



Underground Data

Analyte	UG-1																							
	11/15/2011	1/16/2012	6/24/2012	9/18/2012	12/6/2012	2/6/2013	6/20/2013	7/18/2013	7/25/2013	8/1/2013	8/8/2013	9/26/2013	12/26/2013	2/12/2014	4/2/2014	6/11/2014	12/4/2014	3/31/2015	6/16/2015	9/16/2015	7/26/2017	12/4/2018		
Aluminum, dissolved	0.03	0.03	0.03	0.05	0.04		0.09	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		1.82	0.03	0.03	0.08	0.03		
Aluminum, total	0.3	0.03	0.03	0.43	4.98	0.19	2.19	0.62	0.07	1.82	18	1.26	0.05	0.03	5.05	6.14	15.2	47.7	0.95	0.03				
Antimony, dissolved	0.0004	0.0004	0.0004	0.0004	0.001		0.0036	0.0056	0.0045	0.0051	0.0055	0.0033	0.0007	0.0007	0.0009	0.0047	0.0031	0.04	0.0024	0.0018	0.0026	0.0024		
Antimony, total													0.0011											
Arsenic, dissolved	0.003	0.0031	0.0017	0.0037	0.0013	0.002	0.0019	0.0036	0.0025	0.0024	0.0015	0.0028		0.0024	0.0006	0.0025	0.0016	0.091	0.0019	0.0023	0.003	0.002		
Arsenic, total													0.0036											
Arsenic, total recoverable																0.24	0.049	0.673	0.0178	0.0034				
Barium, dissolved	0.019	0.022	0.024	0.146	0.033	0.031	0.037	0.032	0.031	0.028	0.054	0.033	0.025	0.029	0.039	0.093	0.043	0.171	0.037	0.021	0.073	0.024		
Barium, total													0.032											
Beryllium, dissolved	0.0001	0.0001	0.0001	0.0001	0.00005		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00008	0.00005	0.00005	0.00005	0.00354	0.00005	0.00005	0.00008	0.00005		
Beryllium, total													0.00005											
Bicarbonate as CaCO3	59	69	63	58	60	61	54	54		52	53	56	55	59	60	46	52	61.3	60.7	63.9	62.6	61.5		
Biochemical Oxygen Demand (5 day)																								
Boron, dissolved	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01		
Boron, total													0.03											
Cadmium, dissolved	0.0001	0.0001	0.0001	0.0001	0.0001		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0004	0.0121	0.0002	0.003	0.0004	0.00035		
Cadmium, potentially dissolved																								
Cadmium, total													0.001			0.023	0.0068	0.1186	0.0007	0.0032				
Calcium, dissolved	34.9	35.5	36	33.8	47.3	48.8	41.4	46	48.1	45.3	50.6	43.5	45.9	66.5	89.3	42.1	48.7	86.7	38.2	56.7	45.6	47.1		
Calcium, total													51.7											
Carbon, dissolved organic (DOC)																								
Carbonate as CaCO3	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Cation-Anion Balance	0	-6.4	0	-2.3	-1.7	0	0	1.1	3.1	0.9	4.4		4	-3.6	-1.3	4.1	7.6	1.8	23.4	0	2.8	-1.8		
Chemical Oxygen Demand																								
Chloride	1	1	1	1	1		1	1	2	1	1	1	1	1	1	0.5	0.9	0.9	0.5	0.9	1.1	0.5		
Chromium, dissolved	0.0005	0.0005	0.0005	0.0005	0.0005		0.0005	0.0005	0.0013	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0032	0.0005	0.0005	0.0005	0.0005		
Chromium, total																								
Chromium, total recoverable																	0.01							
Chromium, Trivalent Dissolved																		0.005	0.005	0.005	0.005	0.005		
Conductivity @25C	216	228	230	217	321	294	264	290	310	289	343	276	310	400	532	283	326	466	238	340	265	286		
Copper, dissolved	0.0029	0.0005	0.0005	0.0009	0.0055		0.0019	0.0007	0.0006	0.0005	0.0005	0.0005	0.001	0.0023	0.0005	0.0029	0.0005	0.4784	0.0034	0.0012	0.0084	0.005		
Copper, potentially dissolved																								
Copper, total													0.0005					0.63	0.13	2.25	0.04	0.01		
Cyanide, total	0.003	0.003	0.003	0.003	0.003		0.008	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.006	0.003	0.003	0.003	0.003	0.003	0.003		
Cyanide, WAD	0.003	0.003	0.003	0.003	0.003		0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.003	0.003		
Dissolved Chromium, Hexavalent																	0.005	0.006	0.005	0.005				
Fluoride	0.3	0.1	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.22	0.23	0.32	0.24	0.18	0.3	0.3	0.34		
Hardness as CaCO3 (dissolved)	93	96	98	92	127	131	112	126	131	123	136	118	121	175	235	113	129	234	103	155	122	125		
Hardness as CaCO3	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Hydroxide as CaCO3																								
Iron, dissolved	0.02	0.02	0.02	0.44	0.02		0.2	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	7.95	0.02	0.05	0.15	0.02		
Iron, total	0.4	0.05	0.07	0.55	5.49	0.27	2.76	1.39	0.18	1.28	16.3	2.42	0.06	0.06	19.3	21	6.8	75.1	1.5	0.15				
Iron, total recoverable																21.4	5.73	75.9	1.4	0.15				
Lead, dissolved	0.0004	0.0001	0.0001	0.0012	0.0003		0.0049	0.0084	0.0018	0.0087	0.0372	0.0248	0.0022	0.0007	0.0032	0.0577	0.1401	23.8	0.365	0.0043	0.101	0.0017		
Lead, potentially dissolved																								
Lead, total													0.0083			3.93	3.18	42.3	1.37	0.0112				
Magnesium, dissolved	1.5	1.7	1.9	1.7	2.2	2.3	2.1	2.6	2.6	2.3	2.4	2.2	1.5	2.1	2.9	1.9	1.9	4.2	1.9	3.2	1.9	1.7		
Magnesium, total													1.8											
Manganese, dissolved	0.051	0.032	0.101	0.054	0.44	0.033	0.651	0.035	1.06	0.035	0.203	0.02	0.025	0.014	0.374	0.101	0.111	9.03	0.065	3.8	0.177	0.014		
Manganese, potentially dissolved																								
Manganese, total													0.039											
Mercury, dissolved	0.0002	0.0002	0.0002	0.0002	0.0002		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002		
Mercury, total													0.0002			0.0005	0.0002	0.0027	0.0002	0.0002				
Molybdenum, dissolved	0.0049	0.0044	0.0047	0.0045	0.0061	0.0045	0.0056	0.005	0.0042	0.005	0.0085	0.0057	0.0049	0.0047	0.0052	0.0052	0.0053	0.033	0.0045	0.0037	0.0047	0.0043		
Molybdenum, total													0.0055											
Nickel, dissolved	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008		
Nickel, total													0.01											
Nitrate/Nitrite as N	0.05	0.04	0.43	0.47	0.79	0.2	2.77	1.43	1.56	1.34	6.08	1.56	1.41	1.04	7.45	4.3	5	5.44	0.61	0.41	0.23	0.2		
Oil and Grease																2	16.4							
pH	8.2	8	8	8.2	8.2	8.2	8.1	8.2	8.1	8.2	8.1	8.2	8.1	8.2	7.8	8.1	8	8	8.3	8.1	7.7	8.2		
pH measured at	20	19	20	22	21	23	19	20	21	20	21	21	22	21	18	21	19.4	20.9	20.4	19.2	21.5	21.6		
Phosphorus, ortho dissolved	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.02	0.05	0.06	0.04	0.02	0.01	0.02	0.09		
Potassium, dissolved	0.3	0.4	0.6	0.5	0.9	0.6	0.8	0.6	0.5	0.8	1	0.5	0.5	0.4	0.6	0.9	0.8	2.2	0.6	0.8	0.3	0.3		
Potassium, total													0.5											
Residue, Filterable (TDS) @180C	120	130	140	140	200	190	160	180	200	172	220	174	210	260	370	130	204	280	146	222	188	188		
Residue, Non-Filterable (TSS) @105C	5	5	5	7	182		123	22	5	21	940	185	5	5	396	670	362	1840	16	7	9	5		
Selenium, dissolved	0.0005	0.0005	0.0005	0.0007	0.0004	0.0006	0.0006	0.0006	0.0005	0.0006	0.0012	0.0005	0.0006	0.0008	0.0006	0.0008	0.001	0.0017	0.0008	0.0004	0.0006	0.0008		
Selenium, total													0.0006											
Silica, dissolved	8.6	8.7	8.3	8.4	8.4	8.2	6.8	6.3	6.4	6.2	6.4	6.7	8.5	8.3	8	7.6	8.2	14	7.2	8.2	8.5	8.7		
Silica, total													8.7											
Silver, dissolved	0.00005	0.00005	0.00005	0.00005	0.00017		0.00007	0.00005	0.00013	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.0002	0.00005	0.00269	0.00005	0.00005	0.00037	0.0001		
Silver, potentially dissolved																								
Silver, total													0.00011											
Sodium, dissolved	5.7	5.9	5.6	5.3	6.5	6	4.7																	

Notes:
Blank indicates analyses not performed.
All non-detects included at MDL value.



Underground Data

Analyte	UG-2																			
	11/15/2011	1/16/2012	6/24/2012	9/18/2012	12/6/2012	2/6/2013	6/20/2013	7/18/2013	7/25/2013	8/1/2013	8/8/2013	9/26/2013	12/26/2013	2/12/2014	4/2/2014	6/11/2014	12/4/2014	3/31/2015	6/16/2015	9/16/2015
Aluminum, dissolved	0.03	0.03	0.03	0.03	0.03		0.14	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.06	0.03	0.03
Aluminum, total	0.16	0.08	0.18	0.13	0.11	0.04	2.28	1.68	0.03	2.88	30.3	0.95	0.04	0.06	0.12	0.2	7.78	0.23	4.25	0.03
Antimony, dissolved	0.0017	0.0011	0.0038	0.0041	0.0026	0.0025	0.0009	0.0008	0.0055	0.0007	0.0015	0.0008	0.0019	0.001	0.0007	0.0021	0.0008	0.001	0.0042	0.0015
Antimony, total													0.0022							
Arsenic, dissolved	0.003	0.0029	0.001	0.0027	0.002	0.0025	0.0017	0.0022	0.0023	0.0021	0.0022	0.0017	0.0047	0.0026	0.002	0.0028	0.0024	0.0031	0.0015	0.0044
Arsenic, total													0.0056							
Arsenic, total recoverable																0.04	0.0142	0.0035	0.0206	0.0051
Barium, dissolved	0.022	0.022	0.024	0.027	0.029	0.03	0.047	0.042	0.031	0.034	0.063	0.036	0.029	0.026	0.025	0.026	0.033	0.034	0.029	0.029
Barium, total													0.038							
Beryllium, dissolved	0.0001	0.0001	0.0001	0.0001	0.00005		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Beryllium, total													0.00009							
Bicarbonate as CaCO3	50	57	49	68	51	52	62	59	52	60	62	62	58	55	44	39	66.5	56	49.6	54.3
Biochemical Oxygen Demand (5 day)																				
Boron, dissolved	0.02	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.01	0.01	0.02	0.01	0.01
Boron, total													0.03							
Cadmium, dissolved	0.0007	0.0005	0.0009	0.0009	0.0018	0.0014	0.001	0.001	0.0013	0.001	0.001	0.001	0.001	0.0017	0.0017	0.001	0.0023	0.0031	0.0001	0.0001
Cadmium, potentially dissolved																				
Cadmium, total													0.001			0.005	0.0031	0.0033	0.0031	0.0001
Calcium, dissolved	57.2	63.1	43.6	48.7	63.2	65.7	52.3	54.1	45.2	50.3	58.2	44.5	44.8	54.5	54.6	32.1	58.9	57.7	33.3	49.7
Calcium, total													53.7							
Carbon, dissolved organic (DOC)																				
Carbonate as CaCO3	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Cation-Anion Balance	0	-9.3	0	-6.3	-1.3	1.2	6.7	10.9	0.7	6.6	11.7	8	-8.5	-2.9	0	5.2	-3.9	1.3	2.6	0
Chemical Oxygen Demand																				
Chloride	1	1	1	1	1		1	1	1	1	1	1	1	1	1	0.5	0.5	0.5	0.5	0.9
Chromium, dissolved	0.0005	0.0005	0.0005	0.0005	0.0005		0.0007	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Chromium, total													0.0005							
Chromium, total recoverable																0.01				
Chromium, Trivalent Dissolved																	0.005	0.005	0.005	0.005
Conductivity @25C	344	390	271	305	416	406	370	361	289	327	441	308	323	366	358	203	366	376	209	288
Copper, dissolved	0.0043	0.0005	0.0005	0.0005	0.0008		0.0034	0.001	0.0005	0.0008	0.0006	0.0015	0.0005	0.0008	0.0005	0.0005	0.0008	0.0012	0.001	0.0005
Copper, potentially dissolved																				
Copper, total													0.0008			0.01	0.01	0.01	0.02	0.01
Cyanide, total	0.003	0.003	0.003	0.003	0.003		0.028	0.014	0.004	0.004	0.007	0.01	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Cyanide, WAD	0.003	0.003	0.003	0.003	0.003		0.012	0.004	0.003	0.004	0.003	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Dissolved Chromium, Hexavalent																	0.005	0.006	0.005	0.005
Fluoride	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.29	0.13	0.25	0.24	0.1	0.18
Hardness as CaCO3 (dissolved)	153	168	119	132	169	176	140	144	124	133	153	119	120	147	147	87	158	156	91	133
Hydroxide as CaCO3	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Iron, dissolved	0.02	0.02	0.03	0.02	0.02		0.13	0.06	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.09	0.11	0.02
Iron, total	0.7	0.39	0.63	0.47	0.24	0.09	4	2.34	0.13	2.38	30	2.21	0.15	0.15	0.55	0.38	5.49	0.21	8.71	0.11
Iron, total recoverable																0.38	5.17	0.19	8.44	0.12
Lead, dissolved	0.0003	0.0001	0.0008	0.0011	0.0026	0.0011	0.0032	0.0087	0.0008	0.0042	0.0169	0.0233	0.0006	0.0006	0.0007	0.0009	0.002	0.0124	0.0039	0.0018
Lead, potentially dissolved																				
Lead, total													0.0072			0.03	0.0843	0.0141	0.3425	0.0061
Magnesium, dissolved	2.4	2.6	2.5	2.6	2.7	2.8	2.3	2.2	2.7	1.7	1.9	1.8	1.9	2.5	2.6	1.6	2.7	2.8	1.9	2.2
Magnesium, total													2.3							
Manganese, dissolved	1.17	1.5	1.3	0.923	2.08	2.38	0.168	0.126	1.37	0.124	0.213	0.077	0.005	1.75	1.65	0.312	3.11	3.47	0.024	0.037
Manganese, potentially dissolved																				
Manganese, total													0.094							
Mercury, dissolved	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Mercury, total													0.0002			0.0002	0.0002	0.0002	0.0002	0.0002
Molybdenum, dissolved	0.0024	0.0025	0.0035	0.0033	0.0023	0.0037	0.0041	0.0051	0.0031	0.0052	0.0103	0.0044	0.0038	0.0021	0.002	0.0022	0.0027	0.003	0.0041	0.0026
Molybdenum, total													0.0042							
Nickel, dissolved	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Nickel, total													0.01							
Nitrate/Nitrite as N	0.13	0.09	0.19	0.2	0.15	0.14	13.6	9.8	0.26	6.35	17.5	6.52	0.17	0.2	0.2	0.37	0.18	0.3	0.57	0.23
Oil and Grease																		2	2	
pH	8.1	8	7.9	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8	8.2	8.1	8.1	7.9	8.1	7.9	7.9	8.2	8.1
pH measured at	20	20	20	22	21	23	19	21	22	21	21	21	22	21	22	21	19.4	21.5	20.2	19.8
Phosphorus, ortho dissolved	0.03	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.03	0.02	0.01	0.01	0.01	0.01	0.02	0.05	0.01	0.04	0.01
Potassium, dissolved	0.3	0.5	0.6	0.6	0.5	0.6	1.5	1.2	0.5	0.8	1.4	0.9	0.5	0.5	0.4	0.4	0.6	0.7	0.6	0.6
Potassium, total													0.6							
Residue, Filterable (TDS) @180C	220	260	170	210	220	280	240	230	186	212	306									



Underground Data

Analyte	UG-3																	
	1/16/2012	6/24/2012	9/18/2012	12/6/2012	2/6/2013	6/20/2013	7/18/2013	7/25/2013	8/1/2013	8/8/2013	9/26/2013	12/26/2013	2/12/2014	4/2/2014	6/11/2014	12/4/2014	3/31/2015	6/16/2015
Aluminum, dissolved	0.03	0.03	0.03	0.03		0.03	0.03	0.08	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.5	0.03
Aluminum, total	0.56	0.72	0.42	0.74		0.07	0.03	1.42	0.04	0.06	0.07	0.12	0.04	0.05	0.1	0.48	0.54	0.06
Antimony, dissolved	0.0004	0.0004	0.0004	0.0004		0.0044	0.0134	0.0006	0.0124	0.013	0.0076	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Antimony, total												0.0009						
Arsenic, dissolved	0.0064	0.008	0.0084	0.0008	0.0072	0.0048	0.0068	0.0038	0.007	0.0072	0.0066	0.0056	0.0002	0.0026	0.0062	0.0028	0.0086	0.0006
Arsenic, total												0.0296						
Arsenic, total recoverable															0.04	0.0134	0.0088	0.012
Barium, dissolved	0.04	0.018	0.188	0.04	0.06	0.017	0.052	0.082	0.052	0.052	0.056	0.054	0.044	0.064	0.048	0.044	0.052	0.062
Barium, total												0.078						
Beryllium, dissolved	0.0002	0.0002	0.0003	0.00025		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00013	0.00005	0.00015	0.00066	0.00112	0.00005
Beryllium, total												0.00005						
Bicarbonate as CaCO3	90	76	82	82	158	92	108	118	104	104	106	136	120	130	100	103.6	94.2	128
Biochemical Oxygen Demand (5 day)																		
Boron, dissolved	0.03	0.04	0.02	0.02	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Boron, total												0.03						
Cadmium, dissolved	0.0366	0.0732	0.0664	0.076		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0228	0.001	0.0338	0.0664	0.0646	0.0001
Cadmium, potentially dissolved																		
Cadmium, total												0.0032			0.016	0.0668	0.0658	0.0017
Calcium, dissolved	168.2	148.4	167	202	89.2	59.4	92.2	106	87	89.8	82.6	84.6	143.6	86.2	121.6	182.2	171.4	87.6
Calcium, total												93						
Carbon, dissolved organic (DOC)																		
Carbonate as CaCO3	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2
Cation-Anion Balance	13.8	24.8	12	15.6	-11.8	-24.4	3	16	-2	5.4	70.2	-9.8	5.4	-3.2	12.6	16.2	18.2	0
Chemical Oxygen Demand																		
Chloride	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1.4	1	0.5
Chromium, dissolved	0.0005	0.0005	0.0005	0.0005		0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Chromium, total												0.0005						
Chromium, total recoverable															0.01			
Chromium, Trivalent Dissolved																0.005	0.005	0.005
Conductivity @25C	1420	1384	1362	1718	632	448	552	682	548	548	530	646	1068	636	922	1436	1350	626
Copper, dissolved	0.0005	0.001	0.0015	0.0011		0.0006	0.0005	0.002	0.0005	0.0007	0.0005	0.0005	0.0006	0.0005	0.0009	0.0088	0.0244	0.0008
Copper, potentially dissolved																		
Copper, total												0.006			0.01	0.01	0.02	0.02
Cyanide, total	0.003	0.003	0.003	0.003		0.003	0.003	0.009	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Cyanide, WAD	0.003	0.003	0.003	0.003		0.003	0.003	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Dissolved Chromium, Hexavalent																0.005	0.005	0.005
Fluoride	1.2	1.6	1.4	1.4	0.6	0.2	0.2	0.3	0.4	0.2	0.1	0.2	0.3	0.26	1.14	1.16	0.98	0.02
Hardness as CaCO3 (dissolved)	494	446	486	592	246	162	254	280	238	246	226	232	406	236	348	526	488	242
Hydroxide as CaCO3	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2
Iron, dissolved	0.32	0.3	0.72	0.12	0.04	0.02	0.02	0.16	0.02	0.02	0.02	0.04	0.02	0.1	0.32	0.02	1.38	0.38
Iron, total	5.48	15.08	4.02	4.38	1.7	0.54	0.04	2.16	0.2	0.54	0.14	3.46	0.76	1.84	1.54	1.44	1.4	1.42
Iron, total recoverable															1.5	1.52	1.4	1.36
Lead, dissolved	0.003	0.0004	0.0022	0.0014		0.0034	0.0012	0.0046	0.0016	0.0014	0.0012	0.0024	0.0001	0.0026	0.001	0.0014	0.016	0.0003
Lead, potentially dissolved																		
Lead, total												0.0434			0.03	0.0194	0.0156	0.0068
Magnesium, dissolved	17.8	18.4	16.6	21.2	5.6	3.2	5.8	3.8	5	5	4.6	5.2	11.2	5	10.8	17.4	14.4	5.8
Magnesium, total												5.6						
Manganese, dissolved	90.6	121	80.4	110.2	5.8	1.542	0.005	0.24	0.005	0.005	0.005	2.48	31	6.46	43.4	86.4	69.8	6.3
Manganese, potentially dissolved																		
Manganese, total												4.78						
Mercury, dissolved	0.0002	0.0002	0.0002	0.0002		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Mercury, total												0.0002			0.0002	0.0002	0.0002	0.0002
Molybdenum, dissolved	0.0014	0.0019	0.0016	0.0014	0.0076	0.0015	0.0074	0.0086	0.0068	0.0084	0.0066	0.008	0.0011	0.0086	0.0027	0.0013	0.0022	0.0088
Molybdenum, total												0.012						
Nickel, dissolved	0.01	0.01	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.008	0.008	0.008	0.009	0.008	0.008
Nickel, total												0.01						
Nitrate/Nitrite as N	0.03	0.07	0.05	0.06		0.44	0.52	15.24	0.54	0.6	0.68	0.02	0.22	0.02	0.02	0.06	0.03	0.02
Oil and Grease																	2	2
pH	7.6	7.2	7.6	7.7	16.2	8.1	8.1	8.1	8.1	8.1	8.2	8.1	7.9	7.8	7.7	7.3	7.3	7.9
pH measured at	19	20	22	21	23	19	21	21	21	20	21	22	44	21	20	19.4	21.4	19.7
Phosphorus, ortho dissolved	0.01	0.01	0.02	0.01		0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
Potassium, dissolved	1.3	1.2	1.2	1.3	0.9	0.4	0.6	0.8	0.5	0.5	0.4	0.9	0.8	0.8	0.9	1.1	1.1	1
Potassium, total												0.9						
Residue, Filterable (TDS) @180C	1100	1100	1100	1260	190	280	340	464	328	344	164	380	360	440	520	1044	980	400
Residue, Non-Filterable (TSS) @105C	15	44	7	6		5	5	18	5	8	8	5	5	6	5	6	5	5
Selenium, dissolved	0.0001	0.0002	0.0001	0.0001		0.0006	0.0008	0.0014	0.0008	0.001	0.0008	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001
Selenium, total												0.0001						
Silica, dissolved	18.6	17.8	18	9.1	12.6	11.4	11.2	17	11.4	11.6	11.8	13	15.8	12.2	15.6	18.2	15.8	12.6
Silica, total												14						
Silver, dissolved	0.00005	0.00005	0.00005	0.00005		0.00005	0.00005	0.00027	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Silver, potentially dissolved																		
Silver, total												0.00023						
Sodium																		



Underground Data

Analyte	UG-4																							
	1/16/2012	6/24/2012	9/18/2012	12/6/2012	2/6/2013	6/20/2013	7/18/2013	7/25/2013	8/1/2013	8/8/2013	9/26/2013	12/26/2013	2/12/2014	4/2/2014	6/11/2014	12/4/2014	3/31/2015	6/16/2015	9/16/2015	3/30/2016	7/26/2017	12/4/2018		
Aluminum, dissolved	0.03	0.03	0.03	0.17		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.15	0.09	0.03	0.03	0.03	0.05		
Aluminum, total	0.04	0.1	0.03	6.74	0.34	0.03	0.04	0.03	0.06	0.03	0.12	0.03	0.05	2.22	0.62	224	3.34	7.42	0.7	0.76				
Antimony, dissolved	0.0114	0.0316	0.032	0.0248	0.0218	0.0004	0.0372	0.0378	0.0358	0.0342	0.027	0.0098	0.0076	0.0058	0.0368	0.0096	0.0068	0.0364	0.008	0.0014	0.0262	0.0015		
Antimony, total												0.0112												
Arsenic, dissolved	0.019	0.0066	0.0102	0.0118	0.0134	0.0052	0.0074	0.0074	0.0074	0.009	0.0094	0.017	0.0168	0.0172	0.0078	0.0134	0.0184	0.0066	0.0176	0.0242	0.014	0.0212		
Arsenic, total												0.0188												
Arsenic, total recoverable																0.04	1.05	0.0194	0.0382	0.023	0.0254			
Barium, dissolved	0.048	0.04	0.048	0.074	0.064	0.018	0.04	0.05	0.05	0.042	0.044	0.064	0.06	0.058	0.044	0.056	0.064	0.064	0.056	0.044	0.042	0.052		
Barium, total												0.078												
Beryllium, dissolved	0.0001	0.0001	0.0001	0.00005		0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005		
Beryllium, total												0.00005												
Bicarbonate as CaCO3	146	104	122	140	136	94	114	124	132	122	130	146	150	120	82	163.4	152.2	96.6	129.4	144.4	143.2	156.6		
Biochemical Oxygen Demand (5 day)																								
Boron, dissolved	0.03	0.02	0.01	0.02	0.08	0.01	0.02	0.02	0.01	0.01	0.01	0.03	0.03	0.1	0.02	0.03	0.04	0.03	0.02	0.04	0.03	0.02		
Boron, total												0.03												
Cadmium, dissolved	0.0001	0.0004	0.0004	0.0005	0.0006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	0.0001	0.0003	0.0001	0.0001	0.0002	0.00008		
Cadmium, potentially dissolved																				0.0001				
Cadmium, total												0.001				0.005	0.0164	0.0002	0.0008	0.0002	0.001			
Calcium, dissolved	123.4	102.6	110	129.8	129.2	39.6	112.4	115	108.2	113	112	112.4	124.2	128.8	94	155.4	133	79.6	107	125.8	118.4	137.2		
Calcium, total												132.4												
Carbon, dissolved organic (DOC)																								
Carbonate as CaCO3	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Cation-Anion Balance	-5	-3	2.8	-2.4	0	-15.4	4.4	0.8	-5.4	5.6	-5.6	-15.8	-5	0	0.4	-2	0	4	-3	-7.2	5.6	-2.2		
Chemical Oxygen Demand																								
Chloride	1	1	1	1	2	1	1	1	1	1	1	1	1	2	0.8	4.8	1.8	1	1	1.9	1.3	1.8		
Chromium, dissolved	0.0005	0.0005	0.0005	0.0005		0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005		
Chromium, total												0.0005												
Chromium, total recoverable																0.01								
Chromium, Trivalent Dissolved																	0.005	0.005	0.005	0.005	0.005			
Conductivity @25C	832	650	678	858	806	288	702	742	706	712	748	810	826	838	626	966	852	540	648	852	698	850		
Copper, dissolved	0.0005	0.0006	0.0005	0.0134	0.0018	0.0006	0.0013	0.0009	0.0009	0.0009	0.0005	0.0005	0.0005	0.0005	0.0008	0.0017	0.0027	0.0029	0.0006	0.0006	0.0006	0.013		
Copper, potentially dissolved																				0.0068				
Copper, total												0.0018					0.01	0.76	0.01	0.03	0.01			
Cyanide, total	0.003	0.004	0.003	0.003		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003		
Cyanide, WAD	0.003	0.003	0.003	0.003		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003		
Dissolved Chromium, Hexavalent																	0.005	0.005	0.005	0.005	0.005			
Fluoride	0.1	0.3	0.3	0.3	0.8	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.84	0.25	0.8	0.76	0.15	0.24	0.86	0.86	0.9		
Hardness as CaCO3 (dissolved)	338	296	312	354	350	108	324	328	310	322	318	306	336	346	268	422	360	228	296	338	330	368		
Hydroxide as CaCO3	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Iron, dissolved	0.02	0.02	0.02	0.32		0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.44	0.46	0.02	0.02	0.02	0.02		
Iron, total	0.14	0.38	0.02	5.46	0.3	0.02	0.03	0.02	0.26	0.04	0.32	0.16	0.14	3.58	1.14	322	1.62	8.54	0.54	0.9				
Iron, total recoverable															1.04	298	1.6	7.92	0.54	0.96				
Lead, dissolved	0.0002	0.0094	0.0036	0.164	0.0172	0.0016	0.0124	0.006	0.0802	0.0114	0.0036	0.0064	0.0038	0.0044	0.0094	0.007	0.0848	0.0324	0.0164	0.0058	0.004	0.0088		
Lead, potentially dissolved																				0.0998				
Lead, total												0.0484					0.03	10.48	0.0884	0.6536	0.046	0.074		
Magnesium, dissolved	7	9.4	9	7.4	6.8	2.2	10.4	10	9.4	9.6	9.2	6	6	5.8		8.2	8.4	6.6	7.2	6.8	5.6	8.2		
Magnesium, total												7.4										6.2		
Manganese, dissolved	0.152	0.064	0.294	0.414	0.172	0.005	0.008	0.012	0.011	0.005	0.01	0.006	0.012	0.009	0.018	0.076	0.314	0.33	0.008	0.005	0.017	0.005		
Manganese, potentially dissolved																				0.1694				
Manganese, total												0.028												
Mercury, dissolved	0.0002	0.0002	0.0002	0.0002		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002		
Mercury, total												0.0002					0.0002	0.0036	0.0002	0.0002	0.0004			
Molybdenum, dissolved	0.015	0.0148	0.0176	0.0204	0.0208	0.0012	0.0156	0.0168	0.0176	0.0168	0.0162	0.015	0.0142	0.0146	0.0198	0.0258	0.018	0.0166	0.0136	0.0168	0.0162	0.0148		
Molybdenum, total												0.016												
Nickel, dissolved	0.01	0.01	0.01	0.01		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008		
Nickel, total												0.01												
Nitrate/Nitrite as N	0.08	0.36	0.36	0.22	0.2	0.46	0.56	0.56	0.6	0.6	0.58	0.24	0.3	0.										



Underground Data

Analyte	UG-5																									
	2/6/2013	6/20/2013	8/1/2013	8/8/2013	12/26/2013	2/12/2014	4/2/2014	6/11/2014	7/22/2014	12/4/2014	3/31/2015	6/16/2015	9/16/2015	10/26/2015	12/10/2015	3/10/2016	3/7/2018	3/26/2018	4/23/2018	5/22/2018	6/26/2018	8/22/2018	12/4/2018			
Aluminum, dissolved		0.03	0.03		0.03	0.03	0.03	0.03	0.03	0.03	0.51	0.03	0.03			0.03	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.06		
Aluminum, total	0.08	0.03	1.82	18	0.12	0.03	0.87	1.76	0.93	8.45	13.8	3.7	0.04			0.04	0.1	0.03	0.04	0.52	0.11	0.09				
Antimony, dissolved	0.0024	0.0056	0.0051	0.0055	0.0021	0.0016	0.0014	0.0034	0.0046	0.0013	0.014	0.004	0.0016			0.0014	0.0012	0.0014	0.0032	0.0013	0.0015	0.0008	0.0018			
Antimony, total					0.0031												0.0014	0.0014	0.0036	0.0025	0.0017	0.0009				
Arsenic, dissolved	0.0024	0.0031	0.0024	0.0015	0.0026	0.0025	0.0009	0.0029	0.0027	0.0019	0.0301	0.0015	0.0034			0.0037	0.0029	0.0034	0.002	0.003	0.0022	0.0019	0.004			
Arsenic, total					0.0065												0.0043	0.0039	0.005	0.0068	0.0033	0.0034				
Arsenic, total recoverable								0.07	0.0092	0.0161	0.1878	0.0158	0.0048			0.0042										
Barium, dissolved	0.029	0.014	0.028	0.054	0.028	0.027	0.025	0.077	0.033	0.033	0.156	0.041	0.026			0.028	0.03	0.034	0.041	0.027	0.03	0.027	0.052			
Barium, total					0.033												0.028	0.031	0.041	0.045	0.032	0.032				
Beryllium, dissolved		0.00005			0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00079	0.00005	0.00005			0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.0001			
Beryllium, total					0.00005												0.00005	0.00005	0.00014	0.00005	0.00005	0.00005				
Bicarbonate as CaCO3	53	46	53	56	59	57	44	45	55.5	56.3	56	55.9	55.8			57.2	57.7	59.3	68.6	52.1	57.4	53.9	107.2			
Biochemical Oxygen Demand (5 day)																	2	8	5	2	2	2				
Boron, dissolved	0.02	0.01			0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.01			0.01	0.03	0.02	0.02	0.01	0.01	0.01	0.02			
Boron, total					0.02												0.01	0.01	0.01	0.01	0.01	0.02				
Cadmium, dissolved	0.0012	0.0029			0.0014	0.0011	0.001	0.001	0.001	0.0015	0.0047	0.0003	0.0005	0.0011	0.0006	0.0005	0.0017	0.0004	0.0022	0.0004	0.0006	0.0015	0.00268			
Cadmium, potentially dissolved										0.002	0.0049	0.0011				0.0006										
Cadmium, total					0.0016			0.005	0.0012	0.003	0.0291	0.0067	0.0006			0.0006	0.0018	0.0005	0.0025	0.001	0.0006	0.0015				
Calcium, dissolved	65.3	34.8	45.3	50.6	53.3	61.8	65.5	40.5	44.7	56.8	66.7	40.2	49.4			61	66.3	75.9	94.5	37.8	46	46.5	116			
Calcium, total					59.9												72.6	71.3	95.3	41	46	47.3				
Carbon, dissolved organic (DOC)																	12	8	1	3.3	3.8	1				
Carbonate as CaCO3		2			2	2	2	2	2	2	2	2	2			2	2	2	2	2	2	2	4			
Cation-Anion Balance	2.5	2	0.9	4.4	-1.5	-2.6	0	4.8	1.8	0	7.1	0	-1.7			-8.9	-1.2	2.2	-7.3	0	-1.8	0	0			
Chemical Oxygen Demand																	10	83	10	10	10	10				
Chloride		1	1	1	1	1	1	0.5	0.5	1.1	0.5	0.5	0.8			0.5	1	1.4	1.4	0.7	0.7	0.5	1.4			
Chromium, dissolved		0.0005			0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0009	0.0005	0.0005			0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001			
Chromium, total					0.0005												0.0005	0.0005	0.0005	0.0005	0.0009	0.0005				
Chromium, total recoverable								0.01																		
Chromium, Trivalent Dissolved									0.005	0.005	0.005	0.005	0.005			0.005										
Conductivity @25C	395		289	343	362	393	405	258	276	358	407	254	295			357	428	427	534	235	288	292	708			
Copper, dissolved		0.0009	0.0005		0.001	0.0005	0.0005	0.0024	0.0005	0.0005	0.0751	0.0016	0.0006	0.0005	0.0005	0.0005	0.0004	0.0039	0.0094	0.0021	0.0034	0.001	0.0028			
Copper, potentially dissolved										0.0078	0.0676	0.0142				0.001	0.005	0.0006								
Copper, total					0.0024			0.13	0.01	0.02	0.51	0.05	0.01			0.01	0.0011	0.0011	0.0264	0.0056	0.0028	0.0017				
Cyanide, total		0.003		0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003			0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006			
Cyanide, WAD		0.003			0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003				
Dissolved Chromium, Hexavalent									0.005	0.005	0.005	0.005	0.005			0.005										
Fluoride	0.3	0.2	0.2	0.2	0.2	0.2	0.29	0.19	0.25	0.28	0.23	0.13	0.21			0.28	0.22	0.28	0.24	0.14	0.18	0.21	0.62			
Hardness as CaCO3 (dissolved)	175	98	123	136	143	165	175	110	122	151	178	110	133			162	175	202	254	101	123	124	308			
Hydroxide as CaCO3		2			2	2	2	2	2	2	2	2	2			2	2	2	2	2	2	2	4			
Iron, dissolved		0.02	0.02		0.02	0.02	0.02	0.02	0.02	0.02	1.93	0.06	0.02			0.02	0.02	0.08	0.03	0.08	0.02	0.02	0.04			
Iron, total	0.11	0.11	1.28	16.3	0.43	0.06	1.74	4.29	1.56	4.84	21.4	5.68	0.12			0.07	0.18	0.03	0.32	0.73	0.49	0.16				
Iron, total recoverable								4.3	1.52	4.58	21.3	5.46	0.13	0.12	0.07	0.06	0.18	0.03	0.35	0.63	0.53	0.14				
Lead, dissolved	0.0009	0.0008	0.0087	0.0372	0.0009	0.0002	0.0011	0.0404	0.0054	0.0188	6.14	0.0233	0.0013	0.0011	0.0001	0.0009	0.0026	0.0056	0.0048	0.0117	0.0271	0.0008	0.0006			
Lead, potentially dissolved											5.92	0.4857				0.0041										
Lead, total					0.0217			0.78	0.1178	0.4421	10.9	1.25	0.0132	0.0075	0.0039	0.0043	0.0095	0.0059	0.0285	0.0626	0.0499	0.0077				
Magnesium, dissolved	2.8	2.7	2.3	2.4	2.3	2.5	2.7	2.1	2.5	2.3	2.9	2.3	2.3			2.3	2.4	3.1	4.5	1.6	2	1.9	4.6			
Magnesium, total					2.7												2.5	2.8	4.6	1.8	2.1	1.8				
Manganese, dissolved	2.04	3.36	0.035	0.203	1.6	1.06	1.1	0.232	0.874	1.74	4.16	0.119	0.187	1.47	0.2	0.384	2.04	0.536	1.58	0.264	0.385	0.83	1.77			
Manganese, potentially dissolved											2.4	3.8	0.915	1.52	1.05	0.485										
Manganese, total					2.5												2.62	0.546	1.59	1.15	0.84	1.55				
Mercury, dissolved		0.0002			0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002			0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004			
Mercury, total																										