CHEMTECH

284 Sheffield Street, Mountainside, New Jersey - 07092

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

LAB CHRONICLE

OrderID:	P1747	**OrderDate:**	3/13/2024 12:28:00 PM
Client:	LiRo Engineers, Inc.	**Project:**	Walter Gladwin Recreation Center, Bronx, NY
Contact:	Steve Frank	**Location:**	I21,I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P1747-01	**MW-01**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-02	**MW-01-DUP**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-03	**MW-01**	**WATER**			**03/13/24**			**03/13/24**
			PCB	608.3		03/14/24	03/15/24	
P1747-04	**MW-02**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	
P1747-05	**TWP-04**	**WATER**			**03/12/24**			**03/13/24**
			PCB	8082A		03/14/24	03/14/24	
			Pesticide-TCL	8081B		03/14/24	03/14/24	

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Hit Summary Sheet
SW-846

SDG No.: P1747 **Order ID:** P1747

Client: LiRo Engineers, Inc. **Project ID:** Walter Gladwin Recreation Center, Bı

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :								
			Total Concentration:	0.000				

CHEMTECH

SAMPLE DATA

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088618.D	1	03/14/24 10:51	03/14/24 19:02	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.052	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.052	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.052	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.052	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.052	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.052	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.052	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.052	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.052	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.052	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.052	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.052	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.052	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.052	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.052	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.052	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.052	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.052	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.052	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	16.4		27 - 142	82%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.2		35 - 148	101%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01	SDG No.:	P1747
Lab Sample ID:	P1747-01	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088618.D	1	03/14/24 10:51	03/14/24 19:02	PB159588

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088619.D	1	03/14/24 10:51	03/14/24 19:16	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.052	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.052	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.052	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.052	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.052	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.052	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.052	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.052	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.052	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.052	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.052	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.052	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.052	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.052	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.052	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.052	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.052	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.052	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.052	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	12.2		27 - 142	61%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.3		35 - 148	97%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-01-DUP	SDG No.:	P1747
Lab Sample ID:	P1747-02	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088619.D	1	03/14/24 10:51	03/14/24 19:16	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

U = Not Detected
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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	980 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
PL088620.D	1	03/14/24 10:51	03/14/24 19:30	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.051	U	0.0062	0.051	ug/L
319-85-7	beta-BHC	0.051	U	0.014	0.051	ug/L
319-86-8	delta-BHC	0.051	U	0.015	0.051	ug/L
58-89-9	gamma-BHC (Lindane)	0.051	U	0.0050	0.051	ug/L
76-44-8	Heptachlor	0.051	U	0.0055	0.051	ug/L
309-00-2	Aldrin	0.051	U	0.0045	0.051	ug/L
1024-57-3	Heptachlor epoxide	0.051	U	0.0092	0.051	ug/L
959-98-8	Endosulfan I	0.051	U	0.0051	0.051	ug/L
60-57-1	Dieldrin	0.051	U	0.0048	0.051	ug/L
72-55-9	4,4-DDE	0.051	U	0.0046	0.051	ug/L
72-20-8	Endrin	0.051	U	0.0044	0.051	ug/L
33213-65-9	Endosulfan II	0.051	U	0.0077	0.051	ug/L
72-54-8	4,4-DDD	0.051	U	0.0094	0.051	ug/L
1031-07-8	Endosulfan Sulfate	0.051	U	0.0036	0.051	ug/L
50-29-3	4,4-DDT	0.051	U	0.0045	0.051	ug/L
72-43-5	Methoxychlor	0.051	U	0.011	0.051	ug/L
53494-70-5	Endrin ketone	0.051	U	0.0099	0.051	ug/L
7421-93-4	Endrin aldehyde	0.051	U	0.010	0.051	ug/L
5103-71-9	alpha-Chlordane	0.051	U	0.0061	0.051	ug/L
5103-74-2	gamma-Chlordane	0.051	U	0.0061	0.051	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	15.6		27 - 142	78%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		35 - 148	111%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	MW-02	SDG No.:	P1747
Lab Sample ID:	P1747-04	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	980 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
PL088620.D	1	03/14/24 10:51	03/14/24 19:30	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units

Comments:

U = Not Detected
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MDL = Method Detection Limit
LOD = Limit of Detection
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B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
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S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088621.D	1	03/14/24 10:51	03/14/24 19:44	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.052	U	0.0063	0.052	ug/L
319-85-7	beta-BHC	0.052	U	0.014	0.052	ug/L
319-86-8	delta-BHC	0.052	U	0.016	0.052	ug/L
58-89-9	gamma-BHC (Lindane)	0.052	U	0.0051	0.052	ug/L
76-44-8	Heptachlor	0.052	U	0.0056	0.052	ug/L
309-00-2	Aldrin	0.052	U	0.0045	0.052	ug/L
1024-57-3	Heptachlor epoxide	0.052	U	0.0093	0.052	ug/L
959-98-8	Endosulfan I	0.052	U	0.0052	0.052	ug/L
60-57-1	Dieldrin	0.052	U	0.0048	0.052	ug/L
72-55-9	4,4-DDE	0.052	U	0.0046	0.052	ug/L
72-20-8	Endrin	0.052	U	0.0044	0.052	ug/L
33213-65-9	Endosulfan II	0.052	U	0.0077	0.052	ug/L
72-54-8	4,4-DDD	0.052	U	0.0095	0.052	ug/L
1031-07-8	Endosulfan Sulfate	0.052	U	0.0036	0.052	ug/L
50-29-3	4,4-DDT	0.052	U	0.0045	0.052	ug/L
72-43-5	Methoxychlor	0.052	U	0.011	0.052	ug/L
53494-70-5	Endrin ketone	0.052	U	0.010	0.052	ug/L
7421-93-4	Endrin aldehyde	0.052	U	0.010	0.052	ug/L
5103-71-9	alpha-Chlordane	0.052	U	0.0062	0.052	ug/L
5103-74-2	gamma-Chlordane	0.052	U	0.0062	0.052	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	18.8		27 - 142	94%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.0		35 - 148	110%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/12/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	TWP-04	SDG No.:	P1747
Lab Sample ID:	P1747-05	Matrix:	WATER
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	970 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
PL088621.D	1	03/14/24 10:51	03/14/24 19:44	PB159588

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

QC SUMMARY

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

Surrogate Summary

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 8081B

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits Low	Limits High
I.BLK-PL088549.D	PIBLK-PL088549.D	Decachlorobiphenyl	1	20	18.9	95		27	142
		Tetrachloro-m-xylene	1	20	19.6	98		35	148
		Decachlorobiphenyl	2	20	19.7	98		27	142
		Tetrachloro-m-xylene	2	20	19.7	98		35	148
I.BLK-PL088606.D	PIBLK-PL088606.D	Decachlorobiphenyl	1	20	21.2	106		27	142
		Tetrachloro-m-xylene	1	20	22.1	110		35	148
		Decachlorobiphenyl	2	20	21.4	107		27	142
		Tetrachloro-m-xylene	2	20	21.7	108		35	148
PB159588BL	PB159588BL	Decachlorobiphenyl	1	20	19.7	99		27	142
		Tetrachloro-m-xylene	1	20	22.1	111		35	148
		Decachlorobiphenyl	2	20	20.9	105		27	142
		Tetrachloro-m-xylene	2	20	21.0	105		35	148
PB159588BS	PB159588BS	Decachlorobiphenyl	1	20	19.5	98		27	142
		Tetrachloro-m-xylene	1	20	21.1	106		35	148
		Decachlorobiphenyl	2	20	20.2	101		27	142
		Tetrachloro-m-xylene	2	20	20.6	103		35	148
PB159588BSD	PB159588BSD	Decachlorobiphenyl	1	20	18.6	93		27	142
		Tetrachloro-m-xylene	1	20	20.2	101		35	148
		Decachlorobiphenyl	2	20	19.4	97		27	142
		Tetrachloro-m-xylene	2	20	19.7	99		35	148
P1747-01	MW-01	Decachlorobiphenyl	1	20	15.8	79		27	142
		Tetrachloro-m-xylene	1	20	18.7	94		35	148
		Decachlorobiphenyl	2	20	16.4	82		27	142
		Tetrachloro-m-xylene	2	20	20.2	101		35	148
P1747-02	MW-01-DUP	Decachlorobiphenyl	1	20	11.5	58		27	142
		Tetrachloro-m-xylene	1	20	18.1	91		35	148
		Decachlorobiphenyl	2	20	12.2	61		27	142
		Tetrachloro-m-xylene	2	20	19.3	97		35	148
P1747-04	MW-02	Decachlorobiphenyl	1	20	14.4	72		27	142
		Tetrachloro-m-xylene	1	20	22.2	111		35	148
		Decachlorobiphenyl	2	20	15.6	78		27	142
		Tetrachloro-m-xylene	2	20	21.5	107		35	148
P1747-05	TWP-04	Decachlorobiphenyl	1	20	18.2	91		27	142
		Tetrachloro-m-xylene	1	20	22.0	110		35	148
		Decachlorobiphenyl	2	20	18.8	94		27	142
		Tetrachloro-m-xylene	2	20	21.4	107		35	148
I.BLK-PL088622.D	PIBLK-PL088622.D	Decachlorobiphenyl	1	20	21.3	107		27	142
		Tetrachloro-m-xylene	1	20	22.2	111		35	148
		Decachlorobiphenyl	2	20	22.3	111		27	142
		Tetrachloro-m-xylene	2	20	22.2	111		35	148

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 8081B **Datafile :** PL088616.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB159588BS	alpha-BHC	0.5	0.51	ug/L	102				85	130	
	beta-BHC	0.5	0.49	ug/L	98				83	126	
	delta-BHC	0.5	0.46	ug/L	93				69	141	
	gamma-BHC (Lindane)	0.5	0.50	ug/L	99				82	129	
	Heptachlor	0.5	0.51	ug/L	101				79	127	
	Aldrin	0.5	0.49	ug/L	98				79	126	
	Heptachlor epoxide	0.5	0.50	ug/L	100				81	124	
	Endosulfan I	0.5	0.50	ug/L	101				85	122	
	Dieldrin	0.5	0.51	ug/L	101				83	125	
	4,4'-DDE	0.5	0.51	ug/L	101				80	127	
	Endrin	0.5	0.50	ug/L	101				81	128	
	Endosulfan II	0.5	0.50	ug/L	100				82	123	
	4,4'-DDD	0.5	0.50	ug/L	100				77	131	
	Endosulfan sulfate	0.5	0.50	ug/L	99				76	129	
	4,4'-DDT	0.5	0.51	ug/L	102				80	133	
	Methoxychlor	0.5	0.48	ug/L	96				76	137	
	Endrin ketone	0.5	0.50	ug/L	100				80	131	
	Endrin aldehyde	0.5	0.52	ug/L	103				82	127	
	alpha-Chlordane	0.5	0.51	ug/L	103				82	125	
	gamma-Chlordane	0.5	0.53	ug/L	105				82	125	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P1747

Client: LiRo Engineers, Inc.

Analytical Method: 8081B **Datafile :** PL088617.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB159588BSD	alpha-BHC	0.5	0.48	ug/L	97	5			85	130	20
	beta-BHC	0.5	0.47	ug/L	94	4			83	126	20
	delta-BHC	0.5	0.44	ug/L	89	4			69	141	20
	gamma-BHC (Lindane)	0.5	0.47	ug/L	95	4			82	129	20
	Heptachlor	0.5	0.49	ug/L	97	4			79	127	20
	Aldrin	0.5	0.47	ug/L	94	4			79	126	20
	Heptachlor epoxide	0.5	0.48	ug/L	96	4			81	124	20
	Endosulfan I	0.5	0.48	ug/L	97	4			85	122	20
	Dieldrin	0.5	0.49	ug/L	97	4			83	125	20
	4,4'-DDE	0.5	0.48	ug/L	97	4			80	127	20
	Endrin	0.5	0.48	ug/L	96	5			81	128	20
	Endosulfan II	0.5	0.48	ug/L	96	4			82	123	20
	4,4'-DDD	0.5	0.48	ug/L	96	4			77	131	20
	Endosulfan sulfate	0.5	0.48	ug/L	96	3			76	129	20
	4,4'-DDT	0.5	0.49	ug/L	98	4			80	133	20
	Methoxychlor	0.5	0.46	ug/L	93	3			76	137	20
	Endrin ketone	0.5	0.48	ug/L	96	4			80	131	20
	Endrin aldehyde	0.5	0.50	ug/L	100	3			82	127	20
	alpha-Chlordane	0.5	0.49	ug/L	99	4			82	125	20
	gamma-Chlordane	0.5	0.50	ug/L	101	4			82	125	20

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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB159588BL

Lab Name: CHEMTECH Contract: LIRO01

Lab Code: CHEM Case No.: P1747 SAS No.: P1747 SDG NO.: P1747

Lab Sample ID: PB159588BL Lab File ID: PL088615.D

Matrix: (soil/water) WATER Extraction: (Type)

Sulfur Cleanup: (Y/N) N Date Extracted: 03/14/2024

Date Analyzed (1): 03/14/2024 Date Analyzed (2): 03/14/2024

Time Analyzed (1): 18:21 Time Analyzed (2): 18:21

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
PB159588BS	PB159588BS	PL088616.D	03/14/2024	03/14/2024
PB159588BSD	PB159588BSD	PL088617.D	03/14/2024	03/14/2024
MW-01	P1747-01	PL088618.D	03/14/2024	03/14/2024
MW-01-DUP	P1747-02	PL088619.D	03/14/2024	03/14/2024
MW-02	P1747-04	PL088620.D	03/14/2024	03/14/2024
TWP-04	P1747-05	PL088621.D	03/14/2024	03/14/2024

COMMENTS:

CHEMTECH

A
B
C
D
E
F
G
H

QC SAMPLE DATA

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BL	SDG No.:	P1747
Lab Sample ID:	PB159588BL	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
PL088615.D	1	03/14/24 10:51	03/14/24 18:21	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.050	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.050	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.050	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.050	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.050	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.050	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.050	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.050	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.050	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.050	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.050	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.050	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.050	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.050	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.050	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.050	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.9		27 - 142	105%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.1		35 - 148	111%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BL	SDG No.:	P1747
Lab Sample ID:	PB159588BL	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
PL088615.D	1	03/14/24 10:51	03/14/24 18:21	PB159588

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	PIBLK-PL088549.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088549.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
PL088549.D	1		03/13/24	pl031424

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.050	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.050	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.050	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.050	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.050	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.050	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.050	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.050	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.050	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.050	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.050	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.050	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.050	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.050	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.050	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.050	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	19.7		27 - 142	98%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.7		35 - 148	98%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/13/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/13/24
Client Sample ID:	PIBLK-PL088549.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088549.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
PL088549.D	1		03/13/24	pl031424

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/14/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/14/24
Client Sample ID:	PIBLK-PL088606.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088606.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
PL088606.D	1		03/14/24	PL031524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.050	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.050	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.050	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.050	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.050	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.050	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.050	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.050	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.050	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.050	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.050	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.050	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.050	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.050	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.050	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.050	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.4		27 - 142	107%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.1		35 - 148	110%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/14/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/14/24
Client Sample ID:	PIBLK-PL088606.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088606.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
PL088606.D	1		03/14/24	PL031524

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/14/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/14/24
Client Sample ID:	PIBLK-PL088622.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088622.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
PL088622.D	1		03/14/24	PL031524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.050	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.050	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.050	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.050	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.050	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.050	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.050	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.050	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.050	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.050	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.050	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.050	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.050	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.050	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.050	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.050	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.3		27 - 142	111%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		35 - 148	111%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	03/14/24
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	03/14/24
Client Sample ID:	PIBLK-PL088622.D	SDG No.:	P1747
Lab Sample ID:	I.BLK-PL088622.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
PL088622.D	1		03/14/24	PL031524

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BS	SDG No.:	P1747
Lab Sample ID:	PB159588BS	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
PL088616.D	1	03/14/24 10:51	03/14/24 18:35	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.51		0.0061	0.050	ug/L
319-85-7	beta-BHC	0.49		0.014	0.050	ug/L
319-86-8	delta-BHC	0.46		0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.50		0.0049	0.050	ug/L
76-44-8	Heptachlor	0.51		0.0054	0.050	ug/L
309-00-2	Aldrin	0.49		0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.50		0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.50		0.0050	0.050	ug/L
60-57-1	Dieldrin	0.51		0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.51		0.0045	0.050	ug/L
72-20-8	Endrin	0.50		0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.50		0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.50		0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.50		0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.51		0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.48		0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.50		0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.52		0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.51		0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.53		0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.2		27 - 142	101%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.1		35 - 148	106%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BS	SDG No.:	P1747
Lab Sample ID:	PB159588BS	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
PL088616.D	1	03/14/24 10:51	03/14/24 18:35	PB159588

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

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BSD	SDG No.:	P1747
Lab Sample ID:	PB159588BSD	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
PL088617.D	1	03/14/24 10:51	03/14/24 18:49	PB159588

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
319-84-6	alpha-BHC	0.48		0.0061	0.050	ug/L
319-85-7	beta-BHC	0.47		0.014	0.050	ug/L
319-86-8	delta-BHC	0.44		0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.47		0.0049	0.050	ug/L
76-44-8	Heptachlor	0.49		0.0054	0.050	ug/L
309-00-2	Aldrin	0.47		0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.48		0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.48		0.0050	0.050	ug/L
60-57-1	Dieldrin	0.49		0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.48		0.0045	0.050	ug/L
72-20-8	Endrin	0.48		0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.48		0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.48		0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.48		0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.49		0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.46		0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.48		0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.50		0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.49		0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.50		0.0060	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	19.4		27 - 142	97%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.2		35 - 148	101%	SPK: 20

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Report of Analysis

Client:	LiRo Engineers, Inc.	Date Collected:	
Project:	Walter Gladwin Recreation Center, Bronx, NY	Date Received:	
Client Sample ID:	PB159588BSD	SDG No.:	P1747
Lab Sample ID:	PB159588BSD	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
PL088617.D	1	03/14/24 10:51	03/14/24 18:49	PB159588

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

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CALIBRATION SUMMARY

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

RETENTION TIMES OF INITIAL CALIBRATION

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Calibration Date(s):** 03/13/2024 03/13/2024

Calibration Times: 11:35 12:30

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

LAB FILE ID: **RT 100 =** PL088552.D **RT 075 =** PL088553.D

RT 050 = PL088554.D **RT 025 =** PL088555.D **RT 005 =** PL088556.D

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	RT WINDOW TO
4,4'-DDD	6.85	6.85	6.85	6.85	6.85	6.85	6.75	6.95
4,4'-DDE	6.33	6.33	6.33	6.33	6.33	6.33	6.23	6.43
4,4'-DDT	7.17	7.17	7.17	7.17	7.17	7.17	7.07	7.27
Aldrin	5.39	5.38	5.39	5.39	5.38	5.38	5.28	5.48
alpha-BHC	4.10	4.10	4.10	4.10	4.10	4.10	4.00	4.20
alpha-Chlordane	6.16	6.16	6.16	6.16	6.16	6.16	6.06	6.26
beta-BHC	4.64	4.64	4.64	4.64	4.63	4.63	4.53	4.73
Decachlorobiphenyl	9.30	9.30	9.30	9.30	9.30	9.30	9.20	9.40
delta-BHC	4.89	4.89	4.89	4.89	4.89	4.89	4.79	4.99
Dieldrin	6.49	6.49	6.49	6.49	6.49	6.49	6.39	6.59
Endosulfan I	6.21	6.21	6.21	6.21	6.21	6.21	6.11	6.31
Endosulfan II	6.94	6.94	6.94	6.94	6.94	6.94	6.84	7.04
Endosulfan sulfate	7.31	7.31	7.31	7.31	7.31	7.31	7.21	7.41
Endrin	6.72	6.72	6.72	6.72	6.72	6.72	6.62	6.82
Endrin aldehyde	7.07	7.07	7.07	7.07	7.07	7.07	6.97	7.17
Endrin ketone	7.80	7.80	7.80	7.80	7.80	7.80	7.70	7.90
gamma-BHC (Lindane)	4.44	4.44	4.44	4.44	4.44	4.44	4.34	4.54
gamma-Chlordane	6.08	6.08	6.08	6.08	6.08	6.08	5.98	6.18
Heptachlor	5.04	5.04	5.04	5.04	5.04	5.04	4.94	5.14
Heptachlor epoxide	5.82	5.82	5.82	5.82	5.82	5.82	5.72	5.92
Methoxychlor	7.65	7.65	7.65	7.65	7.65	7.65	7.55	7.75
Tetrachloro-m-xylene	3.63	3.63	3.63	3.63	3.63	3.63	3.53	3.73

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Calibration Date(s):** 03/13/2024 03/13/2024

Calibration Times: 11:35 12:30

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

LAB FILE ID: **RT 100 =** PL088552.D **RT 075 =** PL088553.D

RT 050 = PL088554.D **RT 025 =** PL088555.D **RT 005 =** PL088556.D

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	RT WINDOW TO
4,4'-DDD	5.92	5.92	5.92	5.92	5.92	5.92	5.82	6.02
4,4'-DDE	5.36	5.36	5.36	5.36	5.36	5.36	5.26	5.46
4,4'-DDT	6.18	6.18	6.18	6.18	6.18	6.18	6.08	6.28
Aldrin	4.34	4.34	4.34	4.34	4.34	4.34	4.24	4.44
alpha-BHC	3.37	3.37	3.37	3.37	3.37	3.37	3.27	3.47
alpha-Chlordane	5.17	5.17	5.17	5.17	5.17	5.17	5.07	5.27
beta-BHC	4.01	4.01	4.01	4.01	4.01	4.01	3.91	4.11
Decachlorobiphenyl	8.08	8.08	8.08	8.08	8.08	8.08	7.98	8.18
delta-BHC	4.24	4.24	4.24	4.24	4.24	4.24	4.14	4.34
Dieldrin	5.49	5.49	5.49	5.49	5.49	5.49	5.39	5.59
Endosulfan I	5.22	5.23	5.22	5.22	5.22	5.22	5.12	5.32
Endosulfan II	6.07	6.07	6.07	6.07	6.07	6.07	5.97	6.17
Endosulfan sulfate	6.48	6.48	6.48	6.48	6.48	6.48	6.38	6.58
Endrin	5.77	5.77	5.77	5.77	5.77	5.77	5.67	5.87
Endrin aldehyde	6.25	6.25	6.25	6.25	6.25	6.25	6.15	6.35
Endrin ketone	6.99	6.99	6.99	6.99	6.99	6.99	6.89	7.09
gamma-BHC (Lindane)	3.70	3.70	3.70	3.70	3.70	3.70	3.60	3.80
gamma-Chlordane	5.10	5.10	5.10	5.10	5.10	5.10	5.00	5.20
Heptachlor	4.05	4.05	4.05	4.05	4.05	4.05	3.95	4.15
Heptachlor epoxide	4.85	4.85	4.85	4.85	4.85	4.85	4.75	4.95
Methoxychlor	6.76	6.76	6.76	6.76	6.76	6.76	6.66	6.86
Tetrachloro-m-xylene	2.85	2.85	2.85	2.85	2.85	2.85	2.75	2.95

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Calibration Date(s):** 03/13/2024 03/13/2024

Calibration Times: 11:35 12:30

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

LAB FILE ID: **CF 100 =** PL088552.D **CF 075 =** PL088553.D

CF 050 = PL088554.D **CF 025 =** PL088555.D **CF 005 =** PL088556.D

COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	2605150000	2531380000	2454770000	2481810000	2660630000	2546750000	3
4,4'-DDE	3178230000	3063290000	2943150000	2934560000	2819300000	2987700000	5
4,4'-DDT	2748570000	2675830000	2612300000	2652290000	2638400000	2665480000	2
Aldrin	3842560000	3737850000	3597040000	3618370000	3526580000	3664480000	3
alpha-BHC	4339720000	4205870000	3969030000	3909040000	3534820000	3991700000	8
alpha-Chlordane	3376150000	3308060000	3240100000	3339840000	3356100000	3324050000	2
beta-BHC	1684100000	1687030000	1663320000	1806370000	2026390000	1773440000	9
Decachlorobiphenyl	2436610000	2426940000	2397780000	2509440000	2588810000	2471910000	3
delta-BHC	4214440000	4094390000	3928370000	3942460000	3961320000	4028190000	3
Dieldrin	3371550000	3284380000	3180230000	3214960000	3162200000	3242670000	3
Endosulfan I	3084770000	3033680000	2967760000	3061750000	3134370000	3056470000	2
Endosulfan II	2845570000	2805120000	2769760000	2873890000	3026640000	2864190000	3
Endosulfan sulfate	2735040000	2700270000	2673160000	2789900000	2908110000	2761300000	3
Endrin	2848980000	2769640000	2685100000	2723910000	2640970000	2733720000	3
Endrin aldehyde	2079410000	2015110000	2025620000	2093370000	2225670000	2087840000	4
Endrin ketone	2970920000	2937250000	2897030000	2988880000	2987910000	2956400000	1
gamma-BHC (Lindane)	4137770000	4022900000	3836800000	3839840000	3553780000	3878220000	6
gamma-Chlordane	3417730000	3335520000	3245830000	3326580000	3328420000	3330820000	2
Heptachlor	3906610000	3822660000	3706760000	3791550000	3759620000	3797440000	2
Heptachlor epoxide	3430270000	3379140000	3332490000	3460650000	3572360000	3434980000	3
Methoxychlor	1464350000	1467990000	1470780000	1549630000	1579820000	1506510000	4
Tetrachloro-m-xylene	2686870000	2646600000	2568650000	2665410000	2682310000	2649970000	2

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Calibration Date(s):** 03/13/2024 03/13/2024

Calibration Times: 11:35 12:30

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

LAB FILE ID: **CF 100 =** PL088552.D **CF 075 =** PL088553.D

CF 050 = PL088554.D **CF 025 =** PL088555.D **CF 005 =** PL088556.D

COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	1308210000	1278550000	1213180000	1224370000	1202550000	1245370000	4
4,4'-DDE	1572130000	1526800000	1437960000	1431260000	1324780000	1458590000	7
4,4'-DDT	1405410000	1379020000	1315320000	1332390000	1278840000	1342200000	4
Aldrin	1919490000	1882120000	1778160000	1777990000	1677600000	1807070000	5
alpha-BHC	2149490000	2111870000	1981390000	1973940000	1830590000	2009460000	6
alpha-Chlordane	1699950000	1675420000	1609760000	1653860000	1660680000	1659930000	2
beta-BHC	833598000	836044000	821970000	871810000	922789000	857242000	5
Decachlorobiphenyl	1307600000	1305320000	1293970000	1392670000	1480040000	1355920000	6
delta-BHC	2068040000	2016000000	1906440000	1877220000	1697630000	1913070000	8
Dieldrin	1709850000	1674230000	1590530000	1604530000	1541610000	1624150000	4
Endosulfan I	1538420000	1524800000	1463270000	1502090000	1487660000	1503250000	2
Endosulfan II	1441390000	1426250000	1384750000	1438120000	1498920000	1437890000	3
Endosulfan sulfate	1384330000	1372290000	1336020000	1397660000	1446900000	1387440000	3
Endrin	1494730000	1474680000	1401130000	1423990000	1412630000	1441430000	3
Endrin aldehyde	1040410000	1017290000	1005900000	1052090000	1124040000	1047950000	4
Endrin ketone	1645070000	1641730000	1597450000	1659920000	1709370000	1650710000	2
gamma-BHC (Lindane)	2052130000	2006750000	1902480000	1885370000	1748880000	1919120000	6
gamma-Chlordane	1715080000	1683250000	1606330000	1642720000	1634210000	1656320000	3
Heptachlor	1878290000	1848380000	1763450000	1785060000	1723470000	1799730000	4
Heptachlor epoxide	1681450000	1663240000	1599880000	1645050000	1632870000	1644500000	2
Methoxychlor	768511000	775219000	768675000	823757000	874190000	802071000	6
Tetrachloro-m-xylene	1356550000	1339940000	1298670000	1341820000	1326710000	1332740000	2

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INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Date(s) Analyzed:** 03/13/2024 03/13/2024

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	500	1	5.99	5.89	6.09	15819600
		2	6.58	6.48	6.68	45191500
		3	7.21	7.11	7.31	123592000
		4	7.30	7.20	7.40	90671800
		5	7.73	7.63	7.83	68270000

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INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Instrument ID: ECD_L **Date(s) Analyzed:** 03/13/2024 03/13/2024

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	500	1	5.46	5.36	5.56	13114100
		2	5.82	5.72	5.92	13971000
		3	6.75	6.65	6.85	45709900
		4	6.88	6.78	6.98	62869100
		5	7.20	7.10	7.30	26040400

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Continuing Calib Date: 03/14/2024 **Initial Calibration Date(s):** 03/13/2024 03/13/2024

Continuing Calib Time: 16:44 **Initial Calibration Time(s):** 11:35 12:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	9.30	9.30	9.20	9.40	0.00
Tetrachloro-m-xylene	3.63	3.63	3.53	3.73	0.00
alpha-BHC	4.10	4.10	4.00	4.20	0.00
beta-BHC	4.64	4.64	4.54	4.74	0.00
delta-BHC	4.89	4.89	4.79	4.99	0.00
gamma-BHC (Lindane)	4.44	4.44	4.34	4.54	0.00
Heptachlor	5.04	5.04	4.94	5.14	0.00
Aldrin	5.38	5.39	5.29	5.49	0.01
Heptachlor epoxide	5.82	5.82	5.72	5.92	0.00
Endosulfan I	6.21	6.21	6.11	6.31	0.00
Dieldrin	6.49	6.49	6.39	6.59	0.00
4,4'-DDE	6.33	6.33	6.23	6.43	0.00
Endrin	6.72	6.72	6.62	6.82	0.00
Endosulfan II	6.94	6.94	6.84	7.04	0.00
4,4'-DDD	6.85	6.85	6.75	6.95	0.00
Endosulfan sulfate	7.31	7.31	7.21	7.41	0.00
4,4'-DDT	7.17	7.17	7.07	7.27	0.00
Methoxychlor	7.65	7.65	7.55	7.75	0.00
Endrin ketone	7.80	7.80	7.70	7.90	0.00
Endrin aldehyde	7.07	7.07	6.97	7.17	0.00
alpha-Chlordane	6.16	6.16	6.06	6.26	0.00
gamma-Chlordane	6.07	6.08	5.98	6.18	0.01

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Continuing Calib Date: 03/14/2024 **Initial Calibration Date(s):** 03/13/2024 03/13/2024

Continuing Calib Time: 16:44 **Initial Calibration Time(s):** 11:35 12:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.08	8.08	7.98	8.18	0.00
Tetrachloro-m-xylene	2.85	2.85	2.75	2.95	0.00
alpha-BHC	3.37	3.37	3.27	3.47	0.00
beta-BHC	4.01	4.01	3.91	4.11	0.00
delta-BHC	4.24	4.24	4.14	4.34	0.00
gamma-BHC (Lindane)	3.70	3.70	3.60	3.80	0.00
Heptachlor	4.05	4.05	3.95	4.15	0.00
Aldrin	4.34	4.34	4.24	4.44	0.00
Heptachlor epoxide	4.85	4.85	4.75	4.95	0.00
Endosulfan I	5.22	5.22	5.12	5.32	0.00
Dieldrin	5.49	5.49	5.39	5.59	0.00
4,4'-DDE	5.36	5.36	5.26	5.46	0.00
Endrin	5.77	5.77	5.67	5.87	0.00
Endosulfan II	6.07	6.07	5.97	6.17	0.00
4,4'-DDD	5.92	5.92	5.82	6.02	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.76	6.76	6.66	6.86	0.00
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.25	6.25	6.15	6.35	0.00
alpha-Chlordane	5.17	5.17	5.07	5.27	0.00
gamma-Chlordane	5.10	5.10	5.00	5.20	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No.: CCAL01 **Date Analyzed:** 03/14/2024

Lab Sample No.: PSTDCCC050 **Data File :** PL088608.D **Time Analyzed:** 16:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	6.852	6.754	6.954	50.080	50.000	0.2
4,4'-DDE	6.331	6.232	6.432	51.720	50.000	3.4
4,4'-DDT	7.172	7.073	7.273	48.630	50.000	-2.7
Aldrin	5.384	5.285	5.485	52.000	50.000	4.0
alpha-BHC	4.099	3.999	4.199	52.830	50.000	5.7
alpha-Chlordane	6.156	6.057	6.257	52.140	50.000	4.3
beta-BHC	4.635	4.535	4.735	50.330	50.000	0.7
Decachlorobiphenyl	9.302	9.203	9.403	47.210	50.000	-5.6
delta-BHC	4.887	4.787	4.987	51.410	50.000	2.8
Dieldrin	6.486	6.387	6.587	51.700	50.000	3.4
Endosulfan I	6.207	6.107	6.307	51.370	50.000	2.7
Endosulfan II	6.939	6.840	7.040	51.100	50.000	2.2
Endosulfan sulfate	7.307	7.209	7.409	50.780	50.000	1.6
Endrin	6.719	6.619	6.819	52.020	50.000	4.0
Endrin aldehyde	7.069	6.971	7.171	51.580	50.000	3.2
Endrin ketone	7.799	7.700	7.900	51.420	50.000	2.8
gamma-BHC (Lindane)	4.437	4.338	4.538	52.630	50.000	5.3
gamma-Chlordane	6.074	5.976	6.176	51.780	50.000	3.6
Heptachlor	5.037	4.938	5.138	50.210	50.000	0.4
Heptachlor epoxide	5.816	5.717	5.917	52.220	50.000	4.4
Methoxychlor	7.652	7.553	7.753	46.980	50.000	-6.0
Tetrachloro-m-xylene	3.634	3.534	3.734	51.830	50.000	3.7

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR1 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No.: CCAL01 **Date Analyzed:** 03/14/2024

Lab Sample No.: PSTDCCC050 **Data File :** PL088608.D **Time Analyzed:** 16:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	5.922	5.823	6.023	50.450	50.000	0.9
4,4'-DDE	5.360	5.261	5.461	50.660	50.000	1.3
4,4'-DDT	6.177	6.078	6.278	47.090	50.000	-5.8
Aldrin	4.337	4.238	4.438	50.910	50.000	1.8
alpha-BHC	3.367	3.267	3.467	51.580	50.000	3.2
alpha-Chlordane	5.167	5.068	5.268	49.860	50.000	-0.3
beta-BHC	4.005	3.906	4.106	49.980	50.000	0.0
Decachlorobiphenyl	8.081	7.982	8.182	47.840	50.000	-4.3
delta-BHC	4.240	4.141	4.341	51.760	50.000	3.5
Dieldrin	5.493	5.393	5.593	50.560	50.000	1.1
Endosulfan I	5.223	5.124	5.324	49.640	50.000	-0.7
Endosulfan II	6.069	5.970	6.170	49.300	50.000	-1.4
Endosulfan sulfate	6.477	6.378	6.578	49.480	50.000	-1.0
Endrin	5.772	5.673	5.873	50.370	50.000	0.7
Endrin aldehyde	6.252	6.152	6.352	50.580	50.000	1.2
Endrin ketone	6.990	6.890	7.090	49.710	50.000	-0.6
gamma-BHC (Lindane)	3.703	3.604	3.804	51.570	50.000	3.1
gamma-Chlordane	5.102	5.003	5.203	50.020	50.000	0.0
Heptachlor	4.052	3.952	4.152	49.580	50.000	-0.8
Heptachlor epoxide	4.848	4.749	4.949	50.160	50.000	0.3
Methoxychlor	6.761	6.660	6.860	45.470	50.000	-9.1
Tetrachloro-m-xylene	2.852	2.752	2.952	51.370	50.000	2.7

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Continuing Calib Date: 03/14/2024 **Initial Calibration Date(s):** 03/13/2024 03/13/2024

Continuing Calib Time: 20:11 **Initial Calibration Time(s):** 11:35 12:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	9.30	9.30	9.20	9.40	0.00
Tetrachloro-m-xylene	3.63	3.63	3.53	3.73	0.00
alpha-BHC	4.10	4.10	4.00	4.20	0.00
beta-BHC	4.63	4.64	4.54	4.74	0.01
delta-BHC	4.89	4.89	4.79	4.99	0.00
gamma-BHC (Lindane)	4.44	4.44	4.34	4.54	0.00
Heptachlor	5.04	5.04	4.94	5.14	0.00
Aldrin	5.39	5.39	5.29	5.49	0.00
Heptachlor epoxide	5.82	5.82	5.72	5.92	0.00
Endosulfan I	6.21	6.21	6.11	6.31	0.00
Dieldrin	6.49	6.49	6.39	6.59	0.00
4,4'-DDE	6.33	6.33	6.23	6.43	0.00
Endrin	6.72	6.72	6.62	6.82	0.00
Endosulfan II	6.94	6.94	6.84	7.04	0.00
4,4'-DDD	6.85	6.85	6.75	6.95	0.00
Endosulfan sulfate	7.31	7.31	7.21	7.41	0.00
4,4'-DDT	7.17	7.17	7.07	7.27	0.00
Methoxychlor	7.65	7.65	7.55	7.75	0.00
Endrin ketone	7.80	7.80	7.70	7.90	0.00
Endrin aldehyde	7.07	7.07	6.97	7.17	0.00
alpha-Chlordane	6.16	6.16	6.06	6.26	0.00
gamma-Chlordane	6.07	6.08	5.98	6.18	0.01

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Continuing Calib Date: 03/14/2024 **Initial Calibration Date(s):** 03/13/2024 03/13/2024

Continuing Calib Time: 20:11 **Initial Calibration Time(s):** 11:35 12:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
Decachlorobiphenyl	8.08	8.08	7.98	8.18	0.00
Tetrachloro-m-xylene	2.85	2.85	2.75	2.95	0.00
alpha-BHC	3.37	3.37	3.27	3.47	0.00
beta-BHC	4.00	4.01	3.91	4.11	0.01
delta-BHC	4.24	4.24	4.14	4.34	0.00
gamma-BHC (Lindane)	3.70	3.70	3.60	3.80	0.00
Heptachlor	4.05	4.05	3.95	4.15	0.00
Aldrin	4.34	4.34	4.24	4.44	0.00
Heptachlor epoxide	4.85	4.85	4.75	4.95	0.00
Endosulfan I	5.22	5.22	5.12	5.32	0.00
Dieldrin	5.49	5.49	5.39	5.59	0.00
4,4'-DDE	5.36	5.36	5.26	5.46	0.00
Endrin	5.77	5.77	5.67	5.87	0.00
Endosulfan II	6.07	6.07	5.97	6.17	0.00
4,4'-DDD	5.92	5.92	5.82	6.02	0.00
Endosulfan sulfate	6.48	6.48	6.38	6.58	0.00
4,4'-DDT	6.18	6.18	6.08	6.28	0.00
Methoxychlor	6.76	6.76	6.66	6.86	0.00
Endrin ketone	6.99	6.99	6.89	7.09	0.00
Endrin aldehyde	6.25	6.25	6.15	6.35	0.00
alpha-Chlordane	5.17	5.17	5.07	5.27	0.00
gamma-Chlordane	5.10	5.10	5.00	5.20	0.00

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No.: CCAL02 **Date Analyzed:** 03/14/2024

Lab Sample No.: PSTDCCC050 **Data File :** PL088623.D **Time Analyzed:** 20:11

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	6.853	6.754	6.954	52.650	50.000	5.3
4,4'-DDE	6.330	6.232	6.432	52.910	50.000	5.8
4,4'-DDT	7.171	7.073	7.273	50.310	50.000	0.6
Aldrin	5.385	5.285	5.485	53.160	50.000	6.3
alpha-BHC	4.099	3.999	4.199	53.900	50.000	7.8
alpha-Chlordane	6.156	6.057	6.257	53.130	50.000	6.3
beta-BHC	4.634	4.535	4.735	51.690	50.000	3.4
Decachlorobiphenyl	9.300	9.203	9.403	48.280	50.000	-3.4
delta-BHC	4.886	4.787	4.987	52.950	50.000	5.9
Dieldrin	6.485	6.387	6.587	52.950	50.000	5.9
Endosulfan I	6.207	6.107	6.307	52.480	50.000	5.0
Endosulfan II	6.938	6.840	7.040	52.350	50.000	4.7
Endosulfan sulfate	7.306	7.209	7.409	52.210	50.000	4.4
Endrin	6.718	6.619	6.819	52.100	50.000	4.2
Endrin aldehyde	7.069	6.971	7.171	52.960	50.000	5.9
Endrin ketone	7.798	7.700	7.900	53.150	50.000	6.3
gamma-BHC (Lindane)	4.437	4.338	4.538	53.610	50.000	7.2
gamma-Chlordane	6.073	5.976	6.176	52.950	50.000	5.9
Heptachlor	5.037	4.938	5.138	51.940	50.000	3.9
Heptachlor epoxide	5.816	5.717	5.917	52.610	50.000	5.2
Methoxychlor	7.651	7.553	7.753	49.040	50.000	-1.9
Tetrachloro-m-xylene	3.634	3.534	3.734	52.690	50.000	5.4

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CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR1 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No.: CCAL02 **Date Analyzed:** 03/14/2024

Lab Sample No.: PSTDCCC050 **Data File :** PL088623.D **Time Analyzed:** 20:11

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	5.921	5.823	6.023	52.580	50.000	5.2
4,4'-DDE	5.360	5.261	5.461	52.920	50.000	5.8
4,4'-DDT	6.176	6.078	6.278	49.460	50.000	-1.1
Aldrin	4.337	4.238	4.438	52.920	50.000	5.8
alpha-BHC	3.366	3.267	3.467	53.060	50.000	6.1
alpha-Chlordane	5.166	5.068	5.268	51.810	50.000	3.6
beta-BHC	4.004	3.906	4.106	51.750	50.000	3.5
Decachlorobiphenyl	8.080	7.982	8.182	49.710	50.000	-0.6
delta-BHC	4.239	4.141	4.341	53.870	50.000	7.7
Dieldrin	5.492	5.393	5.593	52.350	50.000	4.7
Endosulfan I	5.223	5.124	5.324	51.600	50.000	3.2
Endosulfan II	6.069	5.970	6.170	51.280	50.000	2.6
Endosulfan sulfate	6.477	6.378	6.578	51.710	50.000	3.4
Endrin	5.771	5.673	5.873	51.530	50.000	3.1
Endrin aldehyde	6.251	6.152	6.352	52.930	50.000	5.9
Endrin ketone	6.990	6.890	7.090	52.040	50.000	4.1
gamma-BHC (Lindane)	3.703	3.604	3.804	53.460	50.000	6.9
gamma-Chlordane	5.101	5.003	5.203	52.000	50.000	4.0
Heptachlor	4.051	3.952	4.152	52.160	50.000	4.3
Heptachlor epoxide	4.847	4.749	4.949	52.200	50.000	4.4
Methoxychlor	6.760	6.660	6.860	48.000	50.000	-4.0
Tetrachloro-m-xylene	2.852	2.752	2.952	52.980	50.000	6.0

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PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No. (PEM): PEM - PL088550.D **Date Analyzed:** 03/13/2024

Lab Sample No.(PEM): PEM **Time Analyzed:** 11:08

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	9.300	9.200	9.400	21.690	20.000	8.5
Tetrachloro-m-xylene	3.634	3.580	3.680	20.100	20.000	0.5
alpha-BHC	4.099	4.050	4.150	9.190	10.000	-8.1
beta-BHC	4.634	4.580	4.680	10.480	10.000	4.8
gamma-BHC (Lindane)	4.437	4.390	4.490	9.290	10.000	-7.1
Endrin	6.719	6.650	6.790	46.980	50.000	-6.0
4,4'-DDT	7.173	7.100	7.240	102.990	100.000	3.0
Methoxychlor	7.654	7.580	7.720	245.930	250.000	-1.6

GC Column: ZB-MR1 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No. (PEM): PEM - PL088550.D **Date Analyzed:** 03/13/2024

Lab Sample No.(PEM): PEM **Time Analyzed:** 11:08

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.081	7.980	8.180	21.120	20.000	5.6
Tetrachloro-m-xylene	2.852	2.800	2.900	20.140	20.000	0.7
alpha-BHC	3.366	3.320	3.420	8.990	10.000	-10.1
beta-BHC	4.005	3.950	4.060	10.630	10.000	6.3
gamma-BHC (Lindane)	3.703	3.650	3.750	8.990	10.000	-10.1
Endrin	5.773	5.700	5.840	47.930	50.000	-4.1
4,4'-DDT	6.178	6.110	6.250	106.860	100.000	6.9
Methoxychlor	6.761	6.690	6.830	237.820	250.000	-4.9

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PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

GC Column: ZB-MR2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No. (PEM): PEM - PL088607.D **Date Analyzed:** 03/14/2024

Lab Sample No.(PEM): PEM **Time Analyzed:** 16:31

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	9.300	9.200	9.400	21.490	20.000	7.5
Tetrachloro-m-xylene	3.634	3.580	3.680	22.310	20.000	11.6
alpha-BHC	4.098	4.050	4.150	10.230	10.000	2.3
beta-BHC	4.634	4.580	4.680	12.310	10.000	23.1
gamma-BHC (Lindane)	4.437	4.390	4.490	10.300	10.000	3.0
Endrin	6.716	6.650	6.790	50.490	50.000	1.0
4,4'-DDT	7.171	7.100	7.240	106.000	100.000	6.0
Methoxychlor	7.651	7.580	7.720	245.850	250.000	-1.7

GC Column: ZB-MR1 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 03/13/2024 03/13/2024

Client Sample No. (PEM): PEM - PL088607.D **Date Analyzed:** 03/14/2024

Lab Sample No.(PEM): PEM **Time Analyzed:** 16:31

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	8.080	7.980	8.180	21.730	20.000	8.7
Tetrachloro-m-xylene	2.851	2.800	2.900	21.910	20.000	9.6
alpha-BHC	3.366	3.320	3.420	9.700	10.000	-3.0
beta-BHC	4.004	3.950	4.050	12.630	10.000	26.3
gamma-BHC (Lindane)	3.703	3.650	3.750	9.640	10.000	-3.6
Endrin	5.771	5.700	5.840	50.780	50.000	1.6
4,4'-DDT	6.177	6.110	6.250	107.710	100.000	7.7
Methoxychlor	6.760	6.690	6.830	232.260	250.000	-7.1

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

Analytical Sequence

Client: LiRo Engineers, Inc. **SDG No.:** P1747

Project: Walter Gladwin Recreation Center, Bronx, N **Instrument ID:** ECD_L

GC Column: ZB-MR2 **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 03/13/2024 03/13/2024

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 #
I.BLK	I.BLK	03/13/2024	10:54	PL088549.D	9.30	3.63
PEM	PEM	03/13/2024	11:08	PL088550.D	9.30	3.63
RESCHK	RESCHK	03/13/2024	11:21	PL088551.D	9.30	3.63
PSTDICC100	PSTDICC100	03/13/2024	11:35	PL088552.D	9.30	3.63
PSTDICC075	PSTDICC075	03/13/2024	11:49	PL088553.D	9.30	3.63
PSTDICC050	PSTDICC050	03/13/2024	12:03	PL088554.D	9.30	3.63
PSTDICC025	PSTDICC025	03/13/2024	12:17	PL088555.D	9.30	3.63
PSTDICC005	PSTDICC005	03/13/2024	12:30	PL088556.D	9.30	3.63
PCHLORICC500	PCHLORICC500	03/13/2024	13:12	PL088559.D	9.30	3.63
PTOXICC500	PTOXICC500	03/13/2024	14:21	PL088564.D	9.30	3.63
I.BLK	I.BLK	03/14/2024	16:17	PL088606.D	9.30	3.63
PEM	PEM	03/14/2024	16:31	PL088607.D	9.30	3.63
PSTDCCC050	PSTDCCC050	03/14/2024	16:44	PL088608.D	9.30	3.63
PB159588BL	PB159588BL	03/14/2024	18:21	PL088615.D	9.30	3.63
PB159588BS	PB159588BS	03/14/2024	18:35	PL088616.D	9.30	3.63
PB159588BSD	PB159588BSD	03/14/2024	18:49	PL088617.D	9.30	3.63
MW-01	P1747-01	03/14/2024	19:02	PL088618.D	9.30	3.63
MW-01-DUP	P1747-02	03/14/2024	19:16	PL088619.D	9.30	3.63
MW-02	P1747-04	03/14/2024	19:30	PL088620.D	9.30	3.63
TWP-04	P1747-05	03/14/2024	19:44	PL088621.D	9.30	3.63
I.BLK	I.BLK	03/14/2024	19:58	PL088622.D	9.30	3.63
PSTDCCC050	PSTDCCC050	03/14/2024	20:11	PL088623.D	9.30	3.63

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Analytical Sequence

Client: LiRo Engineers, Inc. **SDG No.:** P1747

Project: Walter Gladwin Recreation Center, Bronx, N **Instrument ID:** ECD_L

GC Column: ZB-MR1 **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 03/13/2024 03/13/2024

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 #
I.BLK	I.BLK	03/13/2024	10:54	PL088549.D	8.08	2.85
PEM	PEM	03/13/2024	11:08	PL088550.D	8.08	2.85
RESCHK	RESCHK	03/13/2024	11:21	PL088551.D	8.08	2.85
PSTDICC100	PSTDICC100	03/13/2024	11:35	PL088552.D	8.08	2.85
PSTDICC075	PSTDICC075	03/13/2024	11:49	PL088553.D	8.08	2.85
PSTDICC050	PSTDICC050	03/13/2024	12:03	PL088554.D	8.08	2.85
PSTDICC025	PSTDICC025	03/13/2024	12:17	PL088555.D	8.08	2.85
PSTDICC005	PSTDICC005	03/13/2024	12:30	PL088556.D	8.08	2.85
PCHLORICC500	PCHLORICC500	03/13/2024	13:12	PL088559.D	8.08	2.85
PTOXICC500	PTOXICC500	03/13/2024	14:21	PL088564.D	8.08	2.85
I.BLK	I.BLK	03/14/2024	16:17	PL088606.D	8.08	2.85
PEM	PEM	03/14/2024	16:31	PL088607.D	8.08	2.85
PSTDCCC050	PSTDCCC050	03/14/2024	16:44	PL088608.D	8.08	2.85
PB159588BL	PB159588BL	03/14/2024	18:21	PL088615.D	8.08	2.85
PB159588BS	PB159588BS	03/14/2024	18:35	PL088616.D	8.08	2.85
PB159588BSD	PB159588BSD	03/14/2024	18:49	PL088617.D	8.08	2.85
MW-01	P1747-01	03/14/2024	19:02	PL088618.D	8.08	2.85
MW-01-DUP	P1747-02	03/14/2024	19:16	PL088619.D	8.08	2.85
MW-02	P1747-04	03/14/2024	19:30	PL088620.D	8.08	2.85
TWP-04	P1747-05	03/14/2024	19:44	PL088621.D	8.08	2.85
I.BLK	I.BLK	03/14/2024	19:58	PL088622.D	8.08	2.85
PSTDCCC050	PSTDCCC050	03/14/2024	20:11	PL088623.D	8.08	2.85

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB159588BS

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Lab Sample ID: PB159588BS **Date(s) Analyzed:** 03/14/2024 03/14/2024

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 FROM	RT WINDOW TO	CONCENTRATION	%RPD
Endosulfan II	1	6.94	6.89	6.99	0.50	1.5
	2	6.07	6.02	6.12	0.49	
4,4'-DDD	1	6.85	6.80	6.90	0.50	1.3
	2	5.92	5.87	5.97	0.50	
4,4'-DDT	1	7.17	7.12	7.22	0.51	4.6
	2	6.18	6.13	6.23	0.49	
Endrin aldehyde	1	7.07	7.02	7.12	0.52	0
	2	6.25	6.20	6.30	0.52	
Endosulfan sulfate	1	7.31	7.26	7.36	0.50	1.8
	2	6.48	6.43	6.53	0.49	
Methoxychlor	1	7.65	7.60	7.70	0.48	3
	2	6.76	6.71	6.81	0.47	
Endrin ketone	1	7.80	7.75	7.85	0.50	3
	2	6.99	6.94	7.04	0.49	
alpha-BHC	1	4.10	4.05	4.15	0.51	4.5
	2	3.37	3.32	3.42	0.49	
gamma-BHC (Lindane)	1	4.44	4.39	4.49	0.50	3.5
	2	3.70	3.65	3.75	0.48	
Heptachlor	1	5.04	4.99	5.09	0.51	1.8
	2	4.05	4.00	4.10	0.50	
Aldrin	1	5.38	5.33	5.43	0.49	2.8
	2	4.34	4.29	4.39	0.48	
beta-BHC	1	4.63	4.58	4.68	0.49	3.1
	2	4.01	3.96	4.06	0.48	
delta-BHC	1	4.89	4.84	4.94	0.46	2.2
	2	4.24	4.19	4.29	0.45	
Heptachlor epoxide	1	5.82	5.77	5.87	0.50	3.4
	2	4.85	4.80	4.90	0.48	

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CLIENT SAMPLE NO.

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Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Lab Sample ID: PB159588BS **Date(s) Analyzed:** 03/14/2024 03/14/2024

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 FROM	RT WINDOW TO	CONCENTRATION	%RPD
Endosulfan I	1	6.21	6.16	6.26	0.50	2.6
	2	5.22	5.17	5.27	0.49	
gamma-Chlordane	1	6.08	6.03	6.13	0.53	5.6
	2	5.10	5.05	5.15	0.50	
alpha-Chlordane	1	6.16	6.11	6.21	0.51	3.8
	2	5.17	5.12	5.22	0.49	
4,4'-DDE	1	6.33	6.28	6.38	0.51	1
	2	5.36	5.31	5.41	0.50	
Dieldrin	1	6.49	6.44	6.54	0.51	2.8
	2	5.49	5.44	5.54	0.49	
Endrin	1	6.72	6.67	6.77	0.50	0.5
	2	5.77	5.72	5.82	0.50	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB159588BSD

Contract: LIRO01

Lab Code: CHEM **Case No.:** P1747 **SAS No.:** P1747 **SDG NO.:** P1747

Lab Sample ID: PB159588BSD **Date(s) Analyzed:** 03/14/2024 03/14/2024

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 FROM	RT WINDOW TO	CONCENTRATION	%RPD
Endosulfan II	1	6.94	6.89	6.99	0.48	2.3
	2	6.07	6.02	6.12	0.47	
4,4'-DDD	1	6.85	6.80	6.90	0.48	2.2
	2	5.92	5.87	5.97	0.47	
4,4'-DDT	1	7.17	7.12	7.22	0.49	5.7
	2	6.18	6.13	6.23	0.46	
Endrin aldehyde	1	7.07	7.02	7.12	0.50	1.1
	2	6.25	6.20	6.30	0.49	
Endosulfan sulfate	1	7.31	7.26	7.36	0.48	2.2
	2	6.48	6.43	6.53	0.47	
Methoxychlor	1	7.65	7.60	7.70	0.46	3.5
	2	6.76	6.71	6.81	0.45	
Endrin ketone	1	7.80	7.75	7.85	0.48	3.6
	2	6.99	6.94	7.04	0.46	
alpha-BHC	1	4.10	4.05	4.15	0.48	4.8
	2	3.37	3.32	3.42	0.46	
gamma-BHC (Lindane)	1	4.44	4.39	4.49	0.47	3.6
	2	3.70	3.65	3.75	0.46	
Heptachlor	1	5.04	4.99	5.09	0.49	2
	2	4.05	4.00	4.10	0.48	
Aldrin	1	5.38	5.33	5.43	0.47	3.1
	2	4.34	4.29	4.39	0.46	
beta-BHC	1	4.63	4.58	4.68	0.47	3
	2	4.01	3.96	4.06	0.46	
delta-BHC	1	4.89	4.84	4.94	0.44	2.3
	2	4.24	4.19	4.29	0.43	
Heptachlor epoxide	1	5.82	5.77	5.87	0.48	4.1
	2	4.85	4.80	4.90	0.46	

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Lab Sample ID: PB159588BSD **Date(s) Analyzed:** 03/14/2024 03/14/2024

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 FROM	RT WINDOW TO	CONCENTRATION	%RPD
Endosulfan I	1	6.21	6.16	6.26	0.48	3.3
	2	5.22	5.17	5.27	0.47	
gamma-Chlordane	1	6.08	6.03	6.13	0.50	6
	2	5.10	5.05	5.15	0.47	
alpha-Chlordane	1	6.16	6.11	6.21	0.49	4.5
	2	5.17	5.12	5.22	0.47	
4,4'-DDE	1	6.33	6.28	6.38	0.48	1.5
	2	5.36	5.31	5.41	0.48	
Dieldrin	1	6.49	6.44	6.54	0.49	3.7
	2	5.49	5.44	5.54	0.47	
Endrin	1	6.72	6.67	6.77	0.48	0.4
	2	5.77	5.72	5.82	0.48	