

LAB CHRONICLE

OrderID:	Q1241	OrderDate:	1/30/2025 2:58:00 PM
Client:	RU2 Engineering, LLC	Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	Location:	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1241-03	JPP-3.5-013025	SOIL			01/30/25			01/30/25
			Mercury	7471B		02/03/25	02/03/25	
			Metals ICP-TAL	6010D		01/31/25	02/10/25	
Q1241-07	JPP-5.3-013025	SOIL			01/30/25			01/30/25
			Mercury	7471B		02/03/25	02/03/25	
			Metals ICP-TAL	6010D		01/31/25	02/10/25	
Q1241-11	JPP-5.2-013025	SOIL			01/30/25			01/30/25
			Mercury	7471B		02/03/25	02/03/25	
			Metals ICP-TAL	6010D		01/31/25	02/10/25	
Q1241-15	JPP-5.4-013025	SOIL			01/30/25			01/30/25
			Mercury	7471B		02/03/25	02/03/25	
			Metals ICP-TAL	6010D		01/31/25	02/10/25	
Q1241-19	JPP-51.4-013025	SOIL			01/30/25			01/30/25
			Mercury	7471B		02/03/25	02/03/25	
			Metals ICP-TAL	6010D		01/31/25	02/10/25	

Hit Summary Sheet SW-846

SDG No.: Q1241 **Order ID:** Q1241
Client: RU2 Engineering, LLC **Project ID:** NYCDDC SANTWOBR Brooklyn Bridge

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : JPP-3.5-013025								
Q1241-03	JPP-3.5-013025	SOIL	Aluminum	5080		2.56	5.30	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Antimony	3.39		0.16	2.65	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Arsenic	49.3		0.31	1.06	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Barium	580		0.68	5.30	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Beryllium	0.57		0.013	0.32	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Cadmium	4.03		0.017	0.32	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Calcium	22400		2.97	106	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Chromium	20.6		0.057	0.53	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Cobalt	8.29		0.062	1.59	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Copper	302		0.50	1.06	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Iron	27700		2.85	5.30	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Lead	1470		0.16	0.64	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Magnesium	3480		3.64	106	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Manganese	350		0.075	1.06	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Mercury	1.94	D	0.038	0.085	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Nickel	33.7		0.095	2.12	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Potassium	1000		30.4	106	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Silver	2.91		0.055	0.53	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Sodium	538		38.3	106	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Thallium	0.82	J	0.47	2.12	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Vanadium	21.9		0.29	2.12	mg/Kg
Q1241-03	JPP-3.5-013025	SOIL	Zinc	1050		0.12	2.12	mg/Kg
Client ID : JPP-5.3-013025								
Q1241-07	JPP-5.3-013025	SOIL	Aluminum	6240		2.23	4.63	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Arsenic	2.33		0.27	0.93	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Barium	24.9		0.59	4.63	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Beryllium	0.22	J	0.011	0.28	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Cadmium	0.28	J	0.015	0.28	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Calcium	16400		2.59	92.6	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Chromium	12.9		0.050	0.46	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Cobalt	2.67		0.054	1.39	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Copper	22.0		0.44	0.93	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Iron	7760		2.49	4.63	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Lead	36.8		0.14	0.56	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Magnesium	4140		3.18	92.6	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Manganese	92.7		0.066	0.93	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Mercury	0.084		0.0060	0.014	mg/Kg

Hit Summary Sheet
SW-846

SDG No.:	Q1241	Order ID:	Q1241
Client:	RU2 Engineering, LLC	Project ID:	NYCDDC SANTWOBR Brooklyn Bridge

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1241-07	JPP-5.3-013025	SOIL	Nickel	14.1		0.083	1.85	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Potassium	799		26.6	92.6	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Silver	0.38	J	0.048	0.46	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Sodium	435		33.4	92.6	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Vanadium	15.2		0.25	1.85	mg/Kg
Q1241-07	JPP-5.3-013025	SOIL	Zinc	69.0		0.10	1.85	mg/Kg

Client ID : JPP-5.2-013025

Q1241-11	JPP-5.2-013025	SOIL	Aluminum	4320		2.29	4.76	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Antimony	0.39	J	0.14	2.38	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Arsenic	3.46		0.28	0.95	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Barium	49.8		0.61	4.76	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Beryllium	0.44		0.011	0.28	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Cadmium	0.56		0.015	0.28	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Calcium	22100		2.66	95.1	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Chromium	16.1		0.051	0.48	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Cobalt	6.38		0.055	1.43	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Copper	60.5		0.45	0.95	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Iron	10800		2.56	4.76	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Lead	116		0.14	0.57	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Magnesium	3530		3.26	95.1	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Manganese	223		0.068	0.95	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Mercury	0.35		0.0060	0.014	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Nickel	22.0		0.086	1.90	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Potassium	1280		27.3	95.1	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Silver	1.00		0.049	0.48	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Sodium	601		34.3	95.1	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Vanadium	15.3		0.26	1.90	mg/Kg
Q1241-11	JPP-5.2-013025	SOIL	Zinc	233		0.11	1.90	mg/Kg

Client ID : JPP-5.4-013025

Q1241-15	JPP-5.4-013025	SOIL	Aluminum	4350		2.34	4.85	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Antimony	2.02	J	0.15	2.43	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Arsenic	5.13		0.28	0.97	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Barium	93.8		0.62	4.85	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Beryllium	0.37		0.012	0.29	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Cadmium	0.57		0.016	0.29	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Calcium	17700		2.72	97.0	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Chromium	11.9		0.052	0.49	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Cobalt	5.88		0.056	1.46	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Copper	76.4		0.46	0.97	mg/Kg

Hit Summary Sheet
SW-846

SDG No.:	Q1241	Order ID:	Q1241
Client:	RU2 Engineering, LLC	Project ID:	NYCDDC SANTWOBR Brooklyn Bridge

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1241-15	JPP-5.4-013025	SOIL	Iron	12200		2.61	4.85	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Lead	365		0.15	0.58	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Magnesium	5050		3.33	97.0	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Manganese	197		0.069	0.97	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Mercury	1.01	D	0.034	0.078	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Nickel	23.3		0.087	1.94	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Potassium	1420		27.8	97.0	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Silver	0.72		0.050	0.49	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Sodium	1010		35.0	97.0	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Vanadium	14.2		0.26	1.94	mg/Kg
Q1241-15	JPP-5.4-013025	SOIL	Zinc	85.8		0.11	1.94	mg/Kg

Client ID : JPP-51.4-013025

Q1241-19	JPP-51.4-013025	SOIL	Aluminum	5920		2.23	4.62	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Antimony	0.66	J	0.14	2.31	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Arsenic	7.33		0.27	0.93	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Barium	118		0.59	4.62	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Beryllium	0.44		0.011	0.28	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Cadmium	1.02		0.015	0.28	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Calcium	23200		2.59	92.5	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Chromium	15.0		0.050	0.46	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Cobalt	7.16		0.054	1.39	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Copper	83.1		0.44	0.93	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Iron	15800		2.49	4.62	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Lead	286		0.14	0.56	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Magnesium	3980		3.17	92.5	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Manganese	221		0.066	0.93	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Mercury	0.55		0.0060	0.014	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Nickel	19.5		0.083	1.85	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Potassium	1160		26.5	92.5	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Silver	0.79		0.048	0.46	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Sodium	2280		33.4	92.5	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Vanadium	22.4		0.25	1.85	mg/Kg
Q1241-19	JPP-51.4-013025	SOIL	Zinc	185		0.10	1.85	mg/Kg



SAMPLE DATA

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	82

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	5080		1	2.56	5.30	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-36-0	Antimony	3.39	N	1	0.16	2.65	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-38-2	Arsenic	49.3		1	0.31	1.06	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-39-3	Barium	580		1	0.68	5.30	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-41-7	Beryllium	0.57		1	0.013	0.32	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-43-9	Cadmium	4.03		1	0.017	0.32	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-70-2	Calcium	22400		1	2.97	106	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-47-3	Chromium	20.6		1	0.057	0.53	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-48-4	Cobalt	8.29		1	0.062	1.59	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-50-8	Copper	302		1	0.50	1.06	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7439-89-6	Iron	27700		1	2.85	5.30	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7439-92-1	Lead	1470		1	0.16	0.64	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7439-95-4	Magnesium	3480		1	3.64	106	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7439-96-5	Manganese	350		1	0.075	1.06	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7439-97-6	Mercury	1.94	D*	5	0.038	0.085	mg/Kg	02/03/25 10:35	02/03/25 19:22	SW7471B	
7440-02-0	Nickel	33.7		1	0.095	2.12	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-09-7	Potassium	1000		1	30.4	106	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7782-49-2	Selenium	1.06	U	1	0.35	1.06	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-22-4	Silver	2.91	*	1	0.055	0.53	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-23-5	Sodium	538		1	38.3	106	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-28-0	Thallium	0.82	J	1	0.47	2.12	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-62-2	Vanadium	21.9	N	1	0.29	2.12	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050
7440-66-6	Zinc	1050		1	0.12	2.12	mg/Kg	01/31/25 09:40	02/10/25 19:27	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.3-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-07	Matrix:	SOIL
Level (low/med):	low	% Solid:	87.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	6240		1	2.23	4.63	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-36-0	Antimony	2.31	UN	1	0.14	2.31	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-38-2	Arsenic	2.33		1	0.27	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-39-3	Barium	24.9		1	0.59	4.63	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-41-7	Beryllium	0.22	J	1	0.011	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-43-9	Cadmium	0.28	J	1	0.015	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-70-2	Calcium	16400		1	2.59	92.6	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-47-3	Chromium	12.9		1	0.050	0.46	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-48-4	Cobalt	2.67		1	0.054	1.39	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-50-8	Copper	22.0		1	0.44	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7439-89-6	Iron	7760		1	2.49	4.63	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7439-92-1	Lead	36.8		1	0.14	0.56	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7439-95-4	Magnesium	4140		1	3.18	92.6	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7439-96-5	Manganese	92.7		1	0.066	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7439-97-6	Mercury	0.084	*	1	0.0060	0.014	mg/Kg	02/03/25 10:35	02/03/25 18:30	SW7471B	
7440-02-0	Nickel	14.1		1	0.083	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-09-7	Potassium	799		1	26.6	92.6	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7782-49-2	Selenium	0.93	U	1	0.31	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-22-4	Silver	0.38	J*	1	0.048	0.46	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-23-5	Sodium	435		1	33.4	92.6	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-28-0	Thallium	1.85	U	1	0.41	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-62-2	Vanadium	15.2	N	1	0.25	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050
7440-66-6	Zinc	69.0		1	0.10	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:31	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.2-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-11	Matrix:	SOIL
Level (low/med):	low	% Solid:	88.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4320		1	2.29	4.76	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-36-0	Antimony	0.39	JN	1	0.14	2.38	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-38-2	Arsenic	3.46		1	0.28	0.95	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-39-3	Barium	49.8		1	0.61	4.76	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-41-7	Beryllium	0.44		1	0.011	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-43-9	Cadmium	0.56		1	0.015	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-70-2	Calcium	22100		1	2.66	95.1	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-47-3	Chromium	16.1		1	0.051	0.48	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-48-4	Cobalt	6.38		1	0.055	1.43	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-50-8	Copper	60.5		1	0.45	0.95	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7439-89-6	Iron	10800		1	2.56	4.76	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7439-92-1	Lead	116		1	0.14	0.57	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7439-95-4	Magnesium	3530		1	3.26	95.1	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7439-96-5	Manganese	223		1	0.068	0.95	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7439-97-6	Mercury	0.35	*	1	0.0060	0.014	mg/Kg	02/03/25 10:35	02/03/25 18:32	SW7471B	
7440-02-0	Nickel	22.0		1	0.086	1.90	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-09-7	Potassium	1280		1	27.3	95.1	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7782-49-2	Selenium	0.95	U	1	0.31	0.95	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-22-4	Silver	1.00	*	1	0.049	0.48	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-23-5	Sodium	601		1	34.3	95.1	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-28-0	Thallium	1.90	U	1	0.42	1.90	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-62-2	Vanadium	15.3	N	1	0.26	1.90	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050
7440-66-6	Zinc	233		1	0.11	1.90	mg/Kg	01/31/25 09:40	02/10/25 19:36	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-5.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-15	Matrix:	SOIL
Level (low/med):	low	% Solid:	86.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4350		1	2.34	4.85	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-36-0	Antimony	2.02	JN	1	0.15	2.43	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-38-2	Arsenic	5.13		1	0.28	0.97	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-39-3	Barium	93.8		1	0.62	4.85	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-41-7	Beryllium	0.37		1	0.012	0.29	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-43-9	Cadmium	0.57		1	0.016	0.29	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-70-2	Calcium	17700		1	2.72	97.0	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-47-3	Chromium	11.9		1	0.052	0.49	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-48-4	Cobalt	5.88		1	0.056	1.46	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-50-8	Copper	76.4		1	0.46	0.97	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7439-89-6	Iron	12200		1	2.61	4.85	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7439-92-1	Lead	365		1	0.15	0.58	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7439-95-4	Magnesium	5050		1	3.33	97.0	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7439-96-5	Manganese	197		1	0.069	0.97	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7439-97-6	Mercury	1.01	D*	5	0.034	0.078	mg/Kg	02/03/25 10:35	02/03/25 19:25	SW7471B	
7440-02-0	Nickel	23.3		1	0.087	1.94	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-09-7	Potassium	1420		1	27.8	97.0	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7782-49-2	Selenium	0.97	U	1	0.32	0.97	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-22-4	Silver	0.72	*	1	0.050	0.49	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-23-5	Sodium	1010		1	35.0	97.0	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-28-0	Thallium	1.94	U	1	0.43	1.94	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-62-2	Vanadium	14.2	N	1	0.26	1.94	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050
7440-66-6	Zinc	85.8		1	0.11	1.94	mg/Kg	01/31/25 09:40	02/10/25 19:49	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

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

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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-51.4-013025	SDG No.:	Q1241
Lab Sample ID:	Q1241-19	Matrix:	SOIL
Level (low/med):	low	% Solid:	93.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	5920		1	2.23	4.62	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-36-0	Antimony	0.66	JN	1	0.14	2.31	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-38-2	Arsenic	7.33		1	0.27	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-39-3	Barium	118		1	0.59	4.62	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-41-7	Beryllium	0.44		1	0.011	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-43-9	Cadmium	1.02		1	0.015	0.28	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-70-2	Calcium	23200		1	2.59	92.5	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-47-3	Chromium	15.0		1	0.050	0.46	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-48-4	Cobalt	7.16		1	0.054	1.39	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-50-8	Copper	83.1		1	0.44	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7439-89-6	Iron	15800		1	2.49	4.62	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7439-92-1	Lead	286		1	0.14	0.56	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7439-95-4	Magnesium	3980		1	3.17	92.5	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7439-96-5	Manganese	221		1	0.066	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7439-97-6	Mercury	0.55	*	1	0.0060	0.014	mg/Kg	02/03/25 10:35	02/03/25 18:41	SW7471B	
7440-02-0	Nickel	19.5		1	0.083	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-09-7	Potassium	1160		1	26.5	92.5	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7782-49-2	Selenium	0.93	U	1	0.31	0.93	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-22-4	Silver	0.79	*	1	0.048	0.46	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-23-5	Sodium	2280		1	33.4	92.5	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-28-0	Thallium	1.85	U	1	0.41	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-62-2	Vanadium	22.4	N	1	0.25	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050
7440-66-6	Zinc	185		1	0.10	1.85	mg/Kg	01/31/25 09:40	02/10/25 19:53	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

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

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



METAL CALIBRATION DATA

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV82	Mercury	3.82	4.0	95	90 - 110	CV	02/03/2025	18:02	LB134542



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Client:	<u>RU2 Engineering, LLC</u>	SDG No.:	<u>Q1241</u>	
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>	Case No.: <u>Q1241</u> SAS No.: <u>Q1241</u>
Initial Calibration Source:	<u>EPA</u>			
Continuing Calibration Source:	<u>PLASMA-PURE</u>			

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV14	Mercury	5.18	5.0	104	90 - 110	CV	02/03/2025	18:07	LB134542
CCV15	Mercury	4.99	5.0	100	90 - 110	CV	02/03/2025	18:35	LB134542
CCV16	Mercury	5.19	5.0	104	90 - 110	CV	02/03/2025	19:02	LB134542
CCV17	Mercury	5.01	5.0	100	90 - 110	CV	02/03/2025	19:27	LB134542

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2550	2500	102	90 - 110	P	02/10/2025	14:06	LB134659
	Antimony	1070	1000	107	90 - 110	P	02/10/2025	14:06	LB134659
	Arsenic	1030	1000	104	90 - 110	P	02/10/2025	14:06	LB134659
	Barium	502	520	97	90 - 110	P	02/10/2025	14:06	LB134659
	Beryllium	505	510	99	90 - 110	P	02/10/2025	14:06	LB134659
	Cadmium	514	510	101	90 - 110	P	02/10/2025	14:06	LB134659
	Calcium	10000	10000	100	90 - 110	P	02/10/2025	14:06	LB134659
	Chromium	541	520	104	90 - 110	P	02/10/2025	14:06	LB134659
	Cobalt	522	520	100	90 - 110	P	02/10/2025	14:06	LB134659
	Copper	541	510	106	90 - 110	P	02/10/2025	14:06	LB134659
	Iron	10300	10000	103	90 - 110	P	02/10/2025	14:06	LB134659
	Lead	1010	1000	101	90 - 110	P	02/10/2025	14:06	LB134659
	Magnesium	5910	6000	99	90 - 110	P	02/10/2025	14:06	LB134659
	Manganese	511	520	98	90 - 110	P	02/10/2025	14:06	LB134659
	Nickel	526	530	99	90 - 110	P	02/10/2025	14:06	LB134659
	Potassium	10100	9900	102	90 - 110	P	02/10/2025	14:06	LB134659
	Selenium	1080	1000	108	90 - 110	P	02/10/2025	14:06	LB134659
	Silver	256	250	102	90 - 110	P	02/10/2025	14:06	LB134659
	Sodium	9920	10000	99	90 - 110	P	02/10/2025	14:06	LB134659
	Thallium	1050	1000	106	90 - 110	P	02/10/2025	14:06	LB134659
	Vanadium	503	500	101	90 - 110	P	02/10/2025	14:06	LB134659
	Zinc	988	1000	99	90 - 110	P	02/10/2025	14:06	LB134659

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	97.7	100	98	80 - 120	P	02/10/2025	14:20	LB134659
	Antimony	52.3	50.0	105	80 - 120	P	02/10/2025	14:20	LB134659
	Arsenic	21.0	20.0	105	80 - 120	P	02/10/2025	14:20	LB134659
	Barium	84.5	100	84	80 - 120	P	02/10/2025	14:20	LB134659
	Beryllium	5.86	6.0	98	80 - 120	P	02/10/2025	14:20	LB134659
	Cadmium	5.70	6.0	95	80 - 120	P	02/10/2025	14:20	LB134659
	Calcium	1930	2000	96	80 - 120	P	02/10/2025	14:20	LB134659
	Chromium	9.89	10.0	99	80 - 120	P	02/10/2025	14:20	LB134659
	Cobalt	29.0	30.0	97	80 - 120	P	02/10/2025	14:20	LB134659
	Copper	22.1	20.0	110	80 - 120	P	02/10/2025	14:20	LB134659
	Iron	95.9	100	96	80 - 120	P	02/10/2025	14:20	LB134659
	Lead	11.5	12.0	95	80 - 120	P	02/10/2025	14:20	LB134659
	Magnesium	2010	2000	101	80 - 120	P	02/10/2025	14:20	LB134659
	Manganese	19.0	20.0	95	80 - 120	P	02/10/2025	14:20	LB134659
	Nickel	38.9	40.0	97	80 - 120	P	02/10/2025	14:20	LB134659
	Potassium	1630	2000	82	80 - 120	P	02/10/2025	14:20	LB134659
	Selenium	20.3	20.0	101	80 - 120	P	02/10/2025	14:20	LB134659
	Silver	10.3	10.0	103	80 - 120	P	02/10/2025	14:20	LB134659
	Sodium	1950	2000	98	80 - 120	P	02/10/2025	14:20	LB134659
	Thallium	39.3	40.0	98	80 - 120	P	02/10/2025	14:20	LB134659
	Vanadium	36.8	40.0	92	80 - 120	P	02/10/2025	14:20	LB134659
	Zinc	42.9	40.0	107	80 - 120	P	02/10/2025	14:20	LB134659

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9800	10000	98	90 - 110	P	02/10/2025	14:59	LB134659
	Antimony	5120	5000	102	90 - 110	P	02/10/2025	14:59	LB134659
	Arsenic	5020	5000	100	90 - 110	P	02/10/2025	14:59	LB134659
	Barium	9910	10000	99	90 - 110	P	02/10/2025	14:59	LB134659
	Beryllium	268	250	107	90 - 110	P	02/10/2025	14:59	LB134659
	Cadmium	2640	2500	106	90 - 110	P	02/10/2025	14:59	LB134659
	Calcium	23800	25000	95	90 - 110	P	02/10/2025	14:59	LB134659
	Chromium	998	1000	100	90 - 110	P	02/10/2025	14:59	LB134659
	Cobalt	2430	2500	97	90 - 110	P	02/10/2025	14:59	LB134659
	Copper	1260	1250	101	90 - 110	P	02/10/2025	14:59	LB134659
	Iron	4930	5000	99	90 - 110	P	02/10/2025	14:59	LB134659
	Lead	4860	5000	97	90 - 110	P	02/10/2025	14:59	LB134659
	Magnesium	23800	25000	95	90 - 110	P	02/10/2025	14:59	LB134659
	Manganese	2340	2500	93	90 - 110	P	02/10/2025	14:59	LB134659
	Nickel	2430	2500	97	90 - 110	P	02/10/2025	14:59	LB134659
	Potassium	25000	25000	100	90 - 110	P	02/10/2025	14:59	LB134659
	Selenium	5080	5000	102	90 - 110	P	02/10/2025	14:59	LB134659
	Silver	1240	1250	99	90 - 110	P	02/10/2025	14:59	LB134659
	Sodium	25600	25000	102	90 - 110	P	02/10/2025	14:59	LB134659
	Thallium	4990	5000	100	90 - 110	P	02/10/2025	14:59	LB134659
	Vanadium	2400	2500	96	90 - 110	P	02/10/2025	14:59	LB134659
	Zinc	2510	2500	100	90 - 110	P	02/10/2025	14:59	LB134659
CCV02	Aluminum	9130	10000	91	90 - 110	P	02/10/2025	16:05	LB134659
	Antimony	4840	5000	97	90 - 110	P	02/10/2025	16:05	LB134659
	Arsenic	4720	5000	94	90 - 110	P	02/10/2025	16:05	LB134659
	Barium	10500	10000	105	90 - 110	P	02/10/2025	16:05	LB134659
	Beryllium	268	250	107	90 - 110	P	02/10/2025	16:05	LB134659
	Cadmium	2720	2500	109	90 - 110	P	02/10/2025	16:05	LB134659
	Calcium	27300	25000	109	90 - 110	P	02/10/2025	16:05	LB134659
	Chromium	929	1000	93	90 - 110	P	02/10/2025	16:05	LB134659
	Cobalt	2260	2500	91	90 - 110	P	02/10/2025	16:05	LB134659
	Copper	1180	1250	95	90 - 110	P	02/10/2025	16:05	LB134659
	Iron	4500	5000	90	90 - 110	P	02/10/2025	16:05	LB134659
	Lead	4520	5000	90	90 - 110	P	02/10/2025	16:05	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	26300	25000	105	90 - 110	P	02/10/2025	16:05	LB134659
	Manganese	2450	2500	98	90 - 110	P	02/10/2025	16:05	LB134659
	Nickel	2270	2500	91	90 - 110	P	02/10/2025	16:05	LB134659
	Potassium	22900	25000	92	90 - 110	P	02/10/2025	16:05	LB134659
	Selenium	4790	5000	96	90 - 110	P	02/10/2025	16:05	LB134659
	Silver	1150	1250	92	90 - 110	P	02/10/2025	16:05	LB134659
	Sodium	23800	25000	95	90 - 110	P	02/10/2025	16:05	LB134659
	Thallium	4620	5000	92	90 - 110	P	02/10/2025	16:05	LB134659
	Vanadium	2560	2500	102	90 - 110	P	02/10/2025	16:05	LB134659
	Zinc	2350	2500	94	90 - 110	P	02/10/2025	16:05	LB134659
CCV03	Aluminum	9720	10000	97	90 - 110	P	02/10/2025	16:57	LB134659
	Antimony	5160	5000	103	90 - 110	P	02/10/2025	16:57	LB134659
	Arsenic	5040	5000	101	90 - 110	P	02/10/2025	16:57	LB134659
	Barium	9210	10000	92	90 - 110	P	02/10/2025	16:57	LB134659
	Beryllium	231	250	93	90 - 110	P	02/10/2025	16:57	LB134659
	Cadmium	2370	2500	95	90 - 110	P	02/10/2025	16:57	LB134659
	Calcium	23100	25000	92	90 - 110	P	02/10/2025	16:57	LB134659
	Chromium	991	1000	99	90 - 110	P	02/10/2025	16:57	LB134659
	Cobalt	2390	2500	96	90 - 110	P	02/10/2025	16:57	LB134659
	Copper	1250	1250	100	90 - 110	P	02/10/2025	16:57	LB134659
	Iron	4770	5000	95	90 - 110	P	02/10/2025	16:57	LB134659
	Lead	4770	5000	95	90 - 110	P	02/10/2025	16:57	LB134659
	Magnesium	23000	25000	92	90 - 110	P	02/10/2025	16:57	LB134659
	Manganese	2610	2500	104	90 - 110	P	02/10/2025	16:57	LB134659
	Nickel	2390	2500	96	90 - 110	P	02/10/2025	16:57	LB134659
	Potassium	24400	25000	98	90 - 110	P	02/10/2025	16:57	LB134659
	Selenium	5140	5000	103	90 - 110	P	02/10/2025	16:57	LB134659
	Silver	1220	1250	98	90 - 110	P	02/10/2025	16:57	LB134659
	Sodium	25700	25000	103	90 - 110	P	02/10/2025	16:57	LB134659
	Thallium	4880	5000	98	90 - 110	P	02/10/2025	16:57	LB134659
CCV04	Vanadium	2330	2500	93	90 - 110	P	02/10/2025	16:57	LB134659
	Zinc	2490	2500	100	90 - 110	P	02/10/2025	16:57	LB134659
	Aluminum	9540	10000	95	90 - 110	P	02/10/2025	17:53	LB134659
	Antimony	5040	5000	101	90 - 110	P	02/10/2025	17:53	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
 Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	4910	5000	98	90 - 110	P	02/10/2025	17:53	LB134659
	Barium	9210	10000	92	90 - 110	P	02/10/2025	17:53	LB134659
	Beryllium	228	250	91	90 - 110	P	02/10/2025	17:53	LB134659
	Cadmium	2320	2500	93	90 - 110	P	02/10/2025	17:53	LB134659
	Calcium	22700	25000	91	90 - 110	P	02/10/2025	17:53	LB134659
	Chromium	972	1000	97	90 - 110	P	02/10/2025	17:53	LB134659
	Cobalt	2350	2500	94	90 - 110	P	02/10/2025	17:53	LB134659
	Copper	1230	1250	98	90 - 110	P	02/10/2025	17:53	LB134659
	Iron	4730	5000	95	90 - 110	P	02/10/2025	17:53	LB134659
	Lead	4680	5000	94	90 - 110	P	02/10/2025	17:53	LB134659
	Magnesium	22500	25000	90	90 - 110	P	02/10/2025	17:53	LB134659
	Manganese	2570	2500	103	90 - 110	P	02/10/2025	17:53	LB134659
	Nickel	2350	2500	94	90 - 110	P	02/10/2025	17:53	LB134659
	Potassium	24200	25000	97	90 - 110	P	02/10/2025	17:53	LB134659
	Selenium	5010	5000	100	90 - 110	P	02/10/2025	17:53	LB134659
	Silver	1210	1250	97	90 - 110	P	02/10/2025	17:53	LB134659
	Sodium	25300	25000	101	90 - 110	P	02/10/2025	17:53	LB134659
	Thallium	4840	5000	97	90 - 110	P	02/10/2025	17:53	LB134659
	Vanadium	2300	2500	92	90 - 110	P	02/10/2025	17:53	LB134659
	Zinc	2460	2500	99	90 - 110	P	02/10/2025	17:53	LB134659
CCV05	Aluminum	9720	10000	97	90 - 110	P	02/10/2025	18:48	LB134659
	Antimony	5170	5000	103	90 - 110	P	02/10/2025	18:48	LB134659
	Arsenic	5050	5000	101	90 - 110	P	02/10/2025	18:48	LB134659
	Barium	9470	10000	95	90 - 110	P	02/10/2025	18:48	LB134659
	Beryllium	229	250	92	90 - 110	P	02/10/2025	18:48	LB134659
	Cadmium	2360	2500	94	90 - 110	P	02/10/2025	18:48	LB134659
	Calcium	23400	25000	94	90 - 110	P	02/10/2025	18:48	LB134659
	Chromium	969	1000	97	90 - 110	P	02/10/2025	18:48	LB134659
	Cobalt	2390	2500	96	90 - 110	P	02/10/2025	18:48	LB134659
	Copper	1260	1250	101	90 - 110	P	02/10/2025	18:48	LB134659
	Iron	4760	5000	95	90 - 110	P	02/10/2025	18:48	LB134659
	Lead	4760	5000	95	90 - 110	P	02/10/2025	18:48	LB134659
	Magnesium	23200	25000	93	90 - 110	P	02/10/2025	18:48	LB134659
	Manganese	2680	2500	107	90 - 110	P	02/10/2025	18:48	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2390	2500	96	90 - 110	P	02/10/2025	18:48	LB134659
	Potassium	24400	25000	98	90 - 110	P	02/10/2025	18:48	LB134659
	Selenium	5190	5000	104	90 - 110	P	02/10/2025	18:48	LB134659
	Silver	1200	1250	96	90 - 110	P	02/10/2025	18:48	LB134659
	Sodium	25600	25000	102	90 - 110	P	02/10/2025	18:48	LB134659
	Thallium	4870	5000	98	90 - 110	P	02/10/2025	18:48	LB134659
	Vanadium	2360	2500	94	90 - 110	P	02/10/2025	18:48	LB134659
	Zinc	2450	2500	98	90 - 110	P	02/10/2025	18:48	LB134659
CCV06	Aluminum	9650	10000	96	90 - 110	P	02/10/2025	19:40	LB134659
	Antimony	5050	5000	101	90 - 110	P	02/10/2025	19:40	LB134659
	Arsenic	4890	5000	98	90 - 110	P	02/10/2025	19:40	LB134659
	Barium	9330	10000	93	90 - 110	P	02/10/2025	19:40	LB134659
	Beryllium	227	250	91	90 - 110	P	02/10/2025	19:40	LB134659
	Cadmium	2290	2500	92	90 - 110	P	02/10/2025	19:40	LB134659
	Calcium	23200	25000	93	90 - 110	P	02/10/2025	19:40	LB134659
	Chromium	970	1000	97	90 - 110	P	02/10/2025	19:40	LB134659
	Cobalt	2340	2500	93	90 - 110	P	02/10/2025	19:40	LB134659
	Copper	1220	1250	98	90 - 110	P	02/10/2025	19:40	LB134659
	Iron	4760	5000	95	90 - 110	P	02/10/2025	19:40	LB134659
	Lead	4630	5000	93	90 - 110	P	02/10/2025	19:40	LB134659
	Magnesium	23100	25000	92	90 - 110	P	02/10/2025	19:40	LB134659
	Manganese	2640	2500	106	90 - 110	P	02/10/2025	19:40	LB134659
	Nickel	2330	2500	93	90 - 110	P	02/10/2025	19:40	LB134659
	Potassium	24500	25000	98	90 - 110	P	02/10/2025	19:40	LB134659
	Selenium	5000	5000	100	90 - 110	P	02/10/2025	19:40	LB134659
	Silver	1200	1250	96	90 - 110	P	02/10/2025	19:40	LB134659
	Sodium	25700	25000	103	90 - 110	P	02/10/2025	19:40	LB134659
	Thallium	4680	5000	94	90 - 110	P	02/10/2025	19:40	LB134659
	Vanadium	2330	2500	93	90 - 110	P	02/10/2025	19:40	LB134659
	Zinc	2420	2500	97	90 - 110	P	02/10/2025	19:40	LB134659
CCV07	Aluminum	9710	10000	97	90 - 110	P	02/10/2025	20:36	LB134659
	Antimony	5030	5000	101	90 - 110	P	02/10/2025	20:36	LB134659
	Arsenic	4890	5000	98	90 - 110	P	02/10/2025	20:36	LB134659
	Barium	9290	10000	93	90 - 110	P	02/10/2025	20:36	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
 Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	233	250	93	90 - 110	P	02/10/2025	20:36	LB134659
	Cadmium	2290	2500	92	90 - 110	P	02/10/2025	20:36	LB134659
	Calcium	23400	25000	93	90 - 110	P	02/10/2025	20:36	LB134659
	Chromium	968	1000	97	90 - 110	P	02/10/2025	20:36	LB134659
	Cobalt	2340	2500	93	90 - 110	P	02/10/2025	20:36	LB134659
	Copper	1220	1250	98	90 - 110	P	02/10/2025	20:36	LB134659
	Iron	4710	5000	94	90 - 110	P	02/10/2025	20:36	LB134659
	Lead	4650	5000	93	90 - 110	P	02/10/2025	20:36	LB134659
	Magnesium	23200	25000	93	90 - 110	P	02/10/2025	20:36	LB134659
	Manganese	2270	2500	91	90 - 110	P	02/10/2025	20:36	LB134659
	Nickel	2330	2500	93	90 - 110	P	02/10/2025	20:36	LB134659
	Potassium	24200	25000	97	90 - 110	P	02/10/2025	20:36	LB134659
	Selenium	5010	5000	100	90 - 110	P	02/10/2025	20:36	LB134659
	Silver	1200	1250	96	90 - 110	P	02/10/2025	20:36	LB134659
	Sodium	24900	25000	100	90 - 110	P	02/10/2025	20:36	LB134659
	Thallium	4770	5000	95	90 - 110	P	02/10/2025	20:36	LB134659
	Vanadium	2330	2500	93	90 - 110	P	02/10/2025	20:36	LB134659
	Zinc	2430	2500	97	90 - 110	P	02/10/2025	20:36	LB134659
CCV08	Aluminum	9750	10000	98	90 - 110	P	02/10/2025	21:02	LB134659
	Antimony	5080	5000	102	90 - 110	P	02/10/2025	21:02	LB134659
	Arsenic	4920	5000	98	90 - 110	P	02/10/2025	21:02	LB134659
	Barium	9300	10000	93	90 - 110	P	02/10/2025	21:02	LB134659
	Beryllium	238	250	95	90 - 110	P	02/10/2025	21:02	LB134659
	Cadmium	2320	2500	93	90 - 110	P	02/10/2025	21:02	LB134659
	Calcium	23500	25000	94	90 - 110	P	02/10/2025	21:02	LB134659
	Chromium	983	1000	98	90 - 110	P	02/10/2025	21:02	LB134659
	Cobalt	2370	2500	95	90 - 110	P	02/10/2025	21:02	LB134659
	Copper	1240	1250	99	90 - 110	P	02/10/2025	21:02	LB134659
	Iron	4860	5000	97	90 - 110	P	02/10/2025	21:02	LB134659
	Lead	4700	5000	94	90 - 110	P	02/10/2025	21:02	LB134659
	Magnesium	23200	25000	93	90 - 110	P	02/10/2025	21:02	LB134659
	Manganese	2280	2500	91	90 - 110	P	02/10/2025	21:02	LB134659
	Nickel	2360	2500	94	90 - 110	P	02/10/2025	21:02	LB134659
	Potassium	24100	25000	96	90 - 110	P	02/10/2025	21:02	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV08	Selenium	5010	5000	100	90 - 110	P	02/10/2025	21:02	LB134659
	Silver	1220	1250	97	90 - 110	P	02/10/2025	21:02	LB134659
	Sodium	24900	25000	100	90 - 110	P	02/10/2025	21:02	LB134659
	Thallium	4780	5000	96	90 - 110	P	02/10/2025	21:02	LB134659
	Vanadium	2340	2500	94	90 - 110	P	02/10/2025	21:02	LB134659
	Zinc	2460	2500	99	90 - 110	P	02/10/2025	21:02	LB134659

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	2420	2500	97	90 - 110	P	02/12/2025	12:59	LB134704
	Antimony	1010	1000	101	90 - 110	P	02/12/2025	12:59	LB134704
	Arsenic	998	1000	100	90 - 110	P	02/12/2025	12:59	LB134704
	Barium	545	520	105	90 - 110	P	02/12/2025	12:59	LB134704
	Beryllium	501	510	98	90 - 110	P	02/12/2025	12:59	LB134704
	Cadmium	505	510	99	90 - 110	P	02/12/2025	12:59	LB134704
	Calcium	9700	10000	97	90 - 110	P	02/12/2025	12:59	LB134704
	Chromium	528	520	102	90 - 110	P	02/12/2025	12:59	LB134704
	Cobalt	509	520	98	90 - 110	P	02/12/2025	12:59	LB134704
	Copper	520	510	102	90 - 110	P	02/12/2025	12:59	LB134704
	Iron	10400	10000	104	90 - 110	P	02/12/2025	12:59	LB134704
	Lead	987	1000	99	90 - 110	P	02/12/2025	12:59	LB134704
	Magnesium	6290	6000	105	90 - 110	P	02/12/2025	12:59	LB134704
	Manganese	496	520	95	90 - 110	P	02/12/2025	12:59	LB134704
	Nickel	514	530	97	90 - 110	P	02/12/2025	12:59	LB134704
	Potassium	10100	9900	102	90 - 110	P	02/12/2025	12:59	LB134704
	Selenium	1030	1000	103	90 - 110	P	02/12/2025	12:59	LB134704
	Silver	247	250	99	90 - 110	P	02/12/2025	12:59	LB134704
	Sodium	10300	10000	103	90 - 110	P	02/12/2025	12:59	LB134704
	Thallium	1020	1000	102	90 - 110	P	02/12/2025	12:59	LB134704
	Vanadium	517	500	103	90 - 110	P	02/12/2025	12:59	LB134704
	Zinc	1010	1000	101	90 - 110	P	02/12/2025	12:59	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Aluminum	95.9	100	96	80 - 120	P	02/12/2025	13:08	LB134704
	Antimony	49.5	50.0	99	80 - 120	P	02/12/2025	13:08	LB134704
	Arsenic	19.2	20.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Barium	97.5	100	98	80 - 120	P	02/12/2025	13:08	LB134704
	Beryllium	5.68	6.0	95	80 - 120	P	02/12/2025	13:08	LB134704
	Cadmium	5.79	6.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Calcium	1990	2000	99	80 - 120	P	02/12/2025	13:08	LB134704
	Chromium	10.2	10.0	102	80 - 120	P	02/12/2025	13:08	LB134704
	Cobalt	29.3	30.0	98	80 - 120	P	02/12/2025	13:08	LB134704
	Copper	21.9	20.0	110	80 - 120	P	02/12/2025	13:08	LB134704
	Iron	102	100	102	80 - 120	P	02/12/2025	13:08	LB134704
	Lead	10.4	12.0	87	80 - 120	P	02/12/2025	13:08	LB134704
	Magnesium	2110	2000	105	80 - 120	P	02/12/2025	13:08	LB134704
	Manganese	19.8	20.0	99	80 - 120	P	02/12/2025	13:08	LB134704
	Nickel	39.3	40.0	98	80 - 120	P	02/12/2025	13:08	LB134704
	Potassium	2090	2000	104	80 - 120	P	02/12/2025	13:08	LB134704
	Selenium	18.5	20.0	92	80 - 120	P	02/12/2025	13:08	LB134704
	Silver	10.2	10.0	102	80 - 120	P	02/12/2025	13:08	LB134704
	Sodium	2090	2000	104	80 - 120	P	02/12/2025	13:08	LB134704
	Thallium	39.9	40.0	100	80 - 120	P	02/12/2025	13:08	LB134704
	Vanadium	38.4	40.0	96	80 - 120	P	02/12/2025	13:08	LB134704
	Zinc	42.2	40.0	106	80 - 120	P	02/12/2025	13:08	LB134704

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
 Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	9840	10000	98	90 - 110	P	02/12/2025	13:39	LB134704
	Antimony	4950	5000	99	90 - 110	P	02/12/2025	13:39	LB134704
	Arsenic	4980	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Barium	10100	10000	101	90 - 110	P	02/12/2025	13:39	LB134704
	Beryllium	246	250	98	90 - 110	P	02/12/2025	13:39	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Calcium	25000	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Chromium	999	1000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Cobalt	2490	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Copper	1260	1250	101	90 - 110	P	02/12/2025	13:39	LB134704
	Iron	5110	5000	102	90 - 110	P	02/12/2025	13:39	LB134704
	Lead	5000	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Magnesium	25000	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Manganese	2520	2500	101	90 - 110	P	02/12/2025	13:39	LB134704
	Nickel	2500	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Potassium	25100	25000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Selenium	4980	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Silver	1240	1250	99	90 - 110	P	02/12/2025	13:39	LB134704
	Sodium	25200	25000	101	90 - 110	P	02/12/2025	13:39	LB134704
	Thallium	5020	5000	100	90 - 110	P	02/12/2025	13:39	LB134704
	Vanadium	2490	2500	100	90 - 110	P	02/12/2025	13:39	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	13:39	LB134704
CCV02	Aluminum	9980	10000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Antimony	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Arsenic	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Barium	10000	10000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Beryllium	247	250	99	90 - 110	P	02/12/2025	14:29	LB134704
	Cadmium	2540	2500	102	90 - 110	P	02/12/2025	14:29	LB134704
	Calcium	25100	25000	100	90 - 110	P	02/12/2025	14:29	LB134704
	Chromium	1030	1000	103	90 - 110	P	02/12/2025	14:29	LB134704
	Cobalt	2530	2500	101	90 - 110	P	02/12/2025	14:29	LB134704
	Copper	1270	1250	102	90 - 110	P	02/12/2025	14:29	LB134704
	Iron	5210	5000	104	90 - 110	P	02/12/2025	14:29	LB134704
	Lead	5060	5000	101	90 - 110	P	02/12/2025	14:29	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
 Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Magnesium	25200	25000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Manganese	2500	2500	100	90 - 110	P	02/12/2025	14:29	LB134704
	Nickel	2530	2500	101	90 - 110	P	02/12/2025	14:29	LB134704
	Potassium	26000	25000	104	90 - 110	P	02/12/2025	14:29	LB134704
	Selenium	5040	5000	101	90 - 110	P	02/12/2025	14:29	LB134704
	Silver	1270	1250	102	90 - 110	P	02/12/2025	14:29	LB134704
	Sodium	26300	25000	105	90 - 110	P	02/12/2025	14:29	LB134704
	Thallium	5160	5000	103	90 - 110	P	02/12/2025	14:29	LB134704
	Vanadium	2510	2500	100	90 - 110	P	02/12/2025	14:29	LB134704
	Zinc	2520	2500	101	90 - 110	P	02/12/2025	14:29	LB134704
CCV03	Aluminum	9920	10000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Antimony	4990	5000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Arsenic	4960	5000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Barium	10000	10000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Beryllium	243	250	97	90 - 110	P	02/12/2025	15:20	LB134704
	Cadmium	2490	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	15:20	LB134704
	Cobalt	2490	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	15:20	LB134704
	Iron	5160	5000	103	90 - 110	P	02/12/2025	15:20	LB134704
	Lead	4980	5000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Magnesium	24900	25000	100	90 - 110	P	02/12/2025	15:20	LB134704
	Manganese	2470	2500	99	90 - 110	P	02/12/2025	15:20	LB134704
	Nickel	2490	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Potassium	26000	25000	104	90 - 110	P	02/12/2025	15:20	LB134704
	Selenium	4970	5000	99	90 - 110	P	02/12/2025	15:20	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	15:20	LB134704
	Sodium	26600	25000	106	90 - 110	P	02/12/2025	15:20	LB134704
	Thallium	5070	5000	101	90 - 110	P	02/12/2025	15:20	LB134704
CCV04	Vanadium	2490	2500	99	90 - 110	P	02/12/2025	15:20	LB134704
	Zinc	2510	2500	100	90 - 110	P	02/12/2025	15:20	LB134704
	Aluminum	9770	10000	98	90 - 110	P	02/12/2025	16:13	LB134704
	Antimony	4820	5000	96	90 - 110	P	02/12/2025	16:13	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	4870	5000	97	90 - 110	P	02/12/2025	16:13	LB134704
	Barium	9830	10000	98	90 - 110	P	02/12/2025	16:13	LB134704
	Beryllium	245	250	98	90 - 110	P	02/12/2025	16:13	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	16:13	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	16:13	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	16:13	LB134704
	Cobalt	2470	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
	Copper	1240	1250	99	90 - 110	P	02/12/2025	16:13	LB134704
	Iron	5120	5000	102	90 - 110	P	02/12/2025	16:13	LB134704
	Lead	4970	5000	99	90 - 110	P	02/12/2025	16:13	LB134704
	Magnesium	25200	25000	101	90 - 110	P	02/12/2025	16:13	LB134704
	Manganese	2480	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
	Nickel	2490	2500	100	90 - 110	P	02/12/2025	16:13	LB134704
	Potassium	25000	25000	100	90 - 110	P	02/12/2025	16:13	LB134704
	Selenium	4810	5000	96	90 - 110	P	02/12/2025	16:13	LB134704
	Silver	1250	1250	100	90 - 110	P	02/12/2025	16:13	LB134704
	Sodium	26200	25000	105	90 - 110	P	02/12/2025	16:13	LB134704
	Thallium	4760	5000	95	90 - 110	P	02/12/2025	16:13	LB134704
	Vanadium	2470	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	16:13	LB134704
CCV05	Aluminum	9750	10000	98	90 - 110	P	02/12/2025	17:04	LB134704
	Antimony	4870	5000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Arsenic	4890	5000	98	90 - 110	P	02/12/2025	17:04	LB134704
	Barium	9700	10000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Beryllium	251	250	100	90 - 110	P	02/12/2025	17:04	LB134704
	Cadmium	2490	2500	100	90 - 110	P	02/12/2025	17:04	LB134704
	Calcium	24700	25000	99	90 - 110	P	02/12/2025	17:04	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	17:04	LB134704
	Cobalt	2480	2500	99	90 - 110	P	02/12/2025	17:04	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	17:04	LB134704
	Iron	5000	5000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Lead	4970	5000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Magnesium	25000	25000	100	90 - 110	P	02/12/2025	17:04	LB134704
	Manganese	2460	2500	98	90 - 110	P	02/12/2025	17:04	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1241
 Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV05	Nickel	2490	2500	100	90 - 110	P	02/12/2025	17:04	LB134704
	Potassium	24200	25000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Selenium	4840	5000	97	90 - 110	P	02/12/2025	17:04	LB134704
	Silver	1250	1250	100	90 - 110	P	02/12/2025	17:04	LB134704
	Sodium	24800	25000	99	90 - 110	P	02/12/2025	17:04	LB134704
	Thallium	4720	5000	94	90 - 110	P	02/12/2025	17:04	LB134704
	Vanadium	2450	2500	98	90 - 110	P	02/12/2025	17:04	LB134704
	Zinc	2480	2500	99	90 - 110	P	02/12/2025	17:04	LB134704
CCV06	Aluminum	9860	10000	99	90 - 110	P	02/12/2025	17:55	LB134704
	Antimony	4890	5000	98	90 - 110	P	02/12/2025	17:55	LB134704
	Arsenic	4910	5000	98	90 - 110	P	02/12/2025	17:55	LB134704
	Barium	9930	10000	99	90 - 110	P	02/12/2025	17:55	LB134704
	Beryllium	250	250	100	90 - 110	P	02/12/2025	17:55	LB134704
	Cadmium	2500	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Calcium	25200	25000	101	90 - 110	P	02/12/2025	17:55	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	17:55	LB134704
	Cobalt	2490	2500	99	90 - 110	P	02/12/2025	17:55	LB134704
	Copper	1250	1250	100	90 - 110	P	02/12/2025	17:55	LB134704
	Iron	5180	5000	104	90 - 110	P	02/12/2025	17:55	LB134704
	Lead	4980	5000	100	90 - 110	P	02/12/2025	17:55	LB134704
	Magnesium	25400	25000	102	90 - 110	P	02/12/2025	17:55	LB134704
	Manganese	2530	2500	101	90 - 110	P	02/12/2025	17:55	LB134704
	Nickel	2500	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Potassium	25100	25000	100	90 - 110	P	02/12/2025	17:55	LB134704
	Selenium	4860	5000	97	90 - 110	P	02/12/2025	17:55	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	17:55	LB134704
	Sodium	25700	25000	103	90 - 110	P	02/12/2025	17:55	LB134704
	Thallium	4740	5000	95	90 - 110	P	02/12/2025	17:55	LB134704
	Vanadium	2510	2500	100	90 - 110	P	02/12/2025	17:55	LB134704
	Zinc	2490	2500	99	90 - 110	P	02/12/2025	17:55	LB134704
CCV07	Aluminum	9920	10000	99	90 - 110	P	02/12/2025	18:34	LB134704
	Antimony	5000	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Arsenic	5020	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Barium	9970	10000	100	90 - 110	P	02/12/2025	18:34	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1241

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV07	Beryllium	245	250	98	90 - 110	P	02/12/2025	18:34	LB134704
	Cadmium	2520	2500	101	90 - 110	P	02/12/2025	18:34	LB134704
	Calcium	24900	25000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Chromium	1020	1000	102	90 - 110	P	02/12/2025	18:34	LB134704
	Cobalt	2500	2500	100	90 - 110	P	02/12/2025	18:34	LB134704
	Copper	1270	1250	102	90 - 110	P	02/12/2025	18:34	LB134704
	Iron	5160	5000	103	90 - 110	P	02/12/2025	18:34	LB134704
	Lead	5020	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Magnesium	25100	25000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Manganese	2480	2500	99	90 - 110	P	02/12/2025	18:34	LB134704
	Nickel	2510	2500	100	90 - 110	P	02/12/2025	18:34	LB134704
	Potassium	25400	25000	102	90 - 110	P	02/12/2025	18:34	LB134704
	Selenium	5000	5000	100	90 - 110	P	02/12/2025	18:34	LB134704
	Silver	1260	1250	101	90 - 110	P	02/12/2025	18:34	LB134704
	Sodium	26100	25000	105	90 - 110	P	02/12/2025	18:34	LB134704
	Thallium	4800	5000	96	90 - 110	P	02/12/2025	18:34	LB134704
	Vanadium	2490	2500	100	90 - 110	P	02/12/2025	18:34	LB134704
	Zinc	2470	2500	99	90 - 110	P	02/12/2025	18:34	LB134704

Metals

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CRDL STANDARD FOR AA & ICP

Client: RU2 Engineering, LLC SDG No.: Q1241
Contract: RUTW01 Lab Code: CHEM Case No.: Q1241 SAS No.: Q1241
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.19	0.2	95	40 - 160	CV	02/03/2025	18:11	LB134542
CRI01	Aluminum	98.1	100	98	40 - 160	P	02/10/2025	14:31	LB134659
	Antimony	52.3	50.0	104	40 - 160	P	02/10/2025	14:31	LB134659
	Arsenic	21.7	20.0	108	40 - 160	P	02/10/2025	14:31	LB134659
	Barium	88.7	100	89	40 - 160	P	02/10/2025	14:31	LB134659
	Beryllium	5.76	6.0	96	40 - 160	P	02/10/2025	14:31	LB134659
	Cadmium	5.75	6.0	96	40 - 160	P	02/10/2025	14:31	LB134659
	Calcium	1940	2000	97	40 - 160	P	02/10/2025	14:31	LB134659
	Chromium	10.1	10.0	101	40 - 160	P	02/10/2025	14:31	LB134659
	Cobalt	29.2	30.0	97	40 - 160	P	02/10/2025	14:31	LB134659
	Copper	21.6	20.0	108	40 - 160	P	02/10/2025	14:31	LB134659
	Iron	100	100	100	40 - 160	P	02/10/2025	14:31	LB134659
	Lead	11.5	12.0	96	40 - 160	P	02/10/2025	14:31	LB134659
	Magnesium	2050	2000	103	40 - 160	P	02/10/2025	14:31	LB134659
	Manganese	19.2	20.0	96	40 - 160	P	02/10/2025	14:31	LB134659
	Nickel	38.8	40.0	97	40 - 160	P	02/10/2025	14:31	LB134659
	Potassium	1740	2000	87	40 - 160	P	02/10/2025	14:31	LB134659
	Selenium	19.7	20.0	99	40 - 160	P	02/10/2025	14:31	LB134659
	Silver	10.6	10.0	106	40 - 160	P	02/10/2025	14:31	LB134659
	Sodium	2000	2000	100	40 - 160	P	02/10/2025	14:31	LB134659
	Thallium	38.9	40.0	97	40 - 160	P	02/10/2025	14:31	LB134659
	Vanadium	37.0	40.0	92	40 - 160	P	02/10/2025	14:31	LB134659
	Zinc	42.9	40.0	107	40 - 160	P	02/10/2025	14:31	LB134659
CRI01	Aluminum	91.2	100	91	40 - 160	P	02/12/2025	13:17	LB134704
	Antimony	51.2	50.0	102	40 - 160	P	02/12/2025	13:17	LB134704
	Arsenic	19.8	20.0	99	40 - 160	P	02/12/2025	13:17	LB134704
	Barium	100.0	100	100	40 - 160	P	02/12/2025	13:17	LB134704
	Beryllium	5.74	6.0	96	40 - 160	P	02/12/2025	13:17	LB134704
	Cadmium	5.89	6.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Calcium	2030	2000	101	40 - 160	P	02/12/2025	13:17	LB134704
	Chromium	10.1	10.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Cobalt	30.0	30.0	100	40 - 160	P	02/12/2025	13:17	LB134704
	Copper	22.2	20.0	111	40 - 160	P	02/12/2025	13:17	LB134704
	Iron	102	100	102	40 - 160	P	02/12/2025	13:17	LB134704
	Lead	11.8	12.0	98	40 - 160	P	02/12/2025	13:17	LB134704

Metals

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CRDL STANDARD FOR AA & ICP

Client: RU2 Engineering, LLC **SDG No.:** Q1241

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI01	Magnesium	2140	2000	107	40 - 160	P	02/12/2025	13:17	LB134704
	Manganese	20.1	20.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Nickel	40.4	40.0	101	40 - 160	P	02/12/2025	13:17	LB134704
	Potassium	2070	2000	104	40 - 160	P	02/12/2025	13:17	LB134704
	Selenium	19.5	20.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Silver	10.4	10.0	104	40 - 160	P	02/12/2025	13:17	LB134704
	Sodium	2070	2000	103	40 - 160	P	02/12/2025	13:17	LB134704
	Thallium	40.8	40.0	102	40 - 160	P	02/12/2025	13:17	LB134704
	Vanadium	39.2	40.0	98	40 - 160	P	02/12/2025	13:17	LB134704
	Zinc	43.0	40.0	108	40 - 160	P	02/12/2025	13:17	LB134704



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	RU2 Engineering, LLC				SDG No.:	Q1241			
Contract:	RUTW01	Lab Code:	CHEM	Case No.:	Q1241	SAS No.:	Q1241		
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB82	Mercury	0.20	+/-0.20	U	0.20	CV	02/03/2025	18:04	LB134542

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB14	Mercury	0.20	+/-0.20	U	0.20	CV	02/03/2025	18:09	LB134542
CCB15	Mercury	0.20	+/-0.20	U	0.20	CV	02/03/2025	18:37	LB134542
CCB16	Mercury	0.20	+/-0.20	U	0.20	CV	02/03/2025	19:04	LB134542
CCB17	Mercury	0.20	+/-0.20	U	0.20	CV	02/03/2025	19:29	LB134542

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	100	P	02/10/2025	14:26	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	14:26	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	14:26	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	14:26	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	14:26	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	14:26	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	14:26	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	14:26	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	14:26	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	14:26	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	14:26	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	14:26	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	14:26	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	14:26	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	14:26	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	14:26	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	14:26	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	14:26	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	14:26	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	14:26	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	14:26	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	14:26	LB134659

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	100	P	02/10/2025	15:03	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	15:03	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	15:03	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	15:03	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	15:03	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	15:03	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	15:03	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	15:03	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	15:03	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	15:03	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	15:03	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	15:03	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	15:03	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	15:03	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	15:03	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	15:03	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	15:03	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	15:03	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	15:03	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	15:03	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	15:03	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	15:03	LB134659
CCB02	Aluminum	100	+/-100	U	100	P	02/10/2025	16:08	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	16:08	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	16:08	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	16:08	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	16:08	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	16:08	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	16:08	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	16:08	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	16:08	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	16:08	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	16:08	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	16:08	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	16:08	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	16:08	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	16:08	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	16:08	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	16:08	LB134659

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	16:08	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	16:08	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	16:08	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	16:08	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	16:08	LB134659
CCB03	Aluminum	100	+/-100	U	100	P	02/10/2025	17:06	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	17:06	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	17:06	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	17:06	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	17:06	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	17:06	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	17:06	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	17:06	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	17:06	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	17:06	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	17:06	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	17:06	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	17:06	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	17:06	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	17:06	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	17:06	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	17:06	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	17:06	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	17:06	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	17:06	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	17:06	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	17:06	LB134659
CCB04	Aluminum	100	+/-100	U	100	P	02/10/2025	18:00	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	18:00	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	18:00	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	18:00	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	18:00	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	18:00	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	18:00	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	18:00	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	18:00	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	18:00	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	18:00	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	18:00	LB134659

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	18:00	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	18:00	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	18:00	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	18:00	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	18:00	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	18:00	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	18:00	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	18:00	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	18:00	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	18:00	LB134659
CCB05	Aluminum	100	+/-100	U	100	P	02/10/2025	18:52	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	18:52	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	18:52	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	18:52	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	18:52	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	18:52	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	18:52	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	18:52	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	18:52	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	18:52	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	18:52	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	18:52	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	18:52	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	18:52	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	18:52	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	18:52	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	18:52	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	18:52	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	18:52	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	18:52	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	18:52	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	18:52	LB134659
CCB06	Aluminum	100	+/-100	U	100	P	02/10/2025	19:45	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	19:45	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	19:45	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	19:45	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	19:45	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	19:45	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	19:45	LB134659

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	19:45	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	19:45	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	19:45	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	19:45	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	19:45	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	19:45	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	19:45	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	19:45	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	19:45	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	19:45	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	19:45	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	19:45	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	19:45	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	19:45	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	19:45	LB134659
CCB07	Aluminum	100	+/-100	U	100	P	02/10/2025	20:41	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	20:41	LB134659
	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	20:41	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	20:41	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	20:41	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	20:41	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	20:41	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	20:41	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	20:41	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	20:41	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	20:41	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	20:41	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	20:41	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	20:41	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	20:41	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	20:41	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	20:41	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	20:41	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	20:41	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	20:41	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	20:41	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	20:41	LB134659
CCB08	Aluminum	100	+/-100	U	100	P	02/10/2025	21:06	LB134659
	Antimony	50.0	+/-50.0	U	50.0	P	02/10/2025	21:06	LB134659

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	02/10/2025	21:06	LB134659
	Barium	100	+/-100	U	100	P	02/10/2025	21:06	LB134659
	Beryllium	6.00	+/-6.00	U	6.00	P	02/10/2025	21:06	LB134659
	Cadmium	6.00	+/-6.00	U	6.00	P	02/10/2025	21:06	LB134659
	Calcium	2000	+/-2000	U	2000	P	02/10/2025	21:06	LB134659
	Chromium	10.0	+/-10.0	U	10.0	P	02/10/2025	21:06	LB134659
	Cobalt	30.0	+/-30.0	U	30.0	P	02/10/2025	21:06	LB134659
	Copper	20.0	+/-20.0	U	20.0	P	02/10/2025	21:06	LB134659
	Iron	100	+/-100	U	100	P	02/10/2025	21:06	LB134659
	Lead	12.0	+/-12.0	U	12.0	P	02/10/2025	21:06	LB134659
	Magnesium	2000	+/-2000	U	2000	P	02/10/2025	21:06	LB134659
	Manganese	20.0	+/-20.0	U	20.0	P	02/10/2025	21:06	LB134659
	Nickel	40.0	+/-40.0	U	40.0	P	02/10/2025	21:06	LB134659
	Potassium	2000	+/-2000	U	2000	P	02/10/2025	21:06	LB134659
	Selenium	20.0	+/-20.0	U	20.0	P	02/10/2025	21:06	LB134659
	Silver	10.0	+/-10.0	U	10.0	P	02/10/2025	21:06	LB134659
	Sodium	2000	+/-2000	U	2000	P	02/10/2025	21:06	LB134659
	Thallium	40.0	+/-40.0	U	40.0	P	02/10/2025	21:06	LB134659
	Vanadium	40.0	+/-40.0	U	40.0	P	02/10/2025	21:06	LB134659
	Zinc	40.0	+/-40.0	U	40.0	P	02/10/2025	21:06	LB134659

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	13:12	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:12	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:12	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	13:12	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	13:12	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	13:12	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	13:12	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	13:12	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	13:12	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	13:12	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	13:12	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	13:43	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:43	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	13:43	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	13:43	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	13:43	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	13:43	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	13:43	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	13:43	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	13:43	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	13:43	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	13:43	LB134704
CCB02	Aluminum	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	14:33	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	14:33	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	14:33	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	14:33	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	14:33	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	14:33	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	14:33	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	14:33	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	14:33	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	14:33	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	14:33	LB134704
CCB03	Aluminum	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	15:24	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	15:24	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	15:24	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	15:24	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	15:24	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	15:24	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	15:24	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	15:24	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	15:24	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	15:24	LB134704
	Sodium	559	+/-2000	J	2000	P	02/12/2025	15:24	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	15:24	LB134704
CCB04	Aluminum	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	16:17	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	16:17	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	16:17	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	16:17	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	16:17	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	16:17	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	16:17	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC

SDG No.: Q1241

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1241

SAS No.: Q1241

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	16:17	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	16:17	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	16:17	LB134704
	Sodium	505	+/-2000	J	2000	P	02/12/2025	16:17	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	16:17	LB134704
	Zinc	4.78	+/-40.0	J	40.0	P	02/12/2025	16:17	LB134704
CCB05	Aluminum	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	17:08	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:08	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:08	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	17:08	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	17:08	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	17:08	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	17:08	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	17:08	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	17:08	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	17:08	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	17:08	LB134704
CCB06	Aluminum	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	17:59	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:59	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	17:59	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1241</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u>	SAS No.: <u>Q1241</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	17:59	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	17:59	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	17:59	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	17:59	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	17:59	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	17:59	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	17:59	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	17:59	LB134704
CCB07	Aluminum	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Antimony	50.0	+/-50.0	U	50.0	P	02/12/2025	18:38	LB134704
	Arsenic	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Barium	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Beryllium	6.00	+/-6.00	U	6.00	P	02/12/2025	18:38	LB134704
	Cadmium	6.00	+/-6.00	U	6.00	P	02/12/2025	18:38	LB134704
	Calcium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Chromium	10.0	+/-10.0	U	10.0	P	02/12/2025	18:38	LB134704
	Cobalt	30.0	+/-30.0	U	30.0	P	02/12/2025	18:38	LB134704
	Copper	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Iron	100	+/-100	U	100	P	02/12/2025	18:38	LB134704
	Lead	12.0	+/-12.0	U	12.0	P	02/12/2025	18:38	LB134704
	Magnesium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Manganese	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Nickel	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Potassium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Selenium	20.0	+/-20.0	U	20.0	P	02/12/2025	18:38	LB134704
	Silver	10.0	+/-10.0	U	10.0	P	02/12/2025	18:38	LB134704
	Sodium	2000	+/-2000	U	2000	P	02/12/2025	18:38	LB134704
	Thallium	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Vanadium	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704
	Zinc	40.0	+/-40.0	U	40.0	P	02/12/2025	18:38	LB134704

Metals
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PREPARATION BLANK SUMMARY

Client: RU2 Engineering, LLC

SDG No.: Q1241

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166520BL		SOLID		Batch Number:	PB166520		Prep Date:	02/03/2025	
	Mercury	0.013	<0.013	U	0.013	CV	02/03/2025	18:18	LB134542

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: RU2 Engineering, LLC

SDG No.: Q1241

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB166414BL	SOLID			Batch Number:	PB166414		Prep Date:	01/31/2025	
	Aluminum	4.27	<4.27	U	4.27	P	02/12/2025	18:08	LB134704
	Antimony	2.14	<2.14	U	2.14	P	02/12/2025	18:08	LB134704
	Arsenic	0.86	<0.86	U	0.86	P	02/12/2025	18:08	LB134704
	Barium	4.27	<4.27	U	4.27	P	02/12/2025	18:08	LB134704
	Beryllium	0.26	<0.26	U	0.26	P	02/12/2025	18:08	LB134704
	Cadmium	0.26	<0.26	U	0.26	P	02/12/2025	18:08	LB134704
	Calcium	85.5	<85.5	U	85.5	P	02/12/2025	18:08	LB134704
	Chromium	0.43	<0.43	U	0.43	P	02/12/2025	18:08	LB134704
	Cobalt	1.28	<1.28	U	1.28	P	02/12/2025	18:08	LB134704
	Copper	0.86	<0.86	U	0.86	P	02/12/2025	18:08	LB134704
	Iron	4.27	<4.27	U	4.27	P	02/12/2025	18:08	LB134704
	Lead	0.51	<0.51	U	0.51	P	02/12/2025	18:08	LB134704
	Magnesium	85.5	<85.5	U	85.5	P	02/12/2025	18:08	LB134704
	Manganese	0.86	<0.86	U	0.86	P	02/12/2025	18:08	LB134704
	Nickel	1.71	<1.71	U	1.71	P	02/12/2025	18:08	LB134704
	Potassium	85.5	<85.5	U	85.5	P	02/12/2025	18:08	LB134704
	Selenium	0.86	<0.86	U	0.86	P	02/12/2025	18:08	LB134704
	Silver	0.43	<0.43	U	0.43	P	02/12/2025	18:08	LB134704
	Sodium	85.5	<85.5	U	85.5	P	02/12/2025	18:08	LB134704
	Thallium	1.71	<1.71	U	1.71	P	02/12/2025	18:08	LB134704
	Vanadium	1.71	<1.71	U	1.71	P	02/12/2025	18:08	LB134704
	Zinc	1.71	<1.71	U	1.71	P	02/12/2025	18:08	LB134704

Metals
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INTERFERENCE CHECK SAMPLE

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	243000	255000	95	216000	294000	02/10/2025	14:35	LB134659
	Antimony	0.93			-50	50	02/10/2025	14:35	LB134659
	Arsenic	1.27			-20	20	02/10/2025	14:35	LB134659
	Barium	1.84	6.0	31	-94	106	02/10/2025	14:35	LB134659
	Beryllium	1.94			-6	6	02/10/2025	14:35	LB134659
	Cadmium	3.51	1.0	351	-5	7	02/10/2025	14:35	LB134659
	Calcium	226000	245000	92	208000	282000	02/10/2025	14:35	LB134659
	Chromium	56.7	52.0	109	42	62	02/10/2025	14:35	LB134659
	Cobalt	2.30			-30	30	02/10/2025	14:35	LB134659
	Copper	6.48	2.0	324	-18	22	02/10/2025	14:35	LB134659
	Iron	96500	101000	96	85600	116500	02/10/2025	14:35	LB134659
	Lead	8.37			-12	12	02/10/2025	14:35	LB134659
	Magnesium	244000	255000	96	216000	294000	02/10/2025	14:35	LB134659
	Manganese	4.94	7.0	71	-13	27	02/10/2025	14:35	LB134659
	Nickel	3.88	2.0	194	-38	42	02/10/2025	14:35	LB134659
	Potassium	-134			0	0	02/10/2025	14:35	LB134659
	Selenium	-6.12			-20	20	02/10/2025	14:35	LB134659
	Silver	2.79			-10	10	02/10/2025	14:35	LB134659
	Sodium	-468			0	0	02/10/2025	14:35	LB134659
	Thallium	5.79			-40	40	02/10/2025	14:35	LB134659
	Vanadium	3.73			-40	40	02/10/2025	14:35	LB134659
	Zinc	6.15			-40	40	02/10/2025	14:35	LB134659
ICSAB01	Aluminum	245000	247000	99	209000	285000	02/10/2025	14:41	LB134659
	Antimony	632	618	102	525	711	02/10/2025	14:41	LB134659
	Arsenic	106	104	102	88.4	120	02/10/2025	14:41	LB134659
	Barium	442	537	82	437	637	02/10/2025	14:41	LB134659
	Beryllium	473	495	96	420	570	02/10/2025	14:41	LB134659
	Cadmium	963	972	99	826	1120	02/10/2025	14:41	LB134659
	Calcium	225000	235000	96	199000	271000	02/10/2025	14:41	LB134659
	Chromium	556	542	103	460	624	02/10/2025	14:41	LB134659
	Cobalt	492	476	103	404	548	02/10/2025	14:41	LB134659
	Copper	494	511	97	434	588	02/10/2025	14:41	LB134659
	Iron	95800	99300	96	84400	114500	02/10/2025	14:41	LB134659
	Lead	55.7	49.0	114	37	61	02/10/2025	14:41	LB134659
	Magnesium	243000	248000	98	210000	286000	02/10/2025	14:41	LB134659
	Manganese	439	507	87	430	584	02/10/2025	14:41	LB134659
	Nickel	971	954	102	810	1100	02/10/2025	14:41	LB134659
	Potassium	-143			0	0	02/10/2025	14:41	LB134659
	Selenium	44.9	46.0	98	26	66	02/10/2025	14:41	LB134659
	Silver	216	201	108	170	232	02/10/2025	14:41	LB134659
	Sodium	-483			0	0	02/10/2025	14:41	LB134659
	Thallium	88.3	108	82	68	148	02/10/2025	14:41	LB134659

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Vanadium	450	491	92	417	565	02/10/2025	14:41	LB134659
	Zinc	1040	952	109	809	1095	02/10/2025	14:41	LB134659
ICSA01	Aluminum	245000	255000	96	216000	294000	02/12/2025	13:21	LB134704
	Antimony	0.84			-50	50	02/12/2025	13:21	LB134704
	Arsenic	-4.34			-20	20	02/12/2025	13:21	LB134704
	Barium	6.69	6.0	112	-94	106	02/12/2025	13:21	LB134704
	Beryllium	2.82			-6	6	02/12/2025	13:21	LB134704
	Cadmium	-3.20	1.0	320	-5	7	02/12/2025	13:21	LB134704
	Calcium	234000	245000	96	208000	282000	02/12/2025	13:21	LB134704
	Chromium	59.1	52.0	114	42	62	02/12/2025	13:21	LB134704
	Cobalt	2.15			-30	30	02/12/2025	13:21	LB134704
	Copper	7.73	2.0	386	-18	22	02/12/2025	13:21	LB134704
	Iron	106000	101000	105	85600	116500	02/12/2025	13:21	LB134704
	Lead	7.88			-12	12	02/12/2025	13:21	LB134704
	Magnesium	252000	255000	99	216000	294000	02/12/2025	13:21	LB134704
	Manganese	-0.86	7.0	12	-13	27	02/12/2025	13:21	LB134704
	Nickel	4.04	2.0	202	-38	42	02/12/2025	13:21	LB134704
	Potassium	10.9			0	0	02/12/2025	13:21	LB134704
	Selenium	-16.2			-20	20	02/12/2025	13:21	LB134704
	Silver	-5.31			-10	10	02/12/2025	13:21	LB134704
	Sodium	50.4			0	0	02/12/2025	13:21	LB134704
	Thallium	-0.098			-40	40	02/12/2025	13:21	LB134704
	Vanadium	7.52			-40	40	02/12/2025	13:21	LB134704
	Zinc	4.54			-40	40	02/12/2025	13:21	LB134704
ICSAB01	Aluminum	241000	247000	98	209000	285000	02/12/2025	13:25	LB134704
	Antimony	608	618	98	525	711	02/12/2025	13:25	LB134704
	Arsenic	106	104	102	88.4	120	02/12/2025	13:25	LB134704
	Barium	482	537	90	437	637	02/12/2025	13:25	LB134704
	Beryllium	468	495	94	420	570	02/12/2025	13:25	LB134704
	Cadmium	1000	972	103	826	1120	02/12/2025	13:25	LB134704
	Calcium	231000	235000	98	199000	271000	02/12/2025	13:25	LB134704
	Chromium	571	542	105	460	624	02/12/2025	13:25	LB134704
	Cobalt	509	476	107	404	548	02/12/2025	13:25	LB134704
	Copper	498	511	98	434	588	02/12/2025	13:25	LB134704
	Iron	105000	99300	106	84400	114500	02/12/2025	13:25	LB134704
	Lead	56.5	49.0	115	37	61	02/12/2025	13:25	LB134704
	Magnesium	248000	248000	100	210000	286000	02/12/2025	13:25	LB134704
	Manganese	468	507	92	430	584	02/12/2025	13:25	LB134704
	Nickel	1010	954	106	810	1100	02/12/2025	13:25	LB134704
	Potassium	-9.51			0	0	02/12/2025	13:25	LB134704
	Selenium	33.8	46.0	74	26	66	02/12/2025	13:25	LB134704
	Silver	213	201	106	170	232	02/12/2025	13:25	LB134704

Metals

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INTERFERENCE CHECK SAMPLE

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Sodium	50.1			0	0	02/12/2025	13:25	LB134704
	Thallium	89.5	108	83	68	148	02/12/2025	13:25	LB134704
	Vanadium	468	491	95	417	565	02/12/2025	13:25	LB134704
	Zinc	1050	952	110	809	1095	02/12/2025	13:25	LB134704



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>RU2 Engineering, LLC</u>	level: <u>low</u>	sdg no.: <u>Q1241</u>
contract: <u>RUTW01</u>	lab code: <u>CHEM</u>	case no.: <u>Q1241</u> sas no.: <u>Q1241</u>
matrix: <u>Solid</u>	sample id: <u>Q1241-19</u>	client id: <u>JPP-51.4-013025MS</u>
Percent Solids for Sample: 93.2	Spiked ID: Q1241-19MS	Percent Solids for Spike Sample: 93.2

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	6020		5920		93.3	109		P
Antimony	mg/Kg	75 - 125	12.7		0.66	J	37.3	32	N	P
Arsenic	mg/Kg	75 - 125	39.8		7.33		37.3	87		P
Barium	mg/Kg	75 - 125	119		118		9.3	12		P
Beryllium	mg/Kg	75 - 125	7.59		0.44		9.3	77		P
Cadmium	mg/Kg	75 - 125	9.27		1.02		9.3	89		P
Calcium	mg/Kg	75 - 125	23300		23200		46.7	132		P
Chromium	mg/Kg	75 - 125	29.3		15.0		18.7	76		P
Cobalt	mg/Kg	75 - 125	15.6		7.16		9.3	91		P
Copper	mg/Kg	75 - 125	84.1		83.1		14.0	7		P
Iron	mg/Kg	75 - 125	18400		15800		140	1832		P
Lead	mg/Kg	75 - 125	285		286		46.7	-1		P
Magnesium	mg/Kg	75 - 125	4330		3980		93.3	378		P
Manganese	mg/Kg	75 - 125	202		221		9.3	-206		P
Nickel	mg/Kg	75 - 125	41.0		19.5		23.3	92		P
Potassium	mg/Kg	75 - 125	1680		1160		470	110		P
Selenium	mg/Kg	75 - 125	77.7		0.93	U	93.3	83		P
Silver	mg/Kg	75 - 125	3.93		0.79		3.5	90		P
Sodium	mg/Kg	75 - 125	2340		2280		140	40		P
Thallium	mg/Kg	75 - 125	75.9		1.85	U	93.3	81		P
Vanadium	mg/Kg	75 - 125	32.1		22.4		14.0	69	N	P
Zinc	mg/Kg	75 - 125	175		185		9.3	-110		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:	<u>RU2 Engineering, LLC</u>	level:	<u>low</u>	sdg no.:	<u>Q1241</u>
contract:	<u>RUTW01</u>	lab code:	<u>CHEM</u>	case no.:	<u>Q1241</u>
matrix:	<u>Solid</u>	sample id:	<u>Q1241-19</u>	client id:	<u>JPP-51.4-013025MSD</u>
Percent Solids for Sample:	93.2	Spiked ID:	Q1241-19MSD	Percent Solids for Spike Sample:	93.2

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	5960		5920		94.1	48		P
Antimony	mg/Kg	75 - 125	12.7		0.66	J	37.6	32	N	P
Arsenic	mg/Kg	75 - 125	40.1		7.33		37.6	87		P
Barium	mg/Kg	75 - 125	115		118		9.4	-33		P
Beryllium	mg/Kg	75 - 125	7.60		0.44		9.4	76		P
Cadmium	mg/Kg	75 - 125	9.35		1.02		9.4	89		P
Calcium	mg/Kg	75 - 125	22800		23200		47.1	-985		P
Chromium	mg/Kg	75 - 125	29.5		15.0		18.8	77		P
Cobalt	mg/Kg	75 - 125	15.7		7.16		9.4	91		P
Copper	mg/Kg	75 - 125	84.8		83.1		14.1	12		P
Iron	mg/Kg	75 - 125	18200		15800		140	1673		P
Lead	mg/Kg	75 - 125	286		286		47.1	1		P
Magnesium	mg/Kg	75 - 125	4250		3980		94.1	289		P
Manganese	mg/Kg	75 - 125	196		221		9.4	-265		P
Nickel	mg/Kg	75 - 125	41.2		19.5		23.5	92		P
Potassium	mg/Kg	75 - 125	1630		1160		470	99		P
Selenium	mg/Kg	75 - 125	78.5		0.93	U	94.1	83		P
Silver	mg/Kg	75 - 125	3.91		0.79		3.5	89		P
Sodium	mg/Kg	75 - 125	2300		2280		140	13		P
Thallium	mg/Kg	75 - 125	76.9		1.85	U	94.1	82		P
Vanadium	mg/Kg	75 - 125	31.4		22.4		14.1	64	N	P
Zinc	mg/Kg	75 - 125	176		185		9.4	-90		P

metals
- 5a -
MATRIX SPIKE SUMMARY

client: RU2 Engineering, LLC level: low sdg no.: Q1241
contract: RUTW01 lab code: CHEM case no.: Q1241 sas no.: Q1241
matrix: Solid sample id: Q1269-01 client id: VNJ-231MS
Percent Solids for Sample: 88.9 Spiked ID: Q1269-01MS Percent Solids for Spike Sample: 88.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.31		0.019		0.3	97		CV

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>RU2 Engineering, LLC</u>	level: <u>low</u>	sdg no.: <u>Q1241</u>
contract: <u>RUTW01</u>	lab code: <u>CHEM</u>	case no.: <u>Q1241</u> sas no.: <u>Q1241</u>
matrix: <u>Solid</u>	sample id: <u>Q1269-01</u>	client id: <u>VNJ-231MSD</u>
Percent Solids for Sample: 88.9	Spiked ID: Q1269-01MSD	Percent Solids for Spike Sample: 88.9

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.25		0.019		0.27	84		CV

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: <u>RU2 Engineering, LLC</u>	SDG No.: <u>Q1241</u>	
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1241</u> SAS No.: <u>Q1241</u>
Matrix: <u>Solid</u>	Level: <u>LOW</u>	Client ID: <u>JPP-51.4-013025A</u>
Sample ID: <u>Q1241-19</u>	Spiked ID: <u>Q1241-19A</u>	

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	mg/Kg	75 - 125	12.8		0.66	J	37.0	33		P
Vanadium	mg/Kg	75 - 125	31.5		22.4		13.9	66		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: RU2 Engineering, LLC **Level:** LOW **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Matrix: Solid **Sample ID:** Q1241-19 **Client ID:** JPP-51.4-013025DUP
Percent Solids for Sample: 93.2 **Duplicate ID** Q1241-19DUP **Percent Solids for Spike Sample:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	5920		5910		0		P
Antimony	mg/Kg	20	0.66	J	0.70	J	6		P
Arsenic	mg/Kg	20	7.33		7.22		2		P
Barium	mg/Kg	20	118		115		3		P
Beryllium	mg/Kg	20	0.44		0.47		7		P
Cadmium	mg/Kg	20	1.02		1.15		12		P
Calcium	mg/Kg	20	23200		23500		1		P
Chromium	mg/Kg	20	15.0		15.5		3		P
Cobalt	mg/Kg	20	7.16		7.36		3		P
Copper	mg/Kg	20	83.1		85.1		2		P
Iron	mg/Kg	20	15800		15300		3		P
Lead	mg/Kg	20	286		292		2		P
Magnesium	mg/Kg	20	3980		3980		0		P
Manganese	mg/Kg	20	221		220		0		P
Nickel	mg/Kg	20	19.5		20.0		3		P
Potassium	mg/Kg	20	1160		1090		6		P
Selenium	mg/Kg	20	0.93	U	0.95	U			P
Silver	mg/Kg	20	0.79		0.63		22	*	P
Sodium	mg/Kg	20	2280		2160		5		P
Thallium	mg/Kg	20	1.85	U	1.91	U			P
Vanadium	mg/Kg	20	22.4		22.3		0		P
Zinc	mg/Kg	20	185		191		3		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: RU2 Engineering, LLC **Level:** LOW **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Matrix: Solid **Sample ID:** Q1241-19MS **Client ID:** JPP-51.4-013025MSD
Percent Solids for Sample: 93.2 **Duplicate ID** Q1241-19MSD **Percent Solids for Spike Sample:** 93.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	6020		5960		1		P
Antimony	mg/Kg	20	12.7		12.7		0		P
Arsenic	mg/Kg	20	39.8		40.1		1		P
Barium	mg/Kg	20	119		115		3		P
Beryllium	mg/Kg	20	7.59		7.60		0		P
Cadmium	mg/Kg	20	9.27		9.35		1		P
Calcium	mg/Kg	20	23300		22800		2		P
Chromium	mg/Kg	20	29.3		29.5		1		P
Cobalt	mg/Kg	20	15.6		15.7		1		P
Copper	mg/Kg	20	84.1		84.8		1		P
Iron	mg/Kg	20	18400		18200		1		P
Lead	mg/Kg	20	285		286		0		P
Magnesium	mg/Kg	20	4330		4250		2		P
Manganese	mg/Kg	20	202		196		3		P
Nickel	mg/Kg	20	41.0		41.2		0		P
Potassium	mg/Kg	20	1680		1630		3		P
Selenium	mg/Kg	20	77.7		78.5		1		P
Silver	mg/Kg	20	3.93		3.91		1		P
Sodium	mg/Kg	20	2340		2300		2		P
Thallium	mg/Kg	20	75.9		76.9		1		P
Vanadium	mg/Kg	20	32.1		31.4		2		P
Zinc	mg/Kg	20	175		176		1		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q1241</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1241</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>Q1269-01</u>	Client ID:	<u>VNJ-231DUP</u>
Percent Solids for Sample:	88.9	Duplicate ID	Q1269-01DUP	Percent Solids for Spike Sample:	88.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.019		0.023		19		CV

Metals

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DUPLICATE SAMPLE SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q1241</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1241</u>
Matrix:	<u>Solid</u>	Sample ID:	<u>Q1269-01MS</u>	Client ID:	<u>VNJ-231MSD</u>
Percent Solids for Sample:	88.9	Duplicate ID	Q1269-01MSD	Percent Solids for Spike Sample:	88.9

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.31		0.25		23	*	CV

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166414BS							
Aluminum	mg/Kg	85.5	80.4		94	80 - 120	P
Antimony	mg/Kg	34.2	33.0		96	80 - 120	P
Arsenic	mg/Kg	34.2	32.8		96	80 - 120	P
Barium	mg/Kg	8.5	8.26		97	80 - 120	P
Beryllium	mg/Kg	8.5	8.20		96	80 - 120	P
Cadmium	mg/Kg	8.5	8.31		98	80 - 120	P
Calcium	mg/Kg	42.7	43.1	J	101	80 - 120	P
Chromium	mg/Kg	17.1	17.4		102	80 - 120	P
Cobalt	mg/Kg	8.5	8.37		98	80 - 120	P
Copper	mg/Kg	12.8	13.1		102	80 - 120	P
Iron	mg/Kg	130	132		102	80 - 120	P
Lead	mg/Kg	42.7	40.9		96	80 - 120	P
Magnesium	mg/Kg	85.5	83.0	J	97	80 - 120	P
Manganese	mg/Kg	8.5	8.40		99	80 - 120	P
Nickel	mg/Kg	21.4	21.2		99	80 - 120	P
Potassium	mg/Kg	430	422		98	80 - 120	P
Selenium	mg/Kg	85.5	82.1		96	80 - 120	P
Silver	mg/Kg	3.2	3.22		101	80 - 120	P
Sodium	mg/Kg	130	138		106	80 - 120	P
Thallium	mg/Kg	85.5	80.6		94	80 - 120	P
Vanadium	mg/Kg	12.8	12.3		96	80 - 120	P
Zinc	mg/Kg	8.5	8.63		102	80 - 120	P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166520BS Mercury	mg/Kg	0.24	0.20		83	80 - 120	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

JPP-51.4-013025L

Lab Name: Chemtech Consulting Group

Contract: RUTW01

Lab Code: CHEM Lb No.: lb134659 Lab Sample ID : Q1241-19L SDG No.: Q1241

Matrix (soil/water): Solid Level (low/med): LOW

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ-ence	Q	M
Aluminum	5920		6380		8		P
Antimony	0.66	J	11.6	U	100.0		P
Arsenic	7.33		7.41		1		P
Barium	118		122		3		P
Beryllium	0.44		0.54	J	24		P
Cadmium	1.02		0.60	J	41		P
Calcium	23200		26500		14		P
Chromium	15.0		17.3		15		P
Cobalt	7.16		7.27		2		P
Copper	83.1		99.5		20		P
Iron	15800		16700		5		P
Lead	286		303		6		P
Magnesium	3980		4500		13		P
Manganese	221		253		15		P
Nickel	19.5		20.1		3		P
Potassium	1160		1050		9		P
Selenium	0.93	U	4.62	U			P
Silver	0.79		0.72	J	8		P
Sodium	2280		2010		12		P
Thallium	1.85	U	9.25	U			P
Vanadium	22.4		24.9		11		P
Zinc	185		210		13		P

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ICP SERIAL DILUTIONS

SAMPLE NO.

VNJ-231L

Lab Name: Chemtech Consulting Group

Contract: RUTW01

Lab Code: CHEM **Lb No.:** lb134542

Lab Sample ID : Q1269-01L **SDG No.:** Q1241

Matrix (soil/water): Solid

Level (low/med): LOW

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	M
Mercury	0.019	0.068 U	100.0		CV



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC **SDG No.:** Q1241
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1241 **SAS No.:** Q1241
Instrument ID: _____ **Date:** _____
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Aluminum	396.100	0.0000000	-0.0002060	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	-0.0075970	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1241

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1241

SAS No.: Q1241

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	-0.0039600
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0054900
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1241

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1241

SAS No.: Q1241

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Aluminum	396.100	0.0000000	0.0000000	0.0000590	0.0000000	0.0396900
Antimony	206.833	0.0122000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0007860
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Iron	240.488	0.0000000	0.0000000	0.0000730	0.0000000	-0.0015250
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0017400	-0.0100400
Vanadium	292.402	-0.0025100	0.0000000	0.0000000	0.0000000	-0.0072000
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1241

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1241

SAS No.: Q1241

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Aluminum	396.100	0.0000000	0.0000000	0.0012800	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Iron	240.488	0.0000000	-0.0017000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1241

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1241

SAS No.: Q1241

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Aluminum	396.100	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	-0.0035600	-0.0007970	0.0000000	-0.0018900	0.0000000
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Calcium	373.690	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Cobalt	228.616	0.0000000	0.0018800	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Iron	240.488	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	-0.0039700	0.0000000	-0.0115600	0.0000000
Vanadium	292.402	0.0000000	0.0005320	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	SDG No.:	<u>Q1241</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1241</u>
		SAS No.:	<u>Q1241</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166414							
PB166414BL	PB166414BL	MB	SOLID	01/31/2025	2.34	100.0	100.00
PB166414BS	PB166414BS	LCS	SOLID	01/31/2025	2.34	100.0	100.00
Q1241-03	JPP-3.5-013025	SAM	SOLID	01/31/2025	2.30	100.0	82.00
Q1241-07	JPP-5.3-013025	SAM	SOLID	01/31/2025	2.46	100.0	87.80
Q1241-11	JPP-5.2-013025	SAM	SOLID	01/31/2025	2.37	100.0	88.70
Q1241-15	JPP-5.4-013025	SAM	SOLID	01/31/2025	2.38	100.0	86.60
Q1241-19	JPP-51.4-013025	SAM	SOLID	01/31/2025	2.32	100.0	93.20
Q1241-19DUP	JPP-51.4-013025DUP	DUP	SOLID	01/31/2025	2.25	100.0	93.20
Q1241-19MS	JPP-51.4-013025MS	MS	SOLID	01/31/2025	2.30	100.0	93.20
Q1241-19MSD	JPP-51.4-013025MSD	MSD	SOLID	01/31/2025	2.28	100.0	93.20

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SAMPLE PREPARATION SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	SDG No.:	<u>Q1241</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1241</u>
		SAS No.:	<u>Q1241</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166520							
PB166520BL	PB166520BL	MB	SOLID	02/03/2025	0.54	35.0	100.00
PB166520BS	PB166520BS	LCS	SOLID	02/03/2025	0.59	35.0	100.00
Q1241-03	JPP-3.5-013025	SAM	SOLID	02/03/2025	0.50	35.0	82.00
Q1241-07	JPP-5.3-013025	SAM	SOLID	02/03/2025	0.57	35.0	87.80
Q1241-11	JPP-5.2-013025	SAM	SOLID	02/03/2025	0.58	35.0	88.70
Q1241-15	JPP-5.4-013025	SAM	SOLID	02/03/2025	0.52	35.0	86.60
Q1241-19	JPP-51.4-013025	SAM	SOLID	02/03/2025	0.53	35.0	93.20
Q1269-01DUP	VNJ-231DUP	DUP	SOLID	02/03/2025	0.55	35.0	88.90
Q1269-01MS	VNJ-231MS	MS	SOLID	02/03/2025	0.53	35.0	88.90
Q1269-01MSD	VNJ-231MSD	MSD	SOLID	02/03/2025	0.59	35.0	88.90

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ANALYSIS RUN LOG

Client: RU2 Engineering, LLC **Contract:** RUTW01

Lab code: CHEM **Case no.:** Q1241 **Sas no.:** Q1241 **Sdg no.:** Q1241

Instrument id number: **Method:** **Run number:** LB134542

Start date: 02/03/2025 **End date:** 02/03/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1745	HG
S0.2	S0.2	1	1747	HG
S2.5	S2.5	1	1749	HG
S5	S5	1	1752	HG
S7.5	S7.5	1	1754	HG
S10	S10	1	1756	HG
ICV82	ICV82	1	1802	HG
ICB82	ICB82	1	1804	HG
CCV14	CCV14	1	1807	HG
CCB14	CCB14	1	1809	HG
CRA	CRA	1	1811	HG
PB166520BL	PB166520BL	1	1818	HG
PB166520BS	PB166520BS	1	1820	HG
Q1241-07	JPP-5.3-013025	1	1830	HG
Q1241-11	JPP-5.2-013025	1	1832	HG
CCV15	CCV15	1	1835	HG
CCB15	CCB15	1	1837	HG
Q1241-19	JPP-51.4-013025	1	1841	HG
CCV16	CCV16	1	1902	HG
CCB16	CCB16	1	1904	HG
Q1269-01DUP	VNJ-231DUP	1	1907	HG
Q1269-01MS	VNJ-231MS	1	1909	HG
Q1269-01MSD	VNJ-231MSD	1	1911	HG
Q1269-01L	VNJ-231L	5	1918	HG
Q1241-03	JPP-3.5-013025	5	1922	HG
Q1241-15	JPP-5.4-013025	5	1925	HG
CCV17	CCV17	1	1927	HG
CCB17	CCB17	1	1929	HG

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ANALYSIS RUN LOG

Client: RU2 Engineering, LLC **Contract:** RUTW01

Lab code: CHEM **Case no.:** Q1241 **Sas no.:** Q1241 **Sdg no.:** Q1241

Instrument id number: **Method:** **Run number:** LB134659

Start date: 02/10/2025 **End date:** 02/10/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1328	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1332	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1336	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1340	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1344	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1349	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1406	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1420	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1426	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1431	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1435	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1441	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1459	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1503	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1605	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1608	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1657	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1706	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1753	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1800	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1848	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1852	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-03	JPP-3.5-013025	1	1927	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-07	JPP-5.3-013025	1	1931	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-11	JPP-5.2-013025	1	1936	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1940	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1945	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-15	JPP-5.4-013025	1	1949	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19	JPP-51.4-013025	1	1953	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19DUP	JPP-51.4-013025DUP	1	1958	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19L	JPP-51.4-013025L	5	2002	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19MS	JPP-51.4-013025MS	1	2006	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19MSD	JPP-51.4-013025MSD	1	2011	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1241-19A	JPP-51.4-013025A	1	2015	Sb,V
CCV07	CCV07	1	2036	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	2041	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV08	CCV08	1	2102	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB08	CCB08	1	2106	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

metals
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ANALYSIS RUN LOG

Client: RU2 Engineering, LLC **Contract:** RUTW01

Lab code: CHEM **Case no.:** Q1241 **Sas no.:** Q1241 **Sdg no.:** Q1241

Instrument id number: **Method:** **Run number:** LB134704

Start date: 02/12/2025 **End date:** 02/12/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1147	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S1	S1	1	1152	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1156	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1200	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1204	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1209	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICV01	ICV01	1	1259	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1308	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1312	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1317	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1321	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1325	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1339	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1343	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1429	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1433	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV03	CCV03	1	1520	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1524	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1613	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1617	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1704	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1708	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1755	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1759	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB166414BL	PB166414BL	1	1808	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB166414BS	PB166414BS	1	1812	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV07	CCV07	1	1834	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB07	CCB07	1	1838	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn