metrovancouver

Bottom Ash Data

2025 Week 33

The following analytical report represents bottom ash composite results for week 33 of 2025 (August 10, 2025 to August 16, 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	:	**VA25C0879**			
Client	:	**Veolia Environmental Services Canada**	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Brian Graham	Account Manager	:	Gulraj Dhanaua
Address	:	5150 Riverbend Dr. Burnaby British Columbia Canada V3N 4V3	Address	:	8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	:	Gulraj.Dhanaua@alsglobal.com
Project	:	Veolia Weekly Bottom Ash-Suite	Telephone	:	+1 604 253 4188
PO	:	1000497676	Date Samples Received	:	19-Aug-2025 11:10
C-O-C number	:	----	Date Analysis Commenced	:	21-Aug-2025
Sampler	:	----	Issue Date	:	26-Aug-2025 12:18
Site	:	Metro Van Ash Sampling Program			
Quote number	:	VA25-VISI100-001			
No. of samples received	:	12			
No. of samples analysed	:	12			

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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

Signatories

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

Signatories	*Position*	*Laboratory Department*
Kevin Duarte		Metals, Burnaby, British Columbia
Ophelia Chiu		Organics, Burnaby, British Columbia

General Comments

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

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

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

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

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

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

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

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-1 ----	BA 2533 A-2 ----	BA 2533 A-3 ----	BA 2533 A-4 ----	BA 2533 A-5 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-001	VA25C0879-002	VA25C0879-003	VA25C0879-004	VA25C0879-005
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/VA	0.25	%		24.3	23.2	23.7	23.2	24.6
pH (1:2 soil:water)	----	E108/VA	0.10	pH units		10.77	10.40	10.69	10.64	10.55
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg		34600	35300	40400	37000	36800
Antimony	7440-36-0	E440/VA	0.10	mg/kg		173	163	148	150	152
Arsenic	7440-38-2	E440/VA	0.10	mg/kg		28.9	29.7	27.3	28.4	28.0
Barium	7440-39-3	E440/VA	0.50	mg/kg		301	332	360	376	337
Beryllium	7440-41-7	E440/VA	0.10	mg/kg		0.32	0.35	0.40	0.34	0.38
Bismuth	7440-69-9	E440/VA	0.20	mg/kg		13.6	17.3	12.0	12.2	16.8
Boron	7440-42-8	E440/VA	5.0	mg/kg		193	212	243	189	212
Cadmium	7440-43-9	E440/VA	0.020	mg/kg		15.6	15.8	14.9	13.2	16.1
Calcium	7440-70-2	E440/VA	50	mg/kg		151000	146000	135000	138000	144000
Chromium	7440-47-3	E440/VA	0.50	mg/kg		187	201	129	210	246
Cobalt	7440-48-4	E440/VA	0.10	mg/kg		86.5	916	41.4	86.6	45.4
Copper	7440-50-8	E440/VA	0.50	mg/kg		4820	3730	1930	1700	2890
Iron	7439-89-6	E440/VA	50	mg/kg		55700	41000	41100	43900	53100
Lead	7439-92-1	E440/VA	0.50	mg/kg		460	490	298	305	348
Lithium	7439-93-2	E440/VA	2.0	mg/kg		29.4	53.3	26.8	28.8	24.0
Magnesium	7439-95-4	E440/VA	20	mg/kg		13400	14300	13100	14300	14300
Manganese	7439-96-5	E440/VA	1.0	mg/kg		879	1210	662	808	750
Mercury	7439-97-6	E510/VA	0.0500	mg/kg		0.0604	0.0519	<0.0500	<0.0500	<0.0500

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-1 ----	BA 2533 A-2 ----	BA 2533 A-3 ----	BA 2533 A-4 ----	BA 2533 A-5 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-001	VA25C0879-002	VA25C0879-003	VA25C0879-004	VA25C0879-005
						Result	Result	Result	Result	Result
Metals										
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg		19.5	19.8	21.0	18.1	19.6
Nickel	7440-02-0	E440/VA	0.50	mg/kg		283	262	220	184	269
Phosphorus	7723-14-0	E440/VA	50	mg/kg		10000	10500	9830	10900	9650
Potassium	7440-09-7	E440/VA	100	mg/kg		5460	6270	6120	5430	6080
Selenium	7782-49-2	E440/VA	0.20	mg/kg		0.79	0.61	0.50	0.50	0.46
Silver	7440-22-4	E440/VA	0.10	mg/kg		6.08	20.4	6.17	5.36	9.50
Sodium	7440-23-5	E440/VA	50	mg/kg		14000	16000	15800	14400	16300
Strontium	7440-24-6	E440/VA	0.50	mg/kg		341	320	297	298	323
Sulfur	7704-34-9	E440/VA	1000	mg/kg		14700	16700	16000	14100	15900
Thallium	7440-28-0	E440/VA	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	0.052
Tin	7440-31-5	E440/VA	2.0	mg/kg		149	182	124	110	129
Titanium	7440-32-6	E440/VA	1.0	mg/kg		213	253	482	215	262
Tungsten	7440-33-7	E440/VA	0.50	mg/kg		16.1	19.6	17.8	12.2	15.6
Uranium	7440-61-1	E440/VA	0.050	mg/kg		1.55	1.69	1.62	1.47	1.62
Vanadium	7440-62-2	E440/VA	0.20	mg/kg		37.4	40.9	39.8	37.6	42.6
Zinc	7440-66-6	E440/VA	2.0	mg/kg		4320	4010	3310	3570	4240
Zirconium	7440-67-7	E440/VA	1.0	mg/kg		<1.0	1.6	2.0	1.6	2.0
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units		11.64	11.62	11.61	11.52	11.55
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units		4.53	3.16	3.88	3.42	4.15
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units		4.95	4.95	4.95	4.95	4.95

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-1 ----	BA 2533 A-2 ----	BA 2533 A-3 ----	BA 2533 A-4 ----	BA 2533 A-5 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-001	VA25C0879-002	VA25C0879-003	VA25C0879-004	VA25C0879-005
						Result	Result	Result	Result	Result
TCLP Metals										
pH, TCLP final	----	EPP444/VA	0.010	pH units		10.79	10.46	10.55	10.62	10.63
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		0.64	0.88	0.85	0.82	0.77
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		864	911	849	824	840
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		0.930	1.07	1.15	1.16	1.12
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		<2.5	3.2	2.7	2.6	<2.5
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)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-1 ----	BA 2533 A-2 ----	BA 2533 A-3 ----	BA 2533 A-4 ----	BA 2533 A-5 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-001	VA25C0879-002	VA25C0879-003	VA25C0879-004	VA25C0879-005
						Result	Result	Result	Result	Result
TCLP Metals										
Zinc, TCLP	7440-66-6	E444/VA	0.50	mg/L		<0.50	<0.50	<0.50	<0.50	<0.50
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

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-6 ----	BA 2533 A-7 ----	BA 2533 A-8 ----	BA 2533 A-9 ----	BA 2533 A-10 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-006	VA25C0879-007	VA25C0879-008	VA25C0879-009	VA25C0879-010
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/VA	0.25	%		24.8	22.2	21.9	23.9	23.2
pH (1:2 soil:water)	----	E108/VA	0.10	pH units		10.63	10.59	10.87	10.52	10.61
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg		43600	38700	36500	35700	36100
Antimony	7440-36-0	E440/VA	0.10	mg/kg		144	141	152	145	140
Arsenic	7440-38-2	E440/VA	0.10	mg/kg		28.9	25.6	27.2	25.3	24.2
Barium	7440-39-3	E440/VA	0.50	mg/kg		400	420	384	356	373
Beryllium	7440-41-7	E440/VA	0.10	mg/kg		0.37	0.37	0.42	0.36	0.37
Bismuth	7440-69-9	E440/VA	0.20	mg/kg		12.3	13.1	13.2	13.5	10.0
Boron	7440-42-8	E440/VA	5.0	mg/kg		177	194	235	163	206
Cadmium	7440-43-9	E440/VA	0.020	mg/kg		14.2	14.2	22.7	13.4	12.5
Calcium	7440-70-2	E440/VA	50	mg/kg		139000	138000	151000	135000	136000

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-6 ----	BA 2533 A-7 ----	BA 2533 A-8 ----	BA 2533 A-9 ----	BA 2533 A-10 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-006	VA25C0879-007	VA25C0879-008	VA25C0879-009	VA25C0879-010
						Result	Result	Result	Result	Result
Metals										
Chromium	7440-47-3	E440/VA	0.50	mg/kg		238	163	147	173	208
Cobalt	7440-48-4	E440/VA	0.10	mg/kg		334	152	122	168	316
Copper	7440-50-8	E440/VA	0.50	mg/kg		3680	5250	2330	3850	7300
Iron	7439-89-6	E440/VA	50	mg/kg		42200	58000	35400	43500	56800
Lead	7439-92-1	E440/VA	0.50	mg/kg		356	347	1490	1170	873
Lithium	7439-93-2	E440/VA	2.0	mg/kg		30.8	29.2	27.1	59.7	36.2
Magnesium	7439-95-4	E440/VA	20	mg/kg		14000	15000	14600	12000	12800
Manganese	7439-96-5	E440/VA	1.0	mg/kg		774	774	840	786	887
Mercury	7439-97-6	E510/VA	0.0500	mg/kg		<0.0500	<0.0500	0.0511	<0.0500	<0.0500
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg		31.8	23.6	17.5	16.6	17.8
Nickel	7440-02-0	E440/VA	0.50	mg/kg		536	167	214	470	242
Phosphorus	7723-14-0	E440/VA	50	mg/kg		10000	9680	11500	9680	9160
Potassium	7440-09-7	E440/VA	100	mg/kg		5690	5740	7070	6140	5680
Selenium	7782-49-2	E440/VA	0.20	mg/kg		0.53	0.46	0.55	0.54	0.43
Silver	7440-22-4	E440/VA	0.10	mg/kg		>90.6	10.2	8.56	5.12	10.9
Sodium	7440-23-5	E440/VA	50	mg/kg		14500	15700	17600	15700	15300
Strontium	7440-24-6	E440/VA	0.50	mg/kg		302	324	348	299	313
Sulfur	7704-34-9	E440/VA	1000	mg/kg		14900	15300	15800	14700	14900
Thallium	7440-28-0	E440/VA	0.050	mg/kg		0.054	<0.050	<0.050	<0.050	<0.050
Tin	7440-31-5	E440/VA	2.0	mg/kg		200	121	539	138	347
Titanium	7440-32-6	E440/VA	1.0	mg/kg		324	322	249	300	272

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-6 ----	BA 2533 A-7 ----	BA 2533 A-8 ----	BA 2533 A-9 ----	BA 2533 A-10 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-006	VA25C0879-007	VA25C0879-008	VA25C0879-009	VA25C0879-010
						Result	Result	Result	Result	Result
Metals										
Tungsten	7440-33-7	E440/VA	0.50	mg/kg		41.9	40.6	23.7	28.8	32.8
Uranium	7440-61-1	E440/VA	0.050	mg/kg		1.54	1.47	1.66	1.57	1.47
Vanadium	7440-62-2	E440/VA	0.20	mg/kg		42.6	37.9	55.5	38.1	46.3
Zinc	7440-66-6	E440/VA	2.0	mg/kg		5280	3600	4100	3470	4120
Zirconium	7440-67-7	E440/VA	1.0	mg/kg		2.1	1.8	1.1	1.7	1.3
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units		11.55	11.54	11.64	11.63	11.56
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units		2.57	3.60	3.56	3.37	3.68
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units		4.95	4.95	4.95	4.95	4.95
pH, TCLP final	----	EPP444/VA	0.010	pH units		10.55	10.56	10.87	10.76	10.59
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		0.83	0.81	0.67	0.74	0.78
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		830	852	859	872	868
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		1.03	1.07	1.04	0.994	0.951
Iron, TCLP	7439-89-6	E444/VA	5.0	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-6 ----	BA 2533 A-7 ----	BA 2533 A-8 ----	BA 2533 A-9 ----	BA 2533 A-10 ----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00	12-Aug-2025 09:00
						VA25C0879-006	VA25C0879-007	VA25C0879-008	VA25C0879-009	VA25C0879-010
						Result	Result	Result	Result	Result
TCLP Metals										
Lead, TCLP	7439-92-1	E444/VA	0.25	mg/L		<0.25	<0.25	<0.25	<0.25	<0.25
Magnesium, TCLP	7439-95-4	E444/VA	2.5	mg/L		<2.5	2.6	<2.5	<2.5	<2.5
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

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-11 ----	BA 2533 A-12 ----	----	----	----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	----	----	----
						VA25C0879-011	VA25C0879-012	----	----	----
						Result	Result	----	----	----
Physical Tests										
Moisture	----	E144/VA	0.25	%		22.7	22.6	----	----	----
pH (1:2 soil:water)	----	E108/VA	0.10	pH units		10.74	10.63	----	----	----

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-11 ----	BA 2533 A-12 ----	----	----	----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	----	----	----
						VA25C0879-011	VA25C0879-012	----	----	----
						Result	Result	----	----	----
Metals										
Aluminum	7429-90-5	E440/VA	50	mg/kg		34900	35300	----	----	----
Antimony	7440-36-0	E440/VA	0.10	mg/kg		152	144	----	----	----
Arsenic	7440-38-2	E440/VA	0.10	mg/kg		24.1	26.7	----	----	----
Barium	7440-39-3	E440/VA	0.50	mg/kg		357	323	----	----	----
Beryllium	7440-41-7	E440/VA	0.10	mg/kg		0.37	0.34	----	----	----
Bismuth	7440-69-9	E440/VA	0.20	mg/kg		8.96	12.3	----	----	----
Boron	7440-42-8	E440/VA	5.0	mg/kg		216	225	----	----	----
Cadmium	7440-43-9	E440/VA	0.020	mg/kg		11.7	12.8	----	----	----
Calcium	7440-70-2	E440/VA	50	mg/kg		145000	140000	----	----	----
Chromium	7440-47-3	E440/VA	0.50	mg/kg		134	159	----	----	----
Cobalt	7440-48-4	E440/VA	0.10	mg/kg		55.1	77.8	----	----	----
Copper	7440-50-8	E440/VA	0.50	mg/kg		4390	1680	----	----	----
Iron	7439-89-6	E440/VA	50	mg/kg		45100	48000	----	----	----
Lead	7439-92-1	E440/VA	0.50	mg/kg		348	358	----	----	----
Lithium	7439-93-2	E440/VA	2.0	mg/kg		22.3	23.0	----	----	----
Magnesium	7439-95-4	E440/VA	20	mg/kg		12500	12800	----	----	----
Manganese	7439-96-5	E440/VA	1.0	mg/kg		4210	859	----	----	----
Mercury	7439-97-6	E510/VA	0.0500	mg/kg		<0.0500	0.0545	----	----	----
Molybdenum	7439-98-7	E440/VA	0.10	mg/kg		15.1	16.2	----	----	----
Nickel	7440-02-0	E440/VA	0.50	mg/kg		200	131	----	----	----
Phosphorus	7723-14-0	E440/VA	50	mg/kg		9620	9820	----	----	----

Analytical Results

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

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-11 ----	BA 2533 A-12 ----	----	----	----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	----	----	----
						VA25C0879-011	VA25C0879-012	----	----	----
						Result	Result	----	----	----
Metals										
Potassium	7440-09-7	E440/VA	100	mg/kg		5780	6260	----	----	----
Selenium	7782-49-2	E440/VA	0.20	mg/kg		0.51	0.49	----	----	----
Silver	7440-22-4	E440/VA	0.10	mg/kg		5.65	5.38	----	----	----
Sodium	7440-23-5	E440/VA	50	mg/kg		15300	15800	----	----	----
Strontium	7440-24-6	E440/VA	0.50	mg/kg		314	315	----	----	----
Sulfur	7704-34-9	E440/VA	1000	mg/kg		14400	14700	----	----	----
Thallium	7440-28-0	E440/VA	0.050	mg/kg		<0.050	<0.050	----	----	----
Tin	7440-31-5	E440/VA	2.0	mg/kg		190	119	----	----	----
Titanium	7440-32-6	E440/VA	1.0	mg/kg		315	298	----	----	----
Tungsten	7440-33-7	E440/VA	0.50	mg/kg		11.7	13.1	----	----	----
Uranium	7440-61-1	E440/VA	0.050	mg/kg		1.49	1.56	----	----	----
Vanadium	7440-62-2	E440/VA	0.20	mg/kg		40.4	36.8	----	----	----
Zinc	7440-66-6	E440/VA	2.0	mg/kg		5720	4000	----	----	----
Zirconium	7440-67-7	E440/VA	1.0	mg/kg		1.5	2.0	----	----	----
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444/VA	0.010	pH units		11.63	11.54	----	----	----
pH, TCLP 2nd preliminary	----	EPP444/VA	0.010	pH units		4.98	3.10	----	----	----
pH, TCLP extraction fluid initial	----	EPP444/VA	0.010	pH units		4.95	4.95	----	----	----
pH, TCLP final	----	EPP444/VA	0.010	pH units		10.77	10.74	----	----	----
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)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	BA 2533 A-11 ----	BA 2533 A-12 ----	----	----	----
					Client sampling date / time	12-Aug-2025 09:00	12-Aug-2025 09:00	----	----	----
						VA25C0879-011	VA25C0879-012	----	----	----
						Result	Result	----	----	----
TCLP Metals										
Barium, TCLP	7440-39-3	E444/VA	2.5	mg/L		<2.5	<2.5	----	----	----
Beryllium, TCLP	7440-41-7	E444/VA	0.025	mg/L		<0.025	<0.025	----	----	----
Boron, TCLP	7440-42-8	E444/VA	0.50	mg/L		0.73	0.87	----	----	----
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		862	913	----	----	----
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		0.899	0.942	----	----	----
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		<2.5	<2.5	----	----	----
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.

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA25C0879**	Page	: 1 of 16
Client	: **Veolia Environmental Services Canada**	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: Veolia Weekly Bottom Ash-Suite	Date Samples Received	: 19-Aug-2025 11:10
PO	: 1000497676	Issue Date	: 26-Aug-2025 12:18
C-O-C number	: ----		
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VISI100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

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

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

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

Summary of Outliers

Outliers : Quality Control Samples

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

Outliers: Reference Material (RM) Samples

- Reference Material (RM) Sample outliers occur - please see the following pages for full details.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Soil/Solid**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Duplicate (DUP) RPDs								
Metals	VA25C0879-001	BA 2533 A-1	Bismuth	7440-69-9	E440	137 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Boron	7440-42-8	E440	44.2 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Cobalt	7440-48-4	E440	65.8 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Copper	7440-50-8	E440	87.1 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Lead	7439-92-1	E440	48.6 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Nickel	7440-02-0	E440	40.7 % DUP-H	30%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Silver	7440-22-4	E440	76.6 % DUP-H	40%	Duplicate RPD does not meet the DQO for this test.
Metals	VA25C0879-001	BA 2533 A-1	Titanium	7440-32-6	E440	61.2 % DUP-H	40%	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.*

Reference Material (RM) Sample								
Metals	QC-MRG2-2174680 003	----	Tungsten	7440-33-7	E440	136 % MES	70.0-130%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

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 Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-1	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-10	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-11	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-12	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-2	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-3	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-4	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-5	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-6	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-7	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-8	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Mercury in Soil/Solid by CVAAS										
LDPE bag BA 2533 A-9	E510	12-Aug-2025	23-Aug-2025	28 days	11 days	✓	25-Aug-2025	28 days	3 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-1	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-10	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-11	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-12	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-2	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-3	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-4	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-5	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-6	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-7	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-8	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS										
LDPE bag BA 2533 A-9	E440	12-Aug-2025	23-Aug-2025	180 days	11 days	✓	25-Aug-2025	180 days	11 days	✓
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-1	E144	12-Aug-2025	----	----	----		21-Aug-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 Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-10	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-11	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-12	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-2	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-3	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-4	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-5	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-6	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-7	E144	12-Aug-2025	----	----	----		21-Aug-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 Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-8	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA 2533 A-9	E144	12-Aug-2025	----	----	----		21-Aug-2025	----	----	
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-1	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-10	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-11	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-12	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-2	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-3	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-4	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-5	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-6	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-7	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-8	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
Physical Tests : pH by Meter (1:2 Soil:Water Extraction)										
LDPE bag BA 2533 A-9	E108	12-Aug-2025	23-Aug-2025	30 days	11 days	✓	23-Aug-2025	30 days	11 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-1	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-10	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-11	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-12	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 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* Rec	*Holding Times* Actual	*Eval*	*Analysis Date*	*Holding Times* Rec	*Holding Times* Actual	*Eval*
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-2	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-3	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-4	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-5	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-6	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-7	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-8	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Mercury by CVAAS (TCLP)										
Glass vial - total (lab preserved) BA 2533 A-9	E512	22-Aug-2025	25-Aug-2025	38 days	13 days	✓	25-Aug-2025	38 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-1	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 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 Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-10	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-11	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-12	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-2	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-3	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-4	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-5	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-6	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-7	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 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* Rec	*Holding Times* Actual	*Eval*	*Analysis Date*	*Holding Times* Rec	*Holding Times* Actual	*Eval*
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-8	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : Metals by CRC ICPMS (TCLP)										
HDPE - total (lab preserved) BA 2533 A-9	E444	22-Aug-2025	25-Aug-2025	190 days	13 days	✓	26-Aug-2025	190 days	13 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-1	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-10	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-11	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-12	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-2	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-3	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-4	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 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 Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-5	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-6	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-7	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-8	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓
TCLP Metals : TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)										
Lab Split - Non-Volatile Leach: 28 day HT (e.g. Hg, CrVI, PFAS) BA 2533 A-9	EPP444	12-Aug-2025	22-Aug-2025	----	----		----	28 days	10 days	✓

Legend & Qualifier Definitions

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

Quality Control Parameter Frequency Compliance

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

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
pH by Meter (1:2 Soil:Water Extraction)	E108	2174682	1	17	5.8	5.0	✓
Moisture Content by Gravimetry	E144	2174687	1	12	8.3	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2174680	1	17	5.8	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	2180088	1	12	8.3	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2174681	1	16	6.2	5.0	✓
Mercury by CVAAS (TCLP)	E512	2180089	1	12	8.3	5.0	✓
Laboratory Control Samples (LCS)							
pH by Meter (1:2 Soil:Water Extraction)	E108	2174682	1	17	5.8	5.0	✓
Moisture Content by Gravimetry	E144	2174687	1	12	8.3	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2174680	2	17	11.7	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	2174681	2	16	12.5	10.0	✓
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	2174687	1	12	8.3	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2174680	1	17	5.8	5.0	✓
Metals by CRC ICPMS (TCLP)	E444	2180088	1	12	8.3	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2174681	1	16	6.2	5.0	✓
Mercury by CVAAS (TCLP)	E512	2180089	1	12	8.3	5.0	✓
Matrix Spikes (MS)							
Metals by CRC ICPMS (TCLP)	E444	2180088	1	12	8.3	5.0	✓
Mercury by CVAAS (TCLP)	E512	2180089	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 ºC) 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 HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Metals by CRC ICPMS (TCLP)	E444 ALS Environmental - Vancouver	Soil/Solid	EPA 1311/6020B (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by Collision/Reaction Cell ICPMS.
Mercury in Soil/Solid by CVAAS	E510 ALS Environmental - Vancouver	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Mercury by CVAAS (TCLP)	E512 ALS Environmental - Vancouver	Soil/Solid	EPA 1311/245.1 (mod)	An extract produced by the Toxicity Characteristic Leachate Procedure (TCLP) as per EPA 1311 is analyzed by CVAAS.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Leach 1:2 Soil:Water for pH/EC	EP108 ALS Environmental - Vancouver	Soil/Solid	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL	The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
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 HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
TCLP Leachate Preparation (Metals, Inorganics, and SVOCs)	EPP444 ALS Environmental - Vancouver	Soil/Solid	EPA 1311	Preparation of a Toxicity Characteristic Leaching Procedure (TCLP) solid sample involves particle size reduction, homogenization, then determination of appropriate extraction fluid. A measured portion of fresh subsample is placed in an extraction bottle with the appropriate extraction fluid then tumbled in a rotary extractor for 18+/- 2 hours at 23 +/- 2 C. The liquid leachate is filtered to separate from solids then bottled and prepared for analytical tests.

QUALITY CONTROL REPORT

Work Order	: **VA25C0879**	Page	: 1 of 12
Client	: Veolia Environmental Services Canada	Laboratory	: ALS Environmental - Vancouver
Contact	: Brian Graham	Account Manager	: Gulraj Dhanaua
Address	: 5150 Riverbend Dr. Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: Veolia Weekly Bottom Ash-Suite	Date Samples Received	: 19-Aug-2025 11:10
PO	: 1000497676	Date Analysis Commenced	: 21-Aug-2025
C-O-C number	: ----	Issue Date	: 26-Aug-2025 12:19
Sampler	: ----		
Site	: Metro Van Ash Sampling Program		
Quote number	: VA25-VISI100-001		
No. of samples received	: 12		
No. of samples analysed	: 12		

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

This Quality Control Report contains the following information:

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

Signatories

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

Signatories	*Position*	*Laboratory Department*
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Vancouver Organics, Burnaby, British Columbia

General Comments

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

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 2174682)											
VA25C0879-001	BA 2533 A-1	pH (1:2 soil:water)	----	E108	0.10	pH units	10.77	10.77	0.0%	5%	----
Physical Tests (QC Lot: 2174687)											
VA25C0879-001	BA 2533 A-1	Moisture	----	E144	0.25	%	24.3	22.2	8.79%	20%	----
Metals (QC Lot: 2174680)											
VA25C0879-001	BA 2533 A-1	Aluminum	7429-90-5	E440	50	mg/kg	34600	42500	20.7%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	173	142	19.4%	30%	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	28.9	23.9	18.9%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	301	411	30.8%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	0.32	0.39	0.07	Diff <2x LOR	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	13.6	72.8	137%	30%	DUP-H
		Boron	7440-42-8	E440	5.0	mg/kg	193	302	44.2%	30%	DUP-H
		Cadmium	7440-43-9	E440	0.020	mg/kg	15.6	12.0	25.9%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	151000	144000	4.88%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	187	155	18.4%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	86.5	43.7	65.8%	30%	DUP-H
		Copper	7440-50-8	E440	0.50	mg/kg	4820	1890	87.1%	30%	DUP-H
		Iron	7439-89-6	E440	50	mg/kg	55700	54300	2.58%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	460	756	48.6%	40%	DUP-H
		Lithium	7439-93-2	E440	2.0	mg/kg	29.4	30.2	3.00%	30%	----
		Magnesium	7439-95-4	E440	20	mg/kg	13400	13200	1.13%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	879	768	13.4%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	19.5	16.7	15.1%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	283	187	40.7%	30%	DUP-H
		Phosphorus	7723-14-0	E440	50	mg/kg	10000	9520	5.10%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	5460	6630	19.4%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.79	0.59	0.20	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	6.08	13.6	76.6%	40%	DUP-H
		Sodium	7440-23-5	E440	50	mg/kg	14000	17100	20.0%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	341	323	5.30%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	14700	14400	2.00%	30%	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 2174680) - continued											
VA25C0879-001	BA 2533 A-1	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	149	176	16.8%	40%	----
		Titanium	7440-32-6	E440	1.0	mg/kg	213	400	61.2%	40%	DUP-H
		Tungsten	7440-33-7	E440	0.50	mg/kg	16.1	14.2	12.8%	30%	----
		Uranium	7440-61-1	E440	0.050	mg/kg	1.55	1.61	3.76%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	37.4	45.7	20.1%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	4320	3640	17.1%	30%	----
		Zirconium	7440-67-7	E440	1.0	mg/kg	<1.0	1.3	0.3	Diff <2x LOR	----
Metals (QC Lot: 2174681)											
VA25C0879-001	BA 2533 A-1	Mercury	7439-97-6	E510	0.0500	mg/kg	0.0604	<0.0500	0.0104	Diff <2x LOR	----
TCLP Metals (QC Lot: 2180088)											
VA25C0879-001	BA 2533 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	0.64	0.60	0.04	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	864	826	4.61%	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	0.930	0.919	1.22%	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	<2.5	<2.5	0	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	----
TCLP Metals (QC Lot: 2180089)											
VA25C0879-001	BA 2533 A-1	Mercury, TCLP	7439-97-6	E512	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----

Qualifiers

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

Method Blank (MB) Report

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

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 2174687)						
Moisture	----	E144	0.25	%	<0.25	----
Metals (QCLot: 2174680)						
Aluminum	7429-90-5	E440	50	mg/kg	<50	----
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Calcium	7440-70-2	E440	50	mg/kg	<50	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Iron	7439-89-6	E440	50	mg/kg	<50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Lithium	7439-93-2	E440	2	mg/kg	<2.0	----
Magnesium	7439-95-4	E440	20	mg/kg	<20	----
Manganese	7439-96-5	E440	1	mg/kg	<1.0	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Phosphorus	7723-14-0	E440	50	mg/kg	<50	----
Potassium	7440-09-7	E440	100	mg/kg	<100	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Sodium	7440-23-5	E440	50	mg/kg	<50	----
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	----
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	----
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Tin	7440-31-5	E440	2	mg/kg	<2.0	----
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Tungsten	7440-33-7	E440	0.5	mg/kg	<0.50	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2174680) - continued						
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
Metals (QCLot: 2174681)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
TCLP Metals (QCLot: 2180088)						
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	----
TCLP Metals (QCLot: 2180089)						
Mercury, TCLP	7439-97-6	E512	0.001	mg/L	<0.0010	----

Laboratory Control Sample (LCS) Report

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

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 2174682)									
pH (1:2 soil:water)	----	E108	----	pH units	6 pH units	100	95.0	105	----
Physical Tests (QCLot: 2174687)									
Moisture	----	E144	0.25	%	50 %	98.0	90.0	110	----
Metals (QCLot: 2174680)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	108	80.0	120	----
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	103	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	109	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	103	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	108	80.0	120	----
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	103	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	98.6	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	105	80.0	120	----
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	104	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	105	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	102	80.0	120	----
Iron	7439-89-6	E440	50	mg/kg	100 mg/kg	105	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	104	80.0	120	----
Lithium	7439-93-2	E440	2	mg/kg	25 mg/kg	107	80.0	120	----
Magnesium	7439-95-4	E440	20	mg/kg	5000 mg/kg	108	80.0	120	----
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	104	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	104	80.0	120	----
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	108	80.0	120	----
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	104	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	103	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	95.7	80.0	120	----
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	110	80.0	120	----
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	108	80.0	120	----
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	99.4	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	101	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	100	80.0	120	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2174680) - continued									
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	100	80.0	120	----
Tungsten	7440-33-7	E440	0.5	mg/kg	10 mg/kg	101	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	107	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	106	80.0	120	----
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	96.5	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	105	80.0	120	----
Metals (QCLot: 2174681)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	101	80.0	120	----

Matrix Spike (MS) Report

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

Sub-Matrix: **Soil/Solid**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
TCLP Metals (QCLot: 2180088)										
VA25C0879-001	BA 2533 A-1	Antimony, TCLP	7440-36-0	E444	5.04 mg/L	5 mg/L	101	50.0	140	----
		Arsenic, TCLP	7440-38-2	E444	5.5 mg/L	5 mg/L	109	50.0	140	----
		Barium, TCLP	7440-39-3	E444	12.9 mg/L	12.5 mg/L	103	50.0	140	----
		Beryllium, TCLP	7440-41-7	E444	0.258 mg/L	0.25 mg/L	103	50.0	140	----
		Boron, TCLP	7440-42-8	E444	9.46 mg/L	10 mg/L	94.6	50.0	140	----
		Cadmium, TCLP	7440-43-9	E444	0.247 mg/L	0.25 mg/L	98.7	50.0	140	----
		Calcium, TCLP	7440-70-2	E444	ND mg/L	----	ND	50.0	140	----
		Chromium, TCLP	7440-47-3	E444	1.26 mg/L	1.25 mg/L	101	50.0	140	----
		Cobalt, TCLP	7440-48-4	E444	0.255 mg/L	0.25 mg/L	102	50.0	140	----
		Copper, TCLP	7440-50-8	E444	2.41 mg/L	2.5 mg/L	96.3	50.0	140	----
		Iron, TCLP	7439-89-6	E444	251 mg/L	250 mg/L	100	50.0	140	----
		Lead, TCLP	7439-92-1	E444	9.71 mg/L	10 mg/L	97.1	50.0	140	----
		Magnesium, TCLP	7439-95-4	E444	264 mg/L	250 mg/L	106	50.0	140	----
		Nickel, TCLP	7440-02-0	E444	2.54 mg/L	2.5 mg/L	102	50.0	140	----
		Selenium, TCLP	7782-49-2	E444	5.33 mg/L	5 mg/L	106	50.0	140	----
		Silver, TCLP	7440-22-4	E444	0.084 mg/L	0.1 mg/L	83.7	50.0	140	----
		Thallium, TCLP	7440-28-0	E444	4.9 mg/L	5 mg/L	97.4	50.0	140	----
		Uranium, TCLP	7440-61-1	E444	5.05 mg/L	5 mg/L	101	50.0	150	----
		Vanadium, TCLP	7440-62-2	E444	0.79 mg/L	0.75 mg/L	105	50.0	140	----
		Zinc, TCLP	7440-66-6	E444	9.62 mg/L	10 mg/L	96.2	50.0	140	----
		Zirconium, TCLP	7440-67-7	E444	0.8 mg/L	1 mg/L	79.2	50.0	150	----
TCLP Metals (QCLot: 2180089)										
VA25C0879-001	BA 2533 A-1	Mercury, TCLP	7439-97-6	E512	0.0026 mg/L	0.003 mg/L	85.4	50.0	140	----

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:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2174680)									
QC-2174680-003	MRCA-21	Aluminum	7429-90-5	E440	22500 mg/kg	110	70.0	130	----
QC-2174680-003	MRCA-21	Antimony	7440-36-0	E440	24.8 mg/kg	95.6	70.0	130	----
QC-2174680-003	MRCA-21	Arsenic	7440-38-2	E440	21.2 mg/kg	99.6	70.0	130	----
QC-2174680-003	MRCA-21	Barium	7440-39-3	E440	788 mg/kg	93.8	70.0	130	----
QC-2174680-003	MRCA-21	Beryllium	7440-41-7	E440	1.82 mg/kg	116	70.0	130	----
QC-2174680-003	MRCA-21	Bismuth	7440-69-9	E440	1.78 mg/kg	98.8	70.0	130	----
QC-2174680-003	MRCA-21	Cadmium	7440-43-9	E440	2.15 mg/kg	103	70.0	130	----
QC-2174680-003	MRCA-21	Calcium	7440-70-2	E440	4900 mg/kg	108	70.0	130	----
QC-2174680-003	MRCA-21	Chromium	7440-47-3	E440	56.9 mg/kg	102	70.0	130	----
QC-2174680-003	MRCA-21	Cobalt	7440-48-4	E440	32 mg/kg	101	70.0	130	----
QC-2174680-003	MRCA-21	Copper	7440-50-8	E440	969 mg/kg	99.1	70.0	130	----
QC-2174680-003	MRCA-21	Iron	7439-89-6	E440	32700 mg/kg	101	70.0	130	----
QC-2174680-003	MRCA-21	Lead	7439-92-1	E440	919 mg/kg	94.5	70.0	130	----
QC-2174680-003	MRCA-21	Lithium	7439-93-2	E440	47.3 mg/kg	104	70.0	130	----
QC-2174680-003	MRCA-21	Magnesium	7439-95-4	E440	7780 mg/kg	105	70.0	130	----
QC-2174680-003	MRCA-21	Manganese	7439-96-5	E440	8640 mg/kg	98.9	70.0	130	----
QC-2174680-003	MRCA-21	Molybdenum	7439-98-7	E440	25.1 mg/kg	101	70.0	130	----
QC-2174680-003	MRCA-21	Nickel	7440-02-0	E440	1000 mg/kg	104	70.0	130	----
QC-2174680-003	MRCA-21	Phosphorus	7723-14-0	E440	660 mg/kg	110	70.0	130	----
QC-2174680-003	MRCA-21	Potassium	7440-09-7	E440	10800 mg/kg	99.7	70.0	130	----
QC-2174680-003	MRCA-21	Selenium	7782-49-2	E440	1.04 mg/kg	108	60.0	140	----
QC-2174680-003	MRCA-21	Silver	7440-22-4	E440	8.98 mg/kg	97.0	70.0	130	----
QC-2174680-003	MRCA-21	Sodium	7440-23-5	E440	1770 mg/kg	118	70.0	130	----
QC-2174680-003	MRCA-21	Strontium	7440-24-6	E440	41 mg/kg	106	70.0	130	----
QC-2174680-003	MRCA-21	Sulfur	7704-34-9	E440	3940 mg/kg	91.3	50.0	150	----
QC-2174680-003	MRCA-21	Thallium	7440-28-0	E440	0.907 mg/kg	102	70.0	130	----
QC-2174680-003	MRCA-21	Tin	7440-31-5	E440	3.79 mg/kg	99.7	40.0	160	----
QC-2174680-003	MRCA-21	Titanium	7440-32-6	E440	2790 mg/kg	105	70.0	130	----
QC-2174680-003	MRCA-21	Tungsten	7440-33-7	E440	6.99 mg/kg	# 136	70.0	130	MES
QC-2174680-003	MRCA-21	Uranium	7440-61-1	E440	3.97 mg/kg	92.8	70.0	130	----
QC-2174680-003	MRCA-21	Vanadium	7440-62-2	E440	66.2 mg/kg	100	70.0	130	----
QC-2174680-003	MRCA-21	Zinc	7440-66-6	E440	828 mg/kg	95.0	70.0	130	----
QC-2174680-003	MRCA-21	Zirconium	7440-67-7	E440	6.91 mg/kg	106	70.0	130	----

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2174681)									
QC-2174681-003	MRCA-21	Mercury	7439-97-6	E510	0.068 mg/kg	102	70.0	130	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Report To		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	Veolia Canada / Burnaby Waste To Energy Facility	"Veolia Email Distribution List" please	
Contact:	Brian Graham / Darcie Grace		
Address:	5150 Riverbend Drive	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	Analysis Request
		brent.kirkpatrick@metrovancouver.org	
		Sarah.Wellman@metrovancouver.org	
Invoice To	Same as Report ? Veolia Water Canada	**Client / Project Information**	Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #: Veolia Weekly Bottom Ash - Suite	
Company:	Veolia Water Canada / Burnaby Waste To Energy	PO / AFE: PO#	
Contact:	Danny George, Purchaser/Darcie Grace, SHE Manager	LSD: (includes 2:1 pH)	
Address:	5150 Riverbend Drive, Burnaby BC V3N 4V3		
Phone:	604 521 1025 Fax:	Quote #:	
Lab Work Order # (lab use only)		**ALS Contact:**	**Sampler:**

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	MET-TCLP-VA (all metals, Hg)	MOISTURE	Chrome 6	MET-CSR+FULL-VA (all metals)	Number of Containers
	BA 2533-A-1	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-2	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-3	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-4	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-5	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-6	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-7	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-8	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-9	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-10	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-11	12 Aug 2025	9:00	Soil	X	X		X	1
	BA 2533-A-12	12 Aug 2025	9:00	Soil	X	X		X	1
water Aquatic									

Environmental Division Vancouver
Work Order Reference
VA25C0879

Telephone : +1 604 253 4188

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numbers and

IT RELEASE (C

SHIPMENT RECEPTION (lab use only)							SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
	19/08/25	08:50				20 °C	SS	19/08/25	11:10	