

## Bottom Ash Data

2025 Week 21

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The following analytical report represents bottom ash composite results for week 21 of 2025 (May 18, 2025 to May 24, 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** : **VA25B2351**  
**Client** : **Veolia Environmental Services Canada**  
**Contact** : Brian Graham  
**Address** : 5150 Riverbend Dr.  
 Burnaby British Columbia Canada V3N 4V3  
**Telephone** : ----  
**Project** : Veolia Weekly Bottom Ash-Suite  
**PO** : ----  
**C-O-C number** : ----  
**Sampler** : ----  
**Site** : Metro Van Ash Sampling Program  
**Quote number** : VA25-VIS1100-001  
**No. of samples received** : 12  
**No. of samples analysed** : 12

**Laboratory** : ALS Environmental - Vancouver  
**Account Manager** : Gulraj Dhanaua  
**Address** : 8081 Lougheed Highway  
 Burnaby BC Canada V5A 1W9  
**E-mail** : Gulraj.Dhanaua@alsglobal.com  
**Telephone** : +1 604 253 4188  
**Date Samples Received** : 27-May-2025 13:25  
**Date Analysis Commenced** : 28-May-2025  
**Issue Date** : 03-Jun-2025 09:11

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>
Janice Leung	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia



## General Comments

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

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

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

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

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

<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-2521-A-1	BA-2521-A-2	BA-2521-A-3	BA-2521-A-4	BA-2521-A-5
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-001	VA25B2351-002	VA25B2351-003	VA25B2351-004	VA25B2351-005	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Moisture	----	E144/VA	0.25	%	26.8	25.0	26.6	26.1	26.8	
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.23	10.15	10.30	10.34	10.31	
<b>Metals</b>										
Aluminum	7429-90-5	E440/VA	50	mg/kg	42000	40400	33100	44900	35700	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	120	140	120	115	130	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	17.6	18.2	17.8	19.6	18.4	
Barium	7440-39-3	E440/VA	0.50	mg/kg	528	589	434	442	443	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.38	0.33	0.34	0.32	0.39	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	8.67	8.40	8.90	7.94	8.12	
Boron	7440-42-8	E440/VA	5.0	mg/kg	186	215	158	134	170	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	9.79	7.78	13.7	7.93	7.11	
Calcium	7440-70-2	E440/VA	50	mg/kg	140000	128000	134000	130000	136000	
Chromium	7440-47-3	E440/VA	0.50	mg/kg	212	442	185	166	155	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	112	94.3	102	148	69.3	
Copper	7440-50-8	E440/VA	0.50	mg/kg	2310	6370	2310	1450	1550	
Iron	7439-89-6	E440/VA	50	mg/kg	49900	60600	52700	64300	59200	
Lead	7439-92-1	E440/VA	0.50	mg/kg	296	850	7280	370	356	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	44.5	29.0	27.8	29.8	28.3	
Magnesium	7439-95-4	E440/VA	20	mg/kg	12800	13100	14400	13100	13400	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	955	1100	796	1230	915	
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	0.0610	0.0787	<0.0500	<0.0500	<0.0500	



## Analytical Results

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

					Client sample ID	BA-2521-A-1	BA-2521-A-2	BA-2521-A-3	BA-2521-A-4	BA-2521-A-5
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-001	VA25B2351-002	VA25B2351-003	VA25B2351-004	VA25B2351-005	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	18.1	45.0	20.6	17.0	22.1	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	190	414	155	267	257	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	12700	11100	12200	10800	11400	
Potassium	7440-09-7	E440/VA	100	mg/kg	6820	5980	5620	6540	6520	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.50	0.57	0.59	0.48	0.64	
Silver	7440-22-4	E440/VA	0.10	mg/kg	5.67	22.1	8.02	4.63	5.15	
Sodium	7440-23-5	E440/VA	50	mg/kg	19100	16000	15300	18700	17900	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	304	265	307	272	287	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	12200	13000	12400	12500	13300	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	0.061	<0.050	<0.050	
Tin	7440-31-5	E440/VA	2.0	mg/kg	99.4	132	283	98.5	104	
Titanium	7440-32-6	E440/VA	1.0	mg/kg	245	284	183	302	246	
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	24.1	17.7	14.8	20.8	17.0	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	2.20	1.98	1.94	1.84	2.14	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	38.7	35.4	32.2	34.2	41.0	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	3840	6950	5740	3800	4060	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	1.9	2.1	3.3	3.2	2.6	
<b>TCLP Metals</b>										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.22	11.23	11.23	11.28	11.34	
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	1.94	2.02	1.99	2.22	2.03	
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	4.96	4.96	4.96	4.96	4.96	



## Analytical Results

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

					Client sample ID				
					BA-2521-A-1	BA-2521-A-2	BA-2521-A-3	BA-2521-A-4	BA-2521-A-5
					Client sampling date / time				
					21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-001	VA25B2351-002	VA25B2351-003	VA25B2351-004	VA25B2351-005
					Result	Result	Result	Result	Result
<b>TCLP Metals</b>									
pH, TCLP final	----	EPP444/VA	0.010	pH units	9.65	9.54	9.72	9.68	10.02
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	0.69	0.74	0.71	0.70	0.71
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	744	767	761	752	769
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	0.799	0.728	0.763	0.733	0.788
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	3.8	6.5	5.1	5.9	3.2
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-2521-A-1	BA-2521-A-2	BA-2521-A-3	BA-2521-A-4	BA-2521-A-5
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-001	VA25B2351-002	VA25B2351-003	VA25B2351-004	VA25B2351-005	
					Result	Result	Result	Result	Result	
<b>TCLP Metals</b>										
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-2521-A-6	BA-2521-A-7	BA-2521-A-8	BA-2521-A-9	BA-2521-A-10
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-006	VA25B2351-007	VA25B2351-008	VA25B2351-009	VA25B2351-010	
					Result	Result	Result	Result	Result	
<b>Physical Tests</b>										
Moisture	----	E144/VA	0.25	%	25.8	25.7	24.6	26.0	25.2	
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.30	10.33	10.33	10.33	10.28	
<b>Metals</b>										
Aluminum	7429-90-5	E440/VA	50	mg/kg	33000	42200	56900	35000	36800	
Antimony	7440-36-0	E440/VA	0.10	mg/kg	138	98.0	112	121	112	
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	18.4	15.0	22.3	24.5	18.3	
Barium	7440-39-3	E440/VA	0.50	mg/kg	485	565	622	494	491	
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.35	0.31	0.33	1.34	0.31	
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	10.4	8.29	7.36	8.70	13.0	
Boron	7440-42-8	E440/VA	5.0	mg/kg	159	175	294	142	176	
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	9.23	7.20	6.89	8.42	10.7	
Calcium	7440-70-2	E440/VA	50	mg/kg	135000	120000	131000	124000	130000	



## Analytical Results

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

					Client sample ID	BA-2521-A-6	BA-2521-A-7	BA-2521-A-8	BA-2521-A-9	BA-2521-A-10
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-006	VA25B2351-007	VA25B2351-008	VA25B2351-009	VA25B2351-010	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Chromium	7440-47-3	E440/VA	0.50	mg/kg	176	300	204	612	177	
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	103	88.6	174	75.4	44.5	
Copper	7440-50-8	E440/VA	0.50	mg/kg	12500	2320	2170	15600	5710	
Iron	7439-89-6	E440/VA	50	mg/kg	48300	67500	57600	68500	64100	
Lead	7439-92-1	E440/VA	0.50	mg/kg	1000	817	2320	1120	460	
Lithium	7439-93-2	E440/VA	2.0	mg/kg	38.6	25.8	30.9	28.1	27.3	
Magnesium	7439-95-4	E440/VA	20	mg/kg	13300	12300	12600	13900	13600	
Manganese	7439-96-5	E440/VA	1.0	mg/kg	1140	909	1090	999	904	
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	0.0512	<0.0500	<0.0500	<0.0500	0.0918	
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	17.0	19.9	17.0	19.8	16.9	
Nickel	7440-02-0	E440/VA	0.50	mg/kg	234	207	209	571	164	
Phosphorus	7723-14-0	E440/VA	50	mg/kg	11600	9980	11000	10800	12000	
Potassium	7440-09-7	E440/VA	100	mg/kg	6040	5380	5380	5610	5680	
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.59	0.48	0.54	0.53	0.78	
Silver	7440-22-4	E440.Ag/VA	0.10	mg/kg	----	----	----	4.89	----	
Silver	7440-22-4	E440/VA	0.10	mg/kg	7.68	5.62	5.32	----	9.84	
Sodium	7440-23-5	E440/VA	50	mg/kg	15900	16200	16200	15200	16300	
Strontium	7440-24-6	E440/VA	0.50	mg/kg	364	277	292	309	265	
Sulfur	7704-34-9	E440/VA	1000	mg/kg	13300	11200	12000	12000	16900	
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	<0.050	0.064	<0.050	
Tin	7440-31-5	E440/VA	2.0	mg/kg	125	121	114	146	105	



## Analytical Results

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

					Client sample ID	BA-2521-A-6	BA-2521-A-7	BA-2521-A-8	BA-2521-A-9	BA-2521-A-10
					Client sampling date / time	21-May-2025 09:00				
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-006	VA25B2351-007	VA25B2351-008	VA25B2351-009	VA25B2351-010	
					Result	Result	Result	Result	Result	
<b>Metals</b>										
Titanium	7440-32-6	E440/VA	1.0	mg/kg	216	234	364	228	207	
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	15.6	13.1	13.4	19.5	12.9	
Uranium	7440-61-1	E440/VA	0.050	mg/kg	2.06	1.72	1.90	1.81	1.97	
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	32.4	31.6	32.5	32.7	36.9	
Zinc	7440-66-6	E440/VA	2.0	mg/kg	4240	3240	4100	14000	4310	
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	3.0	5.0	4.0	2.8	3.2	
<b>TCLP Metals</b>										
pH, TCLP 1st preliminary	---	EPP444/VA	0.010	pH units	11.33	11.27	11.29	11.30	11.26	
pH, TCLP 2nd preliminary	---	EPP444/VA	0.010	pH units	2.00	2.07	2.15	2.06	2.42	
pH, TCLP extraction fluid initial	---	EPP444/VA	0.010	pH units	4.96	4.96	4.96	4.96	4.96	
pH, TCLP final	---	EPP444/VA	0.010	pH units	9.56	9.95	9.54	9.78	9.90	
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	0.76	0.71	0.73	0.74	0.72	
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	731	755	797	785	798	
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	0.768	0.818	0.793	0.707	0.793	



### Analytical Results

					Client sample ID				
					BA-2521-A-6	BA-2521-A-7	BA-2521-A-8	BA-2521-A-9	BA-2521-A-10
					Client sampling date / time				
					21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00	21-May-2025 09:00
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-006	VA25B2351-007	VA25B2351-008	VA25B2351-009	VA25B2351-010
					Result	Result	Result	Result	Result
<b>TCLP Metals</b>									
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	5.3	3.1	4.4	5.9	3.8
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-2521-A-11	BA-2521-A-12	----	----	----
					Client sampling date / time				
					21-May-2025 09:00	21-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-011	VA25B2351-012	----	----	----
					Result	Result	----	----	----
<b>Physical Tests</b>									
Moisture	----	E144/VA	0.25	%	25.8	25.7	----	----	----
pH (1:2 soil:water)	----	E108/VA	0.10	pH units	10.43	10.36	----	----	----



## Analytical Results

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

					Client sample ID		BA-2521-A-11	BA-2521-A-12	----	----	----
					Client sampling date / time		21-May-2025 09:00	21-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-011	VA25B2351-012	----	----	----		
					Result	Result	----	----	----		
<b>Metals</b>											
Aluminum	7429-90-5	E440/VA	50	mg/kg	32500	33300	----	----	----		
Antimony	7440-36-0	E440/VA	0.10	mg/kg	138	128	----	----	----		
Arsenic	7440-38-2	E440/VA	0.10	mg/kg	19.2	19.9	----	----	----		
Barium	7440-39-3	E440/VA	0.50	mg/kg	534	419	----	----	----		
Beryllium	7440-41-7	E440/VA	0.10	mg/kg	0.32	0.33	----	----	----		
Bismuth	7440-69-9	E440/VA	0.20	mg/kg	10.9	9.54	----	----	----		
Boron	7440-42-8	E440/VA	5.0	mg/kg	170	151	----	----	----		
Cadmium	7440-43-9	E440/VA	0.020	mg/kg	9.58	9.50	----	----	----		
Calcium	7440-70-2	E440/VA	50	mg/kg	139000	141000	----	----	----		
Chromium	7440-47-3	E440/VA	0.50	mg/kg	191	214	----	----	----		
Cobalt	7440-48-4	E440/VA	0.10	mg/kg	136	580	----	----	----		
Copper	7440-50-8	E440/VA	0.50	mg/kg	3460	2190	----	----	----		
Iron	7439-89-6	E440/VA	50	mg/kg	56600	54300	----	----	----		
Lead	7439-92-1	E440/VA	0.50	mg/kg	964	609	----	----	----		
Lithium	7439-93-2	E440/VA	2.0	mg/kg	27.6	30.2	----	----	----		
Magnesium	7439-95-4	E440/VA	20	mg/kg	13800	13400	----	----	----		
Manganese	7439-96-5	E440/VA	1.0	mg/kg	831	813	----	----	----		
Mercury	7439-97-6	E510/VA	0.0500	mg/kg	<0.0500	<0.0500	----	----	----		
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg	19.3	23.0	----	----	----		
Nickel	7440-02-0	E440/VA	0.50	mg/kg	523	206	----	----	----		
Phosphorus	7723-14-0	E440/VA	50	mg/kg	13100	13100	----	----	----		



## Analytical Results

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

					Client sample ID		BA-2521-A-11	BA-2521-A-12	----	----	----
					Client sampling date / time		21-May-2025 09:00	21-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-011	VA25B2351-012	----	----	----	----	----
					Result	Result	----	----	----	----	----
<b>Metals</b>											
Potassium	7440-09-7	E440/VA	100	mg/kg	5630	5960	----	----	----	----	----
Selenium	7782-49-2	E440/VA	0.20	mg/kg	0.67	0.56	----	----	----	----	----
Silver	7440-22-4	E440/VA	0.10	mg/kg	5.95	5.06	----	----	----	----	----
Sodium	7440-23-5	E440/VA	50	mg/kg	15300	15600	----	----	----	----	----
Strontium	7440-24-6	E440/VA	0.50	mg/kg	289	312	----	----	----	----	----
Sulfur	7704-34-9	E440/VA	1000	mg/kg	13900	13400	----	----	----	----	----
Thallium	7440-28-0	E440/VA	0.050	mg/kg	<0.050	<0.050	----	----	----	----	----
Tin	7440-31-5	E440/VA	2.0	mg/kg	123	121	----	----	----	----	----
Titanium	7440-32-6	E440/VA	1.0	mg/kg	191	220	----	----	----	----	----
Tungsten	7440-33-7	E440/VA	0.50	mg/kg	242	18.4	----	----	----	----	----
Uranium	7440-61-1	E440/VA	0.050	mg/kg	2.03	2.25	----	----	----	----	----
Vanadium	7440-62-2	E440/VA	0.20	mg/kg	31.8	35.1	----	----	----	----	----
Zinc	7440-66-6	E440/VA	2.0	mg/kg	4060	5500	----	----	----	----	----
Zirconium	7440-67-7	E440/VA	1.0	mg/kg	2.0	2.5	----	----	----	----	----
<b>TCLP Metals</b>											
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units	11.29	11.25	----	----	----	----	----
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units	2.31	2.10	----	----	----	----	----
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units	4.96	4.96	----	----	----	----	----
pH, TCLP final	----	EPP444/VA	0.010	pH units	9.97	9.91	----	----	----	----	----
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-2521-A-11	BA-2521-A-12	----	----	----
					Client sampling date / time		21-May-2025 09:00	21-May-2025 09:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25B2351-011	VA25B2351-012	----	----	----	----	----
					Result	Result	----	----	----	----	----
<b>TCLP Metals</b>											
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	0.69	0.75	----	----	----	----	----
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	748	790	----	----	----	----	----
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	0.809	0.742	----	----	----	----	----
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	4.0	4.4	----	----	----	----	----
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

<b>Work Order</b>	: <b>VA25B2351</b>	Page	: 1 of 22
<b>Client</b>	: <b>Veolia Environmental Services Canada</b>	Laboratory	: ALS Environmental - Vancouver
<b>Contact</b>	: Brian Graham	Account Manager	: Gulraj Dhanaua
<b>Address</b>	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
<b>Telephone</b>	: ----	Telephone	: +1 604 253 4188
<b>Project</b>	: Veolia Weekly Bottom Ash-Suite	Date Samples Received	: 27-May-2025 13:25
<b>PO</b>	: ----	Date Analysis	: 28-May-2025
<b>C-O-C number</b>	: ----	Commenced	
<b>Sampler</b>	: ----	Issue Date	: 03-Jun-2025 09:11
<b>Site</b>	: Metro Van Ash Sampling Program		
<b>Quote number</b>	: VA25-VIS1100-001		
<b>No. of samples received</b>	: 12		
<b>No. of samples analysed</b>	: 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>
Janice Leung	Supervisor - Organics Instrumentation	Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia



## General Comments

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

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

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

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

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances

LOR: Limit of Reporting (detection limit).

Measurement Uncertainty: The reported uncertainties in this report are expanded uncertainties calculated using a coverage factor of 2, which gives a level of confidence of approximately 95%.

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

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

>: greater than.

<: less than.

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

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



## Analytical Results

VA25B2351-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-1

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	26.8	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.23	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	42000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	120	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	17.6	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	528	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.38	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.67	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	186	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	9.79	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	140000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	212	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	112	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	2310	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	49900	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	296	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	44.5	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	12800	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	955	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	0.0610	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	18.1	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	190	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	12700	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	6820	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.50	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.67	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	19100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	304	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	12200	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	99.4	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	245	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	24.1	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	2.20	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	38.7	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	3840	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	1.9	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.22	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	1.94	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.65	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-001

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-1

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.69	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	744	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.799	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	3.8	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-2

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	25.0	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.15	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	40400	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	140	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	18.2	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	589	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.40	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	215	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	7.78	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	128000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	442	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	94.3	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	6370	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-2

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Metals</b>								
Iron	7439-89-6	60600	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	850	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	29.0	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13100	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	1100	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	0.0787	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	45.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	414	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	11100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5980	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.57	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	22.1	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	16000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	265	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	13000	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	132	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	284	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	17.7	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.98	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	35.4	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	6950	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	2.1	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.23	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.02	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.54	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.74	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	767	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.728	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	6.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-002

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-2

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-3

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	26.6	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.30	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	33100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	120	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	17.8	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	434	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.34	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.90	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	158	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	13.7	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	134000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	185	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	102	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	2310	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	52700	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	7280	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	27.8	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	14400	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	796	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	20.6	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	155	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	12200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5620	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.59	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	8.02	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	15300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	307	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	12400	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-003

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-3

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Metals</b>								
Thallium	7440-28-0	0.061	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	283	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	183	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	14.8	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.94	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	32.2	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	5740	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	3.3	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.23	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	1.99	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.72	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.71	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	761	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.763	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	5.1	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-4

Client sampling date / time: 21-May-2025 09:00

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



## Analytical Results

VA25B2351-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-4

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Physical Tests</b>								
Moisture	----	26.1	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.34	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	44900	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	115	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	19.6	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	442	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.32	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	7.94	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	134	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	7.93	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	130000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	166	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	148	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	1450	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	64300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	370	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	29.8	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13100	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	1230	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	17.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	267	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	10800	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	6540	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.48	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	4.63	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	18700	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	272	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	12500	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	98.5	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	302	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	20.8	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.84	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	34.2	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	3800	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	3.2	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.28	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.22	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.68	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-004

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-4

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.70	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	752	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.733	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	5.9	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-5

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	26.8	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.31	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	35700	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	130	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	18.4	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	443	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.39	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.12	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	170	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	7.11	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	136000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	155	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	69.3	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	1550	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-5

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Metals</b>								
Iron	7439-89-6	59200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	356	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	28.3	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13400	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	915	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	22.1	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	257	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	11400	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	6520	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.64	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.15	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	17900	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	287	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	13300	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	104	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	246	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	17.0	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	2.14	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	41.0	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	4060	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	2.6	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.34	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.03	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	10.02	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.71	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	769	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.788	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	3.2	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-005

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-5

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-006

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-6

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	25.8	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.30	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	33000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	138	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	18.4	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	485	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.35	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	10.4	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	159	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	9.23	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	135000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	176	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	103	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	12500	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	48300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	1000	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	38.6	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13300	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	1140	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	0.0512	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	17.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	234	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	11600	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	6040	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.59	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	7.68	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	15900	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	364	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	13300	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-006

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-6

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Metals</b>								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	125	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	216	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	15.6	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	2.06	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	32.4	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	4240	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	3.0	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.33	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.00	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.56	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.76	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	731	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.768	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	5.3	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-7

Client sampling date / time: 21-May-2025 09:00

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



## Analytical Results

VA25B2351-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-7

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Physical Tests</b>								
Moisture	----	25.7	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.33	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	42200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	98.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	15.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	565	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.31	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.29	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	175	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	7.20	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	120000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	300	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	88.6	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	2320	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	67500	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	817	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	25.8	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	12300	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	909	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	19.9	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	207	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	9980	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5380	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.48	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.62	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	16200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	277	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	11200	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	121	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	234	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	13.1	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.72	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	31.6	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	3240	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	5.0	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.27	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.07	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.95	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-007

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-7

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.71	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	755	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.818	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	3.1	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-8

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	24.6	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.33	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	56900	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	112	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	22.3	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	622	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	7.36	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	294	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	6.89	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	131000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	204	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	174	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	2170	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-8

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Metals</b>								
Iron	7439-89-6	57600	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	2320	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	30.9	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	12600	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	1090	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	17.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	209	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	11000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5380	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.54	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.32	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	16200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	292	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	12000	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	114	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	364	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	13.4	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.90	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	32.5	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	4100	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	4.0	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.15	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.54	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.73	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	797	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.793	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	4.4	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-008

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-8

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-009

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-9

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	26.0	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.33	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	35000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	121	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	24.5	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	494	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	1.34	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	8.70	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	142	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	8.42	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	124000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	612	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	75.4	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	15600	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	68500	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	1120	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	28.1	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13900	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	999	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	19.8	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	571	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	10800	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5610	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.53	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	4.89	0.30	mg/kg	E440.Ag/VA	02-Jun-2025	03-Jun-2025	2028724
Sodium	7440-23-5	15200	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	309	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	12000	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-009

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-9

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Metals</b>								
Thallium	7440-28-0	0.064	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	146	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	228	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	19.5	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.81	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	32.7	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	14000	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	2.8	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.30	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.06	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.78	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.74	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	785	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.707	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	5.9	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-10

Client sampling date / time: 21-May-2025 09:00

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



## Analytical Results

VA25B2351-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-10

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Physical Tests</b>								
Moisture	----	25.2	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.28	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	36800	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	112	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	18.3	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	491	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.31	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	13.0	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	176	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	10.7	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	130000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	177	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	44.5	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	5710	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	64100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	460	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	27.3	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13600	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	904	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	0.0918	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	16.9	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	164	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	12000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5680	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.78	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	9.84	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	16300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	265	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	16900	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	105	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	207	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	12.9	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	1.97	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	36.9	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	4310	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	3.2	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.26	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.42	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.90	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-010

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-10

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.72	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	798	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.793	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	3.8	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-11

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	25.8	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.43	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	32500	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	138	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	19.2	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	534	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.32	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	10.9	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	170	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	9.58	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	139000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	191	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	136	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	3460	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-11

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
<b>Metals</b>								
Iron	7439-89-6	56600	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	964	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	27.6	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13800	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	831	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	19.3	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	523	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	13100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5630	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.67	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.95	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	15300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	289	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	13900	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	123	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	191	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	242	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	2.03	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	31.8	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	4060	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	2.0	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.29	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.31	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.97	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.69	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	748	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.809	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	4.0	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990



## Analytical Results

VA25B2351-011

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-11

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>TCLP Metals</b>								
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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

## Analytical Results

VA25B2351-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-12

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Moisture	----	25.7	0.25	%	E144/VA	-	30-May-2025	2024983
pH (1:2 soil:water)	----	10.36	0.10	pH units	E108/VA	31-May-2025	31-May-2025	2024979
<b>Metals</b>								
Aluminum	7429-90-5	33300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Antimony	7440-36-0	128	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Arsenic	7440-38-2	19.9	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Barium	7440-39-3	419	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Beryllium	7440-41-7	0.33	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Bismuth	7440-69-9	9.54	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Boron	7440-42-8	151	5.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cadmium	7440-43-9	9.50	0.020	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Calcium	7440-70-2	141000	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Chromium	7440-47-3	214	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Cobalt	7440-48-4	580	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Copper	7440-50-8	2190	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Iron	7439-89-6	54300	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lead	7439-92-1	609	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Lithium	7439-93-2	30.2	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Magnesium	7439-95-4	13400	20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Manganese	7439-96-5	813	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Mercury	7439-97-6	<0.0500	0.0500	mg/kg	E510/VA	31-May-2025	31-May-2025	2024980
Molybdenum	7439-98-7	23.0	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Nickel	7440-02-0	206	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Phosphorus	7723-14-0	13100	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Potassium	7440-09-7	5960	100	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Selenium	7782-49-2	0.56	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Silver	7440-22-4	5.06	0.10	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sodium	7440-23-5	15600	50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Strontium	7440-24-6	312	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Sulfur	7704-34-9	13400	1000	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981



## Analytical Results

VA25B2351-012

Sub-Matrix: Soil

(Matrix: Soil/Solid)

Client sample ID: BA-2521-A-12

Client sampling date / time: 21-May-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Metals</b>								
Thallium	7440-28-0	<0.050	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tin	7440-31-5	121	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Titanium	7440-32-6	220	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Tungsten	7440-33-7	18.4	0.50	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Uranium	7440-61-1	2.25	0.050	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Vanadium	7440-62-2	35.1	0.20	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zinc	7440-66-6	5500	2.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
Zirconium	7440-67-7	2.5	1.0	mg/kg	E440/VA	31-May-2025	01-Jun-2025	2024981
<b>TCLP Metals</b>								
pH, TCLP 1st preliminary	----	11.25	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP 2nd preliminary	----	2.10	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP extraction fluid initial	----	4.96	0.010	pH units	EPP444/VA	-	28-May-2025	-
pH, TCLP final	----	9.91	0.010	pH units	EPP444/VA	-	28-May-2025	-
Antimony, TCLP	7440-36-0	<1.00	1.00	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Arsenic, TCLP	7440-38-2	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Barium, TCLP	7440-39-3	<2.5	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Beryllium, TCLP	7440-41-7	<0.025	0.025	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Boron, TCLP	7440-42-8	0.75	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cadmium, TCLP	7440-43-9	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Calcium, TCLP	7440-70-2	790	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Chromium, TCLP	7440-47-3	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Cobalt, TCLP	7440-48-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Copper, TCLP	7440-50-8	0.742	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Iron, TCLP	7439-89-6	<5.0	5.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Lead, TCLP	7439-92-1	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Magnesium, TCLP	7439-95-4	4.4	2.5	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Mercury, TCLP	7439-97-6	<0.0010	0.0010	mg/L	E512/VA	31-May-2025	31-May-2025	2025432
Nickel, TCLP	7440-02-0	<0.25	0.25	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Selenium, TCLP	7782-49-2	<0.10	0.10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Silver, TCLP	7440-22-4	<0.050	0.050	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Thallium, TCLP	7440-28-0	<1.0	1.0	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Uranium, TCLP	7440-61-1	<0.20	0.20	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Vanadium, TCLP	7440-62-2	<0.15	0.15	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zinc, TCLP	7440-66-6	<0.50	0.50	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990
Zirconium, TCLP	7440-67-7	<10	10	mg/L	E444/VA	31-May-2025	01-Jun-2025	2025990

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



## QUALITY CONTROL INTERPRETIVE REPORT

<p><b>Work Order</b> : <b>VA25B2351</b></p> <p><b>Client</b> : <b>Veolia Environmental Services Canada</b></p> <p><b>Contact</b> : Brian Graham</p> <p><b>Address</b> : 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3</p> <p><b>Telephone</b> : ----</p> <p><b>Project</b> : Veolia Weekly Bottom Ash-Suite</p> <p><b>PO</b> : ----</p> <p><b>C-O-C number</b> : ----</p> <p><b>Sampler</b> : ----</p> <p><b>Site</b> : Metro Van Ash Sampling Program</p> <p><b>Quote number</b> : VA25-VIS1100-001</p> <p><b>No. of samples received</b> : 12</p> <p><b>No. of samples analysed</b> : 12</p>	<p><b>Page</b> : 1 of 16</p> <p><b>Laboratory</b> : ALS Environmental - Vancouver</p> <p><b>Account Manager</b> : Gulraj Dhanaua</p> <p><b>Address</b> : 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9</p> <p><b>Telephone</b> : +1 604 253 4188</p> <p><b>Date Samples Received</b> : 27-May-2025 13:25</p> <p><b>Issue Date</b> : 03-Jun-2025 09:11</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 Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

#### ***Outliers: Reference Material (RM) Samples***

- No Reference Material (RM) Sample outliers occur.

### ***Outliers : Analysis Holding Time Compliance (Breaches)***

- No Analysis Holding Time Outliers exist.

### ***Outliers : Frequency of Quality Control Samples***

- No Quality Control Sample Frequency Outliers occur.



**Outliers : Quality Control Samples**

*Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes*

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
<b>Duplicate (DUP) RPDs</b>								
Metals	VA25B2351-001	BA-2521-A-1	Arsenic	7440-38-2	E440	32.6 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25B2351-001	BA-2521-A-1	Bismuth	7440-69-9	E440	110 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25B2351-001	BA-2521-A-1	Boron	7440-42-8	E440	44.3 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25B2351-001	BA-2521-A-1	Cobalt	7440-48-4	E440	65.0 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25B2351-001	BA-2521-A-1	Lithium	7439-93-2	E440	55.1 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25B2351-001	BA-2521-A-1	Tungsten	7440-33-7	E440	58.0 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.

**Result Qualifiers**

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



## Analysis Holding Time Compliance

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

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

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

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

Matrix: **Soil/Solid**

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

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
<b>Metals : High Silver in Soil/Solid by CRC ICPMS</b>										
<b>LDPE bag</b> BA-2521-A-9	E440.Ag	21-May-2025	02-Jun-2025	180 days	12 days	✔	03-Jun-2025	180 days	12 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-1	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-10	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-11	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-12	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-2	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔
<b>Metals : Mercury in Soil/Solid by CVAAS</b>										
<b>LDPE bag</b> BA-2521-A-3	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 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		
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-4	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-5	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-6	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-7	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-8	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Mercury in Soil/Solid by CVAAS</b>											
<b>LDPE bag</b> BA-2521-A-9	E510	21-May-2025	31-May-2025	28 days	10 days	✔	31-May-2025	28 days	0 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICMS</b>											
<b>LDPE bag</b> BA-2521-A-1	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICMS</b>											
<b>LDPE bag</b> BA-2521-A-10	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICMS</b>											
<b>LDPE bag</b> BA-2521-A-11	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-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		
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-12	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-2	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-3	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-4	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-5	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-6	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-7	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-8	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-2025	180 days	10 days	✔	
<b>Metals : Metals in Soil/Solid by CRC ICPMS</b>											
<b>LDPE bag</b> BA-2521-A-9	E440	21-May-2025	31-May-2025	180 days	10 days	✔	01-Jun-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		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-1	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-10	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-11	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-12	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-2	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-3	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-4	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-5	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-6	E144	21-May-2025	----	----	----		30-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		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-7	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-8	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : Moisture Content by Gravimetry</b>											
LDPE bag BA-2521-A-9	E144	21-May-2025	----	----	----		30-May-2025	----	----		
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-1	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-10	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-11	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-12	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-2	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
LDPE bag BA-2521-A-3	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-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		
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-4	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-5	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-6	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-7	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-8	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>Physical Tests : pH by Meter (1:2 Soil:Water Extraction)</b>											
<b>LDPE bag</b> BA-2521-A-9	E108	21-May-2025	31-May-2025	30 days	10 days	✔	31-May-2025	30 days	10 days	✔	
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>											
<b>Glass vial - total (lab preserved)</b> BA-2521-A-1	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔	
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>											
<b>Glass vial - total (lab preserved)</b> BA-2521-A-10	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔	
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>											
<b>Glass vial - total (lab preserved)</b> BA-2521-A-11	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 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	
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-12	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-2	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-3	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-4	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-5	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-6	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-7	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-8	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 days	10 days	✔
<b>TCLP Metals : Mercury by CVAAS (TCLP)</b>										
Glass vial - total (lab preserved) BA-2521-A-9	E512	28-May-2025	31-May-2025	35 days	10 days	✔	31-May-2025	35 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		
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-1	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-10	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-11	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-12	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-2	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-3	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-4	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-5	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-6	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 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		
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-7	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-8	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : Metals by CRC ICPMS (TCLP)</b>											
HDPE - total (lab preserved) BA-2521-A-9	E444	28-May-2025	31-May-2025	187 days	10 days	✔	01-Jun-2025	187 days	10 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-1	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-10	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-11	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-12	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-2	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>											
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-3	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 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	
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-4	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-5	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-6	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-7	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-8	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 days	✔
<b>TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)</b>										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA-2521-A-9	EPP444	21-May-2025	28-May-2025	----	----		----	28 days	7 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
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
pH by Meter (1:2 Soil:Water Extraction)	E108	2024979	1	15	6.6	5.0	✔
Moisture Content by Gravimetry	E144	2024983	1	12	8.3	5.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2024981	1	14	7.1	5.0	✔
Metals by CRC ICPMS (TCLP)	E444	2025990	1	12	8.3	5.0	✔
Mercury in Soil/Solid by CVAAS	E510	2024980	1	14	7.1	5.0	✔
Mercury by CVAAS (TCLP)	E512	2025432	1	12	8.3	5.0	✔
<b>Laboratory Control Samples (LCS)</b>							
pH by Meter (1:2 Soil:Water Extraction)	E108	2024979	1	15	6.6	5.0	✔
Moisture Content by Gravimetry	E144	2024983	1	12	8.3	5.0	✔
High Silver in Soil/Solid by CRC ICPMS	E440.Ag	2028724	2	1	200.0	10.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2024981	2	14	14.2	10.0	✔
Mercury in Soil/Solid by CVAAS	E510	2024980	2	14	14.2	10.0	✔
<b>Method Blanks (MB)</b>							
Moisture Content by Gravimetry	E144	2024983	1	12	8.3	5.0	✔
High Silver in Soil/Solid by CRC ICPMS	E440.Ag	2028724	1	1	100.0	5.0	✔
Metals in Soil/Solid by CRC ICPMS	E440	2024981	1	14	7.1	5.0	✔
Metals by CRC ICPMS (TCLP)	E444	2025990	1	12	8.3	5.0	✔
Mercury in Soil/Solid by CVAAS	E510	2024980	1	14	7.1	5.0	✔
Mercury by CVAAS (TCLP)	E512	2025432	1	12	8.3	5.0	✔
<b>Matrix Spikes (MS)</b>							
Metals by CRC ICPMS (TCLP)	E444	2025990	1	12	8.3	5.0	✔
Mercury by CVAAS (TCLP)	E512	2025432	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 <sub>3</sub> and HCl.  Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines.  Analysis is by Collision/Reaction Cell ICPMS.
High Silver in Soil/Solid by CRC ICPMS	E440.Ag ALS Environmental - Vancouver	Soil/Solid	EPA 6020B (mod)	Samples are sieved through a 2 mm sieve, and digested with HNO <sub>3</sub> and HCl. This method is intended to liberate metals that may be environmentally available. Silicate minerals are not solubilized. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. Analysis is by Collision/Reaction Cell ICPMS.
Metals by CRC ICPMS (TCLP)	E444 ALS Environmental - Vancouver	Soil/Solid	EPA 1311/6020B (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by Collision/Reaction Cell ICPMS.
Mercury in Soil/Solid by CVAAS	E510 ALS Environmental - Vancouver	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO <sub>3</sub> 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



<i>Preparation Methods</i>	<i>Method / Lab</i>	<i>Matrix</i>	<i>Method Reference</i>	<i>Method Descriptions</i>
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Vancouver	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.
Digestion for Metals and Mercury	EP440 ALS Environmental - Vancouver	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO <sub>3</sub> and HCl. This method is intended to liberate metals that may be environmentally available.
Digestion for Silver	EP440.Ag ALS Environmental - Vancouver	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO <sub>3</sub> 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

<b>Work Order</b>	<b>: VA25B2351</b>	<b>Page</b>	: 1 of 13
<b>Client</b>	: Veolia Environmental Services Canada	<b>Laboratory</b>	: ALS Environmental - Vancouver
<b>Contact</b>	: Brian Graham	<b>Account Manager</b>	: Gulraj Dhanaua
<b>Address</b>	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	<b>Address</b>	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
<b>Telephone</b>	: ----	<b>Telephone</b>	: +1 604 253 4188
<b>Project</b>	: Veolia Weekly Bottom Ash-Suite	<b>Date Samples Received</b>	: 27-May-2025 13:25
<b>PO</b>	: ----	<b>Date Analysis Commenced</b>	: 28-May-2025
<b>C-O-C number</b>	: ----	<b>Issue Date</b>	: 03-Jun-2025 09:11
<b>Sampler</b>	: ----		
<b>Site</b>	: Metro Van Ash Sampling Program		
<b>Quote number</b>	: VA25-VISI100-001		
<b>No. of samples received</b>	: 12		
<b>No. of samples analysed</b>	: 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>
Janice Leung	Supervisor - Organics Instrumentation	Vancouver Organics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia



## General Comments

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

### Key :

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

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

DQO = Data Quality Objective.

LOR = Limit of Reporting (detection limit).

RPD = Relative Percent Difference

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

## Workorder Comments

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

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### 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
<b>Physical Tests (QC Lot: 2024979)</b>											
VA25B2351-001	BA-2521-A-1	pH (1:2 soil:water)	----	E108	0.10	pH units	10.23	10.31	0.8%	5%	----
<b>Physical Tests (QC Lot: 2024983)</b>											
VA25B2351-001	BA-2521-A-1	Moisture	----	E144	0.25	%	26.8	27.3	1.79%	20%	----
<b>Metals (QC Lot: 2024980)</b>											
VA25B2351-001	BA-2521-A-1	Mercury	7439-97-6	E510	0.0500	mg/kg	0.0610	0.0767	0.0157	Diff <2x LOR	----
<b>Metals (QC Lot: 2024981)</b>											
VA25B2351-001	BA-2521-A-1	Aluminum	7429-90-5	E440	50	mg/kg	42000	37900	10.4%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	120	111	8.09%	30%	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	17.6	24.5	32.6%	30%	DUP-H
		Barium	7440-39-3	E440	0.50	mg/kg	528	520	1.40%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.38	0.34	0.04	Diff <2x LOR	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	8.67	29.8	110%	30%	DUP-H
		Boron	7440-42-8	E440	5.0	mg/kg	186	292	44.3%	30%	DUP-H
		Cadmium	7440-43-9	E440	0.020	mg/kg	9.79	8.05	19.5%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	140000	126000	11.1%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	212	174	19.7%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	112	56.9	65.0%	30%	DUP-H
		Copper	7440-50-8	E440	0.50	mg/kg	2310	1960	16.1%	30%	----
		Iron	7439-89-6	E440	50	mg/kg	49900	60900	20.0%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	296	392	28.0%	40%	----
		Lithium	7439-93-2	E440	2.0	mg/kg	44.5	25.3	55.1%	30%	DUP-H
		Magnesium	7439-95-4	E440	20	mg/kg	12800	12800	0.166%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	955	1150	18.7%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	18.1	16.3	10.3%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	190	148	25.4%	30%	----
		Phosphorus	7723-14-0	E440	50	mg/kg	12700	14400	12.2%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	6820	6060	11.8%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.50	0.56	0.07	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	5.67	5.42	4.36%	40%	----
		Sodium	7440-23-5	E440	50	mg/kg	19100	17300	9.60%	40%	----



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
<b>Metals (QC Lot: 2024981) - continued</b>											
VA25B2351-001	BA-2521-A-1	Strontium	7440-24-6	E440	0.50	mg/kg	304	399	27.1%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	12200	12400	1.75%	30%	----
		Thallium	7440-28-0	E440	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	----
		Tin	7440-31-5	E440	2.0	mg/kg	99.4	103	3.78%	40%	----
		Titanium	7440-32-6	E440	1.0	mg/kg	245	202	19.0%	40%	----
		Tungsten	7440-33-7	E440	0.50	mg/kg	24.1	13.3	58.0%	30%	DUP-H
		Uranium	7440-61-1	E440	0.050	mg/kg	2.20	1.92	13.4%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	38.7	31.4	20.8%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	3840	3750	2.41%	30%	----
Zirconium	7440-67-7	E440	1.0	mg/kg	1.9	2.4	0.4	Diff <2x LOR	----		
<b>TCLP Metals (QC Lot: 2025432)</b>											
VA25B2351-001	BA-2521-A-1	Mercury, TCLP	7439-97-6	E512	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
<b>TCLP Metals (QC Lot: 2025990)</b>											
VA25B2351-001	BA-2521-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	0.69	0.70	0.010	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	744	758	1.88%	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	0.799	0.785	1.75%	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	3.8	3.6	0.2	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	----		



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## Qualifiers

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

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## 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
<b>Physical Tests (QCLot: 2024983)</b>						
Moisture	---	E144	0.25	%	<0.25	---
<b>Metals (QCLot: 2024980)</b>						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	---
<b>Metals (QCLot: 2024981)</b>						
Aluminum	7429-90-5	E440	50	mg/kg	<50	---
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	---
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	---
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	---
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	---
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	---
Boron	7440-42-8	E440	5	mg/kg	<5.0	---
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	---
Calcium	7440-70-2	E440	50	mg/kg	<50	---
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	---
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	---
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	---
Iron	7439-89-6	E440	50	mg/kg	<50	---
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	---
Lithium	7439-93-2	E440	2	mg/kg	<2.0	---
Magnesium	7439-95-4	E440	20	mg/kg	<20	---
Manganese	7439-96-5	E440	1	mg/kg	<1.0	---
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	---
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	---
Phosphorus	7723-14-0	E440	50	mg/kg	<50	---
Potassium	7440-09-7	E440	100	mg/kg	<100	---
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	---
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	---
Sodium	7440-23-5	E440	50	mg/kg	<50	---
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	---
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	---
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	---
Tin	7440-31-5	E440	2	mg/kg	<2.0	---



Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Metals (QCLot: 2024981) - continued</b>						
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Tungsten	7440-33-7	E440	0.5	mg/kg	<0.50	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
<b>Metals (QCLot: 2028724)</b>						
Silver	7440-22-4	E440.Ag	0.1	mg/kg	<0.10	----
<b>TCLP Metals (QCLot: 2025432)</b>						
Mercury, TCLP	7439-97-6	E512	0.001	mg/L	<0.0010	----
<b>TCLP Metals (QCLot: 2025990)</b>						
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
<b>Physical Tests (QCLot: 2024979)</b>									
pH (1:2 soil:water)	---	E108	---	pH units	6 pH units	100	95.0	105	---
<b>Physical Tests (QCLot: 2024983)</b>									
Moisture	---	E144	0.25	%	50 %	100	90.0	110	---
<b>Metals (QCLot: 2024980)</b>									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	96.1	80.0	120	---
<b>Metals (QCLot: 2024981)</b>									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	102	80.0	120	---
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	107	80.0	120	---
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	107	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	98.9	80.0	120	---
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	94.6	80.0	120	---
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	99.5	80.0	120	---
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	99.4	80.0	120	---
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	103	80.0	120	---
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	103	80.0	120	---
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	100	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	99.7	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	108	80.0	120	---
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	103	80.0	120	---
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	---
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	101	80.0	120	---
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	103	80.0	120	---
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	106	80.0	120	---
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	104	80.0	120	---
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	97.8	80.0	120	---
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	104	80.0	120	---
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	102	80.0	120	---
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	96.4	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
<b>Metals (QCLot: 2024981) - continued</b>									
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	98.7	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	98.5	80.0	120	----
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	102	80.0	120	----
Tungsten	7440-33-7	E440	0.5	mg/kg	10 mg/kg	100.0	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	101	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	103	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	98.0	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	100	80.0	120	----
<b>Metals (QCLot: 2028724)</b>									
Silver	7440-22-4	E440.Ag	0.1	mg/kg	10 mg/kg	90.5	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 >= 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
<b>TCLP Metals (QCLot: 2025432)</b>										
VA25B2351-001	BA-2521-A-1	Mercury, TCLP	7439-97-6	E512	0.0028 mg/L	0.003 mg/L	92.5	50.0	140	----
<b>TCLP Metals (QCLot: 2025990)</b>										
VA25B2351-001	BA-2521-A-1	Antimony, TCLP	7440-36-0	E444	5.13 mg/L	5 mg/L	103	50.0	140	----
		Arsenic, TCLP	7440-38-2	E444	5.1 mg/L	5 mg/L	103	50.0	140	----
		Barium, TCLP	7440-39-3	E444	12.5 mg/L	12.5 mg/L	100	50.0	140	----
		Beryllium, TCLP	7440-41-7	E444	0.226 mg/L	0.25 mg/L	90.3	50.0	140	----
		Boron, TCLP	7440-42-8	E444	9.00 mg/L	10 mg/L	90.0	50.0	140	----
		Cadmium, TCLP	7440-43-9	E444	0.233 mg/L	0.25 mg/L	93.1	50.0	140	----
		Calcium, TCLP	7440-70-2	E444	ND mg/L	----	ND	50.0	140	----
		Chromium, TCLP	7440-47-3	E444	1.20 mg/L	1.25 mg/L	96.2	50.0	140	----
		Cobalt, TCLP	7440-48-4	E444	0.244 mg/L	0.25 mg/L	97.5	50.0	140	----
		Copper, TCLP	7440-50-8	E444	2.28 mg/L	2.5 mg/L	91.0	50.0	140	----
		Iron, TCLP	7439-89-6	E444	230 mg/L	250 mg/L	92.1	50.0	140	----
		Lead, TCLP	7439-92-1	E444	8.86 mg/L	10 mg/L	88.6	50.0	140	----
		Magnesium, TCLP	7439-95-4	E444	251 mg/L	250 mg/L	100	50.0	140	----
		Nickel, TCLP	7440-02-0	E444	2.37 mg/L	2.5 mg/L	94.8	50.0	140	----
		Selenium, TCLP	7782-49-2	E444	4.91 mg/L	5 mg/L	98.2	50.0	140	----
		Silver, TCLP	7440-22-4	E444	0.082 mg/L	0.1 mg/L	82.4	50.0	140	----
		Thallium, TCLP	7440-28-0	E444	4.6 mg/L	5 mg/L	92.1	50.0	140	----
		Uranium, TCLP	7440-61-1	E444	4.45 mg/L	5 mg/L	89.0	50.0	150	----
		Vanadium, TCLP	7440-62-2	E444	0.73 mg/L	0.75 mg/L	97.6	50.0	140	----
		Zinc, TCLP	7440-66-6	E444	9.21 mg/L	10 mg/L	92.1	50.0	140	----
		Zirconium, TCLP	7440-67-7	E444	0.8 mg/L	1 mg/L	82.0	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	
<b>Metals (QCLot: 2024980)</b>									
QC-2024980-003	MRCA-21	Mercury	7439-97-6	E510	0.068 mg/kg	91.4	70.0	130	----
<b>Metals (QCLot: 2024981)</b>									
QC-2024981-003	MRCA-21	Aluminum	7429-90-5	E440	22500 mg/kg	101	70.0	130	----
QC-2024981-003	MRCA-21	Antimony	7440-36-0	E440	24.8 mg/kg	97.5	70.0	130	----
QC-2024981-003	MRCA-21	Arsenic	7440-38-2	E440	21.2 mg/kg	92.6	70.0	130	----
QC-2024981-003	MRCA-21	Barium	7440-39-3	E440	788 mg/kg	96.5	70.0	130	----
QC-2024981-003	MRCA-21	Beryllium	7440-41-7	E440	1.82 mg/kg	98.7	70.0	130	----
QC-2024981-003	MRCA-21	Bismuth	7440-69-9	E440	1.78 mg/kg	74.0	70.0	130	----
QC-2024981-003	MRCA-21	Cadmium	7440-43-9	E440	2.15 mg/kg	92.0	70.0	130	----
QC-2024981-003	MRCA-21	Calcium	7440-70-2	E440	4900 mg/kg	96.1	70.0	130	----
QC-2024981-003	MRCA-21	Chromium	7440-47-3	E440	56.9 mg/kg	95.1	70.0	130	----
QC-2024981-003	MRCA-21	Cobalt	7440-48-4	E440	32 mg/kg	95.1	70.0	130	----
QC-2024981-003	MRCA-21	Copper	7440-50-8	E440	969 mg/kg	95.5	70.0	130	----
QC-2024981-003	MRCA-21	Iron	7439-89-6	E440	32700 mg/kg	94.8	70.0	130	----
QC-2024981-003	MRCA-21	Lead	7439-92-1	E440	919 mg/kg	86.3	70.0	130	----
QC-2024981-003	MRCA-21	Lithium	7439-93-2	E440	47.3 mg/kg	98.1	70.0	130	----
QC-2024981-003	MRCA-21	Magnesium	7439-95-4	E440	7780 mg/kg	98.5	70.0	130	----
QC-2024981-003	MRCA-21	Manganese	7439-96-5	E440	8640 mg/kg	95.6	70.0	130	----
QC-2024981-003	MRCA-21	Molybdenum	7439-98-7	E440	25.1 mg/kg	94.0	70.0	130	----
QC-2024981-003	MRCA-21	Nickel	7440-02-0	E440	1000 mg/kg	95.6	70.0	130	----
QC-2024981-003	MRCA-21	Phosphorus	7723-14-0	E440	660 mg/kg	91.9	70.0	130	----
QC-2024981-003	MRCA-21	Potassium	7440-09-7	E440	10800 mg/kg	96.2	70.0	130	----
QC-2024981-003	MRCA-21	Selenium	7782-49-2	E440	1.04 mg/kg	105	60.0	140	----
QC-2024981-003	MRCA-21	Silver	7440-22-4	E440	8.98 mg/kg	94.5	70.0	130	----
QC-2024981-003	MRCA-21	Sodium	7440-23-5	E440	1770 mg/kg	106	70.0	130	----
QC-2024981-003	MRCA-21	Strontium	7440-24-6	E440	41 mg/kg	94.9	70.0	130	----
QC-2024981-003	MRCA-21	Sulfur	7704-34-9	E440	3940 mg/kg	87.4	50.0	150	----
QC-2024981-003	MRCA-21	Thallium	7440-28-0	E440	0.907 mg/kg	89.0	70.0	130	----
QC-2024981-003	MRCA-21	Tin	7440-31-5	E440	3.79 mg/kg	88.6	40.0	160	----
QC-2024981-003	MRCA-21	Titanium	7440-32-6	E440	2790 mg/kg	99.4	70.0	130	----
QC-2024981-003	MRCA-21	Tungsten	7440-33-7	E440	6.99 mg/kg	103	70.0	130	----
QC-2024981-003	MRCA-21	Uranium	7440-61-1	E440	3.97 mg/kg	94.6	70.0	130	----
QC-2024981-003	MRCA-21	Vanadium	7440-62-2	E440	66.2 mg/kg	93.8	70.0	130	----



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	
<b>Metals (QCLot: 2024981) - continued</b>									
QC-2024981-003	MRCA-21	Zinc	7440-66-6	E440	828 mg/kg	92.5	70.0	130	----
QC-2024981-003	MRCA-21	Zirconium	7440-67-7	E440	6.91 mg/kg	96.1	70.0	130	----
<b>Metals (QCLot: 2028724)</b>									
QC-2028724-003	MRCA-21	Silver	7440-22-4	E440.Ag	8.98 mg/kg	97.6	70.0	130	----



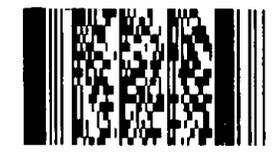
**Chain of Custody / Analytical Request Form**  
**Canada Toll Free: 1 800 668 9878**  
[www.alsglobal.com](http://www.alsglobal.com)

COC # \_\_\_\_\_

Page 1 of 1

<b>Report To</b>		<b>Report Format / Distribution</b>		<b>Service Requested</b> (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		Email 1: Darcie.grace@veolia.com			
Burnaby BC		Email 2: lorenzo.ilao@veolia.com			
Phone: 604-521-1025	Fax:	Email 3: karen.thornquist@veolia.com		<b>Analysis</b>	
		brent.kirkpatrick@metrovancoouver.org			
		Sarah.Wellman@metrovancoouver.org			

**Environmental Division**  
**Vancouver**  
 Work Order Reference  
**VA25B2351**



Telephone : +1 604 253 4199

<b>Invoice To</b> Same as Report ? Veolia Water Canada		<b>Client / Project Information</b>		Please indicate below Filtered, 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:		MET-TCLP-VA (all metals, Hg)	MOISTURE	Chrome 6	MET-CSR-FULL-VA (all metals)						Number of Contain
Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type										
	BA 2521-A-1	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-2	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-3	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-4	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-5	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-6	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-7	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-8	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-9	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-10	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-11	21-May-25	9:00	Soil	X	X		X						1
	BA 2521-A-12	21-May-25	9:00	Soil	X	X		X						1
water Aquatic														

m may delay a es with the Ter numbers and		SHIPMENT RECEPTION (lab use only)		SHIPMENT VERIFICATION (lab use only)	
Released by:	Date (dd-mmm-yy): 26/05/2023	Time (hh:mm): 14:45	Received by:	Date:	Time:
				Temperature: 20,20 °C	Verified by: DS
				Date: 27-May	Time: 13:25
				Observations: Yes / No ? If Yes add SIF	



**Chain of Custody / Analytical Request Form**  
**Canada Toll Free: 1 800 668 9878**  
[www.alsglobal.com](http://www.alsglobal.com)

COC # \_\_\_\_\_

Page 1 of 1

<b>Report To</b>	<b>Report Format / Distribution</b>	<b>Service Requested</b> (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	Email 1: Darcie.grace@veolia.com	
Burnaby BC	Email 2: lorenzo.ilao@veolia.com	
Phone: 604-521-1025 Fax:	Email 3: karen.thornquist@veolia.com	<b>Analysis</b>
	brent.kirkpatrick@metrovancover.org	
	Sarah.Wellman@metrovancover.org	

Environmental Division  
 Vancouver  
 Work Order Reference  
**VA25B2351**



Telephone: +1 604 253 4199

<b>Invoice To</b>	<b>Client / Project Information</b>	Please indicate below Filtered, P	
Same as Report? Veolia Water Canada	Job #: Veolia Weekly Bottom Ash - Suite		
Hardcopy of Invoice with Report?	PO / AFE: PO#		
Company: Veolia Water Canada / Burnaby Waste To Energy	LSD: (includes 2:1 pH)		
Contact: Danny George, Purchaser/Darcie Grace, SHE Manager			
Address: 5150 Riverbend Drive, Burnaby BC V3N 4V3			
Phone: 604 521 1025 Fax:	Quote #:		

Lab Work Order # (lab use only)	ALS Contact:	Sampler:
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Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	MET-TCLP-VA (all metals, Hg)	MOISTURE	Chrome 6	MET-CSR+FULL-VA (all metals)	Number of Containers
BA 2521-A-1		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-2		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-3		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-4		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-5		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-6		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-7		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-8		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-9		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-10		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-11		21-May-25	9:00	Soil	X	X		X	1
BA 2521-A-12		21-May-25	9:00	Soil	X	X		X	1

water Aquatic	
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IT RELEASE (C)	SHIPMENT RECEPTION (lab use only)	SHIPMENT VERIFICATION (lab use only)
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Released by:	Date (dd-mmm-yy): 26/05/2023	Time (hh:mm): 14:45	Received by:	Date:	Time:	Temperature: 20,20 °C	Verified by: DS	Date: 27-May	Time: 13:25	Observations: Yes / No? If Yes add SIF
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**Bottom Ash Worksheet**

Date sample composited (DD/MM/YYYY)	26/05/2025
Person doing the sampling	COREY MURRAY
Total Sample Weight before processing, kg	36.86 kg
Weight of Material >3/8", kg	12.3 kg
Weight of Material that cannot be processed to <3/8" (metal, wood, etc), kg	9.9 kg
Final Total weight of Processed Bottom Ash, kg	26.96 kg

**Return this form with the filled Weekly Bottom Ash Composite Sample containers**

**Completely fill twelve (12) 500ml sample containers and label each with "Bottom Ash" and the week the ash composite is from, i.e. "June 9-15, 2019"**