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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
JPP-18.1-012825	Q1216-01	8260D			8015D		Chemtech -SOP
JPP-18.1-012825	Q1216-02	8260D			8015D		Chemtech -SOP
JPP-18.1-012825	Q1216-03	8260D	8270E		8015D, 8081B, 8082A	6010D, 7471B	Chemtech -SOP, 9095B
JPP-18.1-012825	Q1216-04	8260D	8270E		8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.1-012825	Q1216-05	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.1-012825	Q1216-06	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.1-012825	Q1216-07	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.1-012825	Q1216-08	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.2-012825	Q1216-09	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.2-012825	Q1216-10	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.2-012825	Q1216-11	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-21.2-012825	Q1216-12	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.1-012825	Q1216-13	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.1-012825	Q1216-14	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.1-012825	Q1216-15	8260D	8270E		8151A 8015D, 8081B, 8082A,	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.1-012825	Q1216-16	8260D	8270E		8151A 8015D, 8081B, 8082A, 8151A	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
JPP-26.2-012825	Q1216-17	8260D	8270E		8015D, 8081B, 8082A, 8151A	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.2-012825	Q1216-18	8260D	8270E		8015D, 8081B, 8082A, 8151A	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.2-012825	Q1216-19	8260D	8270E		8015D, 8081B, 8082A, 8151A	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D
JPP-26.2-012825	Q1216-20	8260D	8270E		8015D, 8081B, 8082A, 8151A	6010D, 7471B, 7470A	Chemtech -SOP, 9095B, 1030, 9012B, 9034, 9045D

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-03	SOIL	01/28/25	01/29/25	01/30/25	02/07/25
Q1216-07	SOIL	01/28/25	01/29/25	01/30/25	02/07/25
Q1216-11	SOIL	01/28/25	01/29/25	01/30/25	02/04/25
Q1216-15	SOIL	01/28/25	01/29/25	01/30/25	02/07/25
Q1216-19	SOIL	01/28/25	01/29/25	01/30/25	02/04/25

*** Details For Test :** SVOC-TCL BNA -20

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIa

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-04	TCLP	01/28/25	01/29/25	01/31/25	02/06/25
Q1216-08	TCLP	01/28/25	01/29/25	01/31/25	02/04/25
Q1216-12	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-16	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-20	TCLP	01/28/25	01/29/25	01/31/25	02/03/25

*** Details For Test :** TCLP BNA

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-02	TCLP	01/28/25	01/29/25		02/03/25
Q1216-06	TCLP	01/28/25	01/29/25		02/03/25
Q1216-10	TCLP	01/28/25	01/29/25		02/03/25
Q1216-14	TCLP	01/28/25	01/29/25		02/03/25
Q1216-18	TCLP	01/28/25	01/29/25		02/03/25

*** Details For Test :** TCLP VOA

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FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-01	SOIL	01/28/25	01/29/25		02/04/25
Q1216-05	SOIL	01/28/25	01/29/25		02/03/25
Q1216-09	SOIL	01/28/25	01/29/25		02/04/25
Q1216-13	SOIL	01/28/25	01/29/25		02/04/25
Q1216-17	SOIL	01/28/25	01/29/25		02/03/25

*** Details For Test :** VOCMS Group1

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-01	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-05	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-09	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-13	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-17	SOIL	01/28/25	01/29/25	01/30/25	01/30/25

*** Details For Test :** Diesel Range Organics

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-01	SOIL	01/28/25	01/29/25		01/30/25
Q1216-05	SOIL	01/28/25	01/29/25		01/30/25
Q1216-09	SOIL	01/28/25	01/29/25		01/30/25
Q1216-13	SOIL	01/28/25	01/29/25		01/30/25
Q1216-17	SOIL	01/28/25	01/29/25		01/30/25

*** Details For Test :** Gasoline Range Organics

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-03	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-07	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-11	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-15	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-19	SOIL	01/28/25	01/29/25	01/30/25	01/30/25

*** Details For Test :** PCB

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FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-03	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-07	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-11	SOIL	01/28/25	01/29/25	01/30/25	01/30/25
Q1216-15	SOIL	01/28/25	01/29/25	01/30/25	02/03/25
Q1216-19	SOIL	01/28/25	01/29/25	01/30/25	01/30/25

*** Details For Test :** Pesticide-TCL

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-04	TCLP	01/28/25	01/29/25	01/31/25	02/01/25
Q1216-08	TCLP	01/28/25	01/29/25	01/31/25	02/01/25
Q1216-12	TCLP	01/28/25	01/29/25	01/31/25	02/01/25
Q1216-16	TCLP	01/28/25	01/29/25	01/31/25	02/01/25
Q1216-20	TCLP	01/28/25	01/29/25	01/31/25	02/01/25

*** Details For Test :** TCLP Herbicide

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IIc

SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
Q1216-04	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-08	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-12	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-16	TCLP	01/28/25	01/29/25	01/31/25	02/03/25
Q1216-20	TCLP	01/28/25	01/29/25	01/31/25	02/03/25

*** Details For Test :** TCLP Pesticide

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-01	Solid	8260D	5035		
Q1216-02	Solid	8260D	1311_ZHE		
Q1216-05	Solid	8260D	5035		
Q1216-06	Solid	8260D	1311_ZHE		
Q1216-09	Solid	8260D	5035		
Q1216-10	Solid	8260D	1311_ZHE		
Q1216-13	Solid	8260D	5035		
Q1216-14	Solid	8260D	1311_ZHE		
Q1216-17	Solid	8260D	5035		
Q1216-18	Solid	8260D	1311_ZHE		

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-03	Solid	8270E	3550		
Q1216-04	Solid	8270E			
Q1216-07	Solid	8270E	3550		
Q1216-08	Solid	8270E			
Q1216-11	Solid	8270E	3550		
Q1216-12	Solid	8270E			
Q1216-15	Solid	8270E	3550		
Q1216-16	Solid	8270E			
Q1216-19	Solid	8270E	3550		
Q1216-20	Solid	8270E			

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-01	Solid	8015D	3541		
Q1216-01	Solid	8015D	NA		
Q1216-03	Solid	8081B	3541		
Q1216-03	Solid	8082A	3541		
Q1216-04	Solid	8081B			
Q1216-04	Solid	8151A			
Q1216-05	Solid	8015D	3541		
Q1216-05	Solid	8015D	NA		
Q1216-07	Solid	8081B	3541		
Q1216-07	Solid	8082A	3541		
Q1216-08	Solid	8081B			
Q1216-08	Solid	8151A			
Q1216-09	Solid	8015D	3541		
Q1216-09	Solid	8015D	NA		
Q1216-11	Solid	8081B	3541		
Q1216-11	Solid	8082A	3541		
Q1216-12	Solid	8081B			
Q1216-12	Solid	8151A			
Q1216-13	Solid	8015D	3541		
Q1216-13	Solid	8015D	NA		
Q1216-15	Solid	8081B	3541		
Q1216-15	Solid	8082A	3541		
Q1216-16	Solid	8081B			
Q1216-16	Solid	8151A			
Q1216-17	Solid	8015D	3541		
Q1216-17	Solid	8015D	NA		
Q1216-19	Solid	8081B	3541		
Q1216-19	Solid	8082A	3541		
Q1216-20	Solid	8081B			
Q1216-20	Solid	8151A			

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-03	SOIL	Mercury	01/29/25	01/30/25	01/31/25
Q1216-07	SOIL	Mercury	01/29/25	01/30/25	01/31/25
Q1216-11	SOIL	Mercury	01/29/25	01/30/25	01/31/25
Q1216-15	SOIL	Mercury	01/29/25	01/30/25	01/31/25
Q1216-19	SOIL	Mercury	01/29/25	01/30/25	01/31/25

*** Details For Test :** Mercury

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FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-03	SOIL	Metals ICP-TAL	01/29/25	01/30/25	01/30/25
Q1216-07	SOIL	Metals ICP-TAL	01/29/25	01/30/25	01/30/25
Q1216-11	SOIL	Metals ICP-TAL	01/29/25	01/30/25	01/30/25
Q1216-15	SOIL	Metals ICP-TAL	01/29/25	01/30/25	01/30/25
Q1216-19	SOIL	Metals ICP-TAL	01/29/25	01/30/25	01/30/25

*** Details For Test :** Metals ICP-TAL

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-04	TCLP	TCLP ICP Metals	01/29/25	01/31/25	02/10/25
Q1216-08	TCLP	TCLP ICP Metals	01/29/25	01/31/25	02/10/25
Q1216-12	TCLP	TCLP ICP Metals	01/29/25	01/31/25	02/10/25
Q1216-16	TCLP	TCLP ICP Metals	01/29/25	01/31/25	02/10/25
Q1216-20	TCLP	TCLP ICP Metals	01/29/25	01/31/25	02/10/25

*** Details For Test :** TCLP ICP Metals

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-IV

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
Q1216-04	TCLP	TCLP Mercury	01/29/25	02/03/25	02/03/25
Q1216-08	TCLP	TCLP Mercury	01/29/25	02/03/25	02/03/25
Q1216-12	TCLP	TCLP Mercury	01/29/25	02/03/25	02/03/25
Q1216-16	TCLP	TCLP Mercury	01/29/25	02/03/25	02/03/25
Q1216-20	TCLP	TCLP Mercury	01/29/25	02/03/25	02/03/25

*** Details For Test :** TCLP Mercury

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Cover Page

Order ID : Q1216

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number	Client Sample Number
Q1216-01	JPP-18.1-012825
Q1216-02	JPP-18.1-012825
Q1216-03	JPP-18.1-012825
Q1216-04	JPP-18.1-012825
Q1216-05	JPP-21.1-012825
Q1216-06	JPP-21.1-012825
Q1216-07	JPP-21.1-012825
Q1216-08	JPP-21.1-012825
Q1216-09	JPP-21.2-012825
Q1216-10	JPP-21.2-012825
Q1216-11	JPP-21.2-012825
Q1216-12	JPP-21.2-012825
Q1216-13	JPP-26.1-012825
Q1216-14	JPP-26.1-012825
Q1216-15	JPP-26.1-012825
Q1216-16	JPP-26.1-012825
Q1216-17	JPP-26.2-012825
Q1216-18	JPP-26.2-012825
Q1216-19	JPP-26.2-012825
Q1216-20	JPP-26.2-012825

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: 2/13/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:
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 VOCMS Group1 was based on method 8260D.

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 except for JPP-21.1-012825 and JPP-26.2-012825,samples were Initially analyzed in sequence VY013025 but Method was failing therefore samples reanalyzed but now Internal Standard Failing so Internal standard failure run reported in Hardcopy and Initial run Provided in MISC Section.

The Retention Times were acceptable for all samples.

The RPD for {VY0203SBSD01} with File ID: VY021030.D met criteria except for 2-Butanone[22%], 2-Hexanone[25%], 4-Methyl-2-Pentanone[23%], Methyl Acetate[23%] and Tert butyl alcohol[26%] due to difference in results of BS and BSD.

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.

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The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
Trip Blank was not provided with this set of samples.
The soil samples results are based on a dry weight basis.
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.

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.

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP VOA

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP VOA.

C. Analytical Techniques:
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_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of TCLP VOA was based on method 8260D and TCLP extraction method was 1311.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for JPP-26.1-012825 [4-Bromofluorobenzene - 76%] failing marginally low now no more vials for confirmation therefore no corrective action taken.

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.

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E. Additional Comments:
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
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 <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.

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.

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: Gasoline Range Organics

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Gasoline Range Organics.

C. Analytical Techniques:
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 met the acceptable criteria.
The Retention Times were acceptable for all samples.
The MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .

The RPD for {Q1216-17MSD} with File ID: FB031402.D met criteria except for GRO[25%] due to difference in results of MS-MSD.

The Blank Spike 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 .

Samples JPP-21.1-012825, JPP-21.2-012825, JPP-26.1-012825 and JPP-26.2-012825 were directly run in methanol as both low level soil vials did not purge.

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E. Additional Comments:
The soil samples results are based on a dry weight basis.

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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for SVOC-TCL BNA -20.

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 df The analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3541.

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 except for JPP-21.2-012825, due to matrix interference, and JPP-26.1-012825, The sample was reanalyzed to confirm internal standard failure, both run were reported in hard copy. reanalyzed with the required dilution.

The Retention Times were acceptable for all samples.

The MS {Q1215-03MS} with File ID: BF141573.D recoveries met the requirements for all compounds except for Atrazine[132%], Benzaldehyde[116%], due to Matrix interference therefore no corrective action was taken.

The MSD {Q1215-03MSD} with File ID: BF141574.D recoveries met the acceptable requirements except for Benzaldehyde[116%], due to Matrix interference therefore no corrective action was taken.

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The RPD met criteria .
The Blank Spike for {PB166360BS} with File ID: BF141405.D met requirements for all samples except for 3,3-Dichlorobenzidine[41%], Hexachlorocyclopentadiene[191%], The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.

The Continuous Calibration File ID BF141531.D met the requirements except for Di-n-octyl phthalate, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

Samples JPP-21.2-012825, JPP-26.2-012825 analyzed with direct 2x dilution due to dirty and viscous matrix.

Sample JPP-26.1-012825 was diluted due to high concentration.

E. Additional Comments:
The Sample JPP-21.2-012825, JPP-26.1-012825, JPP-26.1-012825DL, JPP-26.2-012825 have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
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 <15% 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 > 15% 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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP BNA

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP BNA.

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 TCLP BNA was based on method 8270E and extraction was done based on method 3510 and TCLP extraction method was 1311.

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 MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike 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 File ID BF141336.D met the requirements except for Pentachlorophenol , Associated samples does not have hit for this compound, no corrective action was required.
The Tuning criteria met requirements.

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E. Additional Comments:
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Pesticide-TCL.

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-TCLs was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for JPP-26.1-012825 [Decachlorobiphenyl(2) - 169%], as per method one surrogate is allowed to failed, therefore no corrective action was taken.

The Retention Times were acceptable for all samples.
The MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike 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 File ID PL093919.D met the requirements except for 4,4-DDD is failing in both column but no positive hit in associated sample therefore no corrective action taken.

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E. Additional Comments:
The soil samples results are based on a dry weight basis.

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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP Pesticide

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP Pesticide.

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 TCLP Pesticides was based on method 8081B and extraction was done based on method 3510 and TCLP extraction method was 1311.

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 MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike 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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: PCB

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for PCB.

C. Analytical Techniques:
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.

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 MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike 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 File ID PO109288.D met the requirements except for Decachlorobiphenyl is failing in 1st column but passing in 2nd column therefore no corrective action taken.

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The Continuous Calibration File ID PO109302.D met the requirements except for Aroclor-1260(Peak-04),Aroclor-1260(Peak-05),Decachlorobiphenyl is failing in 1st column but passing in 2nd column therefore no corrective action taken.

E. Additional Comments:

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

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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP Herbicide.

C. Analytical Techniques:
The analysis was performed on instrument ECD_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

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 MS recoveries met the requirements for all compounds .
The MSD recoveries met the acceptable requirements .
The RPD met criteria .
The Blank Spike 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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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:
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.

D. QA/ QC Samples:
The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for JPP-26.1-012825 [Tetracosane-d50 - 168%] but this sample was required dilution as well due to high concentration, therefore no further corrective action taken.

The Retention Times were acceptable for all samples.

The MS {Q1215-01MS} with File ID: FG015260.D recoveries met the requirements for all compounds except for DRO[-143%] Due to matrix interference.
The MSD {Q1215-01MSD} with File ID: FG015261.D recoveries met the acceptable requirements except for DRO[-126%] .

The RPD met criteria .
The Blank Spike 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 .

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Samples JPP-18.1-012825, JPP-21.1-012825, JPP-21.2-012825, JPP-26.1-012825 and JPP-26.2-012825 were diluted due to bad matrices The above sample original run is reported as screening data in miscellaneous data.

E. Additional Comments:

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

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.

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
Sample JPP-26.2-012825 was diluted due to high concentrations for Mercury.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike (CHESTNUT-CONCRETEMS) analysis met criteria for all samples except for Antimony, Barium, Chromium, Cobalt, Copper, Potassium, Sodium, Vanadium, Zinc due to Chemical Interference during Digestion process.
The Matrix Spike Duplicate (CHESTNUT-CONCRETEMSD) analysis met criteria for all samples except for Antimony, Barium, Chromium, Potassium, Sodium, Vanadium, Zinc due to Chemical Interference during Digestion process.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met criteria for all samples.

E. Additional Comments:

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_____

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

CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP Mercury,TCLP ICP Metals

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for TCLP Mercury,TCLP ICP Metals.

C. Analytical Techniques:
The analysis of TCLP ICP Metals was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

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:

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_____

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: Corrosivity,Paint Filter,Ignitability,Reactive Cyanide,Reactive Sulfide

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. This data package contains results for Corrosivity,Paint Filter,Ignitability,Reactive Cyanide,Reactive Sulfide.

C. Analytical Techniques:
The analysis of Ignitability was based on method 1030, The analysis of Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034, The analysis of Corrosivity was based on method 9045D and The analysis of Paint Filter was based on method 9095B.

D. QA/ QC Samples:
The Holding Times were met for all samples except for JPP-18.1-012825 of Corrosivity, for JPP-21.1-012825 of Corrosivity.for JPP-21.2-012825 of Corrosivity.for JPP-26.1-012825 of Corrosivity.for JPP-26.2-012825 of Corrosivity as these sample received out of hold.
The Duplicate analysis met criteria for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.

E. Additional Comments:

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_____

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

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

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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 is 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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q1216**

	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:** **02/13/2025**