

Cover Page

Order ID : Q3551

Project ID : Outfall 001 - Orangetown Dis Permit 2025

Client : Spectra East Inc.

Lab Sample Number

Q3551-01
Q3551-02
Q3551-03
Q3551-04

Client Sample Number

MANHOLE
Q3551-01MS
Q3551-01MSD
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.

Signature : _____

Date: 11/19/2025



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CASE NARRATIVE

Spectra East Inc.

Project Name: Outfall 001 - Orangetown Dis Permit 2025

Project # N/A

Order ID # Q3551

**Test Name: VOCMS Group1,SVOCMS Group1,PCB,PESTICIDE Group1,
Mercury, Metals ICP-Group1,Ammonia,Anions Group1,BOD5,COD, Cyanide,
Cyanide-Amenable,Field pH,Field Temperature,Oil and Grease,Phenolics,TSS**

A. Number of Samples and Date of Receipt:

4 Water samples were received on 11/05/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: VOCMS Group1,SVOCMS Group1,PCB,PESTICIDE Group1,Mercury,Metals ICP-Group1,Ammonia,Anions Group1,BOD5,COD,Cyanide,Cyanide-Amenable,Field pH,Field Temperature,Oil and Grease,Phenolics,TSS. This data package contains results for VOCMS Group1(624.1),SVOCMS Group1(625.1),PCB(8082A),PESTICIDE Group1(608.3),Mercury(245.1),Metals ICP-Group1(200.7),Ammonia(SM4500-NH3), Anions Group1(300.0),BOD5(SM5210 B),COD(SM5220 D),Cyanide(SM4500-CN C,E),Cyanide-Amenable(SM4500-CN B,G Cyanide-Amenable),Field pH(9045D),Field Temperature(SM2550-B),Oil and Grease(1664A),Phenolics(420.1),TSS(SM2540 D).

C. Analytical Techniques:

VOCMS Group1 : The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOCMS Group1 was based on method 624.1.

SVOCMS Group1 : The samples were analyzed on instrument BNA_G using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOCMS Group1 was based on method 625.1 and extraction was done based on method 3510.

PESTICIDE Group1 : The analysis was performed on instrument ECD_D. 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.



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

Mercury, Metals ICP-Group1 : 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.

Wetchem : 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 Surrogate recoveries were met for all analysis except following

PESTICIDE Group1 : MANHOLE [Tetrachloro-m-xylene(1)24%, Tetrachloro-m-xylene(2)32%], MANHOLERE [Tetrachloro-m-xylene(1)10% and Tetrachloro-m-xylene(2)27%]. Affected samples reanalyzed to confirm to results, Original and reanalysis both are reported.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds except following

Mercury, Metals ICP-Group1 : The Matrix Spike (CompMS) analysis met criteria for all compounds except for Silver due to Chemical Interference during Digestion process.

The MSD recoveries met the requirements for all compounds except following

Mercury, Metals ICP-Group1 : The Matrix Spike Duplicate (CompMSD) analysis met criteria for all compounds except for Silver due to Chemical Interference during Digestion process.

The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds. The Blank Spike Duplicate met requirements for all compounds.

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

The Initial Calibration met the requirements.



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The Continuous Calibration met the requirements except following SVOCMS Group1 : The Continuous Calibration File ID BG064713.D met the requirements except for 2,4,6-Tribromophenol and Nitrobenzene-d5, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

Wetchem : Sample MANHOLE was diluted due to high concentrations for Ammonia as N.

The Duplicate analysis met criteria for all compounds except following Mercury, Metals ICP-Group1 : The Duplicate (CompDUP) analysis met criteria for all compounds except for Nickel due to sample matrix interference.

The Duplicate analysis met criteria for all compounds except following Wetchem : The Duplicate (DSN003DUP) analysis met criteria for all compounds except for Phenolics due to the Results are below Reporting limit.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

SEMI-VOA : The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Ammonia, Anions Group1, BOD5, COD, Cyanide, Cyanide-Amenable, Field pH, Field Temperature, Oil and Grease, Phenolics, TSS : Sample Q3551-04 was analyzed straight Dilution for COD parameter Because the original samples were reading over range, only 10X has been reported.

PESTICIDE Group1 : 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.

VOCMS Group1 : "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.



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F. Manual Integration Comments:

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

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

Signature_____

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q3551

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 Custody

✓

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: 11/19/2025