

Bottom Ash Data

2025 Week 12

The following analytical report represents bottom ash composite results for week 12 of 2025 (March 16, 2025 to March 22, 2025).

The bottom ash meets the conditions of Metro Vancouver's 2020 Bottom Ash Management Plan and is suitable for disposal.

CERTIFICATE OF ANALYSIS

Work Order	: VA25A6468		
Client	: Veolia Environmental Services Canada	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby British Columbia Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: ----	Date Samples Received	: 25-Mar-2025 12:45
PO	: ----	Date Analysis Commenced	: 27-Mar-2025
C-O-C number	: ----	Issue Date	: 31-Mar-2025 16:20
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VIS100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Ghazaleh Khanmirzaei	Analyst	Metals, Burnaby, British Columbia
Ilnaz Badbezanchi	Supervisor - Metals Prep	Metals, Burnaby, British Columbia
Janice Leung	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	Description
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-1	BA2512-A-2	BA2512-A-3	BA2512-A-4	BA2512-A-5
Client sampling date / time					19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-001	VA25A6468-002	VA25A6468-003	VA25A6468-004	VA25A6468-005	
					Result	Result	Result	Result	Result	
Physical Tests										
Moisture	----	E144/VA	0.25	%	23.3	23.0	23.3	21.8	23.5	
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.90	10.90	10.94	10.91	11.09	
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg	32900	29300	51200	33900	41400	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	109	119	110	140	126	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	15.6	21.8	21.0	21.1	31.0	
Barium	7440-39-3	E440/VA	0.50	mg/kg	475	506	465	399	382	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.37	0.38	0.35	0.36	0.34	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	55.9	55.0	43.3	54.4	73.5	
Boron	7440-42-8	E440/VA	5.0	mg/kg	234	251	288	217	187	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	7.42	8.39	7.16	9.05	9.40	
Calcium	7440-70-2	E440/VA	50	mg/kg	120000	131000	132000	135000	130000	
Chromium	7440-47-3	E440/VA	0.50	mg/kg	173	188	183	180	152	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	50.1	114	61.7	73.6	192	
Copper	7440-50-8	E440/VA	0.50	mg/kg	6980	2190	5260	2410	3220	
Iron	7439-89-6	E440/VA	50	mg/kg	67100	81700	69800	59400	44900	
Lead	7439-92-1	E440/VA	0.50	mg/kg	334	318	617	279	390	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	32.5	40.2	48.6	33.7	37.9	
Magnesium	7439-95-4	E440/VA	20	mg/kg	12400	14000	12700	14300	13800	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	757	808	1330	768	821	
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-1	BA2512-A-2	BA2512-A-3	BA2512-A-4	BA2512-A-5
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A6468-001	VA25A6468-002	VA25A6468-003	VA25A6468-004	VA25A6468-005
						Result	Result	Result	Result	Result
Metals										
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg		27.0	37.0	22.7	30.8	28.0
Nickel	7440-02-0	E440/VA	0.50	mg/kg		119	178	107	179	189
Phosphorus	7723-14-0	E440/VA	50	mg/kg		6890	7580	8680	8630	8850
Potassium	7440-09-7	E440/VA	100	mg/kg		5370	5440	5230	6240	5930
Selenium	7782-49-2	E440/VA	0.20	mg/kg		0.45	0.55	0.39	0.40	0.44
Silver	7440-22-4	E440/VA	0.10	mg/kg		4.08	4.60	5.32	4.90	5.53
Sodium	7440-23-5	E440/VA	50	mg/kg		16100	16700	16400	18000	17800
Strontium	7440-24-6	E440/VA	0.50	mg/kg		272	490	536	446	287
Sulfur	7704-34-9	E440/VA	1000	mg/kg		12700	13000	12500	14500	14900
Thallium	7440-28-0	E440/VA	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Tin	7440-31-5	E440/VA	2.0	mg/kg		149	152	121	138	155
Titanium	7440-32-6	E440/VA	1.0	mg/kg		266	365	445	292	282
Tungsten	7440-33-7	E440/VA	0.50	mg/kg		6.86	18.3	8.92	9.32	8.37
Uranium	7440-61-1	E440/VA	0.050	mg/kg		1.57	1.32	1.26	2.69	1.48
Vanadium	7440-62-2	E440/VA	0.20	mg/kg		31.8	31.9	32.8	34.8	32.9
Zinc	7440-66-6	E440/VA	2.0	mg/kg		3300	3870	3570	3840	9090
Zirconium	7440-67-7	E440/VA	1.0	mg/kg		1.9	1.0	3.4	2.3	3.6
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units		11.42	11.42	11.42	11.43	11.45
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units		5.25	5.53	5.52	6.05	5.93
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units		2.91	2.91	2.91	2.91	2.91



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-1	BA2512-A-2	BA2512-A-3	BA2512-A-4	BA2512-A-5
Client sampling date / time					19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-001	VA25A6468-002	VA25A6468-003	VA25A6468-004	VA25A6468-005	
					Result	Result	Result	Result	Result	
TCLP Metals										
pH, TCLP final	----	EPP444/VA	0.010	pH units	6.51	6.50	6.44	6.53	6.56	
Antimony, TCLP	7440-36-0	E444/VA	1.00	mg/L	<1.00	<1.00	<1.00	<1.00	<1.00	
Arsenic, TCLP	7440-38-2	E444/VA	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Barium, TCLP	7440-39-3	E444/VA	2.5	mg/L	<2.5	<2.5	<2.5	<2.5	<2.5	
Beryllium, TCLP	7440-41-7	E444/VA	0.025	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	
Boron, TCLP	7440-42-8	E444/VA	0.50	mg/L	2.22	2.21	2.25	2.28	2.29	
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	0.096	0.096	0.101	0.112	0.121	
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	1930	1830	1910	1920	1940	
Chromium, TCLP	7440-47-3	E444/VA	0.25	mg/L	<0.25	<0.25	<0.25	<0.25	<0.25	
Cobalt, TCLP	7440-48-4	E444/VA	0.050	mg/L	1.39	0.954	1.87	1.22	1.46	
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.637	0.584	0.594	0.755	0.638	
Iron, TCLP	7439-89-6	E444/VA	5.0	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	
Lead, TCLP	7439-92-1	E444/VA	0.25	mg/L	<0.25	<0.25	<0.25	<0.25	<0.25	
Magnesium, TCLP	7439-95-4	E444/VA	2.5	mg/L	157	169	181	177	171	
Mercury, TCLP	7439-97-6	E512/VA	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Nickel, TCLP	7440-02-0	E444/VA	0.25	mg/L	0.43	0.56	0.78	0.63	0.54	
Selenium, TCLP	7782-49-2	E444/VA	0.10	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	
Silver, TCLP	7440-22-4	E444/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	
Thallium, TCLP	7440-28-0	E444/VA	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Uranium, TCLP	7440-61-1	E444/VA	0.20	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	
Vanadium, TCLP	7440-62-2	E444/VA	0.15	mg/L	<0.15	<0.15	<0.15	<0.15	<0.15	



Analytical Results

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-1	BA2512-A-2	BA2512-A-3	BA2512-A-4	BA2512-A-5
Client sampling date / time						19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A6468-001	VA25A6468-002	VA25A6468-003	VA25A6468-004	VA25A6468-005
						Result	Result	Result	Result	Result
TCLP Metals										
Zinc, TCLP	7440-66-6	E444/VA	0.50	mg/L		27.4	27.4	26.1	30.3	27.1
Zirconium, TCLP	7440-67-7	E444/VA	10	mg/L		<10	<10	<10	<10	<10

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-6	BA2512-A-7	BA2512-A-8	BA2512-A-9	BA2512-A-10
Client sampling date / time						19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A6468-006	VA25A6468-007	VA25A6468-008	VA25A6468-009	VA25A6468-010
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/VA	0.25	%		22.7	23.4	23.0	23.7	24.7
pH (1:2 soil:water)	----	E108/VA	0.10	pH units		11.10	11.11	10.95	11.03	11.12
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg		36300	45000	33200	34200	33900
Antimony	7440-36-0	E440/VA	0.10	mg/kg		142	131	130	125	134
Arsenic	7440-38-2	E440/VA	0.10	mg/kg		21.2	30.5	20.7	20.9	21.0
Barium	7440-39-3	E440/VA	0.50	mg/kg		420	466	437	461	397
Beryllium	7440-41-7	E440/VA	0.10	mg/kg		0.37	0.33	0.36	0.33	0.33
Bismuth	7440-69-9	E440/VA	0.20	mg/kg		59.0	58.5	95.9	48.3	44.9
Boron	7440-42-8	E440/VA	5.0	mg/kg		250	241	254	330	295
Cadmium	7440-43-9	E440/VA	0.020	mg/kg		10.8	7.81	9.66	10.2	10.2
Calcium	7440-70-2	E440/VA	50	mg/kg		139000	132000	133000	132000	128000



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-6	BA2512-A-7	BA2512-A-8	BA2512-A-9	BA2512-A-10
Client sampling date / time					19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-006	VA25A6468-007	VA25A6468-008	VA25A6468-009	VA25A6468-010	
					Result	Result	Result	Result	Result	
Metals										
Chromium	7440-47-3	E440/VA	0.50	mg/kg	202	180	197	162	204	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	69.7	196	192	171	52.5	
Copper	7440-50-8	E440/VA	0.50	mg/kg	6150	2180	1620	3520	9720	
Iron	7439-89-6	E440/VA	50	mg/kg	57800	65900	44800	74500	45400	
Lead	7439-92-1	E440/VA	0.50	mg/kg	301	412	324	274	656	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	31.0	33.0	33.9	92.7	31.2	
Magnesium	7439-95-4	E440/VA	20	mg/kg	14000	13300	15400	14600	13800	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	897	1020	714	901	743	
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	26.0	30.8	86.6	39.2	29.0	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	185	177	269	348	491	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	9320	8540	9700	8540	7980	
Potassium	7440-09-7	E440/VA	100	mg/kg	5940	5660	5860	5900	5580	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.52	0.40	0.44	0.41	0.48	
Silver	7440-22-4	E440/VA	0.10	mg/kg	5.40	6.13	13.2	5.12	6.00	
Sodium	7440-23-5	E440/VA	50	mg/kg	17800	17200	17900	17200	16400	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	292	320	295	265	279	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	15200	14100	13600	14200	13600	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	<0.050	<0.050	<0.050	
Tin	7440-31-5	E440/VA	2.0	mg/kg	151	133	143	136	215	
Titanium	7440-32-6	E440/VA	1.0	mg/kg	225	375	234	281	224	



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2512-A-6	BA2512-A-7	BA2512-A-8	BA2512-A-9	BA2512-A-10
Client sampling date / time					19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-006	VA25A6468-007	VA25A6468-008	VA25A6468-009	VA25A6468-010	
					Result	Result	Result	Result	Result	
Metals										
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	8.62	8.76	11.3	8.96	7.29	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	1.39	1.38	1.42	1.41	1.30	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	33.4	35.2	32.2	34.2	33.9	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	4180	3510	4120	4560	6670	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	2.4	2.9	1.8	1.7	1.9	
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.43	11.41	11.44	11.55	11.53	
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	6.21	5.51	6.09	6.61	7.22	
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	2.91	2.91	2.91	2.91	2.91	
pH, TCLP final	----	EPP444/VA	0.010	pH units	6.63	7.07	6.60	7.40	7.33	
Antimony, TCLP	7440-36-0	E444/VA	1.00	mg/L	<1.00	<1.00	<1.00	<1.00	<1.00	
Arsenic, TCLP	7440-38-2	E444/VA	1.0	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	
Barium, TCLP	7440-39-3	E444/VA	2.5	mg/L	<2.5	<2.5	<2.5	<2.5	<2.5	
Beryllium, TCLP	7440-41-7	E444/VA	0.025	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	
Boron, TCLP	7440-42-8	E444/VA	0.50	mg/L	2.10	2.22	2.05	2.16	2.17	
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	0.084	0.054	0.109	<0.050	<0.050	
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	1750	1830	1700	1760	1840	
Chromium, TCLP	7440-47-3	E444/VA	0.25	mg/L	<0.25	<0.25	<0.25	<0.25	<0.25	
Cobalt, TCLP	7440-48-4	E444/VA	0.050	mg/L	1.30	0.764	1.31	0.382	0.801	
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.645	0.419	0.347	0.429	0.394	
Iron, TCLP	7439-89-6	E444/VA	5.0	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-6	BA2512-A-7	BA2512-A-8	BA2512-A-9	BA2512-A-10
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00	19-Mar-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A6468-006	VA25A6468-007	VA25A6468-008	VA25A6468-009	VA25A6468-010
						Result	Result	Result	Result	Result
TCLP Metals										
Lead, TCLP	7439-92-1	E444/VA	0.25	mg/L		<0.25	<0.25	<0.25	<0.25	<0.25
Magnesium, TCLP	7439-95-4	E444/VA	2.5	mg/L		143	148	174	144	142
Mercury, TCLP	7439-97-6	E512/VA	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel, TCLP	7440-02-0	E444/VA	0.25	mg/L		0.57	0.35	0.60	<0.25	0.27
Selenium, TCLP	7782-49-2	E444/VA	0.10	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10
Silver, TCLP	7440-22-4	E444/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
Thallium, TCLP	7440-28-0	E444/VA	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Uranium, TCLP	7440-61-1	E444/VA	0.20	mg/L		<0.20	<0.20	<0.20	<0.20	<0.20
Vanadium, TCLP	7440-62-2	E444/VA	0.15	mg/L		<0.15	<0.15	<0.15	<0.15	<0.15
Zinc, TCLP	7440-66-6	E444/VA	0.50	mg/L		18.4	3.96	24.5	1.53	1.66
Zirconium, TCLP	7440-67-7	E444/VA	10	mg/L		<10	<10	<10	<10	<10

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-11	BA2512-A-12	----	----	----
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A6468-011	VA25A6468-012	----	----	----
						Result	Result	----	----	----
Physical Tests										
Moisture	----	E144/VA	0.25	%		24.1	23.1	----	----	----
pH (1:2 soil:water)	----	E108/VA	0.10	pH units		10.98	11.00	----	----	----



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-11	BA2512-A-12	----	----	----
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-011	VA25A6468-012	----	----	----	----
					Result	Result	----	----	----	----
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg	33600	35300	----	----	----	----
Antimony	7440-36-0	E440/VA	0.10	mg/kg	128	104	----	----	----	----
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	25.3	18.1	----	----	----	----
Barium	7440-39-3	E440/VA	0.50	mg/kg	418	422	----	----	----	----
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.38	0.35	----	----	----	----
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	50.8	41.7	----	----	----	----
Boron	7440-42-8	E440/VA	5.0	mg/kg	294	191	----	----	----	----
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	11.5	8.17	----	----	----	----
Calcium	7440-70-2	E440/VA	50	mg/kg	146000	123000	----	----	----	----
Chromium	7440-47-3	E440/VA	0.50	mg/kg	172	173	----	----	----	----
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	115	128	----	----	----	----
Copper	7440-50-8	E440/VA	0.50	mg/kg	3530	3140	----	----	----	----
Iron	7439-89-6	E440/VA	50	mg/kg	53600	50200	----	----	----	----
Lead	7439-92-1	E440/VA	0.50	mg/kg	355	2480	----	----	----	----
Lithium	7439-93-2	E440/VA	2.0	mg/kg	39.0	34.4	----	----	----	----
Magnesium	7439-95-4	E440/VA	20	mg/kg	16700	14400	----	----	----	----
Manganese	7439-96-5	E440/VA	1.0	mg/kg	832	993	----	----	----	----
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	0.0643	<0.0500	----	----	----	----
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	25.4	26.6	----	----	----	----
Nickel	7440-02-0	E440/VA	0.50	mg/kg	140	180	----	----	----	----
Phosphorus	7723-14-0	E440/VA	50	mg/kg	10700	8410	----	----	----	----



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-11	BA2512-A-12	----	----	----
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-011	VA25A6468-012	----	----	----	----
					Result	Result	----	----	----	----
Metals										
Potassium	7440-09-7	E440/VA	100	mg/kg	6060	5840	----	----	----	----
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.48	0.46	----	----	----	----
Silver	7440-22-4	E440.Ag/VA	0.10	mg/kg	----	4.70	----	----	----	----
Silver	7440-22-4	E440/VA	0.10	mg/kg	7.01	----	----	----	----	----
Sodium	7440-23-5	E440/VA	50	mg/kg	17500	17300	----	----	----	----
Strontium	7440-24-6	E440/VA	0.50	mg/kg	562	274	----	----	----	----
Sulfur	7704-34-9	E440/VA	1000	mg/kg	14400	13200	----	----	----	----
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	----	----	----	----
Tin	7440-31-5	E440/VA	2.0	mg/kg	144	138	----	----	----	----
Titanium	7440-32-6	E440/VA	1.0	mg/kg	176	202	----	----	----	----
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	8.23	42.4	----	----	----	----
Uranium	7440-61-1	E440/VA	0.050	mg/kg	1.47	1.36	----	----	----	----
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	35.1	35.9	----	----	----	----
Zinc	7440-66-6	E440/VA	2.0	mg/kg	4330	5870	----	----	----	----
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	2.6	4.5	----	----	----	----
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.47	11.47	----	----	----	----
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	6.39	6.55	----	----	----	----
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	2.91	2.91	----	----	----	----
pH, TCLP final	----	EPP444/VA	0.010	pH units	7.35	7.22	----	----	----	----
Antimony, TCLP	7440-36-0	E444/VA	1.00	mg/L	<1.00	<1.00	----	----	----	----



Analytical Results

Sub-Matrix: Soil
 (Matrix: Soil/Solid)

					Client sample ID	BA2512-A-11	BA2512-A-12	----	----	----
					Client sampling date / time	19-Mar-2025 09:00	19-Mar-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A6468-011	VA25A6468-012	----	----	----	----
					Result	Result	----	----	----	----
TCLP Metals										
Arsenic, TCLP	7440-38-2	E444/VA	1.0	mg/L	<1.0	<1.0	----	----	----	----
Barium, TCLP	7440-39-3	E444/VA	2.5	mg/L	<2.5	<2.5	----	----	----	----
Beryllium, TCLP	7440-41-7	E444/VA	0.025	mg/L	<0.025	<0.025	----	----	----	----
Boron, TCLP	7440-42-8	E444/VA	0.50	mg/L	2.12	2.07	----	----	----	----
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	<0.050	0.058	----	----	----	----
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	1770	1770	----	----	----	----
Chromium, TCLP	7440-47-3	E444/VA	0.25	mg/L	<0.25	<0.25	----	----	----	----
Cobalt, TCLP	7440-48-4	E444/VA	0.050	mg/L	0.489	0.628	----	----	----	----
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.436	0.453	----	----	----	----
Iron, TCLP	7439-89-6	E444/VA	5.0	mg/L	<5.0	<5.0	----	----	----	----
Lead, TCLP	7439-92-1	E444/VA	0.25	mg/L	<0.25	<0.25	----	----	----	----
Magnesium, TCLP	7439-95-4	E444/VA	2.5	mg/L	149	151	----	----	----	----
Mercury, TCLP	7439-97-6	E512/VA	0.0010	mg/L	<0.0010	<0.0010	----	----	----	----
Nickel, TCLP	7440-02-0	E444/VA	0.25	mg/L	0.31	0.26	----	----	----	----
Selenium, TCLP	7782-49-2	E444/VA	0.10	mg/L	<0.10	<0.10	----	----	----	----
Silver, TCLP	7440-22-4	E444/VA	0.050	mg/L	<0.050	<0.050	----	----	----	----
Thallium, TCLP	7440-28-0	E444/VA	1.0	mg/L	<1.0	<1.0	----	----	----	----
Uranium, TCLP	7440-61-1	E444/VA	0.20	mg/L	<0.20	<0.20	----	----	----	----
Vanadium, TCLP	7440-62-2	E444/VA	0.15	mg/L	<0.15	<0.15	----	----	----	----
Zinc, TCLP	7440-66-6	E444/VA	0.50	mg/L	1.60	2.75	----	----	----	----
Zirconium, TCLP	7440-67-7	E444/VA	10	mg/L	<10	<10	----	----	----	----



Please refer to the General Comments section for an explanation of any result qualifiers detected.

CERTIFICATE OF ANALYSIS

Work Order	: VA25A6468	Page	: 1 of 22
Client	: Veolia Environmental Services Canada	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	:	Date Samples Received	: 25-Mar-2025 12:45
PO	: ----	Date Analysis	: 27-Mar-2025
		Commenced	
C-O-C number	: ----	Issue Date	: 31-Mar-2025 16:19
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VIS100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.		
Signatories	Position	Laboratory Department
Ghazaleh Khanmirzaei	Analyst	Metals, Burnaby, British Columbia
Ilnaz Badbezanchi	Supervisor - Metals Prep	Metals, Burnaby, British Columbia
Janice Leung	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).
Measurement Uncertainty: The reported uncertainties in this report are expanded uncertainties calculated using a coverage factor of 2, which gives a level of confidence of approximately 95%.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

<i>Unit</i>	<i>Description</i>
%	percent
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
pH units	pH units

>: greater than.

<: less than.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

VA25A6468-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-1

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.3	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.90	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	32900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	109	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	15.6	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	475	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.37	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	55.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	234	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	7.42	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	120000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	173	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	50.1	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	6980	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	67100	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	334	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	32.5	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	12400	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	757	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	27.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	119	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	6890	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5370	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.45	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	4.08	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	16100	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	272	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	12700	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	149	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	266	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	6.86	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.57	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	31.8	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	3300	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	1.9	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.42	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	5.25	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.51	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-1

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.22	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.096	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1930	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.39	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.637	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	157	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.43	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	27.4	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-2

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.0	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.90	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	29300	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	119	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	21.8	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	506	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.38	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	55.0	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	251	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	8.39	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	131000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	188	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	114	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	2190	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-2

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	81700	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	318	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	40.2	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	14000	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	808	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	37.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	178	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	7580	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5440	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.55	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	4.60	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	16700	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	490	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	13000	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	152	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	365	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	18.3	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.32	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	31.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	3870	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	1.0	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.42	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	5.53	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.50	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.21	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.096	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1830	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.954	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.584	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	169	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.56	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-2

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	27.4	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-3

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.3	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.94	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	51200	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	110	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	21.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	465	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.35	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	43.3	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	288	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	7.16	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	132000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	183	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	61.7	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	5260	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	69800	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	617	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	48.6	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	12700	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	1330	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	22.7	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	107	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	8680	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5230	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.39	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	5.32	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	16400	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	536	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	12500	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-3

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Metals								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	121	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	445	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.92	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.26	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	32.8	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	3570	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	3.4	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.42	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	5.52	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.44	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.25	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.101	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1910	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.87	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.594	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	181	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.78	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	26.1	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-4

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								



Analytical Results

VA25A6468-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-4

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Physical Tests								
Moisture	----	21.8	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.91	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	33900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	140	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	21.1	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	399	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.36	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	54.4	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	217	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	9.05	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	135000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	180	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	73.6	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	2410	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	59400	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	279	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	33.7	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	14300	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	768	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	30.8	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	179	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	8630	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	6240	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.40	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	4.90	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	18000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	446	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	14500	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	138	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	292	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	9.32	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	2.69	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	34.8	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	3840	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	2.3	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.43	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.05	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.53	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-4

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.28	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.112	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1920	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.22	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.755	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	177	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.63	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	30.3	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-5

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.5	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	11.09	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	41400	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	126	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	31.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	382	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.34	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	73.5	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	187	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	9.40	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	130000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	152	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	192	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	3220	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-5

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	44900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	390	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	37.9	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	13800	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	821	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	28.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	189	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	8850	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5930	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.44	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	5.53	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17800	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	287	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	14900	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	155	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	282	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.37	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.48	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	32.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	9090	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	3.6	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.45	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	5.93	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.56	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.29	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.121	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1940	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.46	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.638	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	171	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.54	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-005

Sub-Matrix:Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-5

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	27.1	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-006

Sub-Matrix:Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-6

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	22.7	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	11.10	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	36300	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	142	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	21.2	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	420	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.37	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	59.0	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	250	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	10.8	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	139000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	202	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	69.7	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	6150	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	57800	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	301	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	31.0	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	14000	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	897	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	26.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	185	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	9320	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5940	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.52	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	5.40	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17800	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	292	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	15200	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-006

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-6

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Metals								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	151	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	225	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.62	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.39	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	33.4	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	4180	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	2.4	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.43	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.21	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.63	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.10	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.084	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1750	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.30	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.645	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	143	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.57	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	18.4	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-7

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								



Analytical Results

VA25A6468-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-7

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Physical Tests								
Moisture	----	23.4	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	11.11	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	45000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	131	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	30.5	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	466	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	58.5	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	241	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	7.81	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	132000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	180	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	196	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	2180	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	65900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	412	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	33.0	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	13300	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	1020	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	30.8	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	177	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	8540	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5660	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.40	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	6.13	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17200	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	320	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	14100	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	133	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	375	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.76	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.38	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	35.2	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	3510	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	2.9	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.41	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	5.51	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	7.07	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-7

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.22	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.054	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1830	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.764	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.419	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	148	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.35	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	3.96	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-8

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.0	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.95	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	33200	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	130	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	20.7	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	437	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.36	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	95.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	254	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	9.66	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	133000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	197	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	192	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	1620	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-8

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	44800	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	324	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	33.9	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	15400	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	714	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	86.6	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	269	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	9700	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5860	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.44	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	13.2	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	295	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	13600	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	143	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	234	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	11.3	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.42	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	32.2	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	4120	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	1.8	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.44	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.09	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	6.60	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.05	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.109	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1700	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	1.31	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.347	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	174	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.60	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-008

Sub-Matrix:Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-8

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	24.5	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-009

Sub-Matrix:Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-9

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.7	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	11.03	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	34200	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	125	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	20.9	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	461	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	48.3	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	330	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	10.2	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	132000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	162	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	171	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	3520	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	74500	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	274	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	92.7	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	14600	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	901	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	39.2	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	348	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	8540	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5900	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.41	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	5.12	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17200	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	265	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	14200	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-009

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-9

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Metals								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	136	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	281	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.96	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.41	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	34.2	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	4560	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	1.7	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.55	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.61	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	7.40	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.16	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1760	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.382	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.429	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	144	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	1.53	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-10

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								



Analytical Results

VA25A6468-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-10

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Physical Tests								
Moisture	----	24.7	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	11.12	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	33900	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	134	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	21.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	397	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	44.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	295	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	10.2	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	128000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	204	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	52.5	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	9720	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Iron	7439-89-6	45400	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	656	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	31.2	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	13800	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	743	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	29.0	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	491	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	7980	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	5580	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.48	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	6.00	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	16400	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	279	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	13600	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	215	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	224	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	7.29	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.30	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	33.9	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	6670	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	1.9	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.53	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	7.22	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	7.33	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-10

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.17	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1840	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.801	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.394	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	142	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.27	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	1.66	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-11

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	24.1	0.25	%	E144/VA	-	29-Mar-2025	1928526
pH (1:2 soil:water)	----	10.98	0.10	pH units	E108/VA	28-Mar-2025	29-Mar-2025	1928525
Metals								
Aluminum	7429-90-5	33600	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Antimony	7440-36-0	128	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Arsenic	7440-38-2	25.3	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Barium	7440-39-3	418	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Beryllium	7440-41-7	0.38	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Bismuth	7440-69-9	50.8	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Boron	7440-42-8	294	5.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cadmium	7440-43-9	11.5	0.020	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Calcium	7440-70-2	146000	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Chromium	7440-47-3	172	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Cobalt	7440-48-4	115	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Copper	7440-50-8	3530	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522



Analytical Results

VA25A6468-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-11

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	53600	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lead	7439-92-1	355	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Lithium	7439-93-2	39.0	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Magnesium	7439-95-4	16700	20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Manganese	7439-96-5	832	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Mercury	7439-97-6	0.0643	0.0500	mg/kg	E510/VA	28-Mar-2025	31-Mar-2025	1928523
Molybdenum	7439-98-7	25.4	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Nickel	7440-02-0	140	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Phosphorus	7723-14-0	10700	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Potassium	7440-09-7	6060	100	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Selenium	7782-49-2	0.48	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Silver	7440-22-4	7.01	0.10	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sodium	7440-23-5	17500	50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Strontium	7440-24-6	562	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Sulfur	7704-34-9	14400	1000	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tin	7440-31-5	144	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Titanium	7440-32-6	176	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Tungsten	7440-33-7	8.23	0.50	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Uranium	7440-61-1	1.47	0.050	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Vanadium	7440-62-2	35.1	0.20	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zinc	7440-66-6	4330	2.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
Zirconium	7440-67-7	2.6	1.0	mg/kg	E440/VA	28-Mar-2025	30-Mar-2025	1928522
TCLP Metals								
pH, TCLP 1st preliminary	----	11.47	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.39	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	7.35	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.12	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1770	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.489	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.436	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	149	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.31	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843



Analytical Results

VA25A6468-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-11

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
TCLP Metals								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	1.60	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Analytical Results

VA25A6468-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-12

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.1	0.25	%	E144/VA	-	28-Mar-2025	1929984
pH (1:2 soil:water)	----	11.00	0.10	pH units	E108/VA	29-Mar-2025	29-Mar-2025	1930047
Metals								
Aluminum	7429-90-5	35300	50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Antimony	7440-36-0	104	0.10	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Arsenic	7440-38-2	18.1	0.10	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Barium	7440-39-3	422	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Beryllium	7440-41-7	0.35	0.10	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Bismuth	7440-69-9	41.7	0.20	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Boron	7440-42-8	191	5.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Cadmium	7440-43-9	8.17	0.020	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Calcium	7440-70-2	123000	50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Chromium	7440-47-3	173	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Cobalt	7440-48-4	128	0.10	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Copper	7440-50-8	3140	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Iron	7439-89-6	50200	50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Lead	7439-92-1	2480	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Lithium	7439-93-2	34.4	2.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Magnesium	7439-95-4	14400	20	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Manganese	7439-96-5	993	1.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	29-Mar-2025	29-Mar-2025	1930046
Molybdenum	7439-98-7	26.6	0.10	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Nickel	7440-02-0	180	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Phosphorus	7723-14-0	8410	50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Potassium	7440-09-7	5840	100	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Selenium	7782-49-2	0.46	0.20	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Silver	7440-22-4	4.70	0.29	mg/kg	E440.Ag/VA	30-Mar-2025	31-Mar-2025	1931294
Sodium	7440-23-5	17300	50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Strontium	7440-24-6	274	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Sulfur	7704-34-9	13200	1000	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045



Analytical Results

VA25A6468-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA2512-A-12

Client sampling date / time: 19-Mar-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Metals								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Tin	7440-31-5	138	2.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Titanium	7440-32-6	202	1.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Tungsten	7440-33-7	42.4	0.50	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Uranium	7440-61-1	1.36	0.050	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Vanadium	7440-62-2	35.9	0.20	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Zinc	7440-66-6	5870	2.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
Zirconium	7440-67-7	4.5	1.0	mg/kg	E440/VA	29-Mar-2025	30-Mar-2025	1930045
TCLP Metals								
pH, TCLP 1st preliminary	----	11.47	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP 2nd preliminary	----	6.55	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP extraction fluid initial	----	2.91	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
pH, TCLP final	----	7.22	0.010	pH units	EPP444/VA	-	27-Mar-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Boron, TCLP	7440-42-8	2.07	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cadmium, TCLP	7440-43-9	0.058	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Calcium, TCLP	7440-70-2	1770	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Cobalt, TCLP	7440-48-4	0.628	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Copper, TCLP	7440-50-8	0.453	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Magnesium, TCLP	7439-95-4	151	2.5	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	28-Mar-2025	28-Mar-2025	1929842
Nickel, TCLP	7440-02-0	0.26	0.25	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zinc, TCLP	7440-66-6	2.75	0.50	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	28-Mar-2025	28-Mar-2025	1929843

Please refer to the General Comments section for an explanation of any result qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: VA25A6468	Page	: 1 of 16
Client	: Veolia Environmental Services Canada	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: ----	Date Samples Received	: 25-Mar-2025 12:45
PO	: ----	Issue Date	: 31-Mar-2025 16:20
C-O-C number	: ----		
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VISI100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.

CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.

DQO: Data Quality Objective.

LOR: Limit of Reporting (detection limit).

RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "----" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: Soil/Solid

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Duplicate (DUP) RPDs								
Metals	VA25A6468-012	BA2512-A-12	Arsenic	7440-38-2	E440	35.4 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Boron	7440-42-8	E440	33.7 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Copper	7440-50-8	E440	38.6 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Lead	7439-92-1	E440	58.9 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Lithium	7439-93-2	E440	31.9 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Manganese	7439-96-5	E440	34.4 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Silver	7440-22-4	E440	164 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Tungsten	7440-33-7	E440	134 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Zinc	7440-66-6	E440	52.2 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25A6468-012	BA2512-A-12	Zirconium	7440-67-7	E440	2.1 % DUP-H	Diff <2x LOR	Low Level DUP DQO exceeded (difference > 2 LOR).

Result Qualifiers

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
Metals : High Silver in Soil/Solid by CRC ICPMS											
LDPE bag BA2512-A-12	E440.Ag	19-Mar-2025	30-Mar-2025	180 days	11 days	✓	31-Mar-2025	180 days	12 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-12	E510	19-Mar-2025	29-Mar-2025	28 days	10 days	✓	29-Mar-2025	28 days	0 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-1	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-10	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-11	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-2	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA2512-A-3	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-4	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-5	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-6	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-7	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-8	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA2512-A-9	E510	19-Mar-2025	28-Mar-2025	28 days	9 days	✓	31-Mar-2025	28 days	3 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-12	E440	19-Mar-2025	29-Mar-2025	180 days	10 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-1	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-10	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-11	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-2	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-3	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-4	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-5	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-6	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-7	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-8	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA2512-A-9	E440	19-Mar-2025	28-Mar-2025	180 days	9 days	✓	30-Mar-2025	180 days	11 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-1	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-10	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-11	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-12	E144	19-Mar-2025	----	----	----		28-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-2	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-3	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-4	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-5	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-6	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-7	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-8	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA2512-A-9	E144	19-Mar-2025	----	----	----		27-Mar-2025	----	9 days	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-12	E108	19-Mar-2025	29-Mar-2025	30 days	10 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-1	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-10	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-11	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-2	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-3	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-4	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-5	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-6	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-7	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-8	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA2512-A-9	E108	19-Mar-2025	28-Mar-2025	30 days	9 days	✓	29-Mar-2025	30 days	10 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-1	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-10	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-11	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-12	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-2	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-3	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-4	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-5	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-6	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-7	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-8	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA2512-A-9	E512	27-Mar-2025	28-Mar-2025	36 days	9 days	✓	28-Mar-2025	36 days	9 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-1	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-10	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-11	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-12	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-2	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-3	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-4	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-5	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-6	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-7	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-8	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA2512-A-9	E444	27-Mar-2025	28-Mar-2025	188 days	9 days	✓	28-Mar-2025	188 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-1	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-10	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-11	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-12	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-2	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-3	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓



Matrix: Soil/Solid

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-4	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-5	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-6	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-7	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-8	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA2512-A-9	EPP444	19-Mar-2025	27-Mar-2025	----	----		----	28 days	8 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	Method	QC Lot #	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)							
pH by Meter (1:2 Soil:Water Extraction)	E108	1930047	2	35	5.7	5.0	✓
Moisture Content by Gravimetry	E144	1929984	2	34	5.8	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	1928522	2	35	5.7	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	1929843	1	12	8.3	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	1930046	2	35	5.7	5.0	✓
Mercury by CVAAS (TCLP)	E512	1929842	1	12	8.3	5.0	✓
Laboratory Control Samples (LCS)							
pH by Meter (1:2 Soil:Water Extraction)	E108	1930047	2	35	5.7	5.0	✓
Moisture Content by Gravimetry	E144	1929984	2	34	5.8	5.0	✓
High Silver in Soil/Solid by CRC ICPMS	E440.Ag	1931294	2	1	200.0	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	1928522	4	35	11.4	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	1930046	4	35	11.4	10.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	1929984	2	34	5.8	5.0	✓
High Silver in Soil/Solid by CRC ICPMS	E440.Ag	1931294	1	1	100.0	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	1928522	2	35	5.7	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	1929843	1	12	8.3	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	1930046	2	35	5.7	5.0	✓
Mercury by CVAAS (TCLP)	E512	1929842	1	12	8.3	5.0	✓
Matrix Spikes (MS)							
Metals by CRC ICPMS (TCLP)	E444	1929843	1	12	8.3	5.0	✓
Mercury by CVAAS (TCLP)	E512	1929842	1	12	8.3	5.0	✓



Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
pH by Meter (1:2 Soil:Water Extraction)	E108 ALS Environmental - Vancouver	Soil/Solid	BC Lab Manual	pH is determined by potentiometric measurement with a pH electrode at ambient laboratory temperature (normally $20 \pm 5^{\circ}\text{C}$), and is carried out in accordance with procedures described in the BC Lab Manual (prescriptive method). The procedure involves mixing the dried (at $<60^{\circ}\text{C}$) and sieved (10mesh/2mm) sample with ultra pure water at a 1:2 ratio of sediment to water. The pH is then measured by a standard pH probe.
Moisture Content by Gravimetry	E144 ALS Environmental - Vancouver	Soil/Solid	CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C . Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Metals in Soil/Solid by CRC ICPMS	E440 ALS Environmental - Vancouver	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
High Silver in Soil/Solid by CRC ICPMS	E440.Ag ALS Environmental - Vancouver	Soil/Solid	EPA 6020B (mod)	Samples are sieved through a 2 mm sieve, and digested with HNO_3 and HCl . This method is intended to liberate metals that may be environmentally available. Silicate minerals are not solubilized. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. Analysis is by Collision/Reaction Cell ICPMS.
Metals by CRC ICPMS (TCLP)	E444 ALS Environmental - Vancouver	Soil/Solid	EPA 1311/6020B (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by Collision/Reaction Cell ICPMS.
Mercury in Soil/Solid by CVAAS	E510 ALS Environmental - Vancouver	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO_3 and HCl , followed by CVAAS analysis.
Mercury by CVAAS (TCLP)	E512 ALS Environmental - Vancouver	Soil/Solid	EPA 1311/245.1 (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by CVAAS.
Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions



Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Vancouver	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Digestion for Metals and Mercury	EP440 ALS Environmental - Vancouver	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO ₃ and HCl. This method is intended to liberate metals that may be environmentally available.
Digestion for Silver	EP440.Ag ALS Environmental - Vancouver	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO ₃ and HCl. This method is intended to liberate metals that may be environmentally available.
TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)	EPP444 ALS Environmental - Vancouver	Soil/Solid	EPA 1311	Preparation of a Toxicity Characteristic Leaching Procedure (TCLP) solid sample involves particle size reduction, homogenization, then determination of appropriate extraction fluid. A measured portion of fresh subsample is placed in an extraction bottle with the appropriate extraction fluid then tumbled in a rotary extractor for 18+/- 2 hours at 23 +/- 2 C. The liquid leachate is filtered to separate from solids then bottled and prepared for analytical tests.

QUALITY CONTROL REPORT

Work Order	: VA25A6468	Page	: 1 of 17
Client	: Veolia Environmental Services Canada	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: ----	Date Samples Received	: 25-Mar-2025 12:45
PO	: ----	Date Analysis Commenced	: 27-Mar-2025
C-O-C number	: ----	Issue Date	: 31-Mar-2025 16:18
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VISI100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Ghazaleh Khanmirzaei	Analyst	Vancouver Metals, Burnaby, British Columbia
Ilnaz Badbezanchi	Supervisor - Metals Prep	Vancouver Metals, Burnaby, British Columbia
Janice Leung	Supervisor - Organics Instrumentation	Vancouver Organics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.

CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.

DQO = Data Quality Objective.

LOR = Limit of Reporting (detection limit).

RPD = Relative Percent Difference

= Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.



Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: Soil/Solid					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 1928525)											
VA25A6363-001	Anonymous	pH (1:2 soil:water)	----	E108	0.10	pH units	7.75	7.85	1.3%	5%	----
Physical Tests (QC Lot: 1928526)											
VA25A6363-001	Anonymous	Moisture	----	E144	0.25	%	41.4	41.4	0.220%	20%	----
Physical Tests (QC Lot: 1929984)											
VA25A6368-009	Anonymous	Moisture	----	E144	0.25	%	48.4	49.5	2.31%	20%	----
Physical Tests (QC Lot: 1930047)											
VA25A6468-012	BA2512-A-12	pH (1:2 soil:water)	----	E108	0.10	pH units	11.00	11.02	0.2%	5%	----
Metals (QC Lot: 1928522)											
VA25A6363-001	Anonymous	Aluminum	7429-90-5	E440	50	mg/kg	16900	16000	5.87%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	0.49	0.45	0.04	Diff <2x LOR	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	9.66	9.09	6.04%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	55.5	49.8	10.8%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.38	0.34	0.04	Diff <2x LOR	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	0.24	0.23	0.01	Diff <2x LOR	----
		Boron	7440-42-8	E440	5.0	mg/kg	17.2	15.4	1.8	Diff <2x LOR	----
		Cadmium	7440-43-9	E440	0.020	mg/kg	0.421	0.402	4.79%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	11200	8620	25.8%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	43.5	40.9	6.27%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	14.0	13.2	6.37%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	32.0	29.9	6.98%	30%	----
		Iron	7439-89-6	E440	50	mg/kg	30000	28500	4.92%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	8.60	7.30	16.4%	40%	----
		Lithium	7439-93-2	E440	2.0	mg/kg	18.0	17.2	4.39%	30%	----
		Magnesium	7439-95-4	E440	20	mg/kg	11800	11000	7.25%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	363	338	7.10%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	0.80	0.76	5.04%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	43.6	40.9	6.45%	30%	----
		Phosphorus	7723-14-0	E440	50	mg/kg	979	953	2.72%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	2130	1950	8.61%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.42	0.39	0.03	Diff <2x LOR	----



Sub-Matrix: Soil/Solid

Sub-Matrix: Soil/Solid					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1928522) - continued											
VA25A6363-001	Anonymous	Silver	7440-22-4	E440	0.10	mg/kg	0.18	0.16	0.03	Diff <2x LOR	----
		Sodium	7440-23-5	E440	50	mg/kg	8260	6920	17.7%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	62.0	50.9	19.7%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	1300	1100	200	Diff <2x LOR	----
		Thallium	7440-28-0	E440	0.050	mg/kg	0.228	0.213	0.015	Diff <2x LOR	----
		Tin	7440-31-5	E440	2.0	mg/kg	<2.0	<2.0	0	Diff <2x LOR	----
		Titanium	7440-32-6	E440	1.0	mg/kg	1110	1020	9.17%	40%	----
		Tungsten	7440-33-7	E440	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	----
		Uranium	7440-61-1	E440	0.050	mg/kg	0.773	0.712	8.14%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	62.3	57.4	8.14%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	84.4	78.9	6.69%	30%	----
		Zirconium	7440-67-7	E440	1.0	mg/kg	5.5	5.2	0.2	Diff <2x LOR	----
Metals (QC Lot: 1928523)											
VA25A6363-001	Anonymous	Mercury	7439-97-6	E510	0.0050	mg/kg	0.0656	0.0666	1.45%	40%	----
Metals (QC Lot: 1930045)											
VA25A6468-012	BA2512-A-12	Aluminum	7429-90-5	E440	50	mg/kg	35300	31100	12.6%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	104	102	2.80%	30%	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	18.1	25.9	35.4%	30%	DUP-H
		Barium	7440-39-3	E440	0.50	mg/kg	422	464	9.34%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.35	0.32	0.02	Diff <2x LOR	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	41.7	36.9	12.2%	30%	----
		Boron	7440-42-8	E440	5.0	mg/kg	191	268	33.7%	30%	DUP-H
		Cadmium	7440-43-9	E440	0.020	mg/kg	8.17	8.03	1.82%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	123000	121000	1.33%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	173	209	18.9%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	128	153	17.7%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	3140	4650	38.6%	30%	DUP-H
		Iron	7439-89-6	E440	50	mg/kg	50200	59700	17.2%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	2480	1350	58.9%	40%	DUP-H
		Lithium	7439-93-2	E440	2.0	mg/kg	34.4	24.9	31.9%	30%	DUP-H
		Magnesium	7439-95-4	E440	20	mg/kg	14400	13400	7.58%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	993	702	34.4%	30%	DUP-H
		Molybdenum	7439-98-7	E440	0.10	mg/kg	26.6	25.6	3.45%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	180	142	23.5%	30%	----



Sub-Matrix: Soil/Solid

Sub-Matrix: Soil/Solid					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1930045) - continued											
VA25A6468-012	BA2512-A-12	Phosphorus	7723-14-0	E440	50	mg/kg	8410	7520	11.1%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	5840	5600	4.07%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.46	0.40	0.06	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	42.3	4.22	164%	40%	DUP-H
		Sodium	7440-23-5	E440	50	mg/kg	17300	16900	2.32%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	274	281	2.80%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	13200	11500	13.3%	30%	----
		Thallium	7440-28-0	E440	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tin	7440-31-5	E440	2.0	mg/kg	138	99.9	32.1%	40%	----
		Titanium	7440-32-6	E440	1.0	mg/kg	202	206	2.32%	40%	----
		Tungsten	7440-33-7	E440	0.50	mg/kg	42.4	8.42	134%	30%	DUP-H
		Uranium	7440-61-1	E440	0.050	mg/kg	1.36	1.29	5.30%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	35.9	32.1	11.1%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	5870	3440	52.2%	30%	DUP-H
		Zirconium	7440-67-7	E440	1.0	mg/kg	4.5	# 2.4	2.1	Diff <2x LOR	DUP-H
Metals (QC Lot: 1930046)											
VA25A6468-012	BA2512-A-12	Mercury	7439-97-6	E510	0.0500	mg/kg	<0.0500	<0.0500	0	Diff <2x LOR	----
TCLP Metals (QC Lot: 1929842)											
VA25A6468-001	BA2512-A-1	Mercury, TCLP	7439-97-6	E512	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
TCLP Metals (QC Lot: 1929843)											
VA25A6468-001	BA2512-A-1	Antimony, TCLP	7440-36-0	E444	1.00	mg/L	<1.00	<1.00	0	Diff <2x LOR	----
		Arsenic, TCLP	7440-38-2	E444	1.0	mg/L	<1.0	<1.0	0	Diff <2x LOR	----
		Barium, TCLP	7440-39-3	E444	2.5	mg/L	<2.5	<2.5	0	Diff <2x LOR	----
		Beryllium, TCLP	7440-41-7	E444	0.025	mg/L	<0.025	<0.025	0	Diff <2x LOR	----
		Boron, TCLP	7440-42-8	E444	0.50	mg/L	2.22	2.20	0.02	Diff <2x LOR	----
		Cadmium, TCLP	7440-43-9	E444	0.050	mg/L	0.096	0.098	0.002	Diff <2x LOR	----
		Calcium, TCLP	7440-70-2	E444	10	mg/L	1930	1940	0.678%	30%	----
		Chromium, TCLP	7440-47-3	E444	0.25	mg/L	<0.25	<0.25	0	Diff <2x LOR	----
		Cobalt, TCLP	7440-48-4	E444	0.050	mg/L	1.39	1.36	2.16%	30%	----
		Copper, TCLP	7440-50-8	E444	0.050	mg/L	0.637	0.620	2.76%	30%	----
		Iron, TCLP	7439-89-6	E444	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Lead, TCLP	7439-92-1	E444	0.25	mg/L	<0.25	<0.25	0	Diff <2x LOR	----
		Magnesium, TCLP	7439-95-4	E444	2.5	mg/L	157	154	1.72%	30%	----
		Nickel, TCLP	7440-02-0	E444	0.25	mg/L	0.43	0.42	0.01	Diff <2x LOR	----



Sub-Matrix: Soil/Solid					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
TCLP Metals (QC Lot: 1929843) - continued											
VA25A6468-001	BA2512-A-1	Selenium, TCLP	7782-49-2	E444	0.10	mg/L	<0.10	<0.10	0	Diff <2x LOR	----
		Silver, TCLP	7440-22-4	E444	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Thallium, TCLP	7440-28-0	E444	1.0	mg/L	<1.0	<1.0	0	Diff <2x LOR	----
		Uranium, TCLP	7440-61-1	E444	0.20	mg/L	<0.20	<0.20	0	Diff <2x LOR	----
		Vanadium, TCLP	7440-62-2	E444	0.15	mg/L	<0.15	<0.15	0	Diff <2x LOR	----
		Zinc, TCLP	7440-66-6	E444	0.50	mg/L	27.4	27.0	1.36%	30%	----
		Zirconium, TCLP	7440-67-7	E444	10	mg/L	<10	<10	0	Diff <2x LOR	----

Qualifiers

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.



Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Soil/Solid

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1928526)						
Moisture	----	E144	0.25	%	<0.25	----
Physical Tests (QCLot: 1929984)						
Moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 1928522)						
Aluminum	7429-90-5	E440	50	mg/kg	<50	----
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Calcium	7440-70-2	E440	50	mg/kg	<50	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Iron	7439-89-6	E440	50	mg/kg	<50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Lithium	7439-93-2	E440	2	mg/kg	<2.0	----
Magnesium	7439-95-4	E440	20	mg/kg	<20	----
Manganese	7439-96-5	E440	1	mg/kg	<1.0	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Phosphorus	7723-14-0	E440	50	mg/kg	<50	----
Potassium	7440-09-7	E440	100	mg/kg	<100	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Sodium	7440-23-5	E440	50	mg/kg	<50	----
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	----
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	----
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Tin	7440-31-5	E440	2	mg/kg	<2.0	----



Sub-Matrix: Soil/Solid

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1928522) - continued						
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Tungsten	7440-33-7	E440	0.5	mg/kg	<0.50	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
Metals (QCLot: 1928523)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 1930045)						
Aluminum	7429-90-5	E440	50	mg/kg	<50	----
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Calcium	7440-70-2	E440	50	mg/kg	<50	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Iron	7439-89-6	E440	50	mg/kg	<50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Lithium	7439-93-2	E440	2	mg/kg	<2.0	----
Magnesium	7439-95-4	E440	20	mg/kg	<20	----
Manganese	7439-96-5	E440	1	mg/kg	<1.0	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Phosphorus	7723-14-0	E440	50	mg/kg	<50	----
Potassium	7440-09-7	E440	100	mg/kg	<100	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Sodium	7440-23-5	E440	50	mg/kg	<50	----
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	----
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	----



Sub-Matrix: Soil/Solid

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1930045) - continued						
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Tin	7440-31-5	E440	2	mg/kg	<2.0	----
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Tungsten	7440-33-7	E440	0.5	mg/kg	<0.50	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
Metals (QCLot: 1930046)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 1931294)						
Silver	7440-22-4	E440.Ag	0.1	mg/kg	<0.10	----
TCLP Metals (QCLot: 1929842)						
Mercury, TCLP	7439-97-6	E512	0.001	mg/L	<0.0010	----
TCLP Metals (QCLot: 1929843)						
Antimony, TCLP	7440-36-0	E444	0.1	mg/L	<0.10	----
Arsenic, TCLP	7440-38-2	E444	1	mg/L	<1.0	----
Barium, TCLP	7440-39-3	E444	2.5	mg/L	<2.5	----
Beryllium, TCLP	7440-41-7	E444	0.025	mg/L	<0.025	----
Boron, TCLP	7440-42-8	E444	0.5	mg/L	<0.50	----
Cadmium, TCLP	7440-43-9	E444	0.05	mg/L	<0.050	----
Calcium, TCLP	7440-70-2	E444	10	mg/L	<10	----
Chromium, TCLP	7440-47-3	E444	0.25	mg/L	<0.25	----
Cobalt, TCLP	7440-48-4	E444	0.05	mg/L	<0.050	----
Copper, TCLP	7440-50-8	E444	0.05	mg/L	<0.050	----
Iron, TCLP	7439-89-6	E444	5	mg/L	<5.0	----
Lead, TCLP	7439-92-1	E444	0.25	mg/L	<0.25	----
Magnesium, TCLP	7439-95-4	E444	2.5	mg/L	<2.5	----
Nickel, TCLP	7440-02-0	E444	0.25	mg/L	<0.25	----
Selenium, TCLP	7782-49-2	E444	0.1	mg/L	<0.10	----
Silver, TCLP	7440-22-4	E444	0.05	mg/L	<0.050	----
Thallium, TCLP	7440-28-0	E444	1	mg/L	<1.0	----
Uranium, TCLP	7440-61-1	E444	0.2	mg/L	<0.20	----
Vanadium, TCLP	7440-62-2	E444	0.15	mg/L	<0.15	----
Zinc, TCLP	7440-66-6	E444	0.5	mg/L	<0.50	----



Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
TCLP Metals (QCLot: 1929843) - continued						
Zirconium, TCLP	7440-67-7	E444	10	mg/L	<10	----



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Soil/Solid

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1928525)									
pH (1:2 soil:water)	----	E108	----	pH units	6 pH units	99.7	95.0	105	----
Physical Tests (QCLot: 1928526)									
Moisture	----	E144	0.25	%	50 %	100	90.0	110	----
Physical Tests (QCLot: 1929984)									
Moisture	----	E144	0.25	%	50 %	101	90.0	110	----
Physical Tests (QCLot: 1930047)									
pH (1:2 soil:water)	----	E108	----	pH units	6 pH units	100	95.0	105	----
Metals (QCLot: 1928522)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	104	80.0	120	----
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	108	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	108	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	104	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	106	80.0	120	----
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	96.4	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	102	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	105	80.0	120	----
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	104	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	101	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	103	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	99.4	80.0	120	----
Iron	7439-89-6	E440	50	mg/kg	100 mg/kg	107	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	101	80.0	120	----
Lithium	7439-93-2	E440	2	mg/kg	25 mg/kg	107	80.0	120	----
Magnesium	7439-95-4	E440	20	mg/kg	5000 mg/kg	106	80.0	120	----
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	103	80.0	120	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	106	80.0	120	----
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	99.2	80.0	120	----
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	109	80.0	120	----
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	105	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	103	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	98.5	80.0	120	----
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	105	80.0	120	----



Sub-Matrix: Soil/Solid					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		Qualifier
					Target Concentration	LCS	Low	High	
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1928522) - continued									
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	109	80.0	120	----
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	100	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	98.6	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	106	80.0	120	----
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	102	80.0	120	----
Tungsten	7440-33-7	E440	0.5	mg/kg	10 mg/kg	98.6	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	105	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	105	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	102	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	109	80.0	120	----
Metals (QCLot: 1928523)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	102	80.0	120	----
Metals (QCLot: 1930045)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	94.6	80.0	120	----
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	103	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	104	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	97.8	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	99.1	80.0	120	----
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	92.4	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	96.7	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	98.3	80.0	120	----
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	97.3	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	96.7	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	97.9	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	95.3	80.0	120	----
Iron	7439-89-6	E440	50	mg/kg	100 mg/kg	101	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	96.0	80.0	120	----
Lithium	7439-93-2	E440	2	mg/kg	25 mg/kg	101	80.0	120	----
Magnesium	7439-95-4	E440	20	mg/kg	5000 mg/kg	99.3	80.0	120	----
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	100	80.0	120	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	102	80.0	120	----
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	95.6	80.0	120	----
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	99.7	80.0	120	----
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	99.6	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	102	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	94.5	80.0	120	----



Sub-Matrix: Soil/Solid					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1930045) - continued									
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	100.0	80.0	120	----
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	103	80.0	120	----
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	100	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	94.5	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	101	80.0	120	----
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	92.7	80.0	120	----
Tungsten	7440-33-7	E440	0.5	mg/kg	10 mg/kg	95.4	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	102	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	101	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	99.9	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	108	80.0	120	----
Metals (QCLot: 1930046)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	96.0	80.0	120	----
Metals (QCLot: 1931294)									
Silver	7440-22-4	E440.Ag	0.1	mg/kg	10 mg/kg	96.7	80.0	120	----



Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: Soil/Solid

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
TCLP Metals (QCLot: 1929842)										
VA25A6468-001	BA2512-A-1	Mercury, TCLP	7439-97-6	E512	0.0010 mg/L	0.001 mg/L	97.9	50.0	140	----
TCLP Metals (QCLot: 1929843)										
VA25A6468-001	BA2512-A-1	Antimony, TCLP	7440-36-0	E444	4.64 mg/L	5 mg/L	92.9	50.0	140	----
		Arsenic, TCLP	7440-38-2	E444	4.9 mg/L	5 mg/L	97.8	50.0	140	----
		Barium, TCLP	7440-39-3	E444	12.4 mg/L	12.5 mg/L	99.3	50.0	140	----
		Beryllium, TCLP	7440-41-7	E444	0.221 mg/L	0.25 mg/L	88.4	50.0	140	----
		Boron, TCLP	7440-42-8	E444	8.61 mg/L	10 mg/L	86.1	50.0	140	----
		Cadmium, TCLP	7440-43-9	E444	0.230 mg/L	0.25 mg/L	91.8	50.0	140	----
		Calcium, TCLP	7440-70-2	E444	ND mg/L	----	ND	50.0	140	----
		Chromium, TCLP	7440-47-3	E444	1.19 mg/L	1.25 mg/L	95.3	50.0	140	----
		Cobalt, TCLP	7440-48-4	E444	ND mg/L	----	ND	50.0	140	----
		Copper, TCLP	7440-50-8	E444	2.28 mg/L	2.5 mg/L	91.0	50.0	140	----
		Iron, TCLP	7439-89-6	E444	235 mg/L	250 mg/L	94.1	50.0	140	----
		Lead, TCLP	7439-92-1	E444	9.01 mg/L	10 mg/L	90.1	50.0	140	----
		Magnesium, TCLP	7439-95-4	E444	241 mg/L	250 mg/L	96.6	50.0	140	----
		Nickel, TCLP	7440-02-0	E444	2.30 mg/L	2.5 mg/L	92.1	50.0	140	----
		Selenium, TCLP	7782-49-2	E444	4.98 mg/L	5 mg/L	99.5	50.0	140	----
		Silver, TCLP	7440-22-4	E444	0.076 mg/L	0.1 mg/L	76.4	50.0	140	----
		Thallium, TCLP	7440-28-0	E444	4.4 mg/L	5 mg/L	87.3	50.0	140	----
		Uranium, TCLP	7440-61-1	E444	4.58 mg/L	5 mg/L	91.6	50.0	150	----
		Vanadium, TCLP	7440-62-2	E444	0.72 mg/L	0.75 mg/L	95.5	50.0	140	----
		Zinc, TCLP	7440-66-6	E444	ND mg/L	----	ND	50.0	140	----
		Zirconium, TCLP	7440-67-7	E444	0.8 mg/L	1 mg/L	75.4	50.0	150	----



Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

Sub-Matrix:					Reference Material (RM) Report				
					RM Target Concentration	Recovery (%) RM	Recovery Limits (%)		Qualifier
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method			Low	High	
Metals (QCLot: 1928522)									
QC-1928522-003	MRCA-21	Aluminum	7429-90-5	E440	22500 mg/kg	93.0	70.0	130	----
QC-1928522-003	MRCA-21	Antimony	7440-36-0	E440	24.8 mg/kg	97.7	70.0	130	----
QC-1928522-003	MRCA-21	Arsenic	7440-38-2	E440	21.2 mg/kg	89.8	70.0	130	----
QC-1928522-003	MRCA-21	Barium	7440-39-3	E440	788 mg/kg	88.6	70.0	130	----
QC-1928522-003	MRCA-21	Beryllium	7440-41-7	E440	1.82 mg/kg	104	70.0	130	----
QC-1928522-003	MRCA-21	Bismuth	7440-69-9	E440	1.78 mg/kg	92.8	70.0	130	----
QC-1928522-003	MRCA-21	Cadmium	7440-43-9	E440	2.15 mg/kg	89.3	70.0	130	----
QC-1928522-003	MRCA-21	Calcium	7440-70-2	E440	4900 mg/kg	100	70.0	130	----
QC-1928522-003	MRCA-21	Chromium	7440-47-3	E440	56.9 mg/kg	88.1	70.0	130	----
QC-1928522-003	MRCA-21	Cobalt	7440-48-4	E440	32 mg/kg	88.4	70.0	130	----
QC-1928522-003	MRCA-21	Copper	7440-50-8	E440	969 mg/kg	87.7	70.0	130	----
QC-1928522-003	MRCA-21	Iron	7439-89-6	E440	32700 mg/kg	92.6	70.0	130	----
QC-1928522-003	MRCA-21	Lead	7439-92-1	E440	919 mg/kg	88.9	70.0	130	----
QC-1928522-003	MRCA-21	Lithium	7439-93-2	E440	47.3 mg/kg	108	70.0	130	----
QC-1928522-003	MRCA-21	Magnesium	7439-95-4	E440	7780 mg/kg	89.7	70.0	130	----
QC-1928522-003	MRCA-21	Manganese	7439-96-5	E440	8640 mg/kg	89.0	70.0	130	----
QC-1928522-003	MRCA-21	Molybdenum	7439-98-7	E440	25.1 mg/kg	94.4	70.0	130	----
QC-1928522-003	MRCA-21	Nickel	7440-02-0	E440	1000 mg/kg	86.3	70.0	130	----
QC-1928522-003	MRCA-21	Phosphorus	7723-14-0	E440	660 mg/kg	90.2	70.0	130	----
QC-1928522-003	MRCA-21	Potassium	7440-09-7	E440	10800 mg/kg	92.5	70.0	130	----
QC-1928522-003	MRCA-21	Selenium	7782-49-2	E440	1.04 mg/kg	92.8	60.0	140	----
QC-1928522-003	MRCA-21	Silver	7440-22-4	E440	8.98 mg/kg	91.7	70.0	130	----
QC-1928522-003	MRCA-21	Sodium	7440-23-5	E440	1770 mg/kg	98.4	70.0	130	----
QC-1928522-003	MRCA-21	Strontium	7440-24-6	E440	41 mg/kg	96.4	70.0	130	----
QC-1928522-003	MRCA-21	Sulfur	7704-34-9	E440	3940 mg/kg	82.9	50.0	150	----
QC-1928522-003	MRCA-21	Thallium	7440-28-0	E440	0.907 mg/kg	92.9	70.0	130	----
QC-1928522-003	MRCA-21	Tin	7440-31-5	E440	3.79 mg/kg	92.3	40.0	160	----
QC-1928522-003	MRCA-21	Titanium	7440-32-6	E440	2790 mg/kg	93.2	70.0	130	----
QC-1928522-003	MRCA-21	Tungsten	7440-33-7	E440	6.99 mg/kg	105	70.0	130	----
QC-1928522-003	MRCA-21	Uranium	7440-61-1	E440	3.97 mg/kg	103	70.0	130	----
QC-1928522-003	MRCA-21	Vanadium	7440-62-2	E440	66.2 mg/kg	88.6	70.0	130	----
QC-1928522-003	MRCA-21	Zinc	7440-66-6	E440	828 mg/kg	89.7	70.0	130	----
QC-1928522-003	MRCA-21	Zirconium	7440-67-7	E440	6.91 mg/kg	86.9	70.0	130	----



Sub-Matrix:					Reference Material (RM) Report				
					RM Target Concentration	Recovery (%) RM	Recovery Limits (%)		Qualifier
							Low	High	
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method					
Metals (QCLot: 1928523)									
QC-1928523-003	MRCA-21	Mercury	7439-97-6	E510	0.068 mg/kg	94.9	70.0	130	----
Metals (QCLot: 1930045)									
QC-1930045-003	MRCA-21	Aluminum	7429-90-5	E440	22500 mg/kg	97.9	70.0	130	----
QC-1930045-003	MRCA-21	Antimony	7440-36-0	E440	24.8 mg/kg	102	70.0	130	----
QC-1930045-003	MRCA-21	Arsenic	7440-38-2	E440	21.2 mg/kg	97.4	70.0	130	----
QC-1930045-003	MRCA-21	Barium	7440-39-3	E440	788 mg/kg	93.7	70.0	130	----
QC-1930045-003	MRCA-21	Beryllium	7440-41-7	E440	1.82 mg/kg	105	70.0	130	----
QC-1930045-003	MRCA-21	Bismuth	7440-69-9	E440	1.78 mg/kg	85.4	70.0	130	----
QC-1930045-003	MRCA-21	Cadmium	7440-43-9	E440	2.15 mg/kg	102	70.0	130	----
QC-1930045-003	MRCA-21	Calcium	7440-70-2	E440	4900 mg/kg	100	70.0	130	----
QC-1930045-003	MRCA-21	Chromium	7440-47-3	E440	56.9 mg/kg	95.8	70.0	130	----
QC-1930045-003	MRCA-21	Cobalt	7440-48-4	E440	32 mg/kg	98.3	70.0	130	----
QC-1930045-003	MRCA-21	Copper	7440-50-8	E440	969 mg/kg	96.2	70.0	130	----
QC-1930045-003	MRCA-21	Iron	7439-89-6	E440	32700 mg/kg	101	70.0	130	----
QC-1930045-003	MRCA-21	Lead	7439-92-1	E440	919 mg/kg	92.0	70.0	130	----
QC-1930045-003	MRCA-21	Lithium	7439-93-2	E440	47.3 mg/kg	107	70.0	130	----
QC-1930045-003	MRCA-21	Magnesium	7439-95-4	E440	7780 mg/kg	99.7	70.0	130	----
QC-1930045-003	MRCA-21	Manganese	7439-96-5	E440	8640 mg/kg	96.8	70.0	130	----
QC-1930045-003	MRCA-21	Molybdenum	7439-98-7	E440	25.1 mg/kg	103	70.0	130	----
QC-1930045-003	MRCA-21	Nickel	7440-02-0	E440	1000 mg/kg	97.7	70.0	130	----
QC-1930045-003	MRCA-21	Phosphorus	7723-14-0	E440	660 mg/kg	87.3	70.0	130	----
QC-1930045-003	MRCA-21	Potassium	7440-09-7	E440	10800 mg/kg	99.6	70.0	130	----
QC-1930045-003	MRCA-21	Selenium	7782-49-2	E440	1.04 mg/kg	104	60.0	140	----
QC-1930045-003	MRCA-21	Silver	7440-22-4	E440	8.98 mg/kg	96.0	70.0	130	----
QC-1930045-003	MRCA-21	Sodium	7440-23-5	E440	1770 mg/kg	109	70.0	130	----
QC-1930045-003	MRCA-21	Strontium	7440-24-6	E440	41 mg/kg	102	70.0	130	----
QC-1930045-003	MRCA-21	Sulfur	7704-34-9	E440	3940 mg/kg	93.3	50.0	150	----
QC-1930045-003	MRCA-21	Thallium	7440-28-0	E440	0.907 mg/kg	94.1	70.0	130	----
QC-1930045-003	MRCA-21	Tin	7440-31-5	E440	3.79 mg/kg	101	40.0	160	----
QC-1930045-003	MRCA-21	Titanium	7440-32-6	E440	2790 mg/kg	96.6	70.0	130	----
QC-1930045-003	MRCA-21	Tungsten	7440-33-7	E440	6.99 mg/kg	102	70.0	130	----
QC-1930045-003	MRCA-21	Uranium	7440-61-1	E440	3.97 mg/kg	93.5	70.0	130	----
QC-1930045-003	MRCA-21	Vanadium	7440-62-2	E440	66.2 mg/kg	99.4	70.0	130	----
QC-1930045-003	MRCA-21	Zinc	7440-66-6	E440	828 mg/kg	100	70.0	130	----
QC-1930045-003	MRCA-21	Zirconium	7440-67-7	E440	6.91 mg/kg	106	70.0	130	----
Metals (QCLot: 1930046)									
QC-1930046-003	MRCA-21	Mercury	7439-97-6	E510	0.068 mg/kg	97.1	70.0	130	----



Sub-Matrix:					Reference Material (RM) Report				
					RM Target Concentration	Recovery (%) RM	Recovery Limits (%)		Qualifier
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method			Low	High	
Metals (QCLot: 1931294)									
QC-1931294-003	MRCA-21	Silver	7440-22-4	E440.Ag	8.98 mg/kg	93.8	70.0	130	----



Report To			Report Format / Distribution			Service Requested (Rush for routine analysis subject to availability)										
Company: Veolia Canada / Burnaby Waste To Energy Facility			"Veolia Email Distribution List" please													
Contact: Brian Graham / Karen Thornquist																
Address: 5150 Riverbend Drive			Email 1: brian.graham@veolia.com													
Burnaby BC			Email 2: jorenzo.ilao@veolia.com													
Phone: 604-521-1025			Email 3: karen.thornquist@veolia.com			Analysis Request										
			brent.kirkpatrick@metrovancover.org													
			Sarah.Wellman@metrovancover.org													
Invoice To: Same as Report ? Veolia Water Canada			Client / Project Information			Please indicate below Filtered, Preserved or both (F, P, F/P)										
Hardcopy of Invoice with Report?			Job #:													
Company: Veolia Water Canada / Burnaby Waste To Energy			PO / AFE: PO# Veolia to be determined / Weekly Bottom Ash - S													
Contact: Danny George, Purchaser			LSD: (includes 2:1 pH)													
Address: 5150 Riverbend Drive, Burnaby BC V3N 4V3																
Phone: 604 521 1025 x207			Quote #:													
Lab Work Order # (lab use only)			ALS Contact:		Sampler:											
Sample #	Sample Identification (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)	Sample Type	MET-TCLP-VA (all metals, Hg)	MOISTURE	Chromium 6	MET-CSR+FULL-VA (all metals)						Number of Containers	
	BA 2512-A-1		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-2		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-3		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-4		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-5		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-6		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-7		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-8		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-9		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-10		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-11		19-Mar-25	9:00	Soil	X	X		X					1		
	BA 2512-A-12		19-Mar-25	9:00	Soil	X	X		X					1		
water Aquatic																
Environmental Division Vancouver Work Order Reference VA25A6468																
Telephone : +1 604 253 4188																
SHIPMENT RECEPTION (lab use only)																
SHIPMENT VERIFICATION (lab use only)																
Released by: Karen T			Date (dd-mm-yy): March 25/2025		Time (hh:mm): 8:00		Received by:		Date:		Time:		Temperature: 18 °C			
									Verified by: mg		Date: 3/25		Time: 12:45			
											Observations: Yes / No ? If Yes add SIF					