Form REP-703
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Water Analysis

Location: Mountaineer Plant ***Report Date: 11/11/2013***

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Sample Number: 134243-001 **Date Collected: 10/16/2013** **Date Received: 10/16/2013**

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Mercury, Hg	< 0.2	ng/L	U	0.5	0.2	JAB	10/18/2013	EPA 1631E

CPS Influent

Sample Number: 134243-002 **Date Collected: 10/16/2013** **Date Received: 10/16/2013**

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	9.82	ug/L		0.05	0.01	DPC	10/25/2013 14:28	EPA 200.8
Arsenic, As	74.5	ug/L		0.1	0.03	DPC	10/25/2013 14:28	EPA 200.8
Barium, Ba	797	ug/L		0.1	0.02	DPC	10/25/2013 14:28	EPA 200.8
Beryllium, Be	< 20	ug/L	U	50	20	DAM	10/24/2013 12:51	EPA 200.7
Cadmium, Cd	259	ug/L		0.05	0.01	DPC	10/25/2013 14:28	EPA 200.8
Chromium, Cr	221	ug/L		0.2	0.04	DPC	10/25/2013 14:28	EPA 200.8
Cobalt, Co	318	ug/L		0.02	0.004	DPC	10/25/2013 14:28	EPA 200.8
Copper, Cu	265	ug/L		0.05	0.01	DPC	10/25/2013 14:28	EPA 200.8
Lead, Pb	116	ug/L		0.01	0.002	DPC	10/25/2013 14:28	EPA 200.8
Mercury, Hg	256000	ng/L		5000	2000	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	313	ug/L		0.05	0.01	DPC	10/25/2013 14:28	EPA 200.8
Nickel, Ni	1930	ug/L		0.2	0.05	DPC	10/25/2013 14:28	EPA 200.8
Selenium, Se	800	ug/L		0.5	0.2	DPC	10/25/2013 14:28	EPA 200.8
Silver, Ag	0.215	ug/L		0.01	0.002	DPC	10/25/2013 14:28	EPA 200.8
Thallium, Tl	14.8	ug/L		0.05	0.002	DPC	10/25/2013 14:28	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 12:51	EPA 200.7
Titanium, Ti	112	ug/L		100	20	DAM	10/24/2013 12:51	EPA 200.7
Zinc, Zn	3070	ug/L		0.5	0.1	DPC	10/25/2013 14:28	EPA 200.8
Aluminum, Al	7.05	mg/L		0.001	0.0003	DPC	10/25/2013 14:28	EPA 200.8
Boron, B	453	mg/L		1	0.2	DAM	10/24/2013 12:51	EPA 200.7
Calcium, Ca	3730	mg/L		1	0.2	DAM	10/24/2013 12:51	EPA 200.7
Iron, Fe	67.4	mg/L		2	0.5	DAM	10/24/2013 12:51	EPA 200.7
Magnesium, Mg	4830	mg/L		0.5	0.1	DAM	10/24/2013 12:51	EPA 200.7
Manganese, Mn	91.0	mg/L		0.02	0.005	DAM	10/24/2013 12:51	EPA 200.7
Potassium, K	79.7	mg/L		2	0.4	DAM	10/24/2013 12:50	EPA 200.7
Sodium, Na	399	mg/L		2	0.4	DAM	10/24/2013 12:50	EPA 200.7
Strontium, Sr	22.2	mg/L		0.05	0.02	DAM	10/24/2013 12:50	EPA 200.7
Ammonia, NH3, as N	< 0.02	mg/L	U	0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	14.1	mg/L		5	1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	37.1	mg/L		0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

CPS Influent Dissolved

Sample Number: 134243-002A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	3.04	ug/L		0.05	0.01	DPC	10/25/2013 14:33	EPA 200.8
Arsenic, As	3.65	ug/L		0.1	0.03	DPC	10/25/2013 14:33	EPA 200.8
Barium, Ba	47.4	ug/L		0.1	0.02	DPC	10/25/2013 14:33	EPA 200.8
Beryllium, Be	< 20	ug/L	U	50	20	DAM	10/24/2013 12:55	EPA 200.7
Cadmium, Cd	164	ug/L		0.05	0.01	DPC	10/25/2013 14:33	EPA 200.8
Chromium, Cr	0.6	ug/L		0.2	0.04	DPC	10/25/2013 14:33	EPA 200.8
Cobalt, Co	244	ug/L		0.02	0.004	DPC	10/25/2013 14:33	EPA 200.8
Copper, Cu	6.66	ug/L		0.05	0.01	DPC	10/25/2013 14:33	EPA 200.8
Lead, Pb	0.154	ug/L		0.01	0.002	DPC	10/25/2013 14:33	EPA 200.8
Mercury, Hg	148	ng/L		10	4	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	287	ug/L		0.05	0.01	DPC	10/25/2013 14:33	EPA 200.8
Nickel, Ni	1510	ug/L		0.2	0.05	DPC	10/25/2013 14:33	EPA 200.8
Selenium, Se	424	ug/L		0.5	0.2	DPC	10/25/2013 14:33	EPA 200.8
Selenite, Se+4 (Hydride)	284	ug/L		20	4	TLT	11/01/2013	AEP Method
Silver, Ag	0.011	ug/L		0.01	0.002	DPC	10/25/2013 14:33	EPA 200.8
Thallium, Tl	8.63	ug/L		0.05	0.002	DPC	10/25/2013 14:33	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 12:55	EPA 200.7
Titanium, Ti	< 20	ug/L	U	100	20	DAM	10/24/2013 12:55	EPA 200.7
Zinc, Zn	653	ug/L		0.5	0.1	DPC	10/25/2013 14:33	EPA 200.8
Aluminum, Al	0.346	mg/L		0.001	0.0003	DPC	10/25/2013 14:33	EPA 200.8
Boron, B	469	mg/L		1	0.2	DAM	10/24/2013 12:55	EPA 200.7
Calcium, Ca	662	mg/L		1	0.2	DAM	10/24/2013 12:55	EPA 200.7
Iron, Fe	< 0.5	mg/L	U	2	0.5	DAM	10/24/2013 12:55	EPA 200.7
Magnesium, Mg	4680	mg/L		0.5	0.1	DAM	10/24/2013 12:55	EPA 200.7
Manganese, Mn	88.4	mg/L		0.02	0.005	DAM	10/24/2013 12:55	EPA 200.7
Potassium, K	79.6	mg/L		2	0.4	DAM	10/24/2013 12:54	EPA 200.7
Sodium, Na	408	mg/L		2	0.4	DAM	10/24/2013 12:54	EPA 200.7
Strontium, Sr	10.2	mg/L		0.05	0.02	DAM	10/24/2013 12:54	EPA 200.7

Primary Clarifier Effluent

Sample Number: 134243-003 **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	2.66	ug/L		0.05	0.01	DPC	10/25/2013 16:36	EPA 200.8
Arsenic, As	3.84	ug/L		0.1	0.03	DPC	10/25/2013 16:36	EPA 200.8
Barium, Ba	52.1	ug/L		0.1	0.02	DPC	10/25/2013 16:36	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 12:59	EPA 200.7
Cadmium, Cd	76.5	ug/L		0.05	0.01	DPC	10/25/2013 16:36	EPA 200.8
Chromium, Cr	7.2	ug/L		0.2	0.04	DPC	10/25/2013 16:36	EPA 200.8
Cobalt, Co	156	ug/L		0.02	0.004	DPC	10/25/2013 16:36	EPA 200.8
Copper, Cu	5.30	ug/L		0.05	0.01	DPC	10/25/2013 16:36	EPA 200.8
Lead, Pb	1.33	ug/L		0.01	0.002	DPC	10/25/2013 16:36	EPA 200.8
Mercury, Hg	1150	ng/L		50	20	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	284	ug/L		0.05	0.01	DPC	10/25/2013 16:36	EPA 200.8
Nickel, Ni	975	ug/L		0.2	0.05	DPC	10/25/2013 16:36	EPA 200.8
Selenium, Se	419	ug/L		0.5	0.2	DPC	10/25/2013 16:36	EPA 200.8
Silver, Ag	0.011	ug/L		0.01	0.002	DPC	10/25/2013 16:36	EPA 200.8
Thallium, Tl	7.26	ug/L		0.05	0.002	DPC	10/25/2013 16:36	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 12:59	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 12:59	EPA 200.7
Zinc, Zn	125	ug/L		0.5	0.1	DPC	10/25/2013 16:36	EPA 200.8
Aluminum, Al	0.302	mg/L		0.001	0.0003	DPC	10/25/2013 16:36	EPA 200.8
Boron, B	356	mg/L		0.2	0.04	DAM	10/24/2013 12:59	EPA 200.7
Calcium, Ca	657	mg/L		0.2	0.04	DAM	10/24/2013 12:59	EPA 200.7
Iron, Fe	1.19	mg/L		0.5	0.1	DAM	10/24/2013 12:59	EPA 200.7
Magnesium, Mg	3670	mg/L		0.1	0.02	DAM	10/24/2013 12:59	EPA 200.7
Manganese, Mn	61.9	mg/L		0.005	0.001	DAM	10/24/2013 12:59	EPA 200.7
Potassium, K	60.3	mg/L		0.5	0.07	DAM	10/24/2013 12:58	EPA 200.7
Sodium, Na	325	mg/L		0.3	0.08	DAM	10/24/2013 12:58	EPA 200.7
Strontium, Sr	8.02	mg/L		0.01	0.003	DAM	10/24/2013 12:58	EPA 200.7
Ammonia, NH3, as N	1.90	mg/L		0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	7.84	mg/L		0.5	0.1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	31.4	mg/L		0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

Primary Clarifier Effluent Dissolved

Sample Number: 134243-003A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	2.35	ug/L		0.05	0.01	DPC	10/25/2013 16:16	EPA 200.8
Arsenic, As	3.06	ug/L		0.1	0.03	DPC	10/25/2013 16:16	EPA 200.8
Barium, Ba	47.1	ug/L		0.1	0.02	DPC	10/25/2013 16:16	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:08	EPA 200.7
Cadmium, Cd	71.3	ug/L		0.05	0.01	DPC	10/25/2013 16:16	EPA 200.8
Chromium, Cr	1.9	ug/L		0.2	0.04	DPC	10/25/2013 16:16	EPA 200.8
Cobalt, Co	145	ug/L		0.02	0.004	DPC	10/25/2013 16:16	EPA 200.8
Copper, Cu	2.71	ug/L		0.05	0.01	DPC	10/25/2013 16:16	EPA 200.8
Lead, Pb	0.018	ug/L		0.01	0.002	DPC	10/25/2013 16:16	EPA 200.8
Mercury, Hg	47.0	ng/L		5	2	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	267	ug/L		0.05	0.01	DPC	10/25/2013 16:16	EPA 200.8
Nickel, Ni	913	ug/L		0.2	0.05	DPC	10/25/2013 16:16	EPA 200.8
Selenium, Se	385	ug/L		0.5	0.2	DPC	10/25/2013 16:16	EPA 200.8
Selenite, Se+4 (Hydride)	309	ug/L		20	4	TLT	11/01/2013	AEP Method
Silver, Ag	0.002	ug/L	J	0.01	0.002	DPC	10/25/2013 16:16	EPA 200.8
Thallium, Tl	6.79	ug/L		0.05	0.002	DPC	10/25/2013 16:16	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:09	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:09	EPA 200.7
Zinc, Zn	116	ug/L		0.5	0.1	DPC	10/25/2013 16:16	EPA 200.8
Aluminum, Al	0.0288	mg/L		0.001	0.0003	DPC	10/25/2013 16:16	EPA 200.8
Boron, B	359	mg/L		0.2	0.04	DAM	10/24/2013 13:08	EPA 200.7
Calcium, Ca	661	mg/L		0.2	0.04	DAM	10/24/2013 13:08	EPA 200.7
Iron, Fe	< 0.1	mg/L	U	0.5	0.1	DAM	10/24/2013 13:09	EPA 200.7
Magnesium, Mg	3690	mg/L		0.1	0.02	DAM	10/24/2013 13:08	EPA 200.7
Manganese, Mn	62.3	mg/L		0.005	0.001	DAM	10/24/2013 13:08	EPA 200.7
Potassium, K	60.7	mg/L		0.5	0.07	DAM	10/24/2013 13:07	EPA 200.7
Sodium, Na	328	mg/L		0.3	0.08	DAM	10/24/2013 13:07	EPA 200.7
Strontium, Sr	8.02	mg/L		0.01	0.003	DAM	10/24/2013 13:07	EPA 200.7

Landfill Leachate

Sample Number: 134243-004 **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	12.8	ug/L		0.05	0.01	DPC	10/28/2013 10:59	EPA 200.8
Arsenic, As	44.8	ug/L		0.1	0.03	DPC	10/28/2013 10:59	EPA 200.8
Barium, Ba	24.8	ug/L		0.1	0.02	DPC	10/28/2013 10:59	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:17	EPA 200.7
Cadmium, Cd	0.90	ug/L		0.05	0.01	DPC	10/28/2013 10:59	EPA 200.8
Chromium, Cr	0.4	ug/L		0.2	0.04	DPC	10/28/2013 10:59	EPA 200.8
Cobalt, Co	2.90	ug/L		0.02	0.004	DPC	10/28/2013 10:59	EPA 200.8
Copper, Cu	0.35	ug/L		0.05	0.01	DPC	10/28/2013 10:59	EPA 200.8
Lead, Pb	0.022	ug/L		0.01	0.002	DPC	10/28/2013 10:59	EPA 200.8
Mercury, Hg	50.9	ng/L		10	4	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	8040	ug/L		0.05	0.01	DPC	10/28/2013 10:59	EPA 200.8
Nickel, Ni	8.50	ug/L		0.2	0.05	DPC	10/28/2013 10:59	EPA 200.8
Selenium, Se	280	ug/L		0.5	0.2	DPC	10/28/2013 10:59	EPA 200.8
Silver, Ag	0.004	ug/L	J	0.01	0.002	DPC	10/28/2013 10:59	EPA 200.8
Thallium, Tl	3.68	ug/L		0.05	0.002	DPC	10/28/2013 10:59	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:18	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:18	EPA 200.7
Zinc, Zn	2.9	ug/L		0.5	0.1	DPC	10/28/2013 10:59	EPA 200.8
Aluminum, Al	0.0183	mg/L		0.001	0.0003	DPC	10/28/2013 10:59	EPA 200.8
Boron, B	65.0	mg/L		0.2	0.04	DAM	10/24/2013 13:17	EPA 200.7
Calcium, Ca	483	mg/L		0.2	0.04	DAM	10/24/2013 13:17	EPA 200.7
Iron, Fe	< 0.1	mg/L	U	0.5	0.1	DAM	10/24/2013 13:18	EPA 200.7
Magnesium, Mg	477	mg/L		0.1	0.02	DAM	10/24/2013 13:17	EPA 200.7
Manganese, Mn	1.43	mg/L		0.005	0.001	DAM	10/24/2013 13:17	EPA 200.7
Potassium, K	133	mg/L		0.5	0.07	DAM	10/24/2013 13:16	EPA 200.7
Sodium, Na	2210	mg/L		0.3	0.08	DAM	10/24/2013 13:16	EPA 200.7
Strontium, Sr	6.64	mg/L		0.01	0.003	DAM	10/24/2013 13:16	EPA 200.7
Ammonia, NH3, as N	0.09	mg/L		0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	0.96	mg/L		0.5	0.1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	7.40	mg/L		0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

Landfill Leachate Dissolved

Sample Number: 134243-004A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	11.2	ug/L		0.05	0.01	DPC	10/28/2013 11:04	EPA 200.8
Arsenic, As	37.5	ug/L		0.1	0.03	DPC	10/28/2013 11:04	EPA 200.8
Barium, Ba	19.6	ug/L		0.1	0.02	DPC	10/28/2013 11:04	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:29	EPA 200.7
Cadmium, Cd	0.78	ug/L		0.05	0.01	DPC	10/28/2013 11:04	EPA 200.8
Chromium, Cr	0.3	ug/L		0.2	0.04	DPC	10/28/2013 11:04	EPA 200.8
Cobalt, Co	1.93	ug/L		0.02	0.004	DPC	10/28/2013 11:04	EPA 200.8
Copper, Cu	0.30	ug/L		0.05	0.01	DPC	10/28/2013 11:04	EPA 200.8
Lead, Pb	0.054	ug/L		0.01	0.002	DPC	10/28/2013 11:04	EPA 200.8
Mercury, Hg	2.6	ng/L		2	0.8	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	7010	ug/L		0.05	0.01	DPC	10/28/2013 11:04	EPA 200.8
Nickel, Ni	7.48	ug/L		0.2	0.05	DPC	10/28/2013 11:04	EPA 200.8
Selenium, Se	247	ug/L		0.5	0.2	DPC	10/28/2013 11:04	EPA 200.8
Selenite, Se+4 (Hydride)	177	ug/L		20	4	TLT	11/08/2013	AEP Method
Silver, Ag	0.002	ug/L	J	0.01	0.002	DPC	10/28/2013 11:04	EPA 200.8
Thallium, Tl	3.11	ug/L		0.05	0.002	DPC	10/28/2013 11:04	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:30	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:30	EPA 200.7
Zinc, Zn	8.4	ug/L		0.5	0.1	DPC	10/28/2013 11:04	EPA 200.8
Aluminum, Al	0.0059	mg/L		0.001	0.0003	DPC	10/28/2013 11:04	EPA 200.8
Boron, B	62.7	mg/L		0.2	0.04	DAM	10/24/2013 13:29	EPA 200.7
Calcium, Ca	458	mg/L		0.2	0.04	DAM	10/24/2013 13:29	EPA 200.7
Iron, Fe	< 0.1	mg/L	U	0.5	0.1	DAM	10/24/2013 13:30	EPA 200.7
Magnesium, Mg	453	mg/L		0.1	0.02	DAM	10/24/2013 13:29	EPA 200.7
Manganese, Mn	1.06	mg/L		0.005	0.001	DAM	10/24/2013 13:29	EPA 200.7
Potassium, K	127	mg/L		0.5	0.07	DAM	10/24/2013 13:28	EPA 200.7
Sodium, Na	2110	mg/L		0.3	0.08	DAM	10/24/2013 13:28	EPA 200.7
Strontium, Sr	6.28	mg/L		0.01	0.003	DAM	10/24/2013 13:28	EPA 200.7

1st Stage Feed

Sample Number: 134243-005 **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	14.8	ug/L		0.05	0.01	DPC	10/28/2013 11:09	EPA 200.8
Arsenic, As	51.2	ug/L		0.1	0.03	DPC	10/28/2013 11:09	EPA 200.8
Barium, Ba	27.1	ug/L		0.1	0.02	DPC	10/28/2013 11:09	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:33	EPA 200.7
Cadmium, Cd	0.98	ug/L		0.05	0.01	DPC	10/28/2013 11:09	EPA 200.8
Chromium, Cr	0.9	ug/L		0.2	0.04	DPC	10/28/2013 11:09	EPA 200.8
Cobalt, Co	3.04	ug/L		0.02	0.004	DPC	10/28/2013 11:09	EPA 200.8
Copper, Cu	0.50	ug/L		0.05	0.01	DPC	10/28/2013 11:09	EPA 200.8
Lead, Pb	0.024	ug/L		0.01	0.002	DPC	10/28/2013 11:09	EPA 200.8
Mercury, Hg	51.6	ng/L		10	4	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	9070	ug/L		0.05	0.01	DPC	10/28/2013 11:09	EPA 200.8
Nickel, Ni	9.82	ug/L		0.2	0.05	DPC	10/28/2013 11:09	EPA 200.8
Selenium, Se	317	ug/L		0.5	0.2	DPC	10/28/2013 11:09	EPA 200.8
Silver, Ag	0.004	ug/L	J	0.01	0.002	DPC	10/28/2013 11:09	EPA 200.8
Thallium, Tl	4.07	ug/L		0.05	0.002	DPC	10/28/2013 11:09	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:34	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:34	EPA 200.7
Zinc, Zn	3.2	ug/L		0.5	0.1	DPC	10/28/2013 11:09	EPA 200.8
Aluminum, Al	0.0204	mg/L		0.001	0.0003	DPC	10/28/2013 11:09	EPA 200.8
Boron, B	66.1	mg/L		0.2	0.04	DAM	10/24/2013 13:33	EPA 200.7
Calcium, Ca	490	mg/L		0.2	0.04	DAM	10/24/2013 13:33	EPA 200.7
Iron, Fe	0.668	mg/L		0.5	0.1	DAM	10/24/2013 13:34	EPA 200.7
Magnesium, Mg	484	mg/L		0.1	0.02	DAM	10/24/2013 13:33	EPA 200.7
Manganese, Mn	1.41	mg/L		0.005	0.001	DAM	10/24/2013 13:33	EPA 200.7
Potassium, K	134	mg/L		0.5	0.07	DAM	10/24/2013 13:32	EPA 200.7
Sodium, Na	2230	mg/L		0.3	0.08	DAM	10/24/2013 13:32	EPA 200.7
Strontium, Sr	6.68	mg/L		0.01	0.003	DAM	10/24/2013 13:32	EPA 200.7
Ammonia, NH3, as N	0.11	mg/L		0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	1.56	mg/L		0.5	0.1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	6.37	mg/L		0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

1st Stage Feed Dissolved

Sample Number: 134243-005A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	11.3	ug/L		0.05	0.01	DPC	10/28/2013 11:14	EPA 200.8
Arsenic, As	23.7	ug/L		0.1	0.03	DPC	10/28/2013 11:14	EPA 200.8
Barium, Ba	20.5	ug/L		0.1	0.02	DPC	10/28/2013 11:14	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:38	EPA 200.7
Cadmium, Cd	1.04	ug/L		0.05	0.01	DPC	10/28/2013 11:14	EPA 200.8
Chromium, Cr	0.2	ug/L		0.2	0.04	DPC	10/28/2013 11:14	EPA 200.8
Cobalt, Co	2.34	ug/L		0.02	0.004	DPC	10/28/2013 11:14	EPA 200.8
Copper, Cu	0.18	ug/L		0.05	0.01	DPC	10/28/2013 11:14	EPA 200.8
Lead, Pb	0.016	ug/L		0.01	0.002	DPC	10/28/2013 11:14	EPA 200.8
Mercury, Hg	3.0	ng/L		2	0.8	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	7150	ug/L		0.05	0.01	DPC	10/28/2013 11:14	EPA 200.8
Nickel, Ni	7.57	ug/L		0.2	0.05	DPC	10/28/2013 11:14	EPA 200.8
Selenium, Se	242	ug/L		0.5	0.2	DPC	10/28/2013 11:14	EPA 200.8
Selenite, Se+4 (Hydride)	169	ug/L		20	4	TLT	11/08/2013	AEP Method
Silver, Ag	0.004	ug/L	J	0.01	0.002	DPC	10/28/2013 11:14	EPA 200.8
Thallium, Tl	3.20	ug/L		0.05	0.002	DPC	10/28/2013 11:14	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:38	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:38	EPA 200.7
Zinc, Zn	2.9	ug/L		0.5	0.1	DPC	10/28/2013 11:14	EPA 200.8
Aluminum, Al	0.0065	mg/L		0.001	0.0003	DPC	10/28/2013 11:14	EPA 200.8
Boron, B	65.5	mg/L		0.2	0.04	DAM	10/24/2013 13:38	EPA 200.7
Calcium, Ca	484	mg/L		0.2	0.04	DAM	10/24/2013 13:38	EPA 200.7
Iron, Fe	0.1	mg/L	J	0.5	0.1	DAM	10/24/2013 13:38	EPA 200.7
Magnesium, Mg	478	mg/L		0.1	0.02	DAM	10/24/2013 13:38	EPA 200.7
Manganese, Mn	1.36	mg/L		0.005	0.001	DAM	10/24/2013 13:38	EPA 200.7
Potassium, K	134	mg/L		0.5	0.07	DAM	10/24/2013 13:36	EPA 200.7
Sodium, Na	2230	mg/L		0.3	0.08	DAM	10/24/2013 13:36	EPA 200.7
Strontium, Sr	6.68	mg/L		0.01	0.003	DAM	10/24/2013 13:36	EPA 200.7

2nd Stage Feed

Sample Number: 134243-006 **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	2.43	ug/L		0.05	0.01	DPC	10/28/2013 11:19	EPA 200.8
Arsenic, As	11.4	ug/L		0.1	0.03	DPC	10/28/2013 11:19	EPA 200.8
Barium, Ba	24.2	ug/L		0.1	0.02	DPC	10/28/2013 11:19	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:42	EPA 200.7
Cadmium, Cd	0.77	ug/L		0.05	0.01	DPC	10/28/2013 11:19	EPA 200.8
Chromium, Cr	0.7	ug/L		0.2	0.04	DPC	10/28/2013 11:19	EPA 200.8
Cobalt, Co	3.03	ug/L		0.02	0.004	DPC	10/28/2013 11:19	EPA 200.8
Copper, Cu	0.11	ug/L		0.05	0.01	DPC	10/28/2013 11:19	EPA 200.8
Lead, Pb	0.014	ug/L		0.01	0.002	DPC	10/28/2013 11:19	EPA 200.8
Mercury, Hg	12.8	ng/L		2	0.8	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	7150	ug/L		0.05	0.01	DPC	10/28/2013 11:19	EPA 200.8
Nickel, Ni	32.7	ug/L		0.2	0.05	DPC	10/28/2013 11:19	EPA 200.8
Selenium, Se	9.4	ug/L		0.5	0.2	DPC	10/28/2013 11:19	EPA 200.8
Silver, Ag	< 0.002	ug/L	U	0.01	0.002	DPC	10/28/2013 11:19	EPA 200.8
Thallium, Tl	0.25	ug/L		0.05	0.002	DPC	10/28/2013 11:19	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:42	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:42	EPA 200.7
Zinc, Zn	1.8	ug/L		0.5	0.1	DPC	10/28/2013 11:19	EPA 200.8
Aluminum, Al	0.157	mg/L		0.001	0.0003	DPC	10/28/2013 11:19	EPA 200.8
Boron, B	64.0	mg/L		0.2	0.04	DAM	10/24/2013 13:42	EPA 200.7
Calcium, Ca	444	mg/L		0.2	0.04	DAM	10/24/2013 13:42	EPA 200.7
Iron, Fe	0.798	mg/L		0.5	0.1	DAM	10/24/2013 13:42	EPA 200.7
Magnesium, Mg	450	mg/L		0.1	0.02	DAM	10/24/2013 13:42	EPA 200.7
Manganese, Mn	2.07	mg/L		0.005	0.001	DAM	10/24/2013 13:42	EPA 200.7
Potassium, K	125	mg/L		0.5	0.07	DAM	10/24/2013 13:40	EPA 200.7
Sodium, Na	2080	mg/L		0.3	0.08	DAM	10/24/2013 13:40	EPA 200.7
Strontium, Sr	6.08	mg/L		0.01	0.003	DAM	10/24/2013 13:40	EPA 200.7
Ammonia, NH3, as N	0.64	mg/L		0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	3.30	mg/L		0.5	0.1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	< 0.02	mg/L	U	0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

2nd Stage Feed Dissolved

Sample Number: 134243-006A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	2.36	ug/L		0.05	0.01	DPC	10/28/2013 11:24	EPA 200.8
Arsenic, As	10.5	ug/L		0.1	0.03	DPC	10/28/2013 11:24	EPA 200.8
Barium, Ba	24.2	ug/L		0.1	0.02	DPC	10/28/2013 11:24	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 13:46	EPA 200.7
Cadmium, Cd	0.71	ug/L		0.05	0.01	DPC	10/28/2013 11:24	EPA 200.8
Chromium, Cr	0.6	ug/L		0.2	0.04	DPC	10/28/2013 11:24	EPA 200.8
Cobalt, Co	2.91	ug/L		0.02	0.004	DPC	10/28/2013 11:24	EPA 200.8
Copper, Cu	0.14	ug/L		0.05	0.01	DPC	10/28/2013 11:24	EPA 200.8
Lead, Pb	0.029	ug/L		0.01	0.002	DPC	10/28/2013 11:24	EPA 200.8
Mercury, Hg	2.9	ng/L		1	0.4	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	7080	ug/L		0.05	0.01	DPC	10/28/2013 11:24	EPA 200.8
Nickel, Ni	33.0	ug/L		0.2	0.05	DPC	10/28/2013 11:24	EPA 200.8
Selenium, Se	4.3	ug/L		0.5	0.2	DPC	10/28/2013 11:24	EPA 200.8
Selenite, Se+4 (Hydride)	2.5	ug/L		2	0.4	TLT	11/08/2013	AEP Method
Silver, Ag	0.002	ug/L	J	0.01	0.002	DPC	10/28/2013 11:24	EPA 200.8
Thallium, Tl	0.26	ug/L		0.05	0.002	DPC	10/28/2013 11:24	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 13:46	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 13:46	EPA 200.7
Zinc, Zn	7.5	ug/L		0.5	0.1	DPC	10/28/2013 11:24	EPA 200.8
Aluminum, Al	0.150	mg/L		0.001	0.0003	DPC	10/28/2013 11:24	EPA 200.8
Boron, B	66.9	mg/L		0.2	0.04	DAM	10/24/2013 13:46	EPA 200.7
Calcium, Ca	466	mg/L		0.2	0.04	DAM	10/24/2013 13:46	EPA 200.7
Iron, Fe	0.721	mg/L		0.5	0.1	DAM	10/24/2013 13:46	EPA 200.7
Magnesium, Mg	474	mg/L		0.1	0.02	DAM	10/24/2013 13:46	EPA 200.7
Manganese, Mn	2.17	mg/L		0.005	0.001	DAM	10/24/2013 13:46	EPA 200.7
Potassium, K	132	mg/L		0.5	0.07	DAM	10/24/2013 13:44	EPA 200.7
Sodium, Na	2180	mg/L		0.3	0.08	DAM	10/24/2013 13:44	EPA 200.7
Strontium, Sr	6.36	mg/L		0.01	0.003	DAM	10/24/2013 13:44	EPA 200.7

Bioreactor Effluent

Sample Number: 134243-007 **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	0.09	ug/L		0.05	0.01	DPC	10/28/2013 11:29	EPA 200.8
Arsenic, As	0.36	ug/L		0.1	0.03	DPC	10/28/2013 11:29	EPA 200.8
Barium, Ba	33.6	ug/L		0.1	0.02	DPC	10/28/2013 11:29	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 14:03	EPA 200.7
Cadmium, Cd	0.07	ug/L		0.05	0.01	DPC	10/28/2013 11:29	EPA 200.8
Chromium, Cr	0.4	ug/L		0.2	0.04	DPC	10/28/2013 11:29	EPA 200.8
Cobalt, Co	0.080	ug/L		0.02	0.004	DPC	10/28/2013 11:29	EPA 200.8
Copper, Cu	0.11	ug/L		0.05	0.01	DPC	10/28/2013 11:29	EPA 200.8
Lead, Pb	0.012	ug/L		0.01	0.002	DPC	10/28/2013 11:29	EPA 200.8
Mercury, Hg	2.7	ng/L		1	0.4	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	954	ug/L		0.05	0.01	DPC	10/28/2013 11:29	EPA 200.8
Nickel, Ni	1.91	ug/L		0.2	0.05	DPC	10/28/2013 11:29	EPA 200.8
Selenium, Se	1.0	ug/L		0.5	0.2	DPC	10/28/2013 11:29	EPA 200.8
Silver, Ag	< 0.002	ug/L	U	0.01	0.002	DPC	10/28/2013 11:29	EPA 200.8
Thallium, Tl	0.006	ug/L	J	0.05	0.002	DPC	10/28/2013 11:29	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 14:03	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 14:03	EPA 200.7
Zinc, Zn	2.2	ug/L		0.5	0.1	DPC	10/28/2013 11:29	EPA 200.8
Aluminum, Al	0.283	mg/L		0.001	0.0003	DPC	10/28/2013 11:29	EPA 200.8
Boron, B	68.2	mg/L		0.2	0.04	DAM	10/24/2013 14:03	EPA 200.7
Calcium, Ca	422	mg/L		0.2	0.04	DAM	10/24/2013 14:03	EPA 200.7
Iron, Fe	0.4	mg/L	J	0.5	0.1	DAM	10/24/2013 14:03	EPA 200.7
Magnesium, Mg	451	mg/L		0.1	0.02	DAM	10/24/2013 14:03	EPA 200.7
Manganese, Mn	4.91	mg/L		0.005	0.001	DAM	10/24/2013 14:03	EPA 200.7
Potassium, K	122	mg/L		0.5	0.07	DAM	10/24/2013 14:01	EPA 200.7
Sodium, Na	2020	mg/L		0.3	0.08	DAM	10/24/2013 14:01	EPA 200.7
Strontium, Sr	5.68	mg/L		0.01	0.003	DAM	10/24/2013 14:01	EPA 200.7
Ammonia, NH3, as N	2.12	mg/L		0.05	0.02	DMM	11/01/2013	EPA 350.1
Total Kjeldahl Nitrogen, TKN as N	2.99	mg/L		0.5	0.1	DMM	10/29/2013	EPA 351.2
Nitrate-Nitrite, NO3-NO2, as N	0.58	mg/L		0.1	0.02	DMM	10/24/2013	SM20 4500NO3 H

Bioreactor Effluent Dissolved

Sample Number: 134243-007A **Date Collected:** 10/16/2013 **Date Received:** 10/16/2013

Parameter	Result	Units	Data Qual	RL	MDL	Analysis By	Analysis Date/Time	Method
Antimony, Sb	0.07	ug/L		0.05	0.01	DPC	10/28/2013 11:34	EPA 200.8
Arsenic, As	0.36	ug/L		0.1	0.03	DPC	10/28/2013 11:34	EPA 200.8
Barium, Ba	31.5	ug/L		0.1	0.02	DPC	10/28/2013 11:34	EPA 200.8
Beryllium, Be	< 3	ug/L	U	10	3	DAM	10/24/2013 14:07	EPA 200.7
Cadmium, Cd	0.04	ug/L	J	0.05	0.01	DPC	10/28/2013 11:34	EPA 200.8
Chromium, Cr	0.4	ug/L		0.2	0.04	DPC	10/28/2013 11:34	EPA 200.8
Cobalt, Co	0.042	ug/L		0.02	0.004	DPC	10/28/2013 11:34	EPA 200.8
Copper, Cu	0.03	ug/L	J	0.05	0.01	DPC	10/28/2013 11:34	EPA 200.8
Lead, Pb	0.005	ug/L	J	0.01	0.002	DPC	10/28/2013 11:34	EPA 200.8
Mercury, Hg	1.3	ng/L		0.5	0.2	JAB	10/18/2013	EPA 1631E
Molybdenum, Mo	897	ug/L		0.05	0.01	DPC	10/28/2013 11:34	EPA 200.8
Nickel, Ni	1.85	ug/L		0.2	0.05	DPC	10/28/2013 11:34	EPA 200.8
Selenium, Se	0.8	ug/L		0.5	0.2	DPC	10/28/2013 11:34	EPA 200.8
Selenite, Se+4 (Hydride)	< 0.08	ug/L	U	0.4	0.08	TLT	11/08/2013	AEP Method
Silver, Ag	< 0.002	ug/L	U	0.01	0.002	DPC	10/28/2013 11:34	EPA 200.8
Thallium, Tl	0.003	ug/L	J	0.05	0.002	DPC	10/28/2013 11:34	EPA 200.8
Tin, Sn	< 30	ug/L	U	100	30	DAM	10/24/2013 14:07	EPA 200.7
Titanium, Ti	< 3	ug/L	U	20	3	DAM	10/24/2013 14:07	EPA 200.7
Zinc, Zn	3.1	ug/L		0.5	0.1	DPC	10/28/2013 11:34	EPA 200.8
Aluminum, Al	0.270	mg/L		0.001	0.0003	DPC	10/28/2013 11:34	EPA 200.8
Boron, B	71.0	mg/L		0.2	0.04	DAM	10/24/2013 14:07	EPA 200.7
Calcium, Ca	443	mg/L		0.2	0.04	DAM	10/24/2013 14:07	EPA 200.7
Iron, Fe	0.4	mg/L	J	0.5	0.1	DAM	10/24/2013 14:07	EPA 200.7
Magnesium, Mg	474	mg/L		0.1	0.02	DAM	10/24/2013 14:07	EPA 200.7
Manganese, Mn	5.11	mg/L		0.005	0.001	DAM	10/24/2013 14:07	EPA 200.7
Potassium, K	126	mg/L		0.5	0.07	DAM	10/24/2013 14:05	EPA 200.7
Sodium, Na	2090	mg/L		0.3	0.08	DAM	10/24/2013 14:05	EPA 200.7
Strontium, Sr	5.92	mg/L		0.01	0.003	DAM	10/24/2013 14:05	EPA 200.7

U: Analyte was analyzed and not detected at or above adjusted Method Detection Limit
J: Analyte was positively identified, though the quantitation was below Reporting Limit.

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