

LAB CHRONICLE

OrderID:	Q1322	OrderDate:	2/6/2025 1:17:00 PM
Client:	Spectra East Inc.	Project:	Outfall 001 - Orangetown Dis Permit 2025
Contact:	Jacob Valeich	Location:	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



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: Q1322-01	MANHOLE MANHOLE	Water	Chloroform	1.80	J	0.72	5.00	ug/L
			Total Voc :	1.80				
			Total Concentration:	1.80				



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
TARGETS						
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
SURROGATES						
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
INTERNAL STANDARDS						
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



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
VX0207WBSD0	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	Low	Limits	RPD
									High	
VX0207WBS01	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	Low	Limits 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: CHEMTECH

Contract: SPEC01

Lab Code: CHEM Case No.: Q1322

SAS No.: Q1322 SDG NO.: Q1322

Lab File ID: VX044859.D

Lab Sample ID: VX0207WBL01

Date Analyzed: 02/07/2025

Time Analyzed: 11:24

GC Column: DB-624UI ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument 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: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: SPEC01
Lab Code: CHEM Case No.: Q1322 SAS No.: Q1322 SDG NO.: Q1322
Lab File ID: VX044658.D BFB Injection Date: 01/16/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:02
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N 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
VSTDIC005	VSTDIC005	VX044659.D	01/16/2025	08:39
VSTDIC020	VSTDIC020	VX044660.D	01/16/2025	09:02
VSTDIC050	VSTDIC050	VX044661.D	01/16/2025	09:25
VSTDIC100	VSTDIC100	VX044662.D	01/16/2025	09:49
VSTDIC150	VSTDIC150	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 SAS No.: Q1322 SDG NO.: Q1322
Lab File ID: VX044855.D BFB Injection Date: 02/07/2025
Instrument ID: MSVOA_X BFB Injection Time: 09:33
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N 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 SAS No.: Q1322 SDG 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) N

	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.



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	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
VX044859.D	1		02/07/25 11:24	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
SURROGATES						
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
INTERNAL STANDARDS						
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	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
VX044857.D	1		02/07/25 10:33	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
SURROGATES						
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
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	21300	4.885			
540-36-3	1,4-Difluorobenzene	121000	6.751			
3114-55-4	Chlorobenzene-d5	109000	10.049			

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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	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
VX044858.D	1		02/07/25 11:01	VX020725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
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
SURROGATES						
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
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	19400	4.891			
540-36-3	1,4-Difluorobenzene	109000	6.757			
3114-55-4	Chlorobenzene-d5	100000	10.049			

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A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: SPEC01

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

Instrument ID: MSVOA_X Calibration Date(s): 01/16/2025 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 =	
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	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 SDG 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.