

**DATA PACKAGE**

VOLATILE ORGANICS  
GENERAL CHEMISTRY  
METALS  
GC SEMI-VOLATILES  
SEMI-VOLATILE ORGANICS

**PROJECT NAME : OUTFALL 001 - ORANGETOWN DIS PERMIT 2025****SPECTRA EAST INC.****8 King Road****Rockleigh, NJ - 07647****Phone No: 201-767-7070****ORDER ID : Q1322****ATTENTION : Jacob Valeich****Laboratory Certification ID # 20012**

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## Cover Page

**Order ID :** Q1322

**Project ID :** Outfall 001 - Orangetown Dis Permit 2025

**Client :** Spectra East Inc.

### Lab Sample Number

Q1322-01  
Q1322-02  
Q1322-03  
Q1322-04

### Client Sample Number

MANHOLE  
Q1322-01MS  
Q1322-01MSD  
MANHOLE

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

**APPROVED**

Signature :

By Nimisha Pandya, QA/QC Supervisor at 3:21 pm, Feb 25, 2025

Date: 2/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Spectra East Inc.**

**Project Name: Outfall 001 - Orangetown Dis Permit 2025**

**Project # N/A**

**Chemtech Project # Q1322**

**Test Name: VOCMS Group1**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for VOCMS Group1.

### **C. Analytical Techniques:**

The analysis performed on instrument MSVOA\_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOCMS Group1 was based on method 624.1.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

### **E. Additional Comments:**

As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

Trip Blank was not provided with this set of samples.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <35% for the Initial



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Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 35% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

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

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**APPROVED**

Signature \_\_\_\_\_  
By Nimisha Pandya, QA/QC Supervisor at 3:21 pm, Feb 25, 2025

## CASE NARRATIVE

**Spectra East Inc.**

**Project Name: Outfall 001 - Orangetown Dis Permit 2025**

**Project # N/A**

**Chemtech Project # Q1322**

**Test Name: SVOCMS Group1**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for SVOCMS Group1.

### **C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of SVOCMS Group1 was based on method 625.1 and extraction was done based on method 3510.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

### **E. Additional Comments:**

As per method, MS/MSD is required to be performed with sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.



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Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

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

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**APPROVED**

*By Nimisha Pandya, QA/QC Supervisor at 3:21 pm, Feb 25, 2025*

## CASE NARRATIVE

**Spectra East Inc.**

**Project Name: Outfall 001 - Orangetown Dis Permit 2025**

**Project # N/A**

**Chemtech Project # Q1322**

**Test Name: PCB**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for PCB.

### **C. Analytical Techniques:**

The analyses were performed on instrument GCECD\_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A and extraction was done based on method 3510.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

### **E. Additional Comments:**

### **F. Manual Integration Comments:**

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



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2

2.3

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*By Nimisha Pandya, QA/QC Supervisor at 3:22 pm, Feb 25, 2025*

Signature \_\_\_\_\_

## CASE NARRATIVE

**Spectra East Inc.**

**Project Name: Outfall 001 - Orangetown Dis Permit 2025**

**Project # N/A**

**Chemtech Project # Q1322**

**Test Name: PESTICIDE Group1**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for PESTICIDE Group1.

### **C. Analytical Techniques:**

The analysis was performed on instrument ECD\_L. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11. The analysis of PESTICIDE Group1s was based on method 608.3 and extraction was done based on method 3510.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

### **E. Additional Comments:**

As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.

### **F. Manual Integration Comments:**

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



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2

2.4

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*By Nimisha Pandya, QA/QC Supervisor at 3:22 pm, Feb 25, 2025*

Signature \_\_\_\_\_



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## CASE NARRATIVE

**Spectra East Inc.**

**Project Name:** Outfall 001 - Orangetown Dis Permit 2025

**Project #** N/A

**Chemtech Project #** Q1322

**Test Name:** Metals ICP-Group1,Mercury

**A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

**B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for Metals ICP-Group1,Mercury.

**C. Analytical Techniques:**

The analysis and digestion of Metals ICP-Group1 was based on 200.7 and The analysis and digestion of Mercury was based on 245.1.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

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

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

**E. Additional Comments:**

LLCCV & LLICV are not required for 200.7 method.

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*By Nimisha Pandya, QA/QC Supervisor at 3:22 pm, Feb 25, 2025*



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## CASE NARRATIVE

**Spectra East Inc.**

**Project Name: Outfall 001 - Orangetown Dis Permit 2025**

**Project # N/A**

**Chemtech Project # Q1322**

**Test Name: Oil and Grease,Cyanide,Field pH,Phenolics,Cyanide-Amenable,Ammonia,COD,Field Temperature,BOD5,TSS,Anions Group1**

### **A. Number of Samples and Date of Receipt:**

4 Water samples were received on 02/06/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Mercury, Metals Group1, Metals ICP-Group1, Oil and Grease, PCB, PESTICIDE Group1, Phenolics, SVOCMS Group1, TSS and VOCMS Group1. This data package contains results for Oil and Grease,Cyanide,Field pH,Phenolics,Cyanide-Amenable,Ammonia,COD,Field Temperature,BOD5,TSS,Anions Group1.

### **C. Analytical Techniques:**

The analysis of Oil and Grease was based on method 1664A, The analysis of Anions Group1 was based on method 300.0, The analysis of Phenolics was based on method 420.1, The analysis of Field pH was based on method 9045D, The analysis of TSS was based on method SM2540 D, The analysis of Field Temperature was based on method SM2550-B, The analysis of Cyanide-Amenable was based on method SM4500-CN B,G Cyanide-Amenable, The analysis of Cyanide was based on method SM4500-CN C,E, The analysis of Ammonia was based on method SM4500-NH3, The analysis of BOD5 was based on method SM5210 B and The analysis of COD was based on method SM5220 D.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate (DSN002MSD) analysis met criteria for all samples except for Ammonia due to matrix interferences.

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

The Calibration met the requirements.



**E. Additional Comments:**

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**APPROVED**

Signature \_\_\_\_\_

*By Nimisha Pandya, QA/QC Supervisor at 3:22 pm, Feb 25, 2025*

## **DATA REPORTING QUALIFIERS- INORGANIC**

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

- J** Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U** Indicates the analyte was analyzed for, but not detected.
- ND** Indicates the analyte was analyzed for, but not detected
- E** Indicates the reported value is estimated because of the presence of interference
- M** Indicates Duplicate injection precision not met.
- N** Indicates the spiked sample recovery is not within control limits.
- S** Indicates the reported value was determined by the Method of Standard Addition (MSA).
- \*** Indicates that the duplicate analysis is not within control limits.
- +** Indicates the correlation coefficient for the MSA is less than 0.995.
- D** Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- M** Method qualifiers
  - "P"** for ICP instrument
  - "PM"** for ICP when Microwave Digestion is used
  - "CV"** for Manual Cold Vapor AA
  - "AV"** for automated Cold Vapor AA
  - "CA"** for MIDI-Distillation Spectrophotometric
  - "AS"** for Semi -Automated Spectrophotometric
  - "C"** for Manual Spectrophotometric
  - "T"** for Titrimetric
  - "NR"** for analyte not required to be analyzed
- OR** Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
- Q** Indicates the LCS did not meet the control limits requirements
- H** Sample Analysis Out Of Hold Time

**DATA REPORTING QUALIFIERS- ORGANIC**

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

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

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1322

Completed

For thorough review, the report must have the following:

#### GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

#### COVER PAGE:

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

✓

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

✓

#### CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 02/25/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1322-01	MANHOLE	Water	VOCMS Group1	624.1	02/06/25		02/07/25	02/06/25

**Hit Summary Sheet  
SW-846**

**SDG No.:** Q1322  
**Client:** Spectra East Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID:</b>	<b>MANHOLE</b>							
Q1322-01	MANHOLE	Water	Chloroform	1.80	J	0.72	5.00	ug/L
			Total Voc :	1.80				
			Total Concentration:	1.80				



A  
B  
C  
D  
E  
F  
G

# SAMPLE DATA

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25
Client Sample ID:	MANHOLE	SDG No.:	Q1322
Lab Sample ID:	Q1322-01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units: mL	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group1
GC Column:	DB-624UI	ID : 0.18	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044865.D	1		02/07/25 13:48	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.95	U	0.95	5.00	ug/L
67-66-3	Chloroform	1.80	J	0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.00	ug/L
79-01-6	Trichloroethene	0.77	U	0.77	5.00	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
127-18-4	Tetrachloroethene	0.94	U	0.94	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
1330-20-7	Total Xylenes	2.52	U	2.52	15.0	ug/L
541-73-1	1,3-Dichlorobenzene	0.88	U	0.88	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	29.1		91 - 110	97%	SPK: 30
2037-26-5	Toluene-d8	29.7		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	27.0		63 - 112	90%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	20800	4.898			
540-36-3	1,4-Difluorobenzene	114000	6.757			
3114-55-4	Chlorobenzene-d5	102000	10.049			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



A  
B  
C  
D  
E  
F  
G

# QC SUMMARY

### Surrogate Summary

**SDG No.:** Q1322

**Client:** Spectra East Inc.

**Analytical Method:** SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1322-01	MANHOLE	1,2-Dichloroethane-d4	30	29.1	97	91	110
		Toluene-d8	30	29.7	99	91	112
		4-Bromofluorobenzene	30	27.0	90	63	112
VX0207WBL01	VX0207WBL01	1,2-Dichloroethane-d4	30	29.3	98	91	110
		Toluene-d8	30	30.4	101	91	112
		4-Bromofluorobenzene	30	31.4	105	63	112
VX0207WBS01	VX0207WBS01	1,2-Dichloroethane-d4	30	28.8	96	91	110
		Toluene-d8	30	29.8	99	91	112
		4-Bromofluorobenzene	30	28.8	96	63	112
VX0207WBSD01	VX0207WBSD01	1,2-Dichloroethane-d4	30	29.4	98	91	110
		Toluene-d8	30	29.3	98	91	112
		4-Bromofluorobenzene	30	29.1	97	63	112

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** Q1322

**Client:** Spectra East Inc.

**Analytical Method:** SW624.1

**Datafile :** VX044857.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		RPD
								Low	High	
<b>VX0207WBS01</b>	Methylene Chloride	20	21.3	ug/L	106			60	140	
	trans-1,2-Dichloroethene	20	21.5	ug/L	108			70	130	
	Chloroform	20	21.0	ug/L	105			70	135	
	1,1,1-Trichloroethane	20	19.2	ug/L	96			70	130	
	Trichloroethene	20	19.7	ug/L	99			65	135	
	Toluene	20	20.7	ug/L	104			70	130	
	Tetrachloroethene	20	20.9	ug/L	104			70	130	
	Ethyl Benzene	20	20.8	ug/L	104			60	140	
	m/p-Xylenes	40	43.0	ug/L	108			87	111	
	o-Xylene	20	21.5	ug/L	108			87	111	
	1,3-Dichlorobenzene	20	22.1	ug/L	111			70	130	

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** Q1322

**Client:** Spectra East Inc.

**Analytical Method:** SW624.1

**Datafile :** VX044858.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		
								Low	High	RPD
VX0207WBSD01	Methylene Chloride	20	21.4	ug/L	107	1		60	140	20
	trans-1,2-Dichloroethene	20	20.8	ug/L	104	4		70	130	20
	Chloroform	20	21.0	ug/L	105	0		70	135	20
	1,1,1-Trichloroethane	20	19.5	ug/L	98	2		70	130	20
	Trichloroethene	20	20.2	ug/L	101	2		65	135	20
	Toluene	20	20.7	ug/L	104	0		70	130	20
	Tetrachloroethene	20	20.0	ug/L	100	4		70	130	20
	Ethyl Benzene	20	20.8	ug/L	104	0		60	140	20
	m/p-Xylenes	40	42.8	ug/L	107	1		87	111	20
	o-Xylene	20	21.2	ug/L	106	2		87	111	20
	1,3-Dichlorobenzene	20	21.7	ug/L	109	2		70	130	20

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0207WBL01

Lab Name: CHEMTECHContract: SPEC01Lab Code: CHEM Case No.: Q1322SAS No.: Q1322 SDG NO.: Q1322Lab File ID: VX044859.DLab Sample ID: VX0207WBL01Date Analyzed: 02/07/2025Time Analyzed: 11:24GC Column: DB-624UI ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOA\_X

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0207WBS01	VX0207WBS01	VX044857.D	02/07/2025
VX0207WBSD01	VX0207WBSD01	VX044858.D	02/07/2025
MANHOLE	Q1322-01	VX044865.D	02/07/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	SPEC01
Lab Code:	CHEM	Case No.:	Q1322
Lab File ID:	VX044658.D	SAS No.:	Q1322
Instrument ID:	MSVOA_X	BFB Injection Date:	01/16/2025
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Time:	08:02
		Heated Purge:	Y/N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	48.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.5 ( 0.7 ) 1
174	50.0 - 100.0% of mass 95	66.7
175	5.0 - 9.0% of mass 174	4.7 ( 7 ) 1
176	95.0 - 101.0% of mass 174	64.7 ( 97 ) 1
177	5.0 - 9.0% of mass 176	4.3 ( 6.6 ) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VX044659.D	01/16/2025	08:39
VSTDICCC020	VSTDICCC020	VX044660.D	01/16/2025	09:02
VSTDICC050	VSTDICC050	VX044661.D	01/16/2025	09:25
VSTDICC100	VSTDICC100	VX044662.D	01/16/2025	09:49
VSTDICC150	VSTDICC150	VX044663.D	01/16/2025	10:12

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	SPEC01
Lab Code:	CHEM	Case No.:	Q1322
Lab File ID:	VX044855.D	SAS No.:	Q1322
Instrument ID:	MSVOA_X	BFB Injection Date:	02/07/2025
GC Column:	DB-624UI ID: 0.18 (mm)	BFB Injection Time:	09:33
		Heated Purge:	Y/N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.7
75	30.0 - 60.0% of mass 95	51.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 ( 0.9 ) 1
174	50.0 - 100.0% of mass 95	72.5
175	5.0 - 9.0% of mass 174	5.4 ( 7.4 ) 1
176	95.0 - 101.0% of mass 174	69.9 ( 96.4 ) 1
177	5.0 - 9.0% of mass 176	4.6 ( 6.6 ) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC020	VSTDCCC020	VX044856.D	02/07/2025	10:01
VX0207WBS01	VX0207WBS01	VX044857.D	02/07/2025	10:33
VX0207WBSD01	VX0207WBSD01	VX044858.D	02/07/2025	11:01
VX0207WBL01	VX0207WBL01	VX044859.D	02/07/2025	11:24
MANHOLE	Q1322-01	VX044865.D	02/07/2025	13:48

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH	Contract:	SPEC01
Lab Code:	CHEM	Case No.:	Q1322
Lab File ID:	VX044856.D	Date Analyzed:	02/07/2025
Instrument ID:	MSVOA_X	Time Analyzed:	10:01
GC Column:	DB-624UI	ID: 0.18 (mm)	Heated Purge: (Y/N) <u>N</u>

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	21982	4.89	127777	6.75	110326	10.05
UPPER LIMIT	43964	5.391	255554	7.251	220652	10.549
LOWER LIMIT	10991	4.391	63888.5	6.251	55163	9.549
EPA SAMPLE NO.						
MANHOLE	20788	4.90	113802	6.76	102149	10.05
VX0207WBL01	20510	4.90	114099	6.76	99648	10.05
VX0207WBS01	21269	4.89	121245	6.75	109254	10.05
VX0207WBSD01	19387	4.89	108776	6.76	100274	10.05

IS1 = Bromochloromethane

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



A  
B  
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# QC SAMPLE

# DATA

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	
Client Sample ID:	VX0207WBL01	SDG No.:	Q1322
Lab Sample ID:	VX0207WBL01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044859.D	1		02/07/25 11:24	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-09-2	Methylene Chloride	1.20	U	1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	0.95	U	0.95	5.00	ug/L
67-66-3	Chloroform	0.72	U	0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.00	ug/L
79-01-6	Trichloroethene	0.77	U	0.77	5.00	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
127-18-4	Tetrachloroethene	0.94	U	0.94	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
1330-20-7	Total Xylenes	2.52	U	2.52	15.0	ug/L
541-73-1	1,3-Dichlorobenzene	0.88	U	0.88	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	29.3		91 - 110	98%	SPK: 30
2037-26-5	Toluene-d8	30.4		91 - 112	101%	SPK: 30
460-00-4	4-Bromofluorobenzene	31.4		63 - 112	105%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	20500	4.898			
540-36-3	1,4-Difluorobenzene	114000	6.757			
3114-55-4	Chlorobenzene-d5	99600	10.049			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	
Client Sample ID:	VX0207WBS01	SDG No.:	Q1322
Lab Sample ID:	VX0207WBS01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044857.D	1		02/07/25 10:33	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-09-2	Methylene Chloride	21.3		1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	21.5		0.95	5.00	ug/L
67-66-3	Chloroform	21.0		0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.2		0.79	5.00	ug/L
79-01-6	Trichloroethene	19.7		0.77	5.00	ug/L
108-88-3	Toluene	20.7		0.72	5.00	ug/L
127-18-4	Tetrachloroethene	20.9		0.94	5.00	ug/L
100-41-4	Ethyl Benzene	20.8		0.73	5.00	ug/L
1330-20-7	Total Xylenes	64.5		2.52	15.0	ug/L
541-73-1	1,3-Dichlorobenzene	22.1		0.88	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	28.8		91 - 110	96%	SPK: 30
2037-26-5	Toluene-d8	29.8		91 - 112	99%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.8		63 - 112	96%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	21300		4.885		
540-36-3	1,4-Difluorobenzene	121000		6.751		
3114-55-4	Chlorobenzene-d5	109000		10.049		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	
Client Sample ID:	VX0207WBSD01	SDG No.:	Q1322
Lab Sample ID:	VX0207WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044858.D	1		02/07/25 11:01	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-09-2	Methylene Chloride	21.4		1.20	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	20.8		0.95	5.00	ug/L
67-66-3	Chloroform	21.0		0.72	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	19.5		0.79	5.00	ug/L
79-01-6	Trichloroethene	20.2		0.77	5.00	ug/L
108-88-3	Toluene	20.7		0.72	5.00	ug/L
127-18-4	Tetrachloroethene	20.0		0.94	5.00	ug/L
100-41-4	Ethyl Benzene	20.8		0.73	5.00	ug/L
1330-20-7	Total Xylenes	64.0		2.52	15.0	ug/L
541-73-1	1,3-Dichlorobenzene	21.7		0.88	5.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	29.4		91 - 110	98%	SPK: 30
2037-26-5	Toluene-d8	29.3		91 - 112	98%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.1		63 - 112	97%	SPK: 30
<b>INTERNAL STANDARDS</b>						
74-97-5	Bromochloromethane	19400		4.891		
540-36-3	1,4-Difluorobenzene	109000		6.757		
3114-55-4	Chlorobenzene-d5	100000		10.049		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



A  
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# CALIBRATION

# SUMMARY

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	CHEMTECH	Contract:	SPEC01
Lab Code:	CHEM	Case No.:	Q1322
Instrument ID:	MSVOA_X	Calibration Date(s):	01/16/2025
Heated Purge:	(Y/N) N	Calibration Time(s):	08:39 10:12
GC Column:	DB-624UI	ID:	0.18 (mm)

LAB FILE ID:	RRF005 = VX044659.D	RRF020 = VX044660.D	RRF050 = VX044661.D	RRF100 = VX044662.D	RRF150 = VX044663.D	RRF =	RRF	% RSD
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	RRF	% RSD
Methylene Chloride	2.516	2.531	2.426	2.551	2.375		2.480	3.1
trans-1,2-Dichloroethene	2.273	2.202	2.143	2.306	2.094		2.203	4
Chloroform	4.285	4.354	4.180	4.469	4.089		4.275	3.5
1,1,1-Trichloroethane	0.729	0.702	0.665	0.708	0.654		0.692	4.5
Trichloroethene	0.394	0.405	0.394	0.424	0.393		0.402	3.3
Toluene	2.097	1.972	1.935	2.023	1.850		1.975	4.7
Tetrachloroethene	0.365	0.350	0.349	0.387	0.348		0.360	4.7
Ethyl Benzene	2.213	2.181	2.126	2.228	2.031		2.156	3.7
m/p-Xylenes	0.838	0.817	0.780	0.808	0.719		0.792	5.8
o-Xylene	0.841	0.823	0.787	0.800	0.726		0.795	5.5
1,3-Dichlorobenzene	0.829	0.841	0.819	0.858	0.789		0.827	3.1
1,2-Dichloroethane-d4	2.935	2.867	2.905	2.916	2.857		2.896	1.1
Toluene-d8	1.674	1.620	1.622	1.634	1.609		1.632	1.5
4-Bromofluorobenzene	0.579	0.578	0.588	0.586	0.582		0.583	0.7

- \* Compounds with required minimum RRF and maximum %RSD values.
- All other compounds must meet a minimum RRF of 0.010.
- RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH		Contract:	SPEC01	
Lab Code:	CHEM	Case No.:	Q1322	SAS No.:	Q1322
Instrument ID:	MSVOA_X		Calibration Date/Time:	02/07/2025	10:01
Lab File ID:	VX044856.D		Init. Calib. Date(s):	01/16/2025	01/16/2025
Heated Purge:	(Y/N)	N	Init. Calib. Time(s):	08:39	10:12
GC Column:	DB-624UI	ID: 0.18 (mm)			

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Methylene Chloride	2.480	2.576		3.87	
trans-1,2-Dichloroethene	2.203	2.279		3.45	
Chloroform	4.275	4.388	0.2	2.64	
1,1,1-Trichloroethane	0.692	0.640	0.1	-7.51	
Trichloroethene	0.402	0.384	0.3	-4.48	
Toluene	1.975	2.024	0.4	2.48	
Tetrachloroethene	0.360	0.376	0.2	4.44	
Ethyl Benzene	2.156	2.199	0.1	1.99	
m/p-Xylenes	0.792	0.839	0.3	5.93	
o-Xylene	0.795	0.821	0.3	3.27	
1,3-Dichlorobenzene	0.827	0.843	0.2	1.93	
1,2-Dichloroethane-d4	2.896	2.855	0.01	-1.42	
Toluene-d8	1.632	1.671	0.01	2.39	
4-Bromofluorobenzene	0.583	0.548	0.2	-6	

All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.

## LAB CHRONICLE

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1322-01	MANHOLE	Water	SVOCMS Group1	625.1	02/06/25	02/07/25	02/10/25	02/06/25



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

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** Q1322

**Client:** Spectra East Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :				0.000				
			Total Svoc :		0.00			
			Total Concentration:		0.00			



A  
B  
C  
D  
E  
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# SAMPLE DATA

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	02/06/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/06/25	
Client Sample ID:	MANHOLE			SDG No.:	Q1322	
Lab Sample ID:	Q1322-01			Matrix:	Water	
Analytical Method:	625.1			% Solid:	0	
Sample Wt/Vol:	960	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1	
Extraction Type :	Decanted : N			Level :	LOW	
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N	PH :
Prep Method :	3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141536.D	1	02/07/25 11:55	02/10/25 15:57	PB166619

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
117-81-7	Bis(2-ethylhexyl)phthalate	2.00	U	2.00	5.20	ug/L
<b>SURROGATES</b>						
4165-60-0	Nitrobenzene-d5	76.4		60 - 140	76%	SPK: 100
321-60-8	2-Fluorobiphenyl	78.4		60 - 140	78%	SPK: 100
1718-51-0	Terphenyl-d14	89.2		60 - 140	89%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	73100	6.787			
1146-65-2	Naphthalene-d8	289000	8.069			
15067-26-2	Acenaphthene-d10	158000	9.822			
1517-22-2	Phenanthrene-d10	269000	11.31			
1719-03-5	Chrysene-d12	203000	13.951			
1520-96-3	Perylene-d12	147000	15.416			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



A  
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# QC SUMMARY

### Surrogate Summary

**SW-846**

**SDG No.:** Q1322

**Client:** Spectra East Inc.

**Analytical Method:** 625.1

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166619BL	PB166619BL	Nitrobenzene-d5	100	90.2	90	90	60	140
		2-Fluorobiphenyl	100	90.0	90	90	60	140
		Terphenyl-d14	100	81.1	81	81	60	140
PB166619BS	PB166619BS	Nitrobenzene-d5	100	95.0	95	95	60	140
		2-Fluorobiphenyl	100	96.3	96	96	60	140
		Terphenyl-d14	100	102	102	102	60	140
PB166619BSD	PB166619BSD	Nitrobenzene-d5	100	94.9	95	95	60	140
		2-Fluorobiphenyl	100	95.9	96	96	60	140
		Terphenyl-d14	100	94.7	95	95	60	140
Q1322-01	MANHOLE	Nitrobenzene-d5	100	76.4	76	76	60	140
		2-Fluorobiphenyl	100	78.4	78	78	60	140
		Terphenyl-d14	100	89.2	89	89	60	140

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary****SW-846**SDG No.: Q1322Client: Spectra East Inc.Analytical Method: 625.1 DataFile: BF141533.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166619BS	bis(2-Ethylhexyl)phthalate	50	50.9	ug/L	102				43	137	

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1322

Client: Spectra East Inc.

Analytical Method: 625.1 DataFile: BF141534.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166619BSD	bis(2-Ethylhexyl)phthalate	50	54.6	ug/L	109	7			43	137	20

4B

## SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166619BL

Lab Name: CHEMTECHContract: SPEC01Lab Code: CHEMCase No.: Q1322SAS No.: Q1322 SDG NO.: Q1322Lab File ID: BF141535.DLab Sample ID: PB166619BLInstrument ID: BNA\_FDate Extracted: 02/07/2025Matrix: (soil/water) WaterDate Analyzed: 02/10/2025Level: (low/med) LOWTime Analyzed: 15:17

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166619BS	PB166619BS	BF141533.D	02/10/2025
PB166619BSD	PB166619BSD	BF141534.D	02/10/2025
MANHOLE	Q1322-01	BF141536.D	02/10/2025

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: SPEC01

Lab Code: CHEM

SAS No.: Q1322 SDG NO.: Q1322

Lab File ID: BF141471.D

DFTPP Injection Date: 02/06/2025

Instrument ID: BNA\_F

DFTPP Injection Time: 10:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.2
68	Less than 2.0% of mass 69	0.7 ( 1.9 ) 1
69	Mass 69 relative abundance	36.7
70	Less than 2.0% of mass 69	0.2 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	49.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	25.6
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	12.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.4 (18.9) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF141472.D	02/06/2025	11:07
SSTDICC005	SSTDICC005	BF141473.D	02/06/2025	11:34
SSTDICC010	SSTDICC010	BF141474.D	02/06/2025	12:00
SSTDICC020	SSTDICC020	BF141475.D	02/06/2025	12:26
SSTDICCC040	SSTDICCC040	BF141476.D	02/06/2025	12:55
SSTDICC050	SSTDICC050	BF141477.D	02/06/2025	13:21
SSTDICC060	SSTDICC060	BF141478.D	02/06/2025	13:47
SSTDICC080	SSTDICC080	BF141479.D	02/06/2025	14:14

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: SPEC01

Lab Code: CHEM

SAS No.: Q1322 SDG NO.: Q1322

Lab File ID: BF141530.D

DFTPP Injection Date: 02/10/2025

Instrument ID: BNA\_F

DFTPP Injection Time: 11:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.6
68	Less than 2.0% of mass 69	0.7 ( 1.9 ) 1
69	Mass 69 relative abundance	37.3
70	Less than 2.0% of mass 69	0.2 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	49.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	27.1
365	Greater than 1% of mass 198	3.4
441	Present, but less than mass 443	12.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15.4 (19.5) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF141531.D	02/10/2025	11:34
PB166619BS	PB166619BS	BF141533.D	02/10/2025	12:26
PB166619BSD	PB166619BSD	BF141534.D	02/10/2025	14:50
PB166619BL	PB166619BL	BF141535.D	02/10/2025	15:17
MANHOLE	Q1322-01	BF141536.D	02/10/2025	15:57



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

6

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322  
EPA Sample No.: SSTDCCC040 Date Analyzed: 02/10/2025  
Lab File ID: BF141531.D Time Analyzed: 11:34  
Instrument ID: BNA\_F GC Column: DB-UI ID: 0.18 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	91504	6.792	356056	8.08	192109	9.83
UPPER LIMIT	183008	7.292	712112	8.575	384218	10.327
LOWER LIMIT	45752	6.292	178028	7.575	96054.5	9.327
EPA SAMPLE NO.						
01 PB166619BS	90197	6.79	363645	8.08	200498	9.83
02 PB166619BL	97885	6.79	393922	8.07	221436	9.82
03 PB166619BSD	95997	6.79	377178	8.07	209865	9.83
04 MANHOLE	73137	6.79	289023	8.07	157501	9.82

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:	CHEMTECH			
Lab Code:	CHEM	Case No.:	Q1322	
SAS No.:	Q1322		SDG NO.:	Q1322
EPA Sample No.:	SSTDCCC040		Date Analyzed:	02/10/2025
Lab File ID:	BF141531.D		Time Analyzed:	11:34
Instrument ID:	BNA_F		GC Column:	DB-U1
			ID:	0.18 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	313129	11.316	193608	13.963	177316	15.439
	626258	11.816	387216	14.463	354632	15.939
	156565	10.816	96804	13.463	88658	14.939
EPA SAMPLE NO.						
01 PB166619BS	341345	11.32	224165	13.96	193889	15.45
02 PB166619BL	390652	11.31	341278	13.95	281271	15.40
03 PB166619BSD	377001	11.32	279833	13.96	213547	15.41
04 MANHOLE	269181	11.31	202540	13.95	146679	15.42

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.



A  
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# QC SAMPLE

# DATA

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166619BL			SDG No.:	Q1322
Lab Sample ID:	PB166619BL			Matrix:	Water
Analytical Method:	625.1			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1
Extraction Type :	Decanted : N			Level :	LOW
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N PH :
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141535.D	1	02/07/25 11:55	02/10/25 15:17	PB166619

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
117-81-7	Bis(2-ethylhexyl)phthalate	1.90	U	1.90	5.00	ug/L
<b>SURROGATES</b>						
4165-60-0	Nitrobenzene-d5	90.2		60 - 140	90%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.0		60 - 140	90%	SPK: 100
1718-51-0	Terphenyl-d14	81.1		60 - 140	81%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	97900	6.787			
1146-65-2	Naphthalene-d8	394000	8.069			
15067-26-2	Acenaphthene-d10	221000	9.822			
1517-22-2	Phenanthrene-d10	391000	11.31			
1719-03-5	Chrysene-d12	341000	13.951			
1520-96-3	Perylene-d12	281000	15.404			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166619BS			SDG No.:	Q1322
Lab Sample ID:	PB166619BS			Matrix:	Water
Analytical Method:	625.1			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1
Extraction Type :	Decanted : N			Level :	LOW
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N PH :
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141533.D	1	02/07/25 11:55	02/10/25 12:26	PB166619

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
117-81-7	Bis(2-ethylhexyl)phthalate	50.9		1.90	5.00	ug/L
<b>SURROGATES</b>						
4165-60-0	Nitrobenzene-d5	95.0		60 - 140	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	96.3		60 - 140	96%	SPK: 100
1718-51-0	Terphenyl-d14	102		60 - 140	102%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	90200	6.787			
1146-65-2	Naphthalene-d8	364000	8.075			
15067-26-2	Acenaphthene-d10	200000	9.828			
1517-22-2	Phenanthrene-d10	341000	11.316			
1719-03-5	Chrysene-d12	224000	13.963			
1520-96-3	Perylene-d12	194000	15.445			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166619BSD			SDG No.:	Q1322
Lab Sample ID:	PB166619BSD			Matrix:	Water
Analytical Method:	625.1			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1
Extraction Type :				Decanted :	N
Injection Volume :				Level :	LOW
Prep Method :	3510C			GPC Factor :	1.0
				GPC Cleanup :	N
				PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF141534.D	1	02/07/25 11:55	02/10/25 14:50	PB166619

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
117-81-7	Bis(2-ethylhexyl)phthalate	54.6		1.90	5.00	ug/L
<b>SURROGATES</b>						
4165-60-0	Nitrobenzene-d5	94.9		60 - 140	95%	SPK: 100
321-60-8	2-Fluorobiphenyl	95.9		60 - 140	96%	SPK: 100
1718-51-0	Terphenyl-d14	94.7		60 - 140	95%	SPK: 100
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	96000	6.787			
1146-65-2	Naphthalene-d8	377000	8.069			
15067-26-2	Acenaphthene-d10	210000	9.828			
1517-22-2	Phenanthrene-d10	377000	11.316			
1719-03-5	Chrysene-d12	280000	13.957			
1520-96-3	Perylene-d12	214000	15.41			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



A  
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# CALIBRATION

# SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF020625.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Feb 06 16:58:59 2025  
 Response Via : Initial Calibration

## Calibration Files

2.5 =BF141472.D 5 =BF141473.D 10 =BF141474.D 20 =BF141475.D 40 =BF141476.D 50 =BF141477.D 60 =BF141478.D 80 =BF141479.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
<hr/>											
1) I	1,4-Dichlorobenzene					ISTD					
2)	1,4-Dioxane	0.511	0.519	0.523	0.517	0.502	0.521	0.501	0.513	1.73	
3)	Pyridine	1.053	1.205	1.311	1.263	1.256	1.261	1.204	1.222	6.79	
4)	n-Nitrosodimethylamine	0.737	0.774	0.820	0.818	0.835	0.846	0.833	0.809	4.83	
5) S	2-Fluorophenol	1.235	1.290	1.365	1.289	1.273	1.264	1.214	1.276	3.77	
6)	Aniline	1.476	1.545	1.650	1.538	1.506	1.494	1.379	1.513	5.42	
7) S	Phenol-d6	1.619	1.629	1.704	1.613	1.599	1.585	1.538	1.612	3.13	
8)	2-Chlorophenol	1.399	1.410	1.446	1.379	1.368	1.345	1.302	1.378	3.38	
9)	Benzaldehyde	0.892	0.993	0.981	0.821	0.747	0.706		0.857	13.92	
10) C	Phenol	1.693	1.681	1.817	1.685	1.659	1.644	1.569	1.678	4.42	
11)	bis(2-Chloroethyl)ether	1.262	1.229	1.296	1.266	1.252	1.262	1.256	1.261	1.59	
12)	1,3-Dichlorobenzene	1.473	1.482	1.554	1.441	1.441	1.430	1.366	1.455	3.95	
13) C	1,4-Dichlorobenzene	1.546	1.538	1.571	1.471	1.465	1.439	1.379	1.487	4.59	
14)	1,2-Dichlorobenzene	1.393	1.439	1.473	1.374	1.351	1.345	1.285	1.380	4.55	
15)	Benzyl Alcohol	1.191	1.251	1.322	1.262	1.248	1.218	1.163	1.236	4.19	
16)	2,2'-oxybis(1,4-phenylene)	2.222	2.245	2.313	2.165	2.119	2.082	1.959	2.158	5.45	
17)	2-Methylphenol	1.116	1.089	1.121	1.077	1.059	1.066	1.024	1.079	3.15	
18)	Hexachloroethane	0.539	0.545	0.589	0.553	0.556	0.544	0.526	0.550	3.59	
19) P	n-Nitroso-di-n-butylamine	0.950	0.978	0.985	1.039	0.969	0.947	0.941	0.907	0.964	4.03
20)	3+4-Methylphenols	1.442	1.417	1.459	1.372	1.344	1.319	1.244	1.371	5.52	
21) I	Naphthalene-d8			ISTD							
22)	Acetophenone	0.517	0.502	0.521	0.493	0.483	0.488	0.478	0.498	3.35	
23) S	Nitrobenzene-d5	0.380	0.379	0.396	0.385	0.378	0.381	0.384	0.383	1.58	
24)	Nitrobenzene	0.370	0.371	0.383	0.374	0.369	0.375	0.376	0.374	1.29	
25)	Isophorone	0.611	0.594	0.633	0.611	0.601	0.617	0.614	0.611	2.04	
26) C	2-Nitrophenol	0.171	0.175	0.190	0.193	0.190	0.193	0.191	0.186	4.91	
27)	2,4-Dimethylphenol	0.208	0.212	0.221	0.223	0.218	0.220	0.220	0.217	2.46	
28)	bis(2-Chloroethyl)ether	0.384	0.390	0.408	0.394	0.387	0.391	0.388	0.392	2.03	
29) C	2,4-Dichlorophenol	0.286	0.287	0.312	0.296	0.290	0.292	0.292	0.294	2.95	
30)	1,2,4-Trichlorobenzene	0.327	0.321	0.331	0.317	0.312	0.317	0.314	0.320	2.12	
31)	Naphthalene	1.067	1.041	1.096	1.037	1.012	1.022	1.012	1.041	2.98	
32)	Benzoic acid		0.186	0.217	0.229	0.233	0.243	0.246	0.226	9.70	
33)	4-Chloroaniline	0.354	0.352	0.382	0.364	0.360	0.364	0.370	0.363	2.82	
34) C	Hexachlorobutane	0.193	0.191	0.200	0.192	0.188	0.191	0.189	0.192	2.01	
35)	Caprolactam	0.083	0.085	0.094	0.093	0.088	0.091	0.092	0.089	4.75	
36) C	4-Chloro-3-methylphenol	0.310	0.324	0.342	0.329	0.324	0.325	0.324	0.325	2.91	
37)	2-Methylnaphthalene	0.688	0.689	0.719	0.669	0.659	0.666	0.652	0.677	3.42	
38)	1-Methylnaphthalene	0.680	0.657	0.691	0.656	0.637	0.640	0.631	0.656	3.40	

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF020625.M

		ISTD-----										
39)	I	Acenaphthene-d10	0.582	0.588	0.600	0.584	0.560	0.574	0.562	0.579	2.50	
40)		1,2,4,5-Tetrac...	0.138	0.180	0.204	0.205	0.214	0.214	0.192	15.36		
41)	P	Hexachlorocycl...	0.201	0.200	0.210	0.200	0.199	0.201	0.196	0.201	2.08	A
42)	S	2,4,6-Tribromo...	0.364	0.365	0.389	0.377	0.373	0.378	0.372	0.374	2.28	B
43)	C	2,4,6-Trichlor...	0.385	0.407	0.430	0.410	0.394	0.409	0.401	0.405	3.51	C
44)		2,4,5-Trichlor...	1.373	1.360	1.385	1.269	1.241	1.259	1.201	1.298	5.62	D
45)	S	2-Fluorobiphenyl	1.582	1.564	1.632	1.545	1.517	1.537	1.478	1.551	3.16	E
46)		1,1'-Biphenyl	1.167	1.161	1.211	1.135	1.114	1.136	1.103	1.147	3.18	F
47)		2-Chloronaphth...	0.371	0.371	0.394	0.390	0.382	0.401	0.385	0.385	2.92	G
48)		2-Nitroaniline	1.739	1.736	1.791	1.696	1.660	1.689	1.626	1.705	3.21	
49)		Acenaphthylene	1.382	1.359	1.408	1.345	1.324	1.341	1.345	1.358	2.09	
50)		Dimethylphthalate	0.289	0.290	0.314	0.301	0.295	0.299	0.290	0.297	3.06	
51)		2,6-Dinitrotol...	1.186	1.164	1.188	1.152	1.108	1.127	1.101	1.147	3.10	
52)	C	Acenaphthene	0.312	0.313	0.335	0.319	0.320	0.321	0.316	0.319	2.35	
53)		3-Nitroaniline	0.133	0.167	0.177	0.185	0.198	0.198	0.176	13.83		
54)	P	2,4-Dinitrophenol	1.768	1.722	1.774	1.673	1.633	1.634	1.576	1.683	4.44	
55)		Dibenzofuran	0.190	0.216	0.247	0.249	0.249	0.257	0.251	0.237	10.43	
56)	P	4-Nitrophenol	0.383	0.403	0.414	0.398	0.390	0.396	0.383	0.395	2.83	
57)		2,4-Dinitrotol...	1.359	1.361	1.377	1.290	1.239	1.263	1.221	1.301	4.90	
58)		Fluorene	0.332	0.361	0.359	0.348	0.348	0.355	0.340	0.349	2.95	
59)		2,3,4,6-Tetrac...	1.400	1.346	1.398	1.330	1.300	1.308	1.269	1.336	3.71	
60)		Diethylphthalate	0.661	0.643	0.659	0.622	0.602	0.611	0.585	0.626	4.66	
61)		4-Chlorophenyl...	0.315	0.319	0.333	0.335	0.319	0.327	0.324	0.324	2.28	
62)		4-Nitroaniline	1.348	1.329	1.385	1.326	1.295	1.320	1.294	1.328	2.38	
63)		Azobenzene										
64)	I	Phenanthrene-d10	0.116	0.140	0.142	0.142	0.146	0.148	0.139	8.48		
65)		4,6-Dinitro-2....	0.650	0.653	0.674	0.627	0.625	0.625	0.627	0.640	2.97	
66)	c	n-Nitrosodiphe...	0.228	0.220	0.234	0.221	0.220	0.221	0.221	0.224	2.46	
67)		4-Bromophenyl....	0.229	0.234	0.241	0.227	0.224	0.228	0.228	0.230	2.46	
68)		Hexachlorobenzene	0.200	0.203	0.214	0.185	0.185	0.182	0.176	0.192	7.12	
69)		Atrazine	0.116	0.131	0.151	0.154	0.158	0.159	0.160	0.147	11.68	
70)	C	Pentachlorophenol	1.141	1.132	1.161	1.084	1.071	1.069	1.049	1.101	3.91	
71)		Phenanthrene	1.168	1.126	1.158	1.082	1.084	1.071	1.057	1.107	3.99	
72)		Anthracene	1.022	1.026	1.076	0.986	0.966	0.961	0.933	0.996	4.87	
73)		Carbazole	1.165	1.156	1.223	1.141	1.132	1.126	1.105	1.150	3.29	
74)		Di-n-butylphth...	1.251	1.239	1.243	1.151	1.129	1.091	1.065	1.167	6.63	
75)	C	Fluoranthene										
76)	I	Chrysene-d12	0.474	0.487	0.334	0.528	0.432	0.351	0.481	0.441	16.58	
77)		Benzidine	1.528	1.557	1.717	1.745	1.774	1.807	1.789	1.703	6.67	
78)		Pyrene	1.129	1.104	1.211	1.198	1.209	1.234	1.208	1.185	4.07	
79)	S	Terphenyl-d14	0.525	0.540	0.605	0.609	0.603	0.623	0.624	0.590	6.83	
80)		Butylbenzylphth...	1.381	1.332	1.350	1.345	1.309	1.309	1.279	1.329	2.51	
81)		Benzo(a)anthra...	0.397	0.411	0.407	0.377	0.363	0.353	0.358	0.381	6.31	
82)		3,3'-Dichlorob...	1.187	1.223	1.314	1.201	1.215	1.224	1.229	1.228	3.34	
83)		Chrysene	0.593	0.610	0.685	0.689	0.680	0.697	0.702	0.665	6.68	
84)		Bis(2-ethylhex...	0.802	0.814	0.910	0.965	1.010	1.051	1.090	0.949	11.82	
85)	c	Di-n-octyl pht...										

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\

Method File : 8270-BF020625.M

86)	I	Perylene-d12	- - - - - ISTD - - - - -										
87)		Indeno(1,2,3-c...)	0.987	1.029	1.186	1.288	1.341	1.410	1.408	1.236		14.06	
88)		Benzo(b)fluora...	1.286	1.407	1.398	1.336	1.350	1.356	1.268	1.343		3.88	
89)		Benzo(k)fluora...	1.113	1.216	1.247	1.142	1.074	1.098	1.138	1.147		5.49	
90)	C	Benzo(a)pyrene	1.085	1.074	1.115	1.080	1.069	1.094	1.089	1.087		1.41	
91)		Dibenzo(a,h)an...	0.796	0.828	0.970	1.051	1.092	1.138	1.134	1.001		14.13	
92)		Benzo(g,h,i)pe...	0.805	0.864	1.001	1.100	1.144	1.203	1.218	1.048		15.60	

(#) = Out of Range

A  
B  
C  
D  
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G

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>SPEC01</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>
Instrument ID:	<u>BNA_F</u>		Calibration Date/Time:	<u>02/10/2025</u>	<u>11:34</u>
Lab File ID:	<u>BF141531.D</u>		Init. Calib. Date(s):	<u>02/06/2025</u>	<u>02/06/2025</u>
EPA Sample No.:	<u>SSTDCCCC040</u>		Init. Calib. Time(s):	<u>11:07</u>	<u>14:14</u>
GC Column:	<u>DB-UI</u>	ID: <u>0.18</u>	(mm)		

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.276	1.279		0.2	
Phenol-d6	1.612	1.566		-2.9	
Nitrobenzene-d5	0.383	0.378		-1.3	
2-Fluorobiphenyl	1.298	1.277		-1.6	
2,4,6-Tribromophenol	0.201	0.194		-3.5	
Terphenyl-d14	1.185	1.253		5.7	
Bis(2-ethylhexyl)phthalate	0.665	0.755		13.5	

All other compounds must meet a minimum RRF of 0.010.

## LAB CHRONICLE

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1322-01	MANHOLE	WATER		PCB	02/06/25	02/07/25	02/07/25	02/06/25

**Hit Summary Sheet**  
**SW-846**

SDG No.: Q1322

Order ID: Q1322

Client: Spectra East Inc.

Project ID: Outfall 001 - Orangetown Dis Permit 2

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

Total Concentration: 0.000



A  
B  
C  
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# SAMPLE DATA

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25	
Client Sample ID:	MANHOLE	SDG No.:	Q1322	
Lab Sample ID:	Q1322-01	Matrix:	WATER	
Analytical Method:	SW8082A	% Solid:	0	Decanted:
Sample Wt/Vol:	960	Units:	mL	Final Vol: 10000 uL
Soil Aliquot Vol:			uL	Test: PCB
Extraction Type:				Injection Volume :
GPC Factor :	1.0	PH :		
Prep Method :	3510C			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069614.D	1	02/07/25 08:10	02/07/25 18:35	PB166608

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	0.16	U	0.16	0.52	ug/L
11104-28-2	Aroclor-1221	0.24	U	0.24	0.52	ug/L
11141-16-5	Aroclor-1232	0.39	U	0.39	0.52	ug/L
53469-21-9	Aroclor-1242	0.17	U	0.17	0.52	ug/L
12672-29-6	Aroclor-1248	0.13	U	0.13	0.52	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.52	ug/L
37324-23-5	Aroclor-1262	0.15	U	0.15	0.52	ug/L
11100-14-4	Aroclor-1268	0.13	U	0.13	0.52	ug/L
11096-82-5	Aroclor-1260	0.16	U	0.16	0.52	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	23.8		10 - 157	119%	SPK: 20
2051-24-3	Decachlorobiphenyl	18.4		10 - 173	92%	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



QC  
SUMMARY

### Surrogate Summary

SDG No.: **Q1322**

Client: **Spectra East Inc.**

Analytical Method: **8082A**

Lab Sample ID	Client ID	Parameter	Limits						
			Column	Spike	Result	Rec	Qual	Low	High
I.BLK-PP069264.D	PIBLK-PP069264.D	Tetrachloro-m-xylene	1	20	25.7	128		60	140
		Decachlorobiphenyl	1	20	25.4	127		60	140
		Tetrachloro-m-xylene	2	20	26.0	130		60	140
		Decachlorobiphenyl	2	20	25.4	127		60	140
I.BLK-PP069607.D	PIBLK-PP069607.D	Tetrachloro-m-xylene	1	20	21.4	107		60	140
		Decachlorobiphenyl	1	20	21.8	109		60	140
		Tetrachloro-m-xylene	2	20	21.7	108		60	140
		Decachlorobiphenyl	2	20	22.0	110		60	140
PB166608BL	PB166608BL	Tetrachloro-m-xylene	1	20	25.4	127		10	157
		Decachlorobiphenyl	1	20	24.9	124		10	173
		Tetrachloro-m-xylene	2	20	26.0	130		10	157
		Decachlorobiphenyl	2	20	25.0	125		10	173
PB166608BS	PB166608BS	Tetrachloro-m-xylene	1	20	26.0	130		10	157
		Decachlorobiphenyl	1	20	25.4	127		10	173
		Tetrachloro-m-xylene	2	20	25.4	127		10	157
		Decachlorobiphenyl	2	20	25.7	128		10	173
PB166608BSD	PB166608BSD	Tetrachloro-m-xylene	1	20	26.1	130		10	157
		Decachlorobiphenyl	1	20	25.4	127		10	173
		Tetrachloro-m-xylene	2	20	25.4	127		10	157
		Decachlorobiphenyl	2	20	26.0	130		10	173
Q1322-01	MANHOLE	Tetrachloro-m-xylene	1	20	23.1	115		10	157
		Decachlorobiphenyl	1	20	16.9	85		10	173
		Tetrachloro-m-xylene	2	20	23.8	119		10	157
		Decachlorobiphenyl	2	20	18.4	92		10	173
I.BLK-PP069621.D	PIBLK-PP069621.D	Tetrachloro-m-xylene	1	20	21.4	107		60	140
		Decachlorobiphenyl	1	20	21.9	110		60	140
		Tetrachloro-m-xylene	2	20	21.6	108		60	140
		Decachlorobiphenyl	2	20	22.4	112		60	140

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1322

Client: Spectra East Inc.

Analytical Method: 8082A

Datafile : PP069609.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166608BS	AR1016	5	5.00	ug/L	100				61	112	
	AR1260	5	4.80	ug/L	96				66	113	

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1322

Client: Spectra East Inc.

Analytical Method: 8082A

Datafile : PP069610.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	Qual	RPD		Limits	
									Low	High	RPD	
PB166608BSD	AR1016	5	4.90	ug/L	98	2			61	112	20	
	AR1260	5	4.90	ug/L	98	2			66	113	20	

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166608BL

Lab Name: CHEMTECH

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322

SAS No.: Q1322 SDG NO.: Q1322

Lab Sample ID: PB166608BL

Lab File ID: PP069608.D

Matrix: (soil/water) WATER

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 02/07/2025

Date Analyzed (1): 02/07/2025

Date Analyzed (2): 02/07/2025

Time Analyzed (1): 16:57

Time Analyzed (2): 16:57

Instrument ID (1): ECD\_P

Instrument ID (2): ECD\_P

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
PB166608BS	PB166608BS	PP069609.D	02/07/2025	02/07/2025
PB166608BSD	PB166608BSD	PP069610.D	02/07/2025	02/07/2025
MANHOLE	Q1322-01	PP069614.D	02/07/2025	02/07/2025

COMMENTS:



A  
B  
C  
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# CALIBRATION

# SUMMARY

**RETENTION TIMES OF INITIAL CALIBRATION**

<b>Contract:</b>	<b>SPEC01</b>				
<b>Lab Code:</b>	<b>CHEM</b>	<b>Case No.:</b>	<b>Q1322</b>	<b>SAS No.:</b>	<b>Q1322</b>
<b>Instrument ID:</b>	<b>ECD_P</b>	<b>Calibration Date(s):</b>		<b>SDG NO.:</b>	<b>Q1322</b>
		<b>Calibration Times:</b>		<b>01/28/2025</b>	<b>01/28/2025</b>
				<b>09:37</b>	<b>17:30</b>

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

<b>LAB FILE ID:</b>	<b>RT 1000 = PP069265.D</b>	<b>RT 750 = PP069266.D</b>
	<b>RT 500 = PP069267.D</b>	<b>RT 250 = PP069268.D</b>
		<b>RT 050 = PP069269.D</b>

COMPOUND	RT 1000	RT 750	RT 500	RT 250	RT 050	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016-1 (1)	5.69	5.69	5.69	5.69	5.69	5.69	5.59	5.79
Aroclor-1016-2 (2)	5.71	5.71	5.71	5.71	5.71	5.71	5.61	5.81
Aroclor-1016-3 (3)	5.78	5.77	5.78	5.77	5.78	5.78	5.68	5.88
Aroclor-1016-4 (4)	5.87	5.87	5.87	5.87	5.87	5.87	5.77	5.97
Aroclor-1016-5 (5)	6.17	6.17	6.17	6.16	6.17	6.17	6.07	6.27
Aroclor-1260-1 (1)	7.29	7.29	7.29	7.28	7.29	7.29	7.19	7.39
Aroclor-1260-2 (2)	7.54	7.54	7.54	7.54	7.54	7.54	7.44	7.64
Aroclor-1260-3 (3)	7.90	7.90	7.90	7.90	7.90	7.90	7.80	8.00
Aroclor-1260-4 (4)	8.12	8.12	8.13	8.12	8.12	8.12	8.02	8.22
Aroclor-1260-5 (5)	8.45	8.45	8.45	8.44	8.45	8.45	8.35	8.55
Decachlorobiphenyl	10.28	10.28	10.28	10.28	10.28	10.28	10.18	10.38
Tetrachloro-m-xylene	4.54	4.54	4.54	4.53	4.54	4.54	4.44	4.64
Aroclor-1242-1 (1)	5.69	5.69	5.69	5.69	5.69	5.69	5.59	5.79
Aroclor-1242-2 (2)	5.71	5.71	5.71	5.71	5.71	5.71	5.61	5.81
Aroclor-1242-3 (3)	5.78	5.78	5.77	5.78	5.77	5.78	5.68	5.88
Aroclor-1242-4 (4)	5.87	5.87	5.87	5.87	5.87	5.87	5.77	5.97
Aroclor-1242-5 (5)	6.61	6.60	6.60	6.61	6.60	6.60	6.50	6.70
Decachlorobiphenyl	10.28	10.28	10.28	10.28	10.28	10.28	10.18	10.38
Tetrachloro-m-xylene	4.54	4.54	4.54	4.54	4.54	4.54	4.44	4.64
Aroclor-1248-1 (1)	5.69	5.69	5.69	5.69	5.69	5.69	5.59	5.79
Aroclor-1248-2 (2)	5.96	5.96	5.97	5.96	5.96	5.96	5.86	6.06
Aroclor-1248-3 (3)	6.17	6.17	6.17	6.17	6.17	6.17	6.07	6.27
Aroclor-1248-4 (4)	6.57	6.56	6.57	6.56	6.57	6.57	6.47	6.67
Aroclor-1248-5 (5)	6.60	6.60	6.61	6.60	6.60	6.60	6.50	6.70
Decachlorobiphenyl	10.28	10.28	10.28	10.28	10.28	10.28	10.18	10.38
Tetrachloro-m-xylene	4.54	4.54	4.54	4.54	4.54	4.54	4.44	4.64
Aroclor-1254-1 (1)	6.54	6.54	6.54	6.54	6.54	6.54	6.44	6.64
Aroclor-1254-2 (2)	6.76	6.76	6.76	6.76	6.76	6.76	6.66	6.86
Aroclor-1254-3 (3)	7.12	7.12	7.12	7.12	7.12	7.12	7.02	7.22
Aroclor-1254-4 (4)	7.40	7.41	7.40	7.40	7.41	7.40	7.30	7.50
Aroclor-1254-5 (5)	7.82	7.82	7.82	7.82	7.82	7.82	7.72	7.92
Decachlorobiphenyl	10.28	10.28	10.28	10.28	10.28	10.28	10.18	10.38
Tetrachloro-m-xylene	4.54	4.54	4.53	4.54	4.54	4.54	4.44	4.64
Aroclor-1268-1 (1)	8.76	8.76	8.76	8.78	8.76	8.77	8.67	8.87
Aroclor-1268-2 (2)	8.86	8.86	8.86	8.87	8.86	8.86	8.76	8.96
Aroclor-1268-3 (3)	9.09	9.09	9.09	9.11	9.09	9.10	9.00	9.20
Aroclor-1268-4 (4)	9.51	9.51	9.51	9.53	9.51	9.51	9.41	9.61
Aroclor-1268-5 (5)	9.93	9.94	9.93	9.95	9.93	9.94	9.84	10.04

**RETENTION TIMES OF INITIAL CALIBRATION**

Decachlorobiphenyl	10.28	10.28	10.28	10.29	10.28	10.28	10.18	10.38
Tetrachloro-m-xylene	4.54	4.54	4.54	4.55	4.54	4.54	4.44	4.64

A  
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**RETENTION TIMES OF INITIAL CALIBRATION**

<b>Contract:</b>	<b>SPEC01</b>						
<b>Lab Code:</b>	<b>CHEM</b>	<b>Case No.:</b>	<b>Q1322</b>	<b>SAS No.:</b>	<b>Q1322</b>	<b>SDG NO.:</b>	<b>Q1322</b>
<b>Instrument ID:</b>	<b>ECD_P</b>	<b>Calibration Date(s):</b>			<b>01/28/2025</b>	<b>01/28/2025</b>	
		<b>Calibration Times:</b>			<b>09:37</b>	<b>17:30</b>	

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

<b>LAB FILE ID:</b>	<b>RT 1000 =</b>	<b>PP069265.D</b>	<b>RT 750 =</b>	<b>PP069266.D</b>
	<b>RT 500 =</b>	<b>PP069267.D</b>	<b>RT 250 =</b>	<b>PP069268.D</b>
			<b>RT 050 =</b>	<b>PP069269.D</b>

<b>COMPOUND</b>	<b>RT 1000</b>	<b>RT 750</b>	<b>RT 500</b>	<b>RT 250</b>	<b>RT 050</b>	<b>MEAN RT</b>	<b>RT WINDOW</b>	<b>FROM</b>	<b>TO</b>
Aroclor-1016-1 (1)	4.93	4.93	4.93	4.93	4.93	4.93	4.83	5.03	
Aroclor-1016-2 (2)	4.95	4.95	4.95	4.95	4.95	4.95	4.85	5.05	
Aroclor-1016-3 (3)	5.13	5.13	5.13	5.13	5.13	5.13	5.03	5.23	
Aroclor-1016-4 (4)	5.17	5.17	5.17	5.17	5.17	5.17	5.07	5.27	
Aroclor-1016-5 (5)	5.39	5.39	5.39	5.39	5.39	5.39	5.29	5.49	
Aroclor-1260-1 (1)	6.43	6.43	6.43	6.43	6.43	6.43	6.33	6.53	
Aroclor-1260-2 (2)	6.62	6.62	6.62	6.62	6.61	6.62	6.52	6.72	
Aroclor-1260-3 (3)	6.77	6.77	6.77	6.77	6.77	6.77	6.67	6.87	
Aroclor-1260-4 (4)	7.24	7.24	7.24	7.24	7.24	7.24	7.14	7.34	
Aroclor-1260-5 (5)	7.48	7.48	7.48	7.48	7.48	7.48	7.38	7.58	
Decachlorobiphenyl	8.91	8.91	8.91	8.91	8.91	8.91	8.81	9.01	
Tetrachloro-m-xylene	3.84	3.84	3.84	3.84	3.84	3.84	3.74	3.94	
Aroclor-1242-1 (1)	4.93	4.93	4.94	4.93	4.93	4.93	4.83	5.03	
Aroclor-1242-2 (2)	4.95	4.95	4.95	4.95	4.95	4.95	4.85	5.05	
Aroclor-1242-3 (3)	5.13	5.13	5.13	5.13	5.13	5.13	5.03	5.23	
Aroclor-1242-4 (4)	5.21	5.22	5.22	5.21	5.22	5.22	5.12	5.32	
Aroclor-1242-5 (5)	5.74	5.74	5.74	5.74	5.74	5.74	5.64	5.84	
Decachlorobiphenyl	8.91	8.91	8.91	8.91	8.91	8.91	8.81	9.01	
Tetrachloro-m-xylene	3.84	3.84	3.84	3.84	3.84	3.84	3.74	3.94	
Aroclor-1248-1 (1)	4.93	4.93	4.93	4.93	4.93	4.93	4.83	5.03	
Aroclor-1248-2 (2)	5.17	5.17	5.17	5.17	5.17	5.17	5.07	5.27	
Aroclor-1248-3 (3)	5.22	5.22	5.22	5.21	5.22	5.22	5.12	5.32	
Aroclor-1248-4 (4)	5.39	5.39	5.39	5.39	5.39	5.39	5.29	5.49	
Aroclor-1248-5 (5)	5.78	5.78	5.78	5.78	5.78	5.78	5.68	5.88	
Decachlorobiphenyl	8.91	8.91	8.91	8.91	8.91	8.91	8.81	9.01	
Tetrachloro-m-xylene	3.84	3.84	3.84	3.84	3.84	3.84	3.74	3.94	
Aroclor-1254-1 (1)	5.74	5.74	5.74	5.74	5.74	5.74	5.64	5.84	
Aroclor-1254-2 (2)	5.89	5.89	5.89	5.89	5.89	5.89	5.79	5.99	
Aroclor-1254-3 (3)	6.30	6.30	6.30	6.30	6.30	6.30	6.20	6.40	
Aroclor-1254-4 (4)	6.52	6.53	6.52	6.53	6.53	6.52	6.42	6.62	
Aroclor-1254-5 (5)	6.94	6.95	6.94	6.94	6.94	6.94	6.84	7.04	
Decachlorobiphenyl	8.91	8.91	8.91	8.91	8.91	8.91	8.81	9.01	
Tetrachloro-m-xylene	3.84	3.84	3.84	3.84	3.84	3.84	3.74	3.94	
Aroclor-1268-1 (1)	7.77	7.77	7.77	7.77	7.77	7.77	7.67	7.87	
Aroclor-1268-2 (2)	7.83	7.83	7.83	7.83	7.83	7.83	7.73	7.93	
Aroclor-1268-3 (3)	8.04	8.04	8.04	8.04	8.04	8.04	7.94	8.14	
Aroclor-1268-4 (4)	8.34	8.34	8.34	8.34	8.34	8.34	8.24	8.44	
Aroclor-1268-5 (5)	8.64	8.64	8.64	8.64	8.64	8.64	8.54	8.74	

**RETENTION TIMES OF INITIAL CALIBRATION**

Decachlorobiphenyl	8.91	8.91	8.91	8.91	8.91	8.91	8.81	9.01
Tetrachloro-m-xylene	3.84	3.84	3.84	3.84	3.84	3.84	3.74	3.94

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	SPEC01						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</u>
Instrument ID:	<u>ECD_P</u>		Calibration Date(s):		<u>01/28/2025</u>	<u>01/28/2025</u>	
			Calibration Times:		<u>09:37</u>	<u>17:30</u>	

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

LAB FILE ID:		CF 1000 =	<u>PP069265.D</u>	CF 750 =	<u>PP069266.D</u>			
CF 500 =	<u>PP069267.D</u>	CF 250 =	<u>PP069268.D</u>	CF 050 =	<u>PP069269.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	CF	% RSD
Aroclor-1016-1	(1)	44563885	46103675	49194740	50253212	41549440	46332990	8
Aroclor-1016-2	(2)	66115347	69779753	70658198	75938800	56893880	67877196	10
Aroclor-1016-3	(3)	39869399	41463369	44413634	48593324	38643280	42596601	9
Aroclor-1016-4	(4)	33707176	35303807	36719774	37971988	31299580	35000465	7
Aroclor-1016-5	(5)	32090736	33824409	35071540	36758492	27547540	33058543	11
Aroclor-1260-1	(1)	55810838	58374851	61327242	65126844	51541560	58436267	9
Aroclor-1260-2	(2)	71849008	75229505	78748522	85337848	77899600	77812897	6
Aroclor-1260-3	(3)	59639386	62129519	64349302	69276732	57201340	62519256	7
Aroclor-1260-4	(4)	61734973	64735973	67542400	73350432	62520020	65976760	7
Aroclor-1260-5	(5)	125094433	130279153	135629934	144497620	119128460	130925920	7
Decachlorobiphenyl		1069166160	1116444307	1169529200	1243495760	865856800	1092898445	13
Tetrachloro-m-xylene		1430473260	1473828093	1522470140	1571078520	1159551800	1431480363	11
Aroclor-1242-1	(1)	38881934	40183667	43367056	45129572	40964140	41705274	6
Aroclor-1242-2	(2)	57026747	57896231	62116710	63798460	54116520	58990934	7
Aroclor-1242-3	(3)	35212135	35868905	39015138	40586632	34810280	37098618	7
Aroclor-1242-4	(4)	29733477	30521513	32725012	34827232	36166060	32794659	8
Aroclor-1242-5	(5)	31146343	32194257	34488024	36289728	28803300	32584330	9
Decachlorobiphenyl		1046199870	1081727787	1138401280	1175392440	940280400	1076400355	8
Tetrachloro-m-xylene		1435254920	1458364720	1537301860	1551717280	1142408000	1425009356	12
Aroclor-1248-1	(1)	29720774	31068636	32496050	36489328	32420520	32439062	8
Aroclor-1248-2	(2)	40031392	40786873	43476982	45978940	41957800	42446397	6
Aroclor-1248-3	(3)	44249426	45321484	48274812	49262872	47827180	46987155	4
Aroclor-1248-4	(4)	52361428	54561383	58048758	58995000	51639900	55121294	6
Aroclor-1248-5	(5)	50435355	52347879	55697774	57690052	50747900	53383792	6
Decachlorobiphenyl		1037639180	1069858813	1128342940	1177314960	1004783400	1083587859	6
Tetrachloro-m-xylene		1397850760	1441113413	1513274920	1556018920	1233936200	1428438843	9
Aroclor-1254-1	(1)	52694329	56123723	55956580	61395668	63148280	57863716	7
Aroclor-1254-2	(2)	75242428	80121392	80560264	87256592	78028640	80241863	6
Aroclor-1254-3	(3)	78719981	83731985	84853004	89742068	84395060	84288420	5
Aroclor-1254-4	(4)	63293404	67680445	70564640	73119196	66281540	68187845	6
Aroclor-1254-5	(5)	65136323	67898099	69017528	74762784	63416000	68046147	6
Decachlorobiphenyl		1048312770	1098692147	1135082800	1189137760	958537000	1085952495	8
Tetrachloro-m-xylene		1421810410	1488698480	1487019120	1532331840	1227018400	1431375650	8
Aroclor-1268-1	(1)	176588317	184780069	192785674	202822560	125915500	176578424	17

**CALIBRATION FACTOR OF INITIAL CALIBRATION**

Aroclor-1268-2	(2)	157019138	164413571	171697424	179175396	114552180	157371542	16
Aroclor-1268-3	(3)	134437818	140375337	146778962	154508480	92538920	133727903	18
Aroclor-1268-4	(4)	59595033	62280167	64687112	67890812	39150760	58720777	19
Aroclor-1268-5	(5)	388908034	403290352	414501270	436451084	261335260	380897200	18
Decachlorobiphenyl		1754282940	1839272453	1920856020	2033075320	1195912000	1748679747	19
Tetrachloro-m-xylene		1417405090	1481109080	1537248520	1587731960	907526000	1386204130	20

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	SPEC01						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</u>
Instrument ID:	<u>ECD_P</u>		Calibration Date(s):		<u>01/28/2025</u>	<u>01/28/2025</u>	
			Calibration Times:		<u>09:37</u>	<u>17:30</u>	
GC Column:	<u>ZB-MR2</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:	CF 1000 =	PP069265.D	CF 750 =	PP069266.D			
	CF 500 =	<u>PP069267.D</u>	CF 250 =	<u>PP069268.D</u>	CF 050 =	<u>PP069269.D</u>	
COMPOUND	CF 1000	CF 750	CF 500	CF 250	CF 050	CF	% RSD
Aroclor-1016-1 (1)	31633685	33556627	33480936	37954972	26448920	32615028	13
Aroclor-1016-2 (2)	44031797	46303903	46946506	51687136	35822760	44958420	13
Aroclor-1016-3 (3)	24261336	25813949	25589188	28587740	20167700	24883983	12
Aroclor-1016-4 (4)	19438184	20660733	21000612	23487460	16394360	20196270	13
Aroclor-1016-5 (5)	25297814	26477140	27113278	31243672	23987600	26823901	10
Aroclor-1260-1 (1)	45562804	49216963	49245668	55739104	41383080	48229524	11
Aroclor-1260-2 (2)	56383179	60514057	62488844	68895184	58237140	61303681	8
Aroclor-1260-3 (3)	52562549	57114871	56932784	65734744	68437200	60156430	11
Aroclor-1260-4 (4)	44924385	48584991	47607396	54330272	36891520	46467713	14
Aroclor-1260-5 (5)	110513786	116112688	112600456	126598028	89900460	111145084	12
Decachlorobiphenyl	1081648740	1075757973	1104259920	1329032280	1001721800	1118484143	11
Tetrachloro-m-xylene	895719350	929032907	946597040	991735040	699610200	892538907	13
Aroclor-1242-1 (1)	28457446	29119925	30117864	31061644	25403260	28832028	7
Aroclor-1242-2 (2)	39820013	39941537	41764664	42385248	33077260	39397744	9
Aroclor-1242-3 (3)	22243475	22254861	23816158	23489144	20716780	22504084	5
Aroclor-1242-4 (4)	21211563	21374985	23120084	22340476	19864100	21582242	6
Aroclor-1242-5 (5)	28383043	28234200	30402778	30060424	26761400	28768369	5
Decachlorobiphenyl	1070572940	1042369120	1225620920	1172941720	1058329800	1113966900	7
Tetrachloro-m-xylene	948008600	922176493	1006063320	982881880	776172200	927060499	10
Aroclor-1248-1 (1)	21330255	20853876	23185376	25262184	19421120	22010562	10
Aroclor-1248-2 (2)	28324001	27797971	30327126	34009348	29864480	30064585	8
Aroclor-1248-3 (3)	29601440	28764189	31580800	34840008	30135060	30984299	8
Aroclor-1248-4 (4)	35306028	34213227	37879582	41180744	36138900	36943696	7
Aroclor-1248-5 (5)	36064443	35808685	37834928	42037920	35201060	37389407	7
Decachlorobiphenyl	980404060	959895520	1126421340	1202320960	1104048600	1074618096	10
Tetrachloro-m-xylene	933404290	928217333	964099100	1014391000	824892400	933000825	7
Aroclor-1254-1 (1)	53877397	54753924	53404230	60667048	52576380	55055796	6
Aroclor-1254-2 (2)	46864995	47439047	46558300	52821560	48160120	48368804	5
Aroclor-1254-3 (3)	74986178	74525173	75336702	83772976	70859440	75896094	6
Aroclor-1254-4 (4)	49801197	49979288	49838494	57136496	49493140	51249723	6
Aroclor-1254-5 (5)	65231257	66669389	67386324	74850464	58664800	66560447	9
Decachlorobiphenyl	1035199210	1139963307	1108865600	1276887280	1138306800	1139844439	8
Tetrachloro-m-xylene	952003350	962162200	938236480	997354800	818278400	933607046	7
Aroclor-1268-1 (1)	145329954	150069627	161518540	160247580	108445040	145122148	15

**CALIBRATION FACTOR OF INITIAL CALIBRATION**

Aroclor-1268-2	(2)	134157524	139030160	148727672	146560884	95601640	132815576	16
Aroclor-1268-3	(3)	115152122	117884433	127017896	124541824	84093360	113737927	15
Aroclor-1268-4	(4)	52741395	55225243	58789156	59095316	34538800	52077982	19
Aroclor-1268-5	(5)	368786226	384323936	391666930	381773968	254352080	356180628	16
Decachlorobiphenyl		1732023730	1823351800	1923257100	1922570920	1314788000	1743198310	14
Tetrachloro-m-xylene		921289540	958710907	983636500	1016257200	585968600	893172549	20

### INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Instrument ID: ECD\_P Date(s) Analyzed: 01/28/2025 01/28/2025

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	4.74	4.64	4.84	19019500
		2	4.82	4.72	4.92	13692500
		3	4.90	4.80	5.00	41943400
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.90	4.80	5.00	33293600
		2	5.42	5.32	5.52	16342000
		3	5.71	5.61	5.81	34359000
		4	5.87	5.77	5.97	17816200
		5	5.96	5.86	6.06	11462400
Aroclor-1262	500	1	8.12	8.02	8.22	79018200
		2	8.45	8.35	8.55	152923000
		3	8.77	8.67	8.87	106280000
		4	8.85	8.75	8.95	81793000
		5	9.51	9.41	9.61	56610200

**INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES**

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Instrument ID: ECD\_P Date(s) Analyzed: 01/28/2025 01/28/2025

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

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	4.05	3.95	4.15	12318000
		2	4.14	4.04	4.24	9683380
		3	4.22	4.12	4.32	29174200
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.22	4.12	4.32	23479400
		2	4.95	4.85	5.05	23571800
		3	5.13	5.03	5.23	12947200
		4	5.21	5.11	5.31	11086300
		5	5.39	5.29	5.49	12210300
Aroclor-1262	500	1	6.98	6.88	7.08	71013200
		2	7.24	7.14	7.34	60979400
		3	7.77	7.67	7.87	52299200
		4	7.83	7.73	7.93	92436400
		5	8.34	8.24	8.44	47792200

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/07/2025 Initial Calibration Date(s): 01/28/2025 01/28/2025

Continuing Calib Time: 13:35 Initial Calibration Time(s): 09:37 17:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.69	5.69	5.59	5.79	0.00
Aroclor-1016-2 (2)	5.71	5.71	5.61	5.81	0.00
Aroclor-1016-3 (3)	5.77	5.78	5.68	5.88	0.01
Aroclor-1016-4 (4)	5.87	5.87	5.77	5.97	0.00
Aroclor-1016-5 (5)	6.16	6.17	6.07	6.27	0.01
Aroclor-1260-1 (1)	7.28	7.29	7.19	7.39	0.01
Aroclor-1260-2 (2)	7.54	7.54	7.44	7.64	0.00
Aroclor-1260-3 (3)	7.90	7.90	7.80	8.00	0.00
Aroclor-1260-4 (4)	8.12	8.13	8.03	8.23	0.01
Aroclor-1260-5 (5)	8.44	8.45	8.35	8.55	0.01
Tetrachloro-m-xylene	4.54	4.54	4.44	4.64	0.00
Decachlorobiphenyl	10.27	10.28	10.18	10.38	0.01

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/07/2025 Initial Calibration Date(s): 01/28/2025 01/28/2025

Continuing Calib Time: 13:35 Initial Calibration Time(s): 09:37 17:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.93	4.93	4.83	5.03	0.00
Aroclor-1016-2 (2)	4.95	4.95	4.85	5.05	0.00
Aroclor-1016-3 (3)	5.13	5.13	5.03	5.23	0.00
Aroclor-1016-4 (4)	5.17	5.17	5.07	5.27	0.00
Aroclor-1016-5 (5)	5.38	5.39	5.29	5.49	0.01
Aroclor-1260-1 (1)	6.42	6.43	6.33	6.53	0.01
Aroclor-1260-2 (2)	6.61	6.62	6.52	6.72	0.01
Aroclor-1260-3 (3)	6.76	6.77	6.67	6.87	0.01
Aroclor-1260-4 (4)	7.24	7.24	7.14	7.34	0.00
Aroclor-1260-5 (5)	7.48	7.48	7.38	7.58	0.00
Tetrachloro-m-xylene	3.84	3.84	3.74	3.94	0.00
Decachlorobiphenyl	8.90	8.91	8.81	9.01	0.01

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 01/28/2025 01/28/2025

 Client Sample No.: CCAL01 Date Analyzed: 02/07/2025

 Lab Sample No.: AR1660CCC500 Data File : PP069603.D Time Analyzed: 13:35

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.689	5.592	5.792	562.590	500.000	12.5
Aroclor-1016-2	5.711	5.614	5.814	555.890	500.000	11.2
Aroclor-1016-3	5.773	5.676	5.876	540.650	500.000	8.1
Aroclor-1016-4	5.870	5.774	5.974	559.270	500.000	11.9
Aroclor-1016-5	6.164	6.067	6.267	558.340	500.000	11.7
Aroclor-1260-1	7.284	7.187	7.387	560.190	500.000	12.0
Aroclor-1260-2	7.538	7.441	7.641	522.070	500.000	4.4
Aroclor-1260-3	7.896	7.800	8.000	536.850	500.000	7.4
Aroclor-1260-4	8.121	8.025	8.225	516.510	500.000	3.3
Aroclor-1260-5	8.442	8.347	8.547	522.590	500.000	4.5
Decachlorobiphenyl	10.273	10.179	10.379	55.130	50.000	10.3
Tetrachloro-m-xylene	4.536	4.438	4.638	57.620	50.000	15.2

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 01/28/2025 01/28/2025

 Client Sample No.: CCAL01 Date Analyzed: 02/07/2025

 Lab Sample No.: AR1660CCC500 Data File : PP069603.D Time Analyzed: 13:35

COMPOUND	RT	RT WINDOW FROM		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		TO				
Aroclor-1016-1	4.930	4.834	5.034	554.420	500.000	10.9
Aroclor-1016-2	4.949	4.853	5.053	551.550	500.000	10.3
Aroclor-1016-3	5.126	5.030	5.230	557.720	500.000	11.5
Aroclor-1016-4	5.168	5.072	5.272	542.010	500.000	8.4
Aroclor-1016-5	5.383	5.288	5.488	543.510	500.000	8.7
Aroclor-1260-1	6.422	6.326	6.526	557.090	500.000	11.4
Aroclor-1260-2	6.610	6.515	6.715	555.810	500.000	11.2
Aroclor-1260-3	6.764	6.670	6.870	515.760	500.000	3.2
Aroclor-1260-4	7.236	7.142	7.342	558.440	500.000	11.7
Aroclor-1260-5	7.477	7.384	7.584	561.960	500.000	12.4
Decachlorobiphenyl	8.902	8.811	9.011	52.430	50.000	4.9
Tetrachloro-m-xylene	3.838	3.740	3.940	56.420	50.000	12.8

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/07/2025 Initial Calibration Date(s): 01/28/2025 01/28/2025

Continuing Calib Time: 19:45 Initial Calibration Time(s): 09:37 17:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.69	5.69	5.59	5.79	0.00
Aroclor-1016-2 (2)	5.71	5.71	5.61	5.81	0.00
Aroclor-1016-3 (3)	5.77	5.78	5.68	5.88	0.01
Aroclor-1016-4 (4)	5.87	5.87	5.77	5.97	0.00
Aroclor-1016-5 (5)	6.16	6.17	6.07	6.27	0.01
Aroclor-1260-1 (1)	7.28	7.29	7.19	7.39	0.01
Aroclor-1260-2 (2)	7.53	7.54	7.44	7.64	0.01
Aroclor-1260-3 (3)	7.89	7.90	7.80	8.00	0.01
Aroclor-1260-4 (4)	8.12	8.13	8.03	8.23	0.01
Aroclor-1260-5 (5)	8.44	8.45	8.35	8.55	0.01
Tetrachloro-m-xylene	4.54	4.54	4.44	4.64	0.01
Decachlorobiphenyl	10.26	10.28	10.18	10.38	0.02

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/07/2025 Initial Calibration Date(s): 01/28/2025 01/28/2025

Continuing Calib Time: 19:45 Initial Calibration Time(s): 09:37 17:30

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.93	4.93	4.83	5.03	0.00
Aroclor-1016-2 (2)	4.95	4.95	4.85	5.05	0.00
Aroclor-1016-3 (3)	5.12	5.13	5.03	5.23	0.01
Aroclor-1016-4 (4)	5.17	5.17	5.07	5.27	0.00
Aroclor-1016-5 (5)	5.38	5.39	5.29	5.49	0.01
Aroclor-1260-1 (1)	6.42	6.43	6.33	6.53	0.01
Aroclor-1260-2 (2)	6.61	6.62	6.52	6.72	0.01
Aroclor-1260-3 (3)	6.76	6.77	6.67	6.87	0.01
Aroclor-1260-4 (4)	7.23	7.24	7.14	7.34	0.01
Aroclor-1260-5 (5)	7.48	7.48	7.38	7.58	0.01
Tetrachloro-m-xylene	3.84	3.84	3.74	3.94	0.00
Decachlorobiphenyl	8.90	8.91	8.81	9.01	0.01

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 01/28/2025 01/28/2025

 Client Sample No.: CCAL02 Date Analyzed: 02/07/2025

 Lab Sample No.: AR1660CCC500 Data File : PP069617.D Time Analyzed: 19:45

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.687	5.592	5.792	546.340	500.000	9.3
Aroclor-1016-2	5.709	5.614	5.814	550.630	500.000	10.1
Aroclor-1016-3	5.772	5.676	5.876	537.240	500.000	7.4
Aroclor-1016-4	5.869	5.774	5.974	546.830	500.000	9.4
Aroclor-1016-5	6.161	6.067	6.267	546.940	500.000	9.4
Aroclor-1260-1	7.280	7.187	7.387	554.520	500.000	10.9
Aroclor-1260-2	7.534	7.441	7.641	522.170	500.000	4.4
Aroclor-1260-3	7.893	7.800	8.000	534.210	500.000	6.8
Aroclor-1260-4	8.117	8.025	8.225	514.170	500.000	2.8
Aroclor-1260-5	8.438	8.347	8.547	516.030	500.000	3.2
Decachlorobiphenyl	10.264	10.179	10.379	54.890	50.000	9.8
Tetrachloro-m-xylene	4.535	4.438	4.638	56.360	50.000	12.7

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 01/28/2025 01/28/2025

 Client Sample No.: CCAL02 Date Analyzed: 02/07/2025

 Lab Sample No.: AR1660CCC500 Data File : PP069617.D Time Analyzed: 19:45

COMPOUND	RT	RT WINDOW FROM		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		TO				
Aroclor-1016-1	4.928	4.834	5.034	549.010	500.000	9.8
Aroclor-1016-2	4.947	4.853	5.053	547.990	500.000	9.6
Aroclor-1016-3	5.124	5.030	5.230	550.750	500.000	10.2
Aroclor-1016-4	5.166	5.072	5.272	533.160	500.000	6.6
Aroclor-1016-5	5.381	5.288	5.488	547.650	500.000	9.5
Aroclor-1260-1	6.418	6.326	6.526	575.420	500.000	15.1
Aroclor-1260-2	6.607	6.515	6.715	571.790	500.000	14.4
Aroclor-1260-3	6.761	6.670	6.870	496.600	500.000	-0.7
Aroclor-1260-4	7.234	7.142	7.342	559.340	500.000	11.9
Aroclor-1260-5	7.475	7.384	7.584	559.740	500.000	11.9
Decachlorobiphenyl	8.898	8.811	9.011	53.340	50.000	6.7
Tetrachloro-m-xylene	3.837	3.740	3.940	55.200	50.000	10.4

## Analytical Sequence

Client: Spectra East Inc.	SDG No.: Q1322
Project: Outfall 001 - Orangetown Dis Permit 2025	Instrument ID: ECD_P
GC Column: ZB-MR1	ID: 0.32 (mm) Inst. Calib. Date(s): 01/28/2025 01/28/2025

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 #
I.BLK	I.BLK	01/28/2025	09:21	PP069264.D	10.28	4.54
AR1660ICC1000	AR1660ICC1000	01/28/2025	09:37	PP069265.D	10.28	4.54
AR1660ICC750	AR1660ICC750	01/28/2025	09:54	PP069266.D	10.28	4.54
AR1660ICC500	AR1660ICC500	01/28/2025	10:10	PP069267.D	10.28	4.54
AR1660ICC250	AR1660ICC250	01/28/2025	10:26	PP069268.D	10.28	4.53
AR1660ICC050	AR1660ICC050	01/28/2025	11:15	PP069269.D	10.28	4.54
AR1221ICC500	AR1221ICC500	01/28/2025	11:32	PP069270.D	10.28	4.54
AR1232ICC500	AR1232ICC500	01/28/2025	11:48	PP069271.D	10.28	4.53
AR1242ICC1000	AR1242ICC1000	01/28/2025	12:04	PP069272.D	10.28	4.54
AR1242ICC750	AR1242ICC750	01/28/2025	12:21	PP069273.D	10.28	4.54
AR1242ICC500	AR1242ICC500	01/28/2025	12:37	PP069274.D	10.28	4.54
AR1242ICC250	AR1242ICC250	01/28/2025	12:53	PP069275.D	10.28	4.54
AR1242ICC050	AR1242ICC050	01/28/2025	13:09	PP069276.D	10.28	4.54
AR1248ICC1000	AR1248ICC1000	01/28/2025	13:26	PP069277.D	10.28	4.54
AR1248ICC750	AR1248ICC750	01/28/2025	13:42	PP069278.D	10.28	4.54
AR1248ICC500	AR1248ICC500	01/28/2025	13:58	PP069279.D	10.28	4.54
AR1248ICC250	AR1248ICC250	01/28/2025	14:15	PP069280.D	10.28	4.54
AR1248ICC050	AR1248ICC050	01/28/2025	14:31	PP069281.D	10.28	4.54
AR1254ICC1000	AR1254ICC1000	01/28/2025	14:47	PP069282.D	10.28	4.54
AR1254ICC750	AR1254ICC750	01/28/2025	15:04	PP069283.D	10.28	4.54
AR1254ICC500	AR1254ICC500	01/28/2025	15:20	PP069284.D	10.28	4.53
AR1254ICC250	AR1254ICC250	01/28/2025	15:36	PP069285.D	10.28	4.54
AR1254ICC050	AR1254ICC050	01/28/2025	15:53	PP069286.D	10.28	4.54
AR1262ICC500	AR1262ICC500	01/28/2025	16:09	PP069287.D	10.28	4.54
AR1268ICC1000	AR1268ICC1000	01/28/2025	16:25	PP069288.D	10.28	4.54
AR1268ICC750	AR1268ICC750	01/28/2025	16:42	PP069289.D	10.28	4.54
AR1268ICC500	AR1268ICC500	01/28/2025	16:58	PP069290.D	10.28	4.54
AR1268ICC250	AR1268ICC250	01/28/2025	17:14	PP069291.D	10.29	4.55
AR1268ICC050	AR1268ICC050	01/28/2025	17:30	PP069292.D	10.28	4.54
AR1660CCC500	AR1660CCC500	02/07/2025	13:35	PP069603.D	10.27	4.54
I.BLK	I.BLK	02/07/2025	14:40	PP069607.D	10.27	4.53
PB166608BL	PB166608BL	02/07/2025	16:57	PP069608.D	10.27	4.53
PB166608BS	PB166608BS	02/07/2025	17:13	PP069609.D	10.27	4.54
PB166608BSD	PB166608BSD	02/07/2025	17:30	PP069610.D	10.27	4.54
MANHOLE	Q1322-01	02/07/2025	18:35	PP069614.D	10.27	4.53
AR1660CCC500	AR1660CCC500	02/07/2025	19:45	PP069617.D	10.26	4.54
I.BLK	I.BLK	02/07/2025	20:50	PP069621.D	10.27	4.53

## Analytical Sequence

Client: Spectra East Inc.	SDG No.: Q1322
Project: Outfall 001 - Orangetown Dis Permit 2025	Instrument ID: ECD_P
GC Column: ZB-MR2	ID: 0.32 (mm) Inst. Calib. Date(s): 01/28/2025 01/28/2025

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 #
I.BLK	I.BLK	01/28/2025	09:21	PP069264.D	8.91	3.84
AR1660ICC1000	AR1660ICC1000	01/28/2025	09:37	PP069265.D	8.91	3.84
AR1660ICC750	AR1660ICC750	01/28/2025	09:54	PP069266.D	8.91	3.84
AR1660ICC500	AR1660ICC500	01/28/2025	10:10	PP069267.D	8.91	3.84
AR1660ICC250	AR1660ICC250	01/28/2025	10:26	PP069268.D	8.91	3.84
AR1660ICC050	AR1660ICC050	01/28/2025	11:15	PP069269.D	8.91	3.84
AR1221ICC500	AR1221ICC500	01/28/2025	11:32	PP069270.D	8.91	3.84
AR1232ICC500	AR1232ICC500	01/28/2025	11:48	PP069271.D	8.91	3.84
AR1242ICC1000	AR1242ICC1000	01/28/2025	12:04	PP069272.D	8.91	3.84
AR1242ICC750	AR1242ICC750	01/28/2025	12:21	PP069273.D	8.91	3.84
AR1242ICC500	AR1242ICC500	01/28/2025	12:37	PP069274.D	8.91	3.84
AR1242ICC250	AR1242ICC250	01/28/2025	12:53	PP069275.D	8.91	3.84
AR1242ICC050	AR1242ICC050	01/28/2025	13:09	PP069276.D	8.91	3.84
AR1248ICC1000	AR1248ICC1000	01/28/2025	13:26	PP069277.D	8.91	3.84
AR1248ICC750	AR1248ICC750	01/28/2025	13:42	PP069278.D	8.91	3.84
AR1248ICC500	AR1248ICC500	01/28/2025	13:58	PP069279.D	8.91	3.84
AR1248ICC250	AR1248ICC250	01/28/2025	14:15	PP069280.D	8.91	3.84
AR1248ICC050	AR1248ICC050	01/28/2025	14:31	PP069281.D	8.91	3.84
AR1254ICC1000	AR1254ICC1000	01/28/2025	14:47	PP069282.D	8.91	3.84
AR1254ICC750	AR1254ICC750	01/28/2025	15:04	PP069283.D	8.91	3.84
AR1254ICC500	AR1254ICC500	01/28/2025	15:20	PP069284.D	8.91	3.84
AR1254ICC250	AR1254ICC250	01/28/2025	15:36	PP069285.D	8.91	3.84
AR1254ICC050	AR1254ICC050	01/28/2025	15:53	PP069286.D	8.91	3.84
AR1262ICC500	AR1262ICC500	01/28/2025	16:09	PP069287.D	8.91	3.84
AR1268ICC1000	AR1268ICC1000	01/28/2025	16:25	PP069288.D	8.91	3.84
AR1268ICC750	AR1268ICC750	01/28/2025	16:42	PP069289.D	8.91	3.84
AR1268ICC500	AR1268ICC500	01/28/2025	16:58	PP069290.D	8.91	3.84
AR1268ICC250	AR1268ICC250	01/28/2025	17:14	PP069291.D	8.91	3.84
AR1268ICC050	AR1268ICC050	01/28/2025	17:30	PP069292.D	8.91	3.84
AR1660CCC500	AR1660CCC500	02/07/2025	13:35	PP069603.D	8.90	3.84
I.BLK	I.BLK	02/07/2025	14:40	PP069607.D	8.90	3.84
PB166608BL	PB166608BL	02/07/2025	16:57	PP069608.D	8.90	3.84
PB166608BS	PB166608BS	02/07/2025	17:13	PP069609.D	8.90	3.84
PB166608BSD	PB166608BSD	02/07/2025	17:30	PP069610.D	8.90	3.84
MANHOLE	Q1322-01	02/07/2025	18:35	PP069614.D	8.90	3.84
AR1660CCC500	AR1660CCC500	02/07/2025	19:45	PP069617.D	8.90	3.84
I.BLK	I.BLK	02/07/2025	20:50	PP069621.D	8.90	3.84



# QC SAMPLE

# DATA

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166608BL			SDG No.:	Q1322
Lab Sample ID:	PB166608BL			Matrix:	WATER
Analytical Method:	SW8082A			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000 uL
Soil Aliquot Vol:			uL	Test:	PCB
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069608.D	1	02/07/25 08:10	02/07/25 16:57	PB166608

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	26.0		10 - 157	130%	SPK: 20
2051-24-3	Decachlorobiphenyl	25.0		10 - 173	125%	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:	Spectra East Inc.			Date Collected:	01/28/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	01/28/25	
Client Sample ID:	PIBLK-PP069264.D			SDG No.:	Q1322	
Lab Sample ID:	I.BLK-PP069264.D			Matrix:	WATER	
Analytical Method:	SW8082A			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:				Test:	PCB	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :	5030					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069264.D	1		01/28/25	PP012825

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	25.7		60 - 140	128%	SPK: 20
2051-24-3	Decachlorobiphenyl	25.4		60 - 140	127%	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:	Spectra East Inc.			Date Collected:	02/07/25			
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/07/25			
Client Sample ID:	PIBLK-PP069607.D			SDG No.:	Q1322			
Lab Sample ID:	I.BLK-PP069607.D			Matrix:	WATER			
Analytical Method:	SW8082A			% Solid:	0	Decanted:		
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL		
Soil Aliquot Vol:	uL			Test:	PCB			
Extraction Type:				Injection Volume :				
GPC Factor :	1.0	PH :						
Prep Method :	5030							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069607.D	1		02/07/25	PP020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	21.4		60 - 140	107%	SPK: 20
2051-24-3	Decachlorobiphenyl	21.8		60 - 140	109%	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:	Spectra East Inc.			Date Collected:	02/07/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/07/25	
Client Sample ID:	PIBLK-PP069621.D			SDG No.:	Q1322	
Lab Sample ID:	I.BLK-PP069621.D			Matrix:	WATER	
Analytical Method:	SW8082A			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:				Test:	PCB	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :	5030					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069621.D	1		02/07/25	PP020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	0.15	U	0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
11096-82-5	Aroclor-1260	0.15	U	0.15	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	21.4		60 - 140	107%	SPK: 20
2051-24-3	Decachlorobiphenyl	21.9		60 - 140	110%	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:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166608BS			SDG No.:	Q1322
Lab Sample ID:	PB166608BS			Matrix:	WATER
Analytical Method:	SW8082A			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000 uL
Soil Aliquot Vol:			uL	Test:	PCB
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069609.D	1	02/07/25 08:10	02/07/25 17:13	PB166608

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	5.00		0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
11096-82-5	Aroclor-1260	4.80		0.15	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	26.0		10 - 157	130%	SPK: 20
2051-24-3	Decachlorobiphenyl	25.7		10 - 173	128%	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:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166608BSD			SDG No.:	Q1322
Lab Sample ID:	PB166608BSD			Matrix:	WATER
Analytical Method:	SW8082A			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000 uL
Soil Aliquot Vol:			uL	Test:	PCB
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP069610.D	1	02/07/25 08:10	02/07/25 17:30	PB166608

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
12674-11-2	Aroclor-1016	4.90		0.15	0.50	ug/L
11104-28-2	Aroclor-1221	0.23	U	0.23	0.50	ug/L
11141-16-5	Aroclor-1232	0.37	U	0.37	0.50	ug/L
53469-21-9	Aroclor-1242	0.16	U	0.16	0.50	ug/L
12672-29-6	Aroclor-1248	0.12	U	0.12	0.50	ug/L
11097-69-1	Aroclor-1254	0.11	U	0.11	0.50	ug/L
37324-23-5	Aroclor-1262	0.14	U	0.14	0.50	ug/L
11100-14-4	Aroclor-1268	0.12	U	0.12	0.50	ug/L
11096-82-5	Aroclor-1260	4.90		0.15	0.50	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	26.1		10 - 157	130%	SPK: 20
2051-24-3	Decachlorobiphenyl	26.0		10 - 173	130%	SPK: 20

Comments:

U = Not Detected

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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

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## LAB CHRONICLE

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM					
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025					
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1322-01	MANHOLE	WATER			02/06/25			02/06/25
			PCB	8082A		02/07/25	02/07/25	
			PESTICIDE Group1	608.3		02/07/25	02/10/25	

**Hit Summary Sheet**  
**SW-846**

SDG No.: Q1322

Order ID: Q1322

Client: Spectra East Inc.

Project ID: Outfall 001 - Orangetown Dis Permit 2

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:	Spectra East Inc.			Date Collected:	02/06/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/06/25	
Client Sample ID:	MANHOLE			SDG No.:	Q1322	
Lab Sample ID:	Q1322-01			Matrix:	WATER	
Analytical Method:	608.3			% Solid:	0	Decanted:
Sample Wt/Vol:	960	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :	5030					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094114.D	1	02/07/25 11:55	02/10/25 14:43	PB166620

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.00060	U	0.00060	0.0052	ug/L
58-89-9	gamma-BHC (Lindane)	0.00050	U	0.00050	0.0052	ug/L
76-44-8	Heptachlor	0.00060	U	0.00060	0.0052	ug/L
309-00-2	Aldrin	0.00050	U	0.00050	0.0052	ug/L
319-85-7	beta-BHC	0.0015	U	0.0015	0.0052	ug/L
319-86-8	delta-BHC	0.0016	U	0.0016	0.0052	ug/L
1024-57-3	Heptachlor epoxide	0.00090	U	0.00090	0.0052	ug/L
959-98-8	Endosulfan I	0.00050	U	0.00050	0.0052	ug/L
5103-74-2	gamma-Chlordane	0.00060	U	0.00060	0.0052	ug/L
5103-71-9	alpha-Chlordane	0.00060	U	0.00060	0.0052	ug/L
72-55-9	4,4-DDE	0.00050	U	0.00050	0.0052	ug/L
60-57-1	Dieldrin	0.00050	U	0.00050	0.0052	ug/L
72-20-8	Endrin	0.00040	U	0.00040	0.0052	ug/L
33213-65-9	Endosulfan II	0.00080	U	0.00080	0.0052	ug/L
72-54-8	4,4-DDD	0.0010	U	0.0010	0.0052	ug/L
50-29-3	4,4-DDT	0.00050	U	0.00050	0.0052	ug/L
7421-93-4	Endrin aldehyde	0.0010	U	0.0010	0.0052	ug/L
1031-07-8	Endosulfan Sulfate	0.00040	U	0.00040	0.0052	ug/L
72-43-5	Methoxychlor	0.0011	U	0.0011	0.0052	ug/L
53494-70-5	Endrin ketone	0.0010	U	0.0010	0.0052	ug/L
8001-35-2	Toxaphene	0.016	U	0.016	0.10	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	17.1		60 - 140	85%	SPK: 20
2051-24-3	Decachlorobiphenyl	12.7		60 - 140	64%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25
Client Sample ID:	MANHOLE	SDG No.:	Q1322
Lab Sample ID:	Q1322-01	Matrix:	WATER
Analytical Method:	608.3	% Solid:	0 Decanted:
Sample Wt/Vol:	960	Units:	mL Final Vol: 1000 uL
Soil Aliquot Vol:			uL Test: PESTICIDE Group1
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	
Prep Method :	5030		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094114.D	1	02/07/25 11:55	02/10/25 14:43	PB166620

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

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

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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

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() = Laboratory InHouse Limit



QC  
SUMMARY

### Surrogate Summary

SDG No.: **Q1322**

Client: **Spectra East Inc.**

Analytical Method: **608.3 Pest**

Lab Sample ID	Client ID	Parameter	Limits						
			Column	Spike	Result	Rec	Qual	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-PL094108.D	PIBLK-PL094108.D	Decachlorobiphenyl	1	20	19.2	96		43	140
		Tetrachloro-m-xylene	1	20	18.7	94		77	126
		Decachlorobiphenyl	2	20	18.9	94		43	140
		Tetrachloro-m-xylene	2	20	18.2	91		77	126
PB166620BL	PB166620BL	Tetrachloro-m-xylene	1	20	25.1	126		60	140
		Decachlorobiphenyl	1	20	24.9	124		60	140
		Tetrachloro-m-xylene	2	20	24.6	123		60	140
		Decachlorobiphenyl	2	20	25.1	126		60	140
PB166620BS	PB166620BS	Tetrachloro-m-xylene	1	20	21.6	108		60	140
		Decachlorobiphenyl	1	20	21.0	105		60	140
		Tetrachloro-m-xylene	2	20	20.7	104		60	140
		Decachlorobiphenyl	2	20	20.8	104		60	140
PB166620BSD	PB166620BSD	Tetrachloro-m-xylene	1	20	20.6	103		60	140
		Decachlorobiphenyl	1	20	19.8	99		60	140
		Tetrachloro-m-xylene	2	20	19.6	98		60	140
		Decachlorobiphenyl	2	20	20.1	100		60	140
Q1322-01	MANHOLE	Tetrachloro-m-xylene	1	20	17.1	85		60	140
		Decachlorobiphenyl	1	20	12.9	65		60	140
		Tetrachloro-m-xylene	2	20	18.5	92		60	140
		Decachlorobiphenyl	2	20	12.7	64		60	140
I.BLK-PL094119.D	PIBLK-PL094119.D	Decachlorobiphenyl	1	20	19.2	96		43	140
		Tetrachloro-m-xylene	1	20	18.3	92		77	126
		Decachlorobiphenyl	2	20	19.6	98		43	140
		Tetrachloro-m-xylene	2	20	18.2	91		77	126

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1322

Client: Spectra East Inc.

Analytical Method: 608.3 Pest

Datafile : PL094112.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB166620BS	alpha-BHC	0.0125	0.011	ug/L	85				37	140	
	gamma-BHC (Lindane)	0.0125	0.011	ug/L	86				32	140	
	Heptachlor	0.0125	0.011	ug/L	89				34	140	
	Aldrin	0.0125	0.011	ug/L	90				42	140	
	beta-BHC	0.0125	0.012	ug/L	95				17	147	
	delta-BHC	0.0125	0.011	ug/L	84				19	140	
	Heptachlor epoxide	0.0125	0.011	ug/L	90				37	142	
	Endosulfan I	0.0125	0.010	ug/L	80				45	153	
	gamma-Chlordane	0.0125	0.011	ug/L	91				45	140	
	alpha-Chlordane	0.0125	0.011	ug/L	90				45	140	
	4,4'-DDE	0.0125	0.011	ug/L	91				30	145	
	Dieldrin	0.0125	0.011	ug/L	86				36	146	
	Endrin	0.0125	0.011	ug/L	90				30	147	
	Endosulfan II	0.0125	0.011	ug/L	90				1	202	
	4,4'-DDD	0.0125	0.011	ug/L	91				31	141	
	4,4'-DDT	0.0125	0.012	ug/L	94				25	160	
	Endrin aldehyde	0.0125	0.011	ug/L	90				38	141	
	Endosulfan sulfate	0.0125	0.011	ug/L	90				26	144	
	Methoxychlor	0.0125	0.012	ug/L	99				30	151	
	Endrin ketone	0.0125	0.011	ug/L	90				44	149	

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1322

Client: Spectra East Inc.

Analytical Method: 608.3 Pest

Datafile : PL094113.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	Qual	RPD			Limits	
									Low	High	RPD	Low	High
PB166620BSD	alpha-BHC	0.0125	0.010	ug/L	80	6			37	140	20		
	gamma-BHC (Lindane)	0.0125	0.010	ug/L	82	5			32	140	20		
	Heptachlor	0.0125	0.011	ug/L	85	5			34	140	20		
	Aldrin	0.0125	0.011	ug/L	86	5			42	140	20		
	beta-BHC	0.0125	0.011	ug/L	90	5			17	147	20		
	delta-BHC	0.0125	0.010	ug/L	80	5			19	140	20		
	Heptachlor epoxide	0.0125	0.011	ug/L	86	5			37	142	20		
	Endosulfan I	0.0125	0.0085	ug/L	68	16			45	153	20		
	gamma-Chlordane	0.0125	0.011	ug/L	88	3			45	140	20		
	alpha-Chlordane	0.0125	0.011	ug/L	86	5			45	140	20		
	4,4'-DDE	0.0125	0.011	ug/L	89	2			30	145	20		
	Dieldrin	0.0125	0.010	ug/L	83	4			36	146	20		
	Endrin	0.0125	0.011	ug/L	90	0			30	147	20		
	Endosulfan II	0.0125	0.011	ug/L	86	5			1	202	20		
	4,4'-DDD	0.0125	0.011	ug/L	88	3			31	141	20		
	4,4'-DDT	0.0125	0.011	ug/L	89	5			25	160	20		
	Endrin aldehyde	0.0125	0.011	ug/L	86	5			38	141	20		
	Endosulfan sulfate	0.0125	0.011	ug/L	85	6			26	144	20		
	Methoxychlor	0.0125	0.012	ug/L	95	4			30	151	20		
	Endrin ketone	0.0125	0.011	ug/L	90	0			44	149	20		

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166620BL

Lab Name: CHEMTECH

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322

SAS No.: Q1322 SDG NO.: Q1322

Lab Sample ID: PB166620BL

Lab File ID: PL094111.D

Matrix: (soil/water) WATER

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 02/07/2025

Date Analyzed (1): 02/10/2025

Date Analyzed (2): 02/10/2025

Time Analyzed (1): 11:18

Time Analyzed (2): 11:18

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
PB166620BS	PB166620BS	PL094112.D	02/10/2025	02/10/2025
PB166620BSD	PB166620BSD	PL094113.D	02/10/2025	02/10/2025
MANHOLE	Q1322-01	PL094114.D	02/10/2025	02/10/2025

COMMENTS:



# QC SAMPLE

# DATA

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BL			SDG No.:	Q1322
Lab Sample ID:	PB166620BL			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094111.D	1	02/07/25 11:55	02/10/25 11:18	PB166620

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.00060	U	0.00060	0.0050	ug/L
58-89-9	gamma-BHC (Lindane)	0.00050	U	0.00050	0.0050	ug/L
76-44-8	Heptachlor	0.00050	U	0.00050	0.0050	ug/L
309-00-2	Aldrin	0.00040	U	0.00040	0.0050	ug/L
319-85-7	beta-BHC	0.0014	U	0.0014	0.0050	ug/L
319-86-8	delta-BHC	0.0015	U	0.0015	0.0050	ug/L
1024-57-3	Heptachlor epoxide	0.00090	U	0.00090	0.0050	ug/L
959-98-8	Endosulfan I	0.00050	U	0.00050	0.0050	ug/L
5103-74-2	gamma-Chlordane	0.00060	U	0.00060	0.0050	ug/L
5103-71-9	alpha-Chlordane	0.00060	U	0.00060	0.0050	ug/L
72-55-9	4,4-DDE	0.00050	U	0.00050	0.0050	ug/L
60-57-1	Dieldrin	0.00050	U	0.00050	0.0050	ug/L
72-20-8	Endrin	0.00040	U	0.00040	0.0050	ug/L
33213-65-9	Endosulfan II	0.00080	U	0.00080	0.0050	ug/L
72-54-8	4,4-DDD	0.00090	U	0.00090	0.0050	ug/L
50-29-3	4,4-DDT	0.00040	U	0.00040	0.0050	ug/L
7421-93-4	Endrin aldehyde	0.0010	U	0.0010	0.0050	ug/L
1031-07-8	Endosulfan Sulfate	0.00040	U	0.00040	0.0050	ug/L
72-43-5	Methoxychlor	0.0011	U	0.0011	0.0050	ug/L
53494-70-5	Endrin ketone	0.0010	U	0.0010	0.0050	ug/L
8001-35-2	Toxaphene	0.015	U	0.015	0.10	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	24.6		60 - 140	123%	SPK: 20
2051-24-3	Decachlorobiphenyl	24.9		60 - 140	124%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BL			SDG No.:	Q1322
Lab Sample ID:	PB166620BL			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094111.D	1	02/07/25 11:55	02/10/25 11:18	PB166620

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	01/21/25			
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	01/21/25			
Client Sample ID:	PIBLK-PL093725.D			SDG No.:	Q1322			
Lab Sample ID:	I.BLK-PL093725.D			Matrix:	WATER			
Analytical Method:	608.3			% Solid:	0	Decanted:		
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL		
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1			
Extraction Type:				Injection Volume :				
GPC Factor :	1.0	PH :						
Prep Method :	3510C							

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
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.0061	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.015	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0049	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.0054	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.0044	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0090	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.0050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.0047	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.0045	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0075	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.0092	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0035	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.0044	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0097	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0099	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0060	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0060	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
<b>SURROGATES</b>						
2051-24-3	Decachlorobiphenyl	22.1		43 - 140	111%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.8		77 - 126	104%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	01/21/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	01/21/25
Client Sample ID:	PIBLK-PL093725.D	SDG No.:	Q1322
Lab Sample ID:	I.BLK-PL093725.D	Matrix:	WATER
Analytical Method:	608.3	% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL Final Vol: 10000 uL
Soil Aliquot Vol:		uL	Test: PESTICIDE Group1
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	
Prep Method :	3510C		

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
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Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	02/10/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/10/25	
Client Sample ID:	PIBLK-PL094108.D			SDG No.:	Q1322	
Lab Sample ID:	I.BLK-PL094108.D			Matrix:	WATER	
Analytical Method:	608.3			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :	3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094108.D	1		02/10/25	pl021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.0061	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.015	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0049	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.0054	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.0044	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0090	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.0050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.0047	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.0045	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0075	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.0092	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0035	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.0044	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0097	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0099	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0060	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0060	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
<b>SURROGATES</b>						
2051-24-3	Decachlorobiphenyl	19.2		43 - 140	96%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.7		77 - 126	94%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/10/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/10/25
Client Sample ID:	PIBLK-PL094108.D	SDG No.:	Q1322
Lab Sample ID:	I.BLK-PL094108.D	Matrix:	WATER
Analytical Method:	608.3	% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL Final Vol: 10000 uL
Soil Aliquot Vol:		uL	Test: PESTICIDE Group1
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094108.D	1		02/10/25	pl021025

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	02/10/25	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	02/10/25	
Client Sample ID:	PIBLK-PL094119.D			SDG No.:	Q1322	
Lab Sample ID:	I.BLK-PL094119.D			Matrix:	WATER	
Analytical Method:	608.3			% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :	3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094119.D	1		02/10/25	pl021025

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.0061	U	0.0061	0.050	ug/L
319-85-7	beta-BHC	0.014	U	0.014	0.050	ug/L
319-86-8	delta-BHC	0.015	U	0.015	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.0049	U	0.0049	0.050	ug/L
76-44-8	Heptachlor	0.0054	U	0.0054	0.050	ug/L
309-00-2	Aldrin	0.0044	U	0.0044	0.050	ug/L
1024-57-3	Heptachlor epoxide	0.0090	U	0.0090	0.050	ug/L
959-98-8	Endosulfan I	0.0050	U	0.0050	0.050	ug/L
60-57-1	Dieldrin	0.0047	U	0.0047	0.050	ug/L
72-55-9	4,4-DDE	0.0045	U	0.0045	0.050	ug/L
72-20-8	Endrin	0.0043	U	0.0043	0.050	ug/L
33213-65-9	Endosulfan II	0.0075	U	0.0075	0.050	ug/L
72-54-8	4,4-DDD	0.0092	U	0.0092	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.0035	U	0.0035	0.050	ug/L
50-29-3	4,4-DDT	0.0044	U	0.0044	0.050	ug/L
72-43-5	Methoxychlor	0.011	U	0.011	0.050	ug/L
53494-70-5	Endrin ketone	0.0097	U	0.0097	0.050	ug/L
7421-93-4	Endrin aldehyde	0.0099	U	0.0099	0.050	ug/L
5103-71-9	alpha-Chlordane	0.0060	U	0.0060	0.050	ug/L
5103-74-2	gamma-Chlordane	0.0060	U	0.0060	0.050	ug/L
8001-35-2	Toxaphene	0.15	U	0.15	1.00	ug/L
<b>SURROGATES</b>						
2051-24-3	Decachlorobiphenyl	19.6		43 - 140	98%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.3		77 - 126	92%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/10/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/10/25
Client Sample ID:	PIBLK-PL094119.D	SDG No.:	Q1322
Lab Sample ID:	I.BLK-PL094119.D	Matrix:	WATER
Analytical Method:	608.3	% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL Final Vol: 10000 uL
Soil Aliquot Vol:		uL	Test: PESTICIDE Group1
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	
Prep Method :	3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094119.D	1		02/10/25	pl021025

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

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

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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:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BS			SDG No.:	Q1322
Lab Sample ID:	PB166620BS			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094112.D	1	02/07/25 11:55	02/10/25 13:18	PB166620

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.011		0.00060	0.0050	ug/L
58-89-9	gamma-BHC (Lindane)	0.011		0.00050	0.0050	ug/L
76-44-8	Heptachlor	0.011		0.00050	0.0050	ug/L
309-00-2	Aldrin	0.011		0.00040	0.0050	ug/L
319-85-7	beta-BHC	0.012		0.0014	0.0050	ug/L
319-86-8	delta-BHC	0.011	P	0.0015	0.0050	ug/L
1024-57-3	Heptachlor epoxide	0.011		0.00090	0.0050	ug/L
959-98-8	Endosulfan I	0.010		0.00050	0.0050	ug/L
5103-74-2	gamma-Chlordane	0.011		0.00060	0.0050	ug/L
5103-71-9	alpha-Chlordane	0.011		0.00060	0.0050	ug/L
72-55-9	4,4-DDE	0.011		0.00050	0.0050	ug/L
60-57-1	Dieldrin	0.011		0.00050	0.0050	ug/L
72-20-8	Endrin	0.011		0.00040	0.0050	ug/L
33213-65-9	Endosulfan II	0.011		0.00080	0.0050	ug/L
72-54-8	4,4-DDD	0.011		0.00090	0.0050	ug/L
50-29-3	4,4-DDT	0.012		0.00040	0.0050	ug/L
7421-93-4	Endrin aldehyde	0.011		0.0010	0.0050	ug/L
1031-07-8	Endosulfan Sulfate	0.011		0.00040	0.0050	ug/L
72-43-5	Methoxychlor	0.012		0.0011	0.0050	ug/L
53494-70-5	Endrin ketone	0.011		0.0010	0.0050	ug/L
8001-35-2	Toxaphene	0.015	U	0.015	0.10	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	20.7		60 - 140	104%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.8		60 - 140	104%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BS			SDG No.:	Q1322
Lab Sample ID:	PB166620BS			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094112.D	1	02/07/25 11:55	02/10/25 13:18	PB166620

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

U = Not Detected

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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:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BSD			SDG No.:	Q1322
Lab Sample ID:	PB166620BSD			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094113.D	1	02/07/25 11:55	02/10/25 14:24	PB166620

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
319-84-6	alpha-BHC	0.010		0.00060	0.0050	ug/L
58-89-9	gamma-BHC (Lindane)	0.010		0.00050	0.0050	ug/L
76-44-8	Heptachlor	0.011		0.00050	0.0050	ug/L
309-00-2	Aldrin	0.011		0.00040	0.0050	ug/L
319-85-7	beta-BHC	0.011		0.0014	0.0050	ug/L
319-86-8	delta-BHC	0.010	P	0.0015	0.0050	ug/L
1024-57-3	Heptachlor epoxide	0.011		0.00090	0.0050	ug/L
959-98-8	Endosulfan I	0.0085	P	0.00050	0.0050	ug/L
5103-74-2	gamma-Chlordane	0.011		0.00060	0.0050	ug/L
5103-71-9	alpha-Chlordane	0.011		0.00060	0.0050	ug/L
72-55-9	4,4-DDE	0.011		0.00050	0.0050	ug/L
60-57-1	Dieldrin	0.010		0.00050	0.0050	ug/L
72-20-8	Endrin	0.011		0.00040	0.0050	ug/L
33213-65-9	Endosulfan II	0.011		0.00080	0.0050	ug/L
72-54-8	4,4-DDD	0.011		0.00090	0.0050	ug/L
50-29-3	4,4-DDT	0.011		0.00040	0.0050	ug/L
7421-93-4	Endrin aldehyde	0.011		0.0010	0.0050	ug/L
1031-07-8	Endosulfan Sulfate	0.011		0.00040	0.0050	ug/L
72-43-5	Methoxychlor	0.012		0.0011	0.0050	ug/L
53494-70-5	Endrin ketone	0.011		0.0010	0.0050	ug/L
8001-35-2	Toxaphene	0.015	U	0.015	0.10	ug/L
<b>SURROGATES</b>						
877-09-8	Tetrachloro-m-xylene	19.6		60 - 140	98%	SPK: 20
2051-24-3	Decachlorobiphenyl	19.8		60 - 140	99%	SPK: 20

## Report of Analysis

Client:	Spectra East Inc.			Date Collected:	
Project:	Outfall 001 - Orangetown Dis Permit 2025			Date Received:	
Client Sample ID:	PB166620BSD			SDG No.:	Q1322
Lab Sample ID:	PB166620BSD			Matrix:	WATER
Analytical Method:	608.3			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:			uL	Test:	PESTICIDE Group1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL094113.D	1	02/07/25 11:55	02/10/25 14:24	PB166620

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit



A  
B  
C  
D  
E  
F  
G  
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# CALIBRATION

# SUMMARY

**RETENTION TIMES OF INITIAL CALIBRATION**

<b>Contract:</b>	<u>SPEC01</u>				
<b>Lab Code:</b>	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>
<b>Instrument ID:</b>	<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-MR1 ID: 0.32 (mm)

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

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	TO
4,4'-DDD	6.71	6.71	6.71	6.71	6.71	6.71	6.61	6.81
4,4'-DDE	6.19	6.19	6.19	6.19	6.19	6.19	6.09	6.29
4,4'-DDT	7.02	7.02	7.02	7.02	7.02	7.02	6.92	7.12
Aldrin	5.26	5.26	5.26	5.26	5.26	5.26	5.16	5.36
alpha-BHC	4.00	4.00	4.00	4.00	3.99	3.99	3.89	4.09
alpha-Chlordane	6.02	6.02	6.02	6.02	6.02	6.02	5.92	6.12
beta-BHC	4.53	4.53	4.53	4.53	4.53	4.53	4.43	4.63
Decachlorobiphenyl	9.05	9.05	9.05	9.05	9.05	9.05	8.95	9.15
delta-BHC	4.77	4.77	4.77	4.77	4.77	4.77	4.67	4.87
Dieldrin	6.34	6.34	6.34	6.34	6.34	6.34	6.24	6.44
Endosulfan I	6.07	6.07	6.07	6.07	6.07	6.07	5.97	6.17
Endosulfan II	6.79	6.79	6.79	6.79	6.79	6.79	6.69	6.89
Endosulfan sulfate	7.16	7.16	7.16	7.16	7.16	7.16	7.06	7.26
Endrin	6.57	6.57	6.57	6.57	6.57	6.57	6.47	6.67
Endrin aldehyde	6.92	6.92	6.92	6.92	6.92	6.92	6.82	7.02
Endrin ketone	7.64	7.64	7.64	7.64	7.64	7.64	7.54	7.74
gamma-BHC (Lindane)	4.33	4.33	4.33	4.33	4.33	4.33	4.23	4.43
gamma-Chlordane	5.94	5.94	5.94	5.94	5.94	5.94	5.84	6.04
Heptachlor	4.92	4.92	4.91	4.91	4.91	4.91	4.81	5.01
Heptachlor epoxide	5.68	5.68	5.68	5.68	5.68	5.68	5.58	5.78
Methoxychlor	7.50	7.50	7.50	7.50	7.50	7.50	7.40	7.60
Tetrachloro-m-xylene	3.54	3.54	3.54	3.54	3.54	3.54	3.44	3.64

**RETENTION TIMES OF INITIAL CALIBRATION**

<b>Contract:</b>	<u>SPEC01</u>			
<b>Lab Code:</b>	<u>CHEM</u>	<b>Case No.:</b> <u>Q1322</u>	<b>SAS No.:</b> <u>Q1322</u>	<b>SDG NO.:</b> <u>Q1322</u>
<b>Instrument ID:</b>	<u>ECD_L</u>	<b>Calibration Date(s):</b> <u>01/21/2025</u>	<b>Calibration Times:</b> <u>10:57</u>	<b>01/21/2025</b>
				<u>11:51</u>

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

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

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW FROM	TO
4,4'-DDD	5.79	5.78	5.78	5.78	5.78	5.78	5.68	5.88
4,4'-DDE	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDT	6.04	6.03	6.03	6.03	6.03	6.03	5.93	6.13
Aldrin	4.23	4.23	4.23	4.22	4.22	4.22	4.12	4.32
alpha-BHC	3.28	3.28	3.28	3.28	3.28	3.28	3.18	3.38
alpha-Chlordane	5.04	5.04	5.04	5.04	5.04	5.04	4.94	5.14
beta-BHC	3.91	3.91	3.91	3.91	3.91	3.91	3.81	4.01
Decachlorobiphenyl	7.91	7.91	7.91	7.91	7.91	7.91	7.81	8.01
delta-BHC	4.14	4.14	4.14	4.14	4.13	4.14	4.04	4.24
Dieldrin	5.36	5.36	5.36	5.36	5.36	5.36	5.26	5.46
Endosulfan I	5.10	5.10	5.10	5.10	5.10	5.10	5.00	5.20
Endosulfan II	5.93	5.93	5.93	5.93	5.93	5.93	5.83	6.03
Endosulfan sulfate	6.33	6.33	6.33	6.33	6.33	6.33	6.23	6.43
Endrin	5.64	5.64	5.64	5.64	5.64	5.64	5.54	5.74
Endrin aldehyde	6.11	6.11	6.11	6.11	6.11	6.11	6.01	6.21
Endrin ketone	6.84	6.84	6.84	6.84	6.84	6.84	6.74	6.94
gamma-BHC (Lindane)	3.61	3.61	3.61	3.61	3.61	3.61	3.51	3.71
gamma-Chlordane	4.98	4.98	4.98	4.98	4.98	4.98	4.88	5.08
Heptachlor	3.95	3.95	3.95	3.95	3.94	3.94	3.84	4.04
Heptachlor epoxide	4.73	4.73	4.73	4.73	4.73	4.73	4.63	4.83
Methoxychlor	6.61	6.61	6.61	6.61	6.61	6.61	6.51	6.71
Tetrachloro-m-xylene	2.78	2.77	2.77	2.77	2.77	2.77	2.67	2.87

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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
4,4'-DDD	1660930000	1679650000	1932670000	1802720000	2426830000	1900560000	17
4,4'-DDE	2179870000	2169930000	2489080000	2321590000	3012520000	2434600000	14
4,4'-DDT	1755570000	1766710000	2016720000	1907120000	2414170000	1972060000	14
Aldrin	2924220000	2896750000	3292630000	3099660000	4146570000	3271970000	16
alpha-BHC	3537700000	3490280000	3918110000	3562830000	4660310000	3833850000	13
alpha-Chlordane	2458070000	2458490000	2788200000	2666580000	3570690000	2788400000	16
beta-BHC	1393460000	1394440000	1618290000	1508890000	2121530000	1607320000	19
Decachlorobiphenyl	1768480000	1816480000	2098320000	2018470000	2757820000	2091910000	19
delta-BHC	3233860000	3194550000	3605880000	3303370000	4188780000	3505290000	12
Dieldrin	2456580000	2440810000	2788190000	2639340000	3554340000	2775850000	17
Endosulfan I	2304400000	2298550000	2637060000	2528610000	3445650000	2642860000	18
Endosulfan II	2084130000	2100600000	2413950000	2287820000	3160260000	2409350000	18
Endosulfan sulfate	1923100000	1945070000	2248580000	2190510000	3011450000	2263740000	20
Endrin	2079430000	2060990000	2363220000	2218560000	3001890000	2344820000	17
Endrin aldehyde	1673120000	1696040000	1958970000	1896570000	2495580000	1944060000	17
Endrin ketone	2196850000	2205550000	2539700000	2413910000	3257130000	2522630000	17
gamma-BHC (Lindane)	3375960000	3339350000	3767250000	3460830000	4470850000	3682850000	13
gamma-Chlordane	2455830000	2471830000	2815630000	2678390000	3515170000	2787370000	16
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:	SPEC01						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</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:	<u>ZB-MR2</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:	CF 100 =	PL093728.D	CF 075 =	PL093729.D			
	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
4,4'-DDD	3134000000	3054730000	3379160000	2910470000	3304320000	3156540000	6
4,4'-DDE	3891920000	3807640000	4253650000	3749010000	4345130000	4009470000	7
4,4'-DDT	3270010000	3177800000	3542860000	3046890000	3232670000	3254050000	6
Aldrin	4482990000	4370810000	4856520000	4222470000	4876190000	4561800000	6
alpha-BHC	4914190000	4768640000	5271080000	4480730000	5010260000	4888980000	6
alpha-Chlordane	4056970000	3962110000	4424110000	3914810000	4574820000	4186560000	7
beta-BHC	1863440000	1842720000	2072180000	1889740000	2319100000	1997440000	10
Decachlorobiphenyl	3226690000	3193800000	3627020000	3320620000	4152210000	3504070000	11
delta-BHC	4741230000	4607910000	5098810000	4368820000	4939430000	4751240000	6
Dieldrin	4189300000	4076770000	4553570000	3958830000	4699760000	4295650000	7
Endosulfan I	3734100000	3661580000	4099030000	3635320000	4254550000	3876920000	7
Endosulfan II	3553260000	3487640000	3912960000	3484510000	4080760000	3703830000	7
Endosulfan sulfate	3408630000	3353240000	3757030000	3348270000	3963240000	3566080000	8
Endrin	3607760000	3481170000	3870730000	3406140000	4097610000	3692680000	8
Endrin aldehyde	2861460000	2820180000	3183430000	2892290000	3465840000	3044640000	9
Endrin ketone	3965120000	3881890000	4400080000	3907370000	4821740000	4195240000	10
gamma-BHC (Lindane)	4713370000	4597010000	5084610000	4384810000	4926270000	4741210000	6
gamma-Chlordane	4137240000	4016860000	4483010000	3935490000	4615500000	4237620000	7
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: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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	
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

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**INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES**

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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	
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: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/10/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 10:55 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	Avg RT	RT Window From	TO	Diff RT
Decachlorobiphenyl	9.05	9.05	8.95	9.15	0.00
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.01
beta-BHC	4.53	4.53	4.43	4.63	0.00
delta-BHC	4.77	4.77	4.67	4.87	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
Aldrin	5.26	5.26	5.16	5.36	0.00
Heptachlor epoxide	5.68	5.68	5.58	5.78	0.00
Endosulfan I	6.07	6.07	5.97	6.17	0.00
Dieldrin	6.34	6.34	6.24	6.44	0.00
4,4'-DDE	6.19	6.19	6.09	6.29	0.00
Endrin	6.57	6.57	6.47	6.67	0.00
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.16	7.16	7.06	7.26	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.50	7.50	7.40	7.60	0.00
Endrin ketone	7.64	7.64	7.54	7.74	0.00
Endrin aldehyde	6.92	6.92	6.82	7.02	0.00
alpha-Chlordane	6.02	6.02	5.92	6.12	0.00
gamma-Chlordane	5.94	5.94	5.84	6.04	0.00

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/10/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 10:55 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.77	2.77	2.67	2.87	0.00
alpha-BHC	3.28	3.28	3.18	3.38	0.00
beta-BHC	3.91	3.91	3.81	4.01	0.00
delta-BHC	4.13	4.14	4.04	4.24	0.01
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.94	3.95	3.85	4.05	0.01
Aldrin	4.22	4.23	4.13	4.33	0.01
Heptachlor epoxide	4.73	4.73	4.63	4.83	0.00
Endosulfan I	5.10	5.10	5.00	5.20	0.01
Dieldrin	5.36	5.36	5.26	5.46	0.00
4,4'-DDE	5.23	5.23	5.13	5.33	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Endosulfan II	5.93	5.93	5.83	6.03	0.00
4,4'-DDD	5.78	5.78	5.68	5.88	0.00
Endosulfan sulfate	6.33	6.33	6.23	6.43	0.00
4,4'-DDT	6.03	6.03	5.93	6.13	0.00
Methoxychlor	6.61	6.61	6.51	6.71	0.00
Endrin ketone	6.84	6.84	6.74	6.94	0.00
Endrin aldehyde	6.11	6.11	6.01	6.21	0.00
alpha-Chlordane	5.04	5.04	4.94	5.14	0.00
gamma-Chlordane	4.98	4.98	4.88	5.08	0.01

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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

 Client Sample No.: CCAL01 Date Analyzed: 02/10/2025

 Lab Sample No.: PSTDCCC050 Data File : PL094110.D Time Analyzed: 10:55

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	6.709	6.608	6.808	48.950	50.000	-2.1
4,4'-DDE	6.192	6.091	6.291	49.320	50.000	-1.4
4,4'-DDT	7.022	6.922	7.122	48.790	50.000	-2.4
Aldrin	5.257	5.156	5.356	47.390	50.000	-5.2
alpha-BHC	3.995	3.895	4.095	46.910	50.000	-6.2
alpha-Chlordane	6.018	5.917	6.117	46.130	50.000	-7.7
beta-BHC	4.525	4.425	4.625	47.190	50.000	-5.6
Decachlorobiphenyl	9.052	8.953	9.153	43.650	50.000	-12.7
delta-BHC	4.773	4.672	4.872	47.480	50.000	-5.0
Dieldrin	6.343	6.243	6.443	45.430	50.000	-9.1
Endosulfan I	6.069	5.967	6.167	45.640	50.000	-8.7
Endosulfan II	6.793	6.692	6.892	44.650	50.000	-10.7
Endosulfan sulfate	7.157	7.057	7.257	44.280	50.000	-11.4
Endrin	6.573	6.472	6.672	45.390	50.000	-9.2
Endrin aldehyde	6.923	6.823	7.023	45.070	50.000	-9.9
Endrin ketone	7.642	7.542	7.742	44.060	50.000	-11.9
gamma-BHC (Lindane)	4.327	4.227	4.427	47.030	50.000	-5.9
gamma-Chlordane	5.939	5.838	6.038	46.300	50.000	-7.4
Heptachlor	4.915	4.814	5.014	48.210	50.000	-3.6
Heptachlor epoxide	5.683	5.582	5.782	46.220	50.000	-7.6
Methoxychlor	7.498	7.398	7.598	49.980	50.000	0.0
Tetrachloro-m-xylene	3.539	3.439	3.639	46.630	50.000	-6.7

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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

Client Sample No.: CCAL01 Date Analyzed: 02/10/2025

Lab Sample No.: PSTDCCC050 Data File : PL094110.D Time Analyzed: 10:55

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	5.783	5.684	5.884	51.220	50.000	2.4
4,4'-DDE	5.228	5.130	5.330	50.350	50.000	0.7
4,4'-DDT	6.033	5.934	6.134	51.660	50.000	3.3
Aldrin	4.223	4.125	4.325	48.960	50.000	-2.1
alpha-BHC	3.276	3.177	3.377	49.190	50.000	-1.6
alpha-Chlordane	5.039	4.940	5.140	48.870	50.000	-2.3
beta-BHC	3.906	3.807	4.007	48.750	50.000	-2.5
Decachlorobiphenyl	7.908	7.810	8.010	46.580	50.000	-6.8
delta-BHC	4.134	4.036	4.236	48.990	50.000	-2.0
Dieldrin	5.359	5.261	5.461	48.360	50.000	-3.3
Endosulfan I	5.095	4.996	5.196	48.720	50.000	-2.6
Endosulfan II	5.930	5.831	6.031	48.600	50.000	-2.8
Endosulfan sulfate	6.332	6.233	6.433	47.730	50.000	-4.5
Endrin	5.635	5.536	5.736	49.300	50.000	-1.4
Endrin aldehyde	6.109	6.010	6.210	47.440	50.000	-5.1
Endrin ketone	6.837	6.739	6.939	47.970	50.000	-4.1
gamma-BHC (Lindane)	3.606	3.507	3.707	48.930	50.000	-2.1
gamma-Chlordane	4.975	4.877	5.077	49.450	50.000	-1.1
Heptachlor	3.944	3.845	4.045	48.150	50.000	-3.7
Heptachlor epoxide	4.726	4.627	4.827	48.580	50.000	-2.8
Methoxychlor	6.608	6.509	6.709	48.860	50.000	-2.3
Tetrachloro-m-xylene	2.774	2.674	2.874	48.150	50.000	-3.7

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/10/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 16:07 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	Avg RT	RT WINDOW FROM	TO	DIFF RT
Decachlorobiphenyl	9.05	9.05	8.95	9.15	0.00
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
alpha-BHC	4.00	4.00	3.90	4.10	0.01
beta-BHC	4.53	4.53	4.43	4.63	0.00
delta-BHC	4.77	4.77	4.67	4.87	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
Aldrin	5.26	5.26	5.16	5.36	0.00
Heptachlor epoxide	5.68	5.68	5.58	5.78	0.00
Endosulfan I	6.07	6.07	5.97	6.17	0.00
Dieldrin	6.34	6.34	6.24	6.44	0.00
4,4'-DDE	6.19	6.19	6.09	6.29	0.00
Endrin	6.57	6.57	6.47	6.67	0.00
Endosulfan II	6.79	6.79	6.69	6.89	0.00
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.16	7.16	7.06	7.26	0.00
4,4'-DDT	7.02	7.02	6.92	7.12	0.00
Methoxychlor	7.50	7.50	7.40	7.60	0.00
Endrin ketone	7.64	7.64	7.54	7.74	0.00
Endrin aldehyde	6.92	6.92	6.82	7.02	0.00
alpha-Chlordane	6.02	6.02	5.92	6.12	0.00
gamma-Chlordane	5.94	5.94	5.84	6.04	0.00

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

Continuing Calib Date: 02/10/2025 Initial Calibration Date(s): 01/21/2025 01/21/2025

Continuing Calib Time: 16:07 Initial Calibration Time(s): 10:57 11:51

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

COMPOUND	CCAL RT	Avg RT	RT Window From	TO	Diff RT
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.77	2.77	2.67	2.87	0.00
alpha-BHC	3.28	3.28	3.18	3.38	0.00
beta-BHC	3.91	3.91	3.81	4.01	0.00
delta-BHC	4.14	4.14	4.04	4.24	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
Aldrin	4.22	4.23	4.13	4.33	0.01
Heptachlor epoxide	4.73	4.73	4.63	4.83	0.00
Endosulfan I	5.10	5.10	5.00	5.20	0.01
Dieldrin	5.36	5.36	5.26	5.46	0.00
4,4'-DDE	5.23	5.23	5.13	5.33	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Endosulfan II	5.93	5.93	5.83	6.03	0.00
4,4'-DDD	5.78	5.78	5.68	5.88	0.00
Endosulfan sulfate	6.33	6.33	6.23	6.43	0.00
4,4'-DDT	6.03	6.03	5.93	6.13	0.00
Methoxychlor	6.61	6.61	6.51	6.71	0.00
Endrin ketone	6.84	6.84	6.74	6.94	0.00
Endrin aldehyde	6.11	6.11	6.01	6.21	0.00
alpha-Chlordane	5.04	5.04	4.94	5.14	0.00
gamma-Chlordane	4.98	4.98	4.88	5.08	0.00

## CALIBRATION VERIFICATION SUMMARY

 Contract: SPEC01

 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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

 Client Sample No.: CCAL02 Date Analyzed: 02/10/2025

 Lab Sample No.: PSTDCCC050 Data File : PL094120.D Time Analyzed: 16:07

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	6.709	6.608	6.808	51.050	50.000	2.1
4,4'-DDE	6.191	6.091	6.291	50.240	50.000	0.5
4,4'-DDT	7.022	6.922	7.122	49.290	50.000	-1.4
Aldrin	5.256	5.156	5.356	48.590	50.000	-2.8
alpha-BHC	3.995	3.895	4.095	47.890	50.000	-4.2
alpha-Chlordane	6.018	5.917	6.117	47.170	50.000	-5.7
beta-BHC	4.525	4.425	4.625	47.840	50.000	-4.3
Decachlorobiphenyl	9.054	8.953	9.153	44.120	50.000	-11.8
delta-BHC	4.772	4.672	4.872	48.680	50.000	-2.6
Dieldrin	6.343	6.243	6.443	46.290	50.000	-7.4
Endosulfan I	6.069	5.967	6.167	46.610	50.000	-6.8
Endosulfan II	6.793	6.692	6.892	45.430	50.000	-9.1
Endosulfan sulfate	7.157	7.057	7.257	45.230	50.000	-9.5
Endrin	6.571	6.472	6.672	46.220	50.000	-7.6
Endrin aldehyde	6.923	6.823	7.023	45.580	50.000	-8.8
Endrin ketone	7.642	7.542	7.742	45.140	50.000	-9.7
gamma-BHC (Lindane)	4.327	4.227	4.427	48.170	50.000	-3.7
gamma-Chlordane	5.939	5.838	6.038	47.140	50.000	-5.7
Heptachlor	4.915	4.814	5.014	49.020	50.000	-2.0
Heptachlor epoxide	5.683	5.582	5.782	46.990	50.000	-6.0
Methoxychlor	7.499	7.398	7.598	50.950	50.000	1.9
Tetrachloro-m-xylene	3.538	3.439	3.639	47.950	50.000	-4.1

### CALIBRATION VERIFICATION SUMMARY

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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

Client Sample No.: CCAL02 Date Analyzed: 02/10/2025

Lab Sample No.: PSTDCCC050 Data File : PL094120.D Time Analyzed: 16:07

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
4,4'-DDD	5.783	5.684	5.884	52.890	50.000	5.8
4,4'-DDE	5.228	5.130	5.330	52.410	50.000	4.8
4,4'-DDT	6.033	5.934	6.134	52.010	50.000	4.0
Aldrin	4.223	4.125	4.325	50.090	50.000	0.2
alpha-BHC	3.276	3.177	3.377	50.610	50.000	1.2
alpha-Chlordane	5.040	4.940	5.140	49.750	50.000	-0.5
beta-BHC	3.906	3.807	4.007	49.740	50.000	-0.5
Decachlorobiphenyl	7.908	7.810	8.010	47.540	50.000	-4.9
delta-BHC	4.135	4.036	4.236	50.090	50.000	0.2
Dieldrin	5.360	5.261	5.461	49.110	50.000	-1.8
Endosulfan I	5.095	4.996	5.196	47.330	50.000	-5.3
Endosulfan II	5.931	5.831	6.031	49.050	50.000	-1.9
Endosulfan sulfate	6.332	6.233	6.433	48.630	50.000	-2.7
Endrin	5.635	5.536	5.736	50.130	50.000	0.3
Endrin aldehyde	6.110	6.010	6.210	47.960	50.000	-4.1
Endrin ketone	6.838	6.739	6.939	48.480	50.000	-3.0
gamma-BHC (Lindane)	3.606	3.507	3.707	50.300	50.000	0.6
gamma-Chlordane	4.976	4.877	5.077	50.430	50.000	0.9
Heptachlor	3.944	3.845	4.045	49.930	50.000	-0.1
Heptachlor epoxide	4.726	4.627	4.827	49.700	50.000	-0.6
Methoxychlor	6.608	6.509	6.709	50.560	50.000	1.1
Tetrachloro-m-xylene	2.774	2.674	2.874	49.910	50.000	-0.2

### PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</u>
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**Contract: SPEC01**

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 AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
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 AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
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: SPEC01

Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322

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

Client Sample No. (PEM): PEM - PL094109.D Date Analyzed: 02/10/2025

Lab Sample No.(PEM): PEM Time Analyzed: 10:41

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	9.053	8.950	9.150	22.520	20.000	12.6
Tetrachloro-m-xylene	3.539	3.490	3.590	23.700	20.000	18.5
alpha-BHC	3.994	3.940	4.040	12.460	10.000	24.6
beta-BHC	4.526	4.480	4.580	12.740	10.000	27.4
gamma-BHC (Lindane)	4.327	4.280	4.380	12.190	10.000	21.9
Endrin	6.572	6.500	6.640	51.160	50.000	2.3
4,4'-DDT	7.023	6.950	7.090	112.440	100.000	12.4
Methoxychlor	7.499	7.430	7.570	259.730	250.000	3.9

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

Client Sample No. (PEM): PEM - PL094109.D Date Analyzed: 02/10/2025

Lab Sample No.(PEM): PEM Time Analyzed: 10:41

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
Decachlorobiphenyl	7.908	7.810	8.010	22.450	20.000	12.3
Tetrachloro-m-xylene	2.774	2.720	2.820	23.240	20.000	16.2
alpha-BHC	3.276	3.230	3.330	11.170	10.000	11.7
beta-BHC	3.906	3.860	3.960	12.590	10.000	25.9
gamma-BHC (Lindane)	3.606	3.560	3.660	10.900	10.000	9.0
Endrin	5.636	5.570	5.710	56.950	50.000	13.9
4,4'-DDT	6.034	5.960	6.100	131.610	100.000	31.6
Methoxychlor	6.608	6.540	6.680	271.950	250.000	8.8

### Analytical Sequence

Client: Spectra East Inc.	SDG No.: Q1322		
Project: Outfall 001 - Orangetown Dis Permit 2025	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 #
I.BLK	LBLK	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
PSTDIICC100	PSTDIICC100	01/21/2025	10:57	PL093728.D	9.05	3.54
PSTDIICC075	PSTDIICC075	01/21/2025	11:10	PL093729.D	9.05	3.54
PSTDIICC050	PSTDIICC050	01/21/2025	11:24	PL093730.D	9.05	3.54
PSTDIICC025	PSTDIICC025	01/21/2025	11:38	PL093731.D	9.05	3.54
PSTDIICC005	PSTDIICC005	01/21/2025	11:51	PL093732.D	9.05	3.54
PCHLORICC500	PCHLORICC500	01/21/2025	12:32	PL093735.D	9.05	3.54
PTOXICCC500	PTOXICCC500	01/21/2025	13:39	PL093740.D	9.05	3.54
I.BLK	LBLK	02/10/2025	10:28	PL094108.D	9.05	3.54
PEM	PEM	02/10/2025	10:41	PL094109.D	9.05	3.54
PSTDCCC050	PSTDCCC050	02/10/2025	10:55	PL094110.D	9.05	3.54
PB166620BL	PB166620BL	02/10/2025	11:18	PL094111.D	9.06	3.55
PB166620BS	PB166620BS	02/10/2025	13:18	PL094112.D	9.05	3.54
PB166620BSD	PB166620BSD	02/10/2025	14:24	PL094113.D	9.06	3.54
MANHOLE	Q1322-01	02/10/2025	14:43	PL094114.D	9.06	3.54
I.BLK	LBLK	02/10/2025	15:53	PL094119.D	9.05	3.54
PSTDCCC050	PSTDCCC050	02/10/2025	16:07	PL094120.D	9.05	3.54

A  
B  
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G  
H

## Analytical Sequence

Client: Spectra East Inc.	SDG No.: Q1322		
Project: Outfall 001 - Orangetown Dis Permit 2025	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 #
I.BLK	LBLK	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
PSTDICC100	PSTDICC100	01/21/2025	10:57	PL093728.D	7.91	2.78
PSTDICC075	PSTDICC075	01/21/2025	11:10	PL093729.D	7.91	2.77
PSTDICC050	PSTDICC050	01/21/2025	11:24	PL093730.D	7.91	2.77
PSTDICC025	PSTDICC025	01/21/2025	11:38	PL093731.D	7.91	2.77
PSTDICC005	PSTDICC005	01/21/2025	11:51	PL093732.D	7.91	2.77
PCHLORICC500	PCHLORICC500	01/21/2025	12:32	PL093735.D	7.91	2.77
PTOXICCC500	PTOXICCC500	01/21/2025	13:39	PL093740.D	7.91	2.77
I.BLK	LBLK	02/10/2025	10:28	PL094108.D	7.91	2.77
PEM	PEM	02/10/2025	10:41	PL094109.D	7.91	2.77
PSTDCCC050	PSTDCCC050	02/10/2025	10:55	PL094110.D	7.91	2.77
PB166620BL	PB166620BL	02/10/2025	11:18	PL094111.D	7.91	2.77
PB166620BS	PB166620BS	02/10/2025	13:18	PL094112.D	7.91	2.77
PB166620BSD	PB166620BSD	02/10/2025	14:24	PL094113.D	7.91	2.77
MANHOLE	Q1322-01	02/10/2025	14:43	PL094114.D	7.91	2.77
I.BLK	LBLK	02/10/2025	15:53	PL094119.D	7.91	2.77
PSTDCCC050	PSTDCCC050	02/10/2025	16:07	PL094120.D	7.91	2.77

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### COMPOUND DETECTION SUMMARY

**CLIENT SAMPLE NO.**

PB166620BS

Contract:	<u>SPEC01</u>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</u>
Lab Sample ID:	<u>PB166620BS</u>		Date(s) Analyzed:	<u>02/10/2025</u>		<u>02/10/2025</u>	
Instrument ID (1):	<u>ECD_L</u>		Instrument ID (2):	<u>ECD_L</u>			
GC Column: (1):	<u>ZB-MR1</u>		ID: <u>0.32</u> (mm)	GC Column:(2):	<u>ZB-MR2</u>		ID: <u>0.32</u> (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.71	6.66	6.76	0.013	13.9
	2	5.78	5.73	5.83	0.011	
4,4'-DDE	1	6.19	6.14	6.24	0.013	12.3
	2	5.23	5.18	5.28	0.011	
alpha-BHC	1	3.99	3.94	4.04	0.012	12.4
	2	3.28	3.23	3.33	0.011	
Aldrin	1	5.26	5.21	5.31	0.012	6.8
	2	4.22	4.17	4.27	0.011	
4,4'-DDT	1	7.02	6.97	7.07	0.013	11.3
	2	6.03	5.98	6.08	0.012	
alpha-Chlordane	1	6.02	5.97	6.07	0.012	6.8
	2	5.04	4.99	5.09	0.011	
beta-BHC	1	4.53	4.48	4.58	0.012	2.5
	2	3.91	3.86	3.96	0.012	
delta-BHC	1	4.77	4.72	4.82	0.014	30
	2	4.13	4.08	4.18	0.011	
Endosulfan I	1	6.07	6.02	6.12	0.012	19
	2	5.10	5.05	5.15	0.010	
Dieldrin	1	6.34	6.29	6.39	0.012	10.5
	2	5.36	5.31	5.41	0.011	
Endosulfan II	1	6.79	6.74	6.84	0.012	10.2
	2	5.93	5.88	5.98	0.011	
Endosulfan sulfate	1	7.16	7.11	7.21	0.012	7.7
	2	6.33	6.28	6.38	0.011	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	0.012	8.9
	2	3.61	3.56	3.66	0.011	
Heptachlor	1	4.91	4.86	4.96	0.013	16.5
	2	3.94	3.89	3.99	0.011	

### COMPOUND DETECTION SUMMARY

**CLIENT SAMPLE NO.**

**PB166620BS**

<b>Contract:</b>	<b>SPEC01</b>	
<b>Lab Code:</b>	<b>CHEM</b>	<b>Case No.:</b> <u>Q1322</u>
<b>Lab Sample ID:</b>	<u>PB166620BS</u>	
<b>Instrument ID (1):</b>	<u>ECD_L</u>	
<b>GC Column: (1):</b>	<u>ZB-MR1</u>	<b>ID:</b> <u>0.32 (mm)</u>
<b>GC Column:(2):</b>	<u>ZB-MR2</u>	
	<b>ID:</b>	<b>0.32 (mm)</b>

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Heptachlor epoxide	1	5.68	5.63	5.73	0.013	12.4
	2	4.73	4.68	4.78	0.011	
Endrin	1	6.57	6.52	6.62	0.012	6.1
	2	5.63	5.58	5.68	0.011	
Endrin aldehyde	1	6.92	6.87	6.97	0.012	9.3
	2	6.11	6.06	6.16	0.011	
Methoxychlor	1	7.50	7.45	7.55	0.013	7
	2	6.61	6.56	6.66	0.012	
Endrin ketone	1	7.64	7.59	7.69	0.012	4.3
	2	6.84	6.79	6.89	0.011	
gamma-Chlordane	1	5.94	5.89	5.99	0.012	6.8
	2	4.98	4.93	5.03	0.011	

### COMPOUND DETECTION SUMMARY

**CLIENT SAMPLE NO.**

PB166620BSD

Contract:	<u>SPEC01</u>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1322</u>	SAS No.:	<u>Q1322</u>	SDG NO.:	<u>Q1322</u>
Lab Sample ID:	<u>PB166620BSD</u>		Date(s) Analyzed:	<u>02/10/2025</u>		<u>02/10/2025</u>	
Instrument ID (1):	<u>ECD_L</u>		Instrument ID (2):	<u>ECD_L</u>			
GC Column: (1):	<u>ZB-MR1</u>		ID: <u>0.32</u> (mm)	GC Column:(2):	<u>ZB-MR2</u>		ID: <u>0.32</u> (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
alpha-BHC	1	4.00	3.95	4.05	0.011	12.2
	2	3.28	3.23	3.33	0.010	
Aldrin	1	5.26	5.21	5.31	0.012	7.1
	2	4.22	4.17	4.27	0.011	
beta-BHC	1	4.53	4.48	4.58	0.011	1.8
	2	3.91	3.86	3.96	0.011	
4,4'-DDE	1	6.20	6.15	6.25	0.012	8.6
	2	5.23	5.18	5.28	0.011	
4,4'-DDD	1	6.71	6.66	6.76	0.012	12
	2	5.78	5.73	5.83	0.011	
4,4'-DDT	1	7.03	6.98	7.08	0.012	8.6
	2	6.03	5.98	6.08	0.011	
alpha-Chlordane	1	6.02	5.97	6.07	0.012	7.1
	2	5.04	4.99	5.09	0.011	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	0.011	8.5
	2	3.61	3.56	3.66	0.010	
Heptachlor	1	4.92	4.87	4.97	0.012	15.7
	2	3.95	3.90	4.00	0.011	
delta-BHC	1	4.78	4.73	4.83	0.013	28.3
	2	4.14	4.09	4.19	0.010	
Heptachlor epoxide	1	5.69	5.64	5.74	0.012	13.9
	2	4.73	4.68	4.78	0.011	
Endosulfan I	1	6.07	6.02	6.12	0.012	30.8
	2	5.10	5.05	5.15	0.0085	
Dieldrin	1	6.35	6.30	6.40	0.011	8.3
	2	5.36	5.31	5.41	0.010	
Endrin	1	6.58	6.53	6.63	0.011	3.5
	2	5.64	5.59	5.69	0.012	

### COMPOUND DETECTION SUMMARY

**CLIENT SAMPLE NO.**

**PB166620BSD**

<b>Contract:</b>	<b>SPEC01</b>	
<b>Lab Code:</b>	<b>CHEM</b>	<b>Case No.:</b> <u>Q1322</u>
<b>Lab Sample ID:</b>	<u>PB166620BSD</u>	
<b>Instrument ID (1):</b>	<u>ECD_L</u>	
<b>GC Column: (1):</b>	<u>ZB-MR1</u>	<b>ID:</b> <u>0.32 (mm)</u>
<b>GC Column:(2):</b>	<u>ZB-MR2</u>	
	<b>ID:</b>	<b>0.32 (mm)</b>

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan II	1	6.80	6.75	6.85	0.012	8.1
	2	5.93	5.88	5.98	0.011	
Endrin aldehyde	1	6.93	6.88	6.98	0.011	5.4
	2	6.11	6.06	6.16	0.011	
Endosulfan sulfate	1	7.16	7.11	7.21	0.012	8.1
	2	6.33	6.28	6.38	0.011	
Methoxychlor	1	7.50	7.45	7.55	0.012	1.7
	2	6.61	6.56	6.66	0.012	
Endrin ketone	1	7.65	7.60	7.70	0.011	1.8
	2	6.84	6.79	6.89	0.011	
gamma-Chlordane	1	5.94	5.89	5.99	0.011	3.6
	2	4.98	4.93	5.03	0.011	

## LAB CHRONICLE

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM					
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025					
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1322-01	MANHOLE	Water			02/06/25			02/06/25
			Mercury	245.1		02/11/25	02/11/25	
			Metals ICP-Group1	200.7		02/17/25	02/18/25	

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

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**Hit Summary Sheet  
SW-846**

**SDG No.:** Q1322

**Order ID:** Q1322

**Client:** Spectra East Inc.

**Project ID:** Outfall 001 - Orangetown Dis Permit 2025

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID :	MANHOLE							
Q1322-01	MANHOLE	Water	Copper	56.3		1.52	10.0	ug/L
Q1322-01	MANHOLE	Water	Zinc	140		1.44	20.0	ug/L



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# SAMPLE DATA

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25
Client Sample ID:	MANHOLE	SDG No.:	Q1322
Lab Sample ID:	Q1322-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	2.84	U	1	2.84	10.0	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-41-7	Beryllium	0.19	U	1	0.19	3.00	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-43-9	Cadmium	0.21	U	1	0.21	3.00	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-47-3	Chromium	0.52	U	1	0.52	5.00	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-50-8	Copper	56.3		1	1.52	10.0	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7439-92-1	Lead	1.57	U	1	1.57	6.00	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7439-97-6	Mercury	0.022	U	1	0.022	0.20	ug/L	02/11/25 13:00	02/11/25 15:50	E245.1	
7440-02-0	Nickel	1.28	U	1	1.28	20.0	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7782-49-2	Selenium	3.07	U	1	3.07	10.0	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-22-4	Silver	0.83	U	1	0.83	5.00	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	
7440-66-6	Zinc	140		1	1.44	20.0	ug/L	02/17/25 09:00	02/18/25 12:50	EPA 200.7	

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group1			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



METAL  
CALIBRATION  
DATA

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV96	Mercury	3.85	4.0	96	95 - 105	CV	02/11/2025	15:17	LB134671

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result		True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L								
CCV56	Mercury	5.24		5.0	105	90 - 110	CV	02/11/2025	15:21	LB134671
CCV57	Mercury	5.01		5.0	100	90 - 110	CV	02/11/2025	15:59	LB134671
CCV58	Mercury	5.17		5.0	103	90 - 110	CV	02/11/2025	16:20	LB134671

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** Spectra East Inc.

**SDG No.:** Q1322

**Contract:** SPEC01

**Lab Code:** CHEM

**Case No.:** Q1322

**SAS No.:** Q1322

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

Sample ID	Analyte	Result		% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L	True Value						
ICV01	Arsenic	1020	1000	102	95 - 105	P	02/18/2025	11:58	LB134743
	Beryllium	519	510	102	95 - 105	P	02/18/2025	11:58	LB134743
	Cadmium	496	510	97	95 - 105	P	02/18/2025	11:58	LB134743
	Chromium	514	520	99	95 - 105	P	02/18/2025	11:58	LB134743
	Copper	514	510	101	95 - 105	P	02/18/2025	11:58	LB134743
	Lead	992	1000	99	95 - 105	P	02/18/2025	11:58	LB134743
	Nickel	552	530	104	95 - 105	P	02/18/2025	11:58	LB134743
	Selenium	1020	1000	102	95 - 105	P	02/18/2025	11:58	LB134743
	Silver	250	250	100	95 - 105	P	02/18/2025	11:58	LB134743
	Zinc	985	1000	98	95 - 105	P	02/18/2025	11:58	LB134743

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Spectra East Inc. SDG No.: Q1322  
 Contract: SPEC01 Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322  
 Initial Calibration Source: EPA  
 Continuing Calibration Source: Inorganic Ventures

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Sample ID	Analyte	Result		% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L	True Value						
LLICV01	Arsenic	23.3	20.0	116	80 - 120	P	02/18/2025	12:10	LB134743
	Beryllium	5.62	6.0	94	80 - 120	P	02/18/2025	12:10	LB134743
	Cadmium	6.01	6.0	100	80 - 120	P	02/18/2025	12:10	LB134743
	Chromium	10.2	10.0	102	80 - 120	P	02/18/2025	12:10	LB134743
	Copper	21.8	20.0	109	80 - 120	P	02/18/2025	12:10	LB134743
	Lead	12.0	12.0	100	80 - 120	P	02/18/2025	12:10	LB134743
	Nickel	38.6	40.0	97	80 - 120	P	02/18/2025	12:10	LB134743
	Selenium	19.8	20.0	99	80 - 120	P	02/18/2025	12:10	LB134743
	Silver	10.4	10.0	104	80 - 120	P	02/18/2025	12:10	LB134743
	Zinc	45.2	40.0	113	80 - 120	P	02/18/2025	12:10	LB134743

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** Spectra East Inc.      **SDG No.:** Q1322  
**Contract:** SPEC01      **Lab Code:** CHEM      **Case No.:** Q1322      **SAS No.:** Q1322  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** Inorganic Ventures

Sample ID	Analyte	Result		% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L	True Value						
CCV01	Arsenic	4940	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Beryllium	244	250	98	90 - 110	P	02/18/2025	12:41	LB134743
	Cadmium	2470	2500	99	90 - 110	P	02/18/2025	12:41	LB134743
	Chromium	1000	1000	100	90 - 110	P	02/18/2025	12:41	LB134743
	Copper	1250	1250	100	90 - 110	P	02/18/2025	12:41	LB134743
	Lead	4940	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Nickel	2470	2500	99	90 - 110	P	02/18/2025	12:41	LB134743
	Selenium	4960	5000	99	90 - 110	P	02/18/2025	12:41	LB134743
	Silver	1250	1250	100	90 - 110	P	02/18/2025	12:41	LB134743
	Zinc	2490	2500	100	90 - 110	P	02/18/2025	12:41	LB134743
CCV02	Arsenic	5030	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Beryllium	244	250	98	90 - 110	P	02/18/2025	13:32	LB134743
	Cadmium	2470	2500	99	90 - 110	P	02/18/2025	13:32	LB134743
	Chromium	1000	1000	100	90 - 110	P	02/18/2025	13:32	LB134743
	Copper	1270	1250	102	90 - 110	P	02/18/2025	13:32	LB134743
	Lead	4950	5000	99	90 - 110	P	02/18/2025	13:32	LB134743
	Nickel	2480	2500	99	90 - 110	P	02/18/2025	13:32	LB134743
	Selenium	5040	5000	101	90 - 110	P	02/18/2025	13:32	LB134743
	Silver	1250	1250	100	90 - 110	P	02/18/2025	13:32	LB134743
	Zinc	2510	2500	100	90 - 110	P	02/18/2025	13:32	LB134743
CCV03	Arsenic	5000	5000	100	90 - 110	P	02/18/2025	14:23	LB134743
	Beryllium	235	250	94	90 - 110	P	02/18/2025	14:23	LB134743
	Cadmium	2450	2500	98	90 - 110	P	02/18/2025	14:23	LB134743
	Chromium	993	1000	99	90 - 110	P	02/18/2025	14:23	LB134743
	Copper	1260	1250	100	90 - 110	P	02/18/2025	14:23	LB134743
	Lead	4910	5000	98	90 - 110	P	02/18/2025	14:23	LB134743
	Nickel	2460	2500	98	90 - 110	P	02/18/2025	14:23	LB134743
	Selenium	5040	5000	101	90 - 110	P	02/18/2025	14:23	LB134743
	Silver	1240	1250	99	90 - 110	P	02/18/2025	14:23	LB134743
	Zinc	2470	2500	99	90 - 110	P	02/18/2025	14:23	LB134743
CCV04	Arsenic	4680	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Beryllium	239	250	96	90 - 110	P	02/18/2025	15:19	LB134743
	Cadmium	2340	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Chromium	960	1000	96	90 - 110	P	02/18/2025	15:19	LB134743

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** Spectra East Inc.      **SDG No.:** Q1322  
**Contract:** SPEC01      **Lab Code:** CHEM      **Case No.:** Q1322      **SAS No.:** Q1322  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** Inorganic Ventures

Sample ID	Analyte	Result		% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L	True Value						
CCV04	Copper	1200	1250	96	90 - 110	P	02/18/2025	15:19	LB134743
	Lead	4700	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Nickel	2360	2500	94	90 - 110	P	02/18/2025	15:19	LB134743
	Selenium	4700	5000	94	90 - 110	P	02/18/2025	15:19	LB134743
	Silver	1210	1250	96	90 - 110	P	02/18/2025	15:19	LB134743
	Zinc	2380	2500	95	90 - 110	P	02/18/2025	15:19	LB134743
CCV05	Arsenic	4890	5000	98	90 - 110	P	02/18/2025	16:06	LB134743
	Beryllium	229	250	92	90 - 110	P	02/18/2025	16:06	LB134743
	Cadmium	2390	2500	96	90 - 110	P	02/18/2025	16:06	LB134743
	Chromium	957	1000	96	90 - 110	P	02/18/2025	16:06	LB134743
	Copper	1240	1250	99	90 - 110	P	02/18/2025	16:06	LB134743
	Lead	4790	5000	96	90 - 110	P	02/18/2025	16:06	LB134743
	Nickel	2400	2500	96	90 - 110	P	02/18/2025	16:06	LB134743
	Selenium	4930	5000	99	90 - 110	P	02/18/2025	16:06	LB134743
	Silver	1210	1250	96	90 - 110	P	02/18/2025	16:06	LB134743
	Zinc	2360	2500	94	90 - 110	P	02/18/2025	16:06	LB134743



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
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## Metals

- 2b -

### CRDL STANDARD FOR AA & ICP

**Client:** Spectra East Inc.

**SDG No.:** Q1322

**Contract:** SPEC01

**Lab Code:** CHEM

**Case No.:** Q1322

**SAS No.:** Q1322

**Initial Calibration Source:**

**Continuing Calibration Source:**

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.055	0.05	111	40 - 160	CV	02/11/2025	15:28	LB134671
CRI01	Arsenic	22.9	20.0	114	40 - 160	P	02/18/2025	12:18	LB134743
	Beryllium	5.61	6.0	94	40 - 160	P	02/18/2025	12:18	LB134743
	Cadmium	6.11	6.0	102	40 - 160	P	02/18/2025	12:18	LB134743
	Chromium	10.3	10.0	103	40 - 160	P	02/18/2025	12:18	LB134743
	Copper	21.9	20.0	110	40 - 160	P	02/18/2025	12:18	LB134743
	Lead	13.4	12.0	111	40 - 160	P	02/18/2025	12:18	LB134743
	Nickel	39.0	40.0	98	40 - 160	P	02/18/2025	12:18	LB134743
	Selenium	19.6	20.0	98	40 - 160	P	02/18/2025	12:18	LB134743
	Silver	10.3	10.0	103	40 - 160	P	02/18/2025	12:18	LB134743
	Zinc	44.3	40.0	111	40 - 160	P	02/18/2025	12:18	LB134743



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

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## Metals

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Spectra East Inc.	SDG No.:	Q1322						
Contract:	SPEC01	Lab Code:	CHEM						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB96	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	15:19	LB134671

## Metals

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322						
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM						
			Case No.: Q1322 SAS No.: Q1322						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB56	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	15:24	LB134671
CCB57	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	16:02	LB134671
CCB58	Mercury	0.20	+/-0.20	U	0.20	CV	02/11/2025	16:22	LB134671

## Metals

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322						
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM	<b>Case No.:</b>	Q1322	<b>SAS No.:</b> Q1322			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:14	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:14	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	12:14	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	12:14	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	12:14	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	12:14	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	12:14	LB134743

## Metals

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Spectra East Inc.				SDG No.:	Q1322			
Contract:	SPEC01	Lab Code:	CHEM		Case No.:	Q1322		SAS No.:	Q1322
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:45	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	12:45	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	12:45	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	12:45	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	12:45	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	12:45	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	12:45	LB134743
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	13:36	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	13:36	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	13:36	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	13:36	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	13:36	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	13:36	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	13:36	LB134743
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	14:27	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	14:27	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	14:27	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	14:27	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	14:27	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	14:27	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	14:27	LB134743
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	15:23	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	15:23	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	15:23	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	15:23	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	15:23	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	15:23	LB134743

## Metals

- 3a -

### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322						
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM						
<b>Sample ID</b>	<b>Analyte</b>	<b>Result ug/L</b>	<b>Acceptance Limit</b>	<b>Conc Qual</b>	<b>CRQL</b>	<b>M</b>	<b>Analysis Date</b>	<b>Analysis Time</b>	<b>Run Number</b>
CCB04	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	15:23	LB134743
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Beryllium	6.00	+/-6.00	U	6.00	P	02/18/2025	16:11	LB134743
	Cadmium	6.00	+/-6.00	U	6.00	P	02/18/2025	16:11	LB134743
	Chromium	10.0	+/-10.0	U	10.0	P	02/18/2025	16:11	LB134743
	Copper	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Lead	12.0	+/-12.0	U	12.0	P	02/18/2025	16:11	LB134743
	Nickel	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743
	Selenium	20.0	+/-20.0	U	20.0	P	02/18/2025	16:11	LB134743
	Silver	10.0	+/-10.0	U	10.0	P	02/18/2025	16:11	LB134743
	Zinc	40.0	+/-40.0	U	40.0	P	02/18/2025	16:11	LB134743

**Metals****- 3a -****INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322						
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number

**Metals****- 3b -****PREPARATION BLANK SUMMARY****Client:** Spectra East Inc.**SDG No.:** Q1322**Instrument:** CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166684BL	Mercury	0.20	<0.20	U	PB166684 0.20	CV	02/11/2025	15:35	LB134671

**Metals**

- 3b -

**PREPARATION BLANK SUMMARY**

**Client:** Spectra East Inc.

**SDG No.:** Q1322

**Instrument:** P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
<b>PB166737BL</b>	<b>WATER</b>			<b>Batch Number:</b>	<b>PB166737</b>		<b>Prep Date:</b>	<b>02/17/2025</b>	
	Arsenic	10.0	<10.0	U	10.0	P	02/18/2025	13:15	LB134743
	Beryllium	3.00	<3.00	U	3.00	P	02/18/2025	13:15	LB134743
	Cadmium	3.00	<3.00	U	3.00	P	02/18/2025	13:15	LB134743
	Chromium	0.52	<5.00	J	5.00	P	02/18/2025	13:15	LB134743
	Copper	10.0	<10.0	U	10.0	P	02/18/2025	13:15	LB134743
	Lead	6.00	<6.00	U	6.00	P	02/18/2025	13:15	LB134743
	Nickel	20.0	<20.0	U	20.0	P	02/18/2025	13:15	LB134743
	Selenium	10.0	<10.0	U	10.0	P	02/18/2025	13:15	LB134743
	Silver	5.00	<5.00	U	5.00	P	02/18/2025	13:15	LB134743
	Zinc	1.52	<20.0	J	20.0	P	02/18/2025	13:15	LB134743

## Metals

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### INTERFERENCE CHECK SAMPLE

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM
<b>ICS Source:</b>	EPA	<b>Case No.:</b>	Q1322
		<b>Instrument ID:</b>	P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
<b>ICSA01</b>	Arsenic	-0.10			-20	20	02/18/2025	12:23	LB134743
	Beryllium	1.24			-6	6	02/18/2025	12:23	LB134743
	Cadmium	-0.11	1.0	11	-5	7	02/18/2025	12:23	LB134743
	Chromium	56.4	52.0	108	42	62	02/18/2025	12:23	LB134743
	Copper	17.7	2.0	885	-18	22	02/18/2025	12:23	LB134743
	Lead	6.91			-12	12	02/18/2025	12:23	LB134743
	Nickel	2.40	2.0	120	-38	42	02/18/2025	12:23	LB134743
	Selenium	-16.8			-20	20	02/18/2025	12:23	LB134743
	Silver	-1.82			-10	10	02/18/2025	12:23	LB134743
	Zinc	3.88			-40	40	02/18/2025	12:23	LB134743
<b>ICSA01</b>	Arsenic	119	104	114	88.4	120	02/18/2025	12:29	LB134743
	Beryllium	476	495	96	420	570	02/18/2025	12:29	LB134743
	Cadmium	1010	972	104	826	1120	02/18/2025	12:29	LB134743
	Chromium	566	542	104	460	624	02/18/2025	12:29	LB134743
	Copper	505	511	99	434	588	02/18/2025	12:29	LB134743
	Lead	55.8	49.0	114	37	61	02/18/2025	12:29	LB134743
	Nickel	1000	954	105	810	1100	02/18/2025	12:29	LB134743
	Selenium	33.0	46.0	72	26	66	02/18/2025	12:29	LB134743
	Silver	217	201	108	170	232	02/18/2025	12:29	LB134743
	Zinc	1040	952	109	809	1095	02/18/2025	12:29	LB134743
<b>ICSA</b>	Arsenic	23.0			-20	20	02/18/2025	12:33	LB134743
	Beryllium	1.84			-6	6	02/18/2025	12:33	LB134743
	Cadmium	-0.94	1.0	94	-5	7	02/18/2025	12:33	LB134743
	Chromium	59.3	52.0	114	42	62	02/18/2025	12:33	LB134743
	Copper	23.3	2.0	1165	-18	22	02/18/2025	12:33	LB134743
	Lead	10.9			-12	12	02/18/2025	12:33	LB134743
	Nickel	5.41	2.0	270	-38	42	02/18/2025	12:33	LB134743
	Selenium	-35.7			-20	20	02/18/2025	12:33	LB134743
	Silver	-2.58			-10	10	02/18/2025	12:33	LB134743
	Zinc	-10.8			-40	40	02/18/2025	12:33	LB134743
<b>ICSA01</b>	Arsenic	147	104	141	88.4	120	02/18/2025	12:37	LB134743
	Beryllium	620	495	125	420	570	02/18/2025	12:37	LB134743
	Cadmium	1220	972	126	826	1120	02/18/2025	12:37	LB134743
	Chromium	701	542	129	460	624	02/18/2025	12:37	LB134743
	Copper	647	511	127	434	588	02/18/2025	12:37	LB134743
	Lead	69.5	49.0	142	37	61	02/18/2025	12:37	LB134743
	Nickel	1230	954	129	810	1100	02/18/2025	12:37	LB134743
	Selenium	68.9	46.0	150	26	66	02/18/2025	12:37	LB134743
	Silver	254	201	126	170	232	02/18/2025	12:37	LB134743
	Zinc	1250	952	131	809	1095	02/18/2025	12:37	LB134743



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**metals**

- 5a -

**MATRIX SPIKE SUMMARY**

**client:** Spectra East Inc.

**level:** low

**sdg no.:** Q1322

**contract:** SPEC01

**lab code:** CHEM

**case no.:** Q1322

**sas no.:** Q1322

**matrix:** Water

**sample id:** Q1322-01

**client id:** MANHOLEMS

**Percent Solids for Sample:** NA

**Spiked ID:** Q1322-01MS

**Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	390	10.0	U		400	98	P	
Beryllium	ug/L	75 - 125	88.1	3.00	U		100	88	P	
Cadmium	ug/L	75 - 125	92.8	3.00	U		100	93	P	
Chromium	ug/L	75 - 125	187	5.00	U		200	94	P	
Copper	ug/L	75 - 125	192	56.3			150	91	P	
Lead	ug/L	75 - 125	462	6.00	U		500	92	P	
Mercury	ug/L	75 - 125	3.55	0.20	U		4.0	89	CV	
Nickel	ug/L	75 - 125	236	20.0	U		250	94	P	
Selenium	ug/L	75 - 125	917	10.0	U		1000	92	P	
Silver	ug/L	75 - 125	35.0	5.00	U		37.5	93	P	
Zinc	ug/L	75 - 125	223	140			100	83	P	

**metals**

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**MATRIX SPIKE DUPLICATE SUMMARY**

client:	Spectra East Inc.	level:	low	sdg no.:	Q1322			
contract:	SPEC01	lab code:	CHEM	case no.:	Q1322	sas no.:	Q1322	
matrix:	Water	sample id:	Q1322-01	client id:	MANHOLEMSD			
Percent Solids for Sample:	NA	Spiked ID:	Q1322-01MSD	Percent Solids for Spike Sample:			NA	

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	395	10.0	U		400	99	P	
Beryllium	ug/L	75 - 125	88.5	3.00	U		100	88	P	
Cadmium	ug/L	75 - 125	93.1	3.00	U		100	93	P	
Chromium	ug/L	75 - 125	190	5.00	U		200	95	P	
Copper	ug/L	75 - 125	194	56.3			150	92	P	
Lead	ug/L	75 - 125	463	6.00	U		500	93	P	
Mercury	ug/L	75 - 125	3.79	0.20	U		4.0	95	CV	
Nickel	ug/L	75 - 125	236	20.0	U		250	94	P	
Selenium	ug/L	75 - 125	936	10.0	U		1000	94	P	
Silver	ug/L	75 - 125	35.9	5.00	U		37.5	96	P	
Zinc	ug/L	75 - 125	230	140			100	90	P	

**Metals**

- 5b -

**Client:** Spectra East Inc.

**SDG No.:** Q1322

**Contract:** SPEC01

**Lab Code:** CHEM      **Case No.:** Q1322      **SAS No.:** Q1322

**Matrix:**  

**Level:** LOW      **Client ID:**  

**Sample ID:**        **Spiked ID:**  

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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### Metals

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#### DUPLICATE SAMPLE SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>Level:</b>	LOW	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM	<b>Case No.:</b>	Q1322
<b>Matrix:</b>	Water	<b>Sample ID:</b>	Q1322-01	<b>Client ID:</b>	MANHOLEDUP
<b>Percent Solids for Sample:</b>	NA	<b>Duplicate ID</b>	Q1322-01DUP	<b>Percent Solids for Spike Sample:</b>	NA

Analyte	Units	Acceptance Limit	Sample Result	Duplicate		RPD	Qual	M
				C	Result			
Arsenic	ug/L	20	10.0	U	10.0	U		P
Beryllium	ug/L	20	3.00	U	3.00	U		P
Cadmium	ug/L	20	3.00	U	3.00	U		P
Chromium	ug/L	20	5.00	U	5.00	U		P
Copper	ug/L	20	56.3		55.9		I	P
Lead	ug/L	20	6.00	U	6.00	U		P
Mercury	ug/L	20	0.20	U	0.20	U		CV
Nickel	ug/L	20	20.0	U	20.0	U		P
Selenium	ug/L	20	10.0	U	10.0	U		P
Silver	ug/L	20	5.00	U	5.00	U		P
Zinc	ug/L	20	140		142		I	P

“A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit”

### Metals

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#### DUPLICATE SAMPLE SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>Level:</b>	LOW	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM	<b>Case No.:</b>	Q1322
<b>Matrix:</b>	Water	<b>Sample ID:</b>	Q1322-01MS	<b>Client ID:</b>	MANHOLEMSD
<b>Percent Solids for Sample:</b>	NA	<b>Duplicate ID</b>	Q1322-01MSD	<b>Percent Solids for Spike Sample:</b>	NA

Analyte	Units	Acceptance Limit	Sample Result	Duplicate					
				C	Result	C	RPD	Qual	M
Arsenic	ug/L	20	390		395		1	P	
Beryllium	ug/L	20	88.1		88.5		0	P	
Cadmium	ug/L	20	92.8		93.1		0	P	
Chromium	ug/L	20	187		190		2	P	
Copper	ug/L	20	192		194		1	P	
Lead	ug/L	20	462		463		0	P	
Mercury	ug/L	20	3.55		3.79		7	CV	
Nickel	ug/L	20	236		236		0	P	
Selenium	ug/L	20	917		936		2	P	
Silver	ug/L	20	35.0		35.9		3	P	
Zinc	ug/L	20	223		230		3	P	

“A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit”

## Metals

- 7 -

### LABORATORY CONTROL SAMPLE SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM
		<b>Case No.:</b>	Q1322
		<b>SAS No.:</b>	Q1322

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166684BS Mercury	ug/L	4.0	3.75		94	85 - 115	CV

## Metals

- 7 -

### LABORATORY CONTROL SAMPLE SUMMARY

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM
		<b>Case No.:</b>	Q1322
		<b>SAS No.:</b>	Q1322

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
<b>PB166737BS</b>							
Arsenic	ug/L	400	414		104	85 - 115	P
Beryllium	ug/L	100	94.1		94	85 - 115	P
Cadmium	ug/L	100	96.4		96	85 - 115	P
Chromium	ug/L	200	204		102	85 - 115	P
Copper	ug/L	150	158		105	85 - 115	P
Lead	ug/L	500	490		98	85 - 115	P
Nickel	ug/L	250	249		100	85 - 115	P
Selenium	ug/L	1000	999		100	85 - 115	P
Silver	ug/L	37.5	38.0		101	85 - 115	P
Zinc	ug/L	100	105		105	85 - 115	P

### Metals

-9 -

#### ICP SERIAL DILUTIONS

SAMPLE NO.

MANHOLEL

Lab Name: Chemtech Consulting Group

Contract: SPEC01

Lab Code: CHEM Lb No.: lb134743

Lab Sample ID : Q1322-01L SDG No.: Q1322

Matrix (soil/water): Water

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	10.0	U	50.0	U			P
Beryllium	3.00	U	15.0	U			P
Cadmium	3.00	U	15.0	U			P
Chromium	5.00	U	25.0	U			P
Copper	56.3		56.8		1		P
Lead	6.00	U	30.0	U			P
Mercury	0.20	U	1.00	U			CV
Nickel	20.0	U	100	U			P
Selenium	10.0	U	50.0	U			P
Silver	5.00	U	25.0	U			P
Zinc	140		138		2		P



METAL  
PREPARATION &  
INSTRUMENT  
DATA

**Metals**

- 11 -

**ICP INTERELEMENT CORRECTION FACTORS**

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent )

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

**Metals**

- 11 -

**ICP INTERELEMENT CORRECTION FACTORS**

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

**Metals**

- 11 -

**ICP INTERELEMENT CORRECTION FACTORS**

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

<b>Analyte</b>	<b>Wave-Length (nm)</b>	<b>ICP Interelement Correction Factors For:</b>				
		<b>Cr</b>	<b>Cu</b>	<b>K</b>	<b>Mn</b>	<b>Mo</b>
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

**Metals**

- 11 -

**ICP INTERELEMENT CORRECTION FACTORS**

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

<b>Analyte</b>	<b>Wave-Length (nm)</b>	<b>ICP Interelement Correction Factors For:</b>				
		<b>Na</b>	<b>Ni</b>	<b>Pb</b>	<b>Sb</b>	<b>Se</b>
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

**Metals**

- 11 -

**ICP INTERELEMENT CORRECTION FACTORS**

Client: Spectra East Inc.

SDG No.: Q1322

Contract: SPEC01

Lab Code: CHEM

Case No.: Q1322

SAS No.: Q1322

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:					
		Sn	Ti	Tl	V	Zn	
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



METAL  
PREPARATION &  
ANALYTICAL  
SUMMARY

**Metals**

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**SAMPLE PREPARATION SUMMARY**

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM
		<b>Method:</b>	
		<b>Case No.:</b>	Q1322
		<b>SAS No.:</b>	Q1322

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
<b>Batch Number: PB166684</b>							
PB166684BL	PB166684BL	MB	WATER	02/11/2025	30.0	30.0	
PB166684BS	PB166684BS	LCS	WATER	02/11/2025	30.0	30.0	
Q1322-01	MANHOLE	SAM	WATER	02/11/2025	30.0	30.0	
Q1322-01DUP	MANHOLEDUP	DUP	WATER	02/11/2025	30.0	30.0	
Q1322-01MS	MANHOLEMS	MS	WATER	02/11/2025	30.0	30.0	
Q1322-01MSD	MANHOLEMSD	MSD	WATER	02/11/2025	30.0	30.0	

**Metals**

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**SAMPLE PREPARATION SUMMARY**

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Contract:</b>	SPEC01	<b>Lab Code:</b>	CHEM
		<b>Method:</b>	
		<b>Case No.:</b>	Q1322
		<b>SAS No.:</b>	Q1322

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
	<b>Batch Number: PB166737</b>						
PB166737BL	PB166737BL	MB	WATER	02/17/2025	50.0	25.0	
PB166737BS	PB166737BS	LCS	WATER	02/17/2025	50.0	25.0	
Q1322-01	MANHOLE	SAM	WATER	02/17/2025	50.0	25.0	
Q1322-01DUP	MANHOLEDUP	DUP	WATER	02/17/2025	50.0	25.0	
Q1322-01MS	MANHOLEMS	MS	WATER	02/17/2025	50.0	25.0	
Q1322-01MSD	MANHOLEMSD	MSD	WATER	02/17/2025	50.0	25.0	

**metals**  
**- 14 -**  
**ANALYSIS RUN LOG**

**Client:** Spectra East Inc.

**Contract:** SPEC01

**Lab code:** CHEM      **Case no.:** Q1322

**Sdg no.:** Q1322

**Instrument id number:** \_\_\_\_\_ **Method:** \_\_\_\_\_

**Run number:** LB134671

**Start date:** 02/11/2025      **End date:** 02/11/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1500	HG
S0.05	S0.05	1	1502	HG
S0.2	S0.2	1	1504	HG
S2.5	S2.5	1	1506	HG
S5	S5	1	1509	HG
S7.5	S7.5	1	1511	HG
S10	S10	1	1513	HG
ICV96	ICV96	1	1517	HG
ICB96	ICB96	1	1519	HG
CCV56	CCV56	1	1521	HG
CCB56	CCB56	1	1524	HG
CRA	CRA	1	1528	HG
PB166684BL	PB166684BL	1	1535	HG
Q1322-01	MANHOLE	1	1550	HG
Q1322-01DUP	MANHOLEDUP	1	1552	HG
Q1322-01MS	MANHOLEMS	1	1557	HG
CCV57	CCV57	1	1559	HG
CCB57	CCB57	1	1602	HG
Q1322-01MSD	MANHOLEMSD	1	1604	HG
Q1322-01L	MANHOLEL	5	1613	HG
PB166684BS	PB166684BS	1	1618	HG
CCV58	CCV58	1	1620	HG
CCB58	CCB58	1	1622	HG

**metals**  
**- 14 -**  
**ANALYSIS RUN LOG**

**Client:** Spectra East Inc.

**Contract:** SPEC01

**Lab code:** CHEM      **Case no.:** Q1322

**Sas no.:** Q1322

**Sdg no.:** Q1322

**Instrument id number:**      **Method:**

**Run number:** LB134743

**Start date:** 02/18/2025

**End date:** 02/18/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1119	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S1	S1	1	1124	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S2	S2	1	1128	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S3	S3	1	1132	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S4	S4	1	1137	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
S5	S5	1	1141	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICV01	ICV01	1	1158	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1210	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICB01	ICB01	1	1214	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CRI01	CRI01	1	1218	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1223	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1229	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSA	ICSA	20	1233	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
ICSAB	ICSAB	20	1237	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV01	CCV01	1	1241	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB01	CCB01	1	1245	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q1322-01	MANHOLE	1	1250	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q1322-01DUP	MANHOLEDUP	1	1254	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q1322-01L	MANHOLEL	5	1259	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q1322-01MS	MANHOLEMS	1	1303	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
Q1322-01MSD	MANHOLEMSD	1	1307	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB166737BL	PB166737BL	1	1315	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
PB166737BS	PB166737BS	1	1320	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV02	CCV02	1	1332	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB02	CCB02	1	1336	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV03	CCV03	1	1423	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB03	CCB03	1	1427	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV04	CCV04	1	1519	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB04	CCB04	1	1523	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCV05	CCV05	1	1606	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn
CCB05	CCB05	1	1611	Ag,As,Be,Cd,Cr,Cu,Ni,Pb,Se,Zn

**LAB CHRONICLE**

<b>OrderID:</b>	Q1322	<b>OrderDate:</b>	2/6/2025 1:17:00 PM					
<b>Client:</b>	Spectra East Inc.	<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025					
<b>Contact:</b>	Jacob Valeich	<b>Location:</b>	N41,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1322-01</b>	<b>MANHOLE</b>	<b>WATER</b>			<b>02/06/25 10:55</b>			<b>02/06/25</b>
		Anions Group1		300.0			02/07/25 12:33	
		Cyanide		SM4500-CN C,E		02/11/25	02/11/25 13:45	
		Cyanide-Amenable		SM4500-CN B,G			02/11/25 00:00	
		Cyanide-Amen able						
		Field pH		9045D			02/06/25 11:00	
		Field Temperature		SM2550-B			02/06/25 11:00	
		Oil and Grease		1664A			02/07/25 10:25	
		Phenolics		420.1		02/10/25	02/10/25 15:55	
<b>Q1322-04</b>	<b>MANHOLE</b>	<b>WATER</b>			<b>02/06/25 10:55</b>			<b>02/06/25</b>
		Ammonia		SM4500-NH3		02/07/25	02/07/25 12:33	
		BOD5		SM5210 B			02/07/25 17:10	
		COD		SM5220 D			02/07/25 15:32	
		TSS		SM2540 D			02/10/25 10:00	



A  
B  
C  
D

# SAMPLE DATA

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25 10:55
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25
Client Sample ID:	MANHOLE	SDG No.:	Q1322
Lab Sample ID:	Q1322-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Nitrate	0.47	J	1	0.0034	0.50	mg/L		02/07/25 12:33	300.0
Cyanide	0.0034	J	1	0.00093	0.0050	mg/L	02/11/25 11:00	02/11/25 13:45	SM 4500-CN C-16 plus E-16
Cyanide-Amenable	0.00093	U	1	0.00093	0.0050	mg/L		02/11/25 00:00	SM 4500-CN B-16 plus G-16
Field pH	8.22		1	0	0	pH		02/06/25 11:00	9045D
Field Temperature	16.2		1	0	0	o C		02/06/25 11:00	SM 2550 B-10
Oil and Grease	0.40	U	1	0.40	5.00	mg/L		02/07/25 10:25	1664A
Phenolics	0.023	U	1	0.023	0.050	mg/L	02/10/25 09:00	02/10/25 15:55	420.1

Comments: \_\_\_\_\_

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits

## Report of Analysis

Client:	Spectra East Inc.	Date Collected:	02/06/25 10:55
Project:	Outfall 001 - Orangetown Dis Permit 2025	Date Received:	02/06/25
Client Sample ID:	MANHOLE	SDG No.:	Q1322
Lab Sample ID:	Q1322-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	1.30		1	0.045	0.10	mg/L	02/07/25 09:10	02/07/25 12:33	SM 4500-NH3 B plus G-11
BOD5	18.2		1	0.17	2.00	mg/L		02/07/25 17:10	SM 5210 B-16
COD	54.3		1	2.35	10.0	mg/L		02/07/25 15:32	SM 5220 D-11
TSS	25.5		1	1.00	4.00	mg/L		02/10/25 10:00	SM 2540 D-15

Comments: \_\_\_\_\_

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits



A  
B  
C  
D

# QC RESULT SUMMARY



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

10

A

B

C

D

## Initial and Continuing Calibration Verification

**Client:** Spectra East Inc. **SDG No.:** Q1322  
**Project:** Outfall 001 - Orangetown Dis Permit 2025 **RunNo.:** LB134623

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	<b>ICV1</b>						
Ammonia as N		mg/L	1	1	100	90-110	02/07/2025
Sample ID:	<b>CCV1</b>						
Ammonia as N		mg/L	0.99	1	99	90-110	02/07/2025
Sample ID:	<b>CCV2</b>						
Ammonia as N		mg/L	1	1	100	90-110	02/07/2025
Sample ID:	<b>CCV3</b>						
Ammonia as N		mg/L	1.1	1	110	90-110	02/07/2025
Sample ID:	<b>CCV4</b>						
Ammonia as N		mg/L	0.97	1	97	90-110	02/07/2025

## Initial and Continuing Calibration Verification

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134631

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV</b> COD	mg/L	49.329	50	99	95-105	01/22/2025
Sample ID: <b>CCV1</b> COD	mg/L	49.329	50	99	95-105	02/07/2025
Sample ID: <b>CCV2</b> COD	mg/L	49.329	50	99	95-105	02/07/2025

## Initial and Continuing Calibration Verification

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134634

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
<b>Sample ID: ICV1</b>						
Bromide	mg/L	10.3	10	103	90-110	01/20/2025
Chloride	mg/L	3.1	3	103	90-110	01/20/2025
Fluoride	mg/L	2.1	2	105	90-110	01/20/2025
Nitrite	mg/L	3.1	3	103	90-110	01/20/2025
Nitrate	mg/L	2.6	2.5	104	90-110	01/20/2025
Sulfate	mg/L	15.4	15	103	90-110	01/20/2025
Orthophosphate as P	mg/L	5.2	5	104	90-110	01/20/2025
<b>Sample ID: CCV1</b>						
Bromide	mg/L	10.2	10	102	90-110	02/07/2025
Chloride	mg/L	3.1	3	103	90-110	02/07/2025
Fluoride	mg/L	2	2	100	90-110	02/07/2025
Nitrite	mg/L	3	3	100	90-110	02/07/2025
Nitrate	mg/L	2.5	2.5	100	90-110	02/07/2025
Sulfate	mg/L	15.2	15	101	90-110	02/07/2025
Orthophosphate as P	mg/L	5	5	100	90-110	02/07/2025
<b>Sample ID: CCV2</b>						
Bromide	mg/L	10.2	10	102	90-110	02/07/2025
Chloride	mg/L	3.1	3	103	90-110	02/07/2025
Fluoride	mg/L	2	2	100	90-110	02/07/2025
Nitrite	mg/L	3	3	100	90-110	02/07/2025
Nitrate	mg/L	2.6	2.5	104	90-110	02/07/2025
Sulfate	mg/L	15.2	15	101	90-110	02/07/2025
Orthophosphate as P	mg/L	5.1	5	102	90-110	02/07/2025

## Initial and Continuing Calibration Verification

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134656

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	<b>ICV1</b>						
Phenolics		mg/L	1	1	100	90-110	02/10/2025
Sample ID:	<b>CCV1</b>						
Phenolics		mg/L	0.99	1	99	90-110	02/10/2025
Sample ID:	<b>CCV2</b>						
Phenolics		mg/L	1	1	100	90-110	02/10/2025

## Initial and Continuing Calibration Verification

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134673

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV1</b>						
Cyanide	mg/L	0.098	0.099	99	85-115	02/11/2025
Sample ID: <b>CCV1</b>						
Cyanide	mg/L	0.25	0.25	100	90-110	02/11/2025
Sample ID: <b>CCV2</b>						
Cyanide	mg/L	0.25	0.25	100	90-110	02/11/2025
Sample ID: <b>CCV3</b>						
Cyanide	mg/L	0.25	0.25	100	90-110	02/11/2025

## Initial and Continuing Calibration Verification

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134762

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV</b> <b>Field pH</b>	pH	7	7	100	90-110	02/06/2025
Sample ID: <b>CCV1</b> <b>Field pH</b>	pH	7	7	100	90-110	02/06/2025
Sample ID: <b>CCV2</b> <b>Field pH</b>	pH	7	7	100	90-110	02/06/2025

**Initial and Continuing Calibration Verification**

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>RunNo.:</b>	LB134762

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date



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Fax : 908 789 8922

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### Initial and Continuing Calibration Blank Summary

<b>Client:</b>	Spectra East Inc.				<b>SDG No.:</b>	Q1322	
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025				<b>RunNo.:</b>	LB134623	
Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025
Sample ID: CCB3 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025
Sample ID: CCB4 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025

### Initial and Continuing Calibration Blank Summary

<b>Client:</b>	Spectra East Inc.						<b>SDG No.:</b>	Q1322	
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025						<b>RunNo.:</b>	LB134631	
Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date	
Sample ID:	<b>ICB</b>								
COD		mg/L	< 5.0000	5.0000	U	2.35	10	01/22/2025	
Sample ID:	<b>CCB1</b>								
COD		mg/L	< 5.0000	5.0000	U	2.35	10	02/07/2025	
Sample ID:	<b>CCB2</b>								
COD		mg/L	< 5.0000	5.0000	U	2.35	10	02/07/2025	

## Initial and Continuing Calibration Blank Summary

<b>Client:</b>	Spectra East Inc.			<b>SDG No.:</b>	Q1322		
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025			<b>RunNo.:</b>	LB134634		
Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
<b>Sample ID: ICB1</b>							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	01/20/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	01/20/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	01/20/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	01/20/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	01/20/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	01/20/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	01/20/2025
<b>Sample ID: CCB1</b>							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	02/07/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	02/07/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	02/07/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	02/07/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	02/07/2025
<b>Sample ID: CCB2</b>							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	02/07/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	02/07/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	02/07/2025
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	02/07/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	02/07/2025

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### Initial and Continuing Calibration Blank Summary

<b>Client:</b>	Spectra East Inc.			<b>SDG No.:</b>			Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025			<b>RunNo.:</b>			LB134656
Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	Analysis Date
Sample ID:	<b>ICB1</b>						
<b>Phenolics</b>		mg/L	< 0.0250	0.0250	U	0.023	0.05 02/10/2025
Sample ID:	<b>CCB1</b>						
<b>Phenolics</b>		mg/L	< 0.0250	0.0250	U	0.023	0.05 02/10/2025
Sample ID:	<b>CCB2</b>						
<b>Phenolics</b>		mg/L	< 0.0250	0.0250	U	0.023	0.05 02/10/2025

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### Initial and Continuing Calibration Blank Summary

<b>Client:</b>	Spectra East Inc.			<b>SDG No.:</b> Q1322			
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025			<b>RunNo.:</b> LB134673			
Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	Analysis Date
Sample ID:	<b>ICB1</b>						
Cyanide		mg/L	< 0.0025	0.0025	U	0.00093	0.005 02/11/2025
Sample ID:	<b>CCB1</b>						
Cyanide		mg/L	< 0.0025	0.0025	U	0.00093	0.005 02/11/2025
Sample ID:	<b>CCB2</b>						
Cyanide		mg/L	< 0.0025	0.0025	U	0.00093	0.005 02/11/2025
Sample ID:	<b>CCB3</b>						
Cyanide		mg/L	< 0.0025	0.0025	U	0.00093	0.005 02/11/2025

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D**Initial and Continuing Calibration Blank Summary**

<b>Client:</b>	Spectra East Inc.			<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025			<b>RunNo.:</b>	LB134673

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
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## Preparation Blank Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025		

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
<b>Sample ID: LB134620BL</b>							
Oil and Grease	mg/L	< 2.5000	2.5000	U	0.4	5.0	02/07/2025
<b>Sample ID: LB134631BL</b>							
COD	mg/L	< 5.0000	5.0000	U	2.35	10.0	02/07/2025
<b>Sample ID: LB134633BL</b>							
BOD5	mg/L	< 0.2000	0.2000	U	0.17	2.0	02/07/2025
<b>Sample ID: LB134634BLW</b>							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	02/07/2025
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	02/07/2025
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	02/07/2025
Nitrate	mg/L	0.14	0.2500	J	0.0034	0.5	02/07/2025
Sulfate	mg/L	0.59	1.5000	J	0.032	3	02/07/2025
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	02/07/2025
<b>Sample ID: LB134646BL</b>							
TSS	mg/L	1	2.0000	J	1	4	02/10/2025
<b>Sample ID: PB166612BL</b>							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	02/07/2025
<b>Sample ID: PB166642BL</b>							
Phenolics	mg/L	< 0.0250	0.0250	U	0.023	0.05	02/10/2025
<b>Sample ID: PB166674BL</b>							
Cyanide	mg/L	< 0.0025	0.0025	U	0.00093	0.005	02/11/2025

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## Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMS	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	9.30		0.034	U	10	1	93		02/07/2025
Cyanide	mg/L	75-125	0.037		0.0034	J	0.04	1	84		02/11/2025
Chloride	mg/L	80-120	152	OR	156	OR	3	1	-133	*	02/07/2025
Fluoride	mg/L	80-120	1.90		0.066	J	2	1	92		02/07/2025
Nitrite	mg/L	80-120	2.80		0.099	J	3	1	90		02/07/2025
Nitrate	mg/L	80-120	2.80		0.47	J	2.5	1	93		02/07/2025
Phenolics	mg/L	75-125	1.00		0.023	U	1	1	100		02/10/2025
Sulfate	mg/L	80-120	29.6		16.1		15	1	90		02/07/2025
Orthophosphate as P	mg/L	80-120	5.40		0.87	J	5	1	91		02/07/2025

## Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/L	80-120	9.30		0.034	U	10	1	93		02/07/2025
Cyanide	mg/L	75-125	0.037		0.0034	J	0.04	1	84		02/11/2025
Chloride	mg/L	80-120	153	OR	156	OR	3	1	-100	*	02/07/2025
Fluoride	mg/L	80-120	1.90		0.066	J	2	1	92		02/07/2025
Nitrite	mg/L	80-120	2.80		0.099	J	3	1	90		02/07/2025
Nitrate	mg/L	80-120	2.80		0.47	J	2.5	1	93		02/07/2025
Phenolics	mg/L	75-125	1.00		0.023	U	1	1	100		02/10/2025
Sulfate	mg/L	80-120	29.7		16.1		15	1	91		02/07/2025
Orthophosphate as P	mg/L	80-120	5.50		0.87	J	5	1	93		02/07/2025

### Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMS	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/L	78-114	20.1		0.40	U	20.0	1	101		02/07/2025

### Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/L	78-114	20.3		0.40	U	20.0	1	102		02/07/2025

### Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1325-01
<b>Client ID:</b>	DSN002MS	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	7.70	OR	6.90	OR	1	1	80		02/07/2025
COD	mg/L	75-125	91.9		47.4		50.0	1	89		02/07/2025

### Matrix Spike Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1325-01
<b>Client ID:</b>	DSN002MSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/L	75-125	8.20	OR	6.90	OR	1	1	130	*	02/07/2025
COD	mg/L	75-125	89.9		47.4		50.0	1	85		02/07/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1316-02
<b>Client ID:</b>	002-35TH-AVE(FEB)DUP	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
TSS	mg/L	+/-5	48.3		47.0		1	2.73		02/10/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEDUP	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Phenolics	mg/L	+/-20	0.023	U	0.023	U	1	0		02/10/2025
Cyanide	mg/L	+/-20	0.0034	J	0.0032	J	1	6		02/11/2025
Field pH	pH	+/-20	8.22		8.23		1	0.12		02/06/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Bromide	mg/L	+/-20	9.30		9.30		1	0		02/07/2025
Fluoride	mg/L	+/-20	1.90		1.90		1	0		02/07/2025
Nitrate	mg/L	+/-20	2.80		2.80		1	0		02/07/2025
Nitrite	mg/L	+/-20	2.80		2.80		1	0		02/07/2025
Sulfate	mg/L	+/-20	29.6		29.7		1	0		02/07/2025
Chloride	mg/L	+/-20	152	OR	153	OR	1	1		02/07/2025
Orthophosphate as P	mg/L	+/-20	5.40		5.50		1	2		02/07/2025
Phenolics	mg/L	+/-20	1.00		1.00		1	0		02/10/2025
Cyanide	mg/L	+/-20	0.037		0.037		1	0		02/11/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-01
<b>Client ID:</b>	MANHOLEMSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Oil and Grease	mg/L	+/-18	20.1		20.3		1	0.99		02/07/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1322-04
<b>Client ID:</b>	MANHOLEDUP	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
BOD5	mg/L	+/-20	18.2		18.0		1	1.1		02/07/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1325-01
<b>Client ID:</b>	DSN002DUP	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	6.90	OR	6.90	OR	1	0		02/07/2025
COD	mg/L	+/-20	47.4		49.3		1	3.93		02/07/2025

### Duplicate Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Sample ID:</b>	Q1325-01
<b>Client ID:</b>	DSN002MSD	<b>Percent Solids for Spike Sample:</b>	0

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/L	+/-20	7.70	OR	8.20	OR	1	6		02/07/2025
COD	mg/L	+/-20	91.9		89.9		1	2.2		02/07/2025

### Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134620

Analyte	Sample ID	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
	LB134620BS								
Oil and Grease		mg/L	20.0	16.7		84	1	78-114	02/07/2025

## Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134631

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134631BS							
COD	mg/L	50	53.3		107	1	90-110	02/07/2025

## Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134633

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB134633BS							
BOD5	mg/L	198	193		97	1	84.6-115.4	02/07/2025

## Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134634

Analyte	Sample ID	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Bromide	LB134634BSW	mg/L	10	10.0	100	1	90-110	02/07/2025	
Chloride		mg/L	3	3.00	100	1	90-110	02/07/2025	
Fluoride		mg/L	2	2.00	100	1	90-110	02/07/2025	
Nitrite		mg/L	3	3.00	100	1	90-110	02/07/2025	
Nitrate		mg/L	2.5	2.50	100	1	90-110	02/07/2025	
Sulfate		mg/L	15	15.0	100	1	90-110	02/07/2025	
Orthophosphate as P		mg/L	5	5.10	102	1	90-110	02/07/2025	

### Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134646

Analyte	Sample ID	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
	LB134646BS								
TSS		mg/L	550	532		97	1	90-110	02/10/2025

### Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134623

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB166612BS							
Ammonia as N	mg/L	1	1.00		100	1	90-110	02/07/2025

## Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134656

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB166642BS							
Phenolics	mg/L	1	1.00		100	1	80-120	02/10/2025

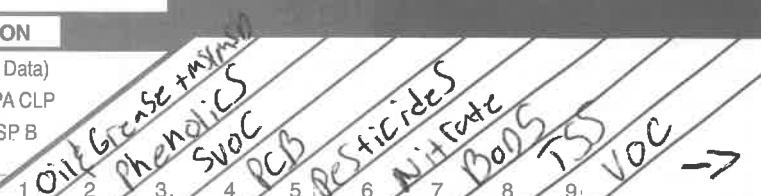
### Laboratory Control Sample Summary

<b>Client:</b>	Spectra East Inc.	<b>SDG No.:</b>	Q1322
<b>Project:</b>	Outfall 001 - Orangetown Dis Permit 2025	<b>Run No.:</b>	LB134673

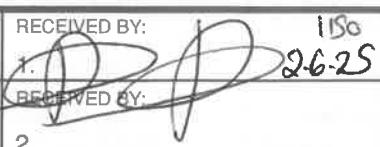
Analyte	Sample ID	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Cyanide	PB166674BS	mg/L	0.1	0.098		98	1	85-115	02/11/2025



# SHIPPING DOCUMENTS

CLIENT INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION											
COMPANY: Spectra East inc ADDRESS: 8 King Road CITY Rockleigh STATE: NJ ZIP: 07647 ATTENTION: Jacob Valeich PHONE: 201-767-7076 FAX:		PROJECT NAME: Outfall off Orangestown D.I.S permit 2025 PROJECT NO.: LOCATION: PROJECT MANAGER: e-mail: PHONE: FAX:		BILL TO: PO#: ADDRESS: CITY STATE: ZIP: ATTENTION: PHONE:											
<b>DATA TURNAROUND INFORMATION</b>															
FAX (RUSH) _____ DAYS* HARDCOPY (DATA PACKAGE): _____ DAYS* EDD: _____ DAYS*		DATA DELIVERABLE INFORMATION <input type="checkbox"/> Level 1 (Results Only) <input type="checkbox"/> Level 4 (QC + Full Raw Data) <input type="checkbox"/> Level 2 (Results + QC) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> US EPA CLP <input type="checkbox"/> Level 3 (Results + QC + Raw Data) <input type="checkbox"/> NYS ASP A <input type="checkbox"/> NYS ASP B <input type="checkbox"/> EDD FORMAT <input type="checkbox"/> Other													
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS 															
ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB		DATE	TIME	1	2	3	4	5	6	7	
1.	Manhole	W ✓	26-25	1055	19	C	C	E	E	E	E	E	A	← Specify Preservatives A-HCl      D-NaOH B-HNO3      E-ICE C-H2SO4      F-OTHER	
2.														PH 8.22	
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER: 1.	DATE/TIME: 1150 2-6-25	RECEIVED BY: 	1150 26-25	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 3.16 °C Comments:
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 	2.	
RELINQUISHED BY SAMPLER: 3.	DATE/TIME: 1830 2-6-25	RECEIVED BY: 	3.	Page 1 of 2 CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO



**284 Sheffield Street, Mountainside, NJ 07092**  
**(908) 789-8900 • Fax (908) 789-8922**  
**[www.chemtech.net](http://www.chemtech.net)**

ALLIANCE PROJECT NO.  
QUOTE NO.

Q1322

11

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER: 1.	DATE/TIME: 1150 2-6-25	RECEIVED BY: 1. <i>[Signature]</i> 26-25	Conditions of bottles or coolers at receipt: <input type="checkbox"/> COMPLIANT <input type="checkbox"/> NON COMPLIANT <input type="checkbox"/> COOLER TEMP 31 °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2. <i>[Signature]</i>	Comments:   
RELINQUISHED BY SAMPLER: 3.	DATE/TIME: 1830 2-6-25	RECEIVED BY: 3.	<p>Page 2 of 2</p> <p>CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Shipment Complete</p>

Client Name: Spectra East Inc.  
 Client Address: 8 King Rd. Rockleigh  
 Client Rep on Site: Jacob Valeich  
 Sampling Date: 2-6-25  
 Arrival Time: 1030

FIELD SAMPLING LOG

Project Name: Outfall 001-OrangeTown D.S Permit  
 Project Location: Rockleigh 2025  
 Cooler Custody Seal: N/A  
 Temperature Correction Factor (°C): +3

Departure Time: 1118FIELD EQUIPMENT CALIBRATIONpH Calibration (SM4500-H B/9040C)

Calibration				ICV (± 0.1 pH unit)
	W 7.00 Buffer	W 4.00 Buffer	W 10.00 Buffer	W 7.00 Buffer
Time	3071	3107	3094	3093
Temp °C	1038	1040	1042	1045
pH	18.82 <sup>c</sup>	18.80 <sup>c</sup>	18.84 <sup>c</sup>	18.81 <sup>c</sup>

FIELD EQUIPMENT CALIBRATIONSpecific Conductance (mS/cm) (99% -101%)/(mmho/cm) (SM2510 B/120.1/9050A)

Calibration (± 1%) (99% -101%)		ICV (± 1%) (99% -101%)
	WP	WP
Time		
Temp °C		
Reading (mS/cm)		

Sampler Signature/Date:

 2/6/25

QA Control# A3041249

Supervisor Review/Date:

 2/6/25

Alliance Technical Group, LLC-Newark

Client Name: Spectra East Inc.

Client Address: 8 King Road, Rockleigh

Client Rep on Site: Jacob Valeich

Sampling Date: 2-5-25

Arrival Time: 1030

284 Sheffield Street, Mountainside, NJ 07092 Tel. 908-789-8900 Fax 908-789-8922  
**FIELD SAMPLING LOG**

Project Name: Outfall out-of-sight permit 2025

Project Location: Rockleigh

Cooler Custody Seal: N/A

Temperature Correction Factor (°C): +3

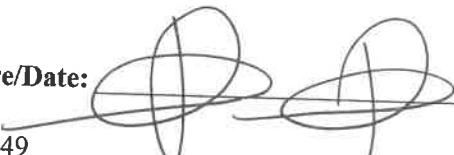
Departure Time: 1118

**FIELD SAMPLING INFORMATION**

Sampling Location	Date/Time of sampling	Field Measurements			
		Date/Time of Analysis	pH	Temperature °C	Specific Conductance (mS/cm) (99% -101%)
CCV CW3071 Manhole	2-5-25 1052	2-5-25 1054	7.00	18.84°C	N/A
DUP	1057	1100	8.22	16.22°C	
CCV CW3071	1103	1107	8.23	16.20°C	
	1110	1113	7.00	18.85°C	

Meter: YSI MPS, Model # 556, Serial # 085A0063

Sampler Signature/Date:

 2-5-25

QA Control# A3041249  
Q1322

Supervisor Review/Date:

 2-5-25

**Laboratory Certification**

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1322	SPEC01	Order Date : 2/6/2025 1:17:00 PM	Project Mgr :
Client Name : Spectra East Inc.		Project Name : Outfall 001 - Orangetown E	Report Type : Level 2
Client Contact : Jacob Valeich		Receive DateTime : 2/6/2025 12:00:00 AM	EDD Type : EXCEL NOCLEANUP
Invoice Name : Spectra East Inc.		Purchase Order : 180130	Hard Copy Date :
Invoice Contact : Jacob Valeich			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1322-01	MANHOLE	Water	02/06/2025	10:55	VOCMS Group1		624.1	10 Bus. Days	

Relinquished By : R

Date / Time : 2-7-25 10:23

Received By : Sam

Date / Time : 2/7/25 01:23

Storage Area : VOA Refrigerator Room

*180130*