

LAB CHRONICLE

OrderID:	Q1242	OrderDate:	1/30/2025 3:02:00 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
Q1242-03	JPP-6.2-013025	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	
Q1242-04	JPP-6.2-013025	TCLP			01/30/25			01/30/25
			TCLP ICP Metals	6010D		02/03/25	02/07/25	
			TCLP Mercury	7470A		02/03/25	02/04/25	



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

Hit Summary Sheet
SW-846

SDG No.:	Q1242	Order ID:	Q1242
Client:	RU2 Engineering, LLC	Project ID:	NYCDDC SANTWOBR Brooklyn Bridge

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : JPP-6.2-013025								
Q1242-04	JPP-6.2-013025	TCLP	Barium	360	J	62.8	500	ug/L
Q1242-04	JPP-6.2-013025	TCLP	Chromium	29.8	J	6.60	50.0	ug/L



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-6.2-013025	SDG No.:	Q1242
Lab Sample ID:	Q1242-04	Matrix:	TCLP
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	100	U	1	34.8	100	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7440-39-3	Barium	360	J	1	62.8	500	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7440-43-9	Cadmium	30.0	U	1	0.94	30.0	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7440-47-3	Chromium	29.8	J	1	6.60	50.0	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7439-92-1	Lead	60.0	U	1	35.1	60.0	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7439-97-6	Mercury	2.00	U	1	0.81	2.00	ug/L	02/03/25 15:10	02/04/25 12:18	SW7470A	
7782-49-2	Selenium	100	U	1	58.8	100	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050
7440-22-4	Silver	50.0	U	1	5.80	50.0	ug/L	02/03/25 12:05	02/07/25 14:11	SW6010	SW3050

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	TCLP-FULL			

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

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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
ICV83	Mercury	3.97	4.0	99	90 - 110	CV	02/04/2025	11:29	LB134551

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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
CCV18	Mercury	4.90	5.0	98	90 - 110	CV	02/04/2025	11:34	LB134551
CCV19	Mercury	4.75	5.0	95	90 - 110	CV	02/04/2025	12:05	LB134551
CCV20	Mercury	4.69	5.0	94	90 - 110	CV	02/04/2025	12:30	LB134551
CCV21	Mercury	5.21	5.0	104	90 - 110	CV	02/04/2025	12:41	LB134551

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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	Arsenic	983	1000	98	90 - 110	P	02/06/2025	12:59	Lb134604
	Barium	477	520	92	90 - 110	P	02/06/2025	12:59	Lb134604
	Cadmium	498	510	98	90 - 110	P	02/06/2025	12:59	Lb134604
	Chromium	532	520	102	90 - 110	P	02/06/2025	12:59	Lb134604
	Lead	981	1000	98	90 - 110	P	02/06/2025	12:59	Lb134604
	Selenium	1020	1000	102	90 - 110	P	02/06/2025	12:59	Lb134604
	Silver	252	250	101	90 - 110	P	02/06/2025	12:59	Lb134604

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

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	Arsenic	18.4	20.0	92	80 - 120	P	02/06/2025	13:03	Lb134604
	Barium	92.2	100	92	80 - 120	P	02/06/2025	13:03	Lb134604
	Cadmium	5.94	6.0	99	80 - 120	P	02/06/2025	13:03	Lb134604
	Chromium	9.88	10.0	99	80 - 120	P	02/06/2025	13:03	Lb134604
	Lead	11.1	12.0	92	80 - 120	P	02/06/2025	13:03	Lb134604
	Selenium	20.5	20.0	103	80 - 120	P	02/06/2025	13:03	Lb134604
	Silver	10.9	10.0	109	80 - 120	P	02/06/2025	13:03	Lb134604

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1242

Contract: RUTW01 Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242

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	Arsenic	4910	5000	98	90 - 110	P	02/06/2025	13:25	Lb134604
	Barium	9480	10000	95	90 - 110	P	02/06/2025	13:25	Lb134604
	Cadmium	2440	2500	98	90 - 110	P	02/06/2025	13:25	Lb134604
	Chromium	996	1000	100	90 - 110	P	02/06/2025	13:25	Lb134604
	Lead	4870	5000	98	90 - 110	P	02/06/2025	13:25	Lb134604
	Selenium	4930	5000	99	90 - 110	P	02/06/2025	13:25	Lb134604
	Silver	1240	1250	99	90 - 110	P	02/06/2025	13:25	Lb134604
CCV02	Arsenic	4820	5000	96	90 - 110	P	02/06/2025	13:59	Lb134604
	Barium	9530	10000	95	90 - 110	P	02/06/2025	13:59	Lb134604
	Cadmium	2440	2500	98	90 - 110	P	02/06/2025	13:59	Lb134604
	Chromium	988	1000	99	90 - 110	P	02/06/2025	13:59	Lb134604
	Lead	4850	5000	97	90 - 110	P	02/06/2025	13:59	Lb134604
	Selenium	4820	5000	96	90 - 110	P	02/06/2025	13:59	Lb134604
	Silver	1230	1250	98	90 - 110	P	02/06/2025	13:59	Lb134604
CCV03	Arsenic	4810	5000	96	90 - 110	P	02/06/2025	14:51	Lb134604
	Barium	9390	10000	94	90 - 110	P	02/06/2025	14:51	Lb134604
	Cadmium	2380	2500	95	90 - 110	P	02/06/2025	14:51	Lb134604
	Chromium	971	1000	97	90 - 110	P	02/06/2025	14:51	Lb134604
	Lead	4740	5000	95	90 - 110	P	02/06/2025	14:51	Lb134604
	Selenium	4840	5000	97	90 - 110	P	02/06/2025	14:51	Lb134604
	Silver	1200	1250	96	90 - 110	P	02/06/2025	14:51	Lb134604
CCV04	Arsenic	4970	5000	99	90 - 110	P	02/06/2025	15:09	Lb134604
	Barium	9780	10000	98	90 - 110	P	02/06/2025	15:09	Lb134604
	Cadmium	2460	2500	98	90 - 110	P	02/06/2025	15:09	Lb134604
	Chromium	999	1000	100	90 - 110	P	02/06/2025	15:09	Lb134604
	Lead	4920	5000	98	90 - 110	P	02/06/2025	15:09	Lb134604
	Selenium	5000	5000	100	90 - 110	P	02/06/2025	15:09	Lb134604
	Silver	1240	1250	99	90 - 110	P	02/06/2025	15:09	Lb134604

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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	Arsenic	1000	1000	100	95 - 105	P	02/07/2025	12:11	LB134636
	Barium	502	520	97	95 - 105	P	02/07/2025	12:11	LB134636
	Cadmium	510	510	100	95 - 105	P	02/07/2025	12:11	LB134636
	Chromium	532	520	102	95 - 105	P	02/07/2025	12:11	LB134636
	Lead	999	1000	100	95 - 105	P	02/07/2025	12:11	LB134636
	Selenium	1040	1000	104	95 - 105	P	02/07/2025	12:11	LB134636
	Silver	251	250	101	95 - 105	P	02/07/2025	12:11	LB134636

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242

Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

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	Arsenic	21.8	20.0	109	80 - 120	P	02/07/2025	12:27	LB134636
	Barium	91.5	100	92	80 - 120	P	02/07/2025	12:27	LB134636
	Cadmium	6.03	6.0	100	80 - 120	P	02/07/2025	12:27	LB134636
	Chromium	9.90	10.0	99	80 - 120	P	02/07/2025	12:27	LB134636
	Lead	11.2	12.0	94	80 - 120	P	02/07/2025	12:27	LB134636
	Selenium	22.0	20.0	110	80 - 120	P	02/07/2025	12:27	LB134636
	Silver	10.1	10.0	101	80 - 120	P	02/07/2025	12:27	LB134636

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC SDG No.: Q1242
Contract: RUTW01 Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242
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	Arsenic	5070	5000	101	90 - 110	P	02/07/2025	12:57	LB134636
	Barium	9860	10000	99	90 - 110	P	02/07/2025	12:57	LB134636
	Cadmium	2490	2500	100	90 - 110	P	02/07/2025	12:57	LB134636
	Chromium	1010	1000	101	90 - 110	P	02/07/2025	12:57	LB134636
	Lead	4990	5000	100	90 - 110	P	02/07/2025	12:57	LB134636
	Selenium	5110	5000	102	90 - 110	P	02/07/2025	12:57	LB134636
	Silver	1250	1250	100	90 - 110	P	02/07/2025	12:57	LB134636
CCV02	Arsenic	5060	5000	101	90 - 110	P	02/07/2025	13:49	LB134636
	Barium	9830	10000	98	90 - 110	P	02/07/2025	13:49	LB134636
	Cadmium	2470	2500	99	90 - 110	P	02/07/2025	13:49	LB134636
	Chromium	1010	1000	100	90 - 110	P	02/07/2025	13:49	LB134636
	Lead	4970	5000	99	90 - 110	P	02/07/2025	13:49	LB134636
	Selenium	5110	5000	102	90 - 110	P	02/07/2025	13:49	LB134636
	Silver	1250	1250	100	90 - 110	P	02/07/2025	13:49	LB134636
CCV03	Arsenic	5200	5000	104	90 - 110	P	02/07/2025	14:41	LB134636
	Barium	9760	10000	98	90 - 110	P	02/07/2025	14:41	LB134636
	Cadmium	2440	2500	98	90 - 110	P	02/07/2025	14:41	LB134636
	Chromium	986	1000	99	90 - 110	P	02/07/2025	14:41	LB134636
	Lead	4920	5000	98	90 - 110	P	02/07/2025	14:41	LB134636
	Selenium	5300	5000	106	90 - 110	P	02/07/2025	14:41	LB134636
	Silver	1240	1250	99	90 - 110	P	02/07/2025	14:41	LB134636
CCV04	Arsenic	4960	5000	99	90 - 110	P	02/07/2025	15:32	LB134636
	Barium	9610	10000	96	90 - 110	P	02/07/2025	15:32	LB134636
	Cadmium	2430	2500	97	90 - 110	P	02/07/2025	15:32	LB134636
	Chromium	990	1000	99	90 - 110	P	02/07/2025	15:32	LB134636
	Lead	4890	5000	98	90 - 110	P	02/07/2025	15:32	LB134636
	Selenium	4980	5000	100	90 - 110	P	02/07/2025	15:32	LB134636
	Silver	1220	1250	98	90 - 110	P	02/07/2025	15:32	LB134636
CCV05	Arsenic	5090	5000	102	90 - 110	P	02/07/2025	16:24	LB134636
	Barium	9800	10000	98	90 - 110	P	02/07/2025	16:24	LB134636
	Cadmium	2480	2500	99	90 - 110	P	02/07/2025	16:24	LB134636
	Chromium	1020	1000	102	90 - 110	P	02/07/2025	16:24	LB134636
	Lead	4990	5000	100	90 - 110	P	02/07/2025	16:24	LB134636
	Selenium	5130	5000	102	90 - 110	P	02/07/2025	16:24	LB134636

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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	Silver	1260	1250	100	90 - 110	P	02/07/2025	16:24	LB134636
CCV06	Arsenic	5040	5000	101	90 - 110	P	02/07/2025	17:16	LB134636
	Barium	9530	10000	95	90 - 110	P	02/07/2025	17:16	LB134636
	Cadmium	2440	2500	97	90 - 110	P	02/07/2025	17:16	LB134636
	Chromium	1010	1000	101	90 - 110	P	02/07/2025	17:16	LB134636
	Lead	4910	5000	98	90 - 110	P	02/07/2025	17:16	LB134636
	Selenium	5080	5000	102	90 - 110	P	02/07/2025	17:16	LB134636
	Silver	1250	1250	100	90 - 110	P	02/07/2025	17:16	LB134636
CCV07	Arsenic	5210	5000	104	90 - 110	P	02/07/2025	18:00	LB134636
	Barium	9530	10000	95	90 - 110	P	02/07/2025	18:00	LB134636
	Cadmium	2450	2500	98	90 - 110	P	02/07/2025	18:00	LB134636
	Chromium	1010	1000	101	90 - 110	P	02/07/2025	18:00	LB134636
	Lead	4980	5000	100	90 - 110	P	02/07/2025	18:00	LB134636
	Selenium	5300	5000	106	90 - 110	P	02/07/2025	18:00	LB134636
	Silver	1240	1250	99	90 - 110	P	02/07/2025	18:00	LB134636
CCV08	Arsenic	5260	5000	105	90 - 110	P	02/07/2025	18:23	LB134636
	Barium	9470	10000	95	90 - 110	P	02/07/2025	18:23	LB134636
	Cadmium	2480	2500	99	90 - 110	P	02/07/2025	18:23	LB134636
	Chromium	1020	1000	102	90 - 110	P	02/07/2025	18:23	LB134636
	Lead	5020	5000	100	90 - 110	P	02/07/2025	18:23	LB134636
	Selenium	5330	5000	107	90 - 110	P	02/07/2025	18:23	LB134636
	Silver	1250	1250	100	90 - 110	P	02/07/2025	18:23	LB134636



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

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CRDL STANDARD FOR AA & ICP

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
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	0.22	0.2	111	40 - 160	CV	02/04/2025	11:38	LB134551
CRI01	Arsenic	20.6	20.0	103	40 - 160	P	02/06/2025	13:12	Lb134604
	Barium	89.7	100	90	40 - 160	P	02/06/2025	13:12	Lb134604
	Cadmium	5.91	6.0	98	40 - 160	P	02/06/2025	13:12	Lb134604
	Chromium	9.92	10.0	99	40 - 160	P	02/06/2025	13:12	Lb134604
	Lead	11.4	12.0	95	40 - 160	P	02/06/2025	13:12	Lb134604
	Selenium	19.9	20.0	100	40 - 160	P	02/06/2025	13:12	Lb134604
	Silver	10.7	10.0	107	40 - 160	P	02/06/2025	13:12	Lb134604
CRI01	Arsenic	20.3	20.0	102	40 - 160	P	02/07/2025	12:35	LB134636
	Barium	92.8	100	93	40 - 160	P	02/07/2025	12:35	LB134636
	Cadmium	5.87	6.0	98	40 - 160	P	02/07/2025	12:35	LB134636
	Chromium	9.48	10.0	95	40 - 160	P	02/07/2025	12:35	LB134636
	Lead	10.9	12.0	91	40 - 160	P	02/07/2025	12:35	LB134636
	Selenium	19.8	20.0	99	40 - 160	P	02/07/2025	12:35	LB134636
	Silver	10.1	10.0	101	40 - 160	P	02/07/2025	12:35	LB134636



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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB83	Mercury	0.20	+/-0.20	U	0.20	CV	02/04/2025	11:32	LB134551

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB18	Mercury	0.20	+/-0.20	U	0.20	CV	02/04/2025	11:36	LB134551
CCB19	Mercury	0.20	+/-0.20	U	0.20	CV	02/04/2025	12:07	LB134551
CCB20	Mercury	0.20	+/-0.20	U	0.20	CV	02/04/2025	12:32	LB134551
CCB21	Mercury	0.20	+/-0.20	U	0.20	CV	02/04/2025	12:43	LB134551

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/06/2025	13:08	Lb134604
	Barium	100	+/-100	U	100	P	02/06/2025	13:08	Lb134604
	Cadmium	6.00	+/-6.00	U	6.00	P	02/06/2025	13:08	Lb134604
	Chromium	10.0	+/-10.0	U	10.0	P	02/06/2025	13:08	Lb134604
	Lead	12.0	+/-12.0	U	12.0	P	02/06/2025	13:08	Lb134604
	Selenium	20.0	+/-20.0	U	20.0	P	02/06/2025	13:08	Lb134604
	Silver	10.0	+/-10.0	U	10.0	P	02/06/2025	13:08	Lb134604

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1242</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1242</u>	SAS No.: <u>Q1242</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/06/2025	13:29	Lb134604
	Barium	100	+/-100	U	100	P	02/06/2025	13:29	Lb134604
	Cadmium	6.00	+/-6.00	U	6.00	P	02/06/2025	13:29	Lb134604
	Chromium	10.0	+/-10.0	U	10.0	P	02/06/2025	13:29	Lb134604
	Lead	12.0	+/-12.0	U	12.0	P	02/06/2025	13:29	Lb134604
	Selenium	20.0	+/-20.0	U	20.0	P	02/06/2025	13:29	Lb134604
	Silver	10.0	+/-10.0	U	10.0	P	02/06/2025	13:29	Lb134604
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	02/06/2025	14:03	Lb134604
	Barium	100	+/-100	U	100	P	02/06/2025	14:03	Lb134604
	Cadmium	6.00	+/-6.00	U	6.00	P	02/06/2025	14:03	Lb134604
	Chromium	10.0	+/-10.0	U	10.0	P	02/06/2025	14:03	Lb134604
	Lead	12.0	+/-12.0	U	12.0	P	02/06/2025	14:03	Lb134604
	Selenium	20.0	+/-20.0	U	20.0	P	02/06/2025	14:03	Lb134604
	Silver	10.0	+/-10.0	U	10.0	P	02/06/2025	14:03	Lb134604
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	02/06/2025	14:55	Lb134604
	Barium	100	+/-100	U	100	P	02/06/2025	14:55	Lb134604
	Cadmium	6.00	+/-6.00	U	6.00	P	02/06/2025	14:55	Lb134604
	Chromium	10.0	+/-10.0	U	10.0	P	02/06/2025	14:55	Lb134604
	Lead	12.0	+/-12.0	U	12.0	P	02/06/2025	14:55	Lb134604
	Selenium	20.0	+/-20.0	U	20.0	P	02/06/2025	14:55	Lb134604
	Silver	10.0	+/-10.0	U	10.0	P	02/06/2025	14:55	Lb134604
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	02/06/2025	15:13	Lb134604
	Barium	100	+/-100	U	100	P	02/06/2025	15:13	Lb134604
	Cadmium	6.00	+/-6.00	U	6.00	P	02/06/2025	15:13	Lb134604
	Chromium	10.0	+/-10.0	U	10.0	P	02/06/2025	15:13	Lb134604
	Lead	12.0	+/-12.0	U	12.0	P	02/06/2025	15:13	Lb134604
	Selenium	20.0	+/-20.0	U	20.0	P	02/06/2025	15:13	Lb134604
	Silver	10.0	+/-10.0	U	10.0	P	02/06/2025	15:13	Lb134604

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	12:31	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	12:31	LB134636
	Cadmium	6.00	+/-6.00	U	6.00	P	02/07/2025	12:31	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	12:31	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	12:31	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	12:31	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	12:31	LB134636

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>RU2 Engineering, LLC</u>		SDG No.: <u>Q1242</u>							
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>	Case No.: <u>Q1242</u>	SAS No.: <u>Q1242</u>						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	13:01	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	13:01	LB134636
	Cadmium	6.00	+/-6.00	U	6.00	P	02/07/2025	13:01	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	13:01	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	13:01	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	13:01	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	13:01	LB134636
CCB02	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	13:53	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	13:53	LB134636
	Cadmium	0.41	+/-6.00	J	6.00	P	02/07/2025	13:53	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	13:53	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	13:53	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	13:53	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	13:53	LB134636
CCB03	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	14:45	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	14:45	LB134636
	Cadmium	0.42	+/-6.00	J	6.00	P	02/07/2025	14:45	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	14:45	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	14:45	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	14:45	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	14:45	LB134636
CCB04	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	15:37	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	15:37	LB134636
	Cadmium	0.26	+/-6.00	J	6.00	P	02/07/2025	15:37	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	15:37	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	15:37	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	15:37	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	15:37	LB134636
CCB05	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	16:28	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	16:28	LB134636
	Cadmium	6.00	+/-6.00	U	6.00	P	02/07/2025	16:28	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	16:28	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	16:28	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	16:28	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	16:28	LB134636
CCB06	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	17:20	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	17:20	LB134636
	Cadmium	0.28	+/-6.00	J	6.00	P	02/07/2025	17:20	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	17:20	LB134636

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	17:20	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	17:20	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	17:20	LB134636
CCB07	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	18:10	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	18:10	LB134636
	Cadmium	6.00	+/-6.00	U	6.00	P	02/07/2025	18:10	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	18:10	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	18:10	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	18:10	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	18:10	LB134636
CCB08	Arsenic	20.0	+/-20.0	U	20.0	P	02/07/2025	18:27	LB134636
	Barium	100	+/-100	U	100	P	02/07/2025	18:27	LB134636
	Cadmium	0.27	+/-6.00	J	6.00	P	02/07/2025	18:27	LB134636
	Chromium	10.0	+/-10.0	U	10.0	P	02/07/2025	18:27	LB134636
	Lead	12.0	+/-12.0	U	12.0	P	02/07/2025	18:27	LB134636
	Selenium	20.0	+/-20.0	U	20.0	P	02/07/2025	18:27	LB134636
	Silver	10.0	+/-10.0	U	10.0	P	02/07/2025	18:27	LB134636

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: RU2 Engineering, LLC

SDG No.: Q1242

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166423TB	WATER			Batch Number:	PB166489		Prep Date:	02/03/2025	
	Mercury	2.00	<2.00	U	2.00	CV	02/04/2025	12:34	LB134551
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166489BL	WATER			Batch Number:	PB166489		Prep Date:	02/03/2025	
	Mercury	0.20	<0.20	U	0.20	CV	02/04/2025	11:45	LB134551

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: RU2 Engineering, LLC

SDG No.: Q1242

Instrument: P4

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166423TB		WATER		Batch Number:	PB166488		Prep Date:	02/03/2025	
	Arsenic	100	<100	U	100	P	02/07/2025	13:22	LB134636
	Barium	500	<500	U	500	P	02/07/2025	13:22	LB134636
	Cadmium	30.0	<30.0	U	30.0	P	02/07/2025	13:22	LB134636
	Chromium	50.0	<50.0	U	50.0	P	02/07/2025	13:22	LB134636
	Lead	60.0	<60.0	U	60.0	P	02/07/2025	13:22	LB134636
	Selenium	100	<100	U	100	P	02/07/2025	13:22	LB134636
	Silver	50.0	<50.0	U	50.0	P	02/07/2025	13:22	LB134636
Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB166488BL		WATER		Batch Number:	PB166488		Prep Date:	02/03/2025	
	Arsenic	100	<100	U	100	P	02/07/2025	14:15	LB134636
	Barium	500	<500	U	500	P	02/07/2025	14:15	LB134636
	Cadmium	30.0	<30.0	U	30.0	P	02/07/2025	14:15	LB134636
	Chromium	50.0	<50.0	U	50.0	P	02/07/2025	14:15	LB134636
	Lead	60.0	<60.0	U	60.0	P	02/07/2025	14:15	LB134636
	Selenium	100	<100	U	100	P	02/07/2025	14:15	LB134636
	Silver	50.0	<50.0	U	50.0	P	02/07/2025	14:15	LB134636

Metals
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INTERFERENCE CHECK SAMPLE

Client: <u>RU2 Engineering, LLC</u>	SDG No.: <u>Q1242</u>
Contract: <u>RUTW01</u>	Lab Code: <u>CHEM</u>
ICS Source: <u>EPA</u>	Case No.: <u>Q1242</u>
	SAS No.: <u>Q1242</u>
	Instrument ID: <u>P4</u>

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	Arsenic	0.20			-20	20	02/06/2025	13:16	Lb134604
	Barium	2.10	6.0	35	-94	106	02/06/2025	13:16	Lb134604
	Cadmium	3.71	1.0	371	-5	7	02/06/2025	13:16	Lb134604
	Chromium	59.2	52.0	114	42	62	02/06/2025	13:16	Lb134604
	Lead	6.57			-12	12	02/06/2025	13:16	Lb134604
	Selenium	-11.3			-20	20	02/06/2025	13:16	Lb134604
	Silver	-2.78			-10	10	02/06/2025	13:16	Lb134604
ICSAB01	Arsenic	103	104	99	88.4	120	02/06/2025	13:21	Lb134604
	Barium	487	537	91	437	637	02/06/2025	13:21	Lb134604
	Cadmium	1010	972	104	826	1120	02/06/2025	13:21	Lb134604
	Chromium	575	542	106	460	624	02/06/2025	13:21	Lb134604
	Lead	56.8	49.0	116	37	61	02/06/2025	13:21	Lb134604
	Selenium	41.8	46.0	91	26	66	02/06/2025	13:21	Lb134604
	Silver	220	201	110	170	232	02/06/2025	13:21	Lb134604
ICSA01	Arsenic	2.16			-20	20	02/07/2025	12:40	LB134636
	Barium	3.37	6.0	56	-94	106	02/07/2025	12:40	LB134636
	Cadmium	2.97	1.0	297	-5	7	02/07/2025	12:40	LB134636
	Chromium	58.5	52.0	112	42	62	02/07/2025	12:40	LB134636
	Lead	8.02			-12	12	02/07/2025	12:40	LB134636
	Selenium	-11.1			-20	20	02/07/2025	12:40	LB134636
	Silver	1.38			-10	10	02/07/2025	12:40	LB134636
ICSAB01	Arsenic	108	104	104	88.4	120	02/07/2025	12:44	LB134636
	Barium	473	537	88	437	637	02/07/2025	12:44	LB134636
	Cadmium	1020	972	105	826	1120	02/07/2025	12:44	LB134636
	Chromium	575	542	106	460	624	02/07/2025	12:44	LB134636
	Lead	56.3	49.0	115	37	61	02/07/2025	12:44	LB134636
	Selenium	41.6	46.0	90	26	66	02/07/2025	12:44	LB134636
	Silver	223	201	111	170	232	02/07/2025	12:44	LB134636



METAL QC DATA

metals
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MATRIX SPIKE SUMMARY

client: <u>RU2 Engineering, LLC</u>	level: <u>low</u>	sdg no.: <u>Q1242</u>
contract: <u>RUTW01</u>	lab code: <u>CHEM</u>	case no.: <u>Q1242</u> sas no.: <u>Q1242</u>
matrix: <u>Water</u>	sample id: <u>Q1262-05</u>	client id: <u>3762MS</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q1262-05MS</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3880		100	U	4000	97		P
Barium	ug/L	75 - 125	1640		644		1000	100		P
Cadmium	ug/L	75 - 125	967		1.09	J	1000	97		P
Chromium	ug/L	75 - 125	2040		18.7	J	2000	101		P
Lead	ug/L	75 - 125	4580		60.0	U	5000	92		P
Mercury	ug/L	75 - 125	49.9		2.00	U	40.0	125		CV
Selenium	ug/L	75 - 125	9410		100	U	10000	94		P
Silver	ug/L	75 - 125	369		50.0	U	380	97		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>RU2 Engineering, LLC</u>	level: <u>low</u>	sdg no.: <u>Q1242</u>
contract: <u>RUTW01</u>	lab code: <u>CHEM</u>	case no.: <u>Q1242</u> sas no.: <u>Q1242</u>
matrix: <u>Water</u>	sample id: <u>Q1262-05</u>	client id: <u>3762MSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q1262-05MSD</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	3860		100	U	4000	96		P
Barium	ug/L	75 - 125	1560		644		1000	92		P
Cadmium	ug/L	75 - 125	964		1.09	J	1000	96		P
Chromium	ug/L	75 - 125	2040		18.7	J	2000	101		P
Lead	ug/L	75 - 125	4560		60.0	U	5000	91		P
Mercury	ug/L	75 - 125	47.2		2.00	U	40.0	118		CV
Selenium	ug/L	75 - 125	9480		100	U	10000	95		P
Silver	ug/L	75 - 125	366		50.0	U	380	96		P



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

Metals
- 5b -

Client:

RU2 Engineering, LLC

SDG No.:

Q1242

Contract:

RUTW01

Lab Code:

CHEM

Case No.:

Q1242

SAS No.:

Q1242

Matrix:

Level:

LOW

Client ID:

Sample ID:

Spiked ID:

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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Metals

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DUPLICATE SAMPLE SUMMARY

Client: RU2 Engineering, LLC **Level:** LOW **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
Matrix: Water **Sample ID:** Q1262-05 **Client ID:** 3762DUP
Percent Solids for Sample: NA **Duplicate ID** Q1262-05DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	100	U	100	U			P
Barium	ug/L	20	644		653		1		P
Cadmium	ug/L	20	1.09	J	0.95	J	14		P
Chromium	ug/L	20	18.7	J	17.3	J	8		P
Lead	ug/L	20	60.0	U	60.0	U			P
Mercury	ug/L	20	2.00	U	2.00	U			CV
Selenium	ug/L	20	100	U	100	U			P
Silver	ug/L	20	50.0	U	50.0	U			P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: RU2 Engineering, LLC **Level:** LOW **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242
Matrix: Water **Sample ID:** Q1262-05MS **Client ID:** 3762MSD
Percent Solids for Sample: NA **Duplicate ID** Q1262-05MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/L	20	3880		3860		1		P
Barium	ug/L	20	1640		1560		5		P
Cadmium	ug/L	20	967		964		0		P
Chromium	ug/L	20	2040		2040		0		P
Lead	ug/L	20	4580		4560		0		P
Mercury	ug/L	20	49.9		47.2		6		CV
Selenium	ug/L	20	9410		9480		1		P
Silver	ug/L	20	369		366		1		P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166488BS							
Arsenic	ug/L	4000	4010		100	80 - 120	P
Barium	ug/L	1000	895		90	80 - 120	P
Cadmium	ug/L	1000	973		97	80 - 120	P
Chromium	ug/L	2000	2040		102	80 - 120	P
Lead	ug/L	5000	4820		96	80 - 120	P
Selenium	ug/L	10000	10200		102	80 - 120	P
Silver	ug/L	380	376		99	80 - 120	P

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: RU2 Engineering, LLC **SDG No.:** Q1242
Contract: RUTW01 **Lab Code:** CHEM **Case No.:** Q1242 **SAS No.:** Q1242

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB166489BS Mercury	ug/L	4.0	4.23		106	80 - 120	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

3762L

Lab Name: Chemtech Consulting Group

Contract: RUTW01

Lab Code: CHEM **Lb No.:** lb134604

Lab Sample ID : Q1262-05L **SDG No.:** Q1242

Matrix (soil/water): Water

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference		Q	M
		C		C				
Arsenic	100	U	500	U				P
Barium	644		597	J	7			P
Cadmium	1.09	J	150	U	100.0			P
Chromium	18.7	J	250	U	100.0			P
Lead	60.0	U	300	U				P
Mercury	2.00	U	10.0	U				CV
Selenium	100	U	500	U				P
Silver	50.0	U	250	U				P



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1242

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1242

SAS No.: Q1242

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1242

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1242

SAS No.: Q1242

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0003170	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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1242

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1242

SAS No.: Q1242

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1242

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1242

SAS No.: Q1242

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
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
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
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

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: RU2 Engineering, LLC

SDG No.: Q1242

Contract: RUTW01

Lab Code: CHEM

Case No.: Q1242

SAS No.: Q1242

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
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
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Lead	220.353	0.0000000	-0.0003610	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

METAL
PREPARATION &
ANALYICAL
SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	SDG No.:	<u>Q1242</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1242</u>
		SAS No.:	<u>Q1242</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166488							
PB166423TB	PB166423TB	MB	WATER	02/03/2025	5.0	25.0	
PB166488BL	PB166488BL	MB	WATER	02/03/2025	5.0	25.0	
PB166488BS	PB166488BS	LCS	WATER	02/03/2025	5.0	25.0	
Q1242-04	JPP-6.2-013025	SAM	WATER	02/03/2025	5.0	25.0	
Q1262-05DUP	3762DUP	DUP	WATER	02/03/2025	5.0	25.0	
Q1262-05MS	3762MS	MS	WATER	02/03/2025	5.0	25.0	
Q1262-05MSD	3762MSD	MSD	WATER	02/03/2025	5.0	25.0	

Metals

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SAMPLE PREPARATION SUMMARY

Client:	<u>RU2 Engineering, LLC</u>	SDG No.:	<u>Q1242</u>
Contract:	<u>RUTW01</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1242</u>
		SAS No.:	<u>Q1242</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB166489							
PB166423TB	PB166423TB	MB	WATER	02/03/2025	3.0	30.0	
PB166489BL	PB166489BL	MB	WATER	02/03/2025	30.0	30.0	
PB166489BS	PB166489BS	LCS	WATER	02/03/2025	30.0	30.0	
Q1242-04	JPP-6.2-013025	SAM	WATER	02/03/2025	3.0	30.0	
Q1262-05DUP	3762DUP	DUP	WATER	02/03/2025	3.0	30.0	
Q1262-05MS	3762MS	MS	WATER	02/03/2025	3.0	30.0	
Q1262-05MSD	3762MSD	MSD	WATER	02/03/2025	3.0	30.0	

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1242 **Sas no.:** Q1242 **Sdg no.:** Q1242

Instrument id number: **Method:** **Run number:** LB134551

Start date: 02/04/2025 **End date:** 02/04/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1112	HG
S0.2	S0.2	1	1115	HG
S2.5	S2.5	1	1117	HG
S5	S5	1	1119	HG
S7.5	S7.5	1	1122	HG
S10	S10	1	1127	HG
ICV83	ICV83	1	1129	HG
ICB83	ICB83	1	1132	HG
CCV18	CCV18	1	1134	HG
CCB18	CCB18	1	1136	HG
CRA	CRA	1	1138	HG
PB166489BL	PB166489BL	1	1145	HG
PB166489BS	PB166489BS	1	1151	HG
CCV19	CCV19	1	1205	HG
CCB19	CCB19	1	1207	HG
Q1242-04	JPP-6.2-013025	1	1218	HG
Q1262-05DUP	3762DUP	1	1223	HG
Q1262-05MS	3762MS	1	1225	HG
Q1262-05MSD	3762MSD	1	1227	HG
CCV20	CCV20	1	1230	HG
CCB20	CCB20	1	1232	HG
PB166423TB	PB166423TB	1	1234	HG
Q1262-05L	3762L	5	1236	HG
CCV21	CCV21	1	1241	HG
CCB21	CCB21	1	1243	HG

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1242 **Sas no.:** Q1242 **Sdg no.:** Q1242

Instrument id number: **Method:** **Run number:** Lb134604

Start date: 02/06/2025 **End date:** 02/06/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1223	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1227	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1232	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1236	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1240	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1244	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1259	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1303	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1308	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1312	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1316	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1321	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1325	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1329	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1359	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1403	Ag,As,Ba,Cd,Cr,Pb,Se
Q1262-05DUP	3762DUP	1	1410	Ag,As,Ba,Cd,Cr,Pb,Se
Q1262-05L	3762L	5	1414	Ag,As,Ba,Cd,Cr,Pb,Se
Q1262-05MS	3762MS	1	1419	Ag,As,Ba,Cd,Cr,Pb,Se
Q1262-05MSD	3762MSD	1	1423	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1451	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1455	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1509	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1513	Ag,As,Ba,Cd,Cr,Pb,Se

metals
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ANALYSIS RUN LOG

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

Lab code: CHEM **Case no.:** Q1242 **Sas no.:** Q1242 **Sdg no.:** Q1242

Instrument id number: **Method:** **Run number:** LB134636

Start date: 02/07/2025 **End date:** 02/07/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1140	Ag,As,Ba,Cd,Cr,Pb,Se
S1	S1	1	1144	Ag,As,Ba,Cd,Cr,Pb,Se
S2	S2	1	1148	Ag,As,Ba,Cd,Cr,Pb,Se
S3	S3	1	1152	Ag,As,Ba,Cd,Cr,Pb,Se
S4	S4	1	1157	Ag,As,Ba,Cd,Cr,Pb,Se
S5	S5	1	1201	Ag,As,Ba,Cd,Cr,Pb,Se
ICV01	ICV01	1	1211	Ag,As,Ba,Cd,Cr,Pb,Se
LLICV01	LLICV01	1	1227	Ag,As,Ba,Cd,Cr,Pb,Se
ICB01	ICB01	1	1231	Ag,As,Ba,Cd,Cr,Pb,Se
CRI01	CRI01	1	1235	Ag,As,Ba,Cd,Cr,Pb,Se
ICSA01	ICSA01	1	1240	Ag,As,Ba,Cd,Cr,Pb,Se
ICSAB01	ICSAB01	1	1244	Ag,As,Ba,Cd,Cr,Pb,Se
CCV01	CCV01	1	1257	Ag,As,Ba,Cd,Cr,Pb,Se
CCB01	CCB01	1	1301	Ag,As,Ba,Cd,Cr,Pb,Se
PB166423TB	PB166423TB	1	1322	Ag,As,Ba,Cd,Cr,Pb,Se
CCV02	CCV02	1	1349	Ag,As,Ba,Cd,Cr,Pb,Se
CCB02	CCB02	1	1353	Ag,As,Ba,Cd,Cr,Pb,Se
Q1242-04	JPP-6,2-013025	1	1411	Ag,As,Ba,Cd,Cr,Pb,Se
PB166488BL	PB166488BL	1	1415	Ag,As,Ba,Cd,Cr,Pb,Se
PB166488BS	PB166488BS	1	1420	Ag,As,Ba,Cd,Cr,Pb,Se
CCV03	CCV03	1	1441	Ag,As,Ba,Cd,Cr,Pb,Se
CCB03	CCB03	1	1445	Ag,As,Ba,Cd,Cr,Pb,Se
CCV04	CCV04	1	1532	Ag,As,Ba,Cd,Cr,Pb,Se
CCB04	CCB04	1	1537	Ag,As,Ba,Cd,Cr,Pb,Se
CCV05	CCV05	1	1624	Ag,As,Ba,Cd,Cr,Pb,Se
CCB05	CCB05	1	1628	Ag,As,Ba,Cd,Cr,Pb,Se
CCV06	CCV06	1	1716	Ag,As,Ba,Cd,Cr,Pb,Se
CCB06	CCB06	1	1720	Ag,As,Ba,Cd,Cr,Pb,Se
CCV07	CCV07	1	1800	Ag,As,Ba,Cd,Cr,Pb,Se
CCB07	CCB07	1	1810	Ag,As,Ba,Cd,Cr,Pb,Se
CCV08	CCV08	1	1823	Ag,As,Ba,Cd,Cr,Pb,Se
CCB08	CCB08	1	1827	Ag,As,Ba,Cd,Cr,Pb,Se