Bottom Ash Data

2020 Week 29

The following analytical report was sent to the Ministry of Environment and Climate Change Strategy on July 28, 2020. The data represents bottom ash composite results for week 29 of 2020 (July 12, 2020 to July 18, 2020).

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

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **VA20B0794**	Page	: 1 of 11
Client	: **Covanta Burnaby Renewable Energy, ULC**	Laboratory	: Vancouver - Environmental
Contact	: Steve McKinney	Account Manager	: Brent Mack
Address	: 5150 Riverbend Drive Burnaby BC Canada V3N 4V3	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: 604 521 1025	Telephone	: +1 604 253 4188
Project	: ----	Date Samples Received	: 21-Jul-2020 12:10
PO	: VANCO 0000049378	Date Analysis Commenced	: 21-Jul-2020
C-O-C number	: ----	Issue Date	: 28-Jul-2020 10:47
Sampler	: ----		
Site	: ----		
Quote number	: Standing Offer (BC work)		
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*
Angeli Marzan	Lab Analyst	Inorganics, Edmonton, Alberta
Brieanna Allen	Department Manager - Organics	Organics, Burnaby, British Columbia
Dee Lee	Analyst	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Muneeb Alam	Analyst	Metals, Burnaby, British Columbia
Robin Weeks	Team Leader - 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).

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 in reports identified as "Preliminary Report" are considered authorized for use.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-1	BA2029-A-2	BA2029-A-3	BA2029-A-4	BA2029-A-5
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00
						VA20B0794-001	VA20B0794-002	VA20B0794-003	VA20B0794-004	VA20B0794-005
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		17.1	15.8	15.3	17.9	18.0
pH (1:2 soil:water)	----	E108	0.10	pH units		11.2	11.4	11.1	11.4	11.2
Metals										
aluminum	7429-90-5	E440	50	mg/kg		30400	28300	45900	29500	29400
antimony	7440-36-0	E440	0.10	mg/kg		163	194	161	170	646
arsenic	7440-38-2	E440	0.10	mg/kg		26.9	32.0	39.5	31.2	112
barium	7440-39-3	E440	0.50	mg/kg		758	873	808	750	832
beryllium	7440-41-7	E440	0.10	mg/kg		0.38	0.44	0.42	0.39	0.35
bismuth	7440-69-9	E440	0.20	mg/kg		5.61	5.79	5.86	6.05	5.36
boron	7440-42-8	E440	5.0	mg/kg		211	190	212	242	194
cadmium	7440-43-9	E440	0.020	mg/kg		7.57	9.01	8.46	9.05	9.56
calcium	7440-70-2	E440	50	mg/kg		124000	134000	127000	135000	122000
chromium	7440-47-3	E440	0.50	mg/kg		157	224	172	163	134
cobalt	7440-48-4	E440	0.10	mg/kg		40.0	165	27.7	26.0	30.0
copper	7440-50-8	E440	0.50	mg/kg		5060	24700	2240	8020	22900
iron	7439-89-6	E440	50	mg/kg		65200	66900	70800	72000	60400
lead	7439-92-1	E440	0.50	mg/kg		442	478	6460	714	13400
lithium	7439-93-2	E440	2.0	mg/kg		25.8	18.3	40.1	16.5	16.7
magnesium	7439-95-4	E440	20	mg/kg		12300	12500	11500	12100	12100
manganese	7439-96-5	E440	1.0	mg/kg		2560	889	1640	1380	1710
mercury	7439-97-6	E510	0.0500	mg/kg		<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
molybdenum	7439-98-7	E440	0.10	mg/kg		58.0	62.0	54.1	44.1	44.5
nickel	7440-02-0	E440	0.50	mg/kg		144	505	124	130	102
phosphorus	7723-14-0	E440	50	mg/kg		9320	10800	10700	10000	9500
potassium	7440-09-7	E440	100	mg/kg		4570	4530	4540	4650	4310
selenium	7782-49-2	E440	0.20	mg/kg		0.27	0.33	0.39	0.34	0.63
silver	7440-22-4	E440	0.10	mg/kg		2.98	7.13	3.21	3.73	6.64
sodium	7440-23-5	E440	50	mg/kg		13600	13200	14400	13600	13300
strontium	7440-24-6	E440	0.50	mg/kg		1370	317	345	348	324
sulfur	7704-34-9	E440	1000	mg/kg		9900	11700	9800	10200	9400
thallium	7440-28-0	E440	0.050	mg/kg		<0.050	<0.050	0.109	<0.050	0.094

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-1	BA2029-A-2	BA2029-A-3	BA2029-A-4	BA2029-A-5
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00
						VA20B0794-001	VA20B0794-002	VA20B0794-003	VA20B0794-004	VA20B0794-005
						Result	Result	Result	Result	Result
Metals										
tin	7440-31-5	E440	2.0	mg/kg		90.7	117	104	122	118
titanium	7440-32-6	E440	1.0	mg/kg		1100	1270	1480	958	820
tungsten	7440-33-7	E440	0.50	mg/kg		4.29	12.3	6.11	11.0	9.77
uranium	7440-61-1	E440	0.050	mg/kg		2.18	2.37	2.44	2.67	2.15
vanadium	7440-62-2	E440	0.20	mg/kg		36.0	37.0	43.4	35.6	36.0
zinc	7440-66-6	E440	2.0	mg/kg		3620	6840	5740	6160	3790
zirconium	7440-67-7	E440	1.0	mg/kg		1.1	1.1	2.6	1.4	<1.0
Speciated Metals										
chromium, hexavalent [Cr VI]	18540-29-9	E532	0.10	mg/kg		<0.10	----	----	----	----
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.5	11.6	11.4	11.5	11.6
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		8.96	9.27	8.67	8.83	8.86
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.86	2.86	2.86	2.86	2.86
pH, TCLP final	----	EPP444	0.010	pH units		5.94	6.04	6.07	6.14	6.41
antimony, TCLP	7440-36-0	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
arsenic, TCLP	7440-38-2	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
barium, TCLP	7440-39-3	E444	2.5	mg/L		<2.5	<2.5	<2.5	<2.5	<2.5
beryllium, TCLP	7440-41-7	E444	0.025	mg/L		<0.025	<0.025	<0.025	<0.025	<0.025
boron, TCLP	7440-42-8	E444	0.50	mg/L		2.12	2.39	2.44	2.47	2.32
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.146	0.282	0.609	0.168	0.206
calcium, TCLP	7440-70-2	E444	10	mg/L		2120	2070	2080	2180	2100
chromium, TCLP	7440-47-3	E444	0.25	mg/L		<0.25	<0.25	<0.25	<0.25	<0.25
cobalt, TCLP	7440-48-4	E444	0.050	mg/L		0.579	0.631	0.872	0.681	0.588
copper, TCLP	7440-50-8	E444	0.050	mg/L		0.929	1.20	2.26	1.16	1.18
iron, TCLP	7439-89-6	E444	5.0	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0
lead, TCLP	7439-92-1	E444	0.25	mg/L		<0.25	<0.25	<0.25	<0.25	<0.25
magnesium, TCLP	7439-95-4	E444	2.5	mg/L		123	123	127	130	133
mercury, TCLP	7439-97-6	E512	0.0100	mg/L		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
nickel, TCLP	7440-02-0	E444	0.25	mg/L		0.52	0.55	0.63	1.45	0.60
selenium, TCLP	7782-49-2	E444	1.00	mg/L		<1.00	<1.00	<1.00	<1.00	<1.00
silver, TCLP	7440-22-4	E444	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
thallium, TCLP	7440-28-0	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-1	BA2029-A-2	BA2029-A-3	BA2029-A-4	BA2029-A-5
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00
						VA20B0794-001	VA20B0794-002	VA20B0794-003	VA20B0794-004	VA20B0794-005
						Result	Result	Result	Result	Result
TCLP Metals										
vanadium, TCLP	7440-62-2	E444	0.15	mg/L		<0.15	<0.15	<0.15	<0.15	<0.15
zinc, TCLP	7440-66-6	E444	0.50	mg/L		57.2	50.9	50.4	48.6	41.8

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

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-6	BA2029-A-7	BA2029-A-8	BA2029-A-9	BA2029-A-10
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00
						VA20B0794-006	VA20B0794-007	VA20B0794-008	VA20B0794-009	VA20B0794-010
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		18.2	15.8	17.7	18.8	16.8
pH (1:2 soil:water)	----	E108	0.10	pH units		11.3	11.3	11.6	11.7	11.4
Metals										
aluminum	7429-90-5	E440	50	mg/kg		40500	30600	42400	32700	31600
antimony	7440-36-0	E440	0.10	mg/kg		163	159	156	157	203
arsenic	7440-38-2	E440	0.10	mg/kg		32.2	26.8	28.0	23.4	33.7
barium	7440-39-3	E440	0.50	mg/kg		750	826	983	821	720
beryllium	7440-41-7	E440	0.10	mg/kg		0.37	0.37	0.36	0.33	0.29
bismuth	7440-69-9	E440	0.20	mg/kg		5.63	5.43	4.97	4.15	5.66
boron	7440-42-8	E440	5.0	mg/kg		251	192	173	165	154
cadmium	7440-43-9	E440	0.020	mg/kg		9.96	9.02	7.88	9.28	8.99
calcium	7440-70-2	E440	50	mg/kg		130000	130000	122000	113000	128000
chromium	7440-47-3	E440	0.50	mg/kg		151	149	140	176	146
cobalt	7440-48-4	E440	0.10	mg/kg		32.9	37.5	87.8	85.5	434
copper	7440-50-8	E440	0.50	mg/kg		3790	3760	1300	3000	7420
iron	7439-89-6	E440	50	mg/kg		49700	64300	76600	87000	55700
lead	7439-92-1	E440	0.50	mg/kg		542	1010	448	422	600
lithium	7439-93-2	E440	2.0	mg/kg		19.0	21.5	18.0	19.8	23.9
magnesium	7439-95-4	E440	20	mg/kg		12400	11700	11400	9290	11100
manganese	7439-96-5	E440	1.0	mg/kg		773	886	1800	900	787
mercury	7439-97-6	E510	0.0500	mg/kg		<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
molybdenum	7439-98-7	E440	0.10	mg/kg		41.1	44.4	49.9	42.0	38.2
nickel	7440-02-0	E440	0.50	mg/kg		125	136	303	153	127
phosphorus	7723-14-0	E440	50	mg/kg		10600	10200	11200	8820	9350
potassium	7440-09-7	E440	100	mg/kg		4710	4570	4140	3720	3940
selenium	7782-49-2	E440	0.20	mg/kg		0.30	0.38	0.36	0.29	0.31
silver	7440-22-4	E440	0.10	mg/kg		3.13	5.27	9.60	4.11	3.69
sodium	7440-23-5	E440	50	mg/kg		14300	13000	12300	12200	12400
strontium	7440-24-6	E440	0.50	mg/kg		319	323	302	290	288
sulfur	7704-34-9	E440	1000	mg/kg		11400	10500	9600	8700	10100
thallium	7440-28-0	E440	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
tin	7440-31-5	E440	2.0	mg/kg		117	111	111	86.4	235

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-6	BA2029-A-7	BA2029-A-8	BA2029-A-9	BA2029-A-10
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00	15-Jul-2020 09:00
						VA20B0794-006	VA20B0794-007	VA20B0794-008	VA20B0794-009	VA20B0794-010
						Result	Result	Result	Result	Result
Metals										
titanium	7440-32-6	E440	1.0	mg/kg		870	1010	1610	1550	1500
tungsten	7440-33-7	E440	0.50	mg/kg		6.44	6.62	6.02	5.16	5.94
uranium	7440-61-1	E440	0.050	mg/kg		2.42	2.42	2.10	1.96	2.12
vanadium	7440-62-2	E440	0.20	mg/kg		37.1	42.7	37.4	34.4	36.8
zinc	7440-66-6	E440	2.0	mg/kg		4050	4600	3470	3660	4680
zirconium	7440-67-7	E440	1.0	mg/kg		1.2	1.0	2.5	2.1	2.2
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.5	11.6	11.6	11.6	11.6
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		9.00	9.36	9.77	9.48	9.39
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.86	2.86	2.86	2.86	2.86
pH, TCLP final	----	EPP444	0.010	pH units		6.38	5.97	6.26	6.03	6.10
antimony, TCLP	7440-36-0	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
arsenic, TCLP	7440-38-2	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
barium, TCLP	7440-39-3	E444	2.5	mg/L		<2.5	<2.5	<2.5	<2.5	<2.5
beryllium, TCLP	7440-41-7	E444	0.025	mg/L		<0.025	<0.025	<0.025	<0.025	<0.025
boron, TCLP	7440-42-8	E444	0.50	mg/L		2.55	2.41	2.54	2.42	2.40
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.248	0.175	0.174	0.144	0.176
calcium, TCLP	7440-70-2	E444	10	mg/L		2300	2080	2200	2170	2120
chromium, TCLP	7440-47-3	E444	0.25	mg/L		<0.25	<0.25	<0.25	<0.25	<0.25
cobalt, TCLP	7440-48-4	E444	0.050	mg/L		0.678	0.650	0.773	0.570	0.473
copper, TCLP	7440-50-8	E444	0.050	mg/L		9.12	1.11	1.09	2.27	1.01
iron, TCLP	7439-89-6	E444	5.0	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0
lead, TCLP	7439-92-1	E444	0.25	mg/L		1.34	<0.25	<0.25	<0.25	<0.25
magnesium, TCLP	7439-95-4	E444	2.5	mg/L		133	135	134	125	133
mercury, TCLP	7439-97-6	E512	0.0100	mg/L		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
nickel, TCLP	7440-02-0	E444	0.25	mg/L		0.60	0.64	0.97	1.00	0.54
selenium, TCLP	7782-49-2	E444	1.00	mg/L		<1.00	<1.00	<1.00	<1.00	<1.00
silver, TCLP	7440-22-4	E444	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
thallium, TCLP	7440-28-0	E444	1.0	mg/L		<1.0	<1.0	<1.0	<1.0	<1.0
vanadium, TCLP	7440-62-2	E444	0.15	mg/L		<0.15	<0.15	<0.15	<0.15	<0.15
zinc, TCLP	7440-66-6	E444	0.50	mg/L		47.7	47.7	43.2	45.9	42.4

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

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-11	BA2029-A-12	----	----	----
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	----	----	----
						VA20B0794-011	VA20B0794-012	--------	--------	--------
						Result	Result	----	----	----
Physical Tests										
moisture	----	E144	0.25	%		15.4	16.4	----	----	----
pH (1:2 soil:water)	----	E108	0.10	pH units		11.4	11.6	----	----	----
Metals										
aluminum	7429-90-5	E440	50	mg/kg		26500	49300	----	----	----
antimony	7440-36-0	E440	0.10	mg/kg		309	282	----	----	----
arsenic	7440-38-2	E440	0.10	mg/kg		27.0	25.9	----	----	----
barium	7440-39-3	E440	0.50	mg/kg		710	685	----	----	----
beryllium	7440-41-7	E440	0.10	mg/kg		0.34	0.40	----	----	----
bismuth	7440-69-9	E440	0.20	mg/kg		5.03	7.49	----	----	----
boron	7440-42-8	E440	5.0	mg/kg		227	168	----	----	----
cadmium	7440-43-9	E440	0.020	mg/kg		8.25	7.99	----	----	----
calcium	7440-70-2	E440	50	mg/kg		125000	119000	----	----	----
chromium	7440-47-3	E440	0.50	mg/kg		167	143	----	----	----
cobalt	7440-48-4	E440	0.10	mg/kg		118	18.9	----	----	----
copper	7440-50-8	E440	0.50	mg/kg		4630	68900	----	----	----
iron	7439-89-6	E440	50	mg/kg		80200	76800	----	----	----
lead	7439-92-1	E440	0.50	mg/kg		1630	856	----	----	----
lithium	7439-93-2	E440	2.0	mg/kg		17.5	18.9	----	----	----
magnesium	7439-95-4	E440	20	mg/kg		12600	9100	----	----	----
manganese	7439-96-5	E440	1.0	mg/kg		1350	925	----	----	----
mercury	7439-97-6	E510	0.0500	mg/kg		1.01 DLA	<0.0500	----	----	----
molybdenum	7439-98-7	E440	0.10	mg/kg		59.4	41.3	----	----	----
nickel	7440-02-0	E440	0.50	mg/kg		193	223	----	----	----
phosphorus	7723-14-0	E440	50	mg/kg		10100	9590	----	----	----
potassium	7440-09-7	E440	100	mg/kg		4270	4500	----	----	----
selenium	7782-49-2	E440	0.20	mg/kg		0.37	0.36	----	----	----
silver	7440-22-4	E440	0.10	mg/kg		3.58	3.45	----	----	----
sodium	7440-23-5	E440	50	mg/kg		13200	12400	----	----	----
strontium	7440-24-6	E440	0.50	mg/kg		281	279	----	----	----
sulfur	7704-34-9	E440	1000	mg/kg		10500	11100	----	----	----
thallium	7440-28-0	E440	0.050	mg/kg		<0.050	<0.050	----	----	----
tin	7440-31-5	E440	2.0	mg/kg		518	112	----	----	----

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2029-A-11	BA2029-A-12	----	----	----
					Client sampling date / time	15-Jul-2020 09:00	15-Jul-2020 09:00	----	----	----
						VA20B0794-011	VA20B0794-012	--------	--------	--------
						Result	Result	----	----	----
Metals										
titanium	7440-32-6	E440	1.0	mg/kg		908	1210	----	----	----
tungsten	7440-33-7	E440	0.50	mg/kg		6.78	4.07	----	----	----
uranium	7440-61-1	E440	0.050	mg/kg		2.18	2.32	----	----	----
vanadium	7440-62-2	E440	0.20	mg/kg		33.3	34.6	----	----	----
zinc	7440-66-6	E440	2.0	mg/kg		3770	3910	----	----	----
zirconium	7440-67-7	E440	1.0	mg/kg		1.2	2.2	----	----	----
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.7	11.6	----	----	----
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		9.05	8.63	----	----	----
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.86	2.86	----	----	----
pH, TCLP final	----	EPP444	0.010	pH units		6.17	6.42	----	----	----
antimony, TCLP	7440-36-0	E444	1.0	mg/L		<1.0	<1.0	----	----	----
arsenic, TCLP	7440-38-2	E444	1.0	mg/L		<1.0	<1.0	----	----	----
barium, TCLP	7440-39-3	E444	2.5	mg/L		<2.5	<2.5	----	----	----
beryllium, TCLP	7440-41-7	E444	0.025	mg/L		<0.025	<0.025	----	----	----
boron, TCLP	7440-42-8	E444	0.50	mg/L		2.44	2.38	----	----	----
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.159	0.169	----	----	----
calcium, TCLP	7440-70-2	E444	10	mg/L		2110	2180	----	----	----
chromium, TCLP	7440-47-3	E444	0.25	mg/L		<0.25	<0.25	----	----	----
cobalt, TCLP	7440-48-4	E444	0.050	mg/L		0.598	0.562	----	----	----
copper, TCLP	7440-50-8	E444	0.050	mg/L		1.04	0.760	----	----	----
iron, TCLP	7439-89-6	E444	5.0	mg/L		<5.0	<5.0	----	----	----
lead, TCLP	7439-92-1	E444	0.25	mg/L		<0.25	<0.25	----	----	----
magnesium, TCLP	7439-95-4	E444	2.5	mg/L		130	134	----	----	----
mercury, TCLP	7439-97-6	E512	0.0100	mg/L		<0.0100	<0.0100	----	----	----
nickel, TCLP	7440-02-0	E444	0.25	mg/L		0.46	0.50	----	----	----
selenium, TCLP	7782-49-2	E444	1.00	mg/L		<1.00	<1.00	----	----	----
silver, TCLP	7440-22-4	E444	0.050	mg/L		<0.050	<0.050	----	----	----
thallium, TCLP	7440-28-0	E444	1.0	mg/L		<1.0	<1.0	----	----	----
vanadium, TCLP	7440-62-2	E444	0.15	mg/L		<0.15	<0.15	----	----	----
zinc, TCLP	7440-66-6	E444	0.50	mg/L		37.7	36.3	----	----	----

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