



LAB CHRONICLE

OrderID:	Q3422	OrderDate:	10/22/2025 11:11:00 AM
Client:	AECOM	Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC -
Contact:	Rob Forstner	Location:	609937051719208 Soil, VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3422-01	PR132-S15-000008-2 0251021	SOIL			10/21/25			10/21/25
			Mercury	7471B		10/23/25	10/23/25	
			Metals ICP-TAL	6020B		10/23/25	10/23/25	

Hit Summary Sheet SW-846

SDG No.:	Q3422	Order ID:	Q3422
Client:	AECOM	Project ID:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PR132-S15-000008-20251021								
Q3422-01	PR132-S15-000008-20251021	SOIL	Aluminum	10100		0.54	3.02	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Antimony	0.22	J	0.068	0.30	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Arsenic	36.4	D	0.091	0.76	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Barium	272		0.050	1.51	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Beryllium	0.77		0.048	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Cadmium	7.29		0.027	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Calcium	3250		7.23	75.5	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Chromium	221	D	0.20	1.51	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Cobalt	9.80		0.014	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Copper	244		0.098	0.30	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Iron	25100		1.39	7.55	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Lead	518		0.048	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Magnesium	5750		2.91	75.5	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Manganese	347		0.051	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Nickel	44.5		0.065	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Mercury	4.35	D	0.12	0.22	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Potassium	2350		5.80	75.5	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Selenium	2.23	JD	2.11	3.77	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Silver	4.84		0.039	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Sodium	2050		10.6	75.5	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Thallium	0.37		0.021	0.15	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Vanadium	36.8		0.017	0.76	mg/Kg
Q3422-01	PR132-S15-000008-20251021	SOIL	Zinc	394		0.14	0.76	mg/Kg



SAMPLE DATA

Report of Analysis

Client: AECOM
Project: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Client Sample ID: PR132-S15-000008-20251021
Lab Sample ID: Q3422-01
Level (low/med): low

Date Collected: 10/21/25
Date Received: 10/21/25
SDG No.: Q3422
Matrix: SOIL
% Solid: 58.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	10100		1	0.54	3.02	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-36-0	Antimony	0.22	J	1	0.068	0.30	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-38-2	Arsenic	36.4	D	5	0.091	0.76	mg/Kg	10/23/25 10:42	10/23/25 17:59	6020B	SW3050
7440-39-3	Barium	272		1	0.050	1.51	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-41-7	Beryllium	0.77		1	0.048	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-43-9	Cadmium	7.29		1	0.027	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-70-2	Calcium	3250	N	1	7.23	75.5	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-47-3	Chromium	221	DN	5	0.20	1.51	mg/Kg	10/23/25 10:42	10/23/25 17:59	6020B	SW3050
7440-48-4	Cobalt	9.80		1	0.014	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-50-8	Copper	244	N	1	0.098	0.30	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7439-89-6	Iron	25100		1	1.39	7.55	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7439-92-1	Lead	518		1	0.048	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7439-95-4	Magnesium	5750	N	1	2.91	75.5	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7439-96-5	Manganese	347	N	1	0.051	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7439-97-6	Mercury	4.35	D*	10	0.12	0.22	mg/Kg	10/23/25 10:22	10/23/25 15:49	7471B	7471B
7440-02-0	Nickel	44.5	N	1	0.065	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-09-7	Potassium	2350	N	1	5.80	75.5	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7782-49-2	Selenium	2.23	JD	5	2.11	3.77	mg/Kg	10/23/25 10:42	10/23/25 17:59	6020B	SW3050
7440-22-4	Silver	4.84	N	1	0.039	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-23-5	Sodium	2050	N	1	10.6	75.5	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-28-0	Thallium	0.37		1	0.021	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-62-2	Vanadium	36.8	N	1	0.017	0.76	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050
7440-66-6	Zinc	394	N	1	0.14	0.76	mg/Kg	10/23/25 10:42	10/23/25 17:06	6020B	SW3050

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: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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
ICV85	Mercury	4.26	4.0	106	90 - 110	CV	10/23/2025	13:51	LB137626

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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
CCV79	Mercury	4.94	5.0	99	90 - 110	CV	10/23/2025	14:01	LB137626
CCV80	Mercury	4.97	5.0	99	90 - 110	CV	10/23/2025	14:35	LB137626
CCV81	Mercury	4.86	5.0	97	90 - 110	CV	10/23/2025	15:09	LB137626
CCV82	Mercury	5.04	5.0	101	90 - 110	CV	10/23/2025	15:29	LB137626
CCV83	Mercury	4.68	5.0	94	90 - 110	CV	10/23/2025	15:59	LB137626
CCV84	Mercury	4.71	5.0	94	90 - 110	CV	10/23/2025	16:14	LB137626

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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
ICV01	Aluminum	1500	1600	94	90 - 110	P	10/23/2025	15:44	LB137649
	Antimony	439	400	110	90 - 110	P	10/23/2025	15:44	LB137649
	Arsenic	416	400	104	90 - 110	P	10/23/2025	15:44	LB137649
	Barium	1610	1600	100	90 - 110	P	10/23/2025	15:44	LB137649
	Beryllium	43.2	40.0	108	90 - 110	P	10/23/2025	15:44	LB137649
	Cadmium	217	200	109	90 - 110	P	10/23/2025	15:44	LB137649
	Calcium	4160	4000	104	90 - 110	P	10/23/2025	15:44	LB137649
	Chromium	160	160	100	90 - 110	P	10/23/2025	15:44	LB137649
	Cobalt	403	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Copper	187	200	94	90 - 110	P	10/23/2025	15:44	LB137649
	Iron	878	800	110	90 - 110	P	10/23/2025	15:44	LB137649
	Lead	387	400	97	90 - 110	P	10/23/2025	15:44	LB137649
	Magnesium	3670	4000	92	90 - 110	P	10/23/2025	15:44	LB137649
	Manganese	394	400	98	90 - 110	P	10/23/2025	15:44	LB137649
	Nickel	404	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Potassium	4210	4000	105	90 - 110	P	10/23/2025	15:44	LB137649
	Selenium	429	400	107	90 - 110	P	10/23/2025	15:44	LB137649
	Silver	213	200	106	90 - 110	P	10/23/2025	15:44	LB137649
	Sodium	3910	4000	98	90 - 110	P	10/23/2025	15:44	LB137649
	Thallium	391	400	98	90 - 110	P	10/23/2025	15:44	LB137649
	Vanadium	403	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Zinc	379	400	95	90 - 110	P	10/23/2025	15:44	LB137649

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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
LLICV01	Aluminum	20.5	20.0	103	80 - 120	P	10/23/2025	15:53	LB137649
	Antimony	2.03	2.0	102	80 - 120	P	10/23/2025	15:53	LB137649
	Arsenic	1.16	1.0	116	80 - 120	P	10/23/2025	15:53	LB137649
	Barium	9.39	10.0	94	80 - 120	P	10/23/2025	15:53	LB137649
	Beryllium	1.07	1.0	107	80 - 120	P	10/23/2025	15:53	LB137649
	Cadmium	0.86	1.0	86	80 - 120	P	10/23/2025	15:53	LB137649
	Calcium	512	500	102	80 - 120	P	10/23/2025	15:53	LB137649
	Chromium	1.94	2.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Cobalt	1.05	1.0	105	80 - 120	P	10/23/2025	15:53	LB137649
	Copper	1.94	2.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Iron	52.8	50.0	106	80 - 120	P	10/23/2025	15:53	LB137649
	Lead	0.83	1.0	83	80 - 120	P	10/23/2025	15:53	LB137649
	Magnesium	479	500	96	80 - 120	P	10/23/2025	15:53	LB137649
	Manganese	0.94	1.0	94	80 - 120	P	10/23/2025	15:53	LB137649
	Nickel	1.00	1.0	100	80 - 120	P	10/23/2025	15:53	LB137649
	Potassium	506	500	101	80 - 120	P	10/23/2025	15:53	LB137649
	Selenium	4.77	5.0	95	80 - 120	P	10/23/2025	15:53	LB137649
	Silver	1.11	1.0	111	80 - 120	P	10/23/2025	15:53	LB137649
	Sodium	484	500	97	80 - 120	P	10/23/2025	15:53	LB137649
	Thallium	0.97	1.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Vanadium	4.89	5.0	98	80 - 120	P	10/23/2025	15:53	LB137649
	Zinc	5.02	5.0	100	80 - 120	P	10/23/2025	15:53	LB137649

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM
Contract: AECO02
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

SDG No.: Q3422
Lab Code: ACE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	48700	50000	98	90 - 110	P	10/23/2025	16:10	LB137649
	Antimony	524	500	105	90 - 110	P	10/23/2025	16:10	LB137649
	Arsenic	515	500	103	90 - 110	P	10/23/2025	16:10	LB137649
	Barium	2570	2500	103	90 - 110	P	10/23/2025	16:10	LB137649
	Beryllium	524	500	105	90 - 110	P	10/23/2025	16:10	LB137649
	Cadmium	503	500	101	90 - 110	P	10/23/2025	16:10	LB137649
	Calcium	251000	250000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Chromium	508	500	102	90 - 110	P	10/23/2025	16:10	LB137649
	Cobalt	503	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Copper	4980	5000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Iron	128000	125000	103	90 - 110	P	10/23/2025	16:10	LB137649
	Lead	2590	2500	104	90 - 110	P	10/23/2025	16:10	LB137649
	Magnesium	250000	250000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Manganese	5020	5000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Nickel	498	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Potassium	126000	125000	101	90 - 110	P	10/23/2025	16:10	LB137649
	Selenium	498	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Silver	510	500	102	90 - 110	P	10/23/2025	16:10	LB137649
	Sodium	247000	250000	99	90 - 110	P	10/23/2025	16:10	LB137649
	Thallium	514	500	103	90 - 110	P	10/23/2025	16:10	LB137649
CCV02	Vanadium	522	500	104	90 - 110	P	10/23/2025	16:10	LB137649
	Zinc	4790	5000	96	90 - 110	P	10/23/2025	16:10	LB137649
	Aluminum	51000	50000	102	90 - 110	P	10/23/2025	16:54	LB137649
	Antimony	536	500	107	90 - 110	P	10/23/2025	16:54	LB137649
	Arsenic	530	500	106	90 - 110	P	10/23/2025	16:54	LB137649
	Barium	2670	2500	107	90 - 110	P	10/23/2025	16:54	LB137649
	Beryllium	530	500	106	90 - 110	P	10/23/2025	16:54	LB137649
	Cadmium	521	500	104	90 - 110	P	10/23/2025	16:54	LB137649
	Calcium	259000	250000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Chromium	538	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Cobalt	525	500	105	90 - 110	P	10/23/2025	16:54	LB137649
	Copper	5180	5000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Iron	131000	125000	105	90 - 110	P	10/23/2025	16:54	LB137649
	Lead	2690	2500	108	90 - 110	P	10/23/2025	16:54	LB137649

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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
CCV02	Magnesium	260000	250000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Manganese	5300	5000	106	90 - 110	P	10/23/2025	16:54	LB137649
	Nickel	520	500	104	90 - 110	P	10/23/2025	16:54	LB137649
	Potassium	130000	125000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Selenium	511	500	102	90 - 110	P	10/23/2025	16:54	LB137649
	Silver	526	500	105	90 - 110	P	10/23/2025	16:54	LB137649
	Sodium	257000	250000	103	90 - 110	P	10/23/2025	16:54	LB137649
	Thallium	539	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Vanadium	540	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Zinc	4990	5000	100	90 - 110	P	10/23/2025	16:54	LB137649
CCV03	Aluminum	50800	50000	102	90 - 110	P	10/23/2025	17:35	LB137649
	Antimony	532	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Arsenic	531	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Barium	2650	2500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Beryllium	528	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Cadmium	514	500	103	90 - 110	P	10/23/2025	17:35	LB137649
	Calcium	259000	250000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Chromium	524	500	105	90 - 110	P	10/23/2025	17:35	LB137649
	Cobalt	536	500	107	90 - 110	P	10/23/2025	17:35	LB137649
	Copper	5230	5000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Iron	133000	125000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Lead	2690	2500	108	90 - 110	P	10/23/2025	17:35	LB137649
	Magnesium	264000	250000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Manganese	5310	5000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Nickel	517	500	104	90 - 110	P	10/23/2025	17:35	LB137649
	Potassium	129000	125000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Selenium	508	500	102	90 - 110	P	10/23/2025	17:35	LB137649
	Silver	528	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Sodium	260000	250000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Thallium	544	500	109	90 - 110	P	10/23/2025	17:35	LB137649
	Vanadium	540	500	108	90 - 110	P	10/23/2025	17:35	LB137649
	Zinc	5050	5000	101	90 - 110	P	10/23/2025	17:35	LB137649
CCV04	Aluminum	50900	50000	102	90 - 110	P	10/23/2025	18:19	LB137649
	Antimony	542	500	108	90 - 110	P	10/23/2025	18:19	LB137649

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM
Contract: AECO02
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

SDG No.: Q3422
Lab Code: ACE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Arsenic	528	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Barium	2660	2500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Beryllium	529	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Cadmium	517	500	103	90 - 110	P	10/23/2025	18:19	LB137649
	Calcium	263000	250000	105	90 - 110	P	10/23/2025	18:19	LB137649
	Chromium	534	500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Cobalt	533	500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Copper	5160	5000	103	90 - 110	P	10/23/2025	18:19	LB137649
	Iron	133000	125000	106	90 - 110	P	10/23/2025	18:19	LB137649
	Lead	2670	2500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Magnesium	262000	250000	105	90 - 110	P	10/23/2025	18:19	LB137649
	Manganese	5280	5000	106	90 - 110	P	10/23/2025	18:19	LB137649
	Nickel	516	500	103	90 - 110	P	10/23/2025	18:19	LB137649
	Potassium	131000	125000	104	90 - 110	P	10/23/2025	18:19	LB137649
	Selenium	510	500	102	90 - 110	P	10/23/2025	18:19	LB137649
	Silver	528	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Sodium	260000	250000	104	90 - 110	P	10/23/2025	18:19	LB137649
	Thallium	546	500	109	90 - 110	P	10/23/2025	18:19	LB137649
	Vanadium	542	500	108	90 - 110	P	10/23/2025	18:19	LB137649
	Zinc	5020	5000	100	90 - 110	P	10/23/2025	18:19	LB137649

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

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	0.20	0.2	100	70 - 130	CV	10/23/2025	14:07	LB137626
CRI01	Aluminum	21.2	20.0	106	70 - 130	P	10/23/2025	16:18	LB137649
	Antimony	2.07	2.0	104	70 - 130	P	10/23/2025	16:18	LB137649
	Arsenic	1.29	1.0	129	70 - 130	P	10/23/2025	16:18	LB137649
	Barium	9.50	10.0	95	70 - 130	P	10/23/2025	16:18	LB137649
	Beryllium	1.08	1.0	108	70 - 130	P	10/23/2025	16:18	LB137649
	Cadmium	0.94	1.0	94	70 - 130	P	10/23/2025	16:18	LB137649
	Calcium	507	500	101	70 - 130	P	10/23/2025	16:18	LB137649
	Chromium	2.02	2.0	101	70 - 130	P	10/23/2025	16:18	LB137649
	Cobalt	1.05	1.0	105	50 - 150	P	10/23/2025	16:18	LB137649
	Copper	2.02	2.0	101	70 - 130	P	10/23/2025	16:18	LB137649
	Iron	57.7	50.0	115	70 - 130	P	10/23/2025	16:18	LB137649
	Lead	0.87	1.0	87	70 - 130	P	10/23/2025	16:18	LB137649
	Magnesium	476	500	95	70 - 130	P	10/23/2025	16:18	LB137649
	Manganese	1.01	1.0	101	50 - 150	P	10/23/2025	16:18	LB137649
	Nickel	0.86	1.0	86	70 - 130	P	10/23/2025	16:18	LB137649
	Potassium	519	500	104	70 - 130	P	10/23/2025	16:18	LB137649
	Selenium	4.86	5.0	97	70 - 130	P	10/23/2025	16:18	LB137649
	Silver	1.10	1.0	110	70 - 130	P	10/23/2025	16:18	LB137649
	Sodium	510	500	102	70 - 130	P	10/23/2025	16:18	LB137649
	Thallium	1.04	1.0	104	70 - 130	P	10/23/2025	16:18	LB137649
	Vanadium	4.89	5.0	98	70 - 130	P	10/23/2025	16:18	LB137649
	Zinc	5.22	5.0	104	50 - 150	P	10/23/2025	16:18	LB137649



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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:

AECOM

Contract:

AECO02

SDG No.:

Q3422

Lab Code:

ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB85	Mercury	0.10	+/-0.2	J	0.20	CV	10/23/2025	13:57	LB137626

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB79	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	14:05	LB137626
CCB80	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	14:38	LB137626
CCB81	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	15:11	LB137626
CCB82	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	15:32	LB137626
CCB83	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	16:02	LB137626
CCB84	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	16:16	LB137626

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	15:58	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	15:58	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Iron	12.2	+/-25	J	50.0	P	10/23/2025	15:58	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	16:14	LB137649
	Antimony	0.17	+/-1	J	2.00	P	10/23/2025	16:14	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	16:14	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	16:14	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	16:14	LB137649
	Iron	15.4	+/-25	J	50.0	P	10/23/2025	16:14	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Thallium	0.11	+/-0.5	J	1.00	P	10/23/2025	16:14	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
CCB02	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	17:00	LB137649
	Antimony	0.12	+/-1	J	2.00	P	10/23/2025	17:00	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	17:00	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	17:00	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	17:00	LB137649
	Iron	15.0	+/-25	J	50.0	P	10/23/2025	17:00	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3422
Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Thallium	0.10	+/-0.5	J	1.00	P	10/23/2025	17:00	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649
CCB03	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	17:43	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	17:43	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Iron	16.2	+/-25	J	50.0	P	10/23/2025	17:43	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
CCB04	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	18:28	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	18:28	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Iron	7.81	+/-25	U	50.0	P	10/23/2025	18:28	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	19.5	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170230BL		SOLID		Batch Number:	PB170230		Prep Date:	10/23/2025	
	Mercury	0.0080	<0.014	U	0.014	CV	10/23/2025	14:15	LB137626

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: AECOM

SDG No.: Q3422

Instrument: P7

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170226BL	SOLID			Batch Number:	PB170226		Prep Date:	10/23/2025	
	Aluminum	0.36	<1	U	2.00	P	10/23/2025	16:21	LB137649
	Antimony	0.045	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Arsenic	0.012	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Barium	0.033	<0.5	U	1.00	P	10/23/2025	16:21	LB137649
	Beryllium	0.032	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Cadmium	0.018	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Calcium	4.79	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Chromium	0.026	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Cobalt	0.0090	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Copper	0.065	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Iron	1.43	<2.5	J	5.00	P	10/23/2025	16:21	LB137649
	Lead	0.032	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Magnesium	1.93	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Manganese	0.034	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Nickel	0.043	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Potassium	3.84	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Selenium	0.28	<0.25	U	0.50	P	10/23/2025	16:21	LB137649
	Silver	0.026	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Sodium	7.02	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Thallium	0.014	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Vanadium	0.011	<0.25	U	0.50	P	10/23/2025	16:21	LB137649
	Zinc	0.090	<0.25	U	0.50	P	10/23/2025	16:21	LB137649

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>AECOM</u>	SDG No.: <u>Q3422</u>
Contract: <u>AECO02</u>	Lab Code: <u>ACE</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P7</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	Aluminum	86100	100000	86	0	0	10/23/2025	16:03	LB137649
	Antimony	1.07	1.5	71	-2.5	5.5	10/23/2025	16:03	LB137649
	Arsenic	0.71	0.1	710	-1.9	2.1	10/23/2025	16:03	LB137649
	Barium	1.35	1.2	112	-18.8	21.2	10/23/2025	16:03	LB137649
	Beryllium	0.27			-2	2	10/23/2025	16:03	LB137649
	Cadmium	0.21	0.7	30	-1.3	2.7	10/23/2025	16:03	LB137649
	Calcium	95800	100000	96	0	0	10/23/2025	16:03	LB137649
	Chromium	19.2	21.0	91	17	25	10/23/2025	16:03	LB137649
	Cobalt	1.25	1.0	125	-1	3	10/23/2025	16:03	LB137649
	Copper	6.85	8.0	86	4	12	10/23/2025	16:03	LB137649
	Iron	96200	100000	96	0	0	10/23/2025	16:03	LB137649
	Lead	4.15	4.0	104	2	6	10/23/2025	16:03	LB137649
	Magnesium	88100	100000	88	0	0	10/23/2025	16:03	LB137649
	Manganese	7.07	7.0	101	5	9	10/23/2025	16:03	LB137649
	Nickel	5.28	6.0	88	4	8	10/23/2025	16:03	LB137649
	Potassium	96200	100000	96	0	0	10/23/2025	16:03	LB137649
	Selenium	0.060	0.3	20	-9.7	10	10/23/2025	16:03	LB137649
	Silver	0.040			-2	2	10/23/2025	16:03	LB137649
	Sodium	93200	100000	93	0	0	10/23/2025	16:03	LB137649
	Thallium	0.070			-2	2	10/23/2025	16:03	LB137649
	Vanadium	0.21	0.5	42	-9.5	10.5	10/23/2025	16:03	LB137649
	Zinc	9.95	11.0	90	1	21	10/23/2025	16:03	LB137649
ICSAB01	Aluminum	86800	100000	87	0	0	10/23/2025	16:07	LB137649
	Antimony	20.1	22.0	91	18	26	10/23/2025	16:07	LB137649
	Arsenic	19.6	19.0	103	16.2	21.9	10/23/2025	16:07	LB137649
	Barium	20.1	22.0	91	2	42	10/23/2025	16:07	LB137649
	Beryllium	20.7	19.0	109	16.2	21.9	10/23/2025	16:07	LB137649
	Cadmium	19.2	20.0	96	17	23	10/23/2025	16:07	LB137649
	Calcium	96000	100000	96	0	0	10/23/2025	16:07	LB137649
	Chromium	38.3	40.0	96	34	46	10/23/2025	16:07	LB137649
	Cobalt	20.8	20.0	104	17	23	10/23/2025	16:07	LB137649
	Copper	24.7	25.0	99	21	29	10/23/2025	16:07	LB137649
	Iron	95200	100000	95	0	0	10/23/2025	16:07	LB137649
	Lead	22.1	25.0	88	21.3	28.8	10/23/2025	16:07	LB137649
	Magnesium	87800	100000	88	0	0	10/23/2025	16:07	LB137649
	Manganese	24.6	27.0	91	23	31.1	10/23/2025	16:07	LB137649
	Nickel	24.5	24.0	102	20.4	27.6	10/23/2025	16:07	LB137649
	Potassium	94300	100000	94	0	0	10/23/2025	16:07	LB137649
	Selenium	19.3	19.0	102	9	29	10/23/2025	16:07	LB137649
	Silver	18.7	18.0	104	15.3	20.7	10/23/2025	16:07	LB137649
	Sodium	94400	100000	94	0	0	10/23/2025	16:07	LB137649
	Thallium	18.8	21.0	90	17.9	24.2	10/23/2025	16:07	LB137649

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>AECOM</u>	SDG No.: <u>Q3422</u>
Contract: <u>AECO02</u>	Lab Code: <u>ACE</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P7</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
ICSAB01	Vanadium	19.4	19.0	102	9	29	10/23/2025	16:07	LB137649
	Zinc	28.7	29.0	99	19	39	10/23/2025	16:07	LB137649



METAL QC DATA

metals
- 5a -
MATRIX SPIKE SUMMARY

client: AECOM **level:** low **sdg no.:** Q3422
contract: AECO02 **lab code:** ACE
matrix: Solid **sample id:** Q3419-01 **client id:** PR-132-S16-015094-20251021MS
Percent Solids for Sample: 54.4 **Spiked ID:** Q3419-02 **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	11500		11700		1600	-17		P
Antimony	mg/Kg	75 - 125	72.4		0.17	J	82.1	88		P
Arsenic	mg/Kg	75 - 125	93.2	D	19.3	D	82.1	90		P
Barium	mg/Kg	75 - 125	471		155		410	77		P
Beryllium	mg/Kg	75 - 125	72.0		0.97		82.1	87		P
Cadmium	mg/Kg	75 - 125	76.4		5.71		82.1	86		P
Calcium	mg/Kg	75 - 125	13600		8400		8200	63	N	P
Chromium	mg/Kg	75 - 125	274	D	221	D	82.1	65	N	P
Cobalt	mg/Kg	75 - 125	77.7		12.5		82.1	79		P
Copper	mg/Kg	75 - 125	854		226		820	76		P
Iron	mg/Kg	75 - 125	31400		32400		4100	-26		P
Lead	mg/Kg	75 - 125	627		291		410	82		P
Magnesium	mg/Kg	75 - 125	14300		8160		8200	75		P
Manganese	mg/Kg	75 - 125	988		425		820	69	N	P
Nickel	mg/Kg	75 - 125	126		63.5		82.1	76		P
Mercury	mg/Kg	80 - 120	2.53	D	2.62	D	0.43	-20		CV
Potassium	mg/Kg	75 - 125	5610		2840		4100	67	N	P
Selenium	mg/Kg	75 - 125	73.9	D	4.03	UD	82.1	88		P
Silver	mg/Kg	75 - 125	17.8		6.57		82.1	14	N	P
Sodium	mg/Kg	75 - 125	13300		6970		8200	77		P
Thallium	mg/Kg	75 - 125	69.2		0.30		82.1	84		P
Vanadium	mg/Kg	75 - 125	109		46.5		82.1	76		P
Zinc	mg/Kg	75 - 125	1030		395		820	77		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>AECOM</u>	level: <u>low</u>	sdg no.: <u>Q3422</u>
contract: <u>AECO02</u>		lab code: <u>ACE</u>
matrix: <u>Solid</u>	sample id: <u>Q3419-01</u>	client id: <u>PR-132-S16-015094-20251021MSD</u>
Percent Solids for Sample: 54.4	Spiked ID: Q3419-03	Percent Solids for Spike Sample: 54.4

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	11000		11700		1600	-47		P
Antimony	mg/Kg	75 - 125	68.6		0.17	J	77.9	88		P
Arsenic	mg/Kg	75 - 125	89.3	D	19.3	D	77.9	90		P
Barium	mg/Kg	75 - 125	449		155		390	75		P
Beryllium	mg/Kg	75 - 125	67.3		0.97		77.9	85		P
Cadmium	mg/Kg	75 - 125	72.6		5.71		77.9	86		P
Calcium	mg/Kg	75 - 125	13100		8400		7800	60	N	P
Chromium	mg/Kg	75 - 125	262	D	221	D	77.9	53	N	P
Cobalt	mg/Kg	75 - 125	73.1		12.5		77.9	78		P
Copper	mg/Kg	75 - 125	806		226		780	74	N	P
Iron	mg/Kg	75 - 125	29700		32400		3900	-71		P
Lead	mg/Kg	75 - 125	599		291		390	79		P
Magnesium	mg/Kg	75 - 125	13600		8160		7800	70	N	P
Manganese	mg/Kg	75 - 125	934		425		780	65	N	P
Nickel	mg/Kg	75 - 125	120		63.5		77.9	72	N	P
Mercury	mg/Kg	80 - 120	2.62	D	2.62	D	0.48	0		CV
Potassium	mg/Kg	75 - 125	5310		2840		3900	63	N	P
Selenium	mg/Kg	75 - 125	70.8	D	4.03	UD	77.9	89		P
Silver	mg/Kg	75 - 125	16.8		6.57		77.9	13	N	P
Sodium	mg/Kg	75 - 125	12400		6970		7800	70	N	P
Thallium	mg/Kg	75 - 125	64.0		0.30		77.9	82		P
Vanadium	mg/Kg	75 - 125	103		46.5		77.9	72	N	P
Zinc	mg/Kg	75 - 125	970		395		780	74	N	P

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client:	<u>AECOM</u>	SDG No.:	<u>Q3422</u>
Contract:	<u>AECO02</u>	Lab Code:	<u>ACE</u>
Matrix:	<u>Solid</u>	Level:	<u>LOW</u>
Sample ID:	<u>Q3419-01</u>	Client ID:	<u>PR-132-S16-015094-20251021A</u>
Spiked ID:	<u>Q3419-01A</u>		

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Calcium	mg/Kg	75 - 125	14000		8400		8100	70	N	P
Chromium	mg/Kg	75 - 125	271	D	221	D	80.6	63	N	P
Copper	mg/Kg	75 - 125	831		226		810	75		P
Magnesium	mg/Kg	75 - 125	14400		8160		8100	77		P
Manganese	mg/Kg	75 - 125	986		425		810	69	N	P
Nickel	mg/Kg	75 - 125	123		63.5		80.6	74	N	P
Potassium	mg/Kg	75 - 125	5580		2840		4000	68	N	P
Silver	mg/Kg	75 - 125	17.3		6.57		80.6	13	N	P
Sodium	mg/Kg	75 - 125	13200		6970		8100	77		P
Vanadium	mg/Kg	75 - 125	106		46.5		80.6	74	N	P
Zinc	mg/Kg	75 - 125	987		395		810	73	N	P

A
B
C
D
E
F
G
H

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client:	<u>AECOM</u>	Level:	<u>LOW</u>	SDG No.:	<u>Q3422</u>
Contract:	<u>AECO02</u>	Lab Code:	<u>ACE</u>		
Matrix:	<u>Solid</u>	Sample ID:	<u>Q3419-01</u>	Client ID:	<u>PR-132-S16-015094-20251021DUP</u>
Percent Solids for Sample:	54.4	Duplicate ID	Q3419-01DUP	Percent Solids for Spike Sample:	54.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	11700		11800		1		P
Antimony	mg/Kg	20	0.17	J	0.17	J	0		P
Arsenic	mg/Kg	20	19.3	D	21.1	D	9		P
Barium	mg/Kg	20	155		157		1		P
Beryllium	mg/Kg	20	0.97		0.97		1		P
Cadmium	mg/Kg	20	5.71		5.76		1		P
Calcium	mg/Kg	20	8400		8430		0		P
Chromium	mg/Kg	20	221	D	238	D	7		P
Cobalt	mg/Kg	20	12.5		12.4		1		P
Copper	mg/Kg	20	226		223		1		P
Iron	mg/Kg	20	32400		32300		0		P
Lead	mg/Kg	20	291		284		2		P
Magnesium	mg/Kg	20	8160		8160		0		P
Manganese	mg/Kg	20	425		424		0		P
Nickel	mg/Kg	20	63.5		63.6		0		P
Mercury	mg/Kg	20	2.62	D	1.92	D	31	*	CV
Potassium	mg/Kg	20	2840		2810		1		P
Selenium	mg/Kg	20	4.03	UD	4.00	UD			P
Silver	mg/Kg	20	6.57		6.78		3		P
Sodium	mg/Kg	20	6970		7000		0		P
Thallium	mg/Kg	20	0.30		0.28		6		P
Vanadium	mg/Kg	20	46.5		46.3		0		P
Zinc	mg/Kg	20	395		392		1		P

Metals

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DUPLICATE SAMPLE SUMMARY

Client: AECOM **Level:** LOW **SDG No.:** Q3422
Contract: AECO02 **Lab Code:** ACE
Matrix: Solid **Sample ID:** Q3419-02 **Client ID:** PR-132-S16-015094-20251021MSD
Percent Solids for Sample: 54.4 **Duplicate ID** Q3419-03 **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	11500		11000		4		P
Antimony	mg/Kg	20	72.4		68.6		5		P
Arsenic	mg/Kg	20	93.2	D	89.3	D	4		P
Barium	mg/Kg	20	471		449		5		P
Beryllium	mg/Kg	20	72.0		67.3		7		P
Cadmium	mg/Kg	20	76.4		72.6		5		P
Calcium	mg/Kg	20	13600		13100		4		P
Chromium	mg/Kg	20	274	D	262	D	4		P
Cobalt	mg/Kg	20	77.7		73.1		6		P
Copper	mg/Kg	20	854		806		6		P
Iron	mg/Kg	20	31400		29700		6		P
Lead	mg/Kg	20	627		599		5		P
Magnesium	mg/Kg	20	14300		13600		5		P
Manganese	mg/Kg	20	988		934		6		P
Nickel	mg/Kg	20	126		120		5		P
Mercury	mg/Kg	20	2.53	D	2.62	D	3		CV
Potassium	mg/Kg	20	5610		5310		5		P
Selenium	mg/Kg	20	73.9	D	70.8	D	4		P
Silver	mg/Kg	20	17.8		16.8		6		P
Sodium	mg/Kg	20	13300		12400		7		P
Thallium	mg/Kg	20	69.2		64.0		8		P
Vanadium	mg/Kg	20	109		103		6		P
Zinc	mg/Kg	20	1030		970		6		P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client:	<u>AECOM</u>	SDG No.:	<u>Q3422</u>
Contract:	<u>AECO02</u>	Lab Code:	<u>ACE</u>

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170226BS							
Aluminum	mg/Kg	1000	994		99	80 - 120	P
Antimony	mg/Kg	50.0	50.8		102	80 - 120	P
Arsenic	mg/Kg	50.0	50.4		101	80 - 120	P
Barium	mg/Kg	250	249		100	80 - 120	P
Beryllium	mg/Kg	50.0	49.8		100	80 - 120	P
Cadmium	mg/Kg	50.0	50.9		102	80 - 120	P
Calcium	mg/Kg	5000	5000		100	80 - 120	P
Chromium	mg/Kg	50.0	50.3		101	80 - 120	P
Cobalt	mg/Kg	50.0	50.4		101	80 - 120	P
Copper	mg/Kg	500	496		99	80 - 120	P
Iron	mg/Kg	2500	2620		105	80 - 120	P
Lead	mg/Kg	250	245		98	80 - 120	P
Magnesium	mg/Kg	5000	4850		97	80 - 120	P
Manganese	mg/Kg	500	497		99	80 - 120	P
Nickel	mg/Kg	50.0	50.4		101	80 - 120	P
Potassium	mg/Kg	2500	2480		99	80 - 120	P
Selenium	mg/Kg	50.0	49.6		99	80 - 120	P
Silver	mg/Kg	50.0	51.9		104	80 - 120	P
Sodium	mg/Kg	5000	4950		99	80 - 120	P
Thallium	mg/Kg	50.0	48.8		98	80 - 120	P
Vanadium	mg/Kg	50.0	50.0		100	80 - 120	P
Zinc	mg/Kg	500	503		101	80 - 120	P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client:	<u>AECOM</u>	SDG No.:	<u>Q3422</u>
Contract:	<u>AECO02</u>	Lab Code:	<u>ACE</u>

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170230BS Mercury	mg/Kg	0.28	0.26		91	80 - 120	CV

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	S0	1500	100		100		100		100		100	
S2	S2	1503	101		99		99		99		99	
S3	S3	1507	101		98		100		100		99	
S4	S4	1510	104		99		99		98		101	
S5	S5	1513	106		98		99		98		102	
S6	S6	1516	106		98		98		98		102	
S7	S7	1519	105		95		97		95		103	
S8	S8	1522	103		99		99		92		103	
ICV01	ICV01	1544	97		100		101		99		100	
LLICV01	LLICV01	1553	99		100		102		99		101	
ICB01	ICB01	1558	99		100		100		100		99	
ICSA01	ICSA01	1603	97		99		100		97		103	
ICSAB01	ICSAB01	1607	96		100		103		97		106	
CCV01	CCV01	1610	98		102		104		99		108	
CCB01	CCB01	1614	98		100		104		102		104	
CRI01	CRI01	1618	97		101		103		102		104	
PB170226BL	PB170226BL	1621	96		98		102		102		102	
PB170226BS	PB170226BS	1625	97		99		102		99		103	
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-	1636	112		122		137	*	109		115	
Q3419-01L	PR-132-S16-	1639	101		106		110		105		108	
Q3419-02	PR-132-S16-	1643	106		119		131	*	106		115	
Q3419-03	PR-132-S16-	1646	107		115		130		105		114	
Q3419-01A	PR-132-S16-	1649	106		115		130		104		114	
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	99		99		101		97		104	
CCB02	CCB02	1700	95		97		100		100		102	
ZZZZZZ	ZZZZZZ	1703										
Q3422-01	PR132-S15-0	1706	107		116		133	*	106		114	
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1722										
Q3419-01DUP	PR-132-S16-	1725	100		105		113		107		109	
Q3419-01L	PR-132-S16-	1729	97		100		104		103		105	

Internal Standard %RI Limit: 70 - 130

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
Q3419-02	PR-132-S16-	1732	102		106		110		104		109	
CCV03	CCV03	1735	99		98		101		96		105	
CCB03	CCB03	1743	95		95		100		97		103	
Q3419-03	PR-132-S16-	1747	100		101		107		101		107	
Q3419-01A	PR-132-S16-	1750	104		102		109		102		107	
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
Q3422-01	PR132-S15-0	1759	102		105		112		106		107	
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
ZZZZZZ	ZZZZZZ	1812										
CCV04	CCV04	1819	99		99		103		98		107	
CCB04	CCB04	1828	96		101		105		104		106	

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
S0	S0	1500	100		100		100		100		100	
S2	S2	1503	100		99		99		99		99	
S3	S3	1507	101		100		101		100		101	
S4	S4	1510	98		98		97		102		100	
S5	S5	1513	96		96		96		101		101	
S6	S6	1516	95		96		95		101		103	
S7	S7	1519	96		97		95		100		101	
S8	S8	1522	104		102		94		104		104	
ICV01	ICV01	1544	100		101		100		100		102	
LLICV01	LLICV01	1553	101		101		101		102		103	
ICB01	ICB01	1558	99		100		98		102		100	
ICSA01	ICSA01	1603	101		100		98		104		103	
ICSAB01	ICSAB01	1607	104		105		101		105		105	
CCV01	CCV01	1610	106		105		100		106		108	
CCB01	CCB01	1614	101		104		103		104		104	
CRI01	CRI01	1618	101		101		101		103		102	
PB170226BL	PB170226BL	1621	101		103		101		100		104	
PB170226BS	PB170226BS	1625	99		100		98		102		103	
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-	1636	125		136	*	109		113		115	
Q3419-01L	PR-132-S16-	1639	108		112		106		108		108	
Q3419-02	PR-132-S16-	1643	119		126		104		112		112	
Q3419-03	PR-132-S16-	1646	117		128		106		111		112	
Q3419-01A	PR-132-S16-	1649	117		128		104		110		112	
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	101		101		95		104		105	
CCB02	CCB02	1700	98		99		100		100		101	
ZZZZZZ	ZZZZZZ	1703										
Q3422-01	PR132-S15-0	1706	121		133	*	107		112		114	
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1722										
Q3419-01DUP	PR-132-S16-	1725	109		111		107		107		110	
Q3419-01L	PR-132-S16-	1729	103		103		104		104		106	

Internal Standard %RI Limit: 70 - 130

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
Q3419-02	PR-132-S16-	1732	107		110		105		107		109	
CCV03	CCV03	1735	100		100		95		103		104	
CCB03	CCB03	1743	97		99		100		100		101	
Q3419-03	PR-132-S16-	1747	104		107		102		104		107	
Q3419-01A	PR-132-S16-	1750	105		107		103		107		109	
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
Q3422-01	PR132-S15-0	1759	109		112		106		108		109	
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
ZZZZZZ	ZZZZZZ	1812										
CCV04	CCV04	1819	103		104		98		106		107	
CCB04	CCB04	1828	101		105		104		106		107	

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	S0	1500	100		100							
S2	S2	1503	102		99							
S3	S3	1507	101		101							
S4	S4	1510	103		103							
S5	S5	1513	103		101							
S6	S6	1516	105		105							
S7	S7	1519	105		102							
S8	S8	1522	105		97							
ICV01	ICV01	1544	102		102							
LLICV01	LLICV01	1553	102		102							
ICB01	ICB01	1558	102		101							
ICSA01	ICSA01	1603	106		99							
ICSAB01	ICSAB01	1607	108		102							
CCV01	CCV01	1610	110		104							
CCB01	CCB01	1614	106		106							
CRI01	CRI01	1618	107		104							
PB170226BL	PB170226BL	1621	104		102							
PB170226BS	PB170226BS	1625	105		103							
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-C	1636	118		117							
Q3419-01L	PR-132-S16-C	1639	110		110							
Q3419-02	PR-132-S16-C	1643	115		115							
Q3419-03	PR-132-S16-C	1646	116		115							
Q3419-01A	PR-132-S16-C	1649	116		114							
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	109		101							
CCB02	CCB02	1700	105		103							
ZZZZZZ	ZZZZZZ	1703										
Q3422-01	PR132-S15-0C	1706	115		118							
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1722										

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM
Lab Code: ACE
Instrument ID: P7
Run Number: LB137649

Contract: AECO02
SDG No.: Q3422
Start Date : 10/23/2025
End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
Q3419-01DUP	PR-132-S16-C	1725	111		107							
Q3419-01L	PR-132-S16-C	1729	107		104							
Q3419-02	PR-132-S16-C	1732	110		106							
CCV03	CCV03	1735	109		100							
CCB03	CCB03	1743	104		102							
Q3419-03	PR-132-S16-C	1747	109		107							
Q3419-01A	PR-132-S16-C	1750	111		109							
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
Q3422-01	PR132-S15-0C	1759	111		109							
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
ZZZZZZ	ZZZZZZ	1812										
CCV04	CCV04	1819	108		102							
CCB04	CCB04	1828	110		109							

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM

Contract: AECO02

Lab Code: ACE

SDG No.: Q3422

Instrument ID: P7

Start Date : 10/23/2025

Run Number: LB137649

End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1500	100									
S2	S2	1503	100									
S3	S3	1507	101									
S4	S4	1510	102									
S5	S5	1513	100									
S6	S6	1516	100									
S7	S7	1519	99									
S8	S8	1522	95									
ICV01	ICV01	1544	100									
LLICV01	LLICV01	1553	101									
ICB01	ICB01	1558	99									
ICSA01	ICSA01	1603	99									
ICSAB01	ICSAB01	1607	101									
CCV01	CCV01	1610	99									
CCB01	CCB01	1614	102									
CRI01	CRI01	1618	100									
PB170226BL	PB170226BL	1621	103									
PB170226BS	PB170226BS	1625	99									
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-C	1636	115									
Q3419-01L	PR-132-S16-C	1639	107									
Q3419-02	PR-132-S16-C	1643	111									
Q3419-03	PR-132-S16-C	1646	108									
Q3419-01A	PR-132-S16-C	1649	109									
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	97									
CCB02	CCB02	1700	101									
ZZZZZZ	ZZZZZZ	1703										
Q3422-01	PR132-S15-0C	1706	113									
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1722										

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM
Lab Code: ACE
Instrument ID: P7
Run Number: LB137649

Contract: AECO02
SDG No.: Q3422
Start Date : 10/23/2025
End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
Q3419-01DUP	PR-132-S16-C	1725	107									
Q3419-01L	PR-132-S16-C	1729	104									
Q3419-02	PR-132-S16-C	1732	105									
CCV03	CCV03	1735	96									
CCB03	CCB03	1743	100									
Q3419-03	PR-132-S16-C	1747	104									
Q3419-01A	PR-132-S16-C	1750	104									
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
Q3422-01	PR132-S15-0C	1759	107									
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
ZZZZZZ	ZZZZZZ	1812										
CCV04	CCV04	1819	98									
CCB04	CCB04	1828	104									

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

PR-132-S16-015094-20251021L

Lab Name: Alliance **Contract:** AECO02
Lab Code: ACE **Lb No.:** lb137649 **Lab Sample ID :** Q3419-01L **SDG No.:** Q3422
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
Aluminum	11700		11700		1		P
Antimony	0.17	J	1.61	U	100.0		P
Arsenic	19.3	D	4.03	UD	100		P
Barium	155		136		12		P
Beryllium	0.97		0.90		7		P
Cadmium	5.71		5.30		7		P
Calcium	8400		8160		3		P
Chromium	199	OR	199		0		P
Cobalt	12.5		12.5		0		P
Copper	226		225		1		P
Iron	32400		32200		1		P
Lead	291		256		12		P
Magnesium	8160		8150		0		P
Manganese	425		418		2		P
Nickel	63.5		64.3		1		P
Mercury	2.13	OR	2.26		6		CV
Potassium	2840		2950		4		P
Selenium	4.03	UD	20.2	UD	100		P
Silver	6.57		6.03		8		P
Sodium	6970		6920		1		P
Thallium	0.30		0.28	J	5		P
Vanadium	46.5		45.3		2		P
Zinc	395		403		2		P



METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

Metals

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SAMPLE PREPARATION SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Method: _____

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB170226							
PB170226BL	PB170226BL	MB	SOLID	10/23/2025	1.00	100.0	100.00
PB170226BS	PB170226BS	LCS	SOLID	10/23/2025	1.00	100.0	100.00
Q3419-01DUP	PR-132-S16-015094-20251021DUP	DUP	SOLID	10/23/2025	1.15	100.0	54.40
Q3419-02	PR-132-S16-015094-20251021MS	MS	SOLID	10/23/2025	1.12	100.0	54.40
Q3419-03	PR-132-S16-015094-20251021MSD	MSD	SOLID	10/23/2025	1.18	100.0	54.40
Q3422-01	PR132-S15-000008-20251021	SAM	SOLID	10/23/2025	1.14	100.0	58.10

Metals

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SAMPLE PREPARATION SUMMARY

Client: AECOM

SDG No.: Q3422

Contract: AECO02

Lab Code: ACE

Method: _____

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB170230							
PB170230BL	PB170230BL	MB	SOLID	10/23/2025	0.50	35.0	100.00
PB170230BS	PB170230BS	LCS	SOLID	10/23/2025	0.50	35.0	100.00
Q3419-01DUP	PR-132-S16-015094-20251021DUP	DUP	SOLID	10/23/2025	0.55	35.0	54.40
Q3419-02	PR-132-S16-015094-20251021MS	MS	SOLID	10/23/2025	0.60	35.0	54.40
Q3419-03	PR-132-S16-015094-20251021MSD	MSD	SOLID	10/23/2025	0.54	35.0	54.40
Q3422-01	PR132-S15-000008-20251021	SAM	SOLID	10/23/2025	0.56	35.0	58.10

metals
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ANALYSIS RUN LOG

Client: AECOM

Contract: AECO02

Lab code: ACE

Sdg no.: Q3422

Instrument id number: _____

Method: _____

Run number: LB137626

Start date: 10/23/2025

End date: 10/23/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1331	HG
S0.2	S0.2	1	1334	HG
S2.5	S2.5	1	1336	HG
S5	S5	1	1339	HG
S7.5	S7.5	1	1341	HG
S10	S10	1	1347	HG
ICV85	ICV85	1	1351	HG
ICB85	ICB85	1	1357	HG
CCV79	CCV79	1	1401	HG
CCB79	CCB79	1	1405	HG
CRA	CRA	1	1407	HG
PB170230BL	PB170230BL	1	1415	HG
PB170230BS	PB170230BS	1	1420	HG
CCV80	CCV80	1	1435	HG
CCB80	CCB80	1	1438	HG
CCV81	CCV81	1	1509	HG
CCB81	CCB81	1	1511	HG
Q3419-01L	PR-132-S16-015094-20251021L	5	1521	HG
CCV82	CCV82	1	1529	HG
CCB82	CCB82	1	1532	HG
Q3419-01DUP	PR-132-S16-015094-20251021D	10	1537	HG
Q3419-02	PR-132-S16-015094-20251021N	10	1539	HG
Q3419-03	PR-132-S16-015094-20251021N	10	1542	HG
Q3422-01	PR132-S15-000008-20251021	10	1549	HG
CCV83	CCV83	1	1559	HG
CCB83	CCB83	1	1602	HG
CCV84	CCV84	1	1614	HG
CCB84	CCB84	1	1616	HG

metals
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ANALYSIS RUN LOG

Client: AECOM

Contract: AECO02

Lab code: ACE

Sdg no.: Q3422

Instrument id number: _____

Method: _____

Run number: LB137649

Start date: 10/23/2025

End date: 10/23/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1500	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	1503	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	1507	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	1510	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	1513	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S6	S6	1	1516	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S7	S7	1	1519	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S8	S8	1	1522	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1544	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	1553	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	1558	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	1603	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	1607	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	1610	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	1614	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	1618	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB170226BL	PB170226BL	1	1621	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB170226BS	PB170226BS	1	1625	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3419-01DUP	PR-132-S16-015094-20251021D	1	1636	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-01L	PR-132-S16-015094-20251021L	5	1639	Ag,Al,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-02	PR-132-S16-015094-20251021N	1	1643	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-03	PR-132-S16-015094-20251021N	1	1646	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-01A	PR-132-S16-015094-20251021A	1	1649	Ag,Ca,Cu,K,Mg,Mn,Na,Ni,V,Zn
CCV02	CCV02	1	1654	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	1700	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3422-01	PR132-S15-000008-20251021	1	1706	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-01DUP	PR-132-S16-015094-20251021D	5	1725	As,Cr,Se
Q3419-01L	PR-132-S16-015094-20251021L	25	1729	As,Se
Q3419-02	PR-132-S16-015094-20251021N	5	1732	As,Cr,Se
CCV03	CCV03	1	1735	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	1743	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3419-03	PR-132-S16-015094-20251021N	5	1747	As,Cr,Se
Q3419-01A	PR-132-S16-015094-20251021A	5	1750	Cr
Q3422-01	PR132-S15-000008-20251021	5	1759	As,Cr,Se
CCV04	CCV04	1	1819	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	1828	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn