

LAB CHRONICLE

OrderID:	Q1235	OrderDate:	1/30/2025 12:15:00 PM
Client:	RU2 Engineering, LLC	Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	Location:	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1235-01	JPP-51.2-012925	SOIL	Diesel Range Organics	8015D	01/29/25	01/31/25	01/31/25	01/30/25
Q1235-04	JPP-51.2-012925	TCLP	TCLP Pesticide	8081B	01/29/25	01/31/25	02/03/25	01/30/25
Q1235-05	JPP-16.1-012925	SOIL	Diesel Range Organics	8015D	01/29/25	01/31/25	01/31/25	01/30/25
Q1235-08	JPP-16.1-012925	TCLP	TCLP Pesticide	8081B	01/29/25	01/31/25	02/03/25	01/30/25

Hit Summary Sheet
SW-846

SDG No.: Q1235

Order ID: Q1235

Client: RU2 Engineering, LLC

Project ID: NYCDDC SANTWOBR Brooklyn Bri

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

Total Concentration: 0.000

A
B
C
D
E
F
G
H



SAMPLE DATA

Report of Analysis

Client:	RU2 Engineering, LLC		Date Collected:		
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR		Date Received:	01/31/25	
Client Sample ID:	PB166356TB		SDG No.:	Q1235	
Lab Sample ID:	PB166356TB		Matrix:	TCLP	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Pesticide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093986.D	1	01/31/25 11:15	02/03/25 13:48	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	0.50	U	0.049	0.50	ug/L
76-44-8	Heptachlor	0.50	U	0.054	0.50	ug/L
1024-57-3	Heptachlor epoxide	0.50	U	0.090	0.50	ug/L
72-20-8	Endrin	0.50	U	0.043	0.50	ug/L
72-43-5	Methoxychlor	0.50	U	0.11	0.50	ug/L
8001-35-2	Toxaphene	10.0	U	1.50	10.0	ug/L
57-74-9	Chlordane	5.00	U	0.82	5.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	20.1		43 - 140	101%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.0		77 - 126	105%	SPK: 20

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

Report of Analysis

Client:	RU2 Engineering, LLC		Date Collected:	01/29/25	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR		Date Received:	01/30/25	
Client Sample ID:	JPP-51.2-012925		SDG No.:	Q1235	
Lab Sample ID:	Q1235-04		Matrix:	TCLP	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Pesticide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094007.D	1	01/31/25 11:15	02/03/25 19:09	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	0.50	U	0.049	0.50	ug/L
76-44-8	Heptachlor	0.50	U	0.054	0.50	ug/L
1024-57-3	Heptachlor epoxide	0.50	U	0.090	0.50	ug/L
72-20-8	Endrin	0.50	U	0.043	0.50	ug/L
72-43-5	Methoxychlor	0.50	U	0.11	0.50	ug/L
8001-35-2	Toxaphene	10.0	U	1.50	10.0	ug/L
57-74-9	Chlordane	5.00	U	0.82	5.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	27.6		43 - 140	138%	SPK: 20
877-09-8	Tetrachloro-m-xylene	25.5	*	77 - 126	127%	SPK: 20

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/29/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-16.1-012925	SDG No.:	Q1235
Lab Sample ID:	Q1235-08	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	PH :	
Prep Method :	SW3541B	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094008.D	1	01/31/25 11:15	02/03/25 19:23	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	0.50	U	0.049	0.50	ug/L
76-44-8	Heptachlor	0.50	U	0.054	0.50	ug/L
1024-57-3	Heptachlor epoxide	0.50	U	0.090	0.50	ug/L
72-20-8	Endrin	0.50	U	0.043	0.50	ug/L
72-43-5	Methoxychlor	0.50	U	0.11	0.50	ug/L
8001-35-2	Toxaphene	10.0	U	1.50	10.0	ug/L
57-74-9	Chlordane	5.00	U	0.82	5.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	26.4		43 - 140	132%	SPK: 20
877-09-8	Tetrachloro-m-xylene	25.2		77 - 126	126%	SPK: 20

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QC SUMMARY

Surrogate Summary

SDG No.: **Q1235**

Client: **RU2 Engineering, LLC**

Analytical Method: **8081B**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PL093725.D	PIBLK-PL093725.D	Decachlorobiphenyl	1	20	22.1	111		43	140
		Tetrachloro-m-xylene	1	20	20.8	104		77	126
		Decachlorobiphenyl	2	20	21.9	109		43	140
		Tetrachloro-m-xylene	2	20	20.5	103		77	126
I.BLK-PL093980.D	PIBLK-PL093980.D	Decachlorobiphenyl	1	20	21.6	108		43	140
		Tetrachloro-m-xylene	1	20	22.2	111		77	126
		Decachlorobiphenyl	2	20	20.2	101		43	140
		Tetrachloro-m-xylene	2	20	21.8	109		77	126
PB166427BL	PB166427BL	Decachlorobiphenyl	1	20	21.1	106		43	140
		Tetrachloro-m-xylene	1	20	19.0	95		77	126
		Decachlorobiphenyl	2	20	14.5	73		43	140
		Tetrachloro-m-xylene	2	20	17.5	87		77	126
PB166427BS	PB166427BS	Decachlorobiphenyl	1	20	23.4	117		43	140
		Tetrachloro-m-xylene	1	20	23.7	119		77	126
		Decachlorobiphenyl	2	20	20.9	105		43	140
		Tetrachloro-m-xylene	2	20	23.0	115		77	126
PB166356TB	PB166356TB	Decachlorobiphenyl	1	20	20.1	101		43	140
		Tetrachloro-m-xylene	1	20	21.0	105		77	126
		Decachlorobiphenyl	2	20	18.6	93		43	140
		Tetrachloro-m-xylene	2	20	19.5	98		77	126
Q1215-04MS	JPP-29.1-012825MS	Decachlorobiphenyl	1	20	22.9	115		43	140
		Tetrachloro-m-xylene	1	20	20.0	100		77	126
		Decachlorobiphenyl	2	20	20.6	103		43	140
		Tetrachloro-m-xylene	2	20	19.2	96		77	126
Q1215-04MSD	JPP-29.1-012825MSD	Decachlorobiphenyl	1	20	22.9	114		43	140
		Tetrachloro-m-xylene	1	20	20.6	103		77	126
		Decachlorobiphenyl	2	20	21.7	108		43	140
		Tetrachloro-m-xylene	2	20	20.1	100		77	126
I.BLK-PL093999.D	PIBLK-PL093999.D	Decachlorobiphenyl	1	20	28.1	140		43	140
		Tetrachloro-m-xylene	1	20	21.1	106		77	126
		Decachlorobiphenyl	2	20	21.9	109		43	140
		Tetrachloro-m-xylene	2	20	20.5	102		77	126
Q1235-04	JPP-51.2-012925	Decachlorobiphenyl	1	20	26.6	133		43	140
		Tetrachloro-m-xylene	1	20	25.5	127	*	77	126
		Decachlorobiphenyl	2	20	27.6	138		43	140
		Tetrachloro-m-xylene	2	20	24.9	124		77	126
Q1235-08	JPP-16.1-012925	Decachlorobiphenyl	1	20	25.1	126		43	140
		Tetrachloro-m-xylene	1	20	25.2	126		77	126
		Decachlorobiphenyl	2	20	26.4	132		43	140
		Tetrachloro-m-xylene	2	20	24.2	121		77	126
I.BLK-PL094020.D	PIBLK-PL094020.D	Decachlorobiphenyl	1	20	22.8	114		43	140

Surrogate Summary

SDG No.: Q1235

Client: RU2 Engineering, LLC

Analytical Method: 8081B

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PL094020.D	PIBLK-PL094020.D	Tetrachloro-m-xylene	1	20	21.6	108		77	126
		Decachlorobiphenyl	2	20	24.3	121		43	140
		Tetrachloro-m-xylene	2	20	21.1	106		77	126

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1235

Client: RU2 Engineering, LLC

Analytical Method: 8081B

DataFile : PL093988.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID: Q1215-04MS	JPP-29.1-012825MS											
	gamma-BHC (Lindane)	5	0	4.90	ug/L	98				60	152	
	Heptachlor	5	0	5.20	ug/L	104				56	147	
	Heptachlor epoxide	5	0	4.90	ug/L	98				77	143	
	Endrin	5	0	5.30	ug/L	106				76	144	
	Methoxychlor	5	0	5.60	ug/L	112				70	142	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1235

Client: RU2 Engineering, LLC

Analytical Method: 8081B

DataFile : PL093989.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec Qual	RPD Qual	Low	Limits High	RPD
Client Sample ID:	JPP-29.1-012825MSD									
Q1215-04MSD	gamma-BHC (Lindane)	5	0	5.10	ug/L	102	4	60	152	20
	Heptachlor	5	0	5.40	ug/L	108	4	56	147	20
	Heptachlor epoxide	5	0	5.20	ug/L	104	6	77	143	20
	Endrin	5	0	5.40	ug/L	108	2	76	144	20
	Methoxychlor	5	0	5.60	ug/L	112	0	70	142	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1235

Client: RU2 Engineering, LLC

Analytical Method: **8081B** Datafile : PL093985.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits	
								Qual	Low	High	RPD
PB166427BS	gamma-BHC (Lindane)	0.5	0.45	ug/L	90				82	129	
	Heptachlor	0.5	0.48	ug/L	97				79	127	
	Heptachlor epoxide	0.5	0.46	ug/L	92				81	124	
	Endrin	0.5	0.48	ug/L	95				81	128	
	Methoxychlor	0.5	0.50	ug/L	100				78	108	

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166427BL

Lab Name: CHEMTECH

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235

SAS No.: Q1235 SDG NO.: Q1235

Lab Sample ID: PB166427BL

Lab File ID: PL093984.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 01/31/2025

Date Analyzed (1): 02/03/2025

Date Analyzed (2): 02/03/2025

Time Analyzed (1): 12:53

Time Analyzed (2): 12:53

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 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
PB166427BS	PB166427BS	PL093985.D	02/03/2025	02/03/2025
PB166356TB	PB166356TB	PL093986.D	02/03/2025	02/03/2025
JPP-29.1-012825MS	Q1215-04MS	PL093988.D	02/03/2025	02/03/2025
JPP-29.1-012825MSD	Q1215-04MSD	PL093989.D	02/03/2025	02/03/2025
JPP-51.2-012925	Q1235-04	PL094007.D	02/03/2025	02/03/2025
JPP-16.1-012925	Q1235-08	PL094008.D	02/03/2025	02/03/2025

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166427BL	SDG No.:	Q1235
Lab Sample ID:	PB166427BL	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Pesticide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093984.D	1	01/31/25 11:15	02/03/25 12:53	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.1		43 - 140	106%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.0		77 - 126	95%	SPK: 20

Comments:

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/21/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/21/25
Client Sample ID:	PIBLK-PL093725.D	SDG No.:	Q1235
Lab Sample ID:	I.BLK-PL093725.D	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093725.D	1		01/21/25	PL012125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.1		43 - 140	111%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.8		77 - 126	104%	SPK: 20

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PIBLK-PL093980.D	SDG No.:	Q1235
Lab Sample ID:	I.BLK-PL093980.D	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093980.D	1		02/03/25	pl020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	21.6		43 - 140	108%	SPK: 20
877-09-8	Tetrachloro-m-xylene	22.2		77 - 126	111%	SPK: 20

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Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PIBLK-PL093999.D	SDG No.:	Q1235
Lab Sample ID:	I.BLK-PL093999.D	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093999.D	1		02/03/25	pl020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	28.1		43 - 140	140%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.1		77 - 126	106%	SPK: 20

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PIBLK-PL094020.D	SDG No.:	Q1235
Lab Sample ID:	I.BLK-PL094020.D	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094020.D	1		02/03/25	pl020325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
1024-57-3	Heptachlor epoxide	0.050	U	0.0090	0.050	ug/L
72-20-8	Endrin	0.050	U	0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.050	U	0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	24.3		43 - 140	121%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.6		77 - 126	108%	SPK: 20

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

Report of Analysis

Client:	RU2 Engineering, LLC		Date Collected:		
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR		Date Received:		
Client Sample ID:	PB166427BS		SDG No.:	Q1235	
Lab Sample ID:	PB166427BS		Matrix:	TCLP	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Pesticide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093985.D	1	01/31/25 11:15	02/03/25 13:26	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	0.45		0.0049	0.050	ug/L
76-44-8	Heptachlor	0.48		0.0054	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.46		0.0090	0.050	ug/L
72-20-8	Endrin	0.48		0.0043	0.050	ug/L
72-43-5	Methoxychlor	0.50		0.011	0.050	ug/L
8001-35-2	Toxaphene	1.00	U	0.15	1.00	ug/L
57-74-9	Chlordane	0.50	U	0.082	0.50	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	23.4		43 - 140	117%	SPK: 20
877-09-8	Tetrachloro-m-xylene	23.7		77 - 126	119%	SPK: 20

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1235
Lab Sample ID:	Q1215-04MS	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	PH :	
Prep Method :	3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093988.D	1	01/31/25 11:15	02/03/25 14:24	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	4.90		0.049	0.50	ug/L
76-44-8	Heptachlor	5.20		0.054	0.50	ug/L
1024-57-3	Heptachlor epoxide	4.90		0.090	0.50	ug/L
72-20-8	Endrin	5.30		0.043	0.50	ug/L
72-43-5	Methoxychlor	5.60		0.11	0.50	ug/L
8001-35-2	Toxaphene	10.0	U	1.50	10.0	ug/L
57-74-9	Chlordane	5.00	U	0.82	5.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.9		43 - 140	115%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.0		77 - 126	100%	SPK: 20

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1235
Lab Sample ID:	Q1215-04MSD	Matrix:	TCLP
Analytical Method:	SW8081	% Solid:	0
Sample Wt/Vol:	100 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Pesticide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093989.D	1	01/31/25 11:15	02/03/25 14:37	PB166427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
58-89-9	gamma-BHC (Lindane)	5.10		0.049	0.50	ug/L
76-44-8	Heptachlor	5.40		0.054	0.50	ug/L
1024-57-3	Heptachlor epoxide	5.20		0.090	0.50	ug/L
72-20-8	Endrin	5.40		0.043	0.50	ug/L
72-43-5	Methoxychlor	5.60		0.11	0.50	ug/L
8001-35-2	Toxaphene	10.0	U	1.50	10.0	ug/L
57-74-9	Chlordane	5.00	U	0.82	5.00	ug/L
SURROGATES						
2051-24-3	Decachlorobiphenyl	22.9		43 - 140	114%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.6		77 - 126	103%	SPK: 20

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



CALIBRATION SUMMARY

A
B
C
D
E
F
G
H

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

[illegible]

RETENTION TIMES OF INITIAL CALIBRATION

Contract:	<u>RUTW01</u>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1235</u>	SAS No.:	<u>Q1235</u>	SDG NO.:	<u>Q1235</u>
Instrument ID:	<u>ECD_L</u>	Calibration Date(s):		<u>01/21/2025</u>	<u>01/21/2025</u>		
		Calibration Times:		<u>10:57</u>	<u>11:51</u>		

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

LAB FILE ID:	RT 100 =	<u>PL093728.D</u>	RT 075 =	<u>PL093729.D</u>	
RT 050 =	PL093730.D	RT 025 =	PL093731.D	RT 005 =	PL093732.D

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1235 **SAS No.:** Q1235 **SDG NO.:** Q1235

Instrument ID: ECD_L **Calibration Date(s):** 01/21/2025 01/21/2025
Calibration Times: 10:57 11:51

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

LAB FILE ID: CF 100 = <u>PL093728.D</u> CF 075 = <u>PL093729.D</u> CF 050 = <u>PL093730.D</u> CF 025 = <u>PL093731.D</u> CF 005 = <u>PL093732.D</u>							
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
Decachlorobiphenyl	1768480000	1816480000	2098320000	2018470000	2757820000	2091910000	19
Endrin	2079430000	2060990000	2363220000	2218560000	3001890000	2344820000	17
gamma-BHC (Lindane)	3375960000	3339350000	3767250000	3460830000	4470850000	3682850000	13
Heptachlor	2922500000	2901690000	3325290000	3144100000	4093120000	3277340000	15
Heptachlor epoxide	2568680000	2575960000	2953630000	2835830000	3935020000	2973820000	19
Methoxychlor	907284000	922109000	1080370000	1020090000	1287130000	1043400000	15
Tetrachloro-m-xylene	2397870000	2402980000	2740040000	2595500000	3327420000	2692760000	14

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1235 **SAS No.:** Q1235 **SDG NO.:** Q1235

Instrument ID: ECD_L **Calibration Date(s):** 01/21/2025 01/21/2025
Calibration Times: 10:57 11:51

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

LAB FILE ID: CF 100 = <u>PL093728.D</u>CF 075 = <u>PL093729.D</u> CF 050 = <u>PL093730.D</u>CF 025 = <u>PL093731.D</u>CF 005 = <u>PL093732.D</u>							
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
Decachlorobiphenyl	3226690000	3193800000	3627020000	3320620000	4152210000	3504070000	11
Endrin	3607760000	3481170000	3870730000	3406140000	4097610000	3692680000	8
gamma-BHC (Lindane)	4713370000	4597010000	5084610000	4384810000	4926270000	4741210000	6
Heptachlor	4505180000	4413750000	4924840000	4345980000	5084220000	4654790000	7
Heptachlor epoxide	4026840000	3946880000	4424170000	3927960000	4575440000	4180260000	7
Methoxychlor	1651870000	1634200000	1870410000	1643810000	2140390000	1788140000	12
Tetrachloro-m-xylene	3101220000	3058550000	3437230000	3066200000	3657590000	3264160000	8

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Instrument ID: ECD_L Date(s) Analyzed: 01/21/2025 01/21/2025

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Chlordane	500	1	4.70	4.60	4.80	110671000
		2	5.23	5.13	5.33	111822000
		3	5.94	5.84	6.04	367564000
		4	6.02	5.92	6.12	441167000
		5	6.87	6.77	6.97	84311800
Toxaphene	500	1	6.24	6.14	6.34	23446000
		2	6.44	6.34	6.54	14767200
		3	7.06	6.96	7.16	75896000
		4	7.15	7.05	7.25	57345100
		5	7.93	7.83	8.03	43067100

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Instrument ID: ECD_L Date(s) Analyzed: 01/21/2025 01/21/2025

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Chlordane	500	1	3.77	3.67	3.87	122213000
		2	4.35	4.25	4.45	140610000
		3	4.98	4.88	5.08	427882000
		4	5.04	4.94	5.14	412254000
		5	5.94	5.84	6.04	148711000
Toxaphene	500	1	5.00	4.90	5.10	27057100
		2	5.33	5.23	5.43	23947200
		3	5.68	5.58	5.78	24726400
		4	6.60	6.50	6.70	84987200
		5	7.04	6.94	7.14	80238300

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 12:17 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.06	9.05	8.95	9.15	-0.01
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.92	4.91	4.81	5.01	-0.01
Heptachlor epoxide	5.69	5.68	5.58	5.78	-0.01
Endrin	6.58	6.57	6.47	6.67	-0.01
Methoxychlor	7.50	7.50	7.40	7.60	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 12:17 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.77	2.77	2.67	2.87	0.00
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.95	3.95	3.85	4.05	0.00
Heptachlor epoxide	4.73	4.73	4.63	4.83	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Methoxychlor	6.61	6.61	6.51	6.71	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL01 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL093982.D Time Analyzed: 12:17

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	9.061	8.953	9.153	48.630	50.000	-2.7
Endrin	6.577	6.472	6.672	51.580	50.000	3.2
gamma-BHC (Lindane)	4.333	4.227	4.427	55.370	50.000	10.7
Heptachlor	4.921	4.814	5.014	55.190	50.000	10.4
Heptachlor epoxide	5.688	5.582	5.782	48.040	50.000	-3.9
Methoxychlor	7.503	7.398	7.598	57.600	50.000	15.2
Tetrachloro-m-xylene	3.544	3.439	3.639	54.550	50.000	9.1

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL01 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL093982.D Time Analyzed: 12:17

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	7.913	7.810	8.010	46.730	50.000	-6.5
Endrin	5.638	5.536	5.736	52.920	50.000	5.8
gamma-BHC (Lindane)	3.608	3.507	3.707	52.550	50.000	5.1
Heptachlor	3.946	3.845	4.045	53.790	50.000	7.6
Heptachlor epoxide	4.728	4.627	4.827	53.570	50.000	7.1
Methoxychlor	6.612	6.509	6.709	55.210	50.000	10.4
Tetrachloro-m-xylene	2.774	2.674	2.874	54.490	50.000	9.0

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 17:50 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.06	9.05	8.95	9.15	-0.01
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.92	4.91	4.81	5.01	-0.01
Heptachlor epoxide	5.68	5.68	5.58	5.78	0.00
Endrin	6.58	6.57	6.47	6.67	0.00
Methoxychlor	7.50	7.50	7.40	7.60	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 17:50 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.77	2.77	2.67	2.87	0.00
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.94	3.95	3.85	4.05	0.01
Heptachlor epoxide	4.73	4.73	4.63	4.83	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Methoxychlor	6.61	6.61	6.51	6.71	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL02 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL094001.D Time Analyzed: 17:50

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	9.055	8.953	9.153	50.120	50.000	0.2
Endrin	6.575	6.472	6.672	53.310	50.000	6.6
gamma-BHC (Lindane)	4.328	4.227	4.427	53.780	50.000	7.6
Heptachlor	4.916	4.814	5.014	54.610	50.000	9.2
Heptachlor epoxide	5.684	5.582	5.782	51.770	50.000	3.5
Methoxychlor	7.501	7.398	7.598	56.300	50.000	12.6
Tetrachloro-m-xylene	3.540	3.439	3.639	52.880	50.000	5.8

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL02 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL094001.D Time Analyzed: 17:50

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	7.909	7.810	8.010	52.420	50.000	4.8
Endrin	5.636	5.536	5.736	55.090	50.000	10.2
gamma-BHC (Lindane)	3.606	3.507	3.707	53.550	50.000	7.1
Heptachlor	3.944	3.845	4.045	53.700	50.000	7.4
Heptachlor epoxide	4.727	4.627	4.827	54.320	50.000	8.6
Methoxychlor	6.609	6.509	6.709	58.410	50.000	16.8
Tetrachloro-m-xylene	2.773	2.674	2.874	53.550	50.000	7.1

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 22:41 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.06	9.05	8.95	9.15	-0.01
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.92	4.91	4.81	5.01	0.00
Heptachlor epoxide	5.68	5.68	5.58	5.78	0.00
Endrin	6.57	6.57	6.47	6.67	0.00
Methoxychlor	7.50	7.50	7.40	7.60	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

Continuing Calib Date: 02/03/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 22:41 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.77	2.77	2.67	2.87	0.00
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.95	3.95	3.85	4.05	0.01
Heptachlor epoxide	4.73	4.73	4.63	4.83	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Methoxychlor	6.61	6.61	6.51	6.71	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL03 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL094022.D Time Analyzed: 22:41

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Decachlorobiphenyl	9.056	8.953	9.153	48.960	50.000	-2.1
Endrin	6.572	6.472	6.672	50.650	50.000	1.3
gamma-BHC (Lindane)	4.327	4.227	4.427	51.980	50.000	4.0
Heptachlor	4.915	4.814	5.014	51.640	50.000	3.3
Heptachlor epoxide	5.683	5.582	5.782	50.990	50.000	2.0
Methoxychlor	7.500	7.398	7.598	53.980	50.000	8.0
Tetrachloro-m-xylene	3.538	3.439	3.639	51.210	50.000	2.4

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No.: CCAL03 Date Analyzed: 02/03/2025

Lab Sample No.: PSTDCCC050 Data File : PL094022.D Time Analyzed: 22:41

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	7.910	7.810	8.010	53.520	50.000	7.0
Endrin	5.636	5.536	5.736	56.890	50.000	13.8
gamma-BHC (Lindane)	3.607	3.507	3.707	52.380	50.000	4.8
Heptachlor	3.945	3.845	4.045	51.290	50.000	2.6
Heptachlor epoxide	4.727	4.627	4.827	52.980	50.000	6.0
Methoxychlor	6.610	6.509	6.709	56.660	50.000	13.3
Tetrachloro-m-xylene	2.774	2.674	2.874	51.590	50.000	3.2

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL093726.D Date Analyzed: 01/21/2025

Lab Sample No.(PEM): PEM Time Analyzed: 10:30

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.052	8.950	9.150	18.070	20.000	-9.7
Tetrachloro-m-xylene	3.538	3.490	3.590	18.530	20.000	-7.4
alpha-BHC	3.994	3.940	4.040	9.490	10.000	-5.1
beta-BHC	4.525	4.470	4.580	9.790	10.000	-2.1
gamma-BHC (Lindane)	4.326	4.280	4.380	9.300	10.000	-7.0
Endrin	6.572	6.500	6.640	41.270	50.000	-17.5
4,4'-DDT	7.022	6.950	7.090	82.410	100.000	-17.6
Methoxychlor	7.498	7.430	7.570	190.380	250.000	-23.8

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL093726.D Date Analyzed: 01/21/2025

Lab Sample No.(PEM): PEM Time Analyzed: 10:30

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.909	7.810	8.010	17.950	20.000	-10.3
Tetrachloro-m-xylene	2.775	2.720	2.830	17.900	20.000	-10.5
alpha-BHC	3.277	3.230	3.330	8.620	10.000	-13.8
beta-BHC	3.907	3.860	3.960	9.800	10.000	-2.0
gamma-BHC (Lindane)	3.607	3.560	3.660	8.300	10.000	-17.0
Endrin	5.636	5.570	5.710	42.700	50.000	-14.6
4,4'-DDT	6.034	5.960	6.100	96.510	100.000	-3.5
Methoxychlor	6.609	6.540	6.680	209.940	250.000	-16.0

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL093981.D Date Analyzed: 02/03/2025

Lab Sample No.(PEM): PEM Time Analyzed: 11:03

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.056	8.960	9.160	14.510	20.000	-27.5
Tetrachloro-m-xylene	3.540	3.490	3.590	18.660	20.000	-6.7
alpha-BHC	3.996	3.950	4.050	9.460	10.000	-5.4
beta-BHC	4.527	4.480	4.580	9.070	10.000	-9.3
gamma-BHC (Lindane)	4.329	4.280	4.380	9.100	10.000	-9.0
Endrin	6.574	6.500	6.640	37.910	50.000	-24.2
4,4'-DDT	7.025	6.950	7.100	80.590	100.000	-19.4
Methoxychlor	7.502	7.430	7.570	195.740	250.000	-21.7

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL093981.D Date Analyzed: 02/03/2025

Lab Sample No.(PEM): PEM Time Analyzed: 11:03

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.911	7.810	8.010	14.500	20.000	-27.5
Tetrachloro-m-xylene	2.775	2.720	2.830	18.090	20.000	-9.6
alpha-BHC	3.277	3.230	3.330	8.770	10.000	-12.3
beta-BHC	3.908	3.860	3.960	9.580	10.000	-4.2
gamma-BHC (Lindane)	3.607	3.560	3.660	7.660	10.000	-23.4
Endrin	5.638	5.570	5.710	37.350	50.000	-25.3
4,4'-DDT	6.035	5.960	6.110	88.620	100.000	-11.4
Methoxychlor	6.610	6.540	6.680	208.200	250.000	-16.7

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235 SAS No.: Q1235 SDG NO.: Q1235

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL094021.D Date Analyzed: 02/03/2025

Lab Sample No.(PEM): PEM Time Analyzed: 22:15

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.055	8.950	9.160	20.780	20.000	3.9
Tetrachloro-m-xylene	3.538	3.490	3.590	21.650	20.000	8.3
alpha-BHC	3.994	3.940	4.040	11.370	10.000	13.7
beta-BHC	4.525	4.470	4.580	11.880	10.000	18.8
gamma-BHC (Lindane)	4.326	4.280	4.380	11.080	10.000	10.8
Endrin	6.572	6.500	6.640	47.950	50.000	-4.1
4,4'-DDT	7.024	6.950	7.090	103.310	100.000	3.3
Methoxychlor	7.501	7.430	7.570	245.600	250.000	-1.8

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 01/21/2025 01/21/2025

Client Sample No. (PEM): PEM - PL094021.D Date Analyzed: 02/03/2025

Lab Sample No.(PEM): PEM Time Analyzed: 22:15

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.911	7.810	8.010	22.010	20.000	10.1
Tetrachloro-m-xylene	2.774	2.720	2.820	20.940	20.000	4.7
alpha-BHC	3.276	3.230	3.330	10.050	10.000	0.5
beta-BHC	3.906	3.860	3.960	11.480	10.000	14.8
gamma-BHC (Lindane)	3.606	3.560	3.660	9.610	10.000	-3.9
Endrin	5.637	5.570	5.710	51.160	50.000	2.3
4,4'-DDT	6.035	5.960	6.110	118.500	100.000	18.5
Methoxychlor	6.610	6.540	6.680	266.910	250.000	6.8

Analytical Sequence

Client: RU2 Engineering, LLC	SDG No.: Q1235
Project: NYCDDC SANTWOBR Brooklyn Bridge BI	Instrument ID: ECD_L
GC Column: ZB-MR1	ID: 0.32 (mm) Inst. Calib. Date(s): 01/21/2025 01/21/2025

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	01/21/2025	10:16	PL093725.D	9.05	3.54
PEM	PEM	01/21/2025	10:30	PL093726.D	9.05	3.54
RESCHK	RESCHK	01/21/2025	10:43	PL093727.D	9.05	3.54
PSTDICCC100	PSTDICCC100	01/21/2025	10:57	PL093728.D	9.05	3.54
PSTDICCC075	PSTDICCC075	01/21/2025	11:10	PL093729.D	9.05	3.54
PSTDICCC050	PSTDICCC050	01/21/2025	11:24	PL093730.D	9.05	3.54
PSTDICCC025	PSTDICCC025	01/21/2025	11:38	PL093731.D	9.05	3.54
PSTDICCC005	PSTDICCC005	01/21/2025	11:51	PL093732.D	9.05	3.54
PCHLORICC500	PCHLORICC500	01/21/2025	12:32	PL093735.D	9.05	3.54
PTOXICC500	PTOXICC500	01/21/2025	13:39	PL093740.D	9.05	3.54
IBLK	IBLK	02/03/2025	09:14	PL093980.D	9.06	3.54
PEM	PEM	02/03/2025	11:03	PL093981.D	9.06	3.54
PSTDCCC050	PSTDCCC050	02/03/2025	12:17	PL093982.D	9.06	3.54
PB166427BL	PB166427BL	02/03/2025	12:53	PL093984.D	9.06	3.54
PB166427BS	PB166427BS	02/03/2025	13:26	PL093985.D	9.06	3.54
PB166356TB	PB166356TB	02/03/2025	13:48	PL093986.D	9.06	3.55
JPP-29.1-012825MS	Q1215-04MS	02/03/2025	14:24	PL093988.D	9.06	3.55
JPP-29.1-012825MSD	Q1215-04MSD	02/03/2025	14:37	PL093989.D	9.06	3.54
IBLK	IBLK	02/03/2025	16:55	PL093999.D	9.05	3.54
PSTDCCC050	PSTDCCC050	02/03/2025	17:50	PL094001.D	9.06	3.54
JPP-51.2-012925	Q1235-04	02/03/2025	19:09	PL094007.D	9.06	3.54
JPP-16.1-012925	Q1235-08	02/03/2025	19:23	PL094008.D	9.06	3.54
IBLK	IBLK	02/03/2025	22:02	PL094020.D	9.06	3.54
PEM	PEM	02/03/2025	22:15	PL094021.D	9.06	3.54
PSTDCCC050	PSTDCCC050	02/03/2025	22:41	PL094022.D	9.06	3.54

Analytical Sequence

Client: RU2 Engineering, LLC	SDG No.: Q1235
Project: NYCDDC SANTWOBR Brooklyn Bridge BI	Instrument ID: ECD_L
GC Column: ZB-MR2	ID: 0.32 (mm) Inst. Calib. Date(s): 01/21/2025 01/21/2025

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	01/21/2025	10:16	PL093725.D	7.91	2.78
PEM	PEM	01/21/2025	10:30	PL093726.D	7.91	2.78
RESCHK	RESCHK	01/21/2025	10:43	PL093727.D	7.91	2.77
PSTDICCC100	PSTDICCC100	01/21/2025	10:57	PL093728.D	7.91	2.78
PSTDICCC075	PSTDICCC075	01/21/2025	11:10	PL093729.D	7.91	2.77
PSTDICCC050	PSTDICCC050	01/21/2025	11:24	PL093730.D	7.91	2.77
PSTDICCC025	PSTDICCC025	01/21/2025	11:38	PL093731.D	7.91	2.77
PSTDICCC005	PSTDICCC005	01/21/2025	11:51	PL093732.D	7.91	2.77
PCHLORICC500	PCHLORICC500	01/21/2025	12:32	PL093735.D	7.91	2.77
PTOXICC500	PTOXICC500	01/21/2025	13:39	PL093740.D	7.91	2.77
IBLK	IBLK	02/03/2025	09:14	PL093980.D	7.91	2.78
PEM	PEM	02/03/2025	11:03	PL093981.D	7.91	2.78
PSTDCCC050	PSTDCCC050	02/03/2025	12:17	PL093982.D	7.91	2.77
PB166427BL	PB166427BL	02/03/2025	12:53	PL093984.D	7.91	2.78
PB166427BS	PB166427BS	02/03/2025	13:26	PL093985.D	7.91	2.78
PB166356TB	PB166356TB	02/03/2025	13:48	PL093986.D	7.91	2.77
JPP-29.1-012825MS	Q1215-04MS	02/03/2025	14:24	PL093988.D	7.91	2.78
JPP-29.1-012825MSD	Q1215-04MSD	02/03/2025	14:37	PL093989.D	7.91	2.78
IBLK	IBLK	02/03/2025	16:55	PL093999.D	7.91	2.77
PSTDCCC050	PSTDCCC050	02/03/2025	17:50	PL094001.D	7.91	2.77
JPP-51.2-012925	Q1235-04	02/03/2025	19:09	PL094007.D	7.91	2.78
JPP-16.1-012925	Q1235-08	02/03/2025	19:23	PL094008.D	7.91	2.77
IBLK	IBLK	02/03/2025	22:02	PL094020.D	7.91	2.77
PEM	PEM	02/03/2025	22:15	PL094021.D	7.91	2.77
PSTDCCC050	PSTDCCC050	02/03/2025	22:41	PL094022.D	7.91	2.77

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-29.1-012825MS

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235

SAS No.: Q1235 SDG NO.: Q1235

Lab Sample ID: Q1215-04MS

Date(s) Analyzed: 02/03/2025 02/03/2025

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Methoxychlor	1	7.51	7.46	7.56	5.00	11.3
	2	6.61	6.56	6.66	5.60	
gamma-BHC (Lindane)	1	4.34	4.29	4.39	4.90	4.2
	2	3.61	3.56	3.66	4.70	
Heptachlor	1	4.92	4.87	4.97	5.20	5.9
	2	3.95	3.90	4.00	4.90	
Heptachlor epoxide	1	5.69	5.64	5.74	4.50	8.5
	2	4.73	4.68	4.78	4.90	
Endrin	1	6.58	6.53	6.63	4.50	16.3
	2	5.64	5.59	5.69	5.30	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-29.1-012825MSD

Contract: RUTW01

Lab Code: CHEM Case No.: Q1235

SAS No.: Q1235 SDG NO.: Q1235

Lab Sample ID: Q1215-04MSD

Date(s) Analyzed: 02/03/2025 02/03/2025

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1 ID: 0.32 (mm)

GC Column: (2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Methoxychlor	1	7.50	7.45	7.55	5.40	3.6
	2	6.61	6.56	6.66	5.60	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	5.10	2
	2	3.61	3.56	3.66	5.00	
Heptachlor	1	4.92	4.87	4.97	5.40	3.8
	2	3.95	3.90	4.00	5.20	
Heptachlor epoxide	1	5.68	5.63	5.73	5.00	3.9
	2	4.73	4.68	4.78	5.20	
Endrin	1	6.57	6.52	6.62	5.30	1.9
	2	5.64	5.59	5.69	5.40	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB166427BS

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1235

SAS No.: Q1235

SDG NO.: Q1235

Lab Sample ID: PB166427BS

Date(s) Analyzed: 02/03/2025

02/03/2025

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column: (2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Methoxychlor	1	7.51	7.46	7.56	0.49	1.5
	2	6.61	6.56	6.66	0.50	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	0.45	3.1
	2	3.61	3.56	3.66	0.44	
Heptachlor	1	4.92	4.87	4.97	0.48	4
	2	3.95	3.90	4.00	0.46	
Heptachlor epoxide	1	5.69	5.64	5.74	0.41	10.9
	2	4.73	4.68	4.78	0.46	
Endrin	1	6.58	6.53	6.63	0.43	10.6
	2	5.64	5.59	5.69	0.48	