

Cover Page

Order ID : Q3741

Project ID : Brooklyn Navy Yard Building 50 SI

Client : Core Environmental Consultants and Services, Inc.

Lab Sample Number

Q3741-01
Q3741-02
Q3741-03
Q3741-04
Q3741-05
Q3741-06
Q3741-07

Client Sample Number

B50-SP3-111925
B50-SP13-112025
B50-SP14-112025
B50-SP9-112425
B50-SP11-112525
B50-SP4-112525
TB-1

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: 12/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

CASE NARRATIVE

Core Environmental Consultants and Services, Inc.

Project Name: Brooklyn Navy Yard Building 50 SI

Project # N/A

Order ID # Q3741

Test Name: VOC-TCLVOA-10,SVOC-TCL BNA,Diesel Range Organics,Gasoline Range Organics,PCB,Mercury,Metals ICP-TAL

A. Number of Samples and Date of Receipt:

6 Solid samples were received on 11/26/2025.

1 Water sample was received on 11/26/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10,SVOC-TCL BNA,Diesel Range Organics,Gasoline Range Organics,PCB,Mercury,Metals ICP-TAL. This data package contains results for VOC-TCLVOA-10(8260-Low,8260D),SVOC-TCL BNA(8270E),Diesel Range Organics(8015D),Gasoline Range Organics(8015D),PCB(8082A),Mercury(7471B),Metals ICP-TAL(6010D).

C. Analytical Techniques:

VOC-TCLVOA-10 : 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 performed on instrument MSVOA_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOC-TCLVOA-10 was based on method 8260-Low,8260D.

SVOC-TCL BNA : 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 df. The samples were analyzed on instrument BNA_P 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 SVOC-TCL BNA was based on method 8270E and extraction was done based on method 3541.

PCB : 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 analyses were performed on instrument GCECD_O. 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 3541.



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Diesel Range Organics : The analysis were performed on instrument FID_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

Gasoline Range Organics : The analysis performed on instrument FID_B were done using GC column RTX502.2 which is 60 meters, 0.53mm ID, 3.0 um df, cat#10909. The analysis of Gasoline Range Organics was based on method 8015D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis except following VOC-TCLVOA-10 : B50-SP9-112425 [Dibromofluoromethane - 49%], B50-SP9-112425RE [4-Bromofluorobenzene - 49%], B50-SP11-112525 [Dibromofluoromethane - 63%], B50-SP11-112525RE [Dibromofluoromethane - 59%] and B50-SP4-112525 [Dibromofluoromethane - 32%] samples were reanalyzed to confirm the failure and reported.

The Internal Standards Areas were met for all analysis except following VOC-TCLVOA-10 : B50-SP9-112425RE, B50-SP4-112525 and B50-SP4-112525RE samples were reanalyzed to confirm the failure and reported.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds except following Mercury, Metals ICP-TAL : The Matrix Spike (B50-SP3-111925MS) analysis met criteria for all compounds except for Mercury due to matrix interference. The Matrix Spike (FENCE WC-1MS) analysis met criteria for all compounds except for Antimony, Barium, Copper, Lead, Sodium, Vanadium due to soil matrix is having tiny stones along with brown soil, which is causing not consistent recovery for these elements and also their is unknown interference during digestion.

The MSD recoveries met the requirements for all compounds except following SVOC-TCL BNA : The MSD {Q3741-06MSD} with File ID: BP026237.D recoveries met the requirements for all compounds except for 4-Nitroaniline[58%] due to matrix interference.

Mercury, Metals ICP-TAL : The Matrix Spike Duplicate (B50-SP3-111925MSD) analysis met criteria for all compounds except for Mercury due to matrix interference. The Matrix Spike Duplicate (FENCE WC-1MSD) analysis met criteria for all compounds except for Antimony, Barium, Lead, Sodium due to soil matrix is having tiny stones along with brown soil, which is causing not consistent recovery for these elements and also their is unknown interference during digestion.



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The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds except following
SVOC-TCL BNA : The Blank Spike for {PB170797BS} with File ID: BP026226.D met requirements for all compounds except for 2,4-Dinitrotoluene[76%], Caprolactam[65%]. But associated samples have no positive hit for these compounds therefore no corrective action was taken.

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 except following
SVOC-TCL BNA : The %RSD is greater than 20% in the Method 8270-BF110525.M for Hexachlorocyclopentadiene, this compound is passing on Quadratic regression.

The Continuous Calibration met the requirements except following
VOC-TCLVOA-10 : The Continuous Calibration File ID VN088370.D met the requirements except for Acetone is failing marginally low and Bromoform is failing high but no positive hit in associate sample therefore no corrective action taken.

The Continuous Calibration File ID VY023829.D met the requirements except for 2-Hexanone is failing high but no positive hit in associate sample therefore no corrective action taken.

The Continuous Calibration File ID VY023849.D met the requirements except for Acetone is failing high and associate sample having hit of acetone but below CRQL therefore no corrective action taken.

SVOC-TCL BNA : The Continuous Calibration File ID BF144415.D met the requirements except for 2,4-Dinitrophenol and Benzaldehyde. Failing high but associated samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BP026224.D met the requirements except for Benzaldehyde, failing high but associated samples have no positive hit for this compound therefore no corrective action was taken. And for Hexachlorocyclopentadiene, failing marginally low therefore no corrective action was taken.



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PCB : The Continuous Calibration File ID PO115565.D met the requirements except for Aroclor-1260(Peak-03),Aroclor-1260(Peak-04),Aroclor-1260(Peak-05) is failing in 2nd column. however it is passed in 1st column therefore no corrective action was taken.

The Continuous Calibration File ID PP076744.D met the requirements except for Aroclor-1016(Peak-05) is failing in 2nd column, however it is passed in 1st column therefore no corrective action was taken.

The Tuning criteria met requirements.

Mercury,Metals ICP-TAL : Sample B50-SP3-111925 was diluted due to high concentrations for Mercury & Sample B50-SP13-112025 was diluted due to high concentrations for Mercury & Sample B50-SP14-112025 was diluted due to high concentrations for Mercury & Sample B50-SP9-112425 was diluted due to high concentrations for Mercury & Sample B50-SP4-112525 was diluted due to high concentrations for Mercury.

The Duplicate analysis met criteria for all compounds except following Mercury,Metals ICP-TAL : The Duplicate (FENCE WC-1MSD) analysis met criteria for all compounds except for Aluminum, Barium, Calcium, Iron, Lead, Zinc due to soil matrix is having tiny stones along with brown soil, which is causing not consistent recovery for these elements and also their is unknown interference during digestion.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

The soil samples results are based on a dry weight basis.

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

VOC-TCLVOA-10 : Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Mercury,Metals ICP-TAL : The Post Digest Spike (SB-1125-24A) analysis met criteria for all compounds except for Mercury due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

The Post Digest Spike (FENCE WC-1A) analysis met criteria for all compounds except for Barium due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.



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SVOC-TCL BNA : The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.

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 #: Q3741

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: 12/10/2025