Edwardsport Grey Water Treatment Analyses, 2013-2016

Note: Metals results represent the total recoverable metal unless otherwise indicated.

	Mercury (ng/l)							Arsenic (ug/l)			Selenium (ug/l)			TDS (mg/l)				Aluminum (mg/l)	Antimony (mg/l)	Barium (mg/l)	Beryllium (mg/l)
Sample date:	Filtered water	Influent	Concentrator Condensate	Crystallizer Steam Condensate	Barometric Condenser Condensate	Condensate Trim Cooler	Effluent	Filtered water	Influent	Effluent	Filtered water	Influent	Effluent	Filtered water	Grey Water Feed Tank (Influent)	Condensate Trim Cooler Discharge	Effluent	Effluent	Effluent	Effluent	Effluent
5/9/2013										< 1.00			7.0					0.003	< 0.001	< 0.001	< 0.001
5/23/2013										< 2.00			< 2.0					0.008	< 0.002	< 0.002	< 0.002
6/6/2013										< 2.00			< 2.0					0.011	< 0.002	< 0.002	< 0.002
6/13/2013										< 2.00			< 2.0					0.006	< 0.002	< 0.002	< 0.002
7/22/2013							2.08														
7/24/2013										2			4.0					0.009	< 0.001	0.002	< 0.001
7/31/2013										< 1.00			< 1.0					0.061	0.017	0.003	< 0.001
8/2/2013										< 1.0			< 1.0					0.295	0.006	0.003	< 0.001
8/8/2013							9.58														
8/21/2013										15			< 10.0					0.020	< 0.010	< 0.010	< 0.010
9/5/2013										< 10.00			< 10.0					0.016	< 0.010	< 0.010	< 0.010
9/25/2013										< 10.00			< 10.0					0.040	< 0.010	< 0.010	< 0.010
10/3/2013							2.53														
10/8/2013										< 10.0			< 10.0					0.028	< 0.010	< 0.010	< 0.010
10/17/2013										< 1.0			< 10.0					0.057	< 0.001	< 0.001	< 0.001
9/8/2015	0.540	6.55					12.8	< 1.0	1,100	< 1.0	< 1.0	260	< 1.0	300	2,540		20				
9/10/2015	< 0.50	15.8					5.25	< 1.0	120	< 1.0	< 1.0	160	< 1.0	300	3,020		40				
9/15/2015	< 0.50	10.8					10.3	< 2.0	120	< 2.0	< 2.0	320	< 2.0	120	2,560		< 10				
9/17/2015	< 0.50	21.2					6.55	< 2.0	130	< 2.0	< 2.0	130	< 2.0	280	2,090		20				
9/22/2015	< 0.50	22.0					10.8	< 1.0	31	< 1.0	< 1.0	78	< 1.0	324	2,200		10				
9/24/2015	< 0.50	23.4					11.5	< 1.0	63	< 1.0	< 1.0	87	< 1.0	322	2,140		< 10				
9/29/2015	< 0.50	44.4					6.40	< 1.0	67	< 1.0	< 1.0	66	< 1.0	420	2,700		32				
10/1/2015	< 0.50	7.35					3.92	< 1.0	42	< 1.0	< 1.0	80	< 1.0	336	2,980		20				
10/6/2015	< 0.50	15.6					2.40	< 1.0	33	< 1.0	< 1.0	140	< 1.0	340	2,680		20				
10/8/2015	< 0.50	11.8					5.79	< 1.0	38	< 1.0	< 1.0	160	10.0	380	1,660		14				
10/13/2015	< 0.50	30.4					3.05	< 1.0	210	< 1.0	< 1.0	140	< 1.0	320	2,230		222				
10/13/2015		0.694 (dissolved)					3.61 (dissolved)														
10/15/2015	< 0.50	59.5					0.877	< 1.0	230	< 1.0	< 1.0	110	< 1.0	340	2,120		60				
10/15/2015		0.694 (dissolved)					0.938 (dissolved)														
4/5/2016			7.03	< 0.50	3.31	15.60	4.74			< 1.0			2.9				34				
4/6/2016			7.25	< 0.50	1.34	16.30	8.39			< 1.0			4.1				72				
4/8/2016			1.72	0.59	1.15	8.88	3.09			< 1.0			3.8				42				
4/14/2016															586	1,760					
5/27/2016							17.8			< 1.0			14.2				< 10				
5/31/2016							4.46			< 1.0			< 1.0				< 10				
6/7/2016	< 0.50						1.51			< 1.0			< 1.0				24				
6/15/2016							< 0.50			< 1.0			< 1.0				< 10				
7/6/2016							3.53			< 1.0			1.1				< 10				
7/13/2016							1.44			< 1.0			1.3				< 10				
8/3/2016							< 0.50			< 1.0			< 1.0				< 10				
8/10/2016							4.07			< 1.0			7.2				< 10				
9/7/2016							2.05			< 1.0			1.5				< 10				
9/14/2016							0.78			< 1.0			< 1.0				< 10				
10/1/2016							1.79			< 1.0			1.0				30				
Maximum	**0.54**	**59.5**	**7.25**	**0.59**	**3.31**	**16.3**	**17.8**	**2.0**	**1,100**	**15**	**2**	**320**	**14.2**	**420**	**3,020**		**222**	**0.295**	**0.017**	**0.010**	**0.010**
Average	**< 0.5**	**22.4**	**5.3**	**< 0.5**	**1.9**	**13.6**	**5.1**	**1.2**	**182**	**2.2**	**1.2**	**144**	**3.5**	**315**	**2,270**		**29.6**	**0.0**	**0.0060**	**0.0047**	**0.0043**
Minimum	**< 0.5**	**6.6**	**1.7**	**< 0.5**	**1.2**	**8.9**	**< 0.5**	**< 1.0**	**31**	**< 1.0**	**< 1.0**	**66**	**< 1.0**	**120**	**586**		**< 10**	**0.0**	**< 0.00**	**< 0.0**	**< 0.00**
No. of results	**13**	**12**	**3**	**3**	**3**	**3**	**29**	**12**	**12**	**38**	**12**	**12**	**38**	**12**	**13**		**26**	**12**	**12**	**12**	**12**

Sample date:	Cadmium (mg/l)	Chloride (mg/l)	Chromium (mg/l)	Copper (mg/l)	Cyanide (mg/l)		Fluoride F (mg/l)	Iron (mg/l)	Lead (mg/l)	Manganese (mg/l)	NH3 as N (mg/l)	Nickel (mg/l)	Oil & Grease (mg/l)	pH (SU)	Phenol (mg/l)	Silver (mg/l)	TSS (mg/l)	Sulfate (mg/l)	Sulfide (as S) (mg/l)	Thallium (mg/l)	Zinc (mg/l)
	Effluent	Effluent	Effluent	Effluent	Total as CN, Effluent	Free, Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
5/9/2013	< 0.001	< 0.700	< 0.001	< 0.001	0.209	0.108	1.360	0.001	< 0.001	< 0.001	1.15	< 0.001	< 5.00	7.30	< 0.005	< 0.001	< 4.00	< 3.000	0.025	< 0.001	0.010
5/23/2013	< 0.002	< 0.070	< 0.002	< 0.002	0.505	0.340	0.880	0.004	< 0.002	< 0.002	1.14	< 0.002	< 5.00	8.30	0.012	< 0.002	< 4.00	0.800	0.095	< 0.002	0.019
6/6/2013	< 0.002	< 0.070	< 0.002	0.003	0.845	0.798	0.071	0.007	< 0.002	0.005	0.76	0.002	< 5.00	8.00	0.009	< 0.002	< 4.00	0.400	13.400	< 0.002	0.008
6/13/2013	< 0.002	< 0.070	< 0.002	0.003	0.210	< 0.001	0.599	0.011	< 0.002	< 0.002	1.14	0.002	< 5.00	8.00	0.008	< 0.002	< 4.00	< 0.300	0.163	< 0.002	0.011
7/22/2013																					
7/24/2013	< 0.001	0.120	< 0.001	< 0.001	3.750	3.060	0.240	0.016	0.004	< 0.001	1.27	0.001	< 5.00	7.90	< 0.005	< 0.001	< 4.00	0.600	6.300	0.010	0.014
7/31/2013	< 0.001	< 0.070	0.001	< 0.001	0.280	0.260	0.260	0.058	< 0.001	0.001	1.49	< 0.001	< 5.00	8.40	0.084	< 0.001	< 4.00	0.400	0.352	< 0.001	0.018
8/2/2013	< 0.001	< 0.070	< 0.001	0.001	0.250	0.243	0.270	0.012	< 0.001	< 0.001	1.10	< 0.001	< 5.00	8.10	0.072	< 0.001	< 4.00	1.000	0.654	< 0.001	0.025
8/8/2013																					
8/21/2013	< 0.010	< 0.070	< 0.010	< 0.010	0.880	0.868	0.050	0.043	0.030	< 0.010	1.05	< 0.010	< 5.00	7.47	< 0.005	< 0.010	< 4.00	0.456	1.580	0.032	0.025
9/5/2013	< 0.010	< 0.070	< 0.010	< 0.010	0.250	0.229	< 0.040	0.054	< 0.010	< 0.010	0.85	< 0.010	< 5.00	8.70	0.020	< 0.010	< 4.00	1.120	3.450	< 0.010	0.034
9/25/2013	< 0.010	< 0.070	< 0.010	< 0.010	0.095	0.087	0.142	0.036	< 0.010	< 0.010	< 0.20	< 0.010	< 5.00	9.50	0.009	< 0.010	< 4.00	0.872	< 0.005	< 0.010	0.038
10/3/2013																					
10/8/2013	< 0.010	< 0.070	< 0.010	< 0.010	0.030	0.029	0.096	0.036	< 0.010	< 0.010	0.56	< 0.010	< 5.00	6.70	0.012	< 0.010	< 4.00	0.625	0.013	< 0.010	0.039
10/17/2013	< 0.010	< 0.070	< 0.010	< 0.010	0.200	0.191	0.071	0.013	< 0.010	< 0.010	1.52	< 0.010	< 5.00	7.30	< 0.005	< 0.010	< 4.00	< 0.300	0.803	< 0.010	0.019
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Maximum	**0.01**	**0.7**	**0.01**	**0.01**	**3.75**	**3.06**	**1.36**	**0.058**	**0.03**	**0.01**	**1.52**	**0.01**	**5**	**9.5**	**0.084**	**0.01**	**4**	**3**	**13.4**	**0.032**	**0.039**
Average	**0.0**	**0.1**	**0.0**	**0.0**	**0.6**	**0.5**	**0.3**	**0.024**	**0.007**	**0.0**	**1.0**	**0.0**	**5.0**	**8.0**	**0.0**	**0.0**	**4.0**	**0.8**	**2.2**	**0.0**	**0.022**
Minimum	**< 0.0**	**< 0.1**	**< 0.0**	**< 0.0**	**0.030**	**< 0.001**	**< 0.04**	**0.001**	**< 0.00100**	**< 0.0**	**< 0.2**	**< 0.0010**	**< 5.0**	**6.7**	**< 0.0**	**< 0.0**	**< 4.0**	**< 0.3**	**< 0.005**	**< 0.0010**	**0.008**
No. of results	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**