 1
Standard injection = 1.5µL, Range=3





CERTIFIED REFERENCE MATERIAL

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Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32021

Lot No.: A0144623

Description :

Chlordane Standard

Chlordane Standard 1000µg/mL, Hexane, 1mL/ampul

Container Size :

2 mL

Pkg Amt: > 1 mL

Expiration Date :

April 30, 2025

Storage: 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Chlordane	1,010.0 µg/mL	+/- 5.9272 µg/mL	Gravimetric
	CAS # 57-74-9		+/- 32.0109 µg/mL	Unstressed
	Purity ----%		+/- 41.8169 µg/mL	Stressed
	(Lot 142990)			
Solvent:	Hexane			
	CAS # 110-54-3			
	Purity 99%			

88742



88744

SM

7/30/19

Tech Tips:

CAS #57-74-9 nomenclature is based on EPA method 8081B.

Column:

30m x .25mm x 2um
Rtx-CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:

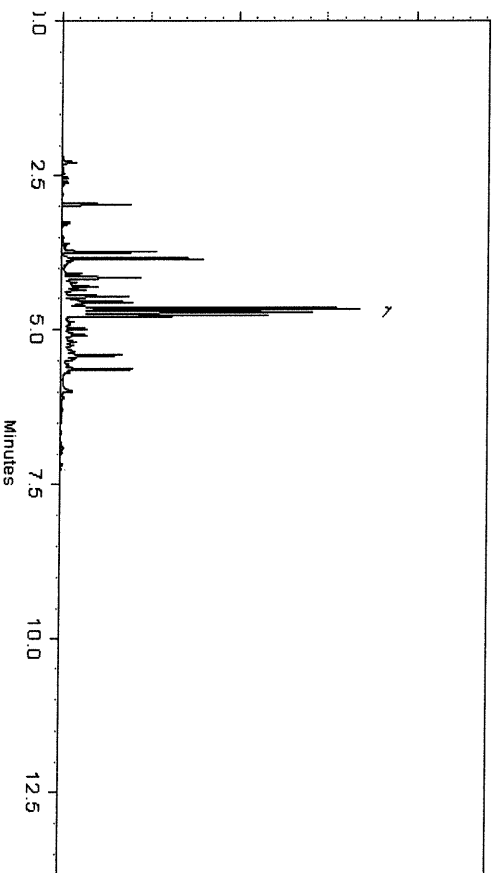
250°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Maggie Wang

Maggie Wang - Operations Technician I

Date Mixed: 04-Jan-2019

Balance: B251644995

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Jan-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

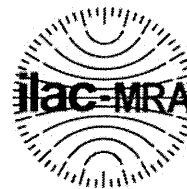


CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32291 **Lot No.:** A0154466

Description : Organochlorine Pesticide Mix AB #1

Organochlorine Pesticide Mix AB #1 200µg/mL, Hexane/Toluene(50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2023 **Storage:** 10°C or colder

P9649 P9654
P9650 P9655
P9651 P9656
P9652 P9657
P9653 P9658

SJ 6/22/2020

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	alpha-BHC CAS # 319-84-6 (Lot 0012018BHC) Purity 99%	201.6 µg/mL	+/- 1.1974 µg/mL Gravimetric +/- 9.1846 µg/mL Unstressed +/- 13.2599 µg/mL Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 (Lot 8521900) Purity 99%	201.6 µg/mL	+/- 1.1974 µg/mL Gravimetric +/- 9.1846 µg/mL Unstressed +/- 13.2599 µg/mL Stressed
3	beta-BHC CAS # 319-85-7 (Lot BCBS8692V) Purity 99%	200.0 µg/mL	+/- 1.1879 µg/mL Gravimetric +/- 9.1117 µg/mL Unstressed +/- 13.1547 µg/mL Stressed
4	delta-BHC CAS # 319-86-8 (Lot ER02101401) Purity 99%	200.0 µg/mL	+/- 1.1879 µg/mL Gravimetric +/- 9.1117 µg/mL Unstressed +/- 13.1547 µg/mL Stressed
5	Heptachlor CAS # 76-44-8 (Lot 0006467453) Purity 98%	200.3 µg/mL	+/- 1.1898 µg/mL Gravimetric +/- 9.1259 µg/mL Unstressed +/- 13.1752 µg/mL Stressed
6	Aldrin CAS # 309-00-2 (Lot 8737100) Purity 96%	200.1 µg/mL	+/- 1.1883 µg/mL Gravimetric +/- 9.1146 µg/mL Unstressed +/- 13.1589 µg/mL Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 (Lot 8666700) Purity 99%	200.0 µg/mL	+/- 1.1879 µg/mL Gravimetric +/- 9.1117 µg/mL Unstressed +/- 13.1547 µg/mL Stressed

8	trans-Chlordane			201.2	µg/mL	+/-	1.1951	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER06190604)				+/-	9.1664	µg/mL	Unstressed
	Purity 99%					+/-	13.2336	µg/mL	Stressed
9	cis-Chlordane			201.2	µg/mL	+/-	1.1951	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 24407)				+/-	9.1664	µg/mL	Unstressed
	Purity 99%					+/-	13.2336	µg/mL	Stressed
10	Endosulfan I			202.0	µg/mL	+/-	1.1998	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCBS8631)				+/-	9.2028	µg/mL	Unstressed
	Purity 99%					+/-	13.2862	µg/mL	Stressed
11	4,4'-DDE			200.8	µg/mL	+/-	1.1927	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)				+/-	9.1481	µg/mL	Unstressed
	Purity 99%					+/-	13.2073	µg/mL	Stressed
12	Dieldrin			200.4	µg/mL	+/-	1.1903	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 8815700)				+/-	9.1299	µg/mL	Unstressed
	Purity 99%					+/-	13.1810	µg/mL	Stressed
13	Endrin			200.8	µg/mL	+/-	1.1927	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 8532900)				+/-	9.1481	µg/mL	Unstressed
	Purity 99%					+/-	13.2073	µg/mL	Stressed
14	4,4'-DDD			201.2	µg/mL	+/-	1.1951	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)				+/-	9.1664	µg/mL	Unstressed
	Purity 99%					+/-	13.2336	µg/mL	Stressed
15	Endosulfan II			200.0	µg/mL	+/-	1.1879	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 8679900)				+/-	9.1117	µg/mL	Unstressed
	Purity 99%					+/-	13.1547	µg/mL	Stressed
16	4,4'-DDT			201.2	µg/mL	+/-	1.1951	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)				+/-	9.1664	µg/mL	Unstressed
	Purity 99%					+/-	13.2336	µg/mL	Stressed
17	Endrin aldehyde			200.8	µg/mL	+/-	1.1927	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)				+/-	9.1481	µg/mL	Unstressed
	Purity 99%					+/-	13.2073	µg/mL	Stressed
18	Endosulfan sulfate			202.0	µg/mL	+/-	1.1998	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)				+/-	9.2028	µg/mL	Unstressed
	Purity 99%					+/-	13.2862	µg/mL	Stressed
19	Methoxychlor			200.4	µg/mL	+/-	1.1903	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 9013400)				+/-	9.1299	µg/mL	Unstressed
	Purity 99%					+/-	13.1810	µg/mL	Stressed
20	Endrin ketone			200.4	µg/mL	+/-	1.1903	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 8618200)				+/-	9.1299	µg/mL	Unstressed
	Purity 99%					+/-	13.1810	µg/mL	Stressed
Solvent: Hexane/Toluene (50:50)									
	CAS # 110-54-3/108-88-3								
	Purity 99%								

Column:

3 x .25mm x .2um
CLP II (cat.# 11323)

Carrier Gas:

helium-constant pressure 20 psi.

Temp. Program:

150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:

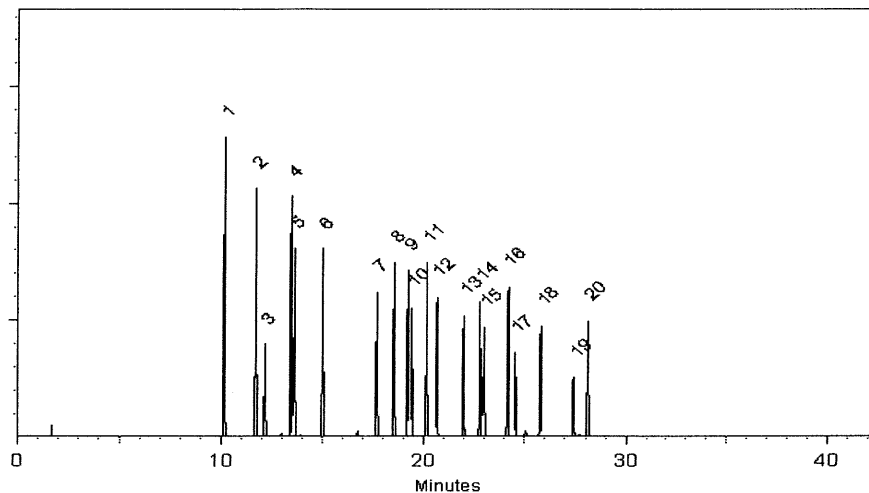
200°C

Det. Temp:

300°C

Det. Type:

ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Walker Workman - Operations Technician I

Date Mixed: 29-Oct-2019

Balance: 1128353505

Date Passed: 05-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent



Material No.: 9262-03

Batch No.: 22B0762004

Manufactured Date: 2021-11-24

Expiration Date: 2023-02-23

Revision No.: 0

Certificate of Analysis

W2938
onatel
07/25/2022
JP

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	< 1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD
Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

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SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255422
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16