

Bottom Ash Data

2025 Week 19

The following analytical report represents bottom ash composite results for week 19 of 2025 (May 4, 2025 to May 10, 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	: VA25B0996	Laboratory	: ALS Environmental - Vancouver
Client	: Veolia Environmental Services Canada	Account Manager	: Gulraj Dhanaua
Contact	: Brian Graham	Address	: 8081 Lougheed Highway
Address	: 5150 Riverbend Dr. Burnaby British Columbia Canada V3N 4V3		: Burnaby BC Canada V5A 1W9
Telephone	: ----	E-mail	: Gulraj.Dhanaua@alsglobal.com
Project	: Veolia Weekly Bottom Ash-Suite	Telephone	: +1 604 253 4188
PO	: PO#	Date Samples Received	: 13-May-2025 14:25
C-O-C number	: ----	Date Analysis Commenced	: 15-May-2025
Sampler	: ----	Issue Date	: 21-May-2025 11:05
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VIS1100-001		
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>
Ilnaz Badbezanchi	Supervisor - Metals Prep	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Organics, 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).

<i>Unit</i>	<i>Description</i>
%	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)					Client sample ID	BA 2519-A-1	BA 2519-A-2	BA 2519-A-3	BA 2519-A-4	BA 2519-A-5
Client sampling date / time					07-May-2025 09:00					
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-001	VA25B0996-002	VA25B0996-003	VA25B0996-004	VA25B0996-005	
					Result	Result	Result	Result	Result	
Physical Tests										
Moisture	----	E144/VA	0.25	%	21.5	18.9	20.2	22.4	24.6	
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.20	10.21	10.24	10.21	10.20	
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg	28900	35000	40700	39300	33000	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	134	108	77.9	82.3	96.7	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	19.1	18.7	13.0	16.9	22.2	
Barium	7440-39-3	E440/VA	0.50	mg/kg	404	443	494	520	526	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.38	0.44	0.34	0.34	0.36	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	8.77	7.52	6.77	10.2	6.32	
Boron	7440-42-8	E440/VA	5.0	mg/kg	159	148	130	148	175	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	9.51	9.09	6.97	7.66	7.65	
Calcium	7440-70-2	E440/VA	50	mg/kg	128000	119000	108000	121000	126000	
Chromium	7440-47-3	E440/VA	0.50	mg/kg	182	151	115	157	126	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	72.5	91.5	86.6	429	86.7	
Copper	7440-50-8	E440/VA	0.50	mg/kg	2570	1560	1220	2170	3710	
Iron	7439-89-6	E440/VA	50	mg/kg	49000	41900	56900	52200	55800	
Lead	7439-92-1	E440/VA	0.50	mg/kg	359	492	696	282	498	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	28.6	28.0	31.2	79.0	26.5	
Magnesium	7439-95-4	E440/VA	20	mg/kg	12100	11000	10000	11000	11000	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	1010	2600	738	778	723	
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	BA 2519-A-1	BA 2519-A-2	BA 2519-A-3	BA 2519-A-4	BA 2519-A-5
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-001	VA25B0996-002	VA25B0996-003	VA25B0996-004	VA25B0996-005	
					Result	Result	Result	Result	Result	
Metals										
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	20.7	16.3	14.4	13.6	13.1	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	192	153	230	1100	124	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	10600	9030	7510	11400	13200	
Potassium	7440-09-7	E440/VA	100	mg/kg	5160	5270	4860	5280	4660	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.49	0.42	0.37	0.38	0.42	
Silver	7440-22-4	E440/VA	0.10	mg/kg	15.5	5.39	3.15	4.36	3.43	
Sodium	7440-23-5	E440/VA	50	mg/kg	14500	14900	14100	15300	14000	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	297	338	246	306	262	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	11600	11000	9400	10000	10000	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	0.052	<0.050	<0.050	<0.050	<0.050	
Tin	7440-31-5	E440/VA	2.0	mg/kg	110	106	74.6	179	96.5	
Titanium	7440-32-6	E440/VA	1.0	mg/kg	169	185	226	200	172	
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	10.8	10.2	7.30	8.05	8.99	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	3.10	2.80	2.81	2.93	3.03	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	43.2	43.2	39.7	42.1	44.8	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	3800	3690	2690	3090	3370	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	2.5	2.8	4.4	3.5	3.8	
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.29	11.20	11.32	11.29	11.29	
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	2.18	2.03	2.61	2.12	2.05	
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	4.89	4.89	4.89	4.89	4.89	



Analytical Results

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

					Client sample ID	BA 2519-A-1	BA 2519-A-2	BA 2519-A-3	BA 2519-A-4	BA 2519-A-5
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-001	VA25B0996-002	VA25B0996-003	VA25B0996-004	VA25B0996-005	
					Result	Result	Result	Result	Result	
TCLP Metals										
pH, TCLP final	----	EPP444/VA	0.010	pH units	9.69	9.72	9.72	9.71	9.79	
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	0.72	0.84	0.78	0.76	0.69	
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	730	774	758	779	748	
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	<0.050	<0.050	<0.050	<0.050	<0.050	
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.807	0.799	0.739	0.890	0.936	
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	3.4	6.1	5.1	4.9	3.3	
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	<0.25	<0.25	<0.25	<0.25	<0.25	
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	BA 2519-A-1	BA 2519-A-2	BA 2519-A-3	BA 2519-A-4	BA 2519-A-5
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-001	VA25B0996-002	VA25B0996-003	VA25B0996-004	VA25B0996-005	
					Result	Result	Result	Result	Result	
TCLP Metals										
Zinc, TCLP	7440-66-6	E444/VA	0.50	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Zirconium, TCLP	7440-67-7	E444/VA	10	mg/L	<10	<10	<10	<10	<10	<10

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

Analytical Results

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA 2519-A-6	BA 2519-A-7	BA 2519-A-8	BA 2519-A-9	BA 2519-A-10
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-006	VA25B0996-007	VA25B0996-008	VA25B0996-009	VA25B0996-010	
					Result	Result	Result	Result	Result	
Physical Tests										
Moisture	----	E144/VA	0.25	%	23.2	22.3	23.2	19.7	21.9	
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.21	10.25	10.15	10.18	10.18	
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg	34900	40900	32700	56200	35900	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	104	96.8	105	116	92.9	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	18.0	21.2	22.1	22.6	16.6	
Barium	7440-39-3	E440/VA	0.50	mg/kg	533	449	436	525	518	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.35	0.41	0.37	0.32	0.38	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	6.74	6.92	19.3	6.40	6.24	
Boron	7440-42-8	E440/VA	5.0	mg/kg	160	146	144	202	191	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	9.04	7.64	8.54	7.56	7.21	
Calcium	7440-70-2	E440/VA	50	mg/kg	128000	118000	125000	116000	127000	



Analytical Results

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

					Client sample ID	BA 2519-A-6	BA 2519-A-7	BA 2519-A-8	BA 2519-A-9	BA 2519-A-10
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-006	VA25B0996-007	VA25B0996-008	VA25B0996-009	VA25B0996-010	
					Result	Result	Result	Result	Result	
Metals										
Chromium	7440-47-3	E440/VA	0.50	mg/kg	134	258	156	145	155	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	135	34.4	73.2	36.2	48.9	
Copper	7440-50-8	E440/VA	0.50	mg/kg	2620	1350	3170	1620	1380	
Iron	7439-89-6	E440/VA	50	mg/kg	44800	46300	48000	49600	43100	
Lead	7439-92-1	E440/VA	0.50	mg/kg	828	310	473	452	372	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	34.5	28.5	28.7	24.6	30.2	
Magnesium	7439-95-4	E440/VA	20	mg/kg	11800	11300	11100	10600	11800	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	975	834	624	737	717	
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	13.7	17.0	15.4	15.9	14.8	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	106	118	114	121	187	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	10200	9560	10900	10600	9960	
Potassium	7440-09-7	E440/VA	100	mg/kg	5040	5030	4990	5290	6060	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.43	0.41	0.44	0.61	0.37	
Silver	7440-22-4	E440/VA	0.10	mg/kg	5.59	5.88	5.92	4.21	3.69	
Sodium	7440-23-5	E440/VA	50	mg/kg	14900	15100	14800	16200	17400	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	287	255	274	244	277	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	10700	9800	10900	10100	10600	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	<0.050	0.050	0.052	
Tin	7440-31-5	E440/VA	2.0	mg/kg	206	99.0	106	932	89.9	
Titanium	7440-32-6	E440/VA	1.0	mg/kg	177	226	191	549	216	



Analytical Results

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

					Client sample ID	BA 2519-A-6	BA 2519-A-7	BA 2519-A-8	BA 2519-A-9	BA 2519-A-10
					Client sampling date / time	07-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-006	VA25B0996-007	VA25B0996-008	VA25B0996-009	VA25B0996-010	
					Result	Result	Result	Result	Result	
Metals										
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	7.57	7.83	10.1	9.81	8.07	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	3.29	2.98	3.22	2.96	3.31	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	47.0	42.2	44.6	44.0	43.0	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	3160	5860	3820	4240	3230	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	2.7	2.7	3.0	4.2	4.0	
TCLP Metals										
pH, TCLP 1st preliminary	---	EPP444/VA	0.010	pH units	11.29	11.32	11.30	11.24	11.30	
pH, TCLP 2nd preliminary	---	EPP444/VA	0.010	pH units	2.29	2.15	2.25	2.33	3.43	
pH, TCLP extraction fluid initial	---	EPP444/VA	0.010	pH units	4.89	4.89	4.89	4.89	4.89	
pH, TCLP final	---	EPP444/VA	0.010	pH units	9.78	9.72	9.80	9.80	9.69	
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	0.70	0.73	0.79	0.82	0.69	
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	739	790	805	791	729	
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	<0.050	<0.050	<0.050	<0.050	<0.050	
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.935	0.865	0.908	0.755	0.900	
Iron, TCLP	7439-89-6	E444/VA	5.0	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	



Analytical Results

					Client sample ID				
					BA 2519-A-6	BA 2519-A-7	BA 2519-A-8	BA 2519-A-9	BA 2519-A-10
					Client sampling date / time				
					07-May-2025 09:00	07-May-2025 09:00	07-May-2025 09:00	07-May-2025 09:00	07-May-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-006	VA25B0996-007	VA25B0996-008	VA25B0996-009	VA25B0996-010
					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	3.4	4.6	3.9	5.6	3.6
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	<0.25	<0.25	<0.25	<0.25	<0.25
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	<0.50	<0.50	<0.50	<0.50	<0.50
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 qualifiers detected.

Analytical Results

					Client sample ID				
					BA 2519-A-11	BA 2519-A-12	----	----	----
					Client sampling date / time				
					07-May-2025 09:00	07-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-011	VA25B0996-012	----	----	----
					Result	Result	----	----	----
Physical Tests									
Moisture	----	E144/VA	0.25	%	20.1	20.5	----	----	----
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.26	10.24	----	----	----



Analytical Results

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

					Client sample ID	BA 2519-A-11	BA 2519-A-12	----	----	----
					Client sampling date / time	07-May-2025 09:00	07-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-011	VA25B0996-012	----	----	----	
					Result	Result	----	----	----	
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg	41200	29300	----	----	----	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	99.3	128	----	----	----	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	23.4	22.5	----	----	----	
Barium	7440-39-3	E440/VA	0.50	mg/kg	505	378	----	----	----	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.31	0.33	----	----	----	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	7.60	10.1	----	----	----	
Boron	7440-42-8	E440/VA	5.0	mg/kg	188	162	----	----	----	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	7.79	11.3	----	----	----	
Calcium	7440-70-2	E440/VA	50	mg/kg	109000	139000	----	----	----	
Chromium	7440-47-3	E440/VA	0.50	mg/kg	119	142	----	----	----	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	105	57.1	----	----	----	
Copper	7440-50-8	E440/VA	0.50	mg/kg	1130	1660	----	----	----	
Iron	7439-89-6	E440/VA	50	mg/kg	51200	34100	----	----	----	
Lead	7439-92-1	E440/VA	0.50	mg/kg	344	1440	----	----	----	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	127	29.3	----	----	----	
Magnesium	7439-95-4	E440/VA	20	mg/kg	10200	11800	----	----	----	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	765	1310	----	----	----	
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	<0.0500	0.0521	----	----	----	
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	13.3	17.8	----	----	----	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	195	258	----	----	----	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	9270	11300	----	----	----	



Analytical Results

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

					Client sample ID	BA 2519-A-11	BA 2519-A-12	----	----	----
					Client sampling date / time	07-May-2025 09:00	07-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-011	VA25B0996-012	----	----	----	
					Result	Result	----	----	----	
Metals										
Potassium	7440-09-7	E440/VA	100	mg/kg	5040	6090	----	----	----	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.40	0.54	----	----	----	
Silver	7440-22-4	E440/VA	0.10	mg/kg	4.52	5.97	----	----	----	
Sodium	7440-23-5	E440/VA	50	mg/kg	14800	16700	----	----	----	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	250	283	----	----	----	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	9800	13000	----	----	----	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	0.076	0.060	----	----	----	
Tin	7440-31-5	E440/VA	2.0	mg/kg	89.7	99.6	----	----	----	
Titanium	7440-32-6	E440/VA	1.0	mg/kg	231	157	----	----	----	
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	12.3	14.4	----	----	----	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	2.57	3.44	----	----	----	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	51.7	44.2	----	----	----	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	7860	6210	----	----	----	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	3.4	1.7	----	----	----	
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.29	11.26	----	----	----	
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	3.58	2.69	----	----	----	
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	4.89	4.89	----	----	----	
pH, TCLP final	----	EPP444/VA	0.010	pH units	9.52	9.72	----	----	----	
Antimony, TCLP	7440-36-0	E444/VA	1.00	mg/L	<1.00	<1.00	----	----	----	
Arsenic, TCLP	7440-38-2	E444/VA	1.0	mg/L	<1.0	<1.0	----	----	----	



Analytical Results

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

					Client sample ID	BA 2519-A-11	BA 2519-A-12	----	----	----
					Client sampling date / time	07-May-2025 09:00	07-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B0996-011	VA25B0996-012	----	----	----	
					Result	Result	----	----	----	
TCLP Metals										
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	0.76	0.80	----	----	----	
Cadmium, TCLP	7440-43-9	E444/VA	0.050	mg/L	<0.050	<0.050	----	----	----	
Calcium, TCLP	7440-70-2	E444/VA	10	mg/L	736	784	----	----	----	
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	<0.050	<0.050	----	----	----	
Copper, TCLP	7440-50-8	E444/VA	0.050	mg/L	0.752	0.846	----	----	----	
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	5.4	3.7	----	----	----	
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	<0.25	<0.25	----	----	----	
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	<0.50	<0.50	----	----	----	
Zirconium, TCLP	7440-67-7	E444/VA	10	mg/L	<10	<10	----	----	----	

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



CERTIFICATE OF ANALYSIS

<p>Work Order : VA25B0996</p> <p>Client : Veolia Environmental Services Canada</p> <p>Contact : Brian Graham</p> <p>Address : 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3</p> <p>Telephone : ----</p> <p>Project : Veolia Weekly Bottom Ash-Suite</p> <p>PO : PO#</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : Metro Van Ash Sampling Program</p> <p>Quote number : VA25-VIS1100-001</p> <p>No. of samples received : 12</p> <p>No. of samples analysed : 12</p>	<p>Page : 1 of 22</p> <p>Laboratory : ALS Environmental - Vancouver</p> <p>Account Manager : Gulraj Dhanaua</p> <p>Address : 8081 Lougheed Highway Burnaby BC Canada V5A 1W9</p> <p>Telephone : +1 604 253 4188</p> <p>Date Samples Received : 13-May-2025 14:25</p> <p>Date Analysis : 15-May-2025</p> <p>Commenced : 15-May-2025</p> <p>Issue Date : 21-May-2025 11:06</p>
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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>
Ilmaz Badbezanchi	Supervisor - Metals Prep	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Organics, 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

VA25B0996-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-1

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	21.5	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.20	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	28900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	134	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	19.1	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	404	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.38	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	8.77	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	159	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	9.51	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	128000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	182	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	72.5	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	2570	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	49000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	359	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	28.6	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	12100	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	1010	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	20.7	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	192	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	10600	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5160	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.49	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	15.5	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14500	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	297	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	11600	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	0.052	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	110	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	169	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	10.8	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.10	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	43.2	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3800	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	2.5	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.18	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.69	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-1

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.72	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	730	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.807	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.4	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-2

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	18.9	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.21	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	35000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	108	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	18.7	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	443	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.44	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	7.52	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	148	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	9.09	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	119000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	151	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	91.5	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1560	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-2

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	41900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	492	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	28.0	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11000	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	2600	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	16.3	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	153	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	9030	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5270	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.42	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	5.39	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	338	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	11000	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	106	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	185	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	10.2	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.80	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	43.2	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3690	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	2.8	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.20	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.03	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.72	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.84	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	774	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.799	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	6.1	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-2

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-3

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	20.2	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.24	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	40700	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	77.9	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	13.0	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	494	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.34	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.77	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	130	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	6.97	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	108000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	115	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	86.6	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1220	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	56900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	696	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	31.2	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	10000	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	738	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	14.4	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	230	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	7510	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	4860	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.37	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	3.15	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14100	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	246	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	9400	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-3

Client sampling date / time: 07-May-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	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	74.6	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	226	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	7.30	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.81	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	39.7	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	2690	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	4.4	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.32	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.61	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.72	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.78	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	758	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.739	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	5.1	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-4

Client sampling date / time: 07-May-2025 09:00

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



Analytical Results

VA25B0996-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-4

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/OT
Physical Tests								
Moisture	----	22.4	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.21	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	39300	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	82.3	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	16.9	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	520	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.34	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	10.2	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	148	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.66	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	121000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	157	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	429	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	2170	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	52200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	282	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	79.0	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11000	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	778	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	13.6	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	1100	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	11400	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5280	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.38	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	4.36	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	15300	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	306	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10000	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	179	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	200	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	8.05	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.93	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	42.1	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3090	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	3.5	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.12	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.71	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-4

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.76	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	779	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.890	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	4.9	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-5

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	24.6	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.20	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	33000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	96.7	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	22.2	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	526	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.36	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.32	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	175	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.65	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	126000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	126	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	86.7	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	3710	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-5

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	55800	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	498	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	26.5	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11000	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	723	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	13.1	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	124	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	13200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	4660	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.42	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	3.43	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	262	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10000	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	96.5	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	172	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	8.99	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.03	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	44.8	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3370	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	3.8	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.05	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.79	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.69	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	748	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.936	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.3	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-5

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-006

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-6

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.2	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.21	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	34900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	104	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	18.0	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	533	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.35	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.74	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	160	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	9.04	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	128000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	134	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	135	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	2620	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	44800	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	828	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	34.5	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11800	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	975	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	13.7	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	106	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	10200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5040	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.43	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	5.59	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	287	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10700	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-006

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-6

Client sampling date / time: 07-May-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	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	206	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	177	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	7.57	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.29	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	47.0	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3160	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	2.7	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.78	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.70	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	739	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.935	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.4	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-7

Client sampling date / time: 07-May-2025 09:00

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



Analytical Results

VA25B0996-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-7

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/OT
Physical Tests								
Moisture	----	22.3	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.25	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	40900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	96.8	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	21.2	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	449	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.41	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.92	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	146	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.64	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	118000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	258	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	34.4	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1350	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	46300	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	310	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	28.5	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11300	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	834	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	17.0	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	118	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	9560	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5030	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.41	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	5.88	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	15100	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	255	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	9800	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	99.0	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	226	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	7.83	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.98	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	42.2	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	5860	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	2.7	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.32	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.15	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.72	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-7

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.73	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	790	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.865	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	4.6	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-8

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	23.2	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.15	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	32700	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	105	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	22.1	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	436	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.37	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	19.3	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	144	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	8.54	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	125000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	156	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	73.2	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	3170	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-8

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	48000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	473	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	28.7	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11100	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	624	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	15.4	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	114	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	10900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	4990	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.44	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	5.92	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14800	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	274	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10900	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	106	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	191	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	10.1	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.22	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	44.6	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3820	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	3.0	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.30	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.25	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.80	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.79	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	805	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.908	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.9	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-8

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-009

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-9

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	19.7	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.18	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	56200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	116	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	22.6	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	525	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.32	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.40	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	202	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.56	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	116000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	145	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	36.2	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1620	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	49600	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	452	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	24.6	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	10600	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	737	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	15.9	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	121	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	10600	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5290	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.61	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	4.21	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	16200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	244	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10100	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-009

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-9

Client sampling date / time: 07-May-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	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	932	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	549	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	9.81	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.96	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	44.0	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	4240	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	4.2	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.24	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.33	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.80	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.82	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	791	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.755	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	5.6	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-10

Client sampling date / time: 07-May-2025 09:00

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



Analytical Results

VA25B0996-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-10

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/OT
Physical Tests								
Moisture	----	21.9	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.18	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	35900	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	92.9	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	16.6	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	518	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.38	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	6.24	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	191	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.21	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	127000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	155	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	48.9	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1380	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	43100	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	372	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	30.2	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11800	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	717	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	14.8	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	187	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	9960	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	6060	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.37	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	3.69	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	17400	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	277	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	10600	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	0.052	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	89.9	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	216	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	8.07	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.31	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	43.0	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	3230	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	4.0	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.30	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	3.43	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.69	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-10

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.69	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	729	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.900	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.6	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-11

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	20.1	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.26	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	41200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	99.3	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	23.4	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	505	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.31	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	7.60	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	188	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	7.79	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	109000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	119	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	105	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1130	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-11

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Metals								
Iron	7439-89-6	51200	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	344	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	127	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	10200	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	765	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	13.3	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	195	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	9270	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	5040	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.40	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	4.52	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	14800	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	250	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	9800	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Thallium	7440-28-0	0.076	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	89.7	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	231	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	12.3	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	2.57	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	51.7	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	7860	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	3.4	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	3.58	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.52	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.76	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	736	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.752	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	5.4	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175



Analytical Results

VA25B0996-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-11

Client sampling date / time: 07-May-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	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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

Analytical Results

VA25B0996-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-12

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Moisture	----	20.5	0.25	%	E144/VA	-	16-May-2025	2001917
pH (1:2 soil:water)	----	10.24	0.10	pH units	E108/VA	17-May-2025	20-May-2025	2001916
Metals								
Aluminum	7429-90-5	29300	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Antimony	7440-36-0	128	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Arsenic	7440-38-2	22.5	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Barium	7440-39-3	378	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Bismuth	7440-69-9	10.1	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Boron	7440-42-8	162	5.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cadmium	7440-43-9	11.3	0.020	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Calcium	7440-70-2	139000	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Chromium	7440-47-3	142	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Cobalt	7440-48-4	57.1	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Copper	7440-50-8	1660	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Iron	7439-89-6	34100	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lead	7439-92-1	1440	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Lithium	7439-93-2	29.3	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Magnesium	7439-95-4	11800	20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Manganese	7439-96-5	1310	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Mercury	7439-97-6	0.0521	0.0500	mg/kg	E510/VA	17-May-2025	20-May-2025	2001915
Molybdenum	7439-98-7	17.8	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Nickel	7440-02-0	258	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Phosphorus	7723-14-0	11300	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Potassium	7440-09-7	6090	100	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Selenium	7782-49-2	0.54	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Silver	7440-22-4	5.97	0.10	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sodium	7440-23-5	16700	50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Strontium	7440-24-6	283	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Sulfur	7704-34-9	13000	1000	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914



Analytical Results

VA25B0996-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA 2519-A-12

Client sampling date / time: 07-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Metals								
Thallium	7440-28-0	0.060	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tin	7440-31-5	99.6	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Titanium	7440-32-6	157	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Tungsten	7440-33-7	14.4	0.50	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Uranium	7440-61-1	3.44	0.050	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Vanadium	7440-62-2	44.2	0.20	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zinc	7440-66-6	6210	2.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
Zirconium	7440-67-7	1.7	1.0	mg/kg	E440/VA	17-May-2025	21-May-2025	2001914
TCLP Metals								
pH, TCLP 1st preliminary	----	11.26	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP 2nd preliminary	----	2.69	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP extraction fluid initial	----	4.89	0.010	pH units	EPP444/VA	-	15-May-2025	-
pH, TCLP final	----	9.72	0.010	pH units	EPP444/VA	-	15-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Boron, TCLP	7440-42-8	0.80	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Calcium, TCLP	7440-70-2	784	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Copper, TCLP	7440-50-8	0.846	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Magnesium, TCLP	7439-95-4	3.7	2.5	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	16-May-2025	16-May-2025	2001174
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	16-May-2025	17-May-2025	2001175
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	16-May-2025	17-May-2025	2001175

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



QUALITY CONTROL INTERPRETIVE REPORT

<p>Work Order : VA25B0996</p> <p>Client : Veolia Environmental Services Canada</p> <p>Contact : Brian Graham</p> <p>Address : 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3</p> <p>Telephone : ----</p> <p>Project : Veolia Weekly Bottom Ash-Suite</p> <p>PO : PO#</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : Metro Van Ash Sampling Program</p> <p>Quote number : VA25-VIS1100-001</p> <p>No. of samples received : 12</p> <p>No. of samples analysed : 12</p>	<p>Page : 1 of 15</p> <p>Laboratory : ALS Environmental - Vancouver</p> <p>Account Manager : Gulraj Dhanaua</p> <p>Address : 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9</p> <p>Telephone : +1 604 253 4188</p> <p>Date Samples Received : 13-May-2025 14:25</p> <p>Issue Date : 21-May-2025 11:05</p>
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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 Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- 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.



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 : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-1	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-10	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-11	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-12	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-2	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-3	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-4	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 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 : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-5	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-6	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-7	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-8	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Mercury in Soil/Solid by CVAAS											
LDPE bag BA 2519-A-9	E510	07-May-2025	17-May-2025	28 days	10 days	✔	20-May-2025	28 days	3 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-1	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-10	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-11	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-12	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 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		
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-2	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-3	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-4	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-5	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-6	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-7	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-8	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Metals : Metals in Soil/Solid by CRC ICPMS											
LDPE bag BA 2519-A-9	E440	07-May-2025	17-May-2025	180 days	10 days	✔	21-May-2025	180 days	10 days	✔	
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-1	E144	07-May-2025	----	----	----		16-May-2025	----	----		



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 BA 2519-A-10	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-11	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-12	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-2	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-3	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-4	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-5	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-6	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-7	E144	07-May-2025	----	----	----		16-May-2025	----	----		



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 BA 2519-A-8	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : Moisture Content by Gravimetry											
LDPE bag BA 2519-A-9	E144	07-May-2025	----	----	----		16-May-2025	----	----		
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-1	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-10	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-11	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-12	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-2	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-3	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-4	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-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 BA 2519-A-5	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-6	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-7	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-8	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)											
LDPE bag BA 2519-A-9	E108	07-May-2025	17-May-2025	30 days	10 days	✔	20-May-2025	30 days	10 days	✔	
TCLP Metals : Mercury by CVAAS (TCLP)											
Glass vial - total (lab preserved) BA 2519-A-1	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔	
TCLP Metals : Mercury by CVAAS (TCLP)											
Glass vial - total (lab preserved) BA 2519-A-10	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔	
TCLP Metals : Mercury by CVAAS (TCLP)											
Glass vial - total (lab preserved) BA 2519-A-11	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔	
TCLP Metals : Mercury by CVAAS (TCLP)											
Glass vial - total (lab preserved) BA 2519-A-12	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-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) BA 2519-A-2	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-3	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-4	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-5	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-6	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-7	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-8	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2519-A-9	E512	15-May-2025	16-May-2025	36 days	9 days	✔	16-May-2025	36 days	9 days	✔
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2519-A-1	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 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) BA 2519-A-10	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-11	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-12	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-2	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-3	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-4	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-5	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-6	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔	
TCLP Metals : Metals by CRC ICPMS (TCLP)											
HDPE - total (lab preserved) BA 2519-A-7	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 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) BA 2519-A-8	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2519-A-9	E444	15-May-2025	16-May-2025	188 days	9 days	✔	17-May-2025	188 days	9 days	✔
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2519-A-1	EPP444	07-May-2025	15-May-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) BA 2519-A-10	EPP444	07-May-2025	15-May-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) BA 2519-A-11	EPP444	07-May-2025	15-May-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) BA 2519-A-12	EPP444	07-May-2025	15-May-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) BA 2519-A-2	EPP444	07-May-2025	15-May-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) BA 2519-A-3	EPP444	07-May-2025	15-May-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) BA 2519-A-4	EPP444	07-May-2025	15-May-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) BA 2519-A-5	EPP444	07-May-2025	15-May-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) BA 2519-A-6	EPP444	07-May-2025	15-May-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) BA 2519-A-7	EPP444	07-May-2025	15-May-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) BA 2519-A-8	EPP444	07-May-2025	15-May-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) BA 2519-A-9	EPP444	07-May-2025	15-May-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	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
Analytical Methods							
Laboratory Duplicates (DUP)							
pH by Meter (1:2 Soil:Water Extraction)	E108	2001916	1	13	7.6	5.0	✔
Moisture Content by Gravimetry	E144	2001917	1	12	8.3	5.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2001914	1	16	6.2	5.0	✔
Metals by CRC ICPMS (TCLP)	E444	2001175	1	12	8.3	5.0	✔
Mercury in Soil/Solid by CVAAS	E510	2001915	1	13	7.6	5.0	✔
Mercury by CVAAS (TCLP)	E512	2001174	1	12	8.3	5.0	✔
Laboratory Control Samples (LCS)							
pH by Meter (1:2 Soil:Water Extraction)	E108	2001916	1	13	7.6	5.0	✔
Moisture Content by Gravimetry	E144	2001917	1	12	8.3	5.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2001914	2	16	12.5	10.0	✔
Mercury in Soil/Solid by CVAAS	E510	2001915	2	13	15.3	10.0	✔
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	2001917	1	12	8.3	5.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2001914	1	16	6.2	5.0	✔
Metals by CRC ICPMS (TCLP)	E444	2001175	1	12	8.3	5.0	✔
Mercury in Soil/Solid by CVAAS	E510	2001915	1	13	7.6	5.0	✔
Mercury by CVAAS (TCLP)	E512	2001174	1	12	8.3	5.0	✔
Matrix Spikes (MS)							
Metals by CRC ICPMS (TCLP)	E444	2001175	1	12	8.3	5.0	✔
Mercury by CVAAS (TCLP)	E512	2001174	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 ± 5°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°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.
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
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.



<i>Preparation Methods</i>	<i>Method / Lab</i>	<i>Matrix</i>	<i>Method Reference</i>	<i>Method Descriptions</i>
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.
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	: VA25B0996	Page	: 1 of 11
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	: Veolia Weekly Bottom Ash-Suite	Date Samples Received	: 13-May-2025 14:25
PO	: PO#	Date Analysis Commenced	: 15-May-2025
C-O-C number	: ----	Issue Date	: 21-May-2025 11:05
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.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Ilnaz Badbezanchi	Supervisor - Metals Prep	Vancouver Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Vancouver Organics, 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: 2001916)											
KS2501632-028	Anonymous	pH (1:2 soil:water)	----	E108	0.10	pH units	9.95	9.98	0.3%	5%	----
Physical Tests (QC Lot: 2001917)											
VA25B0996-001	BA 2519-A-1	Moisture	----	E144	0.25	%	21.5	21.5	0.00940%	20%	----
Metals (QC Lot: 2001914)											
KS2501632-028	Anonymous	Aluminum	7429-90-5	E440	50	mg/kg	11400	11300	1.10%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	1.38	1.49	7.40%	30%	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	4.66	3.85	19.2%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	110	112	2.30%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.34	0.31	0.02	Diff <2x LOR	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	----
		Boron	7440-42-8	E440	5.0	mg/kg	6.8	6.2	0.6	Diff <2x LOR	----
		Cadmium	7440-43-9	E440	0.020	mg/kg	0.110	0.117	0.008	Diff <2x LOR	----
		Calcium	7440-70-2	E440	50	mg/kg	17200	18200	5.65%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	40.9	41.0	0.338%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	9.85	9.77	0.816%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	27.9	28.0	0.233%	30%	----
		Iron	7439-89-6	E440	50	mg/kg	23700	23900	0.733%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	32.5	33.2	2.11%	40%	----
		Lithium	7439-93-2	E440	2.0	mg/kg	6.9	6.6	0.3	Diff <2x LOR	----
		Magnesium	7439-95-4	E440	20	mg/kg	9520	9280	2.54%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	497	494	0.553%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	1.19	1.08	9.72%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	31.2	27.5	12.6%	30%	----
		Phosphorus	7723-14-0	E440	50	mg/kg	976	996	1.96%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	1240	1140	7.78%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	----
		Sodium	7440-23-5	E440	50	mg/kg	2520	2490	1.19%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	131	127	3.71%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	<1000	<1000	0	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
Metals (QC Lot: 2001914) - continued											
KS2501632-028	Anonymous	Thallium	7440-28-0	E440	0.050	mg/kg	0.098	0.098	0.0003	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	1100	1040	5.16%	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	0.645	0.607	6.04%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	69.0	69.8	1.21%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	44.1	47.5	7.26%	30%	----
		Zirconium	7440-67-7	E440	1.0	mg/kg	7.8	7.5	4.46%	30%	----
Metals (QC Lot: 2001915)											
KS2501632-028	Anonymous	Mercury	7439-97-6	E510	0.0500	mg/kg	0.0508	0.0544	0.0036	Diff <2x LOR	----
TCLP Metals (QC Lot: 2001174)											
VA25B0996-001	BA 2519-A-1	Mercury, TCLP	7439-97-6	E512	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
TCLP Metals (QC Lot: 2001175)											
VA25B0996-001	BA 2519-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	0.72	0.72	0.002	Diff <2x LOR	----
		Cadmium, TCLP	7440-43-9	E444	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Calcium, TCLP	7440-70-2	E444	10	mg/L	730	739	1.16%	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	<0.050	<0.050	0	Diff <2x LOR	----
		Copper, TCLP	7440-50-8	E444	0.050	mg/L	0.807	0.881	8.74%	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	3.4	3.7	0.3	Diff <2x LOR	----
		Nickel, TCLP	7440-02-0	E444	0.25	mg/L	<0.25	<0.25	0	Diff <2x LOR	----
		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	<0.50	<0.50	0	Diff <2x LOR	----
Zirconium, TCLP	7440-67-7	E444	10	mg/L	<10	<10	0	Diff <2x LOR	----		



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: 2001917)						
Moisture	---	E144	0.25	%	<0.25	---
Metals (QCLot: 2001914)						
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	---
Titanium	7440-32-6	E440	1	mg/kg	<1.0	---



Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2001914) - continued						
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: 2001915)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
TCLP Metals (QCLot: 2001174)						
Mercury, TCLP	7439-97-6	E512	0.001	mg/L	<0.0010	----
TCLP Metals (QCLot: 2001175)						
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	----
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: 2001916)									
pH (1:2 soil:water)	---	E108	---	pH units	6 pH units	100	95.0	105	---
Physical Tests (QCLot: 2001917)									
Moisture	---	E144	0.25	%	50 %	101	90.0	110	---
Metals (QCLot: 2001914)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	101	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	105	80.0	120	---
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	105	80.0	120	---
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	101	80.0	120	---
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	99.6	80.0	120	---
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	99.5	80.0	120	---
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	100	80.0	120	---
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	101	80.0	120	---
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	99.4	80.0	120	---
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	97.0	80.0	120	---
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	95.8	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	101	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	99.8	80.0	120	---
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	99.6	80.0	120	---
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	98.8	80.0	120	---
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	96.4	80.0	120	---
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	107	80.0	120	---
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	97.6	80.0	120	---
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	100	80.0	120	---
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	90.8	80.0	120	---
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	98.6	80.0	120	---
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	101	80.0	120	---
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	96.0	80.0	120	---
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	99.1	80.0	120	---
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	98.7	80.0	120	---



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
Metals (QCLot: 2001914) - continued									
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	95.4	80.0	120	----
Tungsten	7440-33-7	E440	0.5	mg/kg	10 mg/kg	99.8	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	104	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	100	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	98.2	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	98.1	80.0	120	----
Metals (QCLot: 2001915)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	96.5	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 \geq 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: 2001174)										
VA25B0996-001	BA 2519-A-1	Mercury, TCLP	7439-97-6	E512	0.0026 mg/L	0.003 mg/L	85.6	50.0	140	----
TCLP Metals (QCLot: 2001175)										
VA25B0996-001	BA 2519-A-1	Antimony, TCLP	7440-36-0	E444	5.39 mg/L	5 mg/L	108	50.0	140	----
		Arsenic, TCLP	7440-38-2	E444	5.5 mg/L	5 mg/L	110	50.0	140	----
		Barium, TCLP	7440-39-3	E444	13.6 mg/L	12.5 mg/L	109	50.0	140	----
		Beryllium, TCLP	7440-41-7	E444	0.266 mg/L	0.25 mg/L	106	50.0	140	----
		Boron, TCLP	7440-42-8	E444	9.91 mg/L	10 mg/L	99.1	50.0	140	----
		Cadmium, TCLP	7440-43-9	E444	0.255 mg/L	0.25 mg/L	102	50.0	140	----
		Calcium, TCLP	7440-70-2	E444	ND mg/L	----	ND	50.0	140	----
		Chromium, TCLP	7440-47-3	E444	1.34 mg/L	1.25 mg/L	107	50.0	140	----
		Cobalt, TCLP	7440-48-4	E444	0.268 mg/L	0.25 mg/L	107	50.0	140	----
		Copper, TCLP	7440-50-8	E444	2.60 mg/L	2.5 mg/L	104	50.0	140	----
		Iron, TCLP	7439-89-6	E444	245 mg/L	250 mg/L	98.2	50.0	140	----
		Lead, TCLP	7439-92-1	E444	9.80 mg/L	10 mg/L	98.0	50.0	140	----
		Magnesium, TCLP	7439-95-4	E444	266 mg/L	250 mg/L	106	50.0	140	----
		Nickel, TCLP	7440-02-0	E444	2.60 mg/L	2.5 mg/L	104	50.0	140	----
		Selenium, TCLP	7782-49-2	E444	5.06 mg/L	5 mg/L	101	50.0	140	----
		Silver, TCLP	7440-22-4	E444	0.073 mg/L	0.1 mg/L	73.2	50.0	140	----
		Thallium, TCLP	7440-28-0	E444	5.0 mg/L	5 mg/L	99.0	50.0	140	----
		Uranium, TCLP	7440-61-1	E444	4.89 mg/L	5 mg/L	97.8	50.0	150	----
		Vanadium, TCLP	7440-62-2	E444	0.82 mg/L	0.75 mg/L	109	50.0	140	----
		Zinc, TCLP	7440-66-6	E444	10.6 mg/L	10 mg/L	106	50.0	140	----
		Zirconium, TCLP	7440-67-7	E444	0.8 mg/L	1 mg/L	85.6	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:

Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Reference Material (RM) Report				
					RM Target Concentration	Recovery (%) RM	Recovery Limits (%)		Qualifier
							Low	High	
Metals (QCLot: 2001914)									
QC-2001914-003	MRCA-21	Aluminum	7429-90-5	E440	22500 mg/kg	102	70.0	130	----
QC-2001914-003	MRCA-21	Antimony	7440-36-0	E440	24.8 mg/kg	94.0	70.0	130	----
QC-2001914-003	MRCA-21	Arsenic	7440-38-2	E440	21.2 mg/kg	96.9	70.0	130	----
QC-2001914-003	MRCA-21	Barium	7440-39-3	E440	788 mg/kg	98.7	70.0	130	----
QC-2001914-003	MRCA-21	Beryllium	7440-41-7	E440	1.82 mg/kg	104	70.0	130	----
QC-2001914-003	MRCA-21	Bismuth	7440-69-9	E440	1.78 mg/kg	85.4	70.0	130	----
QC-2001914-003	MRCA-21	Cadmium	7440-43-9	E440	2.15 mg/kg	97.1	70.0	130	----
QC-2001914-003	MRCA-21	Calcium	7440-70-2	E440	4900 mg/kg	101	70.0	130	----
QC-2001914-003	MRCA-21	Chromium	7440-47-3	E440	56.9 mg/kg	100	70.0	130	----
QC-2001914-003	MRCA-21	Cobalt	7440-48-4	E440	32 mg/kg	95.9	70.0	130	----
QC-2001914-003	MRCA-21	Copper	7440-50-8	E440	969 mg/kg	96.6	70.0	130	----
QC-2001914-003	MRCA-21	Iron	7439-89-6	E440	32700 mg/kg	102	70.0	130	----
QC-2001914-003	MRCA-21	Lead	7439-92-1	E440	919 mg/kg	94.2	70.0	130	----
QC-2001914-003	MRCA-21	Lithium	7439-93-2	E440	47.3 mg/kg	106	70.0	130	----
QC-2001914-003	MRCA-21	Magnesium	7439-95-4	E440	7780 mg/kg	98.5	70.0	130	----
QC-2001914-003	MRCA-21	Manganese	7439-96-5	E440	8640 mg/kg	96.1	70.0	130	----
QC-2001914-003	MRCA-21	Molybdenum	7439-98-7	E440	25.1 mg/kg	93.2	70.0	130	----
QC-2001914-003	MRCA-21	Nickel	7440-02-0	E440	1000 mg/kg	94.9	70.0	130	----
QC-2001914-003	MRCA-21	Phosphorus	7723-14-0	E440	660 mg/kg	102	70.0	130	----
QC-2001914-003	MRCA-21	Potassium	7440-09-7	E440	10800 mg/kg	98.8	70.0	130	----
QC-2001914-003	MRCA-21	Selenium	7782-49-2	E440	1.04 mg/kg	99.5	60.0	140	----
QC-2001914-003	MRCA-21	Silver	7440-22-4	E440	8.98 mg/kg	91.4	70.0	130	----
QC-2001914-003	MRCA-21	Sodium	7440-23-5	E440	1770 mg/kg	108	70.0	130	----
QC-2001914-003	MRCA-21	Strontium	7440-24-6	E440	41 mg/kg	96.1	70.0	130	----
QC-2001914-003	MRCA-21	Sulfur	7704-34-9	E440	3940 mg/kg	87.1	50.0	150	----
QC-2001914-003	MRCA-21	Thallium	7440-28-0	E440	0.907 mg/kg	96.0	70.0	130	----
QC-2001914-003	MRCA-21	Tin	7440-31-5	E440	3.79 mg/kg	91.9	40.0	160	----
QC-2001914-003	MRCA-21	Titanium	7440-32-6	E440	2790 mg/kg	98.0	70.0	130	----
QC-2001914-003	MRCA-21	Tungsten	7440-33-7	E440	6.99 mg/kg	96.8	70.0	130	----
QC-2001914-003	MRCA-21	Uranium	7440-61-1	E440	3.97 mg/kg	88.8	70.0	130	----
QC-2001914-003	MRCA-21	Vanadium	7440-62-2	E440	66.2 mg/kg	96.4	70.0	130	----
QC-2001914-003	MRCA-21	Zinc	7440-66-6	E440	828 mg/kg	96.9	70.0	130	----
QC-2001914-003	MRCA-21	Zirconium	7440-67-7	E440	6.91 mg/kg	96.0	70.0	130	----

Page : 11 of 11
 Work Order : VA25B0996
 Client : Veolia Environmental Services Canada
 Project : Veolia Weekly Bottom Ash-Suite



Sub-Matrix:

Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Reference Material (RM) Report				
					RM Target Concentration	Recovery (%) RM	Recovery Limits (%)		Qualifier
							Low	High	
Metals (QCLot: 2001915)									
QC-2001915-003	MRCA-21	Mercury	7439-97-6	E510	0.068 mg/kg	98.3	70.0	130	----



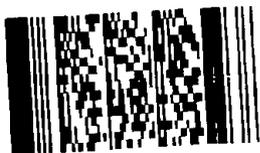
Chain of Custody / Analytical Request Form
 Canada Toll Free: 1 800 668 9878
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COC # _____

Page 1 of 1

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 / Darcie Grace																						
Address: 5150 Riverbend Drive Burnaby BC			Email 1: Darcie.grace@veolia.com																			
Phone: 604-521-1025 Fax:			Email 2: lorenzo.ilao@veolia.com																			
			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 #: Veolia Weekly Bottom Ash - Suite																			
Company: Veolia Water Canada / Burnaby Waste To Energy			PO / AFE: PO#																			
Contact: Danny George, Purchaser/Darcie Grace, SHE Manager			LSD: (includes 2:1 pH)																			
Address: 5150 Riverbend Drive, Burnaby BC V3N 4V3																						
Phone: 604 521 1025 Fax:			Quote #:																			
Lab Work Order # (lab use only)			ALS Contact:		Sampler:																	
Sample #	Sample Identification (This description will appear on the report)		Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	MET-TCLP-VA (all metals, mg)	MOISTURE	Chrome 6	MET-CSR+FULL-VA (all metals)												Number of Containers	
BA 2519-A-1			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-2			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-3			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-4			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-5			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-6			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-7			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-8			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-9			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-10			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-11			07-May-25	9:00	Soil	X	X		X													1
BA 2519-A-12			07-May-25	9:00	Soil	X	X		X													1
water Aquatic																						
Form may delay dates with the Terms numbers and																						
SHIPMENT/RECEPTION (lab use only)						SHIPMENT/VERIFICATION (lab use only)																
Released by: <i>[Signature]</i>		Date (dd-mmm-yy): 13/05/25	Time (hh-mm):	Received by:	Date:	Time:	Temperature: 19,19 °C	Verified by: <i>[Signature]</i>	Date: 5/13	Time: 1230	Observations: Yes / No? If Yes add SIF											

Environmental Division
 Vancouver
 Work Order Reference
VA25B0996



Telephone: +1 604 253 4188