Bottom Ash Data

2020 Week 28

The following analytical report was sent to the Ministry of Environment and Climate Change Strategy on July 23, 2020. The data represents bottom ash composite results for week 28 of 2020 (July 5, 2020 to July 11, 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	: **VA20B0312**	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	: 14-Jul-2020 12:00
PO	: VANCO 0000049378	Date Analysis Commenced	: 15-Jul-2020
C-O-C number	: ----	Issue Date	: 22-Jul-2020 16:11
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*
Cristina Alexandre	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Kinny Wu	Laboratory Analyst	Metals, Burnaby, British Columbia
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Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia
Shaneel Dayal	Analyst	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.

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2028-A-1	BA2028-A-2	BA2028-A-3	BA2028-A-4	BA2028-A-5
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00
						VA20B0312-001	VA20B0312-002	VA20B0312-003	VA20B0312-004	VA20B0312-005
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		18.4	18.7	17.9	18.7	18.6
pH (1:2 soil:water)	----	E108	0.10	pH units		10.8	10.8	10.8	10.9	10.8
Metals										
aluminum	7429-90-5	E440	50	mg/kg		31200	30200	36200	33000	29700
antimony	7440-36-0	E440	0.10	mg/kg		109	103	104	103	114
arsenic	7440-38-2	E440	0.10	mg/kg		30.4	28.1	34.5	27.5	28.4
barium	7440-39-3	E440	0.50	mg/kg		586	812	616	665	592
beryllium	7440-41-7	E440	0.10	mg/kg		0.37	0.39	0.34	0.33	0.34
bismuth	7440-69-9	E440	0.20	mg/kg		38.5	5.16	5.32	4.72	7.13
boron	7440-42-8	E440	5.0	mg/kg		183	226	190	178	190
cadmium	7440-43-9	E440	0.020	mg/kg		11.2	13.4	12.9	8.26	11.9
calcium	7440-70-2	E440	50	mg/kg		123000	121000	124000	109000	116000
chromium	7440-47-3	E440	0.50	mg/kg		139	142	129	171	172
cobalt	7440-48-4	E440	0.10	mg/kg		277	73.3	33.5	38.5	34.6
copper	7440-50-8	E440	0.50	mg/kg		12000	10500	2150	3670	7930
iron	7439-89-6	E440	50	mg/kg		62100	80400	65600	83500	71500
lead	7439-92-1	E440	0.50	mg/kg		1240	1560	528	398	708
lithium	7439-93-2	E440	2.0	mg/kg		21.1	20.2	22.3	17.4	19.1
magnesium	7439-95-4	E440	20	mg/kg		10200	9850	9850	10200	10000
manganese	7439-96-5	E440	1.0	mg/kg		942	761	843	2080	795
mercury	7439-97-6	E510	0.0500	mg/kg		0.0546	0.0800	0.0697	0.0705	0.153
molybdenum	7439-98-7	E440	0.10	mg/kg		31.7	20.6	19.1	26.1	22.1
nickel	7440-02-0	E440	0.50	mg/kg		149	334	205	208	147
phosphorus	7723-14-0	E440	50	mg/kg		9230	9880	10700	10500	9360
potassium	7440-09-7	E440	100	mg/kg		5080	4420	4730	4260	3910
selenium	7782-49-2	E440	0.20	mg/kg		0.57	0.34	0.38	0.34	0.33
silver	7440-22-4	E440.Ag	0.10	mg/kg		6.96	----	----	----	----
silver	7440-22-4	E440	0.10	mg/kg		----	3.51	3.52	6.01	4.71
sodium	7440-23-5	E440	50	mg/kg		14200	13500	13800	13400	12400
strontium	7440-24-6	E440	0.50	mg/kg		346	351	278	264	277
sulfur	7704-34-9	E440	1000	mg/kg		13100	9900	11100	9500	9400

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2028-A-1	BA2028-A-2	BA2028-A-3	BA2028-A-4	BA2028-A-5
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00
						VA20B0312-001	VA20B0312-002	VA20B0312-003	VA20B0312-004	VA20B0312-005
						Result	Result	Result	Result	Result
Metals										
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		1480	144	156	112	111
titanium	7440-32-6	E440	1.0	mg/kg		984	1440	910	533	429
tungsten	7440-33-7	E440	0.50	mg/kg		7.75	7.96	6.76	5.49	5.99
uranium	7440-61-1	E440	0.050	mg/kg		3.36	3.28	3.96	2.96	2.96
vanadium	7440-62-2	E440	0.20	mg/kg		40.9	41.1	41.7	35.8	38.2
zinc	7440-66-6	E440	2.0	mg/kg		3730	4330	3450	3520	4070
zirconium	7440-67-7	E440	1.0	mg/kg		1.0	1.7	1.5	1.4	1.2
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.6	11.6	11.5	11.6	11.5
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		8.73	8.61	8.89	8.67	8.56
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.88	2.88	2.88	2.88	2.88
pH, TCLP final	----	EPP444	0.010	pH units		6.18	6.22	6.27	6.16	6.24
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		1.84	1.80	1.81	1.82	1.86
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.953	0.233	0.398	0.161	0.236
calcium, TCLP	7440-70-2	E444	10	mg/L		1860	1930	1940	1910	1880
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		1.09	1.24	0.716	0.823	0.700
copper, TCLP	7440-50-8	E444	0.050	mg/L		1.36	1.55	1.29	1.50	1.09
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	0.47	<0.25	<0.25	0.32
magnesium, TCLP	7439-95-4	E444	2.5	mg/L		132	139	133	143	142
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		0.53	0.55	0.48	0.56	0.76
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

Analytical Results

Sub-Matrix: Soil (Matrix: Soil/Solid)					Client sample ID	BA2028-A-1	BA2028-A-2	BA2028-A-3	BA2028-A-4	BA2028-A-5
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00
Analyte	CAS Number	Method	LOR	Unit		VA20B0312-001	VA20B0312-002	VA20B0312-003	VA20B0312-004	VA20B0312-005
						Result	Result	Result	Result	Result
TCLP Metals										
zinc, TCLP	7440-66-6	E444	0.50	mg/L		61.2	44.0	43.4	45.2	50.6

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	LOR	Unit	Client sample ID	BA2028-A-6	BA2028-A-7	BA2028-A-8	BA2028-A-9	BA2028-A-10
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00
						VA20B0312-006	VA20B0312-007	VA20B0312-008	VA20B0312-009	VA20B0312-010
						Result	Result	Result	Result	Result
Physical Tests										
moisture	----	E144	0.25	%		18.6	18.6	18.2	17.0	18.1
pH (1:2 soil:water)	----	E108	0.10	pH units		10.8	10.8	10.8	10.8	10.9
Metals										
aluminum	7429-90-5	E440	50	mg/kg		35500	38800	31200	41900	6860
antimony	7440-36-0	E440	0.10	mg/kg		117	91.7	113	101	6.32
arsenic	7440-38-2	E440	0.10	mg/kg		34.0	24.4	28.1	23.9	<0.73
barium	7440-39-3	E440	0.50	mg/kg		516	601	531	620	156
beryllium	7440-41-7	E440	0.10	mg/kg		0.35	0.34	0.38	0.34	<0.73
bismuth	7440-69-9	E440	0.20	mg/kg		5.03	4.60	5.99	7.62	1.50
boron	7440-42-8	E440	5.0	mg/kg		212	166	227	152	<36.6
cadmium	7440-43-9	E440	0.020	mg/kg		50.7	9.32	48.8	11.0	2.75
calcium	7440-70-2	E440	50	mg/kg		112000	113000	123000	115000	88100
chromium	7440-47-3	E440	0.50	mg/kg		167	250	214	139	4600
cobalt	7440-48-4	E440	0.10	mg/kg		146	71.2	27.9	34.7	215
copper	7440-50-8	E440	0.50	mg/kg		2900	3620	1400	2550	6.42
iron	7439-89-6	E440	50	mg/kg		62500	67800	59300	52500	3400
lead	7439-92-1	E440	0.50	mg/kg		2200	2630	575	2960	19000
lithium	7439-93-2	E440	2.0	mg/kg		48.9	17.4	17.6	20.9	<14.6
magnesium	7439-95-4	E440	20	mg/kg		9520	11500	10200	9260	17400
manganese	7439-96-5	E440	1.0	mg/kg		874	862	934	715	136
mercury	7439-97-6	E510	0.0500	mg/kg		0.0863	0.0676	0.0642	0.135	0.0740
molybdenum	7439-98-7	E440	0.10	mg/kg		65.1	26.9	28.6	25.3	<0.73
nickel	7440-02-0	E440	0.50	mg/kg		167	258	163	137	<3.66
phosphorus	7723-14-0	E440	50	mg/kg		10100	8750	10700	10100	<366
potassium	7440-09-7	E440	100	mg/kg		4090	4100	4500	4040	1460
selenium	7782-49-2	E440	0.20	mg/kg		0.29	0.33	0.35	0.36	<1.46
silver	7440-22-4	E440	0.10	mg/kg		3.36	3.17	3.68	7.22	<0.73
sodium	7440-23-5	E440	50	mg/kg		12800	12500	13200	12700	2740
strontium	7440-24-6	E440	0.50	mg/kg		255	284	276	283	52.2
sulfur	7704-34-9	E440	1000	mg/kg		10100	9300	10500	10200	<7300
thallium	7440-28-0	E440	0.050	mg/kg		<0.050	0.067	<0.050	<0.050	0.372
tin	7440-31-5	E440	2.0	mg/kg		116	98.2	97.1	106	<14.6

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2028-A-6	BA2028-A-7	BA2028-A-8	BA2028-A-9	BA2028-A-10
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00	08-Jul-2020 09:00
						VA20B0312-006	VA20B0312-007	VA20B0312-008	VA20B0312-009	VA20B0312-010
						Result	Result	Result	Result	Result
Metals										
titanium	7440-32-6	E440	1.0	mg/kg		425	802	396	882	400
tungsten	7440-33-7	E440	0.50	mg/kg		7.14	5.45	10.6	17.8	<3.66
uranium	7440-61-1	E440	0.050	mg/kg		2.93	2.77	3.30	2.83	0.596
vanadium	7440-62-2	E440	0.20	mg/kg		37.3	38.2	40.6	35.3	5.21
zinc	7440-66-6	E440	2.0	mg/kg		7240	5020	3520	3250	230
zirconium	7440-67-7	E440	1.0	mg/kg		1.8	1.5	1.4	1.8	<7.3
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.5	11.5	11.5	11.5	11.5
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		8.74	8.60	8.39	8.38	8.90
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.88	2.88	2.88	2.88	2.88
pH, TCLP final	----	EPP444	0.010	pH units		6.12	6.14	6.28	6.16	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		1.92	1.92	1.78	1.99	1.88
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.375	0.172	0.382	0.204	0.214
calcium, TCLP	7440-70-2	E444	10	mg/L		1950	1850	1850	1860	2010
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		0.994	1.01	0.858	1.16	1.24
copper, TCLP	7440-50-8	E444	0.050	mg/L		1.30	1.88	0.691	1.55	1.54
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	0.31	<0.25
magnesium, TCLP	7439-95-4	E444	2.5	mg/L		146	139	150	132	146
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		0.58	0.51	0.61	0.53	0.52
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		59.6	46.8	43.5	56.0	47.2

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	LOR	Unit	Client sample ID	BA2028-A-11	BA2028-A-12	----	----	----
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	----	----	----
						VA20B0312-011	VA20B0312-012	--------	--------	--------
						Result	Result	----	----	----
Physical Tests										
moisture	----	E144	0.25	%		18.4	18.0	----	----	----
pH (1:2 soil:water)	----	E108	0.10	pH units		10.8	10.8	----	----	----
Metals										
aluminum	7429-90-5	E440	50	mg/kg		39300	26700	----	----	----
antimony	7440-36-0	E440	0.10	mg/kg		127	197	----	----	----
arsenic	7440-38-2	E440	0.10	mg/kg		28.8	29.9	----	----	----
barium	7440-39-3	E440	0.50	mg/kg		616	703	----	----	----
beryllium	7440-41-7	E440	0.10	mg/kg		0.35	0.38	----	----	----
bismuth	7440-69-9	E440	0.20	mg/kg		11.9	6.23	----	----	----
boron	7440-42-8	E440	5.0	mg/kg		150	177	----	----	----
cadmium	7440-43-9	E440	0.020	mg/kg		8.51	24.9	----	----	----
calcium	7440-70-2	E440	50	mg/kg		123000	120000	----	----	----
chromium	7440-47-3	E440	0.50	mg/kg		138	148	----	----	----
cobalt	7440-48-4	E440	0.10	mg/kg		42.4	102	----	----	----
copper	7440-50-8	E440	0.50	mg/kg		17200	2390	----	----	----
iron	7439-89-6	E440	50	mg/kg		58000	62600	----	----	----
lead	7439-92-1	E440	0.50	mg/kg		454	1640	----	----	----
lithium	7439-93-2	E440	2.0	mg/kg		25.7	19.2	----	----	----
magnesium	7439-95-4	E440	20	mg/kg		9630	11600	----	----	----
manganese	7439-96-5	E440	1.0	mg/kg		716	839	----	----	----
mercury	7439-97-6	E510	0.0500	mg/kg		0.0596	0.0643	----	----	----
molybdenum	7439-98-7	E440	0.10	mg/kg		246	149	----	----	----
nickel	7440-02-0	E440	0.50	mg/kg		138	144	----	----	----
phosphorus	7723-14-0	E440	50	mg/kg		10900	10400	----	----	----
potassium	7440-09-7	E440	100	mg/kg		4320	4720	----	----	----
selenium	7782-49-2	E440	0.20	mg/kg		0.32	0.32	----	----	----
silver	7440-22-4	E440	0.10	mg/kg		6.87	3.93	----	----	----
sodium	7440-23-5	E440	50	mg/kg		13000	14100	----	----	----
strontium	7440-24-6	E440	0.50	mg/kg		284	280	----	----	----
sulfur	7704-34-9	E440	1000	mg/kg		10200	9700	----	----	----
thallium	7440-28-0	E440	0.050	mg/kg		<0.050	<0.050	----	----	----
tin	7440-31-5	E440	2.0	mg/kg		162	2050	----	----	----

Analytical Results

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

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	BA2028-A-11	BA2028-A-12	----	----	----
					Client sampling date / time	08-Jul-2020 09:00	08-Jul-2020 09:00	----	----	----
						VA20B0312-011	VA20B0312-012	--------	--------	--------
						Result	Result	----	----	----
Metals										
titanium	7440-32-6	E440	1.0	mg/kg		834	768	----	----	----
tungsten	7440-33-7	E440	0.50	mg/kg		11.8	13.6	----	----	----
uranium	7440-61-1	E440	0.050	mg/kg		2.87	3.11	----	----	----
vanadium	7440-62-2	E440	0.20	mg/kg		39.9	43.3	----	----	----
zinc	7440-66-6	E440	2.0	mg/kg		6320	3390	----	----	----
zirconium	7440-67-7	E440	1.0	mg/kg		1.7	<1.0	----	----	----
TCLP Metals										
pH, TCLP 1st preliminary	----	EPP444	0.010	pH units		11.5	11.5	----	----	----
pH, TCLP 2nd preliminary	----	EPP444	0.010	pH units		8.80	8.92	----	----	----
pH, TCLP extraction fluid initial	----	EPP444	0.010	pH units		2.88	2.88	----	----	----
pH, TCLP final	----	EPP444	0.010	pH units		6.41	6.97	----	----	----
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		1.91	1.58	----	----	----
cadmium, TCLP	7440-43-9	E444	0.050	mg/L		0.207	0.064	----	----	----
calcium, TCLP	7440-70-2	E444	10	mg/L		1890	1530	----	----	----
chromium, TCLP	7440-47-3	E444	0.25	mg/L		<0.25	<0.25	----	----	----
cobalt, TCLP	7440-48-4	E444	0.050	mg/L		1.42	0.565	----	----	----
copper, TCLP	7440-50-8	E444	0.050	mg/L		1.10	0.448	----	----	----
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		128	99.1	----	----	----
mercury, TCLP	7439-97-6	E512	0.0100	mg/L		<0.0100	<0.0100	----	----	----
nickel, TCLP	7440-02-0	E444	0.25	mg/L		0.44	<0.25	----	----	----
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		43.2	4.89	----	----	----

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