

## LAB CHRONICLE

<b>OrderID:</b>	Q1207	<b>OrderDate:</b>	1/28/2025 11:40:00 AM
<b>Client:</b>	RU2 Engineering, LLC	<b>Project:</b>	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
<b>Contact:</b>	Rutu Manani	<b>Location:</b>	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1207-03</b>	<b>JPP-2.1-012725</b>	<b>SOIL</b>			<b>01/27/25 09:08</b>			<b>01/28/25</b>
			Paint Filter	9095B			01/29/25 12:40	
<b>Q1207-04</b>	<b>JPP-2.1-012725</b>	<b>SOIL</b>			<b>01/27/25 09:08</b>			<b>01/28/25</b>
			Corrosivity	9045D			01/28/25 15:25	
			Ignitability	1030			01/29/25 10:02	
			Reactive Cyanide	9012B		01/30/25	01/30/25 13:06	
			Reactive Sulfide	9034		01/30/25	01/30/25 15:15	
<b>Q1207-07</b>	<b>JPP-5.1-012725</b>	<b>SOIL</b>			<b>01/27/25 10:16</b>			<b>01/28/25</b>
			Paint Filter	9095B			01/29/25 12:48	
<b>Q1207-08</b>	<b>JPP-5.1-012725</b>	<b>SOIL</b>			<b>01/27/25 10:16</b>			<b>01/28/25</b>
			Corrosivity	9045D			01/28/25 15:30	
			Ignitability	1030			01/29/25 10:40	
			Reactive Cyanide	9012B		01/30/25	01/30/25 13:06	
			Reactive Sulfide	9034		01/30/25	01/30/25 15:18	

### LAB CHRONICLE

<b>Q1207-11</b>	<b>JPP-4.5-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>10:56</b>		<b>01/28/25</b>
			Paint Filter	9095B		01/29/25 12:55
<b>Q1207-12</b>	<b>JPP-4.5-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>10:56</b>		<b>01/28/25</b>
			Corrosivity	9045D		01/28/25 15:40
			Ignitability	1030		01/29/25 10:48
			Reactive Cyanide	9012B	01/30/25	01/30/25 13:06
			Reactive Sulfide	9034	01/30/25	01/30/25 15:21
<b>Q1207-15</b>	<b>JPP-16.2-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>12:09</b>		<b>01/28/25</b>
			Paint Filter	9095B		01/29/25 13:02
<b>Q1207-16</b>	<b>JPP-16.2-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>12:09</b>		<b>01/28/25</b>
			Corrosivity	9045D		01/28/25 15:47
			Ignitability	1030		01/29/25 10:55
			Reactive Cyanide	9012B	01/30/25	01/30/25 13:06
			Reactive Sulfide	9034	01/30/25	01/30/25 15:24
<b>Q1207-19</b>	<b>JPP-20.2-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>13:46</b>		<b>01/28/25</b>
			Paint Filter	9095B		01/29/25 13:10
<b>Q1207-20</b>	<b>JPP-20.2-012725</b>	<b>SOIL</b>		<b>01/27/25</b> <b>13:46</b>		<b>01/28/25</b>
			Corrosivity	9045D		01/28/25 15:55

### LAB CHRONICLE

Ignitability	1030		01/29/25 11:02
Reactive Cyanide	9012B	01/30/25	01/30/25 13:06
Reactive Sulfide	9034	01/30/25	01/30/25 15:27

A

B

C

D



# SAMPLE DATA

A

B

C

D

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 09:08
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-2.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-03	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		01/29/25 12:40	9095B

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 09:08
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-2.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-04	Matrix:	SOIL
		% Solid:	87.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	8.88	H	1	0	0	pH		01/28/25 15:25	9045D
Ignitability	NO		1	0	0	oC		01/29/25 10:02	1030
Reactive Cyanide	0.050	U	1	0.0087	0.050	mg/Kg	01/30/25 09:00	01/30/25 13:06	9012B
Reactive Sulfide	3.17	J	1	0.19	10.0	mg/Kg	01/30/25 11:00	01/30/25 15:15	9034

Comments: pH result reported at temperature 21.0 °C

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N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 10:16
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-5.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-07	Matrix:	SOIL
		% Solid:	90.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		01/29/25 12:48	9095B

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

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 N = Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 10:16
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-5.1-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-08	Matrix:	SOIL
		% Solid:	90.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	11.1	H	1	0	0	pH		01/28/25 15:30	9045D
Ignitability	NO		1	0	0	oC		01/29/25 10:40	1030
Reactive Cyanide	0.050	U	1	0.0087	0.050	mg/Kg	01/30/25 09:00	01/30/25 13:06	9012B
Reactive Sulfide	7.97	J	1	0.19	10.0	mg/Kg	01/30/25 11:00	01/30/25 15:18	9034

Comments: pH result reported at temperature 21.3 °C

U = Not Detected

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N =Spiked sample recovery not within control limits



## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 10:56
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-4.5-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-11	Matrix:	SOIL
		% Solid:	81.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		01/29/25 12:55	9095B

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

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 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 10:56
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-4.5-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-12	Matrix:	SOIL
		% Solid:	81.6

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	10.3	H	1	0	0	pH		01/28/25 15:40	9045D
Ignitability	NO		1	0	0	oC		01/29/25 10:48	1030
Reactive Cyanide	0.050	U	1	0.0087	0.050	mg/Kg	01/30/25 09:00	01/30/25 13:06	9012B
Reactive Sulfide	3.16	J	1	0.19	10.0	mg/Kg	01/30/25 11:00	01/30/25 15:21	9034

Comments: pH result reported at temperature 21.0 °C

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LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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H = Sample Analysis Out Of Hold Time

J = Estimated Value

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

OR = Over Range

N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 12:09
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-15	Matrix:	SOIL
		% Solid:	88.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		01/29/25 13:02	9095B

Comments:

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 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 12:09
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-16.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-16	Matrix:	SOIL
		% Solid:	88.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	10.6	H	1	0	0	pH		01/28/25 15:47	9045D
Ignitability	NO		1	0	0	oC		01/29/25 10:55	1030
Reactive Cyanide	0.050	U	1	0.0087	0.050	mg/Kg	01/30/25 09:00	01/30/25 13:06	9012B
Reactive Sulfide	1.58	J	1	0.19	10.0	mg/Kg	01/30/25 11:00	01/30/25 15:24	9034

Comments: pH result reported at temperature 21.5 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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

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OR = Over Range

N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 13:46
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-19	Matrix:	SOIL
		% Solid:	87.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Paint Filter	1.00	U	1	1.00	1.00	ml/100gm		01/29/25 13:10	9095B

Comments:

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 MDL = Method Detection Limit  
 LOD = Limit of Detection  
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 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N =Spiked sample recovery not within control limits

## Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/27/25 13:46
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/28/25
Client Sample ID:	JPP-20.2-012725	SDG No.:	Q1207
Lab Sample ID:	Q1207-20	Matrix:	SOIL
		% Solid:	87.8

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	9.26	H	1	0	0	pH		01/28/25 15:55	9045D
Ignitability	NO		1	0	0	oC		01/29/25 11:02	1030
Reactive Cyanide	0.050	U	1	0.0087	0.050	mg/Kg	01/30/25 09:00	01/30/25 13:06	9012B
Reactive Sulfide	6.31	J	1	0.19	10.0	mg/Kg	01/30/25 11:00	01/30/25 15:27	9034

Comments: pH result reported at temperature 21.4 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

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OR = Over Range

N =Spiked sample recovery not within control limits

# QC RESULT SUMMARY

## Initial and Continuing Calibration Verification

**Client:** RU2 Engineering, LLC

**SDG No.:** Q1207

**Project:** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

**RunNo.:** LB134458

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV</b> Corrosivity	pH	7.01	7	100	90-110	01/28/2025
Sample ID: <b>CCV1</b> Corrosivity	pH	2.01	2.00	101	90-110	01/28/2025
Sample ID: <b>CCV2</b> Corrosivity	pH	12.02	12.00	100	90-110	01/28/2025
Sample ID: <b>CCV3</b> Corrosivity	pH	2.01	2.00	101	90-110	01/28/2025



## Initial and Continuing Calibration Verification

**Client:** RU2 Engineering, LLC

**SDG No.:** Q1207

**Project:** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

**RunNo.:** LB134487

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: <b>ICV1</b> Reactive Cyanide	mg/L	0.098	0.099	99	85-115	01/30/2025
Sample ID: <b>CCV1</b> Reactive Cyanide	mg/L	0.24	0.25	96	90-110	01/30/2025
Sample ID: <b>CCV2</b> Reactive Cyanide	mg/L	0.24	0.25	96	90-110	01/30/2025
Sample ID: <b>CCV3</b> Reactive Cyanide	mg/L	0.24	0.25	96	90-110	01/30/2025
Sample ID: <b>CCV4</b> Reactive Cyanide	mg/L	0.25	0.25	100	90-110	01/30/2025

### Initial and Continuing Calibration Blank Summary

**Client:** RU2 Engineering, LLC

**SDG No.:** Q1207

**Project:** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

**RunNo.:** LB134487

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: <b>ICB1</b> Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	01/30/2025
Sample ID: <b>CCB1</b> Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	01/30/2025
Sample ID: <b>CCB2</b> Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	01/30/2025
Sample ID: <b>CCB3</b> Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	01/30/2025
Sample ID: <b>CCB4</b> Reactive Cyanide	mg/L	< 0.0025	0.0025	U	0.00099	0.005	01/30/2025

### Preparation Blank Summary

**Client:** RU2 Engineering, LLC

**SDG No.:** Q1207

**Project:** NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: <b>PB166323BL</b>							
Reactive Sulfide	mg/Kg	< 5.0000	5.0000	U	0.186	10	01/30/2025
Sample ID: <b>PB166380BL</b>							
Reactive Cyanide	mg/Kg	< 0.0250	0.0250	U	0.0088	0.05	01/30/2025

## Duplicate Sample Summary

<b>Client:</b>	RU2 Engineering, LLC	<b>SDG No.:</b>	Q1207
<b>Project:</b>	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	<b>Sample ID:</b>	Q1205-01
<b>Client ID:</b>	VNJ-236DUP	<b>Percent Solids for Spike Sample:</b>	87.2

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Paint Filter	ml/100gm	+/-20	1.00	U	1.00	U	1	0		01/29/2025
Ignitability	oC	+/-20	NO		NO		1	0		01/29/2025

## Duplicate Sample Summary

<b>Client:</b>	RU2 Engineering, LLC	<b>SDG No.:</b>	Q1207
<b>Project:</b>	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	<b>Sample ID:</b>	Q1205-02
<b>Client ID:</b>	VNJ-236DUP	<b>Percent Solids for Spike Sample:</b>	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Corrosivity	pH	+/-20	5.85		5.86		1	0.17		01/28/2025
Reactive Cyanide	mg/Kg	+/-20	0.0087	U	0.0088	U	1	0		01/30/2025
Reactive Sulfide	mg/Kg	+/-20	3.17	J	3.17	J	1	0		01/30/2025