TABLE 2-1A
OTTER CREEK MINE - BASELINE REPORT 304E
GROUNDWATER MONITORING WELL COMPLETION SUMMARY

Well Name	Geologic Unit	Total Depth Drilled (ft-bgs)	Screened Interval (ft-bgs)	Northing (MT State Plane, NAD83)	Easting (MT State Plane, NAD83)	Ground Surface Elevation (feet)	Legal Location			Surface Owner	Water Level Monitoring Frequency	Sampling Frequency
							Township (S)	Range (E)	Section			
A1	Alluvium	20 (3 ft slough)	7-17	475750.51	2820589.42	3033.71	4	45	9	Ark Land	Monthly	Quarterly
A2	Alluvium	80	55 - 77	493037.18	2827469.82	3100.88	3	45	26	Ark Land	Monthly	
A3	Alluvium	59	29-59	449796.22	2828377.84	3104.93	5	45	2	Denson	Monthly	Quarterly
A4	Alluvium	70	30 - 70	451653.18	2836778.79	3171.91	5	45	1	Denson	Monthly	Quarterly
A5	Alluvium (Sand, Grvl, Clyst)	28	Open End at TD	477695.18	2836255.50	3134.77	4	45	12	Ark Land	Monthly	Quarterly
A6	Alluvium	25	15 - 25	467961.91	2823051.32	3051.71	4	45	22	GNP	Monthly	Quarterly
A7	Alluvium	44	24-44	459251.91	2825659.93	3079.33	4	45	27	GNP	Monthly	Quarterly
A8	Alluvium	64	26 - 64	478461.99	2818975.64	3027.22	4	45	4	Ark Land	Monthly	Quarterly
A9	Alluvrium	50	20 - 40	504771.35	2799819.15	2937.84	3	44	12	GNP	Monthly	Quarterly
AVF-1-1	Alluvium , Clay Slst, Sndst	36	Open End at 32	492770.89	2809604.69	2976.90	3	45	30	Trusler	Monthly	
AVF-1-2	Alluvium	32	22-32	492760.99	2809578.22	2977.01	3	45	30	Trusler	Monthly	Quarterly
AVF-1-3	Alluvium	38	18-38	493518.19	2810154.49	2976.09	3	45	20	Trusler	Monthly	
AVF-2-1	Alluvium	31	19-29	485147.38	2814078.72	3003.13	3	45	32	Trusler	Monthly	
AVF-2-2	Alluvium	32	17-32	485147.86	2814118.55	3003.14	3	45	32	Trusler	Monthly	Quarterly
AVF-2-3	Alluvium	35	19-34	485192.40	2814623.06	3005.30	3	45	32	Trusler	Monthly	
AVF-2-4	Alluvium	32	22-32	485129.20	2813441.03	3004.56	3	45	32	Trusler	Monthly	
AVF-2-5	Alluvium	20	15-20	485120.10	2813077.86	3005.62	3	45	32	Trusler	Monthly	
AVF-2-6	Alluvium	47	Open End at 44	485180.63	2815413.49	3010.11	3	45	33	Trusler	Monthly	
AVF-3-1	Alluvium	103 (45 ft plug'd)	38-58	470051.63	2823451.75	3050.97	4	45	15	GNP	Monthly	
AVF-3-2	Alluvium	59	37-57	470043.96	2823459.65	3051.15	4	45	15	GNP	Monthly	Quarterly
AVF-3-3	Alluvium	65	35 -65	469949.41	2823931.81	3062.45	4	45	15	GNP	Monthly	
AVF-3-4	Alluvium, Coal	56 (38 ft slough)	26 - 46	470334.06	2822621.16	3043.38	4	45	15	GNP	Monthly	
AVF-4-1	Alluvium (Grvls), coal	35	21-34	461327.91	2825333.13	3069.70	4	45	27	GNP	Monthly	
AVF-4-2	Alluvium	55.5	31-51	461411.75	2826300.08	3076.20	4	45	27	GNP	Monthly	
AVF-4-3	Alluvium	32	19-32	461198.56	2824564.14	3073.23	4	45	27	GNP	Monthly	
AVF-4-4	Alluvium	34	17-34	461307.54	2825342.30	3069.45	4	45	27	GNP	Monthly	
AVF-5-1	Alluvium	34	24 - 34	490143.03	2819641.79	3034.78	3	45	28	Trusler	Monthly	Quarterly
AVF-5-2	Alluvium	71	31-71	489701.14	2819885.35	3039.83	3	45	28	Trusler	Monthly	
AVF-5-3	Alluvium	50	20-50	489716.27	2819885.12	3039.59	3	45	28	Trusler	Monthly	
AVF-5-4	Alluvium	74	54 - 74	489376.30	2819988.69	3043.26	3	45	28	Trusler	Monthly	
AVF-5-5	Alluvium	46	41-46	489085.72	2820071.38	3047.03	3	45	28	Trusler	Monthly	
AVF-6-1	Alluvium (clinker gravel)	50	Open End at 40	477256.84	2822637.93	3038.31	4	45	10	Ark Land	Monthly	
AVF-6-2	Alluvium	40	20-40	477271.83	2822635.14	3038.36	4	45	10	Ark Land	Monthly	
AVF-6-3	Alluvium	66	36 - 66	477471.58	2822620.04	3036.94	4	45	10	Ark Land	Monthly	Quarterly
AVF-6-4	Alluvium	71	31-71	477789.43	2822602.67	3046.46	4	45	3	Ark Land	Monthly	
AVF-6-5	Alluvium	30	25 - 30	477463.64	2822619.16	3036.69	4	45	10	Ark Land	Monthly	
B1-C	Clinker, Ash, Claystone	37.5	27-37	492160.74	2822873.31	3077.39	3	45	27	Ark Land	Monthly	Quarterly
B1-U	Underburden (Sand)	90	60-90	492152.65	2822876.07	3077.45	3	45	27	Ark Land	Monthly	Quarterly
B2-K	Knobloch Coal	304	244-304	483992.32	2804348.00	3269.35	3	44	36	MT	Monthly	Quarterly
B2-O	Overburden (Sandstone)	130	80-130	483992.43	2804337.58	3269.76	3	44	36	MT	Monthly	Quarterly
B2-U	Underburden (Sandstone)	420	360-420	483993.19	2804357.02	3269.55	3	44	36	MT	Monthly	Quarterly
B3-K	Knobloch Coal	210	166-210	484882.23	2821620.67	3221.52	3	45	34	Ark Land	Monthly	Quarterly
B3-U	Underburden (Sndst. & Coal)	325	304-324	484871.99	2821619.97	3221.32	3	45	34	Ark Land	Monthly	Quarterly
B4-O	Overburden (Sandstone)	132	122 - 132	488340.36	2828627.91	3241.63	3	45	26	Ark Land	Monthly	Quarterly

TABLE 2-1A
OTTER CREEK MINE - BASELINE REPORT 304E
GROUNDWATER MONITORING WELL COMPLETION SUMMARY

Well Name	Geologic Unit	Total Depth Drilled (ft-bgs)	Screened Interval (ft-bgs)	Northing (MT State Plane, NAD83)	Easting (MT State Plane, NAD83)	Ground Surface Elevation (feet)	Legal Location			Surface Owner	Water Level Monitoring Frequency	Sampling Frequency
							Township (S)	Range (E)	Section			
B4-K	Knobloch Coal	246	181 - 246	488338.13	2828613.28	3241.41	3	45	26	Ark Land	Monthly	Quarterly
B4-U	Underburden (Sandstone)	341	301-341	488335.49	2828597.54	3241.51	3	45	26	Ark Land	Monthly	Quarterly
B5-O	Overburden (Sltst & Sndst)	156	141-156	474962.21	2826808.49	3224.64	4	45	11	Ark Land	Monthly	Quarterly
B5-K	Knobloch Coal	260	185-260	474964.49	2826831.71	3223.85	4	45	11	Ark Land	Monthly	Quarterly
B5-U	Underburden (Sandstone)	500	450-500	474963.53	2826819.95	3224.17	4	45	11	Ark Land	Monthly	Quarterly
B6-O	Overburden (Sandstone)	155	136-155	474204.77	2834702.77	3233.75	4	45	12	Ark Land	Monthly	Quarterly
B6-K	Knobloch Coal	247	179-247	474230.48	2834696.30	3232.90	4	45	12	Ark Land	Monthly	Quarterly
B6-U	Underburden (Coal & Siltstone)	364	352-364	474218.93	2834699.12	3233.21	4	45	12	Ark Land	Monthly	Quarterly
B7-O	Overburden (fine Sndst, thin coal)	233	228 - 233	456309.23	2835498.99	3336.86	4	45	36	MT	Monthly	Quarterly
B7-KU	Upper Knobloch Coal	260	250 - 260	456295.87	2835498.12	3336.44	4	45	36	MT	Monthly	Quarterly
B7-KL	Lower Knobloch Coal	340	320 - 340	456282.92	2835495.36	3336.06	4	45	36	MT	Monthly	Quarterly
B7-U	Underburden (Sand & Sndst)	450	410 - 450	456268.71	2835491.91	3335.27	4	45	36	MT	Monthly	Quarterly
B8-O	Overburden (Sandstone)	165	130-165	463636.15	2813751.51	3223.82	4	45	20	GNP	Monthly	Quarterly
B8-KU	Upper Knobloch Coal	240	193-240	463632.67	2813740.46	3223.79	4	45	20	GNP	Monthly	Quarterly
B8-KL	Lower Knobloch Coal	282	266-282	463623.24	2813713.47	3223.85	4	45	20	GNP	Monthly	Quarterly
B8-U	Underburden (Sandstone)	480	440-480	463627.36	2813725.73	3223.87	4	45	20	GNP	Monthly	Quarterly
B9-K	Knobloch Coal	185	116-185	471769.36	2817516.92	3135.00	4	45	16	MT	Monthly	Quarterly
B9-U	Underburden (Coal & Clay-Sltst)	295	282-295	471759.32	2817523.68	3134.60	4	45	16	MT	Monthly	Quarterly
B10-O	Overburden (Coal & Carb. Shale)	35	30-35	447907.40	2822242.97	3177.80	5	45	3	Denson	Monthly	Quarterly
B10-KU	Upper Knobloch Coal	77	42-77	447896.91	2822243.93	3177.98	5	45	3	Denson	Monthly	Quarterly
B10-KL	Lower Knobloch Coal	147	137-147	447884.96	2822243.99	3177.85	5	45	3	Denson	Monthly	Quarterly
B10-U	Underburden (Sandstone)	460	380-460	447919.60	2822245.02	3177.64	5	45	3	Denson	Monthly	Quarterly
B11-O	Overburden (Siltstone)	151	141-151	467902.65	2829525.74	3250.54	4	45	23	GNP	Monthly	Quarterly
B11-K	Knobloch Coal	313	243 -313	467914.49	2829529.76	3250.18	4	45	23	GNP	Monthly	Quarterly
B11-U	Underburden (Sandstone)	380.5	360-380	467927.58	2829534.34	3249.71	4	45	23	GNP	Monthly	Quarterly
B12-CO	Overburden (Colluvium)	40	24 - 40	454435.24	2842000.11	3258.54	4	46	31	USFS	Monthly	Quarterly
B12-UK2	Knobloch Coal	151	43 - 65	454420.52	2842002.88	3258.42	4	46	31	USFS	Monthly	Quarterly
B12-UK1	Knobloch Coal	151	139 - 151	454404.33	2842004.87	3258.46	4	46	31	USFS	Monthly	Quarterly
B12-LK	Knobloch Coal	240	223 - 240	454392.04	2842006.76	3258.75	4	46	31	USFS	Monthly	Quarterly
B12-U	Underburden	300	250 - 285	454380.75	2842009.07	3258.84	4	46	31	USFS	Monthly	Quarterly
C-1	Clinker (Burned Shale & Sndst)	150	Open End at 147	485805.50	2820986.59	3174.78	3	45	34	Ark Land	Monthly	Quarterly
C-2	Clinker (Baked Sandstone)	63	48-63	476059.44	2818546.45	3065.54	4	45	9	Ark Land	Monthly	Quarterly
C-3	Clinker (Baked Shale)	140	Open End at 138	474644.74	2823620.11	3128.47	4	45	10	Ark Land	Monthly	Quarterly
C-4	Clinker (Sandstone & Sltst)	120	Open End at TD	469778.33	2824994.50	3107.42	4	45	15	GNP	Monthly	Quarterly
K-1	Knobloch Coal	175	110-175	467480.10	2825490.64	3117.44	4	45	15	GNP	Monthly	Quarterly
K-2	Lower Knobloch Caol	209	189-209	460975.69	2828132.50	3137.39	4	45	26	Denson	Monthly	
K-3	Upper Knobloch Coal	75	55-75	459323.03	2827589.55	3127.83	4	45	26	Denson	Monthly	Quarterly
K-4	Lower Knobloch Coal	150	130-150	459331.02	2827583.15	3127.76	4	45	26	Denson	Monthly	Quarterly
K-5	Knobloch Coal	186	126-186	469707.66	2825301.24	3146.44	4	45	15	GNP	Monthly	
K-6	Upper Knobloch Coal	149	140-149	460962.39	2828129.62	3137.97	4	45	26	Denson	Monthly	Quarterly

TABLE 2-1B
OTTER CREEK MINE - BASELINE REPORT 304E
PLUGGED ABANDONED BOREHOLES - COMPLETION SUMMARY

Well Name	Geologic Unit	Total Depth Drilled (ft-bgs)	Screened Interval (ft-bgs)	Northing (MT State Plane, NAD83)	Easting (MT State Plane, NAD83)	Ground Surface Elevation (feet)	Legal Location			Surface Owner	Water Level Monitoring Frequency	Sampling Frequency
							Township (S)	Range (E)	Section			
AVF-1-PH1	Alluvium	22	Plugged	491950.29	2808542.68	2977.26	3	45	30	Trusler	None	None
AVF-1-PH2	Alluvium	68	Plugged	493745.15	2810283.93	3004.29	3	45	20	Trusler	None	None
AVF-5-4A	Alluvium	28	Plugged	NA	NA	NA	3	45	28	Trusler	None	None
AVF-6-PH1	Alluvium	45	Plugged	478147.30	2822469.10	3047.46	4	45	3	Ark Land	None	None
B3-PH1	Plugged Borehole	100	Plugged	NA	NA	NA	3	45	34	Ark Land	None	None
B5-PH1	Plugged Borehole	105	Plugged	475137.55	2825224.07	3196.32	4	45	10	Ark Land	None	None
BH-1	Clinker	19	Plugged	NA	NA	NA	NA	NA	NA	Ark Land	None	None

TABLE 2-2
OTTER CREEK MINE BASELINE REPORT 304E
ANALYTICAL PARAMETERS -GROUNDWATER

Analyte	Method	Reporting Value - Detection Limit (mg/L or otherwise noted)
FIELD PARAMETERS		
Specific Conductance	Field	1 µmhos/cm
pH	Field	0.01s.u.
Temperature	Field	0.1 ^{o} C
PHYSICAL PARAMETERS		
Specific conductance @ 25^{o} C	E120.1/A2510B	1 µmhos/cm
pH	E150.2/A 4500 H B	0.1 s.u.
Total Dissolved Solids (TDS)	EPA 160.1	4
NON-METALS		
Acidity, Total as $CaCO_3$ (if pH <6.0)	A2310B	1
Alkalinity, Total as $CaCO_3$	EPA 310.2/A2320 B	1
Bicarbonate as HCO_3	EPA 310.2/A2320 B	1
Carbonate as CO_3	EPA 310.2/A2320 B	1
Hydroxide as OH	A2320 B	1
Sulfate (SO4)	EPA 300.0	1
Chloride (Cl)	EPA 300.0	1
Fluoride (F)	A 4500 F-C/Technician 380-7WE	0.1
Sodium Adsorption Ratio (SAR)	Calc	0.1
NUTRIENTS		
Nitrate + Nitrite as N	EPA 353.2	0.01
DISSOLVED METALS		
Calcium (Ca)	200.7 / 200.8	1
Magnesium (Mg)	200.7 / 200.8	1
Sodium (Na)	200.7 / 200.8	1
Potassium (K)	200.7 / 200.8	1
Aluminum (Al)	200.7 / 200.8	0.009
Arsenic (As)	200.7 / 200.8	0.001
Barium (Ba)	200.7 / 200.8	0.003
Beryllium (Be)	200.7 / 200.8	0.0008
Boron (B)	200.7 / 200.8	0.01
Cadmium (Cd)	200.7 / 200.8	0.00003
Chromium (Cr)	200.7 / 200.8	0.001
Copper (Cu)	200.7 / 200.8	0.001
Iron (Fe)	200.7 / 200.8	0.02
Lead (Pb)	200.7 / 200.8	0.0003
Manganese (Mn)	200.7 / 200.8	0.005
Mercury (Hg)	245.1 Low Level	0.000005
Molybdenum (Mo)	200.7 / 200.8	0.005
Nickel (Ni)	200.7 / 200.8	0.002
Selenium (Se)	200.7 / 200.8	0.001
Vanadium (V)	200.7 / 200.8	0.01
Zinc (Zn)	200.7 / 200.8	0.008

Note: Metals for Groundwater are analyzed as Dissolved Metals
Total Recoverable metals will be analyzed in the initial set of water quality samples.

TABLE 2-3
OTTER CREEK MINE BASELINE REPORT 304E
AQUIFER TESTING RESULTS

Well ID	Test Date	Test Type	Test Duration (min.)	Pumping Rate (gpm)	Analytical Solution	Wells Observed	Transmissivity (ft^2/day)	Hydraulic Conductivity (ft/day)(2)	Saturated Thickness (ft)	Storativity
A4	8/10/2011	Pump	100 Minutes	59.7	Theis (Unconfined)	A4	2130	40	53	--
A6	7/6/2011	Pump	200 Minutes	50.6	Theis (Unconfined)	A6	7750	554	14	--
A8	6/18/2014	Pump	100 Minutes	55	Theis (Unconfined)	A8	2400	80	30	--
A9	7/8/2014	Pump	100 Minutes	18.6	Theis (Unconfined)	A9	850	12	70	--
AVF1-2	11/17/2011	Pump	100 Minutes	60	Leaky Hantush Jacob	AVF1-1, AVF1-2	1363	80	17	--
AVF1-1	11/17/2011	Pump - obs	100 Minutes	-	Leaky Hantush Jacob	AVF1-1, AVF1-2	1481	87	17	0.00267
AVF3-1	5/8/2012	Pump	106 Minutes	10.6	Theis (Confined)	AVF3-1, AVF3-2	235	3.4	69.5	--
AVF3-2	5/8/2012	Pump - obs	106	--	Cooper-Jacob (Confined)	AVF3-2	2958	42.6	--	0.00085
AVF4-4	10/20/2011	Pump	100 Minutes	110	Theis (Unconfined)	AVF4-1, AVF4-4	2749	162	17	--
AVF4-1	10/20/2011	Pump - obs	100 Minutes	--	Theis (Unconfined)	AVF4-1	3271	192	17	0.00013
AVF5-2	11/2/2011	Pump	104 Minutes	99	Cooley-Case Leaky Confined	AVF5-3, AVF5-4	3842	77	50	0.00878
AVF5-3		Pump - obs	104 Minutes	--	Cooley-Case Leaky Confined	AVF5-3	3796	76	50	0.00673
AVF6-3	11/16/2011	Pump	204 Minutes	102	Leaky Hantush Jacob	AVF6-5	3060	90	34	0.02668
B10-KL	7/7/2011	Pump	100 Minutes	1.3	Cooper-Jacob (Confined)	B10-KL	2.9	0.3	10.5	--
B10-KU	3/10/2011	Pump	100 Minutes	2.7	Theis (Unconfined)	B10-KU	17	0.5	31.5	--
B10-O	7/6/2011	Slug In	2 Minutes	--	Bouwer-Rice (Unconfined)	B10-O	145	41.4	3.5	--
B10-O	7/6/2011	Slug Out	2 Minutes	--	Bouwer-Rice (Unconfined)	B10-O	105	29.9	3.5	--
B10-U	3/10/2011	Pump	126 Minutes	8.1	Theis (Confined)	B10-U	57	0.6	90	--
B11-K	7/21/2011	Pump	200 Minutes	9.9	Theis (Confined)	B11-K	85	1.1	75	--
B11-O	8/10/2011	Slug In	840 Minutes	--	Bouwer-Rice (Confined)	B11-O	0.006	0.001	5	--
B11-O	8/10/2011	Slug Out	150 Minutes	--	Bouwer-Rice (Confined)	B11-O	0.195	0.039	5	--
B11-U	7/20/2011	Pump	100 Minutes	1.6	Theis (Confined)	B11-U	1.1	0.05	23	--
B12-CO	6/16/2014	Slug In	17 Minutes	--	Bouwer-Rice (Unconfined)	B12-CO	34.5	3.00	11.5	--
B12-CO	6/16/2014	Slug Out	10 Minutes	--	Bouwer-Rice (Unconfined)	B12-CO	34.5	3.00	11.5	--
B12-KU2	6/16/2014	Slug In	19 Minutes	--	Bouwer-Rice (Confined)	B12-KU2	14.7	0.70	21	--
B12-KU2	6/16/2014	Slug Out	34 Minutes	--	Bouwer-Rice (Confined)	B12-KU2	12.0	0.57	21	--
B12-KU1	6/18/2014	Pump	40 Minutes	--	Papadopulos-Cooper(Confined)	B12-KU1	0.22	0.02	11.5	--
B12-KU1	6/16/2014	Pump - obs	108 Minutes	2.4 (weighted)	Neuman-Witherspoon (Leaky)	B12-KU1	0.22	0.02	11.5	0.01
B12-KL	6/16/2014	Pump	108 Minutes	2.4 (weighted)	Barker (Confined)	B12-KL	4.0	0.25	16	--
B12-KL	6/17/20104	Pump-obs	110 Minutes	2, 4, 6 (Step)	Neuman-Witherspoon (Leaky)	B12-KL	4.0	0.25	16	0.0001
B12-U	6/17/2014	Pump	110 Minutes	2, 4, 6 (Step)	Neuman-Witherspoon (Leaky)	B12-KL	4.0	0.16	25	--
B1-U	11/17/2011	Pump	100 Minutes	31.8	Theis (Confined)	B1-U	800	19	43	--
B2-K	9/14/2011	Pump	100 Minutes	5.6	Cooper-Jacob (Confined)	B2-K	42	0.7	61.5	--
B2-U	9/14/2011	Pump	100 Minutes	1.7	Cooper-Jacob (Confined)	B2-U	4.8	0.1	53	--
B3-K	6/6/2012	Slug Out	15 Minutes	--	Bouwer-Rice (Confined)	B3-K	6.3	0.4	15.4	--
B3-U	7/22/2011	Pump	100 Minutes	1.5	Cooper-Jacob (Confined)	B3-U	2.1	0.2	9	--
B4-K	9/6/2011	Pump	106 Minutes	4.0	Theis (Confined)	B4-K	57	0.9	66	--
B4-O	9/7/2011	Slug In	150 Minutes	--	Bouwer-Rice (Confined)	B4-O	3.1	0.3	12.2	--
B4-O	9/7/2011	Slug Out	150 Minutes	--	Bouwer-Rice (Confined)	B4-O	3.4	0.3	12.2	--
B4-U	9/1/2011	Pump	100 Minutes	1.0	Theis (Confined)	B4-U	0.58	0.01	41	--
B5-K	7/14/2011	Pump	200 Minutes	12.2	Theis (Confined)	B5-K	691	9.9	70	--
B5-O	8/31/2011	Slug In	5 Minutes	--	Bouwer-Rice (Unconfined)	B5-O	327	32	10.23	--
B5-U	7/14/2011	Pump	100 Minutes	11.8	Theis (Confined)	B5-U	32	0.5	60	--
B6-K	9/8/2011	Pump	210 Minutes	8.6	Theis (Confined)	B6-K	65	1.0	66	--
B6-O	9/7/2011	Pump	100 Minutes	1.0	Theis (Confined)	B6-O	0.76	0.04	18	--
B6-U	9/7/2011	Pump	100 Minutes	1.8	Papadopulos-Cooper(Confined)	B6-U	40	4.9	8	--
B7-KL	7/19/2011	Pump	100 Minutes	3.6	Theis (Confined)	B7-KL	4.5	0.2	19	--
B7-KU	7/15/2011	Pump	100 Minutes	1.2	Theis (Confined)	B7-KU	24.3	2.4	10	--
B7-O	7/19/2011	Pump	100 Minutes	1.3	Theis (Confined)	B7-O	6.3	1.3	5	--
B7-U	7/20/2011	Pump	100 Minutes	0.8	Theis (Confined)	B7-U	1.5	0.1	30	--
B8-KL	8/20/2011	Pump	100 Minutes	3.5	Cooper-Jacob (Confined)	B8-KL	10.0	0.62	16	--
B8-KU	8/11/2011	Pump	106 Minutes	5.8	Theis (Confined)	B8-KU	16.8	0.3	48	--
B8-O	8/10/2011	Pump	103 Minutes	4.3	Theis (Confined)	B8-O	90	2	53	--
B8-U	8/30/2011	Pump	100 Minutes	1.6	Theis (Confined)	B8-U	2.7	0.07	38	--
B9-K	8/31/2011	Pump	100 Minutes	7.5	Theis (Confined)	B9-K	481	7.1	67.5	--
B9-U	8/31/2011	Pump	100 Minutes	1.0	Cooper-Jacob (Confined)	B9-U	0.600	0.05	11	--
C-1	9/6/2011	Slug Out	500 Minutes	--	Bouwer-Rice (Unconfined)	C-1	0.09	0.08	1.22	--
C-2	2/8/2012	Pump	202	89.5	In sufficient drawdown	C-2	--	--	18.5	--
C-4*	2/7/2012	Pump	100	365	Theis (Unconfined)	C-4	762200	26744	28.5	--
K-1	1/25/2011	Pump	105 Minutes	13	Theis (Confined)	K-1	232	3.2	72	--
K-1	1/25/2012	Pump	1043 Minutes	17	Cooper-Jacob (Confined)	K-1, OC83-4	136	2	72	--
OC83-4	1/25/2012	Pump (obs)	1043 Minutes	17	Cooper-Jacob (Confined)	K-1, OC83-4	1625	23	72	0.00016
K-2	1/26/2011	Pump	100 Minutes	8.4	Theis (Confined)	K-2	105	5.8	18	--
K-3	7/8/2011	Pump	98 Minutes	2	Theis (confined)	K-3	34.3	2.5	13.5	--
K-4	1/26/2011	Pump	101 Minutes	1.7	Theis (Confined)	K-4	1.7	0.1	17.5	--
K-5	9/14/2011	Pump	100 Minutes	10.5	Theis (Confined)	K-5	321	4.5	71.5	--
K-6	7/8/2011	Pump	100 Minutes	5.5	Theis (Confined)	K-6	14.6	0.3	45	--

* Estimated valued - computer generated curve fit

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A1	A3
		sample_date	8/23/2011	10/18/2011	1/4/2012	4/26/2012	9/5/2012	11/16/2012	3/7/2013	5/16/2013	7/31/2013	11/21/2013	3/24/2014	5/12/2014	8/24/2011
		sys_sample_code	OTRCR-1108-806	OTRCR-1110-703	OTRCR-1201-112	OCC-1204-530	OCC-1209-703	OCC-1211-211A	OCC-1303-357	OCC-1305-152	OCC-1307-604	OCC-1311-150	OCC-1403-422	OCC-1405-200	OTRCR-1108-850
		lab_sample_id	H11080476-007	H11100344-004	H12010106-013	H12040471-031	H12090092-004	H12110252-012	H13030183-003	H13050294-021	H13080047-005	H13110493-011	H14030353-008	H14050292-001	H11080526-001
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1
ALUMINUM (AL)	mg/L	TRC	< 0.1												0.1
ARSENIC (AS)	mg/L	DIS	0.03	0.03	0.037	0.032	0.04	0.045	0.04	0.038	0.044	0.041	0.045	0.038	0.004
ARSENIC (AS)	mg/L	TRC	0.03												0.004
BARIUM (BA)	mg/L	DIS	0.034	0.028	0.024	0.019	0.023	0.022	0.016	0.016	0.016	0.018	0.016	0.016	0.015
BARIUM (BA)	mg/L	TRC	0.037												0.02
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.001												< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	710	740	780	780	840	850	840	740	860	880	870	840	750
BORON (B)	mg/L	DIS	0.45	0.43	0.45	0.4	0.42	0.4	0.35	0.41	0.38	0.4	0.36	0.4	0.49
BORON (B)	mg/L	TRC	0.45												0.49
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008
CADMIUM (CD)	mg/L	TRC	< 0.00008												< 0.00008
CALCIUM (CA)	mg/L	DIS	80	64	55	53	47	43	40	44	40	41	39	42	130
CALCIUM (CA)	mg/L	TRC	84												138
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 1	17	< 1	19	22	27	15	< 1	8	< 1	< 4
CHLORIDE (CL)	mg/L	NO MEAS	41	45	59	57	70	76	77	73	69	77	72	74	7
CHROMIUM (CR)	mg/L	DIS	0.012	0.011	0.012	0.012	0.01	0.01	0.01	0.01	0.011	0.01	0.011	0.011	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.012												< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	< 0.001												< 0.001
FLUORIDE (F)	mg/L	NO MEAS	2	2	3	3	2.7	2.6	2.7	3	2.8	2.8	2.7	2.8	0.7
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 1	< 4	< 1	< 1	< 4	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02	< 0.02	2.52
IRON (FE)	mg/L	TRC	0.07												2.97
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005
LEAD (PB)	mg/L	TRC	< 0.0005												< 0.0005
MAGNESIUM (MG)	mg/L	DIS	128	103	87	86	71	72	66	67	65	64	66	69	204
MAGNESIUM (MG)	mg/L	TRC	131												212
MANGANESE (MN)	mg/L	DIS	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.266
MANGANESE (MN)	mg/L	TRC	0.008												0.272
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00002	< 0.000005	< 0.000005	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.00005												< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	0.013	0.012	0.013	0.012	0.011	0.011	0.011	0.01	0.011	0.011	0.012	0.011	0.005
MOLYBDENUM (MO)	mg/L	TRC	0.014												< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01
NICKEL (NI)	mg/L	TRC	< 0.01												< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.96	0.99	1.05	1.14	1.19	1.3	1.29	1.35	1.26	1.34	1.22	1.26	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.1	8.3	7.8	7.7	7.8	7.9	7.8	7.8	7.8	7.9	7.8	8.1
PHOSPHORUS (P)	mg/L	TOT	0.049												0.045
POTASSIUM (K)	mg/L	DIS	28	26	24	23	24	24	21	21	22	21	21	21	20
POTASSIUM (K)	mg/L	TRC	28												20
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2640	2470	2800	2700	2330	2420	2380	2320	2400	2470	2390	2370	2930
SELENIUM (SE)	mg/L	DIS	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.006	0.005	0.006	0.004	< 0.001
SELENIUM (SE)	mg/L	TRC	0.005												< 0.001
SODIUM (NA)	mg/L	DIS	484	455	422	432	417	419	402	413	412	408	406	411	407
SODIUM (NA)	mg/L	TRC	481												397
SODIUM ADSORPTION RATIO	unitless	NO MEAS	7.81	8.17	8.26	8.52	8.98	9.11	9.08	9.15	9.33	9.28	9.23	9.09	5.19
SULFATE (SO4)	mg/L	NO MEAS	1100	950	800	750	650	580	510	500	490	510	550	570	1400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2180	1900	1680	1900	1610	1520	1420	1510	1450	1550	1590	1490	2530
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	580	610	640	670	690	730	720	650	730	720	720	690	620
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05												0.1
VANADIUM (V)	mg/L	DIS	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.28	0.25	0.27	< 0.1
VANADIUM (V)	mg/L	TRC	0.2												< 0.1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01
ZINC (ZN)	mg/L	TRC	< 0.01												< 0.01

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A3	A6	A6
		sample_date	10/21/2011	1/11/2012	4/25/2012	9/6/2012	11/15/2012	3/4/2013	5/14/2013	7/31/2013	12/13/2013	3/18/2014	5/14/2014	6/22/2011	10/21/2011
		sys_sample_code	OTRCR-1110-402	OTRCR-1201-205	OCC-1204-524	OCC-1209-722	OCC-1211-301	OCC-1303-345	OCC-1305-139	OCC-1307-610	OCC-1312-116	OCC-1403-405	OCC-1405-219	OTRCR-1106-011	OTRCR-1110-404
		lab_sample_id	H11100352-003	H12010179-006	H12040471-025	H12090092-023	H12110239-002	H13030104-006	H13050294-007	H13080047-011	H13120229-017	H14030299-006	H14050292-020	H11060450-011	H11100352-005
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC												0.7	
ARSENIC (AS)	mg/L	DIS	0.004	0.005	0.004	0.004	0.005	0.004	0.005	0.005	0.005	0.005	0.004	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC												< 0.003	
BARIUM (BA)	mg/L	DIS	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.014	0.014	0.015	0.016	0.019	0.024
BARIUM (BA)	mg/L	TRC												0.037	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC												< 0.001	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	750	750	770	760	770	730	660	780	770	770	720	920	910
BORON (B)	mg/L	DIS	0.47	0.48	0.51	0.49	0.55	0.48	0.55	0.5	0.51	0.52	0.52	0.36	0.4
BORON (B)	mg/L	TRC												0.37	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC												< 0.00008	
CALCIUM (CA)	mg/L	DIS	124	132	125	125	126	138	130	124	122	120	129	144	228
CALCIUM (CA)	mg/L	TRC												142	
CARBONATE AS CO3	mg/L	NO MEAS	< 4	11	< 1	< 1	< 1	< 1	12	< 1	< 1	< 1	< 1	< 4	< 4
CHLORIDE (CL)	mg/L	NO MEAS	7	8	8	5	6	7	7	5	9	8	6	17	27
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC												< 0.001	
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002
COPPER (CU)	mg/L	TRC												0.004	
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6
HYDROXIDE (OH)	mg/L	NO MEAS		< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
IRON (FE)	mg/L	DIS	2.39	2.38	2.41	2.4	2.45	2.29	2.45	2.4	2.28	2.32	2.28	< 0.05	< 0.05
IRON (FE)	mg/L	TRC												0.86	
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC												0.0006	
MAGNESIUM (MG)	mg/L	DIS	194	188	197	187	197	190	202	193	181	192	203	266	432
MAGNESIUM (MG)	mg/L	TRC												258	
MANGANESE (MN)	mg/L	DIS	0.253	0.253	0.245	0.254	0.266	0.264	0.281	0.252	0.239	0.258	0.256	1.12	1.26
MANGANESE (MN)	mg/L	TRC												1.16	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005
MERCURY (HG)	mg/L	TOT												< 0.0001	
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009	0.008
MOLYBDENUM (MO)	mg/L	TRC												0.009	
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC												< 0.01	
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.01	2.39
pH - LAB	s.u.	NO MEAS	7.8	7.5	7.4	7.5	7.7	7.6	7.7	7.4	7.4	7.5	7.4	8.2	7.7
PHOSPHORUS (P)	mg/L	TOT												0.029	
POTASSIUM (K)	mg/L	DIS	20	20	19	20	21	20	20	20	20	20	20	23	31
POTASSIUM (K)	mg/L	TRC												22	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2760	3460	3400	3140	3390	3370	3320	3430	3430	3340	3310	4810	5750
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC												< 0.001	
SODIUM (NA)	mg/L	DIS	409	398	404	419	431	405	423	417	418	433	424	842	1040
SODIUM (NA)	mg/L	TRC												800	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.35	5.2	5.24	5.54	5.59	5.26	5.41	5.46	5.61	5.7	5.42	9.59	9.35
SULFATE (SO4)	mg/L	NO MEAS	1400	1400	1400	1500	1400	1400	1300	1500	1500	1500	1500	2400	3900
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2550	2460	2660	2390	2440	2200	2650	2470	2600	2640	2640	4400	6380
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	620	630	630	620	630	600	560	640	630	630	590	750	750
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS												< 0.05	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC												< 0.1	
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC												< 0.01	

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A6	A6	A6	A6	A6	A6	A6	A6	A6	A6	A7	A7	A7
		sample_date	1/10/2012	4/25/2012	9/5/2012	11/15/2012	2/25/2013	5/16/2013	7/31/2013	11/22/2013	3/25/2014	5/13/2014	8/24/2011	10/21/2011	1/11/2012
		sys_sample_code	OTRCR-1201-201	OCC-1204-519	OCC-1209-710	OCC-1211-205	OCC-1302-102	OCC-1305-155	OCC-1307-608	OCC-1311-108	OCC-1403-427	OCC-1405-213	OTRCR-1108-854	OTRCR-1110-403	OTRCR-1201-206
		lab_sample_id	H12010179-002	H12040471-020	H12090092-011	H12110252-006	H13020319-006	H13050294-024	H13080047-009	H13110493-007	H14030353-013	H14050292-014	H11080526-005	H11100352-004	H12010179-007
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC											< 0.1		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	0.003
ARSENIC (AS)	mg/L	TRC											< 0.003		
BARIUM (BA)	mg/L	DIS	0.021	0.018	0.017	0.018	0.02	0.018	0.017	0.017	0.018	0.018	0.019	0.017	0.017
BARIUM (BA)	mg/L	TRC											0.019		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC											< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	940	930	920	940	910	840	960	940	950	910	750	740	740
BORON (B)	mg/L	DIS	0.43	0.42	0.38	0.39	0.4	0.42	0.39	0.42	0.44	0.43	0.39	0.37	0.39
BORON (B)	mg/L	TRC											0.38		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC											< 0.00008		
CALCIUM (CA)	mg/L	DIS	206	168	164	159	161	172	165	166	163	168	129	125	136
CALCIUM (CA)	mg/L	TRC											129		
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 4	13
CHLORIDE (CL)	mg/L	NO MEAS	28	22	15	14	26	22	9	22	20	14	14	13	16
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											< 0.001		
COPPER (CU)	mg/L	DIS	0.002	0.002	0.001	0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											< 0.001		
FLUORIDE (F)	mg/L	NO MEAS	0.7	0.6	0.7	0.6	0.3	0.7	0.7	0.7	0.6	0.7	0.9	0.9	0.9
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02	< 0.02	5.48	5.15	5.31
IRON (FE)	mg/L	TRC											5.28		
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC											< 0.0005		
MAGNESIUM (MG)	mg/L	DIS	340	313	290	309	299	290	293	305	299	301	209	200	193
MAGNESIUM (MG)	mg/L	TRC											198		
MANGANESE (MN)	mg/L	DIS	1.2	1.11	1.04	1.1	1.04	1.15	1.16	1.04	1.16	1.16	0.538	0.514	0.518
MANGANESE (MN)	mg/L	TRC											0.52		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000050	< 0.00005	< 0.00005	0.00002	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT											< 0.00005		
MOLYBDENUM (MO)	mg/L	DIS	0.009	0.009	0.009	0.009	0.01	0.009	0.01	0.01	0.01	0.009	0.005	0.005	0.005
MOLYBDENUM (MO)	mg/L	TRC											0.005		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.002	0.003	0.003	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC											< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.72	0.11	0.05	0.02	0.1	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.5	7.8	7.5	7.6	7.5	7.5	7.5	7.6	8	7.5	8.2	7.7	7.5
PHOSPHORUS (P)	mg/L	TOT											0.023		
POTASSIUM (K)	mg/L	DIS	30	26	26	27	26	26	26	25	26	26	20	19	20
POTASSIUM (K)	mg/L	TRC											20		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	6650	5800	5250	5600	5500	5420	5680	5680	5560	5470	3280	3200	3920
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											< 0.001		
SODIUM (NA)	mg/L	DIS	1070	859	851	870	845	862	852	831	860	838	514	504	558
SODIUM (NA)	mg/L	TRC											524		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	10.6	9.04	9.24	9.27	9.1	9.3	9.22	8.85	9.25	8.95	6.51	6.51	7.22
SULFATE (SO4)	mg/L	NO MEAS	3400	2900	2900	2600	2800	2600	2800	2800	2700	2800	1600	1700	1600
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	5330	5160	4200	4470	3930	4560	4340	4600	4570	4560	2880	2980	2900
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	770	760	750	770	750	690	780	770	780	740	610	610	620
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											0.61		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC											< 0.1		
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC											< 0.01		

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A7	A7	A7	A7	A7	A7	A7	A7	A7	A8	A9	AVF1-2	AVF1-2
		sample_date	4/25/2012	9/6/2012	11/15/2012	3/4/2013	5/14/2013	7/31/2013	11/22/2013	3/20/2014	5/14/2014	6/18/2014	7/8/2014	6/23/2011	10/21/2011
		sys_sample_code	OCC-1204-523	OCC-1209-723	OCC-1211-302	OCC-1303-346	OCC-1305-133	OCC-1307-609	OCC-1311-109	OCC-1403-414	OCC-1405-218	OCC-1406-444	OCC-1407-001	OTRCR-1106-019	OTRCR-1110-406
		lab_sample_id	H12040471-024	H12090092-024	H12110239-003	H13030104-007	H13050294-001	H13080047-010	H13110493-008	H14030299-015	H14050292-019	H14060425-005	H14070191-001	H11060450-019	H11100352-007
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.009	0.011	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC										0.096	1.17	< 0.1	
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	0.003	< 0.003	< 0.003	0.003	0.003	0.003	0.003	0.004	0.002	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC										0.004	0.003	< 0.003	
BARIUM (BA)	mg/L	DIS	0.018	0.018	0.019	0.018	0.018	0.017	0.018	0.019	0.018	0.018	0.043	0.024	0.021
BARIUM (BA)	mg/L	TRC										0.02	0.07	0.024	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008		< 0.001
BERYLLIUM (BE)	mg/L	TRC										< 0.0008	< 0.0008		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	770	750	770	730	670	780	770	770	730	740	720	610	630
BORON (B)	mg/L	DIS	0.41	0.4	0.44	0.38	0.43	0.41	0.41	0.45	0.42	0.43	0.47	0.54	0.57
BORON (B)	mg/L	TRC										0.44	0.47	0.53	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC										< 0.00003	0.00006	< 0.00008	
CALCIUM (CA)	mg/L	DIS	129	130	129	144	135	128	137	129	135	115	105	51	55
CALCIUM (CA)	mg/L	TRC										120	105	52	
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	9	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 4
CHLORIDE (CL)	mg/L	NO MEAS	16	11	12	17	16	16	17	16	11	5	11	7	7
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC										< 0.001	0.004	< 0.001	
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC										< 0.001	0.005	< 0.001	
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	1.5	1.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		
IRON (FE)	mg/L	DIS	4.48	5.42	5.45	5.11	4.23	5.34	5.12	5.03	5.71	4.95	2.39	1.58	1.74
IRON (FE)	mg/L	TRC										5.46	4.11	1.96	
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC										< 0.0003	0.0018	< 0.0005	
MAGNESIUM (MG)	mg/L	DIS	205	196	199	201	211	200	212	209	214	185	180	65	66
MAGNESIUM (MG)	mg/L	TRC										193	172	65	
MANGANESE (MN)	mg/L	DIS	0.556	0.522	0.548	0.535	0.562	0.502	0.506	0.555	0.522	0.354	0.646	0.188	0.188
MANGANESE (MN)	mg/L	TRC										0.362	0.663	0.187	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00002	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005
MERCURY (HG)	mg/L	TOT										< 0.000005*	< 0.000005*	< 0.0001	
MOLYBDENUM (MO)	mg/L	DIS	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.005	0.008	0.008	0.01	0.009
MOLYBDENUM (MO)	mg/L	TRC										0.008	0.008	0.01	
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC										< 0.002	0.004	< 0.01	
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	1.05	0.02	< 0.01	< 0.01	0.01	0.03	0.02	< 0.01	< 0.01	0.02
pH - LAB	s.u.	NO MEAS	7.6	7.5	7.7	7.6	7.7	7.5	7.6	7.6	7.5	7.6	7.7	8.4	7.9
PHOSPHORUS (P)	mg/L	TOT												0.029	
POTASSIUM (K)	mg/L	DIS	19	20	21	20	20	20	20	20	20	29	19	14	16
POTASSIUM (K)	mg/L	TRC										28	22	15	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3800	3610	3870	3860	3820	3940	4200	3840	3800	3610	3560	1600	1530
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC										< 0.001	< 0.001	< 0.001	
SODIUM (NA)	mg/L	DIS	505	537	534	554	511	536	525	534	536	529	428	240	242
SODIUM (NA)	mg/L	TRC										520	475	239	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.43	6.95	6.88	6.5	6.41	6.9	6.55	6.76	6.69	7.11	5.89	5.23	5.22
SULFATE (SO4)	mg/L	NO MEAS	1600	1700	1700	1800	1800	1800	1800	1800	1700	1400	1300	390	430
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3060	2700	2640	2880	2920	2830	3110	2910	2920	2520	2520	1150	1120
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	630	620	630	600	560	640	630	630	600	610	590	500	520
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS												0.13	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC										< 0.01	< 0.01	< 0.1	
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.008	0.012	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC										< 0.008	0.016	< 0.01	

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF1-2	AVF2-2	AVF2-2	AVF2-2
		sample_date	1/26/2012	4/23/2012	9/5/2012	11/16/2012	3/5/2013	5/15/2013	7/31/2013	1/7/2014	3/18/2014	5/15/2014	6/23/2011	1/10/2012	4/26/2012
		sys_sample_code	OTRCR-1201-151	OCC-1204-500	OCC-1209-700	OCC-1211-209	OCC-1303-350	OCC-1305-146	OCC-1307-601	OCC-1401-805	OCC-1403-403	OCC-1405-037	OTRCR-1106-018	OTRCR-1201-203	OCC-1204-531
		lab_sample_id	H12010303-011	H12040471-001	H12090092-001	H12110252-010	H13030104-011	H13050294-015	H13080047-002	H14010147-006	H14030299-004	H14050297-018	H11060450-018	H12010179-004	H12040471-032
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC											< 0.1		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.003
ARSENIC (AS)	mg/L	TRC											0.004		
BARIUM (BA)	mg/L	DIS	0.022	0.021	0.022	0.022	0.021	0.021	0.021	0.022	0.023	0.022	0.027	0.02	0.02
BARIUM (BA)	mg/L	TRC											0.028		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC											< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	540	620	610	620	590	540	640	620	620	560	610	580	600
BORON (B)	mg/L	DIS	0.6	0.6	0.58	0.58	0.56	0.65	0.56	0.55	0.63	0.58	0.47	0.53	0.5
BORON (B)	mg/L	TRC											0.45		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC											< 0.00008		
CALCIUM (CA)	mg/L	DIS	54	56	57	55	57	59	56	51	53	57	105	109	100
CALCIUM (CA)	mg/L	TRC											103		
CARBONATE AS CO3	mg/L	NO MEAS	6	4	< 1	7	5	13	< 1	< 1	< 1	8	< 4	9	< 1
CHLORIDE (CL)	mg/L	NO MEAS	8	8	7	7	9	9	6	8	9	7	8	9	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											< 0.001		
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.006	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											< 0.001		
FLUORIDE (F)	mg/L	NO MEAS	1.5	1.4	1.4	1.3	1.3	1.6	1.4	1.4	1.4	1.5	0.8	0.8	0.7
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	< 4
IRON (FE)	mg/L	DIS	1.65	1.32	1.73	1.64	1.41	1.47	1.52	1.6	1.42	1.47	4.33	4.19	4.25
IRON (FE)	mg/L	TRC											5.44		
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC											< 0.0005		
MAGNESIUM (MG)	mg/L	DIS	65	67	65	68	64	67	66	66	69	69	185	162	166
MAGNESIUM (MG)	mg/L	TRC											184		
MANGANESE (MN)	mg/L	DIS	0.191	0.189	0.188	0.192	0.186	0.201	0.176	0.181	0.193	0.19	0.879	0.729	0.782
MANGANESE (MN)	mg/L	TRC											0.878		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00001	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT											< 0.0001		
MOLYBDENUM (MO)	mg/L	DIS	0.01	0.01	0.01	0.01	0.01	0.009	0.01	0.01	0.01	0.01	0.009	0.008	0.008
MOLYBDENUM (MO)	mg/L	TRC											0.008		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC											< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.09	0.02	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.7	7.8	7.6	7.7	7.6	7.6	7.6	7.6	7.6	7.7	8.2	7.6	7.5
PHOSPHORUS (P)	mg/L	TOT											0.023		
POTASSIUM (K)	mg/L	DIS	16	16	16	17	16	17	17	15	16	17	20	21	20
POTASSIUM (K)	mg/L	TRC											19		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1790	1740	1640	1730	1740	1720	1820	1720	1740	1740	3120	3330	3300
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											< 0.001		
SODIUM (NA)	mg/L	DIS	236	241	245	247	242	254	249	246	252	252	445	410	416
SODIUM (NA)	mg/L	TRC											443		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.13	5.15	5.27	5.26	5.21	5.36	5.34	5.38	5.36	5.28	6.04	5.83	5.92
SULFATE (SO4)	mg/L	NO MEAS	410	470	500	500	470	470	460	480	540	510	1500	1400	1400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1170	1170	1130	1120	1080	1130	1090	1150	1190	1100	2750	2410	2540
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	450	520	500	520	490	460	520	510	510	470	500	490	490
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											0.16		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC											< 0.1		
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC											< 0.01		

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	AVF2-2	AVF2-2	AVF2-2	AVF2-2	AVF2-2	AVF2-2	AVF2-2	AVF2-2	AVF3-2	AVF3-2	AVF3-2	AVF3-2	AVF3-2
		sample_date	9/5/2012	11/16/2012	3/4/2013	5/15/2013	7/31/2013	12/13/2013	3/31/2014	5/15/2014	6/22/2011	10/20/2011	1/10/2012	4/25/2012	9/5/2012
		sys_sample_code	OCC-1209-701	OCC-1211-208	OCC-1303-349	OCC-1305-147	OCC-1307-603	OCC-1312-118	OCC-1403-942	OCC-1405-036	OTRCR-1106-012	OTRCR-1110-400	OTRCR-1201-200	OCC-1204-518	OCC-1209-707
		lab_sample_id	H12090092-002	H12110252-009	H13030104-010	H13050294-016	H13080047-004	H13120229-019	H14040086-003	H14050297-017	H11060450-012	H11100352-001	H12010179-001	H12040471-019	H12090092-008
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC									< 0.1				
ARSENIC (AS)	mg/L	DIS	0.003	0.004	0.003	0.003	0.004	0.004	0.004	0.004	< 0.003	< 0.003	0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									< 0.003				
BARIUM (BA)	mg/L	DIS	0.02	0.021	0.021	0.021	0.02	0.02	0.022	0.021	0.023	0.021	0.021	0.021	0.021
BARIUM (BA)	mg/L	TRC									0.025				
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001				
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	580	600	580	530	620	610	610	560	850	850	860	870	850
BORON (B)	mg/L	DIS	0.52	0.51	0.49	0.57	0.5	0.56	0.54	0.54	0.35	0.34	0.35	0.37	0.34
BORON (B)	mg/L	TRC									0.34				
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									< 0.00008				
CALCIUM (CA)	mg/L	DIS	106	106	116	118	110	109	114	114	177	193	206	195	200
CALCIUM (CA)	mg/L	TRC									171				
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	4	< 1	< 1	< 1	2	< 4	< 4	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	6	7	9	9	3	11	9	7	21	20	25	22	17
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC									< 0.001				
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC									< 0.001				
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.7	0.7	0.9	0.8	0.7	0.8	0.8	0.6	0.6	0.6	0.6	0.6
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1			< 1	< 4	< 1
IRON (FE)	mg/L	DIS	4.42	4.53	4.16	4.86	4.68	4.5	4.62	4.67	1.99	1.72	1.84	1.75	1.83
IRON (FE)	mg/L	TRC									2.24				
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									< 0.0005				
MAGNESIUM (MG)	mg/L	DIS	167	186	177	183	184	172	187	194	303	308	296	316	312
MAGNESIUM (MG)	mg/L	TRC									300				
MANGANESE (MN)	mg/L	DIS	0.73	0.762	0.748	0.82	0.712	0.727	0.813	0.788	1.64	1.64	1.63	1.66	1.58
MANGANESE (MN)	mg/L	TRC									1.61				
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.0001				
MOLYBDENUM (MO)	mg/L	DIS	0.009	0.008	0.009	0.009	0.009	0.008	0.009	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005				
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01				
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.34	< 0.01	< 0.01	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.5	7.6	7.6	7.5	7.5	7.5	7.5	7.5	8.5	7.5	7.4	7.7	7.4
PHOSPHORUS (P)	mg/L	TOT									0.028				
POTASSIUM (K)	mg/L	DIS	21	23	22	22	22	23	22	22	23	24	24	24	24
POTASSIUM (K)	mg/L	TRC									22				
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3060	3340	3320	3350	3440	3440	3390	3400	4370	4110	5000	4900	4520
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001				
SODIUM (NA)	mg/L	DIS	427	455	440	458	460	447	447	449	623	608	654	602	620
SODIUM (NA)	mg/L	TRC									608				
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.02	6.16	6	6.16	6.23	6.21	5.99	5.93	6.59	6.31	6.83	6.2	6.38
SULFATE (SO4)	mg/L	NO MEAS	1500	1500	1400	1400	1500	1600	1600	1600	2200	2300	2300	2300	2500
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2430	2470	2020	2580	2530	2550	2730	2390	4220	4140	3960	4220	3900
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	480	490	470	450	510	500	500	460	700	700	710	710	690
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									0.18				
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1				
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC									< 0.01				

TABLE 2-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	AVF3-2	AVF3-2	AVF3-2	AVF3-2	AVF3-2	AVF3-2	AVF3-2	AVF4-1	AVF4-1					
		sample_date	11/15/2012	2/25/2013	5/14/2013	7/31/2013	11/21/2013	4/15/2014	5/13/2014	8/25/2011	11/21/2013					
		sys_sample_code	OCC-1211-204	OCC-1302-100	OCC-1305-143	OCC-1307-607	OCC-1311-154	OCC-1404-103	OCC-1405-209	OTRCR-1108-852	OCC-1311-158					
		lab_sample_id	H12110252-005	H13020319-004	H13050294-012	H13080047-008	H13110493-015	H14040323-002	H14050292-010	H11080526-003	H13110493-019					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	0.019	< 0.1	< 0.009	0.009	0.2	0.076	87	4
ALUMINUM (AL)	mg/L	TRC								0.2		0.096	1.17	0.277	10	5
ARSENIC (AS)	mg/L	DIS	0.003	< 0.003	< 0.003	< 0.003	0.003	0.003	0.003	0.004	0.005	0.001	0.045	0.008	87	55
ARSENIC (AS)	mg/L	TRC								0.004		0.003	0.03	0.006	10	6
BARIUM (BA)	mg/L	DIS	0.022	0.024	0.021	0.02	0.02	0.022	0.022	0.025	0.021	0.014	0.043	0.020	87	87
BARIUM (BA)	mg/L	TRC								0.031		0.019	0.07	0.031	10	10
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.0008	0.0008	0.001	0.0009	86	0
BERYLLIUM (BE)	mg/L	TRC								< 0.001		0.0008	0.001	0.0010	9	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	870	840	780	880	870	850	830	930	990	530	990	759	87	87
BORON (B)	mg/L	DIS	0.35	0.37	0.41	0.35	0.35	0.35	0.38	0.46	0.5	0.34	0.65	0.46	87	87
BORON (B)	mg/L	TRC								0.44		0.34	0.53	0.44	10	10
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00003	0.00003	0.00008	0.00007	87	1
CADMIUM (CD)	mg/L	TRC								< 0.00008		0.00003	0.00008	0.00007	10	1
CALCIUM (CA)	mg/L	DIS	189	194	209	185	202	198	197	209	211	39	228	122	87	87
CALCIUM (CA)	mg/L	TRC								221		52	221	127	10	10
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 1	1	27	4	87	19
CHLORIDE (CL)	mg/L	NO MEAS	18	28	24	15	26	23	17	25	30	3	77	21	87	87
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.012	0.002	87	13
CHROMIUM (CR)	mg/L	TRC								< 0.001		0.001	0.012	0.002	10	2
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.006	0.001	87	8
COPPER (CU)	mg/L	TRC								< 0.001		0.001	0.005	0.002	10	2
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.8	0.8	0.3	3	1.1	87	87
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1	1	4	1	74	0
IRON (FE)	mg/L	DIS	1.76	1.74	1.74	1.7	1.62	1.81	1.64	7.12	5.65	0.02	7.12	2.30	87	63
IRON (FE)	mg/L	TRC								8.02		0.07	8.02	3.64	10	10
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0003	0.0003	0.0005	0.0004	87	0
LEAD (PB)	mg/L	TRC								< 0.0005		0.0003	0.0018	0.0006	10	2
MAGNESIUM (MG)	mg/L	DIS	320	316	315	295	321	324	317	388	432	64	432	197	87	87
MAGNESIUM (MG)	mg/L	TRC								397		65	397	211	10	10
MANGANESE (MN)	mg/L	DIS	1.68	1.63	1.68	1.58	1.58	1.69	1.64	2.31	2.36	0.005	2.36	0.680	87	76
MANGANESE (MN)	mg/L	TRC								2.27		0.008	2.27	0.793	10	10
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000050	< 0.00005	< 0.00005	< 0.00002	< 0.000005	< 0.000005	< 0.00005	< 0.00002	0.000005	0.0001	0.000041	87	4
MERCURY (HG)	mg/L	TOT								< 0.00005		0.00005	0.0001	0.00008	8	0
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.005	0.006	< 0.005	< 0.005	0.005	< 0.005	0.008	0.008	0.005	0.013	0.008	87	67
MOLYBDENUM (MO)	mg/L	TRC								0.008		0.005	0.014	0.008	10	8
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	0.002	0.002	0.01	0.008	87	4
NICKEL (NI)	mg/L	TRC								< 0.01		0.002	0.01	0.009	10	1
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.06	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	2.39	0.23	87	33
pH - LAB	s.u.	NO MEAS	7.5	7.4	7.5	7.4	7.5	7.4	7.4	8	7.4	7.4	8.5	7.7	87	87
PHOSPHORUS (P)	mg/L	TOT								0.024		0.023	0.049	0.031	8	8
POTASSIUM (K)	mg/L	DIS	25	24	25	24	23	25	25	27	26	14	31	22	87	87
POTASSIUM (K)	mg/L	TRC								27		15	28	22	10	10
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4880	4900	4850	5020	5080	4860	4820	4920	6120	1530	6650	3607	87	87
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.006	0.002	87	12
SELENIUM (SE)	mg/L	TRC								< 0.001		0.001	0.005	0.001	10	1
SODIUM (NA)	mg/L	DIS	632	609	644	610	618	642	636	753	974	236	1070	517	87	87
SODIUM (NA)	mg/L	TRC								754		239	800	524	10	10
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.5	6.27	6.57	6.48	6.29	6.53	6.53	7.12	8.83	5.13	10.6	6.89	87	87
SULFATE (SO4)	mg/L	NO MEAS	2400	2500	2400	2500	2500	2500	2500	2800	3100	390	3900	1608	87	87
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3700	3980	4120	3700	4250	4270	4110	4880	5110	1080	6380	2826	87	87
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	720	690	640	720	720	700	680	760	810	450	810	626	87	87
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS								0.69		0.05	0.69	0.25	8	6
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.01	0.01	0.3	0.10	87	12
VANADIUM (V)	mg/L	TRC								< 0.1		0.01	0.2	0.09	10	1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.008	0.008	0.012	0.009	87	1
ZINC (ZN)	mg/L	TRC								< 0.01		0.008	0.016	0.010	10	1

TABLE 2-5
OTTER CREEK MINE BASELINE REPORT 304E
TENMILE ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sample_date	6/22/2011	10/21/2011	1/11/2012	4/25/2012	9/6/2012	11/15/2012	3/4/2013	5/14/2013	7/31/2013	1/7/2014	3/18/2014	5/14/2014					
		sys_loc_code	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4					
		sys_sample_code	OTRCR-1106-009	OTRCR-1110-401	OTRCR-1201-204	OCC-1204-525	OCC-1209-721	OCC-1211-300	OCC-1303-344	OCC-1305-138	OCC-1307-611	OCC-1401-806	OCC-1403-404	OCC-1405-220					
		lab_sample_id	H11060450-009	H11100352-002	H12010179-005	H12040471-026	H12090092-022	H12110239-001	H13030104-005	H13050294-006	H13080047-012	H14010147-007	H14030299-005	H14050292-021					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.009	0.1	0.077	12	0
ALUMINUM (AL)	mg/L	TRC	1.5												1.5	1.5	1.5	1	1
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	0.001	0.003	0.003	12	0
ARSENIC (AS)	mg/L	TRC	< 0.003												0.003	0.003	0.003	1	0
BARIUM (BA)	mg/L	DIS	0.018	0.016	0.016	0.016	0.016	0.017	0.017	0.018	0.016	0.017	0.018	0.018	0.016	0.018	0.017	12	12
BARIUM (BA)	mg/L	TRC	0.046												0.046	0.046	0.046	1	1
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008	0.001	0.0010	12	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001												0.001	0.001	0.001	1	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	640	650	640	670	660	670	640	580	680	670	680	640	580	680	652	12	12
BORON (B)	mg/L	DIS	0.43	0.42	0.43	0.44	0.44	0.48	0.43	0.46	0.42	0.42	0.48	0.45	0.42	0.48	0.44	12	12
BORON (B)	mg/L	TRC	0.43												0.43	0.43	0.43	1	1
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	0.00003	0.00008	0.00007	12	0
CADMIUM (CD)	mg/L	TRC	< 0.00008												0.00008	0.00008	0.00008	1	0
CALCIUM (CA)	mg/L	DIS	107	114	121	114	115	119	131	122	118	108	116	126	107	131	118	12	12
CALCIUM (CA)	mg/L	TRC	115												115	115	115	1	1
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	13	< 1	< 1	< 1	< 1	10	< 1	< 1	< 1	< 1	1	13	3	12	2
CHLORIDE (CL)	mg/L	NO MEAS	7	7	8	7	5	5	8	8	6	9	8	5	5	9	7	12	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.001	0.001	0.001	12	1
CHROMIUM (CR)	mg/L	TRC	0.002												0.002	0.002	0.002	1	1
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	0.001	< 0.001	0.001	0.002	0.001	12	2
COPPER (CU)	mg/L	TRC	0.003												0.003	0.003	0.003	1	1
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.9	0.8	12	12
HYDROXIDE (OH)	mg/L	NO MEAS			< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	4	1	10	0
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02	< 0.02	0.02	0.05	0.04	12	0
IRON (FE)	mg/L	TRC	2.02												2.02	2.02	2.02	1	1
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0003	0.0005	0.0005	12	0
LEAD (PB)	mg/L	TRC	0.0015												0.0015	0.0015	0.0015	1	1
MAGNESIUM (MG)	mg/L	DIS	184	186	178	186	182	192	186	198	190	190	199	210	178	210	190	12	12
MAGNESIUM (MG)	mg/L	TRC	184												184	184	184	1	1
MANGANESE (MN)	mg/L	DIS	1.29	1.28	1.26	1.29	1.32	1.32	1.34	1.38	1.3	1.31	1.42	1.38	1.26	1.42	1.32	12	12
MANGANESE (MN)	mg/L	TRC	1.3												1.3	1.3	1.3	1	1
MERCURY (HG)	mg/L	DIS	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.000047	12	0
MERCURY (HG)	mg/L	TOT	< 0.0001												0.0001	0.0001	0.0001	1	0
MOLYBDENUM (MO)	mg/L	DIS	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	12	12
MOLYBDENUM (MO)	mg/L	TRC	0.007												0.007	0.007	0.007	1	1
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.004	< 0.002	< 0.002	0.002	0.01	0.008	12	0
NICKEL (NI)	mg/L	TRC	< 0.01												0.01	0.01	0.01	1	0
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.06	0.12	0.1	0.06	0.07	0.05	0.03	0.06	0.07	0.06	< 0.01	0.11	0.01	0.12	0.07	12	11
pH - LAB	s.u.	NO MEAS	8	7.8	7.5	7.4	7.5	7.7	7.6	7.7	7.5	7.7	7.5	7.5	7.4	8	7.6	12	12
PHOSPHORUS (P)	mg/L	TOT	0.049												0.049	0.049	0.049	1	1
POTASSIUM (K)	mg/L	DIS	14	15	15	15	16	16	16	15	16	15	16	16	14	16	15	12	12
POTASSIUM (K)	mg/L	TRC	14												14	14	14	1	1
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2790	2600	3150	3100	2870	3110	3100	3080	3180	3100	3160	3100	2600	3180	3028	12	12
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	12	0
SELENIUM (SE)	mg/L	TRC	< 0.001												0.001	0.001	0.001	1	0
SODIUM (NA)	mg/L	DIS	355	352	343	349	366	370	354	374	366	366	363	373	343	374	361	12	12
SODIUM (NA)	mg/L	TRC	355												355	355	355	1	1
SODIUM ADSORPTION RATIO	unitless	NO MEAS	4.83	4.73	4.64	4.68	4.95	4.89	4.66	4.86	4.86	4.92	4.74	4.74	4.64	4.95	4.79	12	12
SULFATE (SO4)	mg/L	NO MEAS	1200	1300	1300	1300	1400	1300	1400	1300	1400	1400	1500	1400	1200	1500	1350	12	12
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2420	2270	2300	2330	2320	2250	2060	2400	2400	2380	2510	2440	2060	2510	2340	12	12
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	520	530	540	550	540	550	530	490	560	550	550	520	490	560	536	12	12
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05												0.05	0.05	0.05	1	0
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01	0.1	0.08	12	0
VANADIUM (V)	mg/L	TRC	< 0.1												0.1	0.1	0.1	1	0
ZINC (ZN)	mg/L	DIS	< 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	0.01	0.0095	12	0
ZINC (ZN)	mg/L	TRC	< 0.01												0.01	0.01	0.01	1	0

TABLE 2-6
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A5	A5	A5	A5	A5	A5	A5	A5	A5	A5	A5
		sample_date	8/25/2011	10/18/2011	1/12/2012	5/1/2012	9/6/2012	12/5/2012	3/5/2013	5/15/2013	7/30/2013	1/7/2014	3/21/2014
		sys_sample_code	OTRCR-1108-853	OTRCR-1110-700	OTRCR-1201-132	OCC-1205-543	OCC-1209-711	OCC-1212-253	OCC-1303-354	OCC-1305-151	OCC-1307-600	OCC-1401-100	OCC-1403-419
		lab_sample_id	H11080526-004	H11100344-001	B12011023-013	H12050095-004	H12090092-012	H12120120-015	H13030104-015	H13050294-020	H13080047-001	H14010145-001	H14030299-020
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009
ALUMINUM (AL)	mg/L	TRC	< 0.1										
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003										
BARIUM (BA)	mg/L	DIS	0.029	0.026	0.024	0.019	0.02	0.021	0.02	0.018	0.021	0.02	0.019
BARIUM (BA)	mg/L	TRC	0.03										
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001										
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	760	780	828	780	830	750	760	700	820	830	800
BORON (B)	mg/L	DIS	0.33	0.32	0.3	0.26	0.36	0.35	0.31	0.31	0.35	0.3	0.27
BORON (B)	mg/L	TRC	0.33										
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008										
CALCIUM (CA)	mg/L	DIS	206	208	197	172	172	153	173	159	176	147	143
CALCIUM (CA)	mg/L	TRC	198										
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 4	< 1	< 1	31	< 1	< 1	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	13	13	12	12	9	18	11	11	11	12	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001										
COPPER (CU)	mg/L	DIS	< 0.001	0.003	< 0.001	0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	< 0.001										
FLUORIDE (F)	mg/L	NO MEAS	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.16	0.08	< 0.05	1.32	0.26	< 0.05	0.2	0.13	0.36	0.23	0.2
IRON (FE)	mg/L	TRC	0.51										
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005										
MAGNESIUM (MG)	mg/L	DIS	240	238	221	194	190	180	188	191	201	185	183
MAGNESIUM (MG)	mg/L	TRC	225										
MANGANESE (MN)	mg/L	DIS	0.007	< 0.005	< 0.005	0.012	< 0.005	< 0.005	0.01	0.009	0.014	0.012	0.008
MANGANESE (MN)	mg/L	TRC	0.008										
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005										
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01										
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.19	0.41	0.4	0.04	0.03	0.11	0.04	0.04	0.05	0.06	0.06
pH - LAB	s.u.	NO MEAS	8	7.6	7.3	7	7.3	7.4	7.4	7.4	7.3	7.4	7.5
PHOSPHORUS (P)	mg/L	TOT	0.007										
POTASSIUM (K)	mg/L	DIS	16	16	17	13	14	15	14	13	15	14	12
POTASSIUM (K)	mg/L	TRC	16										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3450	3360	3940	3660	3520	3470	3620	3530	3760	3440	3480
SELENIUM (SE)	mg/L	DIS	0.006	0.005	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	0.006										
SODIUM (NA)	mg/L	DIS	471	480	530	453	482	486	480	458	479	451	453
SODIUM (NA)	mg/L	TRC	482										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.28	5.39	6.17	5.62	6.02	6.31	6	5.79	5.85	5.84	5.91
SULFATE (SO4)	mg/L	NO MEAS	1800	1900	2010	1600	1700	1300	1600	1400	1700	1400	1600
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3350	3390	3320	2920	2740	2530	2800	2750	2720	2610	2680
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	620	640	679	640	680	670	620	570	670	680	650
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01										

TABLE 2-6
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A5	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3	AVF6-3
		sample_date	5/15/2014	8/24/2011	10/18/2011	1/10/2012	5/2/2012	9/5/2012	12/5/2012	3/5/2013	5/15/2013	7/31/2013	12/12/2013
		sys_sample_code	OCC-1405-225	OTRCR-1108-851	OTRCR-1110-702	OTRCR-1201-202	OCC-1205-553	OCC-1209-704	OCC-1212-251	OCC-1303-353	OCC-1305-149	OCC-1307-605	OCC-1312-113
		lab_sample_id	H14050292-026	H11080526-002	H11100344-003	H12010179-003	H12050095-014	H12090092-005	H12120120-013	H13030104-014	H13050294-018	H13080047-006	H13120229-014
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009
ALUMINUM (AL)	mg/L	TRC		< 0.1									
ARSENIC (AS)	mg/L	DIS	< 0.001	0.005	0.006	0.007	0.006	0.006	0.006	0.008	0.006	0.007	0.007
ARSENIC (AS)	mg/L	TRC		0.006									
BARIUM (BA)	mg/L	DIS	0.017	0.022	0.019	0.019	0.02	0.02	0.021	0.02	0.021	0.02	0.02
BARIUM (BA)	mg/L	TRC		0.023									
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC		< 0.001									
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	710	720	740	740	760	740	670	700	650	780	760
BORON (B)	mg/L	DIS	0.29	0.44	0.44	0.45	0.4	0.45	0.47	0.43	0.45	0.44	0.49
BORON (B)	mg/L	TRC		0.45									
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC		< 0.00008									
CALCIUM (CA)	mg/L	DIS	157	99	98	104	101	101	100	108	109	102	103
CALCIUM (CA)	mg/L	TRC		108									
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 4	< 4	14	< 1	< 1	54	11	19	< 1	5
CHLORIDE (CL)	mg/L	NO MEAS	7	10	9	11	13	7	17	11	10	5	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	0.007	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC		< 0.001									
COPPER (CU)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC		< 0.001									
FLUORIDE (F)	mg/L	NO MEAS	0.5	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.7
HYDROXIDE (OH)	mg/L	NO MEAS	< 1		< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.34	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02
IRON (FE)	mg/L	TRC		0.06									
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC		< 0.0005									
MAGNESIUM (MG)	mg/L	DIS	182	134	134	126	132	130	139	135	135	136	130
MAGNESIUM (MG)	mg/L	TRC		144									
MANGANESE (MN)	mg/L	DIS	0.007	0.174	0.167	0.165	0.164	0.165	0.182	0.172	0.171	0.161	0.167
MANGANESE (MN)	mg/L	TRC		0.179									
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT		< 0.00005									
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005									
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC		< 0.01									
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.92	0.92	0.91	0.88	0.85	0.87	0.85	0.91	0.8	0.82
pH - LAB	s.u.	NO MEAS	7.4	8.2	8	7.6	7.5	7.6	7.6	7.7	7.8	7.6	7.6
PHOSPHORUS (P)	mg/L	TOT		0.059									
POTASSIUM (K)	mg/L	DIS	12	20	20	21	21	21	22	21	22	21	22
POTASSIUM (K)	mg/L	TRC		21									
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3320	2630	2500	3020	3000	2820	3030	3020	3000	3100	3110
SELENIUM (SE)	mg/L	DIS	< 0.001	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.004	0.003
SELENIUM (SE)	mg/L	TRC		0.004									
SODIUM (NA)	mg/L	DIS	424	399	419	405	424	421	449	434	435	437	435
SODIUM (NA)	mg/L	TRC		411									
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.45	6.14	6.45	6.32	6.53	6.53	6.81	6.57	6.57	6.65	6.73
SULFATE (SO4)	mg/L	NO MEAS	1500	1000	1100	1100	1200	1200	1000	1200	1100	1200	1200
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2690	2090	2150	2040	2220	1940	2170	1540	2170	2180	2190
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	580	590	610	630	620	610	640	600	560	640	630
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		< 0.05									
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.09
VANADIUM (V)	mg/L	TRC		< 0.1									
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC		< 0.01									

TABLE 2-6
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	AVF6-3	AVF6-3					
		sample_date	3/24/2014	5/12/2014					
		sys_sample_code	OCC-1403-424	OCC-1405-202					
		lab_sample_id	H14030353-010	H14050292-003					
chemical_name	result_unit	fraction	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.009	0.009	0.1	0.077	24	0
ALUMINUM (AL)	mg/L	TRC			0.1	0.1	0.1	2	0
ARSENIC (AS)	mg/L	DIS	0.007	0.006	0.001	0.008	0.004	24	12
ARSENIC (AS)	mg/L	TRC			0.003	0.006	0.005	2	1
BARIUM (BA)	mg/L	DIS	0.021	0.021	0.017	0.029	0.021	24	24
BARIUM (BA)	mg/L	TRC			0.023	0.03	0.027	2	2
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	0.0008	0.001	0.0010	24	0
BERYLLIUM (BE)	mg/L	TRC			0.001	0.001	0.001	2	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	760	730	650	830	754	24	24
BORON (B)	mg/L	DIS	0.47	0.52	0.26	0.52	0.38	24	24
BORON (B)	mg/L	TRC			0.33	0.45	0.39	2	2
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	0.00003	0.00008	0.00007	24	0
CADMIUM (CD)	mg/L	TRC			0.00008	0.00008	0.00008	2	0
CALCIUM (CA)	mg/L	DIS	95	105	95	208	137	24	24
CALCIUM (CA)	mg/L	TRC			108	198	153	2	2
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	1	54	7	24	6
CHLORIDE (CL)	mg/L	NO MEAS	11	8	5	18	11	24	24
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	0.001	0.007	0.001	24	1
CHROMIUM (CR)	mg/L	TRC			0.001	0.001	0.001	2	0
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	0.001	0.003	0.001	24	4
COPPER (CU)	mg/L	TRC			0.001	0.001	0.001	2	0
FLUORIDE (F)	mg/L	NO MEAS	0.7	0.8	0.4	0.8	0.6	24	24
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	1	4	2	22	0
IRON (FE)	mg/L	DIS	< 0.02	< 0.02	0.02	1.32	0.16	24	10
IRON (FE)	mg/L	TRC			0.06	0.51	0.29	2	2
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	0.0003	0.0005	0.0005	24	0
LEAD (PB)	mg/L	TRC			0.0005	0.0005	0.0005	2	0
MAGNESIUM (MG)	mg/L	DIS	129	145	126	240	167	24	24
MAGNESIUM (MG)	mg/L	TRC			144	225	185	2	2
MANGANESE (MN)	mg/L	DIS	0.176	0.185	0.005	0.185	0.0895	24	20
MANGANESE (MN)	mg/L	TRC			0.008	0.179	0.0935	2	2
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	0.000005	0.00005	0.00004	24	0
MERCURY (HG)	mg/L	TOT			0.00005	0.00005	0.00005	2	0
MOLYBDENUM (MO)	mg/L	DIS	0.005	< 0.005	0.005	0.005	0.005	24	1
MOLYBDENUM (MO)	mg/L	TRC			0.005	0.005	0.005	2	0
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	0.002	0.01	0.008	24	0
NICKEL (NI)	mg/L	TRC			0.01	0.01	0.01	2	0
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.79	0.82	0.01	0.92	0.49	24	23
pH - LAB	s.u.	NO MEAS	8.2	7.6	7	8.2	7.6	24	24
PHOSPHORUS (P)	mg/L	TOT			0.007	0.059	0.033	2	2
POTASSIUM (K)	mg/L	DIS	21	22	12	22	18	24	24
POTASSIUM (K)	mg/L	TRC			16	21	19	2	2
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3040	3020	2500	3940	3243	24	24
SELENIUM (SE)	mg/L	DIS	0.004	0.003	0.001	0.006	0.003	24	15
SELENIUM (SE)	mg/L	TRC			0.004	0.006	0.005	2	2
SODIUM (NA)	mg/L	DIS	420	448	399	530	449	24	24
SODIUM (NA)	mg/L	TRC			411	482	447	2	2
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.6	6.64	5.28	6.81	6.17	24	24
SULFATE (SO4)	mg/L	NO MEAS	1200	1100	1000	2010	1380	24	24
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2220	2120	1540	3390	2480	24	24
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	620	600	560	680	627	24	24
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			0.05	0.05	0.05	2	0
VANADIUM (V)	mg/L	DIS	0.09	0.1	0.01	0.1	0.09	24	3
VANADIUM (V)	mg/L	TRC			0.1	0.1	0.1	2	0
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	0.008	0.01	0.010	24	0
ZINC (ZN)	mg/L	TRC			0.01	0.01	0.01	2	0

TABLE 2-7
OTTER CREEK MINE BASELINE REPORT 304E
HOME CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	A2	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1	AVF5-1
		sample_date	6/23/2011	6/23/2011	10/21/2011	1/26/2012	4/23/2012	9/5/2012	11/16/2012	3/7/2013	5/15/2013	7/31/2013	11/22/2013	3/18/2014
		sys_sample_code	OTRCRK-1106-213	OTRCR-1106-017	OTRCR-1110-405	OTRCR-1201-149	OCC-1204-501	OCC-1209-702	OCC-1211-207	OCC-1303-356	OCC-1305-144	OCC-1307-602	OCC-1311-107	OCC-1403-402
		lab_sample_id	H11060448-014	H11060450-017	H11100352-006	H12010303-009	H12040471-002	H12090092-003	H12110252-008	H13030183-002	H13050294-013	H13080047-003	H13110493-006	H14030299-003
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.2	2										
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003										
BARIUM (BA)	mg/L	DIS	0.018	0.025	0.024	0.022	0.022	0.025	0.023	0.024	0.023	0.024	0.023	0.026
BARIUM (BA)	mg/L	TRC	0.023	0.062										
BERYLLIUM (BE)	mg/L	DIS	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001											
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	740	530	520	530	540	520	540	540	490	560	570	580
BORON (B)	mg/L	DIS	0.31	0.57	0.61	0.63	0.61	0.6	0.63	0.63	0.65	0.63	0.67	0.67
BORON (B)	mg/L	TRC	0.33	0.6										
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	0.00094	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008										
CALCIUM (CA)	mg/L	DIS	72	66	72	72	75	75	78	75	85	80	83	77
CALCIUM (CA)	mg/L	TRC	71	84										
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	6	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	7	6	6	7	7	6	6	8	9	6	9	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	0.004										
COPPER (CU)	mg/L	DIS	< 0.001	0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.002	0.008										
FLUORIDE (F)	mg/L	NO MEAS	0.6	1.5	2	1.5	1.5	1.5	1.4	1.5	1.6	1.4	1.4	1.5
HYDROXIDE (OH)	mg/L	NO MEAS				< 1	< 4	< 1	< 1	< 4	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	< 0.05	0.06	0.12	< 0.05	0.05	0.22	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02
IRON (FE)	mg/L	TRC	0.22	3.81										
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005	0.0029										
MAGNESIUM (MG)	mg/L	DIS	161	77	75	74	78	74	84	80	84	83	87	87
MAGNESIUM (MG)	mg/L	TRC	158	82										
MANGANESE (MN)	mg/L	DIS	< 0.005	0.061	0.053	0.057	0.054	0.058	0.06	0.05	0.044	0.055	0.059	0.044
MANGANESE (MN)	mg/L	TRC	< 0.005	0.107										
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00002	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.0001										
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.008	0.007	0.007	0.007	0.008	0.008	0.008	0.007	0.008	0.008	0.008
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	0.008										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01										
NITRATE + NITRITE AS N	mg/L	NO MEAS	1.03	0.57	0.66	0.64	0.66	0.88	0.95	0.9	0.9	0.98	1.27	1.16
pH - LAB	s.u.	NO MEAS	8.2	8.3	8	7.5	7.7	7.4	7.5	7.5	7.5	7.4	7.5	7.5
PHOSPHORUS (P)	mg/L	TOT	0.023	0.053										
POTASSIUM (K)	mg/L	DIS	15	12	13	13	13	13	14	14	14	14	13	14
POTASSIUM (K)	mg/L	TRC	15	12										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3050	1400	1300	1560	1530	1430	1550	1590	1570	1620	1700	1650
SELENIUM (SE)	mg/L	DIS	0.003	< 0.001	0.001	0.003	< 0.001	0.002	0.002	0.001	0.002	0.002	0.002	0.001
SELENIUM (SE)	mg/L	TRC	0.002	0.001										
SODIUM (NA)	mg/L	DIS	488	156	154	149	152	154	164	163	169	165	168	172
SODIUM (NA)	mg/L	TRC	474	152										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	7.17	3.1	3.02	2.94	2.93	3.01	3.06	3.12	3.11	3.08	3.08	3.2
SULFATE (SO4)	mg/L	NO MEAS	1200	410	430	380	440	460	470	460	460	450	490	530
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2380	1020	986	1010	1030	961	1000	919	1040	1030	1090	1140
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	610	430	430	430	440	430	450	450	410	460	470	480
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05	< 0.05										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	0.02										

TABLE 2-7
OTTER CREEK MINE BASELINE REPORT 304E
HOME CREEK ALLUVIUM RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	AVF5-1					
		sample_date	5/15/2014					
		sys_sample_code	OCC-1405-038					
		lab_sample_id	H14050297-019					
chemical_name	result_unit	fraction	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.009	0.5	0.110	13	1
ALUMINUM (AL)	mg/L	TRC		0.2	2	1.1	2	2
ARSENIC (AS)	mg/L	DIS	< 0.001	0.001	0.003	0.003	13	0
ARSENIC (AS)	mg/L	TRC		0.003	0.003	0.003	2	0
BARIUM (BA)	mg/L	DIS	0.025	0.018	0.026	0.023	13	13
BARIUM (BA)	mg/L	TRC		0.023	0.062	0.043	2	2
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	0.0008	0.001	0.0010	12	0
BERYLLIUM (BE)	mg/L	TRC		0.001	0.001	0.001	1	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	530	490	740	553	13	13
BORON (B)	mg/L	DIS	0.69	0.31	0.69	0.61	13	13
BORON (B)	mg/L	TRC		0.33	0.6	0.47	2	2
CADMIUM (CD)	mg/L	DIS	< 0.00003	0.00003	0.00094	0.00013	13	1
CADMIUM (CD)	mg/L	TRC		0.00008	0.00008	0.00008	2	0
CALCIUM (CA)	mg/L	DIS	87	66	87	77	13	13
CALCIUM (CA)	mg/L	TRC		71	84	78	2	2
CARBONATE AS CO3	mg/L	NO MEAS	< 1	1	6	2	13	1
CHLORIDE (CL)	mg/L	NO MEAS	7	6	9	7	13	13
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	0.001	0.001	13	1
CHROMIUM (CR)	mg/L	TRC		0.001	0.004	0.003	2	1
COPPER (CU)	mg/L	DIS	< 0.001	0.001	0.002	0.001	13	2
COPPER (CU)	mg/L	TRC		0.002	0.008	0.005	2	2
FLUORIDE (F)	mg/L	NO MEAS	1.5	0.6	2	1.5	13	13
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	1	4	2	10	0
IRON (FE)	mg/L	DIS	< 0.02	0.02	0.22	0.06	13	4
IRON (FE)	mg/L	TRC		0.22	3.81	2.02	2	2
LEAD (PB)	mg/L	DIS	< 0.0003	0.0003	0.0005	0.0005	13	0
LEAD (PB)	mg/L	TRC		0.0005	0.0029	0.0017	2	1
MAGNESIUM (MG)	mg/L	DIS	94	74	161	88	13	13
MAGNESIUM (MG)	mg/L	TRC		82	158	120	2	2
MANGANESE (MN)	mg/L	DIS	0.034	0.005	0.061	0.049	13	12
MANGANESE (MN)	mg/L	TRC		0.005	0.107	0.056	2	1
MERCURY (HG)	mg/L	DIS	< 0.000005	0.000005	0.0001	0.000045	13	1
MERCURY (HG)	mg/L	TOT		0.00005	0.0001	0.00008	2	0
MOLYBDENUM (MO)	mg/L	DIS	0.008	0.005	0.008	0.007	13	12
MOLYBDENUM (MO)	mg/L	TRC		0.005	0.008	0.007	2	1
NICKEL (NI)	mg/L	DIS	< 0.002	0.002	0.01	0.008	13	0
NICKEL (NI)	mg/L	TRC		0.01	0.01	0.01	2	0
NITRATE + NITRITE AS N	mg/L	NO MEAS	1.38	0.57	1.38	0.92	13	13
pH - LAB	s.u.	NO MEAS	7.6	7.4	8.3	7.7	13	13
PHOSPHORUS (P)	mg/L	TOT		0.023	0.053	0.038	2	2
POTASSIUM (K)	mg/L	DIS	14	12	15	14	13	13
POTASSIUM (K)	mg/L	TRC		12	15	14	2	2
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1660	1300	3050	1662	13	13
SELENIUM (SE)	mg/L	DIS	0.002	0.001	0.003	0.002	13	11
SELENIUM (SE)	mg/L	TRC		0.001	0.002	0.002	2	2
SODIUM (NA)	mg/L	DIS	172	149	488	187	13	13
SODIUM (NA)	mg/L	TRC		152	474	313	2	2
SODIUM ADSORPTION RATIO	unitless	NO MEAS	3.05	2.93	7.17	3.37	13	13
SULFATE (SO4)	mg/L	NO MEAS	520	380	1200	515	13	13
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1110	919	2380	1132	13	13
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	440	410	610	456	13	13
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.05	0.05	0.05	2	0
VANADIUM (V)	mg/L	DIS	< 0.01	0.01	0.1	0.08	13	0
VANADIUM (V)	mg/L	TRC		0.1	0.1	0.1	2	0
ZINC (ZN)	mg/L	DIS	< 0.008	0.008	0.01	0.010	13	0
ZINC (ZN)	mg/L	TRC		0.01	0.02	0.02	2	1

TABLE 2-8
OTTER CREEK MINE BASELINE REPORT 304E
CLINKER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B1-C	B1-C	C-1	C-1	C-1	C-1	C-2	C-2	C-2	C-2	C-2
		sample_date	3/18/2014	5/15/2014	8/24/2011	10/26/2011	1/26/2012	4/24/2012	6/29/2011	10/18/2011	1/3/2012	4/26/2012	9/6/2012
		sys_sample_code	OCC-1403-400	OCC-1405-040	OTRCR-1108-813	OTRCR-1110-332	OTRCR-1201-150	OCC-1204-507	OTRCR-1106-050	OTRCR-1110-704	OTRCR-1201-104	OCC-1204-529	OCC-1209-715
		lab_sample_id	H14030299-001	H14050297-021	H11080476-014	H11100411-004	H12010303-010	H12040471-008	H11070022-003	H11100344-005	H12010106-005	H12040471-030	H12090092-016
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC	0.124		397				0.8				
ARSENIC (AS)	mg/L	DIS	0.009	0.01	< 0.003	0.014	0.012	0.022	0.004	0.003	0.004	0.003	0.004
ARSENIC (AS)	mg/L	TRC	0.009		0.38				0.004				
BARIUM (BA)	mg/L	DIS	0.125	0.075	0.016	0.009	0.012	0.01	0.058	0.058	0.056	0.057	0.064
BARIUM (BA)	mg/L	TRC	0.136		2				0.118				
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.0008		0.019				< 0.001				
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	550	510	260	220	120	160	800	810	810	790	770
BORON (B)	mg/L	DIS	0.46	0.45	0.33	0.26	0.24	0.24	0.4	0.39	0.45	0.41	0.4
BORON (B)	mg/L	TRC	0.5		0.86				0.42				
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00008	< 0.00008	0.00092	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	< 0.00003		0.0121				< 0.00008				
CALCIUM (CA)	mg/L	DIS	88	97	58	75	66	76	68	69	72	72	73
CALCIUM (CA)	mg/L	TRC	111		1940				71				
CARBONATE AS CO3	mg/L	NO MEAS	4	14	< 4	< 4	< 1	< 1	< 4	< 4	< 1	13	< 1
CHLORIDE (CL)	mg/L	NO MEAS	8	6	9	5	3	3	26	25	25	29	24
CHROMIUM (CR)	mg/L	DIS	0.001	0.001	< 0.001	< 0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.003
CHROMIUM (CR)	mg/L	TRC	0.002		0.758				0.003				
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	0.006	0.002	< 0.001	< 0.001	0.002	0.002	< 0.001
COPPER (CU)	mg/L	TRC	0.001		6.8				0.003				
FLUORIDE (F)	mg/L	NO MEAS	1.1	1.2	0.8	1	1	0.9	1.3	1.1	1.2	1	1.2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1		< 4	< 1	< 4	< 4	< 4	< 1	< 4	< 1
IRON (FE)	mg/L	DIS	< 0.02	< 0.02	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC	0.34		664				0.32				
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	< 0.0003		0.868				0.0006				
MAGNESIUM (MG)	mg/L	DIS	146	141	38	47	43	53	111	113	115	116	116
MAGNESIUM (MG)	mg/L	TRC	157		1030				116				
MANGANESE (MN)	mg/L	DIS	< 0.005	< 0.005	0.391	0.098	0.053	0.017	0.032	0.015	0.019	0.016	0.016
MANGANESE (MN)	mg/L	TRC	< 0.005		8.3				0.047				
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.000005		0.0023				< 0.0001				
MOLYBDENUM (MO)	mg/L	DIS	0.008	0.007	0.042	0.013	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	0.009		0.011				0.005				
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	< 0.002		0.9				< 0.01				
NITRATE + NITRITE AS N	mg/L	NO MEAS	1.88	1.57	0.19	0.42	0.74	0.74	3.84	4.72	5.3	6.08	5.7
pH - LAB	s.u.	NO MEAS	8.1	8.1	8.1	6.9	8.1	8	8.1	7.9	7.5	7.7	7.3
PHOSPHORUS (P)	mg/L	TOT			0.013								
POTASSIUM (K)	mg/L	DIS	16	17	8	7	7	7	23	23	22	22	24
POTASSIUM (K)	mg/L	TRC	18		105				24				
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2000	2050	851	843	921	922	2680	2480	3000	3000	2800
SELENIUM (SE)	mg/L	DIS	0.005	0.004	< 0.001	0.001	0.003	0.001	0.015	0.017	0.021	0.02	0.028
SELENIUM (SE)	mg/L	TRC	0.005		0.006				0.015				
SODIUM (NA)	mg/L	DIS	161	186	96	58	52	42	449	437	445	429	455
SODIUM (NA)	mg/L	TRC	178		104				458				
SODIUM ADSORPTION RATIO	unitless	NO MEAS	2.45	2.83	2.41	1.29	1.22	0.9	7.79	7.55	7.58	7.28	7.7
SULFATE (SO4)	mg/L	NO MEAS	790	800	290	340	320	360	820	950	860	960	1000
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1520	1460	615	700	646	700	1920	2190	2440	2140	1970
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	460	440	210	180	100	130	660	670	660	670	630
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			< 0.05								
VANADIUM (V)	mg/L	DIS	0.04	0.05	< 0.1	0.2	0.1	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	0.05		3				< 0.1				
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC	< 0.008		4.08				< 0.01				

TABLE 2-8
OTTER CREEK MINE BASELINE REPORT 304E
CLINKER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	C-2	C-2	C-2	C-2	C-2	C-2	C-2	C-3	C-3	C-3	C-3
		sample_date	11/15/2012	3/4/2013	5/15/2013	8/6/2013	12/13/2013	3/20/2014	5/12/2014	6/22/2011	10/18/2011	1/4/2012	5/2/2012
		sys_sample_code	OCC-1211-206	OCC-1303-348	OCC-1305-148	OCC-1308-551	OCC-1312-114	OCC-1403-417	OCC-1405-205	OTRCR-1106-016	OTRCR-1110-701	OTRCR-1201-111	OCC-1205-554
		lab_sample_id	H12110252-007	H13030104-009	H13050294-017	H13080158-002	H13120229-015	H14030299-018	H14050292-006	H11060450-016	H11100344-002	H12010106-012	H12050095-015
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC								< 0.1			
ARSENIC (AS)	mg/L	DIS	0.004	0.004	0.003	0.004	0.003	0.004	0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC								< 0.003			
BARIUM (BA)	mg/L	DIS	0.056	0.055	0.053	0.057	0.044	0.046	0.043	0.016	0.015	0.015	0.015
BARIUM (BA)	mg/L	TRC								0.017			
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC								< 0.001			
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	800	760	700	790	800	820	780	760	760	760	770
BORON (B)	mg/L	DIS	0.38	0.37	0.43	0.38	0.43	0.4	0.44	0.47	0.49	0.53	0.45
BORON (B)	mg/L	TRC								0.48			
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC								< 0.00008			
CALCIUM (CA)	mg/L	DIS	74	79	79	73	73	62	75	100	109	108	114
CALCIUM (CA)	mg/L	TRC								100			
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	12	6	7	< 1	< 1	< 4	< 4	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	22	32	29	30	30	28	20	12	11	13	14
CHROMIUM (CR)	mg/L	DIS	0.003	0.003	0.003	0.005	0.002	0.002	0.002	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC								< 0.001			
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.004	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	0.002
COPPER (CU)	mg/L	TRC								0.004			
FLUORIDE (F)	mg/L	NO MEAS	1.1	1.1	0.5	1.4	1.1	1.1	1.2	0.8	0.8	0.8	0.7
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1	< 4
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	0.05	0.07	0.11	0.12	0.12	2.47	3.99	4.54	4.95
IRON (FE)	mg/L	TRC								7.77			
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC								0.0006			
MAGNESIUM (MG)	mg/L	DIS	122	115	115	119	107	112	122	172	180	169	179
MAGNESIUM (MG)	mg/L	TRC								174			
MANGANESE (MN)	mg/L	DIS	0.025	0.03	0.03	0.03	0.043	0.062	0.044	0.367	0.45	0.511	0.478
MANGANESE (MN)	mg/L	TRC								0.385			
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT								< 0.0001			
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC								< 0.005			
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC								< 0.01			
NITRATE + NITRITE AS N	mg/L	NO MEAS	5.1	4.24	4.26	4.05	3.27	2.52	3.02	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.5	7.6	7.5	7.8	7.5	7.6	7.5	8.2	7.9	7.6	7.5
PHOSPHORUS (P)	mg/L	TOT								0.067			
POTASSIUM (K)	mg/L	DIS	23	23	23	23	23	21	23	21	22	22	23
POTASSIUM (K)	mg/L	TRC								21			
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3050	3020	3020	3000	3100	3060	3020	3160	2890	3500	3440
SELENIUM (SE)	mg/L	DIS	0.027	0.023	0.022	0.02	0.013	0.012	0.015	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC								< 0.001			
SODIUM (NA)	mg/L	DIS	479	502	482	469	495	501	515	454	469	454	483
SODIUM (NA)	mg/L	TRC								459			
SODIUM ADSORPTION RATIO	unitless	NO MEAS	7.95	8.42	8.1	7.87	8.09	8.8	8.52	6.38	6.41	6.35	6.56
SULFATE (SO4)	mg/L	NO MEAS	1000	1100	1000	1000	1100	1100	1000	1300	1400	1400	1500
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2100	1840	2110	2150	2130	2140	2180	2740	2500	2430	2650
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	660	620	590	660	670	670	640	620	620	620	630
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS								< 0.05			
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	0.05	0.05	0.05	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC								< 0.1			
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC								< 0.01			

TABLE 2-8
OTTER CREEK MINE BASELINE REPORT 304E
CLINKER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	C-3	C-3	C-3	C-3	C-3	C-3	C-3	C-3	C-4	C-4	C-4
		sample_date	9/5/2012	12/5/2012	3/4/2013	5/15/2013	8/6/2013	12/12/2013	3/24/2014	5/5/2014	6/22/2011	10/21/2011	1/26/2012
		sys_sample_code	OCC-1209-705	OCC-1212-252	OCC-1303-347	OCC-1305-150	OCC-1308-550	OCC-1312-112	OCC-1403-421	OCC-1405-008	OTRCR-1106-013	OTRCR-1110-328	OTRCR-1201-148
		lab_sample_id	H12090092-006	H12120120-014	H13030104-008	H13050294-019	H13080158-001	H13120229-013	H14030353-007	H14050154-008	H11060450-013	H11100335-029	H12010303-008
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC									< 0.1		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.002	0.002	< 0.001	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									< 0.003		
BARIUM (BA)	mg/L	DIS	0.015	0.016	0.015	0.014	0.018	0.016	0.016	0.016	0.024	0.022	0.023
BARIUM (BA)	mg/L	TRC									0.024		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	760	690	740	660	780	770	770	730	850	850	840
BORON (B)	mg/L	DIS	0.5	0.5	0.45	0.47	0.44	0.52	0.52	0.51	0.33	0.34	0.35
BORON (B)	mg/L	TRC									0.33		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									< 0.00008		
CALCIUM (CA)	mg/L	DIS	112	112	118	124	118	114	105	109	125	139	139
CALCIUM (CA)	mg/L	TRC									123		
CARBONATE AS CO3	mg/L	NO MEAS	< 1	45	< 1	20	< 1	< 1	< 1	< 1	< 4	< 4	< 1
CHLORIDE (CL)	mg/L	NO MEAS	10	20	14	13	10	16	15	10	15	15	17
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC									< 0.001		
COPPER (CU)	mg/L	DIS	0.002	0.002	0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC									< 0.001		
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.8	0.7	0.9	0.9	0.7	0.7	0.8	0.7	0.7	0.8
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1
IRON (FE)	mg/L	DIS	2.83	3.74	6.32	3.68	5.54	4.78	3.8	3.27	1.2	1.03	1.54
IRON (FE)	mg/L	TRC									1.52		
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									< 0.0005		
MAGNESIUM (MG)	mg/L	DIS	172	186	174	182	188	172	171	179	211	217	216
MAGNESIUM (MG)	mg/L	TRC									203		
MANGANESE (MN)	mg/L	DIS	0.416	0.494	0.473	0.492	0.503	0.452	0.504	0.49	0.358	0.348	0.366
MANGANESE (MN)	mg/L	TRC									0.351		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.0001		
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.01	< 0.01	0.07	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.6	7.6	7.7	7.8	7.6	7.6	7.7	7.8	8.4	7.9	7.6
PHOSPHORUS (P)	mg/L	TOT									0.063		
POTASSIUM (K)	mg/L	DIS	23	24	22	25	24	24	23	23	19	20	20
POTASSIUM (K)	mg/L	TRC									18		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3240	3470	3450	3430	3460	3550	3490	3430	3740	3590	4240
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001		
SODIUM (NA)	mg/L	DIS	471	492	492	490	487	479	483	472	596	572	579
SODIUM (NA)	mg/L	TRC									576		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.52	6.63	6.74	6.55	6.48	6.61	6.76	6.46	7.56	7.08	7.17
SULFATE (SO4)	mg/L	NO MEAS	1500	1300	1400	1400	1500	1500	1500	1500	1600	1800	1600
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2510	2510	2010	2650	2670	2470	2650	2650	3280	3040	3270
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	620	640	600	570	640	640	630	600	690	700	690
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									< 0.05		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1		
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC									< 0.01		

TABLE 2-8
OTTER CREEK MINE BASELINE REPORT 304E
CLINKER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	C-4	C-4	C-4	C-4	C-4	C-4	C-4	C-4	C-4					
		sample_date	4/25/2012	9/5/2012	12/5/2012	3/5/2013	5/14/2013	8/6/2013	11/27/2013	3/27/2014	5/13/2014					
		sys_sample_code	OCC-1204-516	OCC-1209-708	OCC-1212-255	OCC-1303-352	OCC-1305-142	OCC-1308-554	OCC-1311-313	OCC-1403-934	OCC-1405-211					
		lab_sample_id	H12040471-017	H12090092-009	H12120120-017	H13030104-013	H13050294-010	H13080158-005	H13110522-014	H14030412-020	H14050292-012					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.015	< 0.009	< 0.009	0.009	0.1	0.076	42	1
ALUMINUM (AL)	mg/L	TRC										0.1	397	79.6	5	3
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.001	0.002	0.001	0.001	0.022	0.004	42	22
ARSENIC (AS)	mg/L	TRC										0.003	0.38	0.080	5	3
BARIUM (BA)	mg/L	DIS	0.022	0.022	0.024	0.023	0.023	0.024	0.022	0.024	0.024	0.009	0.125	0.032	42	42
BARIUM (BA)	mg/L	TRC										0.017	2	0.459	5	5
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008	0.001	0.0009	42	0
BERYLLIUM (BE)	mg/L	TRC										0.0008	0.019	0.0046	5	1
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	860	840	760	830	750	870	860	860	820	120	870	719	42	42
BORON (B)	mg/L	DIS	0.35	0.35	0.36	0.32	0.39	0.34	0.35	0.39	0.39	0.24	0.53	0.40	42	42
BORON (B)	mg/L	TRC										0.33	0.86	0.52	5	5
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	0.00003	0.00092	0.00009	42	1
CADMIUM (CD)	mg/L	TRC										0.00003	0.0121	0.00247	5	1
CALCIUM (CA)	mg/L	DIS	134	139	142	154	153	143	146	153	146	58	154	104	42	42
CALCIUM (CA)	mg/L	TRC										71	1940	469	5	5
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	62	< 1	11	< 1	< 1	< 1	< 1	1	62	6	42	10
CHLORIDE (CL)	mg/L	NO MEAS	17	12	36	19	17	< 5	19	17	13	3	36	17	42	41
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.005	0.002	42	16
CHROMIUM (CR)	mg/L	TRC										0.001	0.758	0.153	5	3
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.006	0.001	42	14
COPPER (CU)	mg/L	TRC										0.001	6.8	1.362	5	4
FLUORIDE (F)	mg/L	NO MEAS	0.7	0.7	< 1.0	0.7	0.8	0.8	0.7	0.6	0.7	0.5	1.4	0.9	42	41
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	4	2	39	0
IRON (FE)	mg/L	DIS	1.38	1.91	1.48	2.32	1.29	2.36	1.45	1.26	1.35	0.02	6.32	1.66	42	29
IRON (FE)	mg/L	TRC										0.32	664	134.79	5	5
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0003	0.0005	0.0004	42	0
LEAD (PB)	mg/L	TRC										0.0003	0.868	0.1740	5	3
MAGNESIUM (MG)	mg/L	DIS	212	205	230	215	223	222	224	242	229	38	242	158	42	42
MAGNESIUM (MG)	mg/L	TRC										116	1030	336	5	5
MANGANESE (MN)	mg/L	DIS	0.378	0.356	0.392	0.368	0.387	0.375	0.344	0.357	0.353	0.005	0.511	0.261	42	40
MANGANESE (MN)	mg/L	TRC										0.005	8.3	1.818	5	4
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	0.000005	0.0001	0.000042	42	0
MERCURY (HG)	mg/L	TOT										0.000005	0.0023	0.000521	5	1
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.042	0.006	42	5
MOLYBDENUM (MO)	mg/L	TRC										0.005	0.011	0.007	5	3
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	0.002	0.01	0.008	42	0
NICKEL (NI)	mg/L	TRC										0.002	0.9	0.186	5	1
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	6.08	1.38	42	21
pH - LAB	s.u.	NO MEAS	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.6	6.9	8.4	7.7	42	42
PHOSPHORUS (P)	mg/L	TOT										0.013	0.067	0.048	3	3
POTASSIUM (K)	mg/L	DIS	19	20	21	20	21	20	21	21	21	7	25	20	42	42
POTASSIUM (K)	mg/L	TRC										18	105	37	5	5
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4200	3880	4170	4180	4150	4190	4090	4120	4180	843	4240	3144	42	42
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.028	0.006	42	17
SELENIUM (SE)	mg/L	TRC										0.001	0.015	0.006	5	3
SODIUM (NA)	mg/L	DIS	553	582	617	626	625	576	614	609	596	42	626	455	42	42
SODIUM (NA)	mg/L	TRC										104	576	355	5	5
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.93	7.34	7.44	7.65	7.54	7.03	7.45	7.13	7.17	0.9	8.8	6.5	42	42
SULFATE (SO4)	mg/L	NO MEAS	1800	1800	1600	1900	1900	1900	2000	1900	1900	290	2000	1278	42	42
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3300	3130	3040	3220	3180	3360	3270	3300	3340	615	3360	2384	42	42
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	710	690	720	680	630	710	710	710	680	100	720	597	42	42
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										0.05	0.05	0.05	3	0
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01	0.3	0.09	42	8
VANADIUM (V)	mg/L	TRC										0.05	3	0.67	5	2
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.008	0.01	0.009	42	1
ZINC (ZN)	mg/L	TRC										0.008	4.08	0.824	5	1

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B10-O	B11-O
		sample_date	6/22/2011	10/17/2011	1/5/2012	4/27/2012	9/18/2012	11/29/2012	3/6/2013	5/9/2013	7/24/2013	12/11/2013	3/25/2014	5/14/2014	6/23/2011
		sys_sample_code	OTRCRK-1106-202	OTRCR-1110-305	OTRCR-1201-115	OCC-1204-538	OCC-1209-519	OCC-1211-225	OCC-1303-216	OCC-1305-123	OCC-1307-106	OCC-1312-108	OCC-1403-919	OCC-1405-028	OTRCRK-1106-208
		lab_sample_id	H11060448-004	H11100335-006	H12010106-016	H12040492-007	H12090326-008	H12120005-016	H13030123-014	H13050214-024	H13070514-007	H13120229-009	H14030412-005	H14050297-009	H11060448-009
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	4.9	6.7	5.7	3.8	13.9	6.1	4.9	6.5	5.1	3.44	3.74	3.89	0.2
ALUMINUM (AL)	mg/L	TRC	10.1												412
ARSENIC (AS)	mg/L	DIS	0.193	0.02	0.193	0.18	0.207	0.205	0.175	0.188	0.195	0.173	0.192	0.182	0.004
ARSENIC (AS)	mg/L	TRC	0.214												0.132
BARIUM (BA)	mg/L	DIS	0.109	0.009	0.088	0.077	0.113	0.106	0.079	0.09	0.078	0.077	0.077	0.07	0.022
BARIUM (BA)	mg/L	TRC	0.183												8.17
BERYLLIUM (BE)	mg/L	DIS	0.009	< 0.001	0.002	0.002	0.003	0.003	0.001	0.002	0.001	< 0.0008	0.0016	0.0013	< 0.001
BERYLLIUM (BE)	mg/L	TRC	0.01												0.042
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	420	440	400	420	430	430	400	370	410	410	400	360	960
BORON (B)	mg/L	DIS	0.35	0.03	0.37	0.33	0.39	0.43	0.35	0.37	0.37	0.34	0.38	0.33	0.23
BORON (B)	mg/L	TRC	0.46												0.8
CADMIUM (CD)	mg/L	DIS	< 0.0003	< 0.00008	0.0005	0.0002	0.0004	< 0.0001	< 0.0002	0.0004	0.00027	0.00038	0.0003	0.00043	0.00009
CADMIUM (CD)	mg/L	TRC	< 0.0008												0.0068
CALCIUM (CA)	mg/L	DIS	33	32	46	32	34	35	28	32	27	31	29	26	68
CALCIUM (CA)	mg/L	TRC	36												342
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 4
CHLORIDE (CL)	mg/L	NO MEAS	11	12	14	15	11	10	15	15	13	17	17	11	17
CHROMIUM (CR)	mg/L	DIS	0.011	0.002	0.019	0.01	0.042	0.018	0.014	0.005	0.009	0.012	0.01	0.01	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.019												0.375
COPPER (CU)	mg/L	DIS	0.011	0.002	0.017	0.003	0.019	0.019	0.012	0.004	0.006	0.014	0.011	0.013	< 0.001
COPPER (CU)	mg/L	TRC	0.04												0.5
FLUORIDE (F)	mg/L	NO MEAS	0.3	0.2	0.3	0.2	0.2	0.2	< 0.2	< 0.2	0.2	0.2	0.2	0.3	1.3
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	33.8	35.2	33	31.7	55.8	36.4	28.8	38.5	30.5	27.8	26.3	26.7	0.16
IRON (FE)	mg/L	TRC	39.2												347
LEAD (PB)	mg/L	DIS	0.0187	0.0016	0.0181	0.0129	0.0326	0.0248	0.0136	0.0194	0.0131	0.0119	0.0132	0.0123	< 0.0005
LEAD (PB)	mg/L	TRC	0.025												0.536
MAGNESIUM (MG)	mg/L	DIS	30	26	27	24	29	30	26	28	24	27	26	25	34
MAGNESIUM (MG)	mg/L	TRC	32												190
MANGANESE (MN)	mg/L	DIS	0.161	0.012	0.117	0.111	0.249	0.146	0.096	0.138	0.112	0.09	0.1	0.085	0.32
MANGANESE (MN)	mg/L	TRC	0.169												6.62
MERCURY (HG)	mg/L	DIS	0.0003	0.00017	0.00013	0.00016	0.00011	0.00014	0.00014	0.00014	0.00012	0.00012	0.00011	0.000092	< 0.00005
MERCURY (HG)	mg/L	TOT	0.0003												< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	0.015	< 0.005	0.024	0.012	0.029	0.026	0.02	0.013	0.012	0.016	0.02	0.02	0.129
MOLYBDENUM (MO)	mg/L	TRC	0.028												0.073
NICKEL (NI)	mg/L	DIS	< 0.04	< 0.01	0.03	0.03	0.06	0.04	0.03	0.03	0.03	0.03	0.027	0.027	< 0.02
NICKEL (NI)	mg/L	TRC	< 0.04												0.33
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.6	0.2	0.8	< 0.1	< 0.1	0.57	0.11	0.8	0.13	0.05	0.79	0.76	< 0.01
pH - LAB	s.u.	NO MEAS	6.1	6.1	5.9	6.3	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	8.3
PHOSPHORUS (P)	mg/L	TOT	2.16												3.51
POTASSIUM (K)	mg/L	DIS	7	7	7	6	9	7	7	7	7	7	8	6	11
POTASSIUM (K)	mg/L	TRC	9												100
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2970	3000	3370	3320	3430	3310	3340	3360	3370	3440	3340	3400	7670
SELENIUM (SE)	mg/L	DIS	0.003	< 0.001	0.004	0.001	0.008	0.003	0.004	0.003	0.003	0.004	0.003	0.003	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.009												0.04
SODIUM (NA)	mg/L	DIS	806	771	754	733	791	788	741	781	747	787	765	767	1900
SODIUM (NA)	mg/L	TRC	886												2160
SODIUM ADSORPTION RATIO	unitless	NO MEAS	24.4	24.6	21.9	24.7	24.2	22.5	24.3	24.3	25	24.8	24.8	25.7	46.9
SULFATE (SO4)	mg/L	NO MEAS	1200	1200	1200	1200	1200	1200	1200	1300	1200	1300	1300	1300	3200
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	4230	3780	3650	3720	4190	4010	3790	3830	3710	3440	3520	3390	5550
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS								48	180	160	200	230	
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	340	360	330	340	350	350	330	300	340	330	320	290	790
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	1												3.8
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.03	0.03	0.03	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.1												0.6
ZINC (ZN)	mg/L	DIS	0.06	< 0.01	0.07	0.05	0.11	0.1	0.06	0.08	0.06	0.049	0.09	0.047	< 0.01
ZINC (ZN)	mg/L	TRC	0.1												1.6

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B11-O	B12-CO	B4-O
		sample_date	10/20/2011	1/26/2012	4/25/2012	9/6/2012	11/28/2012	3/5/2013	5/7/2013	7/24/2013	11/27/2013	3/20/2014	5/6/2014	6/17/2014	8/24/2011
		sys_sample_code	OTRCR-1110-314	OTRCR-1201-145	OCC-1204-515	OCC-1209-508	OCC-1211-223	OCC-1303-214	OCC-1305-109	OCC-1307-112	OCC-1311-316	OCC-1403-913	OCC-1405-013	OCC-1406-442	OTRCR-1108-812
		lab_sample_id	H11100335-015	H12010303-005	H12040471-016	H12090100-009	H12120005-014	H13030123-012	H13050214-010	H13070514-013	H13110522-017	H14030296-014	H14050154-013	H14060425-003	H11080476-013
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	3.6	< 0.1	< 0.1	< 0.1	< 0.1	1.64	0.031	0.029	0.024	< 0.1
ALUMINUM (AL)	mg/L	TRC												20.4	13.9
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.001	0.005
ARSENIC (AS)	mg/L	TRC												0.019	0.014
BARIUM (BA)	mg/L	DIS	0.022	0.024	0.026	0.165	0.028	0.019	0.022	0.029	0.034	0.026	0.032	0.021	0.088
BARIUM (BA)	mg/L	TRC												0.318	0.256
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.001
BERYLLIUM (BE)	mg/L	TRC												0.001	0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	860	760	920	880	900	830	800	900	880	880	840	630	1300
BORON (B)	mg/L	DIS	0.19	0.21	0.21	0.19	0.2	0.2	0.21	0.21	0.21	0.19	0.2	0.44	0.16
BORON (B)	mg/L	TRC												0.43	0.18
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00004	< 0.00003	< 0.00003	< 0.00003	< 0.00008
CADMIUM (CD)	mg/L	TRC												0.0002	0.0007
CALCIUM (CA)	mg/L	DIS	72	74	73	71	75	86	75	81	74	62	72	200	166
CALCIUM (CA)	mg/L	TRC												219	207
CARBONATE AS CO3	mg/L	NO MEAS	13	11	< 1	13	< 1	14	< 1	< 1	< 1	< 1	< 1	< 1	< 4
CHLORIDE (CL)	mg/L	NO MEAS	13	20	21	13	< 10	16	16	15	19	18	12	12	18
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	0.005	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC												0.041	0.037
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.017	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.001	0.002	< 0.001
COPPER (CU)	mg/L	TRC												0.056	0.111
FLUORIDE (F)	mg/L	NO MEAS	0.9	0.9	0.9	1	0.9	0.8	1	2.4	0.9	0.9	0.9	0.5	0.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	0.1	< 0.05	< 0.05	3.05	0.06	< 0.05	< 0.05	< 0.05	1.05	0.04	0.02	0.04	< 0.05
IRON (FE)	mg/L	TRC												32.3	30.2
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	0.0038	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0015	< 0.0003	< 0.0003	< 0.0003	< 0.0005
LEAD (PB)	mg/L	TRC												0.0336	0.0255
MAGNESIUM (MG)	mg/L	DIS	38	41	40	33	40	40	41	41	40	36	40	448	407
MAGNESIUM (MG)	mg/L	TRC												455	409
MANGANESE (MN)	mg/L	DIS	0.214	0.238	0.225	0.221	0.193	0.165	0.155	0.154	0.148	0.138	0.126	0.014	0.819
MANGANESE (MN)	mg/L	TRC												0.413	1.4
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000007	< 0.000005	< 0.000005	< 0.000005	< 0.00005
MERCURY (HG)	mg/L	TOT												0.00022*	0.00008
MOLYBDENUM (MO)	mg/L	DIS	0.012	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006
MOLYBDENUM (MO)	mg/L	TRC												0.007	0.006
NICKEL (NI)	mg/L	DIS	0.02	0.02	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.009	0.006	0.004	0.003	0.02
NICKEL (NI)	mg/L	TRC												0.029	0.04
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.09	0.14	0.03	0.56	0.61	1.02	0.8	0.86	0.57	0.67	0.58	0.01
pH - LAB	s.u.	NO MEAS	8	7.6	7.6	8	7.8	7.7	7.6	7.6	7.8	7.7	7.9	7.9	8
PHOSPHORUS (P)	mg/L	TOT													0.448
POTASSIUM (K)	mg/L	DIS	12	12	12	10	11	11	12	13	12	11	11	20	13
POTASSIUM (K)	mg/L	TRC												25	16
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	6510	7810	7610	7090	7530	7650	7610	7620	7400	7500	7430	5570	3560
SELENIUM (SE)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.022	< 0.001
SELENIUM (SE)	mg/L	TRC												0.019	< 0.001
SODIUM (NA)	mg/L	DIS	1760	1710	1700	1610	1780	1650	1840	1770	1780	1790	1770	712	409
SODIUM (NA)	mg/L	TRC												705	407
SODIUM ADSORPTION RATIO	unitless	NO MEAS	41.7	39.7	39.5	39.5	41.3	36.7	42.3	40.1	41.4	44.7	41.4	6.4	3.9
SULFATE (SO4)	mg/L	NO MEAS	3300	3100	3200	3400	3100	3500	3300	3300	3500	3700	3200	3000	1700
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	5740	5820	5910	5240	6330	3860	5020	5820	5780	7020	5710	4460	3500
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS													
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	720	640	750	740	740	700	650	740	720	720	690	520	1000
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS													0.88
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1
VANADIUM (V)	mg/L	TRC												0.06	< 0.1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	0.12	0.08	0.02	0.01	< 0.01	0.011	< 0.008	0.015	< 0.008	0.01
ZINC (ZN)	mg/L	TRC												0.081	0.16

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B4-O	B5-O	B5-O
		sample_date	10/26/2011	1/4/2012	4/23/2012	8/29/2012	11/27/2012	2/25/2013	5/8/2013	7/25/2013	12/11/2013	3/26/2014	5/14/2014	6/23/2011	10/19/2011
		sys_sample_code	OTRCR-1110-336	OTRCR-1201-105	OCC-1204-504	OCC-1208-305	OCC-1211-213	OCC-1302-203	OCC-1305-118	OCC-1307-121	OCC-1312-105	OCC-1403-924	OCC-1405-032	OTRCRK-1106-209	OTRCR-1110-320
		lab_sample_id	H11100411-008	H12010106-006	H12040471-005	H12080488-006	H12120005-004	H13020319-003	H13050214-019	H13070514-022	H13120229-006	H14030412-010	H14050297-013	H11060448-010	H11100335-021
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	0.012	< 0.009	0.4	0.6
ALUMINUM (AL)	mg/L	TRC												144	
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	0.001	< 0.001	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC												0.044	
BARIUM (BA)	mg/L	DIS	0.03	0.024	0.023	0.014	0.013	0.014	0.012	0.012	0.011	0.011	0.01	0.04	0.032
BARIUM (BA)	mg/L	TRC												2.31	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC												0.019	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1400	1400	1300	1400	1400	1300	1200	1400	1400	1400	1300	940	930
BORON (B)	mg/L	DIS	0.17	0.17	0.15	0.16	0.15	0.13	0.16	0.16	0.18	0.16	0.16	0.17	0.16
BORON (B)	mg/L	TRC												0.29	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC												0.004	
CALCIUM (CA)	mg/L	DIS	162	150	151	153	159	152	150	148	154	148	157	6	4
CALCIUM (CA)	mg/L	TRC												101	
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10	17
CHLORIDE (CL)	mg/L	NO MEAS	19	17	17	17	12	19	18	15	19	15	11	40	41
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001
CHROMIUM (CR)	mg/L	TRC												0.263	
COPPER (CU)	mg/L	DIS	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001
COPPER (CU)	mg/L	TRC												0.37	
FLUORIDE (F)	mg/L	NO MEAS	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4	4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	1.14	< 0.05	< 0.05	0.25	< 0.05	1	0.65	0.17	0.3	0.24	0.25
IRON (FE)	mg/L	TRC												206	
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0005	< 0.0005
LEAD (PB)	mg/L	TRC												0.18	
MAGNESIUM (MG)	mg/L	DIS	387	416	428	418	411	417	391	406	374	390	413	3	2
MAGNESIUM (MG)	mg/L	TRC												66	
MANGANESE (MN)	mg/L	DIS	0.424	0.19	0.195	0.059	0.052	0.068	0.054	0.049	0.044	0.047	0.041	0.211	0.098
MANGANESE (MN)	mg/L	TRC												5.66	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000050	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT												< 0.00005	
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.032	0.02
MOLYBDENUM (MO)	mg/L	TRC												0.025	
NICKEL (NI)	mg/L	DIS	0.02	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.004	< 0.002	< 0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC												0.25	
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.01	< 0.01	< 0.01	0.02	0.04	0.01	0.18	< 0.01	0.02	0.03	0.03	0.13	0.03
pH - LAB	s.u.	NO MEAS	7.8	7.1	6.9	7	7.1	6.9	7	7.1	7	7	7.2	8.3	8.4
PHOSPHORUS (P)	mg/L	TOT												0.96	
POTASSIUM (K)	mg/L	DIS	11	10	10	11	10	10	10	10	11	10	10	4	4
POTASSIUM (K)	mg/L	TRC												58	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3760	4440	4430	4410	4360	4400	4340	4370	4350	4250	4310	2220	2100
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC												< 0.009	
SODIUM (NA)	mg/L	DIS	403	402	412	410	426	413	420	410	416	425	429	522	527
SODIUM (NA)	mg/L	TRC												580	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	3.92	3.83	3.88	3.89	4.05	3.92	4.1	3.95	4.13	4.16	4.08	43.6	53
SULFATE (SO4)	mg/L	NO MEAS	1700	1700	1800	1800	1700	1900	1700	1800	1800	1800	1800	320	340
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3700	3620	3710	3630	3600	3180	3240	3450	1330	3050	3420	1790	1760
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS													
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	1100	1100	1100	1100	1100	1100	1000	1100	1100	1100	1000	790	790
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS												1.76	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC												0.3	
ZINC (ZN)	mg/L	DIS	< 0.01	0.02	< 0.01	< 0.01	0.02	0.01	0.02	< 0.01	0.028	0.011	< 0.008	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC												0.92	

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B5-O	B5-O	B5-O	B5-O	B5-O	B5-O	B5-O	B5-O	B5-O	B6-O	B6-O	B6-O	B6-O
		sample_date	1/4/2012	5/3/2012	9/18/2012	11/29/2012	3/8/2013	5/9/2013	8/6/2013	3/27/2014	5/5/2014	8/25/2011	10/20/2011	1/12/2012	5/1/2012
		sys_sample_code	OTRCR-1201-109	OCC-1205-557	OCC-1209-516	OCC-1211-231	OCC-1303-228	OCC-1305-129	OCC-1308-365	OCC-1403-932	OCC-1405-006	OTRCR-1108-814	OTRCR-1110-324	OTRCR-1201-130	OCC-1205-542
		lab_sample_id	H12010106-010	H12050095-018	H12090326-005	H12120005-022	H13030181-009	H13050214-030	H13080121-005	H14030412-018	H14050154-006	H11080476-015	H11100335-025	B12011023-011	H12050095-003
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.6	< 0.1	< 0.1	14.7	0.2	0.5	0.7	16	0.434	0.1	0.3	0.2	0.4
ALUMINUM (AL)	mg/L	TRC										19.3			
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	0.004	< 0.003	< 0.003	< 0.003	0.006	< 0.001	0.004	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC										0.015			
BARIUM (BA)	mg/L	DIS	0.032	0.033	0.041	0.182	0.038	0.032	0.031	0.254	0.034	0.038	0.023	0.021	0.025
BARIUM (BA)	mg/L	TRC										0.516			
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.0016	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC										0.002			
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	980	1100	1100	1100	1100	960	1100	1200	1200	1500	1400	1560	1500
BORON (B)	mg/L	DIS	0.19	0.16	0.18	0.18	0.2	0.19	0.17	0.22	0.19	0.23	0.21	0.25	0.24
BORON (B)	mg/L	TRC										0.27			
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	0.00029	< 0.00008	< 0.00008	< 0.00008	0.0004	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC										0.0009			
CALCIUM (CA)	mg/L	DIS	5	7	6	10	9	8	7	12	8	29	25	28	25
CALCIUM (CA)	mg/L	TRC										61			
CARBONATE AS CO3	mg/L	NO MEAS	18	14	25	23	22	36	14	22	< 1	27	55	10	21
CHLORIDE (CL)	mg/L	NO MEAS	47	47	40	36	48	48	48	50	49	15	13	13	15
CHROMIUM (CR)	mg/L	DIS	0.002	< 0.001	< 0.001	0.022	< 0.001	< 0.001	0.001	0.031	< 0.001	0.002	0.002	0.002	0.002
CHROMIUM (CR)	mg/L	TRC										0.081			
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	0.034	0.022	< 0.001	< 0.001	< 0.001	0.031	< 0.001	0.002	0.005	0.002	< 0.001
COPPER (CU)	mg/L	TRC										0.114			
FLUORIDE (F)	mg/L	NO MEAS	4	4	4.1	4.1	3.1	4.2	3.8	3.3	3.5	1.3	1.3	1.4	1.3
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 4	< 4
IRON (FE)	mg/L	DIS	0.21	0.28	0.07	15.6	0.19	0.23	0.31	22.2	0.16	0.22	0.12	0.19	0.17
IRON (FE)	mg/L	TRC										56.3			
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	0.0007	0.0137	< 0.0005	< 0.0005	< 0.0005	0.0207	< 0.0003	< 0.0005	< 0.0005	0.0006	< 0.0005
LEAD (PB)	mg/L	TRC										0.0332			
MAGNESIUM (MG)	mg/L	DIS	2	3	3	6	4	3	3	8	3	15	13	14	13
MAGNESIUM (MG)	mg/L	TRC										31			
MANGANESE (MN)	mg/L	DIS	0.178	0.221	0.142	0.38	0.136	0.076	0.086	0.469	0.112	0.187	0.155	0.195	0.154
MANGANESE (MN)	mg/L	TRC										1.43			
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000039	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT										0.00009			
MOLYBDENUM (MO)	mg/L	DIS	0.009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC										< 0.005			
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.03	0.004	0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC										0.07			
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	0.6	0.04	1.62	0.61	0.07	0.13	< 0.01	0.03	0.04	< 0.01
pH - LAB	s.u.	NO MEAS	8.1	7.6	8.2	8	7.6	7.8	7.8	7.9	7.7	8.4	8.2	8	7.3
PHOSPHORUS (P)	mg/L	TOT										1.64			
POTASSIUM (K)	mg/L	DIS	3	3	3	7	4	3	3	9	3	7	6	7	7
POTASSIUM (K)	mg/L	TRC										15			
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2380	2400	2490	2390	2560	2470	2380	2440	2490	4550	4600	5380	5100
SELENIUM (SE)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.004	< 0.001
SELENIUM (SE)	mg/L	TRC										< 0.001			
SODIUM (NA)	mg/L	DIS	528	566	581	574	596	577	572	605	612	1230	1220	1380	1230
SODIUM (NA)	mg/L	TRC										1260			
SODIUM ADSORPTION RATIO	unitless	NO MEAS	49.3	46.6	48.3	37.7	42.2	44.6	45.4	33.4	47.2	46.1	49.7	53.5	49.8
SULFATE (SO4)	mg/L	NO MEAS	370	350	340	310	380	340	370	360	390	1600	1500	1810	1500
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2030	1560	1510	1310	1310	1580	1670	1730	1660	1570	3630	3910	3640
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS													
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	840	920	910	920	980	850	940	980	950	1300	1300	1290	1300
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										2.1			
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.04	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC										< 0.1			
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	0.05	0.09	< 0.01	< 0.01	< 0.01	0.12	< 0.008	< 0.01	0.03	0.02	< 0.01
ZINC (ZN)	mg/L	TRC										0.26			

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B6-O	B6-O	B6-O	B6-O	B6-O	B6-O	B6-O	B6-O	B7-O	B7-O	B7-O	B7-O	B7-O
		sample_date	8/28/2012	11/27/2012	3/8/2013	5/8/2013	7/26/2013	1/7/2014	3/26/2014	5/5/2014	6/21/2011	10/17/2011	1/10/2012	4/26/2012	9/18/2012
		sys_sample_code	OCC-1208-301	OCC-1211-217	OCC-1303-222	OCC-1305-112	OCC-1307-124	OCC-1401-101	OCC-1403-929	OCC-1405-001	OTRCR-1106-004	OTRCR-1110-300	OTRCR-1201-120	OCC-1204-534	OCC-1209-524
		lab_sample_id	H12080488-002	H12120005-008	H13030181-003	H13050214-013	H13070514-025	H14010145-002	H14030412-015	H14050154-001	H11060450-004	H11100335-001	B12011023-001	H12040492-004	H12090326-013
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	0.1	< 0.1	0.2	0.3	0.349	0.369	0.262	0.2	0.3	0.4	0.3	< 0.1
ALUMINUM (AL)	mg/L	TRC									0.5				
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.001	0.001	0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									< 0.003				
BARIUM (BA)	mg/L	DIS	0.016	0.018	0.015	0.014	0.014	0.013	0.019	0.012	0.023	0.017	0.016	0.015	0.015
BARIUM (BA)	mg/L	TRC									0.035				
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001				
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1500	1600	1400	1300	1500	1600	1500	1100	1100	1100	1050	1100	1000
BORON (B)	mg/L	DIS	0.23	0.22	0.21	0.24	0.24	0.23	0.25	0.22	0.17	0.16	0.15	0.16	0.17
BORON (B)	mg/L	TRC									0.18				
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									< 0.00008				
CALCIUM (CA)	mg/L	DIS	25	28	29	26	25	35	28	27	22	23	21	26	22
CALCIUM (CA)	mg/L	TRC									22				
CARBONATE AS CO3	mg/L	NO MEAS	27	37	60	51	37	22	23	240	16	11	9	29	32
CHLORIDE (CL)	mg/L	NO MEAS	16	11	18	16	14	18	14	11	12	11	10	12	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	0.001	0.002	0.003	0.002	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC									< 0.001				
COPPER (CU)	mg/L	DIS	< 0.001	0.002	< 0.001	0.009	0.006	0.004	< 0.001	0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC									0.001				
FLUORIDE (F)	mg/L	NO MEAS	1.3	1.3	1.2	1.4	1.3	1.3	1.2	1.3	1.1	1	1.1	0.9	5.2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 4	< 1	< 1
IRON (FE)	mg/L	DIS	< 0.05	0.15	0.06	0.08	0.13	0.17	0.19	0.1	0.12	0.13	0.13	0.16	0.05
IRON (FE)	mg/L	TRC									0.41				
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0004	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									0.0008				
MAGNESIUM (MG)	mg/L	DIS	13	14	13	13	13	23	15	14	10	10	10	10	10
MAGNESIUM (MG)	mg/L	TRC									10				
MANGANESE (MN)	mg/L	DIS	0.107	0.068	0.061	0.065	0.062	0.057	0.053	0.056	0.124	0.092	0.071	0.065	0.078
MANGANESE (MN)	mg/L	TRC									0.123				
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.00005				
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005				
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.002	0.004	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01				
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.03	0.02	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.1	8.2	7.9	8.1	8.1	8.1	7.9	8.1	8.4	8.2	8	8.5	8.1
PHOSPHORUS (P)	mg/L	TOT									0.044				
POTASSIUM (K)	mg/L	DIS	6	7	7	7	6	7	6	6	6	6	7	6	6
POTASSIUM (K)	mg/L	TRC									6				
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	5360	5420	5210	5240	5360	5340	5120	5500	4500	4520	4860	4970	5060
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001				
SODIUM (NA)	mg/L	DIS	1190	1300	1260	1260	1170	1200	1300	1290	1140	1160	1260	1110	1150
SODIUM (NA)	mg/L	TRC									1260				
SODIUM ADSORPTION RATIO	unitless	NO MEAS	48.7	49.6	48.8	50.4	49.6	38.7	49.6	50.2	51.5	50.4	57.2	46.6	50.9
SULFATE (SO4)	mg/L	NO MEAS	1600	1600	1600	1600	1600	1700	1600	1700	1500	1700	1860	1700	1700
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3510	3920	3620	3290	3840	3780	3490	4140	3570	3490	3440	3360	2890
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS													
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	1300	1300	1300	1200	1300	1300	1300	1300	900	900	875	920	890
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									1.04				
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1				
ZINC (ZN)	mg/L	DIS	< 0.01	0.14	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	0.009	< 0.01	< 0.01	< 0.01	< 0.01	0.01
ZINC (ZN)	mg/L	TRC									0.01				

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B7-O	B7-O	B7-O	B7-O	B7-O	B7-O	B7-O	B8-O	B8-O	B8-O	B8-O	B8-O	B8-O
		sample_date	11/30/2012	3/4/2013	5/6/2013	7/23/2013	11/25/2013	3/19/2014	5/6/2014	8/23/2011	10/18/2011	1/12/2012	4/25/2012	9/5/2012	11/15/2012
		sys_sample_code	OCC-1211-233	OCC-1303-202	OCC-1305-100	OCC-1307-100	OCC-1311-300	OCC-1403-903	OCC-1405-009	OTRCR-1108-800	OTRCR-1110-311	OTRCR-1201-134	OCC-1204-522	OCC-1209-505	OCC-1211-201
		lab_sample_id	H12120005-024	H13030123-001	H13050214-001	H13070514-001	H13110522-001	H14030296-004	H14050154-009	H11080476-001	H11100335-012	B12011023-015	H12040471-023	H12090100-006	H12110252-002
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.1	0.1	0.1	< 0.1	0.15	0.043	0.011	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC								0.7					
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	0.011	0.01	0.011	0.008	0.006	0.007
ARSENIC (AS)	mg/L	TRC								0.011					
BARIUM (BA)	mg/L	DIS	0.016	0.013	0.012	0.014	0.013	0.014	0.013	0.02	0.018	0.015	0.015	0.017	0.014
BARIUM (BA)	mg/L	TRC								0.043					
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC								< 0.001					
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1000	980	930	1100	1100	1100	1100	540	570	534	530	510	530
BORON (B)	mg/L	DIS	0.17	0.15	0.16	0.19	0.15	0.16	0.15	0.26	0.27	0.27	0.27	0.28	0.27
BORON (B)	mg/L	TRC								0.27					
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC								< 0.00008					
CALCIUM (CA)	mg/L	DIS	21	21	22	20	22	20	21	91	73	72	69	77	73
CALCIUM (CA)	mg/L	TRC								95					
CARBONATE AS CO3	mg/L	NO MEAS	36	39	33	20	11	10	< 1	< 4	< 4	< 4	< 1	3	< 1
CHLORIDE (CL)	mg/L	NO MEAS	9	13	12	13	14	13	9	10	7	6	7	6	6
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC								< 0.001					
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC								0.003					
FLUORIDE (F)	mg/L	NO MEAS	0.9	1	1.1	1	0.9	1.1	1	0.8	0.8	0.8	0.7	0.7	0.7
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 4	< 4	< 1	< 1
IRON (FE)	mg/L	DIS	0.18	0.09	0.11	0.16	0.13	0.14	0.1	< 0.05	< 0.05	< 0.05	0.06	0.17	0.12
IRON (FE)	mg/L	TRC								0.4					
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC								0.001					
MAGNESIUM (MG)	mg/L	DIS	10	10	10	9	10	9	10	194	163	153	158	180	172
MAGNESIUM (MG)	mg/L	TRC								200					
MANGANESE (MN)	mg/L	DIS	0.054	0.052	0.046	0.05	0.042	0.047	0.04	0.099	0.088	0.076	0.067	0.068	0.067
MANGANESE (MN)	mg/L	TRC								0.109					
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT								< 0.00005					
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC								< 0.005					
NICKEL (NI)	mg/L	DIS	< 0.01	0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	0.03	0.01	0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC								0.03					
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.4	0.03	0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.2	8.1	8.1	8.1	8.2	8.1	8.2	8.2	8	7.7	7.7	7.9	8.3
PHOSPHORUS (P)	mg/L	TOT								0.018					
POTASSIUM (K)	mg/L	DIS	6	6	6	6	6	6	6	5	5	6	5	5	5
POTASSIUM (K)	mg/L	TRC								6					
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4890	5000	4990	4960	4810	4910	4880	2200	2060	2280	2300	2220	2410
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC								0.001					
SODIUM (NA)	mg/L	DIS	1140	1090	1200	1140	1150	1150	1170	290	255	253	235	247	257
SODIUM (NA)	mg/L	TRC								298					
SODIUM ADSORPTION RATIO	unitless	NO MEAS	51.2	49	53.2	52.8	50.9	53.1	53.1	3.94	3.8	3.87	3.56	3.52	3.75
SULFATE (SO4)	mg/L	NO MEAS	1600	1800	1700	1700	1800	1900	1700	1200	970	990	960	1100	1000
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3460	3400	3450	3500	3530	3420	3490	2030	1700	1670	1750	1660	1710
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS													
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	920	870	820	930	910	910	880	440	460	438	440	420	430
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS								0.22					
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC								< 0.1					
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01
ZINC (ZN)	mg/L	TRC								< 0.01					

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-9
OTTER CREEK MINE BASELINE REPORT 304E
OVERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B8-O	B8-O	B8-O	B8-O	B8-O	B8-O					
		sample_date	3/5/2013	5/6/2013	7/25/2013	11/26/2013	3/19/2014	5/13/2014					
		sys_sample_code	OCC-1303-211	OCC-1305-106	OCC-1307-120	OCC-1311-309	OCC-1403-907	OCC-1405-022					
		lab_sample_id	H13030123-009	H13050214-007	H13070514-021	H13110522-010	H14030296-008	H14050297-003					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.009	0.016	< 0.009	0.009	16	1.378	84	50
ALUMINUM (AL)	mg/L	TRC							0.5	412	77.6	8	8
ARSENIC (AS)	mg/L	DIS	0.006	0.005	0.005	0.004	0.003	0.004	0.001	0.207	0.028	84	33
ARSENIC (AS)	mg/L	TRC							0.003	0.214	0.057	8	7
BARIUM (BA)	mg/L	DIS	0.013	0.014	0.014	0.012	0.013	0.012	0.009	0.254	0.036	84	84
BARIUM (BA)	mg/L	TRC							0.035	8.17	1.479	8	8
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008	0.009	0.0012	84	12
BERYLLIUM (BE)	mg/L	TRC							0.001	0.042	0.010	8	6
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	480	450	520	520	530	500	360	1600	954	84	84
BORON (B)	mg/L	DIS	0.26	0.29	0.27	0.27	0.29	0.28	0.03	0.44	0.22	84	84
BORON (B)	mg/L	TRC							0.18	0.8	0.36	8	8
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	0.00003	0.0005	0.00011	84	12
CADMIUM (CD)	mg/L	TRC							0.00008	0.0068	0.00170	8	5
CALCIUM (CA)	mg/L	DIS	76	78	79	86	81	88	4	200	59	84	84
CALCIUM (CA)	mg/L	TRC							22	342	135	8	8
CARBONATE AS CO3	mg/L	NO MEAS	11	8	7	< 1	< 1	< 1	1	240	14	84	41
CHLORIDE (CL)	mg/L	NO MEAS	9	9	9	11	11	8	6	50	17	84	83
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.042	0.004	84	30
CHROMIUM (CR)	mg/L	TRC							0.001	0.375	0.102	8	6
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.034	0.004	84	30
COPPER (CU)	mg/L	TRC							0.001	0.5	0.149	8	8
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.8	0.7	0.8	0.7	0.7	0.2	5.2	1.2	84	82
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	1	4	2	77	0
IRON (FE)	mg/L	DIS	0.15	0.15	0.19	0.16	0.14	0.13	0.02	55.8	5.44	84	69
IRON (FE)	mg/L	TRC							0.4	347	89.0	8	8
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0003	0.0326	0.0031	84	20
LEAD (PB)	mg/L	TRC							0.0008	0.536	0.1044	8	8
MAGNESIUM (MG)	mg/L	DIS	177	182	182	199	189	208	2	448	102	84	84
MAGNESIUM (MG)	mg/L	TRC							10	455	174	8	8
MANGANESE (MN)	mg/L	DIS	0.069	0.069	0.074	0.066	0.072	0.07	0.012	0.819	0.128	84	84
MANGANESE (MN)	mg/L	TRC							0.109	6.62	1.991	8	8
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	0.000005	0.0003	0.000054	84	14
MERCURY (HG)	mg/L	TOT							0.00005	0.0003	0.00011	8	3
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.129	0.009	84	20
MOLYBDENUM (MO)	mg/L	TRC							0.005	0.073	0.019	8	5
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	0.002	0.06	0.013	84	31
NICKEL (NI)	mg/L	TRC							0.01	0.33	0.10	8	6
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	1.62	0.18	84	47
pH - LAB	s.u.	NO MEAS	7.8	7.8	7.8	7.9	7.8	7.8	5.8	8.5	7.6	84	84
PHOSPHORUS (P)	mg/L	TOT							0.018	3.51	1.254	7	7
POTASSIUM (K)	mg/L	DIS	5	6	5	6	5	6	3	20	8	84	84
POTASSIUM (K)	mg/L	TRC							6	100	29	8	8
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2450	2480	2520	2510	2610	2650	2060	7810	4300	84	84
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.022	0.002	84	20
SELENIUM (SE)	mg/L	TRC							0.001	0.04	0.010	8	3
SODIUM (NA)	mg/L	DIS	253	268	258	269	270	276	235	1900	884	84	84
SODIUM (NA)	mg/L	TRC							298	2160	945	8	8
SODIUM ADSORPTION RATIO	unitless	NO MEAS	3.63	3.79	3.65	3.64	3.76	3.66	3.52	57.2	30.73	84	84
SULFATE (SO4)	mg/L	NO MEAS	1100	1000	1000	1100	1200	1200	310	3700	1614	84	84
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1660	1890	1860	1940	2110	2020	1310	7020	3336	84	84
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS							48	230	164	5	5
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	410	390	440	430	430	410	290	1300	800	84	84
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS							0.22	3.8	1.54	7	7
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01	0.1	0.08	84	4
VANADIUM (V)	mg/L	TRC							0.06	0.6	0.18	8	3
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.008	0.14	0.025	84	33
ZINC (ZN)	mg/L	TRC							0.01	1.6	0.39	8	7

* - REPORTED AS TOTAL RECOVERABLE

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL	B10-KL
		sample_date	6/22/2011	10/17/2011	1/5/2012	4/27/2012	9/18/2012	11/29/2012	3/6/2013	5/9/2013	7/24/2013	12/11/2013	3/25/2014
		sys_sample_code	OTRCRK-1106-205	OTRCR-1110-307	OTRCR-1201-113	OCC-1204-536	OCC-1209-517	OCC-1211-228	OCC-1303-219	OCC-1305-126	OCC-1307-109	OCC-1312-106	OCC-1403-917
		lab_sample_id	H11060448-006	H11100335-008	H12010106-014	H12040492-005	H12090326-006	H12120005-019	H13030123-017	H13050214-027	H13070514-010	H13120229-007	H14030412-004
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	1.7	0.4	0.4	0.2	< 0.1	0.1	0.4	0.2	0.1	0.167	0.071
ALUMINUM (AL)	mg/L	TRC	66										
ARSENIC (AS)	mg/L	DIS	0.004	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	0.019										
BARIUM (BA)	mg/L	DIS	0.108	0.111	0.097	0.124	0.126	0.122	0.244	0.127	0.15	0.091	0.147
BARIUM (BA)	mg/L	TRC	3.38										
BERYLLIUM (BE)	mg/L	DIS	0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	0.013										
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	930	910	910	910	900	910	850	800	930	930	920
BORON (B)	mg/L	DIS	0.11	0.11	0.11	0.1	0.09	0.1	0.2	0.1	0.11	0.11	0.1
BORON (B)	mg/L	TRC	0.36										
CADMIUM (CD)	mg/L	DIS	< 0.0001	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.0008										
CALCIUM (CA)	mg/L	DIS	3	4	3	4	3	3	3	3	3	4	3
CALCIUM (CA)	mg/L	TRC	38										
CARBONATE AS CO3	mg/L	NO MEAS	31	38	38	44	39	46	51	45	41	37	37
CHLORIDE (CL)	mg/L	NO MEAS	23	27	29	29	13	26	30	29	28	30	31
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.013										
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.04										
FLUORIDE (F)	mg/L	NO MEAS	3	3	3	3	2.9	2.6	2.3	2.8	2.8	2.6	2.4
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.85	0.19	0.17	0.1	0.07	0.12	0.21	0.09	0.09	0.1	0.07
IRON (FE)	mg/L	TRC	31.4										
LEAD (PB)	mg/L	DIS	0.0021	0.0008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	0.065										
MAGNESIUM (MG)	mg/L	DIS	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1
MAGNESIUM (MG)	mg/L	TRC	21										
MANGANESE (MN)	mg/L	DIS	0.041	0.022	0.019	0.017	0.018	0.016	0.033	0.016	0.015	0.016	0.013
MANGANESE (MN)	mg/L	TRC	0.412										
MERCURY (HG)	mg/L	DIS	0.00018	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005
MERCURY (HG)	mg/L	TOT	0.00012										
MOLYBDENUM (MO)	mg/L	DIS	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	0.005										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.03										
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.5	8.5	8.7	8.3	8.3	8.4	8.3	8.3	8.4	8.4
PHOSPHORUS (P)	mg/L	TOT	0.579										
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC	13										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1500	1390	1490	1460	1500	1440	1430	1460	1460	1480	1430
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.009										
SODIUM (NA)	mg/L	DIS	394	358	381	364	369	359	345	359	368	357	365
SODIUM (NA)	mg/L	TRC	449										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	45	43.4	47.7	44.3	47	43.8	43.5	45.5	47.1	42.1	45.2
SULFATE (SO4)	mg/L	NO MEAS	27	7	2	3	< 1	< 1	< 1	1	1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	980	888	848	938	873	863	777	849	880	883	863
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	810	810	810	820	810	820	780	730	830	820	820
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.63										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	0.13										

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-KL	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU	B10-KU
		sample_date	5/14/2014	3/10/2011	6/22/2011	10/17/2011	1/5/2012	4/27/2012	9/18/2012	11/29/2012	3/6/2013	5/9/2013	7/24/2013
		sys_sample_code	OCC-1405-029	OTC-1103-101	OTCRK-1106-203	OTCRC-1110-306	OTCRC-1201-114	OCC-1204-537	OCC-1209-518	OCC-1211-227	OCC-1303-218	OCC-1305-125	OCC-1307-107
		lab_sample_id	H14050297-010	151538002	H11060448-005	H11100335-007	H12010106-015	H12040492-006	H12090326-007	H12120005-018	H13030123-016	H13050214-026	H13070514-008
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.074	0.16	< 0.1	< 0.1	< 0.1	< 0.1	4.4	< 0.1	< 0.1	0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC		4.7	1								
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC		0.0037	< 0.003								
BARIUM (BA)	mg/L	DIS	0.138	0.022	0.015	0.014	0.014	0.014	0.056	0.016	0.014	0.017	0.016
BARIUM (BA)	mg/L	TRC		0.16	0.033								
BERYLLIUM (BE)	mg/L	DIS	< 0.0008		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC			< 0.001								
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	870	1180	1500	1500	1500	1500	1400	1400	1400	1200	1500
BORON (B)	mg/L	DIS	0.09	0.25	0.26	0.25	0.29	0.26	0.27	0.26	0.26	0.28	0.29
BORON (B)	mg/L	TRC		0.21	0.25								
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC		0.00011	< 0.00008								
CALCIUM (CA)	mg/L	DIS	3	91.9	95	97	89	100	91	94	89	90	87
CALCIUM (CA)	mg/L	TRC		99.8	92								
CARBONATE AS CO3	mg/L	NO MEAS	33	< 5	< 4	< 4	< 1	< 1	14	15	< 1	33	< 1
CHLORIDE (CL)	mg/L	NO MEAS	28	< 50	8	9	12	11	7	7	11	10	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.008	< 0.001
CHROMIUM (CR)	mg/L	TRC		0.0034	< 0.001								
COPPER (CU)	mg/L	DIS	< 0.001	0.0035	< 0.001	< 0.001	0.009	0.008	0.011	0.001	< 0.001	0.002	< 0.001
COPPER (CU)	mg/L	TRC		0.014	0.001								
FLUORIDE (F)	mg/L	NO MEAS	2.8	< 5	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 1			< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.06	0.49	0.66	0.56	0.65	0.57	2.79	0.6	0.49	0.47	0.6
IRON (FE)	mg/L	TRC		4.6	1.33								
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	< 0.0005	0.0009	< 0.0005	0.0032	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC		0.0052	0.001								
MAGNESIUM (MG)	mg/L	DIS	< 1	42.5	43	41	38	40	42	42	40	41	38
MAGNESIUM (MG)	mg/L	TRC		45.5	41								
MANGANESE (MN)	mg/L	DIS	0.012	0.063	0.046	0.04	0.044	0.047	0.066	0.043	0.041	0.044	0.046
MANGANESE (MN)	mg/L	TRC		0.1	0.05								
MERCURY (HG)	mg/L	DIS	< 0.000005		0.00014	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT		0.00001	0.00013								
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005	< 0.005								
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC		< 0.01	< 0.01								
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	0.02	< 0.02	< 0.01	< 0.01	0.01	< 0.01	0.03	< 0.02
pH - LAB	s.u.	NO MEAS	8.5	7.8	8.2	7.7	7.4	8.1	7.9	7.8	7.3	7.9	7.3
PHOSPHORUS (P)	mg/L	TOT			0.03								
POTASSIUM (K)	mg/L	DIS	2	12.7	13	13	12	13	14	13	13	13	12
POTASSIUM (K)	mg/L	TRC		14.4	12								
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1460	5180	4760	4600	5160	5110	5240	5100	5180	5180	5200
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC		< 0.001	< 0.001								
SODIUM (NA)	mg/L	DIS	355	1080	1140	1110	1080	1120	1150	1160	1080	1140	1070
SODIUM (NA)	mg/L	TRC		1100	1110								
SODIUM ADSORPTION RATIO	unitless	NO MEAS	45.3	23.4	24.2	23.9	24	23.8	25.1	25	23.8	25	24.1
SULFATE (SO4)	mg/L	NO MEAS	< 1	1820	1500	1600	1500	1600	1600	1600	1800	1700	1700
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	858	3900	3860	3890	3660	3860	3830	4090	3740	3630	3840
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	770		1200	1200	1200	1200	1200	1200	1100	1100	1200
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			4.1								
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC		< 0.1	< 0.1								
ZINC (ZN)	mg/L	DIS	< 0.008	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.02	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC		0.025	0.03								

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-KU	B10-KU	B10-KU	B11-K	B11-K	B11-K	B11-K	B11-K	B11-K	B11-K	B11-K
		sample_date	12/11/2013	3/25/2014	5/14/2014	6/22/2011	10/18/2011	1/24/2012	4/24/2012	9/6/2012	11/28/2012	3/5/2013	5/7/2013
		sys_sample_code	OCC-1312-107	OCC-1403-918	OCC-1405-027	OTRCRK-1106-207	OTRCR-1110-313	OTRCR-1201-143	OCC-1204-512	OCC-1209-507	OCC-1211-222	OCC-1303-212	OCC-1305-108
		lab_sample_id	H13120229-008	H14030412-003	H14050297-008	H11060448-008	H11100335-014	H12010303-003	H12040471-013	H12090100-008	H12120005-013	H13030123-010	H13050214-009
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.009	< 0.009	0.3	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1
ALUMINUM (AL)	mg/L	TRC				8.9							
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC				< 0.003							
BARIUM (BA)	mg/L	DIS	0.015	0.016	0.014	0.098	0.088	0.098	0.108	0.108	0.116	0.115	0.11
BARIUM (BA)	mg/L	TRC				29.6							
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC				< 0.001							
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1500	1400	1400	720	710	670	720	700	710	670	630
BORON (B)	mg/L	DIS	0.28	0.3	0.28	0.13	0.13	0.13	0.13	0.14	0.12	0.13	0.14
BORON (B)	mg/L	TRC				0.13							
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00014	< 0.00008
CADMIUM (CD)	mg/L	TRC				0.00009							
CALCIUM (CA)	mg/L	DIS	105	95	87	2	1	1	1	1	1	1	1
CALCIUM (CA)	mg/L	TRC				8							
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	22	28	18	29	28	34	35	29
CHLORIDE (CL)	mg/L	NO MEAS	12	11	7	7	7	8	8	7	7	9	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC				0.008							
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC				0.007							
FLUORIDE (F)	mg/L	NO MEAS	0.4	0.3	0.4	1.5	2	1.6	1.5	1.6	1.5	1.3	1.6
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1		< 4	< 1	< 4	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.54	0.51	0.6	0.14	0.06	0.05	< 0.05	0.06	0.07	0.1	0.06
IRON (FE)	mg/L	TRC				6.03							
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC				0.0068							
MAGNESIUM (MG)	mg/L	DIS	41	42	38	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC				3							
MANGANESE (MN)	mg/L	DIS	0.044	0.045	0.041	0.015	0.014	0.015	0.016	0.015	0.015	0.015	0.014
MANGANESE (MN)	mg/L	TRC				0.094							
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT				< 0.00005							
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC				< 0.005							
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC				< 0.01							
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.3	7.3	7.4	8.6	8.5	8.4	8	8.2	8.2	8.3	8.2
PHOSPHORUS (P)	mg/L	TOT				0.271							
POTASSIUM (K)	mg/L	DIS	14	13	13	2	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC				3							
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	5250	5060	5140	1140	1020	1160	1120	1040	1100	1100	1100
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC				< 0.001							
SODIUM (NA)	mg/L	DIS	1130	1200	1150	292	271	275	263	277	274	272	280
SODIUM (NA)	mg/L	TRC				286							
SODIUM ADSORPTION RATIO	unitless	NO MEAS	23.7	25.8	25.9	21.6	49.4	50.9	50.8	50.3	49.5	51.7	52.2
SULFATE (SO4)	mg/L	NO MEAS	1800	1900	1700	28	10	7	6	4	3	5	4
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3690	3760	3770	816	654	684	696	647	670	605	638
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	1200	1200	1100	620	630	580	640	620	640	600	560
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				0.53							
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC				< 0.1							
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC				0.03							

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B11-K	B11-K	B11-K	B11-K	B12-LK	B12-UK1	B12-UK2	B2-K	B2-K	B2-K	B2-K
		sample_date	7/24/2013	11/26/2013	3/20/2014	5/6/2014	6/16/2014	6/18/2014	6/17/2014	6/29/2011	10/26/2011	1/11/2012	5/2/2012
		sys_sample_code	OCC-1307-110	OCC-1311-310	OCC-1403-912	OCC-1405-012	OCC-1406-440	OCC-1406-445	OCC-1406-443	OTRCR-1106-300	OTRCR-1110-337	OTRCR-1201-124	OCC-1205-547
		lab_sample_id	H13070514-011	H13110522-011	H14030296-013	H14050154-012	H14060425-001	H14060425-006	H14060425-004	H11070022-001	H11100411-009	B12011023-005	H12050095-008
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.1	0.062	0.136	0.041	0.146	2.82	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC					16.8	79.1	7.81	< 0.1			
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.001	< 0.001	< 0.001	0.001	0.004	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC					0.004	0.028	0.005	< 0.003			
BARIUM (BA)	mg/L	DIS	0.118	0.105	0.113	0.11	0.03	0.051	0.022	0.023	0.017	0.019	0.02
BARIUM (BA)	mg/L	TRC					0.609	3.55	0.161	0.023			
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC					0.001	0.0087	< 0.0008	< 0.001			
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	720	710	730	710	430	740	570	1500	1400	1440	1400
BORON (B)	mg/L	DIS	0.14	0.13	0.12	0.13	0.16	0.13	0.38	0.16	0.16	0.18	0.16
BORON (B)	mg/L	TRC					0.18	0.33	0.39	0.16			
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC					< 0.00004	0.0004	0.00008	< 0.00008			
CALCIUM (CA)	mg/L	DIS	1	1	1	1	36	18	199	21	23	21	22
CALCIUM (CA)	mg/L	TRC					45	93	219	22			
CARBONATE AS CO3	mg/L	NO MEAS	30	28	21	12	3	14	< 1	< 4	31	20	27
CHLORIDE (CL)	mg/L	NO MEAS	8	9	9	7	7	6	6	14	15	12	14
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC					0.003	0.044	0.019	< 0.001			
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	0.009	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC					0.006	0.059	0.039	< 0.001			
FLUORIDE (F)	mg/L	NO MEAS	3.8	1.5	1.5	1.5	0.9	1.3	0.6	1	0.9	1.1	1
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 4	< 4	< 4
IRON (FE)	mg/L	DIS	0.08	0.06	0.08	0.05	0.05	0.81	< 0.02	0.19	0.17	0.25	0.22
IRON (FE)	mg/L	TRC					6.14	37.8	10.9	0.19			
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0003	0.001	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC					0.0122	0.0788	0.0106	< 0.0005			
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	52	13	443	9	8	8	9
MAGNESIUM (MG)	mg/L	TRC					61	54	473	9			
MANGANESE (MN)	mg/L	DIS	0.016	0.011	0.012	0.012	0.061	0.032	0.082	0.082	0.051	0.065	0.057
MANGANESE (MN)	mg/L	TRC					0.104	0.572	0.182	0.082			
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT					0.0000096	0.000074	0.000068	< 0.0001			
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC					< 0.005	0.005	< 0.005	< 0.005			
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	0.002	0.003	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC					0.002	0.04	0.01	< 0.01			
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.03	0.36	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.4	8.4	8.4	8.1	8.2	7.9	8.2	8.5	8.1	7.9
PHOSPHORUS (P)	mg/L	TOT											
POTASSIUM (K)	mg/L	DIS	1	1	1	2	3	3	20	5	5	6	5
POTASSIUM (K)	mg/L	TRC					5	14	22	5			
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1100	1080	1100	1090	2590	3520	5520	4340	4110	4710	4750
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.016	< 0.001	< 0.001	0.002	< 0.001
SELENIUM (SE)	mg/L	TRC					< 0.001	0.002	0.013	< 0.001			
SODIUM (NA)	mg/L	DIS	289	282	274	275	490	771	693	1180	1180	1250	1130
SODIUM (NA)	mg/L	TRC					502	885	680	1190			
SODIUM ADSORPTION RATIO	unitless	NO MEAS	53	52.5	55.9	52	12.2	34.8	6.26	54.5	53.6	58.6	52.1
SULFATE (SO4)	mg/L	NO MEAS	3	3	3	2	880	1200	3000	1200	1300	1460	1400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	663	647	666	657	1700	1450	4660	3310	3210	3310	3380
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	640	630	630	600	350	630	470	1200	1200	1210	1200
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC					< 0.01	0.03	0.02	< 0.1			
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	0.016	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC					0.018	0.152	0.045	< 0.01			

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B2-K	B2-K	B2-K	B2-K	B2-K	B2-K	B2-K	B2-K	B3-K	B3-K	B3-K
		sample_date	9/6/2012	11/26/2012	3/7/2013	5/9/2013	8/6/2013	1/8/2014	3/25/2014	5/13/2014	8/24/2011	10/25/2011	1/4/2012
		sys_sample_code	OCC-1209-510	OCC-1211-211	OCC-1303-220	OCC-1305-130	OCC-1308-367	OCC-1401-105	OCC-1403-915	OCC-1405-024	OTRCR-1108-810	OTRCR-1110-330	OTRCR-1201-106
		lab_sample_id	H12090100-011	H12120005-002	H13030181-001	H13050214-031	H13080121-007	H14010145-006	H14030412-001	H14050297-005	H11080476-011	H11100411-002	H12010106-007
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.012	< 0.009	< 0.009	0.4	0.1	0.2
ALUMINUM (AL)	mg/L	TRC									3.7		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									0.003		
BARIUM (BA)	mg/L	DIS	0.015	0.016	0.014	0.016	0.014	0.015	0.014	0.015	0.026	0.023	0.017
BARIUM (BA)	mg/L	TRC									0.235		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1400	1400	1400	1200	1500	1400	1500	1000	1000	1100	1100
BORON (B)	mg/L	DIS	0.16	0.16	0.15	0.16	0.17	0.17	0.17	0.17	0.67	0.63	0.67
BORON (B)	mg/L	TRC									0.72		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									0.00011		
CALCIUM (CA)	mg/L	DIS	24	21	22	22	25	22	21	21	163	186	158
CALCIUM (CA)	mg/L	TRC									174		
CARBONATE AS CO3	mg/L	NO MEAS	44	33	42	58	29	29	< 1	200	< 4	< 4	< 1
CHLORIDE (CL)	mg/L	NO MEAS	11	10	16	16	< 5	17	16	10	39	49	42
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	0.004
CHROMIUM (CR)	mg/L	TRC									0.005		
COPPER (CU)	mg/L	DIS	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.003	0.007	0.003
COPPER (CU)	mg/L	TRC									0.018		
FLUORIDE (F)	mg/L	NO MEAS	1.1	1	0.9	1.1	1	1.1	0.8	1.1	0.2	0.2	0.2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1
IRON (FE)	mg/L	DIS	0.25	0.23	0.2	0.2	0.17	0.2	0.09	0.19	1.02	0.9	1.23
IRON (FE)	mg/L	TRC									6.49		
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0013	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									0.0071		
MAGNESIUM (MG)	mg/L	DIS	8	8	8	9	9	9	8	8	72	70	71
MAGNESIUM (MG)	mg/L	TRC									76		
MANGANESE (MN)	mg/L	DIS	0.042	0.037	0.031	0.039	0.031	0.028	0.028	0.027	0.193	0.193	0.148
MANGANESE (MN)	mg/L	TRC									0.236		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.00005		
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	0.02	0.02	0.04
pH - LAB	s.u.	NO MEAS	8.2	8.2	8.1	8.1	8.1	8.1	7.9	8.1	7.8	7.8	7.4
PHOSPHORUS (P)	mg/L	TOT									0.362		
POTASSIUM (K)	mg/L	DIS	5	5	5	5	5	5	5	5	10	11	10
POTASSIUM (K)	mg/L	TRC									10		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4480	4740	4830	4810	4690	4720	4650	4770	5500	5690	6820
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001		
SODIUM (NA)	mg/L	DIS	1120	1150	1160	1170	1160	1150	1170	1160	1350	1450	1400
SODIUM (NA)	mg/L	TRC									1450		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	51.5	53.8	52.8	53.5	50.5	52	55.4	54.2	22	22.9	23.2
SULFATE (SO4)	mg/L	NO MEAS	1500	1300	1400	1400	1500	1400	1500	1300	2800	2800	3000
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3200	3280	1950	3050	3380	3240	3240	3220	5270	5220	5080
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	1200	1200	1200	1100	1200	1200	1200	1200	830	890	870
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									14		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1		
ZINC (ZN)	mg/L	DIS	0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.01	0.02	0.01
ZINC (ZN)	mg/L	TRC									0.03		

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B3-K	B3-K	B3-K	B3-K	B3-K	B3-K	B3-K	B3-K	B3-K	B4-K	B4-K
		sample_date	4/23/2012	9/17/2012	11/27/2012	3/9/2013	5/8/2013	7/24/2013	12/10/2013	3/26/2014	5/14/2014	8/24/2011	10/20/2011
		sys_sample_code	OCC-1204-502	OCC-1209-512	OCC-1211-215	OCC-1303-230	OCC-1305-122	OCC-1307-115	OCC-1312-101	OCC-1403-926	OCC-1405-033	OTRCR-1108-811	OTRCR-1110-325
		lab_sample_id	H12040471-003	H12090326-001	H12120005-006	H13030181-010	H13050214-023	H13070514-016	H13120229-002	H14030412-012	H14050297-014	H11080476-012	H11100335-026
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.2	0.1	0.1	0.2	< 0.1	0.1	0.121	0.193	0.063	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC										< 0.1	
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	0.001	< 0.001	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC										< 0.003	
BARIUM (BA)	mg/L	DIS	0.017	0.015	0.02	0.018	0.031	0.024	0.018	0.022	0.017	0.016	0.014
BARIUM (BA)	mg/L	TRC										0.018	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC										< 0.001	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1100	1000	1100	1100	1000	1100	1100	1100	990	880	890
BORON (B)	mg/L	DIS	0.64	0.64	0.6	0.58	0.56	0.61	0.61	0.62	0.56	0.18	0.18
BORON (B)	mg/L	TRC										0.18	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	0.00007	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC										< 0.00008	
CALCIUM (CA)	mg/L	DIS	152	142	166	157	169	180	161	165	168	80	78
CALCIUM (CA)	mg/L	TRC										83	
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	25	< 4	21
CHLORIDE (CL)	mg/L	NO MEAS	41	34	36	49	45	44	50	43	33	13	11
CHROMIUM (CR)	mg/L	DIS	0.008	< 0.001	< 0.001	0.021	0.009	0.007	0.004	0.002	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC										< 0.001	
COPPER (CU)	mg/L	DIS	0.008	0.006	0.005	0.008	0.01	0.004	0.011	0.006	0.003	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC										0.002	
FLUORIDE (F)	mg/L	NO MEAS	0.2	0.2	0.2	0.2	< 0.2	0.2	0.2	0.1	0.2	0.4	0.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4
IRON (FE)	mg/L	DIS	1.12	1.07	1.11	1.02	0.67	0.91	0.98	1.13	0.96	0.06	0.15
IRON (FE)	mg/L	TRC										0.15	
LEAD (PB)	mg/L	DIS	< 0.0005	0.0009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	0.0004	< 0.0003	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC										< 0.0005	
MAGNESIUM (MG)	mg/L	DIS	70	67	72	72	75	74	70	72	75	69	46
MAGNESIUM (MG)	mg/L	TRC										71	
MANGANESE (MN)	mg/L	DIS	0.131	0.123	0.124	0.127	0.147	0.135	0.123	0.136	0.126	0.099	0.128
MANGANESE (MN)	mg/L	TRC										0.1	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT										< 0.00005	
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC										< 0.005	
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.004	0.002	0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC										< 0.01	
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.04	0.03	< 0.02	0.03	0.03	0.03	0.05	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.2	7.2	7.4	7.4	7.4	7.3	7.1	7.2	7.3	8.3	8
PHOSPHORUS (P)	mg/L	TOT										0.006	
POTASSIUM (K)	mg/L	DIS	10	10	9	10	10	11	11	11	10	7	8
POTASSIUM (K)	mg/L	TRC										8	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	6760	6900	6680	6890	6850	6820	6840	6550	6760	4220	4720
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC										< 0.001	
SODIUM (NA)	mg/L	DIS	1410	1460	1460	1400	1450	1450	1420	1430	1450	1020	1160
SODIUM (NA)	mg/L	TRC										1060	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	23.7	25.2	23.7	23.2	23.3	23	23.5	23.3	23.4	20.2	25.8
SULFATE (SO4)	mg/L	NO MEAS	2800	3000	2800	3000	2800	2900	3100	2900	3000	2000	2000
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	5500	5630	5270	5330	4710	5250	4540	5000	5210	3590	3890
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	890	830	900	880	850	900	900	900	860	720	770
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										1.98	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC										< 0.1	
ZINC (ZN)	mg/L	DIS	0.01	0.08	0.09	0.02	0.03	0.02	0.015	0.02	< 0.008	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC										< 0.01	

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B4-K	B4-K	B4-K	B4-K	B4-K	B4-K	B4-K	B4-K	B4-K	B4-K	B5-K
		sample_date	1/3/2012	4/23/2012	8/28/2012	11/26/2012	2/25/2013	5/7/2013	7/25/2013	12/11/2013	3/26/2014	5/14/2014	6/23/2011
		sys_sample_code	OTRCR-1201-102	OCC-1204-505	OCC-1208-300	OCC-1211-212	OCC-1302-200	OCC-1305-111	OCC-1307-123	OCC-1312-104	OCC-1403-922	OCC-1405-030	OTRCRK-1106-211
		lab_sample_id	H12010106-003	H12040471-006	H12080488-001	H12120005-003	H13020319-001	H13050214-012	H13070514-024	H13120229-004	H14030412-008	H14050297-011	H11060448-012
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.014	< 0.009	< 0.009	0.4
ALUMINUM (AL)	mg/L	TRC											7.8
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003
ARSENIC (AS)	mg/L	TRC											< 0.003
BARIUM (BA)	mg/L	DIS	0.012	0.011	0.009	0.01	0.01	0.01	0.009	0.011	0.008	0.009	0.074
BARIUM (BA)	mg/L	TRC											0.192
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001
BERYLLIUM (BE)	mg/L	TRC											< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	940	950	950	970	960	850	980	1000	1000	890	820
BORON (B)	mg/L	DIS	0.21	0.2	0.2	0.19	0.17	0.21	0.21	0.23	0.21	0.2	0.16
BORON (B)	mg/L	TRC											0.17
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008
CADMIUM (CD)	mg/L	TRC											< 0.00008
CALCIUM (CA)	mg/L	DIS	73	72	72	75	73	74	75	78	76	77	2
CALCIUM (CA)	mg/L	TRC											3
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	10	< 1	20	17	< 1	< 1	18	17
CHLORIDE (CL)	mg/L	NO MEAS	16	14	15	10	17	14	13	17	14	10	19
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											0.007
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											0.008
FLUORIDE (F)	mg/L	NO MEAS	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	0.36	0.48	0.47	0.5	0.56	0.41	0.38	0.66	0.23	0.32	0.16
IRON (FE)	mg/L	TRC											3.64
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005
LEAD (PB)	mg/L	TRC											0.0059
MAGNESIUM (MG)	mg/L	DIS	40	39	37	36	37	39	38	36	39	40	< 1
MAGNESIUM (MG)	mg/L	TRC											3
MANGANESE (MN)	mg/L	DIS	0.114	0.082	0.067	0.059	0.066	0.065	0.053	0.069	0.045	0.043	0.021
MANGANESE (MN)	mg/L	TRC											0.051
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000050	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005
MERCURY (HG)	mg/L	TOT											< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC											< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.003	< 0.002	< 0.002	< 0.01
NICKEL (NI)	mg/L	TRC											< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.5	7.8	7.9	8.5
PHOSPHORUS (P)	mg/L	TOT											0.171
POTASSIUM (K)	mg/L	DIS	8	8	8	8	8	8	8	8	8	8	2
POTASSIUM (K)	mg/L	TRC											3
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	5430	5300	5310	5180	5200	5170	5200	5200	5010	5140	1210
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											< 0.001
SODIUM (NA)	mg/L	DIS	1120	1140	1120	1160	1120	1160	1070	1130	1140	1160	318
SODIUM (NA)	mg/L	TRC											313
SODIUM ADSORPTION RATIO	unitless	NO MEAS	26.3	26.9	26.7	27.7	26.5	27.2	25.3	26.5	26.4	26.7	31.6
SULFATE (SO4)	mg/L	NO MEAS	2200	2000	2100	1900	2100	2000	2000	2100	2000	2000	< 2
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3690	4010	3640	3550	3230	3440	3780	3470	3740	3710	785
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	770	780	780	810	780	730	830	840	820	760	700
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											0.28
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1
VANADIUM (V)	mg/L	TRC											< 0.1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01
ZINC (ZN)	mg/L	TRC											0.01

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K	B5-K
		sample_date	10/19/2011	1/4/2012	5/1/2012	8/28/2012	11/28/2012	3/8/2013	5/8/2013	8/6/2013	12/12/2013	3/27/2014	5/5/2014
		sys_sample_code	OTRCR-1110-319	OTRCR-1201-110	OCC-1205-546	OCC-1208-303	OCC-1211-220	OCC-1303-227	OCC-1305-116	OCC-1308-362	OCC-1312-111	OCC-1403-931	OCC-1405-007
		lab_sample_id	H11100335-020	H12010106-011	H12050095-007	H12080488-004	H12120005-011	H13030181-008	H13050214-017	H13080121-002	H13120229-012	H14030412-017	H14050154-007
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.5	0.6	0.3	0.3	0.1	0.2	< 0.1	0.2	0.14	0.173	0.074
ALUMINUM (AL)	mg/L	TRC											
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC											
BARIUM (BA)	mg/L	DIS	0.074	0.072	0.079	0.08	0.089	0.092	0.096	0.095	0.086	0.092	0.094
BARIUM (BA)	mg/L	TRC											
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC											
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	820	820	860	880	890	840	790	910	870	880	900
BORON (B)	mg/L	DIS	0.17	0.18	0.16	0.17	0.15	0.16	0.17	0.15	0.15	0.16	0.16
BORON (B)	mg/L	TRC											
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC											
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC											
CARBONATE AS CO3	mg/L	NO MEAS	36	26	30	27	39	57	39	30	36	29	9
CHLORIDE (CL)	mg/L	NO MEAS	15	14	12	11	10	13	12	12	13	12	10
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											
FLUORIDE (F)	mg/L	NO MEAS	2	2	2	1.8	1.8	1.5	1.7	1.6	1.7	1.6	1.8
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.15	0.19	0.1	0.08	0.09	0.07	0.07	0.07	0.08	0.06	0.05
IRON (FE)	mg/L	TRC											
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC											
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC											
MANGANESE (MN)	mg/L	DIS	0.02	0.019	0.019	0.015	0.014	0.014	0.013	0.014	0.011	0.01	0.01
MANGANESE (MN)	mg/L	TRC											
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005
MERCURY (HG)	mg/L	TOT											
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC											
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC											
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.4	7.9	8.2	8.2	8.1	8.1	8.3	8.2	8.2	8.3
PHOSPHORUS (P)	mg/L	TOT											
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC											
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1200	1290	1310	1350	1350	1380	1370	1320	1350	1300	1340
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											
SODIUM (NA)	mg/L	DIS	312	330	335	327	343	338	346	362	331	334	333
SODIUM (NA)	mg/L	TRC											
SODIUM ADSORPTION RATIO	unitless	NO MEAS	51	53.4	53.1	51.5	53.4	52.7	55.2	54.2	51.5	52.8	53.1
SULFATE (SO4)	mg/L	NO MEAS	< 2	< 2	< 1	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	740	774	815	802	826	740	795	825	804	767	829
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	730	710	760	760	790	780	710	800	770	770	750
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC											
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC											

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K	B6-K
		sample_date	8/25/2011	10/25/2011	1/12/2012	5/1/2012	8/28/2012	11/27/2012	3/8/2013	5/8/2013	7/26/2013	1/7/2014	3/26/2014
		sys_sample_code	OTRCR-1108-815	OTRCR-1110-321	OTRCR-1201-128	OCC-1205-540	OCC-1208-302	OCC-1211-218	OCC-1303-224	OCC-1305-114	OCC-1307-127	OCC-1401-102	OCC-1403-928
		lab_sample_id	H11080476-016	H11100411-001	B12011023-009	H12050095-001	H12080488-003	H12120005-009	H13030181-005	H13050214-015	H13070514-028	H14010145-003	H14030412-014
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.6										
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003										
BARIUM (BA)	mg/L	DIS	0.111	0.097	0.098	0.102	0.096	0.095	0.1	0.101	0.106	0.103	0.103
BARIUM (BA)	mg/L	TRC	0.129										
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001										
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	970	990	973	970	1000	980	920	860	990	1000	990
BORON (B)	mg/L	DIS	0.14	0.14	0.11	0.14	0.14	0.13	0.13	0.14	0.14	0.13	0.14
BORON (B)	mg/L	TRC	0.14										
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008										
CALCIUM (CA)	mg/L	DIS	3	3	3	2	2	3	3	3	3	3	3
CALCIUM (CA)	mg/L	TRC	4										
CARBONATE AS CO3	mg/L	NO MEAS	35	23	32	31	27	42	61	42	43	33	34
CHLORIDE (CL)	mg/L	NO MEAS	7	8	7	7	7	6	8	8	5	9	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.004	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.001										
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.003										
FLUORIDE (F)	mg/L	NO MEAS	1	0.9	1	0.9	0.9	< 1.0	0.8	1	0.9	1	0.9
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.07	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05	0.03	0.02
IRON (FE)	mg/L	TRC	0.71										
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	0.0008										
MAGNESIUM (MG)	mg/L	DIS	1	< 1	< 1	< 1	< 1	< 1	< 1	1	1	1	1
MAGNESIUM (MG)	mg/L	TRC	1										
MANGANESE (MN)	mg/L	DIS	0.016	0.006	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005
MANGANESE (MN)	mg/L	TRC	0.022										
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005										
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01										
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.11	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.6	8.5	8.2	7.8	8.2	8.2	8.2	8.2	8.2	8.3	8.1
PHOSPHORUS (P)	mg/L	TOT	0.152										
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC	2										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1340	1340	1450	1440	1500	1480	1520	1510	1520	1520	1500
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001										
SODIUM (NA)	mg/L	DIS	376	366	386	373	368	378	380	394	390	395	384
SODIUM (NA)	mg/L	TRC	382										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44.7	48.9	53.6	51.4	51.1	50.6	50.8	52.3	51.4	48.7	50.5
SULFATE (SO4)	mg/L	NO MEAS	34	6	4	5	7	8	19	18	22	30	29
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	964	854	886	896	886	930	721	903	929	948	917
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	850	850	850	850	860	870	860	780	880	870	870
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.76										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01										

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B6-K	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL	B7-KL
		sample_date	5/5/2014	6/21/2011	10/17/2011	1/10/2012	4/26/2012	9/18/2012	11/30/2012	3/4/2013	5/6/2013	7/23/2013	11/25/2013
		sys_sample_code	OCC-1405-003	OTRCR-1106-002	OTRCR-1110-302	OTRCR-1201-122	OCC-1204-532	OCC-1209-522	OCC-1211-235	OCC-1303-205	OCC-1305-102	OCC-1307-102	OCC-1311-302
		lab_sample_id	H14050154-003	H11060450-002	H11100335-003	B12011023-003	H12040492-002	H12090326-011	H12120005-026	H13030123-003	H13050214-003	H13070514-003	H13110522-003
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.012	< 0.1	0.2	0.2	0.4	0.1	< 0.1	0.2	0.2	0.3	3.06
ALUMINUM (AL)	mg/L	TRC		0.7									
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001
ARSENIC (AS)	mg/L	TRC		< 0.003									
BARIUM (BA)	mg/L	DIS	0.104	0.018	0.014	0.012	0.013	0.012	0.012	0.012	0.012	0.013	0.018
BARIUM (BA)	mg/L	TRC		0.036									
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC		< 0.001									
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	990	390	410	375	380	370	370	360	330	380	380
BORON (B)	mg/L	DIS	0.13	0.1	0.1	0.09	0.09	0.1	0.1	0.09	0.11	0.11	0.1
BORON (B)	mg/L	TRC		0.11									
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC		< 0.00008									
CALCIUM (CA)	mg/L	DIS	3	4	4	3	4	3	3	3	3	3	3
CALCIUM (CA)	mg/L	TRC		4									
CARBONATE AS CO3	mg/L	NO MEAS	12	15	5	12	20	20	23	21	20	19	17
CHLORIDE (CL)	mg/L	NO MEAS	7	7	7	7	8	7	6	9	9	7	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC		< 0.001									
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC		< 0.001									
FLUORIDE (F)	mg/L	NO MEAS	1	1	1	1	0.9	1	0.9	0.9	1	0.9	1
HYDROXIDE (OH)	mg/L	NO MEAS	< 1		< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.02	0.11	0.08	0.05	0.14	0.06	0.1	0.09	0.08	0.11	0.9
IRON (FE)	mg/L	TRC		0.34									
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0006
LEAD (PB)	mg/L	TRC		< 0.0005									
MAGNESIUM (MG)	mg/L	DIS	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
MAGNESIUM (MG)	mg/L	TRC		1									
MANGANESE (MN)	mg/L	DIS	< 0.005	0.022	0.009	0.006	0.01	0.008	0.008	0.009	0.012	0.009	0.008
MANGANESE (MN)	mg/L	TRC		0.017									
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT		< 0.00005									
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005									
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC		< 0.01									
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.6	8.6	8.4	8.7	8.4	8.4	8.5	8.5	8.5	8.6
PHOSPHORUS (P)	mg/L	TOT		0.065									
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC		2									
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1500	1580	1440	1550	999	1580	1520	1550	1540	1520	1490
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC		< 0.001									
SODIUM (NA)	mg/L	DIS	379	359	346	363	336	345	339	336	345	328	341
SODIUM (NA)	mg/L	TRC		376									
SODIUM ADSORPTION RATIO	unitless	NO MEAS	48.6	43.2	42.6	47.6	41.3	44.8	44	44.3	44.5	43.4	40.4
SULFATE (SO4)	mg/L	NO MEAS	21	420	430	431	430	420	410	430	420	390	440
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	946	1070	982	976	1000	893	951	845	944	971	968
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	830	340	350	328	350	340	340	330	310	350	340
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.53									
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC		< 0.1									
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC		< 0.01									

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B7-KL	B7-KL	B7-KU	B7-KU	B7-KU	B7-KU	B7-KU	B7-KU	B7-KU	B7-KU	B7-KU
		sample_date	3/19/2014	5/6/2014	6/21/2011	10/17/2011	1/10/2012	4/26/2012	9/18/2012	11/30/2012	3/4/2013	5/6/2013	7/23/2013
		sys_sample_code	OCC-1403-901	OCC-1405-011	OTRCR-1106-003	OTRCR-1110-301	OTRCR-1201-121	OCC-1204-533	OCC-1209-523	OCC-1211-234	OCC-1303-204	OCC-1305-101	OCC-1307-101
		lab_sample_id	H14030296-002	H14050154-011	H11060450-003	H11100335-002	B12011023-002	H12040492-003	H12090326-012	H12120005-025	H13030123-002	H13050214-002	H13070514-002
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.172	0.309	1	0.5	0.1	0.4	< 0.1	0.2	< 0.1	0.4	0.5
ALUMINUM (AL)	mg/L	TRC			20.2								
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC			0.004								
BARIUM (BA)	mg/L	DIS	0.013	0.013	0.024	0.04	0.044	0.039	0.051	0.051	0.057	0.059	0.068
BARIUM (BA)	mg/L	TRC			2.9								
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC			0.002								
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	380	380	970	1000	1030	1000	1000	970	910	860	980
BORON (B)	mg/L	DIS	0.1	0.1	0.14	0.12	0.1	0.12	0.12	0.12	0.12	0.13	0.13
BORON (B)	mg/L	TRC			0.2								
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC			0.00026								
CALCIUM (CA)	mg/L	DIS	3	3	17	7	5	5	4	4	4	4	3
CALCIUM (CA)	mg/L	TRC			27								
CARBONATE AS CO3	mg/L	NO MEAS	15	9	28	27	27	41	44	52	48	46	37
CHLORIDE (CL)	mg/L	NO MEAS	9	7	11	12	10	13	10	10	13	12	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC			0.009								
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC			0.016								
FLUORIDE (F)	mg/L	NO MEAS	1	1	1.3	2	2.2	2	2.1	2.1	1.9	2.4	2.3
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1		< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.08	0.04	0.14	0.21	0.05	0.16	< 0.05	0.13	0.07	0.2	0.18
IRON (FE)	mg/L	TRC			9.66								
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	0.0008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0006	< 0.0005	0.0009	< 0.0005
LEAD (PB)	mg/L	TRC			0.0341								
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	6	2	1	1	1	1	1	1	1
MAGNESIUM (MG)	mg/L	TRC			11								
MANGANESE (MN)	mg/L	DIS	0.007	0.009	0.029	0.012	0.006	0.01	0.013	0.013	0.013	0.029	0.02
MANGANESE (MN)	mg/L	TRC			0.105								
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT			< 0.00005								
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC			< 0.005								
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC			0.01								
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.5	8.6	8.3	8.4	8.2	8.6	8.2	8.3	8.3	8.3	8.3
PHOSPHORUS (P)	mg/L	TOT			0.386								
POTASSIUM (K)	mg/L	DIS	2	2	4	3	3	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC			9								
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1520	1510	3410	2010	1870	1820	1900	1680	1690	1680	1620
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC			< 0.001								
SODIUM (NA)	mg/L	DIS	337	334	882	509	492	442	457	428	406	413	398
SODIUM (NA)	mg/L	TRC			861								
SODIUM ADSORPTION RATIO	unitless	NO MEAS	45.6	43.8	47.1	44.4	52.4	47.4	49.7	48	48.1	47.2	47.8
SULFATE (SO4)	mg/L	NO MEAS	450	440	1000	240	157	130	110	84	92	84	76
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	955	955	2550	1410	1160	1170	1110	1090	913	1010	1010
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	340	320	840	900	891	900	900	880	830	780	870
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			0.9								
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC			< 0.1								
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC			0.06								

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B7-KU	B7-KU	B7-KU	B8-KL	B8-KL	B8-KL	B8-KL	B8-KL	B8-KL	B8-KL	B8-KL
		sample_date	11/25/2013	3/19/2014	5/6/2014	8/23/2011	10/18/2011	1/10/2012	4/25/2012	9/5/2012	11/14/2012	3/5/2013	5/6/2013
		sys_sample_code	OCC-1311-301	OCC-1403-902	OCC-1405-010	OTRCR-1108-802	OTRCR-1110-308	OTRCR-1201-123	OCC-1204-520	OCC-1209-502	OCC-1211-200	OCC-1303-208	OCC-1305-103
		lab_sample_id	H13110522-002	H14030296-003	H14050154-010	H11080476-003	H11100335-009	B12011023-004	H12040471-021	H12090100-003	H12110252-001	H13030123-006	H13050214-004
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.017	0.048	0.018	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC				< 0.1							
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC				< 0.003							
BARIUM (BA)	mg/L	DIS	0.06	0.066	0.068	0.036	0.027	0.024	0.021	0.021	0.021	0.022	0.021
BARIUM (BA)	mg/L	TRC				0.039							
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC				< 0.001							
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	970	970	960	540	570	594	580	560	580	520	500
BORON (B)	mg/L	DIS	0.12	0.12	0.11	0.13	0.12	0.11	0.11	0.12	0.12	0.12	0.13
BORON (B)	mg/L	TRC				0.13							
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC				< 0.00008							
CALCIUM (CA)	mg/L	DIS	4	3	3	13	6	4	4	5	4	6	5
CALCIUM (CA)	mg/L	TRC				13							
CARBONATE AS CO3	mg/L	NO MEAS	30	26	15	17	27	18	28	24	25	30	27
CHLORIDE (CL)	mg/L	NO MEAS	12	12	10	10	12	12	16	15	17	19	20
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC				< 0.001							
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC				0.003							
FLUORIDE (F)	mg/L	NO MEAS	2.2	2.4	2.2	0.9	1.2	1.3	1.2	1.2	1.2	1	1.3
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1		< 4	< 4	< 4	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.04	0.07	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05
IRON (FE)	mg/L	TRC				0.06							
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC				< 0.0005							
MAGNESIUM (MG)	mg/L	DIS	1	< 1	1	8	3	2	2	2	2	2	2
MAGNESIUM (MG)	mg/L	TRC				7							
MANGANESE (MN)	mg/L	DIS	0.013	0.017	0.014	0.02	0.01	0.007	0.01	0.015	0.01	0.018	0.015
MANGANESE (MN)	mg/L	TRC				0.02							
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT				< 0.00005							
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC				< 0.005							
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC				< 0.01							
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.4	8.4	8.5	8.6	8.3	8.2	8.3	8.7	8.4	8.3
PHOSPHORUS (P)	mg/L	TOT				0.025							
POTASSIUM (K)	mg/L	DIS	2	2	2	3	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC				3							
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1570	1590	1570	1980	1570	1560	1500	1580	1590	1870	1730
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC				< 0.001							
SODIUM (NA)	mg/L	DIS	414	397	387	495	378	379	340	380	364	415	394
SODIUM (NA)	mg/L	TRC				519							
SODIUM ADSORPTION RATIO	unitless	NO MEAS	49.7	50.1	47.8	26.8	33.4	39.4	40.4	36.5	38.2	36.9	37
SULFATE (SO4)	mg/L	NO MEAS	80	79	70	700	320	294	280	380	310	460	380
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1000	986	972	1480	1070	946	972	1010	966	1110	1020
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	840	840	810	470	510	518	520	500	520	480	460
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				1.07							
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC				< 0.1							
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC				< 0.01							

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B8-KL	B8-KL	B8-KL	B8-KL	B8-KU	B8-KU	B8-KU	B8-KU	B8-KU	B8-KU	B8-KU
		sample_date	7/25/2013	11/26/2013	3/19/2014	5/13/2014	8/23/2011	10/18/2011	1/12/2012	4/25/2012	9/5/2012	11/15/2012	3/5/2013
		sys_sample_code	OCC-1307-116	OCC-1311-306	OCC-1403-904	OCC-1405-019	OTRCR-1108-801	OTRCR-1110-310	OTRCR-1201-133	OCC-1204-521	OCC-1209-504	OCC-1211-202	OCC-1303-210
		lab_sample_id	H13070514-017	H13110522-007	H14030296-005	H14050297-025	H11080476-002	H11100335-011	B12011023-014	H12040471-022	H12090100-005	H12110252-003	H13030123-008
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC					< 0.1						
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC					< 0.003						
BARIUM (BA)	mg/L	DIS	0.022	0.02	0.021	0.023	0.015	0.012	0.015	0.014	0.013	0.014	0.013
BARIUM (BA)	mg/L	TRC					0.015						
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC					< 0.001						
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	580	580	590	560	740	790	735	740	740	740	710
BORON (B)	mg/L	DIS	0.13	0.12	0.12	0.12	0.38	0.38	0.35	0.38	0.41	0.39	0.36
BORON (B)	mg/L	TRC					0.37						
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC					< 0.00008						
CALCIUM (CA)	mg/L	DIS	5	5	5	5	168	159	169	151	180	154	155
CALCIUM (CA)	mg/L	TRC					160						
CARBONATE AS CO3	mg/L	NO MEAS	29	26	20	20	< 4	< 4	< 4	< 1	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	20	22	24	22	9	8	9	10	7	7	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC					< 0.001						
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC					0.001						
FLUORIDE (F)	mg/L	NO MEAS	1.3	1.1	1.3	1.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1		< 4	< 4	< 4	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	< 0.05	0.06	0.06	0.05	1.11	1.18	1.32	1.27	1.34	1.3	1.3
IRON (FE)	mg/L	TRC					1.07						
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC					< 0.0005						
MAGNESIUM (MG)	mg/L	DIS	2	2	2	2	165	155	150	153	154	159	159
MAGNESIUM (MG)	mg/L	TRC					155						
MANGANESE (MN)	mg/L	DIS	0.011	0.009	0.01	0.009	0.111	0.091	0.094	0.085	0.081	0.085	0.083
MANGANESE (MN)	mg/L	TRC					0.104						
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT					< 0.00005						
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC					< 0.005						
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC					< 0.01						
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	0.47	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.5	8.4	8.4	8.2	7.7	7.5	7.5	7.6	7.6	7.5
PHOSPHORUS (P)	mg/L	TOT					0.038						
POTASSIUM (K)	mg/L	DIS	2	2	2	2	8	8	9	8	8	8	8
POTASSIUM (K)	mg/L	TRC					8						
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1630	1700	1690	1660	2710	2820	3310	3300	3070	3290	3290
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC					< 0.001						
SODIUM (NA)	mg/L	DIS	369	400	381	393	420	430	482	401	430	437	415
SODIUM (NA)	mg/L	TRC					434						
SODIUM ADSORPTION RATIO	unitless	NO MEAS	36.8	36.7	37.1	36.9	5.51	5.81	6.5	5.5	5.68	5.89	5.6
SULFATE (SO4)	mg/L	NO MEAS	300	350	370	350	1400	1300	1510	1300	1500	1200	1400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1030	1090	1080	1040	2580	2460	2590	2570	2340	2440	2460
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	520	520	520	490	610	650	603	610	600	610	580
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS					0.99						
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC					< 0.1						
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC					< 0.01						

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B8-KU	B8-KU	B8-KU	B8-KU	B8-KU	B9-K	B9-K	B9-K	B9-K	B9-K	B9-K
		sample_date	5/6/2013	7/25/2013	11/26/2013	3/19/2014	5/13/2014	8/23/2011	10/19/2011	1/24/2012	4/24/2012	9/5/2012	11/29/2012
		sys_sample_code	OCC-1305-105	OCC-1307-119	OCC-1311-308	OCC-1403-906	OCC-1405-021	OTRCR-1108-805	OTRCR-1110-315	OTRCR-1201-142	OCC-1204-509	OCC-1209-500	OCC-1211-229
		lab_sample_id	H13050214-006	H13070514-020	H13110522-009	H14030296-007	H14050297-002	H11080476-006	H11100335-016	H12010303-002	H12040471-010	H12090100-001	H12120005-020
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC						0.5					
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC						< 0.003					
BARIUM (BA)	mg/L	DIS	0.015	0.014	0.013	0.015	0.015	0.087	0.094	0.089	0.091	0.095	0.099
BARIUM (BA)	mg/L	TRC						0.092					
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC						< 0.001					
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	660	740	730	720	670	1000	1000	970	1100	1000	1100
BORON (B)	mg/L	DIS	0.42	0.4	0.39	0.41	0.42	0.13	0.13	0.12	0.13	0.13	0.12
BORON (B)	mg/L	TRC						0.13					
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC						< 0.00008					
CALCIUM (CA)	mg/L	DIS	165	161	172	154	164	3	2	2	2	3	2
CALCIUM (CA)	mg/L	TRC						3					
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	39	48	29	45	43	48
CHLORIDE (CL)	mg/L	NO MEAS	10	5	12	11	7	22	21	21	23	22	20
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC						< 0.001					
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC						0.003					
FLUORIDE (F)	mg/L	NO MEAS	0.3	0.3	0.2	0.3	0.3	1.8	2	1.8	1.7	1.8	1.7
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1		< 4	< 1	< 4	< 1	< 1
IRON (FE)	mg/L	DIS	1.38	1.34	1.42	1.38	1.4	0.05	< 0.05	0.09	0.09	0.16	0.12
IRON (FE)	mg/L	TRC						0.26					
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC						0.0011					
MAGNESIUM (MG)	mg/L	DIS	165	164	170	156	171	< 1	< 1	< 1	< 1	< 1	1
MAGNESIUM (MG)	mg/L	TRC						1					
MANGANESE (MN)	mg/L	DIS	0.086	0.085	0.081	0.087	0.086	0.079	0.051	0.064	0.056	0.07	0.058
MANGANESE (MN)	mg/L	TRC						0.081					
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT						< 0.00005					
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC						< 0.005					
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC						< 0.01					
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.4	7.4	7.5	7.6	7.5	8.6	8.5	8.4	8.2	8.3	8.2
PHOSPHORUS (P)	mg/L	TOT						0.092					
POTASSIUM (K)	mg/L	DIS	8	8	8	8	8	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC						2					
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3310	3360	3280	3300	3310	1370	1500	1680	1640	1540	1620
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC						< 0.001					
SODIUM (NA)	mg/L	DIS	440	436	444	423	429	432	404	392	410	404	414
SODIUM (NA)	mg/L	TRC						396					
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.8	5.77	5.75	5.74	5.59	54.8	56	54.2	56.7	54.6	56.5
SULFATE (SO4)	mg/L	NO MEAS	1300	1400	1500	1500	1400	3	< 2	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2410	2570	2570	2660	2510	986	962	994	1030	941	985
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	540	610	600	590	550	910	930	840	940	930	950
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS						0.78					
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC						< 0.1					
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC						< 0.01					

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B9-K	B9-K	B9-K	B9-K	B9-K	B9-K	K-1	K-1	K-1	K-1	K-1
		sample_date	3/4/2013	5/9/2013	7/23/2013	11/25/2013	3/19/2014	5/13/2014	6/22/2011	10/21/2011	1/25/2012	4/24/2012	9/6/2012
		sys_sample_code	OCC-1303-207	OCC-1305-127	OCC-1307-104	OCC-1311-303	OCC-1403-908	OCC-1405-023	OTRCR-1106-015	OTRCR-1110-327	OTRCR-1201-147	OCC-1204-511	OCC-1209-509
		lab_sample_id	H13030123-005	H13050214-028	H13070514-005	H13110522-004	H14030296-009	H14050297-004	H11060450-015	H11100335-028	H12010303-007	H12040471-012	H12090100-010
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.009	0.01	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC							< 0.1				
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC							< 0.003				
BARIUM (BA)	mg/L	DIS	0.099	0.106	0.115	0.107	0.112	0.113	0.143	0.138	0.148	0.123	0.182
BARIUM (BA)	mg/L	TRC							0.148				
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC							< 0.001				
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1000	930	1100	1100	1100	1000	920	950	940	920	930
BORON (B)	mg/L	DIS	0.12	0.13	0.14	0.12	0.11	0.12	0.09	0.09	0.09	0.09	0.1
BORON (B)	mg/L	TRC							0.09				
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC							< 0.00008				
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	4	4	4	4	5
CALCIUM (CA)	mg/L	TRC							4				
CARBONATE AS CO3	mg/L	NO MEAS	52	52	43	40	33	35	41	28	37	43	41
CHLORIDE (CL)	mg/L	NO MEAS	24	23	22	30	25	22	9	9	10	10	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC							< 0.001				
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC							< 0.001				
FLUORIDE (F)	mg/L	NO MEAS	1.6	1.8	1.7	1.7	1.7	1.9	1.3	1.3	1.3	1.4	1.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1	< 4	< 1
IRON (FE)	mg/L	DIS	0.17	0.15	0.17	0.18	0.2	0.19	0.07	0.05	0.06	< 0.05	0.07
IRON (FE)	mg/L	TRC							0.24				
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC							< 0.0005				
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	1	2	2	2	2	2
MAGNESIUM (MG)	mg/L	TRC							2				
MANGANESE (MN)	mg/L	DIS	0.064	0.06	0.057	0.052	0.05	0.044	0.008	0.006	0.006	< 0.005	0.005
MANGANESE (MN)	mg/L	TRC							0.006				
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT							< 0.0001				
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC							< 0.005				
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC							< 0.01				
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.2	8.3	8.4	8.4	8.4	8.7	8.5	8.4	8.2	8.3
PHOSPHORUS (P)	mg/L	TOT							0.141				
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC							2				
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1650	1640	1630	1600	1630	1650	1460	1470	1670	1500	1590
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC							< 0.001				
SODIUM (NA)	mg/L	DIS	411	409	422	409	413	418	390	380	388	364	420
SODIUM (NA)	mg/L	TRC							388				
SODIUM ADSORPTION RATIO	unitless	NO MEAS	58.5	58.2	60.7	57.1	61.3	57.3	39.2	38.8	41.6	36.1	38.9
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	53	63	64	40	99
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	888	968	980	1000	1000	990	1010	932	1010	940	955
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	900	850	950	940	940	890	820	820	830	830	830
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS							0.63				
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC							< 0.1				
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC							< 0.01				

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-1	K-1	K-1	K-1	K-1	K-1	K-1	K-2	K-2	K-2	K-2
		sample_date	12/5/2012	2/25/2013	5/14/2013	8/6/2013	11/27/2013	3/19/2014	5/13/2014	6/22/2011	10/25/2011	1/13/2012	5/2/2012
		sys_sample_code	OCC-1212-256	OCC-1302-101	OCC-1305-140	OCC-1308-552	OCC-1311-311	OCC-1403-413	OCC-1405-212	OTRCR-1106-007	OTRCR-1110-750	OTRCR-1201-138	OCC-1205-549
		lab_sample_id	H12120120-018	H13020319-005	H13050294-008	H13080158-003	H13110522-012	H14030299-014	H14050292-013	H11060450-007	H11100414-001	B12011023-019	H12050095-010
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	0.047	0.017	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC								< 0.1			
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC								< 0.003			
BARIUM (BA)	mg/L	DIS	0.172	0.187	0.171	0.182	0.178	0.124	0.14	0.09	0.09	0.09	0.096
BARIUM (BA)	mg/L	TRC								0.094			
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC								< 0.001			
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	880	910	820	950	950	930	920	680	710	660	680
BORON (B)	mg/L	DIS	0.1	0.09	0.1	0.09	0.09	0.1	0.09	0.1	0.1	0.09	0.09
BORON (B)	mg/L	TRC								0.1			
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC								< 0.00008			
CALCIUM (CA)	mg/L	DIS	4	4	4	5	4	2	3	2	3	2	2
CALCIUM (CA)	mg/L	TRC								2			
CARBONATE AS CO3	mg/L	NO MEAS	79	37	49	49	44	42	23	25	22	32	40
CHLORIDE (CL)	mg/L	NO MEAS	9	12	12	11	11	11	9	8	8	7	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC								< 0.001			
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC								< 0.001			
FLUORIDE (F)	mg/L	NO MEAS	1.3	1.2	1.4	1.4	1.3	1.3	1.4	1.4	1.2	1.4	1.3
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 4	< 4
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	0.06	0.03	0.03	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC								0.05			
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC								< 0.0005			
MAGNESIUM (MG)	mg/L	DIS	2	2	2	2	2	1	1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC								< 1			
MANGANESE (MN)	mg/L	DIS	0.005	< 0.005	0.006	0.011	< 0.005	< 0.005	< 0.005	0.024	0.018	0.012	0.012
MANGANESE (MN)	mg/L	TRC								0.02			
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000050	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT								< 0.0001			
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC								< 0.005			
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC								< 0.01			
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.3	8.4	8.4	8.5	8.5	8.5	8.8	8.8	8.4	8.2
PHOSPHORUS (P)	mg/L	TOT								0.139			
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	1	2	2	1
POTASSIUM (K)	mg/L	TRC								2			
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1630	1700	1630	1720	1670	1460	1490	1020	937	1100	1120
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC								< 0.001			
SODIUM (NA)	mg/L	DIS	407	407	414	437	425	368	366	280	273	282	273
SODIUM (NA)	mg/L	TRC								280			
SODIUM ADSORPTION RATIO	unitless	NO MEAS	42.1	43.5	42.2	41.4	43.4	49.6	44.3	41.6	39.2	41.8	40.2
SULFATE (SO4)	mg/L	NO MEAS	83	110	100	140	130	25	38	8	10	13	14
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	995	1000	1000	1090	1070	896	925	696	666	655	696
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	860	810	750	860	850	830	790	600	620	594	620
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS								0.3			
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC								< 0.1			
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC								< 0.01			

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-2	K-2	K-2	K-2	K-2	K-2	K-2	K-2	K-3	K-3	K-3
		sample_date	9/18/2012	12/5/2012	3/4/2013	5/14/2013	8/6/2013	1/7/2014	3/19/2014	5/15/2014	6/22/2011	10/25/2011	1/13/2012
		sys_sample_code	OCC-1209-527	OCC-1212-259	OCC-1303-340	OCC-1305-135	OCC-1308-557	OCC-1401-800	OCC-1403-409	OCC-1405-035	OTRCR-1106-008	OTRCR-1110-753	OTRCR-1201-139
		lab_sample_id	H12090328-002	H12120120-021	H13030104-001	H13050294-003	H13080158-008	H14010147-001	H14030299-010	H14050297-016	H11060450-008	H11100414-004	B12011023-020
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	0.024	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC									1.8		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									< 0.003		
BARIUM (BA)	mg/L	DIS	0.095	0.103	0.099	0.102	0.103	0.106	0.106	0.103	0.041	0.039	0.027
BARIUM (BA)	mg/L	TRC									0.078		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	670	660	650	600	690	680	680	640	770	770	738
BORON (B)	mg/L	DIS	0.1	0.1	0.1	0.11	0.1	0.1	0.1	0.1	0.33	0.34	0.29
BORON (B)	mg/L	TRC									0.36		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									< 0.00008		
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	2	2	136	173	142
CALCIUM (CA)	mg/L	TRC									147		
CARBONATE AS CO3	mg/L	NO MEAS	38	61	40	44	42	39	37	29	< 4	< 4	< 4
CHLORIDE (CL)	mg/L	NO MEAS	7	7	9	10	8	9	9	7	12	13	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC									0.001		
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
COPPER (CU)	mg/L	TRC									0.007		
FLUORIDE (F)	mg/L	NO MEAS	3.3	1.4	1.4	1.5	1.4	1.3	1.3	1.4	0.6	0.5	0.6
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 4
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02	0.02	1.75	1.77	0.85
IRON (FE)	mg/L	TRC									3.56		
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									0.0024		
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	90	91	90
MAGNESIUM (MG)	mg/L	TRC									95		
MANGANESE (MN)	mg/L	DIS	0.012	0.016	0.013	0.013	0.014	0.008	0.008	0.007	0.336	0.229	0.113
MANGANESE (MN)	mg/L	TRC									0.362		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.0001		
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.5	8.5	8.5	8.6	8.6	8.6	8.7	7.7	8	7.3
PHOSPHORUS (P)	mg/L	TOT									0.025		
POTASSIUM (K)	mg/L	DIS	1	1	2	1	1	1	1	1	5	6	5
POTASSIUM (K)	mg/L	TRC									6		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1150	1120	1110	1100	1110	1100	1110	1120	1930	1720	1960
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001		
SODIUM (NA)	mg/L	DIS	278	284	274	272	278	273	274	277	219	234	216
SODIUM (NA)	mg/L	TRC									232		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	41.5	42.9	42.8	40.8	41.1	40.8	41.9	41.6	3.57	3.59	3.49
SULFATE (SO4)	mg/L	NO MEAS	10	10	14	14	13	13	15	11	520	570	589
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	662	665	700	663	680	670	661	650	1440	1480	1400
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	610	650	600	560	630	620	620	580	640	630	605
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									0.32		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1		
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.02	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC									0.03		

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-4	K-4
		sample_date	5/2/2012	9/18/2012	11/15/2012	3/4/2013	5/14/2013	8/6/2013	1/7/2014	3/19/2014	5/14/2014	6/22/2011	10/25/2011
		sys_sample_code	OCC-1205-552	OCC-1209-528	OCC-1211-303	OCC-1303-342	OCC-1305-137	OCC-1308-559	OCC-1401-804	OCC-1403-408	OCC-1405-221	OTRCRK-1106-201	OTRCR-1110-752
		lab_sample_id	H12050095-013	H12090328-003	H12110239-004	H13030104-003	H13050294-005	H13080158-010	H14010147-005	H14030299-009	H14050292-022	H11060448-002	H11100414-003
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.3	< 0.1
ALUMINUM (AL)	mg/L	TRC										3.1	
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC										< 0.003	
BARIUM (BA)	mg/L	DIS	0.025	0.023	0.027	0.023	0.023	0.029	0.024	0.024	0.025	0.023	0.02
BARIUM (BA)	mg/L	TRC										0.088	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC										< 0.001	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	750	730	710	710	670	750	750	750	700	500	510
BORON (B)	mg/L	DIS	0.3	0.31	0.39	0.33	0.34	0.31	0.31	0.34	0.33	0.11	0.12
BORON (B)	mg/L	TRC										0.12	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC										< 0.00008	
CALCIUM (CA)	mg/L	DIS	142	138	132	167	141	142	134	128	143	2	2
CALCIUM (CA)	mg/L	TRC										3	
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	15	19
CHLORIDE (CL)	mg/L	NO MEAS	13	11	10	14	14	14	13	14	12	7	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC										0.001	
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC										0.002	
FLUORIDE (F)	mg/L	NO MEAS	0.5	1.4	0.5	0.6	0.6	0.7	0.6	0.6	0.6	2	1.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4
IRON (FE)	mg/L	DIS	0.79	0.91	1.02	0.81	0.85	0.67	0.8	0.81	0.7	0.15	0.05
IRON (FE)	mg/L	TRC										2.04	
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC										0.0035	
MAGNESIUM (MG)	mg/L	DIS	95	96	91	97	96	100	96	96	99	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC										1	
MANGANESE (MN)	mg/L	DIS	0.102	0.094	0.091	0.087	0.086	0.074	0.081	0.079	0.076	0.046	0.027
MANGANESE (MN)	mg/L	TRC										0.081	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT										< 0.00005	
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC										< 0.005	
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002	< 0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC										< 0.01	
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7	6.6	6.7	6.6	6.6	7	6.7	6.7	6.7	8.8	8.8
PHOSPHORUS (P)	mg/L	TOT										0.129	
POTASSIUM (K)	mg/L	DIS	5	5	5	5	5	5	5	5	5	1	1
POTASSIUM (K)	mg/L	TRC										2	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2030	2090	1960	2030	2010	2000	2020	2040	2000	1020	909
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC										< 0.001	
SODIUM (NA)	mg/L	DIS	200	208	195	204	203	186	211	214	209	244	254
SODIUM (NA)	mg/L	TRC										246	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	3.18	3.33	3.2	3.11	3.23	2.92	3.39	3.48	3.29	32.2	40.4
SULFATE (SO4)	mg/L	NO MEAS	580	600	570	640	630	600	620	690	650	100	120
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1450	1330	1330	1330	1390	1380	1390	1450	1450	664	654
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	610	600	580	590	550	610	610	620	570	430	450
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										0.46	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC										< 0.1	
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC										0.01	

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-4	K-4	K-4	K-4	K-4	K-4	K-4	K-4	K-4	K-4	K-5
		sample_date	1/13/2012	5/2/2012	9/18/2012	12/5/2012	3/4/2013	5/14/2013	8/6/2013	1/7/2014	3/19/2014	5/14/2014	6/22/2011
		sys_sample_code	OTRCR-1201-140	OCC-1205-551	OCC-1209-529	OCC-1212-257	OCC-1303-343	OCC-1305-136	OCC-1308-558	OCC-1401-803	OCC-1403-406	OCC-1405-222	OTRCR-1106-014
		lab_sample_id	B12011023-021	H12050095-012	H12090328-004	H12120120-019	H13030104-004	H13050294-004	H13080158-009	H14010147-004	H14030299-007	H14050292-023	H11060450-014
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.4	0.4	< 0.1	0.1	< 0.1	0.3	< 0.1	0.555	0.079	0.27	< 0.1
ALUMINUM (AL)	mg/L	TRC											0.3
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.002	0.001	< 0.001	< 0.003
ARSENIC (AS)	mg/L	TRC											< 0.003
BARIUM (BA)	mg/L	DIS	0.022	0.017	0.021	0.022	0.022	0.021	0.022	0.017	0.023	0.02	0.096
BARIUM (BA)	mg/L	TRC											0.101
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001
BERYLLIUM (BE)	mg/L	TRC											< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	502	480	480	470	460	430	490	480	490	480	840
BORON (B)	mg/L	DIS	0.1	0.11	0.11	0.12	0.11	0.13	0.11	0.11	0.13	0.11	0.16
BORON (B)	mg/L	TRC											0.16
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008
CADMIUM (CD)	mg/L	TRC											< 0.00008
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC											2
CARBONATE AS CO3	mg/L	NO MEAS	23	29	29	41	31	28	31	30	27	16	18
CHLORIDE (CL)	mg/L	NO MEAS	8	8	7	7	9	9	9	9	9	7	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											< 0.001
FLUORIDE (F)	mg/L	NO MEAS	1.5	2	3.6	1.5	1.4	1.6	1.5	1.4	1.5	1.6	1.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	0.13	0.16	< 0.05	< 0.05	< 0.05	0.12	< 0.05	0.21	0.06	0.09	0.21
IRON (FE)	mg/L	TRC											0.36
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	0.0012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0004	< 0.0003	< 0.0003	< 0.0005
LEAD (PB)	mg/L	TRC											< 0.0005
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1
MAGNESIUM (MG)	mg/L	TRC											1
MANGANESE (MN)	mg/L	DIS	0.023	0.028	0.016	0.017	0.018	0.02	0.019	0.014	0.013	0.014	0.11
MANGANESE (MN)	mg/L	TRC											0.096
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00001	< 0.000005	< 0.000005	< 0.0001
MERCURY (HG)	mg/L	TOT											< 0.0001
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC											< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002	< 0.002	< 0.01
NICKEL (NI)	mg/L	TRC											< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.5	8.4	8.5	8.5	8.6	8.6	8.6	8.7	8.6	8.7	8.6
PHOSPHORUS (P)	mg/L	TOT											0.115
POTASSIUM (K)	mg/L	DIS	1	1	1	1	1	1	1	1	1	1	2
POTASSIUM (K)	mg/L	TRC											2
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1060	1070	1100	1070	1070	1060	1060	1070	1080	1050	1170
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											< 0.001
SODIUM (NA)	mg/L	DIS	261	248	259	261	253	268	253	252	253	249	306
SODIUM (NA)	mg/L	TRC											311
SODIUM ADSORPTION RATIO	unitless	NO MEAS	41.3	40.5	43.8	44	39.9	44.5	41.6	42.4	43	41	38.7
SULFATE (SO4)	mg/L	NO MEAS	127	120	120	110	130	120	120	120	140	130	< 2
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	659	694	643	653	572	655	651	608	665	666	806
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	450	440	440	460	420	400	450	450	450	420	720
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											0.22
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1
VANADIUM (V)	mg/L	TRC											< 0.1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01
ZINC (ZN)	mg/L	TRC											< 0.01

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-5	K-5	K-5	K-5	K-5	K-5	K-5	K-5	K-5	K-5	K-5
		sample_date	10/21/2011	1/24/2012	4/24/2012	9/5/2012	12/5/2012	3/5/2013	5/14/2013	8/6/2013	11/27/2013	3/27/2014	5/13/2014
		sys_sample_code	OTRCR-1110-329	OTRCR-1201-146	OCC-1204-513	OCC-1209-709	OCC-1212-254	OCC-1303-351	OCC-1305-141	OCC-1308-553	OCC-1311-312	OCC-1403-933	OCC-1405-210
		lab_sample_id	H11100335-030	H12010303-006	H12040471-014	H12090092-010	H12120120-016	H13030104-012	H13050294-009	H13080158-004	H13110522-013	H14030412-019	H14050292-011
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.022	0.012	< 0.009
ALUMINUM (AL)	mg/L	TRC											
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC											
BARIUM (BA)	mg/L	DIS	0.102	0.103	0.104	0.109	0.117	0.112	0.115	0.112	0.107	0.119	0.122
BARIUM (BA)	mg/L	TRC											
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC											
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	860	780	860	850	820	820	750	870	860	870	860
BORON (B)	mg/L	DIS	0.16	0.16	0.16	0.16	0.18	0.17	0.2	0.16	0.16	0.16	0.16
BORON (B)	mg/L	TRC											
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC											
CALCIUM (CA)	mg/L	DIS	2	2	2	2	3	3	3	2	2	2	3
CALCIUM (CA)	mg/L	TRC											
CARBONATE AS CO3	mg/L	NO MEAS	12	21	27	23	55	30	36	30	22	23	7
CHLORIDE (CL)	mg/L	NO MEAS	8	9	9	8	8	11	11	10	11	10	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											
FLUORIDE (F)	mg/L	NO MEAS	1.4	1.4	1.3	1.4	1.4	1.3	1.5	1.6	1.4	1.3	1.5
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.11	0.19	0.23	0.25	0.24	0.28	0.2	0.18	0.15	0.16	0.15
IRON (FE)	mg/L	TRC											
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC											
MAGNESIUM (MG)	mg/L	DIS	1	< 1	< 1	< 1	1	1	1	< 1	< 1	1	1
MAGNESIUM (MG)	mg/L	TRC											
MANGANESE (MN)	mg/L	DIS	0.031	0.032	0.035	0.026	0.028	0.03	0.02	0.022	0.011	0.012	0.013
MANGANESE (MN)	mg/L	TRC											
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005
MERCURY (HG)	mg/L	TOT											
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC											
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC											
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2.32	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.2	8.2	7.8	7.8	7.8	7.9	8.1	8.1	8.2	8	8.1
PHOSPHORUS (P)	mg/L	TOT											
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC											
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1180	1320	1290	1200	1290	1290	1270	1280	1260	1260	1280
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											
SODIUM (NA)	mg/L	DIS	315	311	311	319	339	325	336	336	322	323	331
SODIUM (NA)	mg/L	TRC											
SODIUM ADSORPTION RATIO	unitless	NO MEAS	43.4	43.4	44.6	44.1	42.6	42.7	44.4	46	44.9	43.7	42.3
SULFATE (SO4)	mg/L	NO MEAS	< 2	< 1	< 1	< 1	5	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	766	784	820	738	764	715	772	792	797	770	793
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	730	670	750	730	760	720	680	760	750	750	720
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC											
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC											

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	K-6	K-6	K-6	K-6	K-6	K-6	K-6	K-6	K-6	K-6	K-6
		sample_date	6/22/2011	10/25/2011	1/13/2012	5/2/2012	9/18/2012	12/5/2012	3/4/2013	5/14/2013	8/6/2013	1/7/2014	3/19/2014
		sys_sample_code	OTRCRK-1106-200	OTRCR-1110-751	OTRCR-1201-137	OCC-1205-550	OCC-1209-526	OCC-1212-258	OCC-1303-341	OCC-1305-134	OCC-1308-556	OCC-1401-801	OCC-1403-410
		lab_sample_id	H11060448-001	H11100414-002	B12011023-018	H12050095-011	H12090328-001	H12120120-020	H13030104-002	H13050294-002	H13080158-007	H14010147-002	H14030299-011
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.3										
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003										
BARIUM (BA)	mg/L	DIS	0.031	0.024	0.023	0.021	0.017	0.019	0.016	0.017	0.017	0.016	0.017
BARIUM (BA)	mg/L	TRC	0.037										
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001										
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1100	1200	1150	1200	1100	990	1100	970	1200	1100	1100
BORON (B)	mg/L	DIS	0.22	0.23	0.2	0.21	0.21	0.22	0.21	0.24	0.21	0.21	0.22
BORON (B)	mg/L	TRC	0.23										
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008										
CALCIUM (CA)	mg/L	DIS	73	104	87	84	77	74	64	68	69	63	57
CALCIUM (CA)	mg/L	TRC	75										
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 4	< 1	11	61	< 1	21	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	14	180	14	16	12	25	18	17	16	19	18
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001										
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.001										
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.8	0.8	0.8	< 1.0	0.8	0.9	0.9	0.9	0.8	0.8
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.89	0.88	0.66	0.64	0.59	0.53	0.73	0.94	0.7	0.53	0.61
IRON (FE)	mg/L	TRC	1.12										
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	0.0016										
MAGNESIUM (MG)	mg/L	DIS	72	82	81	80	75	75	63	67	68	66	69
MAGNESIUM (MG)	mg/L	TRC	73										
MANGANESE (MN)	mg/L	DIS	0.294	0.16	0.099	0.09	0.08	0.096	0.08	0.104	0.096	0.083	0.062
MANGANESE (MN)	mg/L	TRC	0.294										
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00001	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005										
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01										
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.1	7.6	7.5	7.6	7.6	7.5	7.6	7.6	7.6	7.4
PHOSPHORUS (P)	mg/L	TOT	0.035										
POTASSIUM (K)	mg/L	DIS	6	8	8	7	7	7	7	6	6	6	6
POTASSIUM (K)	mg/L	TRC	6										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3140	3030	3520	3490	3510	3350	3170	3090	3100	3020	3070
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001										
SODIUM (NA)	mg/L	DIS	624	681	721	667	659	676	616	605	589	594	607
SODIUM (NA)	mg/L	TRC	608										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	12.1	12.1	13.4	12.5	12.8	13.2	13.1	12.5	12.1	12.5	12.8
SULFATE (SO4)	mg/L	NO MEAS	880	1000	1200	1100	910	850	900	870	840	820	890
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2310	2390	2530	2470	2160	2180	2050	2090	2150	2070	2110
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	900	950	944	960	940	920	880	830	950	930	940
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.9										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01										

* - REPORTED AS TRC

TABLE 2-10
OTTER CREEK MINE BASELINE REPORT 304E
KNOBLOCH COAL RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

			sys_loc_code sample_date sys_sample_code lab_sample_id	K-6 5/14/2014 OCC-1405-223 H14050292-024				
chemical_name	result_unit	fraction	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.009	4.4	0.175	232	83
ALUMINUM (AL)	mg/L	TRC		0.1	79.1	9.7	23	17
ARSENIC (AS)	mg/L	DIS	< 0.001	0.001	0.004	0.003	232	6
ARSENIC (AS)	mg/L	TRC		0.003	0.028	0.005	23	7
BARIUM (BA)	mg/L	DIS	0.016	0.008	0.244	0.059	232	232
BARIUM (BA)	mg/L	TRC		0.015	29.6	1.814	23	23
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	0.0008	0.003	0.0010	231	1
BERYLLIUM (BE)	mg/L	TRC		0.0008	0.013	0.0019	22	4
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1000	330	1500	873	232	232
BORON (B)	mg/L	DIS	0.22	0.09	0.67	0.19	232	232
BORON (B)	mg/L	TRC		0.09	0.72	0.23	23	23
CADMIUM (CD)	mg/L	DIS	< 0.00003	0.00003	0.00014	0.00007	232	2
CADMIUM (CD)	mg/L	TRC		0.00004	0.0008	0.00013	23	6
CALCIUM (CA)	mg/L	DIS	62	1	199	41	232	232
CALCIUM (CA)	mg/L	TRC		2	219	57	23	23
CARBONATE AS CO3	mg/L	NO MEAS	< 1	1	200	24	232	168
CHLORIDE (CL)	mg/L	NO MEAS	12	5	180	15	232	230
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	0.021	0.001	232	25
CHROMIUM (CR)	mg/L	TRC		0.001	0.044	0.005	23	12
COPPER (CU)	mg/L	DIS	< 0.001	0.001	0.011	0.001	232	26
COPPER (CU)	mg/L	TRC		0.001	0.059	0.010	23	18
FLUORIDE (F)	mg/L	NO MEAS	0.9	0.1	5	1.2	232	228
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	1	4	2	213	0
IRON (FE)	mg/L	DIS	0.76	0.02	2.79	0.35	232	193
IRON (FE)	mg/L	TRC		0.05	37.8	5.57	23	23
LEAD (PB)	mg/L	DIS	< 0.0003	0.0003	0.0032	0.0005	232	14
LEAD (PB)	mg/L	TRC		0.0005	0.0788	0.0104	23	15
MAGNESIUM (MG)	mg/L	DIS	61	1	443	28	232	141
MAGNESIUM (MG)	mg/L	TRC		1	473	52	23	22
MANGANESE (MN)	mg/L	DIS	0.063	0.005	0.336	0.045	232	218
MANGANESE (MN)	mg/L	TRC		0.006	0.572	0.139	23	23
MERCURY (HG)	mg/L	DIS	< 0.000005	0.000005	0.00018	0.000040	231	4
MERCURY (HG)	mg/L	TOT		0.0000096	0.00013	0.0000657	23	6
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.005	0.013	0.005	232	2
MOLYBDENUM (MO)	mg/L	TRC		0.005	0.005	0.005	23	2
NICKEL (NI)	mg/L	DIS	< 0.002	0.002	0.01	0.008	232	6
NICKEL (NI)	mg/L	TRC		0.002	0.04	0.012	23	4
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.01	2.32	0.03	232	22
pH - LAB	s.u.	NO MEAS	7.3	6.6	8.8	8.1	232	232
PHOSPHORUS (P)	mg/L	TOT		0.006	0.579	0.153	18	18
POTASSIUM (K)	mg/L	DIS	6	1	20	4	232	232
POTASSIUM (K)	mg/L	TRC		2	22	7	23	23
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2920	909	6900	2489	232	232
SELENIUM (SE)	mg/L	DIS	< 0.001	0.001	0.016	0.001	232	6
SELENIUM (SE)	mg/L	TRC		0.001	0.013	0.002	23	2
SODIUM (NA)	mg/L	DIS	575	186	1460	548	232	232
SODIUM (NA)	mg/L	TRC		232	1450	611	23	23
SODIUM ADSORPTION RATIO	unitless	NO MEAS	12.4	2.92	61.3	36.43	232	232
SULFATE (SO4)	mg/L	NO MEAS	750	1	3100	658	232	192
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2080	572	5630	1727	232	232
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	840	310	1210	755	232	231
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.22	14	1.63	18	18
VANADIUM (V)	mg/L	DIS	< 0.01	0.01	0.1	0.08	232	0
VANADIUM (V)	mg/L	TRC		0.01	0.1	0.09	23	2
ZINC (ZN)	mg/L	DIS	< 0.008	0.008	0.09	0.011	232	20
ZINC (ZN)	mg/L	TRC		0.01	0.152	0.030	23	12

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U	B10-U
		sample_date	3/10/2011	6/22/2011	10/17/2011	1/5/2012	4/27/2012	9/18/2012	11/29/2012	3/6/2013	5/9/2013	7/24/2013	12/11/2013
		sys_sample_code	OTC-1103-100	OTRCRK-1106-204	OTRCR-1110-304	OTRCR-1201-116	OCC-1204-539	OCC-1209-520	OCC-1211-226	OCC-1303-217	OCC-1305-124	OCC-1307-108	OCC-1312-109
		lab_sample_id	151538001	H11060448-003	H11100335-005	H12010106-017	H12040492-008	H12090326-009	H12120005-017	H13030123-015	H13050214-025	H13070514-009	H13120229-010
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.14	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.69	0.5									
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003									
BARIUM (BA)	mg/L	DIS	0.11	0.118	0.118	0.126	0.125	0.123	0.128	0.131	0.134	0.139	0.129
BARIUM (BA)	mg/L	TRC	0.13	0.129									
BERYLLIUM (BE)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC		< 0.001									
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	651	820	890	800	800	780	790	750	710	800	800
BORON (B)	mg/L	DIS	0.15	0.15	0.15	0.16	0.15	0.15	0.15	0.16	0.16	0.16	0.16
BORON (B)	mg/L	TRC	0.14	0.15									
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008									
CALCIUM (CA)	mg/L	DIS	4.2	3	3	3	3	3	3	3	3	3	3
CALCIUM (CA)	mg/L	TRC	3	4									
CARBONATE AS CO3	mg/L	NO MEAS	18.6	15	< 4	24	32	32	39	40	31	35	36
CHLORIDE (CL)	mg/L	NO MEAS	61	59	64	61	63	62	59	65	63	62	65
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.001	< 0.001									
COPPER (CU)	mg/L	DIS	0.0011	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.0021	0.001									
FLUORIDE (F)	mg/L	NO MEAS	2.4	2	2	2	2	2.3	2.2	2	2.4	2.4	2.2
HYDROXIDE (OH)	mg/L	NO MEAS			< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.089	0.12	< 0.05	< 0.05	0.05	0.05	0.05	< 0.05	< 0.05	0.05	0.07
IRON (FE)	mg/L	TRC	0.54	0.46									
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC	0.00077	0.0005									
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC	1.1	1									
MANGANESE (MN)	mg/L	DIS	0.017	0.044	0.04	0.038	0.036	0.029	0.026	0.027	0.028	0.033	0.039
MANGANESE (MN)	mg/L	TRC	0.019	0.052									
MERCURY (HG)	mg/L	DIS		< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT	0.00000219	< 0.00005									
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005									
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01									
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.5	8.6	8.5	8.5	8.6	8.3	8.3	8.3	8.2	8.3	8.4
PHOSPHORUS (P)	mg/L	TOT		0.093									
POTASSIUM (K)	mg/L	DIS	2	2	2	2	2	2	2	2	2	2	2
POTASSIUM (K)	mg/L	TRC	2.2	2									
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1380	1320	1280	1410	1380	1430	1380	1380	1390	1380	1420
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001									
SODIUM (NA)	mg/L	DIS	334	340	334	342	329	337	339	325	334	336	341
SODIUM (NA)	mg/L	TRC	330	336									
SODIUM ADSORPTION RATIO	unitless	NO MEAS	43.8	37.7	42.5	45.6	42.3	45	45	43	45	46.1	43.6
SULFATE (SO4)	mg/L	NO MEAS	< 10	< 2	< 2	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	825	798	817	776	844	800	820	746	841	808	832
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	670	690	730	700	710	690	710	680	630	720	710
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.5									
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1									
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01									

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B10-U	B10-U	B11-U	B11-U	B11-U	B11-U	B11-U	B11-U	B11-U	B11-U	B11-U
		sample_date	3/25/2014	5/14/2014	6/24/2011	10/20/2011	1/26/2012	4/25/2012	9/6/2012	11/28/2012	3/5/2013	5/7/2013	7/24/2013
		sys_sample_code	OCC-1403-921	OCC-1405-026	OTRCRK-1106-206	OTRCR-1110-312	OTRCR-1201-144	OCC-1204-514	OCC-1209-506	OCC-1211-224	OCC-1303-215	OCC-1305-110	OCC-1307-113
		lab_sample_id	H14030412-007	H14050297-007	H11060448-007	H11100335-013	H12010303-004	H12040471-015	H12090100-007	H12120005-015	H13030123-013	H13050214-011	H13070514-014
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.009	0.1	< 0.1	< 0.1	0.2	0.2	< 0.1	< 0.1	0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC			1								
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC			< 0.003								
BARIUM (BA)	mg/L	DIS	0.139	0.134	0.056	0.058	0.06	0.058	0.058	0.061	0.063	0.064	0.068
BARIUM (BA)	mg/L	TRC			0.072								
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC			< 0.001								
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	800	760	600	670	550	600	600	600	560	540	610
BORON (B)	mg/L	DIS	0.16	0.16	0.11	0.11	0.11	0.1	0.12	0.11	0.11	0.12	0.12
BORON (B)	mg/L	TRC			0.12								
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC			< 0.00008								
CALCIUM (CA)	mg/L	DIS	3	3	2	2	2	2	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC			3								
CARBONATE AS CO3	mg/L	NO MEAS	31	26	26	< 4	26	36	34	39	47	32	34
CHLORIDE (CL)	mg/L	NO MEAS	67	66	8	8	9	9	8	7	11	10	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC			< 0.001								
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC			0.002								
FLUORIDE (F)	mg/L	NO MEAS	2	2.4	2	2	1.7	1.6	1.8	1.6	1.5	1.8	4.1
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1		< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.06	0.06	0.06	0.08	< 0.05	0.06	0.06	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC			0.48								
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC			0.0007								
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC			< 1								
MANGANESE (MN)	mg/L	DIS	0.035	0.033	0.016	0.008	0.005	0.006	0.01	0.005	< 0.005	0.007	< 0.005
MANGANESE (MN)	mg/L	TRC			0.017								
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT			< 0.00005								
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC			< 0.005								
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC			< 0.01								
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.4	8.8	8.8	8.7	8.3	8.5	8.5	8.5	8.5	8.6
PHOSPHORUS (P)	mg/L	TOT			0.179								
POTASSIUM (K)	mg/L	DIS	2	2	1	1	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC			1								
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1370	1400	931	900	1000	977	916	967	968	980	983
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC			< 0.001								
SODIUM (NA)	mg/L	DIS	343	324	247	235	237	231	237	244	233	245	237
SODIUM (NA)	mg/L	TRC			242								
SODIUM ADSORPTION RATIO	unitless	NO MEAS	45.4	43.5	34.1	37.3	37.1	37	37.6	38	37.1	38.6	37
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	2	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	813	793	614	508	588	622	571	584	526	564	574
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	710	670	540	550	500	550	550	560	530	500	560
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			0.38								
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC			< 0.1								
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC			< 0.01								

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B11-U	B11-U	B11-U	B12-U	B1-U	B1-U	B1-U	B1-U	B1-U	B1-U	B1-U
		sample_date	11/27/2013	3/20/2014	5/6/2014	6/17/2014	6/23/2011	10/25/2011	1/3/2012	4/24/2012	9/18/2012	12/5/2012	3/7/2013
		sys_sample_code	OCC-1311-315	OCC-1403-914	OCC-1405-014	OCC-1406-441	OTRCRK-1106-212	OTRCR-1110-333	OTRCR-1201-103	OCC-1204-508	OCC-1209-530	OCC-1212-250	OCC-1303-355
		lab_sample_id	H13110522-016	H14030296-015	H14050154-014	H14060425-002	H11060448-013	H11100411-005	H12010106-004	H12040471-009	H12090328-005	H12120120-012	H13030183-001
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.092	0.011	< 0.009	0.922	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC				7.14	0.6						
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.006	< 0.003	< 0.003	0.003	< 0.003	< 0.003	0.003	0.003
ARSENIC (AS)	mg/L	TRC				0.007	0.013						
BARIUM (BA)	mg/L	DIS	0.062	0.066	0.066	0.022	0.032	0.025	0.022	0.025	0.026	0.029	0.027
BARIUM (BA)	mg/L	TRC				0.183	0.05						
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC				< 0.0008	< 0.001						
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	600	610	610	370	350	360	350	350	340	320	340
BORON (B)	mg/L	DIS	0.11	0.11	0.11	0.1	1.18	1.16	1.36	1.18	1.11	1.19	1.19
BORON (B)	mg/L	TRC				0.11	1.16						
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC				0.00004	0.00014						
CALCIUM (CA)	mg/L	DIS	2	2	2	4	59	66	65	65	63	65	67
CALCIUM (CA)	mg/L	TRC				6	60						
CARBONATE AS CO3	mg/L	NO MEAS	37	31	18	8	< 4	< 4	< 1	2	4	23	4
CHLORIDE (CL)	mg/L	NO MEAS	11	10	8	8	6	7	6.5	7	6	5	8
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC				0.003	0.001						
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC				0.004	0.002						
FLUORIDE (F)	mg/L	NO MEAS	1.7	1.7	1.6	1	1.3	1.2	1.3	1.3	3.2	1.3	1.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1		< 4	< 1	< 4	< 1	< 1	< 4
IRON (FE)	mg/L	DIS	0.06	0.02	0.02	0.23	0.13	0.12	0.17	0.15	0.16	0.16	0.15
IRON (FE)	mg/L	TRC				2.94	1.52						
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC				0.0051	0.0036						
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	2	97	93	98	99	96	103	104
MAGNESIUM (MG)	mg/L	TRC				3	96						
MANGANESE (MN)	mg/L	DIS	< 0.005	< 0.005	< 0.005	0.011	0.037	0.031	0.031	0.023	0.026	0.028	0.026
MANGANESE (MN)	mg/L	TRC				0.045	0.404						
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT				0.0000087*	< 0.00005						
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	0.018	0.018	0.019	0.018	0.017	0.019	0.018
MOLYBDENUM (MO)	mg/L	TRC				< 0.005	0.018						
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC				0.003	< 0.01						
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	0.09	0.22	0.18	0.25	< 0.01	0.47	0.51
pH - LAB	s.u.	NO MEAS	8.7	8.6	8.6	8.6	8.2	7.5	8	7.8	7.8	7.7	7.7
PHOSPHORUS (P)	mg/L	TOT					0.014						
POTASSIUM (K)	mg/L	DIS	1	1	1	2	17	19	19	19	19	20	19
POTASSIUM (K)	mg/L	TRC				3	18						
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	961	973	963	1600	1330	1230	1470	1430	1440	1430	1440
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001
SELENIUM (SE)	mg/L	TRC				< 0.001	< 0.001						
SODIUM (NA)	mg/L	DIS	240	234	242	335	100	95	96	96	101	102	99
SODIUM (NA)	mg/L	TRC				348	98						
SODIUM ADSORPTION RATIO	unitless	NO MEAS	38.1	39.3	38.1	34.5	1.83	1.77	1.76	1.76	1.86	1.84	1.76
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	< 1	450	510	500	510	520	520	500	550
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	572	583	567	956	1010	942	916	1000	970	959	808
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	550	550	530	320	280	290	280	290	290	300	290
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS					< 0.05						
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC				< 0.01	< 0.1						
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC				0.015	< 0.01						

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B1-U	B1-U	B1-U	B1-U	B1-U	B2-U	B2-U	B2-U	B2-U	B2-U	B2-U
		sample_date	5/15/2013	8/6/2013	12/10/2013	3/18/2014	5/15/2014	6/29/2011	10/26/2011	1/11/2012	5/2/2012	9/6/2012	11/26/2012
		sys_sample_code	OCC-1305-145	OCC-1308-366	OCC-1312-102	OCC-1403-401	OCC-1405-039	OTRCR-1106-301	OTRCR-1110-338	OTRCR-1201-125	OCC-1205-548	OCC-1209-511	OCC-1211-210
		lab_sample_id	H13050294-014	H13080121-006	H13120229-003	H14030299-002	H14050297-020	H11070022-002	H11100411-010	B12011023-006	H12050095-009	H12090100-012	H12120005-001
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC						0.7					
ARSENIC (AS)	mg/L	DIS	0.003	0.004	0.004	0.004	0.003	0.009	0.011	0.01	0.008	0.003	0.005
ARSENIC (AS)	mg/L	TRC						0.01					
BARIUM (BA)	mg/L	DIS	0.028	0.031	0.031	0.037	0.036	0.045	0.055	0.057	0.059	0.061	0.063
BARIUM (BA)	mg/L	TRC						0.051					
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC						< 0.001					
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	310	360	370	370	340	700	720	695	710	690	720
BORON (B)	mg/L	DIS	1.22	1.02	1.17	1.16	1.19	0.14	0.14	0.12	0.13	0.14	0.13
BORON (B)	mg/L	TRC						0.14					
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC						< 0.00008					
CALCIUM (CA)	mg/L	DIS	71	74	67	65	74	2	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC						2					
CARBONATE AS CO3	mg/L	NO MEAS	8	2	< 1	< 1	4	28	32	29	35	35	37
CHLORIDE (CL)	mg/L	NO MEAS	7	7	7	8	6	33	33	34	33	32	30
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC						< 0.001					
COPPER (CU)	mg/L	DIS	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC						< 0.001					
FLUORIDE (F)	mg/L	NO MEAS	1.4	1.2	1.2	1.3	1.3	2	2	2.2	2	2.1	2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 4	< 4	< 4	< 4	< 1	< 1
IRON (FE)	mg/L	DIS	0.15	0.15	0.17	0.17	0.16	0.08	0.06	0.09	0.06	0.05	0.05
IRON (FE)	mg/L	TRC						0.34					
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	0.0013	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC						0.0009					
MAGNESIUM (MG)	mg/L	DIS	103	104	100	106	113	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC						< 1					
MANGANESE (MN)	mg/L	DIS	0.028	0.03	0.026	0.028	0.024	0.028	0.044	0.042	0.042	0.029	0.029
MANGANESE (MN)	mg/L	TRC						0.031					
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT						< 0.0001					
MOLYBDENUM (MO)	mg/L	DIS	0.017	0.018	0.018	0.018	0.018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC						< 0.005					
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC						< 0.01					
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.56	0.54	0.62	0.57	0.59	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.8	7.9	7.6	7.7	7.9	8.6	8.7	8.4	8.2	8.3	8.4
PHOSPHORUS (P)	mg/L	TOT											
POTASSIUM (K)	mg/L	DIS	19	20	20	19	20	1	1	2	1	1	1
POTASSIUM (K)	mg/L	TRC						1					
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1420	1410	1510	1500	1510	1120	1080	1200	1190	1120	1200
SELENIUM (SE)	mg/L	DIS	0.002	0.002	0.002	0.002	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC						< 0.001					
SODIUM (NA)	mg/L	DIS	105	104	99	108	109	286	295	311	285	294	296
SODIUM (NA)	mg/L	TRC						295					
SODIUM ADSORPTION RATIO	unitless	NO MEAS	1.86	1.82	1.79	1.92	1.85	43.9	44.8	48.6	45.1	45.5	46
SULFATE (SO4)	mg/L	NO MEAS	530	550	560	620	590	< 2	< 2	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	998	1030	1070	1100	1040	636	723	695	725	671	711
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	270	300	300	310	290	620	640	618	640	630	650
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC						< 0.1					
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC						< 0.01					

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B2-U	B2-U	B2-U	B2-U	B2-U	B2-U	B3-U	B3-U	B3-U	B3-U	B3-U
		sample_date	3/7/2013	5/9/2013	8/6/2013	1/8/2014	3/25/2014	5/13/2014	8/24/2011	10/25/2011	1/4/2012	4/23/2012	9/17/2012
		sys_sample_code	OCC-1303-221	OCC-1305-132	OCC-1308-368	OCC-1401-106	OCC-1403-916	OCC-1405-025	OTRCR-1108-809	OTRCR-1110-331	OTRCR-1201-107	OCC-1204-503	OCC-1209-513
		lab_sample_id	H13030181-002	H13050214-033	H13080121-008	H14010145-007	H14030412-002	H14050297-006	H11080476-010	H11100411-003	H12010106-008	H12040471-004	H12090326-002
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.2	0.1	0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC							0.7				
ARSENIC (AS)	mg/L	DIS	0.004	0.004	0.004	0.003	0.003	0.002	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC							< 0.003				
BARIUM (BA)	mg/L	DIS	0.067	0.068	0.068	0.068	0.07	0.07	0.057	0.054	0.06	0.058	0.067
BARIUM (BA)	mg/L	TRC							0.069				
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC							< 0.001				
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	680	620	710	700	710	670	720	860	740	740	730
BORON (B)	mg/L	DIS	0.14	0.15	0.13	0.15	0.14	0.14	0.16	0.15	0.16	0.15	0.14
BORON (B)	mg/L	TRC							0.17				
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC							< 0.00008				
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	3	3	3	3	2
CALCIUM (CA)	mg/L	TRC							3				
CARBONATE AS CO3	mg/L	NO MEAS	50	43	36	34	31	24	31	< 4	30	36	35
CHLORIDE (CL)	mg/L	NO MEAS	34	34	35	35	38	35	13	14	14	14	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC							< 0.001				
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC							0.009				
FLUORIDE (F)	mg/L	NO MEAS	1.8	2.1	2	2.4	1.9	2.2	2	2	2	1.9	2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1	< 4	< 1
IRON (FE)	mg/L	DIS	0.06	0.06	0.06	0.07	0.07	0.07	0.27	0.09	0.08	0.05	< 0.05
IRON (FE)	mg/L	TRC							0.59				
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC							0.001				
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC							1				
MANGANESE (MN)	mg/L	DIS	0.028	0.029	0.029	0.023	0.021	0.017	0.042	0.03	0.023	0.02	0.017
MANGANESE (MN)	mg/L	TRC							0.043				
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT							< 0.00005				
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC							< 0.005				
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC							< 0.01				
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.4	8.5	8.5	8.5	8.6	8.7	7.7	8.6	8.3	8.4
PHOSPHORUS (P)	mg/L	TOT							0.117				
POTASSIUM (K)	mg/L	DIS	1	1	1	1	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC							1				
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1200	1210	1170	1170	1170	1190	1100	1080	1200	1180	1210
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC							< 0.001				
SODIUM (NA)	mg/L	DIS	288	291	292	292	293	288	291	299	282	288	294
SODIUM (NA)	mg/L	TRC							298				
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44.8	45	47.1	46.4	47.2	46	38.2	41.1	40.2	40.4	44.1
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	21	6	3	2	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	625	706	713	697	675	684	718	680	688	730	690
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	640	580	640	630	630	590	640	700	660	670	650
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS							0.51				
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC							< 0.1				
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC							< 0.01				

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B3-U	B3-U	B3-U	B3-U	B3-U	B3-U	B3-U	B4-U	B4-U	B4-U	B4-U
		sample_date	11/27/2012	3/9/2013	5/8/2013	7/24/2013	12/10/2013	3/26/2014	5/14/2014	8/25/2011	10/26/2011	1/5/2012	4/24/2012
		sys_sample_code	OCC-1211-216	OCC-1303-231	OCC-1305-121	OCC-1307-114	OCC-1312-100	OCC-1403-925	OCC-1405-034	OTRCR-1108-818	OTRCR-1110-335	OTRCR-1201-100	OCC-1204-506
		lab_sample_id	H12120005-007	H13030181-011	H13050214-022	H13070514-015	H13120229-001	H14030412-011	H14050297-015	H11080476-019	H11100411-007	H12010106-001	H12040471-007
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.1	0.3	0.2	< 0.1	0.077	0.483	0.508	< 0.1	0.3	0.6	0.3
ALUMINUM (AL)	mg/L	TRC								0.4			
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	0.004	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC								0.004			
BARIUM (BA)	mg/L	DIS	0.066	0.067	0.067	0.079	0.075	0.044	0.05	0.023	0.023	0.02	0.015
BARIUM (BA)	mg/L	TRC								0.027			
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC								< 0.001			
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	730	710	650	740	740	740	710	760	860	790	780
BORON (B)	mg/L	DIS	0.15	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.15	0.14
BORON (B)	mg/L	TRC								0.15			
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC								< 0.00008			
CALCIUM (CA)	mg/L	DIS	2	2	2	3	3	2	2	7	7	6	7
CALCIUM (CA)	mg/L	TRC								8			
CARBONATE AS CO3	mg/L	NO MEAS	42	42	40	38	38	35	27	28	< 4	22	32
CHLORIDE (CL)	mg/L	NO MEAS	12	16	14	14	15	15	13	19	18	18	19
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC								< 0.001			
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.003	0.001	0.001
COPPER (CU)	mg/L	TRC								0.012			
FLUORIDE (F)	mg/L	NO MEAS	1.9	1.6	2.1	4.8	1.9	1.7	2	1.2	1.1	1.2	1.1
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1	< 4
IRON (FE)	mg/L	DIS	0.11	0.12	0.08	0.06	0.07	0.23	0.21	0.09	0.23	0.17	0.05
IRON (FE)	mg/L	TRC								0.36			
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC								0.0006			
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	2	2	2
MAGNESIUM (MG)	mg/L	TRC								3			
MANGANESE (MN)	mg/L	DIS	0.015	0.017	0.016	0.012	0.011	0.015	0.014	0.055	0.042	0.028	0.019
MANGANESE (MN)	mg/L	TRC								0.057			
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT								< 0.00005			
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC								0.007			
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC								< 0.01			
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.02	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.4	8.4	8.6	8.5	8.6	8.6	8.6	8.1	8.4	8.2
PHOSPHORUS (P)	mg/L	TOT								0.077			
POTASSIUM (K)	mg/L	DIS	1	1	1	2	2	2	2	3	3	2	2
POTASSIUM (K)	mg/L	TRC								3			
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1160	1180	1180	1170	1190	1160	1170	1940	1980	2230	2250
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC								< 0.001			
SODIUM (NA)	mg/L	DIS	294	284	283	290	286	295	290	492	523	495	509
SODIUM (NA)	mg/L	TRC								509			
SODIUM ADSORPTION RATIO	unitless	NO MEAS	42	41.3	41.9	41.6	39.3	41.5	41.6	39.9	43.5	43.6	44
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	2	< 1	< 1	< 1	< 1	490	440	440	490
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	712	626	678	671	704	721	711	1390	1420	1330	1520
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	670	650	600	670	670	670	620	670	700	680	690
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS								0.79			
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC								< 0.1			
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC								< 0.01			

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B4-U	B4-U	B4-U	B4-U	B4-U	B4-U	B4-U	B4-U	B5-U	B5-U	B5-U
		sample_date	8/29/2012	11/27/2012	2/25/2013	5/8/2013	7/25/2013	12/11/2013	3/26/2014	5/14/2014	6/23/2011	10/19/2011	1/4/2012
		sys_sample_code	OCC-1208-304	OCC-1211-214	OCC-1302-201	OCC-1305-119	OCC-1307-122	OCC-1312-103	OCC-1403-923	OCC-1405-031	OTRCRK-1106-210	OTRCR-1110-317	OTRCR-1201-108
		lab_sample_id	H12080488-005	H12120005-005	H13020319-002	H13050214-020	H13070514-023	H13120229-005	H14030412-009	H14050297-012	H11060448-011	H11100335-018	H12010106-009
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.1	0.1	0.5	0.3	0.7	0.674	0.28	0.328	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC									0.6		
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC									< 0.003		
BARIUM (BA)	mg/L	DIS	0.014	0.015	0.018	0.016	0.018	0.015	0.016	0.015	0.076	0.071	0.07
BARIUM (BA)	mg/L	TRC									0.08		
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC									< 0.001		
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	870	780	760	680	790	800	790	730	630	620	630
BORON (B)	mg/L	DIS	0.14	0.13	0.13	0.14	0.14	0.15	0.13	0.13	0.16	0.17	0.18
BORON (B)	mg/L	TRC									0.16		
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC									< 0.00008		
CALCIUM (CA)	mg/L	DIS	6	7	7	6	6	7	6	7	2	2	2
CALCIUM (CA)	mg/L	TRC									2		
CARBONATE AS CO3	mg/L	NO MEAS	< 1	35	26	36	37	29	28	25	25	36	32
CHLORIDE (CL)	mg/L	NO MEAS	17	16	21	18	17	20	20	17	23	24	24
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	0.001	< 0.001	0.002	0.002	< 0.001	0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC									< 0.001		
COPPER (CU)	mg/L	DIS	0.004	< 0.001	< 0.001	0.001	0.003	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC									0.001		
FLUORIDE (F)	mg/L	NO MEAS	1	1.1	1	1.2	1.1	1.1	1	1.1	2	2	2
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4	< 1
IRON (FE)	mg/L	DIS	< 0.05	0.18	0.23	0.09	0.28	0.22	0.11	0.11	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC									0.29		
LEAD (PB)	mg/L	DIS	0.0006	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC									0.0006		
MAGNESIUM (MG)	mg/L	DIS	2	2	2	2	2	2	2	2	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC									< 1		
MANGANESE (MN)	mg/L	DIS	0.015	0.015	0.02	0.017	0.016	0.014	0.015	0.015	0.007	0.007	0.008
MANGANESE (MN)	mg/L	TRC									0.009		
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.000050	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT									< 0.00005		
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC									< 0.005		
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	0.002	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC									< 0.01		
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.03	< 0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.4	8.3	8.2	8.3	8.3	8.2	8.3	8.4	8.7	8.8	8.7
PHOSPHORUS (P)	mg/L	TOT									0.105		
POTASSIUM (K)	mg/L	DIS	2	2	3	2	3	3	2	2	1	1	1
POTASSIUM (K)	mg/L	TRC									1		
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2200	2210	2200	2230	2180	2220	2180	2230	1010	1020	1090
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC									< 0.001		
SODIUM (NA)	mg/L	DIS	507	519	515	507	504	508	530	535	261	257	257
SODIUM (NA)	mg/L	TRC									261		
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44.9	44.8	44.1	45.2	44.4	43.7	47.5	45.9	43.3	45.1	43.7
SULFATE (SO4)	mg/L	NO MEAS	440	480	520	480	430	490	490	520	< 2	< 2	< 5
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1360	1520	1340	1470	1350	1390	1400	1380	634	638	608
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	710	700	670	620	710	700	690	640	560	570	570
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS									0.38		
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC									< 0.1		
ZINC (ZN)	mg/L	DIS	0.06	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC									< 0.01		

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B5-U	B5-U	B5-U	B5-U	B5-U	B5-U	B5-U	B5-U	B5-U	B6-U	B6-U
		sample_date	5/1/2012	8/29/2012	11/28/2012	3/8/2013	5/8/2013	8/6/2013	12/12/2013	3/27/2014	5/5/2014	8/25/2011	10/20/2011
		sys_sample_code	OCC-1205-544	OCC-1208-307	OCC-1211-221	OCC-1303-225	OCC-1305-117	OCC-1308-364	OCC-1312-110	OCC-1403-930	OCC-1405-004	OTRCR-1108-817	OTRCR-1110-322
		lab_sample_id	H12050095-005	H12080488-008	H12120005-012	H13030181-006	H13050214-018	H13080121-004	H13120229-011	H14030412-016	H14050154-004	H11080476-018	H11100335-023
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.2	0.5
ALUMINUM (AL)	mg/L	TRC										6.2	
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC										0.003	
BARIUM (BA)	mg/L	DIS	0.072	0.068	0.072	0.074	0.074	0.074	0.072	0.076	0.076	0.023	0.019
BARIUM (BA)	mg/L	TRC										0.208	
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC										< 0.001	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	630	640	630	610	560	640	630	640	640	590	590
BORON (B)	mg/L	DIS	0.17	0.17	0.16	0.16	0.17	0.15	0.17	0.18	0.16	0.13	0.12
BORON (B)	mg/L	TRC										0.13	
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC										< 0.00008	
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	2	2	2	1	1
CALCIUM (CA)	mg/L	TRC										5	
CARBONATE AS CO3	mg/L	NO MEAS	36	26	39	46	38	37	38	33	15	32	32
CHLORIDE (CL)	mg/L	NO MEAS	26	25	23	29	26	28	27	27	26	11	10
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC										0.001	
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC										0.004	
FLUORIDE (F)	mg/L	NO MEAS	2	2.1	2	1.8	1.9	1.9	2	1.9	2.1	2	2
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 4
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.02	< 0.02	< 0.02	0.41	0.17
IRON (FE)	mg/L	TRC										3.14	
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC										0.0091	
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC										2	
MANGANESE (MN)	mg/L	DIS	0.007	0.008	0.009	0.009	0.01	0.011	0.01	0.01	0.009	< 0.005	0.008
MANGANESE (MN)	mg/L	TRC										0.046	
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT										< 0.00005	
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC										< 0.005	
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC										< 0.01	
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.1	8.5	8.4	8.4	8.5	8.6	8.6	8.6	8.6	8.8	8.8
PHOSPHORUS (P)	mg/L	TOT										0.251	
POTASSIUM (K)	mg/L	DIS	1	1	1	1	1	1	2	1	2	< 1	< 1
POTASSIUM (K)	mg/L	TRC										2	
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1080	1080	1070	1090	1080	1050	1100	1060	1060	864	899
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC										< 0.001	
SODIUM (NA)	mg/L	DIS	263	254	271	261	262	278	268	276	264	226	236
SODIUM (NA)	mg/L	TRC										240	
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44.9	44.3	45.2	45.9	47.4	49.1	45.7	46.8	46.4	43.5	44.9
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	650	607	623	574	615	640	635	613	641	654	614
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	580	570	580	570	520	590	580	580	550	530	540
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										0.46	
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC										< 0.1	
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC										0.01	

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B6-U	B6-U	B6-U	B6-U	B6-U	B6-U	B6-U	B6-U	B6-U	B6-U	B7-U
		sample_date	1/12/2012	5/1/2012	8/29/2012	11/27/2012	3/8/2013	5/8/2013	7/26/2013	1/7/2014	3/26/2014	5/5/2014	6/21/2011
		sys_sample_code	OTRCR-1201-129	OCC-1205-541	OCC-1208-306	OCC-1211-219	OCC-1303-223	OCC-1305-113	OCC-1307-126	OCC-1401-104	OCC-1403-927	OCC-1405-002	OTRCR-1106-001
		lab_sample_id	B12011023-010	H12050095-002	H12080488-007	H12120005-010	H13030181-004	H13050214-014	H13070514-027	H14010145-005	H14030412-013	H14050154-002	H11060450-001
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	0.3	0.2	< 0.1	0.3	0.3	0.3	0.479	1.75	0.383	< 0.1
ALUMINUM (AL)	mg/L	TRC											0.7
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	0.007
ARSENIC (AS)	mg/L	TRC											0.008
BARIUM (BA)	mg/L	DIS	0.023	0.022	0.021	0.024	0.021	0.025	0.025	0.026	0.017	0.023	0.023
BARIUM (BA)	mg/L	TRC											0.039
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001
BERYLLIUM (BE)	mg/L	TRC											< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	579	600	590	590	570	530	600	610	590	610	980
BORON (B)	mg/L	DIS	0.11	0.13	0.13	0.12	0.12	0.13	0.13	0.12	0.13	0.12	0.16
BORON (B)	mg/L	TRC											0.17
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008
CADMIUM (CD)	mg/L	TRC											< 0.00008
CALCIUM (CA)	mg/L	DIS	2	2	2	2	2	2	1	1	1	2	20
CALCIUM (CA)	mg/L	TRC											19
CARBONATE AS CO3	mg/L	NO MEAS	26	30	30	35	42	32	40	35	34	15	21
CHLORIDE (CL)	mg/L	NO MEAS	10	11	10	9	12	11	10	11	11	9	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											< 0.001
FLUORIDE (F)	mg/L	NO MEAS	2.2	2	2	2	1.8	2.1	1.9	2.2	1.7	2	1
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
IRON (FE)	mg/L	DIS	< 0.05	0.12	0.08	0.11	0.12	0.08	0.1	0.18	0.41	0.07	0.09
IRON (FE)	mg/L	TRC											0.46
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0004	0.0018	0.0003	< 0.0005
LEAD (PB)	mg/L	TRC											0.0007
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	6
MAGNESIUM (MG)	mg/L	TRC											5
MANGANESE (MN)	mg/L	DIS	0.005	0.008	< 0.005	< 0.005	0.007	0.007	< 0.005	< 0.005	0.006	0.005	0.303
MANGANESE (MN)	mg/L	TRC											0.308
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	< 0.000005	< 0.00005
MERCURY (HG)	mg/L	TOT											< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.015
MOLYBDENUM (MO)	mg/L	TRC											0.014
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01
NICKEL (NI)	mg/L	TRC											< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.03	< 0.01
pH - LAB	s.u.	NO MEAS	8.5	5.6	8.6	8.4	8.4	8.4	8.6	8.7	8.7	8.7	8.4
PHOSPHORUS (P)	mg/L	TOT											0.055
POTASSIUM (K)	mg/L	DIS	1	1	1	1	1	1	1	1	1	1	4
POTASSIUM (K)	mg/L	TRC											4
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	959	968	977	960	966	972	971	973	963	964	4290
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											< 0.001
SODIUM (NA)	mg/L	DIS	247	236	234	241	248	243	239	241	243	238	1050
SODIUM (NA)	mg/L	TRC											1120
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44.4	43.5	41.9	44.2	45.8	45.3	47.5	45.8	44.8	43.9	53.7
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	577	600	531	606	450	604	603	527	570	588	3130
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	517	540	540	550	540	490	560	550	540	530	840
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											0.83
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1
VANADIUM (V)	mg/L	TRC											< 0.1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01
ZINC (ZN)	mg/L	TRC											< 0.01

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U	B7-U
		sample_date	10/18/2011	1/11/2012	4/27/2012	9/18/2012	11/30/2012	3/4/2013	5/7/2013	7/23/2013	11/26/2013	3/18/2014	5/12/2014
		sys_sample_code	OTRCR-1110-303	OTRCR-1201-126	OCC-1204-535	OCC-1209-521	OCC-1211-237	OCC-1303-206	OCC-1305-107	OCC-1307-103	OCC-1311-305	OCC-1403-900	OCC-1405-017
		lab_sample_id	H11100335-004	B12011023-007	H12040492-001	H12090326-010	H12120005-028	H13030123-004	H13050214-008	H13070514-004	H13110522-006	H14030296-001	H14050297-023
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	0.8	0.1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.072	0.051	0.091
ALUMINUM (AL)	mg/L	TRC											
ARSENIC (AS)	mg/L	DIS	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001
ARSENIC (AS)	mg/L	TRC											
BARIUM (BA)	mg/L	DIS	0.04	0.056	0.107	0.044	0.081	0.048	0.066	0.077	0.066	0.062	0.069
BARIUM (BA)	mg/L	TRC											
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC											
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	690	583	570	550	550	530	490	560	560	570	530
BORON (B)	mg/L	DIS	0.11	0.09	0.1	0.09	0.09	0.1	0.11	0.11	0.09	0.11	0.1
BORON (B)	mg/L	TRC											
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC											
CALCIUM (CA)	mg/L	DIS	3	2	2	1	1	1	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC											
CARBONATE AS CO3	mg/L	NO MEAS	< 4	30	34	35	40	39	36	38	35	30	24
CHLORIDE (CL)	mg/L	NO MEAS	10	9	10	9	8	11	11	10	12	11	9
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC											
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC											
FLUORIDE (F)	mg/L	NO MEAS	2	1.9	2	1.7	4.4	1.6	1.9	1.7	1.8	1.9	1.9
HYDROXIDE (OH)	mg/L	NO MEAS	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	0.27	0.06	0.17	< 0.05	0.09	< 0.05	< 0.05	0.05	0.04	0.03	0.04
IRON (FE)	mg/L	TRC											
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC											
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC											
MANGANESE (MN)	mg/L	DIS	0.029	0.014	0.014	0.018	0.016	0.017	0.018	0.017	0.014	0.016	0.013
MANGANESE (MN)	mg/L	TRC											
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.000005
MERCURY (HG)	mg/L	TOT											
MOLYBDENUM (MO)	mg/L	DIS	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC											
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC											
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.7	8.6	8.8	8.5	8.4	8.6	8.6	8.6	8.8	8.7	8.7
PHOSPHORUS (P)	mg/L	TOT											
POTASSIUM (K)	mg/L	DIS	1	1	1	1	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC											
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1300	1020	999	971	935	946	947	937	929	936	940
SELENIUM (SE)	mg/L	DIS	< 0.001	0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC											
SODIUM (NA)	mg/L	DIS	328	264	247	233	230	227	240	233	238	237	235
SODIUM (NA)	mg/L	TRC											
SODIUM ADSORPTION RATIO	unitless	NO MEAS	46.7	50.6	46.1	46.5	44.3	44.8	44.9	43.6	43.7	42.9	42.4
SULFATE (SO4)	mg/L	NO MEAS	180	42	26	9	9	11	13	11	14	11	8
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	896	612	626	545	573	490	536	561	571	581	572
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	570	528	520	510	520	500	470	520	520	510	480
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC											
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC											

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U	B8-U
		sample_date	8/24/2011	10/19/2011	1/12/2012	4/26/2012	9/5/2012	11/15/2012	3/5/2013	5/6/2013	7/25/2013	11/26/2013	3/19/2014
		sys_sample_code	OTRCR-1108-804	OTRCR-1110-309	OTRCR-1201-127	OCC-1204-528	OCC-1209-503	OCC-1211-203	OCC-1303-209	OCC-1305-104	OCC-1307-118	OCC-1311-307	OCC-1403-905
		lab_sample_id	H11080476-005	H11100335-010	B12011023-008	H12040471-029	H12090100-004	H12110252-004	H13030123-007	H13050214-005	H13070514-019	H13110522-008	H14030296-006
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.023	< 0.009
ALUMINUM (AL)	mg/L	TRC	< 0.1										
ARSENIC (AS)	mg/L	DIS	0.018	0.008	0.007	0.004	0.004	0.003	< 0.003	< 0.003	< 0.003	0.001	< 0.001
ARSENIC (AS)	mg/L	TRC	0.018										
BARIUM (BA)	mg/L	DIS	0.089	0.064	0.065	0.065	0.07	0.073	0.08	0.082	0.086	0.081	0.089
BARIUM (BA)	mg/L	TRC	0.09										
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001										
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	650	700	648	660	640	670	630	600	670	670	680
BORON (B)	mg/L	DIS	0.15	0.14	0.12	0.13	0.14	0.14	0.13	0.15	0.15	0.13	0.14
BORON (B)	mg/L	TRC	0.15										
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008										
CALCIUM (CA)	mg/L	DIS	8	3	3	2	2	2	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC	8										
CARBONATE AS CO3	mg/L	NO MEAS	30	23	29	42	42	37	41	28	42	36	31
CHLORIDE (CL)	mg/L	NO MEAS	37	38	40	40	40	40	42	40	39	41	43
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001										
COPPER (CU)	mg/L	DIS	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.022										
FLUORIDE (F)	mg/L	NO MEAS	3	2	2.6	2	2.4	2.2	2.4	2.4	2.3	2.4	2.6
HYDROXIDE (OH)	mg/L	NO MEAS		< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.02	0.02
IRON (FE)	mg/L	TRC	0.07										
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005										
MAGNESIUM (MG)	mg/L	DIS	9	2	2	1	1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC	9										
MANGANESE (MN)	mg/L	DIS	0.029	0.014	0.013	0.014	0.016	0.015	0.013	0.015	0.014	0.011	0.013
MANGANESE (MN)	mg/L	TRC	0.03										
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005										
MOLYBDENUM (MO)	mg/L	DIS	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	0.005										
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01										
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.6	8.8	8.4	8.3	8.4	8.5	8.5	8.3	8.6	8.6	8.6
PHOSPHORUS (P)	mg/L	TOT	0.062										
POTASSIUM (K)	mg/L	DIS	2	1	2	1	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC	2										
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1090	1070	1160	1200	1090	1160	1160	1160	1190	1140	1160
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001										
SODIUM (NA)	mg/L	DIS	272	272	293	264	271	282	276	288	277	285	280
SODIUM (NA)	mg/L	TRC	280										
SODIUM ADSORPTION RATIO	unitless	NO MEAS	15.4	29.6	35.8	37.6	36.1	40.9	41.5	43.5	43.1	43.4	44.3
SULFATE (SO4)	mg/L	NO MEAS	54	< 2	2	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	754	686	672	704	661	673	638	646	702	665	687
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	580	620	580	610	600	610	580	540	620	610	610
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.64										
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1										
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01										

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B8-U	B9-U	B9-U	B9-U	B9-U	B9-U	B9-U	B9-U	B9-U	B9-U	B9-U
		sample_date	5/13/2014	8/24/2011	10/20/2011	1/24/2012	4/24/2012	9/5/2012	11/29/2012	3/8/2013	5/9/2013	7/23/2013	11/25/2013
		sys_sample_code	OCC-1405-020	OTRCR-1108-808	OTRCR-1110-316	OTRCR-1201-141	OCC-1204-510	OCC-1209-501	OCC-1211-230	OCC-1303-229	OCC-1305-128	OCC-1307-105	OCC-1311-304
		lab_sample_id	H14050297-001	H11080476-009	H11100335-017	H12010303-001	H12040471-011	H12090100-002	H12120005-021	H13030181-012	H13050214-029	H13070514-006	H13110522-005
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.3	0.2	0.5	0.7	1.5	< 0.1	0.4	0.3	0.3	0.026
ALUMINUM (AL)	mg/L	TRC		3.7									
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001
ARSENIC (AS)	mg/L	TRC		< 0.003									
BARIUM (BA)	mg/L	DIS	0.087	0.036	0.044	0.044	0.035	0.063	0.051	0.046	0.047	0.081	0.051
BARIUM (BA)	mg/L	TRC		0.085									
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC		< 0.001									
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	650	640	610	570	630	610	610	610	550	620	630
BORON (B)	mg/L	DIS	0.13	0.12	0.12	0.11	0.11	0.12	0.11	0.12	0.12	0.12	0.11
BORON (B)	mg/L	TRC		0.13									
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC		< 0.00008									
CALCIUM (CA)	mg/L	DIS	2	2	2	3	2	3	2	2	2	2	2
CALCIUM (CA)	mg/L	TRC		3									
CARBONATE AS CO3	mg/L	NO MEAS	21	24	33	21	29	31	36	31	32	34	23
CHLORIDE (CL)	mg/L	NO MEAS	40	26	25	23	26	24	22	27	25	24	27
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC		0.003									
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	0.003	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC		0.009									
FLUORIDE (F)	mg/L	NO MEAS	2.5	2	2	3	3	2.5	2.4	2	2.7	2.6	2.4
HYDROXIDE (OH)	mg/L	NO MEAS	< 1		< 4	< 1	< 4	< 1	< 1	< 1	< 1	< 1	< 1
IRON (FE)	mg/L	DIS	< 0.02	0.5	0.07	0.23	0.14	0.6	0.06	0.17	0.17	0.12	0.03
IRON (FE)	mg/L	TRC		2.2									
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0014	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC		0.003									
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MAGNESIUM (MG)	mg/L	TRC		1									
MANGANESE (MN)	mg/L	DIS	0.011	0.013	0.015	0.026	0.016	0.024	0.012	0.021	0.021	0.026	0.012
MANGANESE (MN)	mg/L	TRC		0.041									
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT		< 0.00005									
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		0.006									
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC		< 0.01									
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.6	8.6	8.7	8.7	8.3	8.4	8.3	8.3	8.4	8.5	8.6
PHOSPHORUS (P)	mg/L	TOT		0.111									
POTASSIUM (K)	mg/L	DIS	2	1	1	1	1	1	1	1	1	1	1
POTASSIUM (K)	mg/L	TRC		2									
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1160	943	979	1070	1050	977	1020	1050	1040	1030	1020
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC		< 0.001									
SODIUM (NA)	mg/L	DIS	280	258	244	252	244	268	251	252	254	247	254
SODIUM (NA)	mg/L	TRC		262									
SODIUM ADSORPTION RATIO	unitless	NO MEAS	44	42.4	40.7	38.2	39.7	35.1	42	40.8	41.7	40.7	41.9
SULFATE (SO4)	mg/L	NO MEAS	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	659	732	594	718	664	597	606	569	620	612	611
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	570	560	550	500	560	550	560	550	500	570	560
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.32									
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC		< 0.1									
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC		0.01									

* - REPORTED AS TRC

TABLE 2-11
OTTER CREEK MINE BASELINE REPORT 304E
UNDERBURDEN RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	B9-U	B9-U					
		sample_date	3/19/2014	5/12/2014					
		sys_sample_code	OCC-1403-910	OCC-1405-018					
		lab_sample_id	H14030296-011	H14050297-024					
chemical_name	result_unit	fraction	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	0.175	0.102	0.009	1.75	0.190	134	58
ALUMINUM (AL)	mg/L	TRC			0.1	7.14	1.77	13	12
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.001	0.001	0.018	0.003	134	31
ARSENIC (AS)	mg/L	TRC			0.003	0.018	0.006	13	7
BARIUM (BA)	mg/L	DIS	0.058	0.054	0.014	0.139	0.059	134	134
BARIUM (BA)	mg/L	TRC			0.027	0.208	0.093	13	13
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	0.0008	0.001	0.0009	133	0
BERYLLIUM (BE)	mg/L	TRC			0.0008	0.001	0.0010	12	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	630	590	310	980	636	134	134
BORON (B)	mg/L	DIS	0.11	0.12	0.09	1.36	0.23	134	134
BORON (B)	mg/L	TRC			0.11	1.16	0.22	13	13
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	0.00003	0.00008	0.00007	134	0
CADMIUM (CD)	mg/L	TRC			0.00004	0.00014	0.00008	13	2
CALCIUM (CA)	mg/L	DIS	2	2	1	74	9	134	134
CALCIUM (CA)	mg/L	TRC			2	60	10	13	13
CARBONATE AS CO3	mg/L	NO MEAS	28	20	1	50	28	134	123
CHLORIDE (CL)	mg/L	NO MEAS	27	18	5	67	23	134	134
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	0.001	0.002	0.001	134	9
CHROMIUM (CR)	mg/L	TRC			0.001	0.003	0.001	13	5
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	0.001	0.004	0.001	134	17
COPPER (CU)	mg/L	TRC			0.001	0.022	0.005	13	11
FLUORIDE (F)	mg/L	NO MEAS	2.5	2.5	1	4.8	2.0	134	134
HYDROXIDE (OH)	mg/L	NO MEAS	< 1	< 1	1	4	2	123	0
IRON (FE)	mg/L	DIS	0.09	0.04	0.02	0.6	0.10	134	98
IRON (FE)	mg/L	TRC			0.07	3.14	1.03	13	13
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	0.0003	0.0018	0.0005	134	7
LEAD (PB)	mg/L	TRC			0.0005	0.0091	0.0021	13	12
MAGNESIUM (MG)	mg/L	DIS	< 1	< 1	1	113	10	134	31
MAGNESIUM (MG)	mg/L	TRC			1	96	10	13	10
MANGANESE (MN)	mg/L	DIS	0.018	0.013	0.005	0.303	0.021	134	124
MANGANESE (MN)	mg/L	TRC			0.009	0.404	0.085	13	13
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.000005	0.000005	0.0001	0.000039	133	0
MERCURY (HG)	mg/L	TOT			0.00000219	0.0001	0.00004699	13	1
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	0.005	0.019	0.006	134	17
MOLYBDENUM (MO)	mg/L	TRC			0.005	0.018	0.007	13	5
NICKEL (NI)	mg/L	DIS	< 0.002	< 0.002	0.002	0.01	0.008	134	1
NICKEL (NI)	mg/L	TRC			0.003	0.01	0.009	13	1
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	0.01	0.62	0.04	134	18
pH - LAB	s.u.	NO MEAS	8.6	8.7	5.6	8.8	8.4	134	134
PHOSPHORUS (P)	mg/L	TOT			0.014	0.251	0.106	10	10
POTASSIUM (K)	mg/L	DIS	1	1	1	20	3	134	132
POTASSIUM (K)	mg/L	TRC			1	18	3	13	13
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1040	3320	864	4290	1268	134	134
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	0.001	0.005	0.001	134	9
SELENIUM (SE)	mg/L	TRC			0.001	0.001	0.001	13	0
SODIUM (NA)	mg/L	DIS	246	255	95	1050	284	134	134
SODIUM (NA)	mg/L	TRC			98	1120	355	13	13
SODIUM ADSORPTION RATIO	unitless	NO MEAS	43	41.8	1.76	53.7	39.00	134	134
SULFATE (SO4)	mg/L	NO MEAS	< 1	< 1	1	1400	109	134	47
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	620	595	450	3130	772	134	134
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	560	520	270	840	569	134	134
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			0.05	0.83	0.49	10	9
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	0.01	0.1	0.08	134	0
VANADIUM (V)	mg/L	TRC			0.01	0.1	0.09	13	0
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	0.008	0.06	0.010	134	1
ZINC (ZN)	mg/L	TRC			0.01	0.015	0.010	13	3

* - REPORTED AS TRC

TABLE 2-12
OTTER CREEK MINE BASELINE REPORT 304E
FORTUNE AND COAL CREEK SPRINGS RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	COAL CREEK	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING	FORTUNE SPRING
		sample_date	7/29/2013	10/27/2010	10/25/2011	2/7/2012	5/3/2012	8/29/2012	12/6/2012	3/5/2013	5/16/2013	8/6/2013	3/25/2014
		sys_sample_code	OCC-1307-501	OTC-1010-100	OTRCR-1110-756	OCC-1202-900	OCC-1205-708	OCC-1208-210	OCC-1212-405	OCC-1303-336	OCC-1305-202	OCC-1308-361	OCC-1403-710
		lab_sample_id	H13070565-002	P10272010-100	H11100409-003	H12020104-001	H12050095-027	H12080485-011	H12120120-006	H13030104-016	H13050294-028	H13080121-001	H14030353-006
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001
BARIUM (BA)	mg/L	DIS	0.011	0.0157	0.018	0.014	0.016	0.015	0.016	0.015	0.017	0.018	0.013
BARIUM (BA)	mg/L	TRC	0.013	0.0153	0.019	0.015	0.016	0.015	0.017	0.016	0.017	0.019	0.013
BERYLLIUM (BE)	mg/L	DIS	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	330	810	1000	930	1000	1000	970	950	880	970	960
BORON (B)	mg/L	DIS	0.11	0.789	0.96	0.95	0.74	1.16	1.09	0.85	0.96	0.9	0.84
BORON (B)	mg/L	TRC	0.11	1.14	0.98	1.03	0.74	1.16	1.06	0.87	0.96	0.96	0.92
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CALCIUM (CA)	mg/L	DIS	4	263	388	358	346	335	346	342	405	394	284
CALCIUM (CA)	mg/L	TRC	4	489	396	365	334	351	355	358	415	384	328
CARBONATE AS CO3	mg/L	NO MEAS	38	< 5	< 4	< 1	< 1	< 1	38	< 1	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	9	19.1	32	32	29	25	15	23	25	< 10	24
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	0.001	0.0018	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.003	0.002
COPPER (CU)	mg/L	TRC	0.002	0.0019	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002
FLUORIDE (F)	mg/L	NO MEAS	0.9	0.61	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.5
IRON (FE)	mg/L	DIS	0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02
IRON (FE)	mg/L	TRC	0.26	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
MAGNESIUM (MG)	mg/L	DIS	1	451	735	711	694	662	705	659	740	758	587
MAGNESIUM (MG)	mg/L	TRC	1	875	734	700	684	701	657	709	762	756	657
MANGANESE (MN)	mg/L	DIS	0.011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MANGANESE (MN)	mg/L	TRC	0.014	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MERCURY (HG)	mg/L	DIS	< 0.00005	0.00141	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.0005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.0033	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	0.0036	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.03	0.35	6.04	10.4	12.1	11.7	16.1	11.7	10.3	11.2	7.18
pH - LAB	s.u.	NO MEAS	8.9	7.2	7.8	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4
PHOSPHORUS (P)	mg/L	TOT			0.009								
POTASSIUM (K)	mg/L	DIS	3	25	31	29	26	28	26	26	27	29	25
POTASSIUM (K)	mg/L	TRC	3	21.4	31	29	26	28	27	27	30	29	25
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1740	6830	8270	9840	9430	9200	8970	9130	9450	9300	8530
SELENIUM (SE)	mg/L	DIS	< 0.001	0.0021	0.014	0.012	0.013	0.008	0.024	0.034	0.036	0.049	0.024
SELENIUM (SE)	mg/L	TRC	< 0.001	0.0015	0.014	0.01	0.013	0.007	0.023	0.029	0.034	0.051	0.022
SODIUM (NA)	mg/L	DIS	383	971	1570	1530	1430	1350	1280	1310	1380	1410	1260
SODIUM (NA)	mg/L	TRC	388	1950	1560	1500	1480	1420	1300	1350	1430	1460	1280
SODIUM ADSORPTION RATIO	unitless	NO MEAS	43.4	12.2	10.7	10.7	10.2	9.86	9.04	9.53	9.41	9.55	9.77
SULFATE (SO4)	mg/L	NO MEAS	500	5860	6000	5900	5900	5800	5400	5500	6000	6500	5300
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1130	6510	10100	9270	9400	7980	8200	7030	9280	9660	8860
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	340	810	820	760	820	820	860	780	720	790	790
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS			< 0.05								
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	12		15	12	70	10	70	100	7	20	< 4
TURBIDITY (NTU) - LAB	NTU	NO MEAS	4.5		0.3	0.4	0.3	0.7	0.3	3.8	1.1	0.2	0.6
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.0001	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	0.00042	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008

TABLE 2-12
OTTER CREEK MINE BASELINE REPORT 304E
FORTUNE AND COAL CREEK SPRINGS RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	FORTUNE SPRING					
		sample_date	5/21/2014					
		sys_sample_code	OCC-1405-150					
		lab_sample_id	H14050407-001					
chemical_name	result_unit	fraction	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.009	0.1	0.085	12	0
ALUMINUM (AL)	mg/L	TRC	< 0.009	0.009	0.1	0.085	12	1
ARSENIC (AS)	mg/L	DIS	< 0.001	0.001	0.003	0.003	12	0
ARSENIC (AS)	mg/L	TRC	< 0.001	0.001	0.003	0.003	12	0
BARIUM (BA)	mg/L	DIS	0.012	0.011	0.018	0.015	12	12
BARIUM (BA)	mg/L	TRC	0.012	0.012	0.019	0.016	12	12
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	0.0008	0.001	0.0010	11	0
BERYLLIUM (BE)	mg/L	TRC	< 0.0008	0.0008	0.001	0.0010	11	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	900	330	1000	892	12	12
BORON (B)	mg/L	DIS	0.83	0.11	1.16	0.85	12	12
BORON (B)	mg/L	TRC	0.83	0.11	1.16	0.90	12	12
CADMIUM (CD)	mg/L	DIS	< 0.00003	0.00003	0.00008	0.00007	12	0
CADMIUM (CD)	mg/L	TRC	0.00005	0.00003	0.00008	0.00007	12	1
CALCIUM (CA)	mg/L	DIS	307	4	405	314	12	12
CALCIUM (CA)	mg/L	TRC	287	4	489	339	12	12
CARBONATE AS CO3	mg/L	NO MEAS	< 1	1	38	8	12	2
CHLORIDE (CL)	mg/L	NO MEAS	13	9	32	21	12	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	0.001	0.001	12	0
CHROMIUM (CR)	mg/L	TRC	< 0.001	0.001	0.001	0.001	12	0
COPPER (CU)	mg/L	DIS	0.002	0.001	0.003	0.002	12	12
COPPER (CU)	mg/L	TRC	0.002	0.0019	0.003	0.0022	12	12
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.5	0.9	0.6	12	12
IRON (FE)	mg/L	DIS	< 0.02	0.02	0.09	0.05	12	1
IRON (FE)	mg/L	TRC	< 0.02	0.02	0.26	0.06	12	1
LEAD (PB)	mg/L	DIS	< 0.0003	0.0003	0.0005	0.0005	12	0
LEAD (PB)	mg/L	TRC	< 0.0003	0.0003	0.0005	0.0005	12	0
MAGNESIUM (MG)	mg/L	DIS	613	1	758	610	12	12
MAGNESIUM (MG)	mg/L	TRC	593	1	875	652	12	12
MANGANESE (MN)	mg/L	DIS	< 0.005	0.005	0.011	0.006	12	1
MANGANESE (MN)	mg/L	TRC	< 0.005	0.005	0.014	0.006	12	1
MERCURY (HG)	mg/L	DIS	< 0.000005	0.000005	0.00141	0.000156	12	1
MERCURY (HG)	mg/L	TOT	< 0.000005	0.000005	0.0005	0.000080	12	0
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.0033	0.005	0.0049	12	1
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	0.0036	0.005	0.0049	12	1
NICKEL (NI)	mg/L	DIS	< 0.002	0.002	0.01	0.009	12	0
NICKEL (NI)	mg/L	TRC	< 0.002	0.002	0.01	0.009	12	0
NITRATE + NITRITE AS N	mg/L	NO MEAS	6.2	0.03	16.1	8.61	12	12
pH - LAB	s.u.	NO MEAS	7.4	7.2	8.9	7.5	12	12
PHOSPHORUS (P)	mg/L	TOT		0.009	0.009	0.009	1	1
POTASSIUM (K)	mg/L	DIS	25	3	31	25	12	12
POTASSIUM (K)	mg/L	TRC	25	3	31	25	12	12
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	8330	1740	9840	8252	12	12
SELENIUM (SE)	mg/L	DIS	0.028	0.001	0.049	0.020	12	11
SELENIUM (SE)	mg/L	TRC	0.028	0.001	0.051	0.019	12	11
SODIUM (NA)	mg/L	DIS	1260	383	1570	1261	12	12
SODIUM (NA)	mg/L	TRC	1260	388	1950	1365	12	12
SODIUM ADSORPTION RATIO	unitless	NO MEAS	9.53	9.04	43.4	12.82	12	12
SULFATE (SO4)	mg/L	NO MEAS	4800	500	6500	5288	12	12
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	8260	1130	10100	7973	12	12
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	740	340	860	754	12	12
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.05	0.05	0.05	1	0
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	< 4	4	100	29	11	9
TURBIDITY (NTU) - LAB	NTU	NO MEAS	0.2	0.2	4.5	1.1	11	11
VANADIUM (V)	mg/L	DIS	< 0.01	0.0001	0.1	0.0767	12	0
VANADIUM (V)	mg/L	TRC	< 0.01	0.00042	0.1	0.07670	12	1
ZINC (ZN)	mg/L	DIS	< 0.008	0.008	0.01	0.010	12	0
ZINC (ZN)	mg/L	TRC	< 0.008	0.008	0.01	0.010	12	0

TABLE 2-13
OTTER CREEK MINE BASELINE REPORT 304E
PRIVATE WELL INVENTORY

		Well Location									
GWIC ID	Owner Name	T	R	Section	1/4	Total Depth (feet)	Elevation (feet)	Aquifer of Completion	Date	Present or Former Use	Status
187111	PHS INDIAN HEALTH SERVICE	03S	44E	22	CC	57		125TGRV	6/2/69	DOMESTIC	
705071	TRP 55	03S	44E	25	BDC					BOREHOLE	
199133	SPRING CREEK SPRING	03S	44E	27	ABDD		3040			STOCKWATER	
253956	SH-7059	03S	44E	34	DBBD	206			8/18/70	BOREHOLE	
100466	BREY HENRY	03S	44E	35	B	25		125TGRV	1/1/20	STOCKWATER	
705062	TRP 31	03S	44E	36	DBC					BOREHOLE	
7373	USGS OBS WELL OC83-01	03S	44E	36	BACA	330	3270	125KNCB	6/1/83	MONITORING WELL	UNUSED
7374	GASKILL R. * 9 M E ASHLAND MT *	03S	45E	1	ABDD		3300			UNKNOWN	
7375	SCHOENOVER JOHN	03S	45E	3	BADD	280	3340	125TGRV	1/5/64	DOMESTIC	
100467	HANSON DELBERT	03S	45E	3	AB	280		125TGRV	1/1/63	STOCKWATER	
149873	COOK MOUNTAIN PARTNERSHIP * 3455-902CW	03S	45E	5	AAA	242		125TGRV	6/1/90	MONITORING	
149874	COOK MOUNTAIN PARTNERSHIP * 3455-904CW	03S	45E	5	DDD	215		125TGRV	6/4/90	MONITORING	
7376	USGS OBS WELL * 3 MI NE ASHLAND MT	03S	45E	5	DBAA	148	3200	125TGRV		MONITORING WELL	UNUSED
7377	USGS OBS WELL * 3 MI NE ASHLAND	03S	45E	5	DBBB	19	3170	110ALVM		MONITORING WELL	UNUSED
7378	WAGNER J* 1.5 MI NW OF DUD MONTANA*	03S	45E	5	DBBC	45	3182	125TGRV		STOCKWATER	
100469	MAHON LYLE	03S	45E	6	DC	102		125TGRV	1/1/68	STOCKWATER	
7379	GREEN SPRING * 6 MI SOUTH WILLOW CROSSING	03S	45E	6	AAAD		3140			UNKNOWN	
911575	FEE #7	03S	45E	7	CC	6492				DRY HOLE	
100470		03S	45E	7	CCB	6442	3125	221MSRN	1/1/90	INDUSTRIAL	
898384	NP-7	03S	45E	7	CC		3125			PETWELL	
253976	SH-7071	03S	45E	8	ABBC	209			9/9/70	BOREHOLE	
704910	M 3458-3C	03S	45E	8	DCBC					BOREHOLE	
705061	TRP 30	03S	45E	9	CCD					BOREHOLE	
149875	COOK MOUNTAIN PARTNERSHIP * 3459-903CW	03S	45E	9	ADD	290.5		125TGRV	6/5/90	MONITORING	
149876	COOK MOUNTAIN PARTNERSHIP * 3459-906CW	03S	45E	9	DDD	171.5		125TGRV	6/7/90	MONITORING	
171191	COOLS MOUNTAIN RANCH INC	03S	45E	9	CC	560		125TGRV	8/9/90	STOCKWATER	
100471	SCHONENBACH JOHN	03S	45E	9	DB	135		125TGRV	1/1/47	STOCKWATER	
253973	SH-7068	03S	45E	10	BDDB	175			8/26/70	BOREHOLE	
100472	USDA FOREST SERVICE- EAST FORK PIPELINE WELL	03S	45E	10	BACB	193	3210	125KNUB	4/1/61	STOCKWATER	
253972	SH-7067	03S	45E	12	AABD	295			8/23/70	BOREHOLE	
7383	GASKILL R. * 9 MI NE ASHLAND MONTANA	03S	45E	12	BDCB	12	3280	110ALVM		DOMESTIC	
7382	GASKILL RAY* 6 MI NW HOME CK SCHOOL*	03S	45E	12	BDCB	240	3180	125TGRV		UNUSED	UNUSED
7384	*GASKILL R. * 9 M NE ASHLAND MONTANA	03S	45E	12	BDCD		3260			STOCKWATER/IRRIGATION	
7385	PHILLIPS J. * 7 MI E ASHLAND MONTANA	03S	45E	13	DCBC	172	3200	125TGRV		STOCKWATER	
100473	PHILLIPS MRS. JIM	03S	45E	13	DC	120		125TGRV	11/20/81	STOCKWATER	
253958	SH-7061	03S	45E	14	CBAB	141			8/27/70	BOREHOLE	
7386	U S FOREST SERVICE * CUSTER	03S	45E	14	CCAC	193	3180	125TGRV	5/8/63	DOMESTIC	
100474	F.H. RANCH CO.	03S	45E	14		130		125TGRV	6/20/58	STOCKWATER	
197440	SHEETS CLARK	03S	45E	15		406		125TGRV	6/30/98	DOMESTIC	
176635	SPRAGUE BONNIE	03S	45E	15	AB	380		125TGRV	5/5/99	DOMESTIC	
204774	BAUER LEONARD	03S	45E	15	CBA	140		125TGRV	9/24/99	DOMESTIC	
100476	GREER WILLIAM H & TAYLOR ANN H	03S	45E	15	CD	150		125TGRV	6/13/83	DOMESTIC	
100478	MOOS GENE	03S	45E	15	DD	300		125TGRV	6/19/76	DOMESTIC	
100479	GASKILL MARDEE	03S	45E	15	DDD	484		125TGRV	8/9/84	DOMESTIC	
100477	SCHONENBACH JOHN	03S	45E	15		132	3090	125TGRV	9/1/53	STOCKWATER	
249560	WADDINGTON DANIEL	03S	45E	15	DD	420			7/17/96	STOCKWATER	
7387	DARRAH CLAIR * 4.5 MI E ASHLAND MT	03S	45E	15	DDDA	280	3200	125TGRV		STOCKWATER	
7388	USGS RESEARCH WELL OC83-05	03S	45E	16	DDDB	65	3062	110ALVM		MONITORING	
100480	F.H. RANCH CO.	03S	45E	16		123		125TGRV	10/15/48	STOCKWATER	
149877	COOK MOUNTAIN PARTNERSHIP * 34517-902CW	03S	45E	17	ADB	174.5		125TGRV	5/21/90	MONITORING	
149878	COOK MOUNTAIN PARTNERSHIP	03S	45E	17	BAB	247		125TGRV	5/18/90	MONITORING	
100481	F.H. RANCH CO.	03S	45E	17		103		125TGRV	9/10/38	STOCKWATER	
100482	TRUSLER W.C.	03S	45E	18	BB	200		125TGRV	1/1/60	DOMESTIC	
100483	TRUSLER W.W.	03S	45E	18	CB		3010			STOCKWATER	
100485	F H RANCH COMPANY	03S	45E	19		274		125TGRV	6/20/24	DOMESTIC	
7390	TRUSLER INC * 2.5 MI NW WILLOW CROSSING	03S	45E	19	DDBC	280	2962	125TGRV	1/1/24	DOMESTIC	
7391	TRUSSLER INC. * 3.5 MI SE ASHLAND MT	03S	45E	19	DDBD	100	2963	125TGRV		DOMESTIC	
????	TRUSLER	03S	45E	19	DCCD	1000	2955	211HLCK?		DOMESTIC	
100484	PHILLIPS MRS. JIM	03S	45E	19		58		125TGRV	8/25/81	DOMESTIC/STOCKWATER	
235849	TRUSLER W.C.	03S	45E	19	BB	215			5/17/07	IRRIGATION	
227794	TRUSLER, W.C.	03S	45E	19	BB	95			8/9/06	IRRIGATION	
226329	WARNKE, W. MICHAEL	03S	45E	20	AC	291			6/8/06	DOMESTIC	
100486	TRUSLER W C	03S	45E	20	ADC	275		125TGRV	10/15/86	DOMESTIC	
126429	SANNES QUENTIN	03S	45E	20	BDA	165		125TGRV	10/21/91	DOMESTIC	
259320	NICKELSON, JOHN/HALL, JACKIE	03S	45E	20		300			11/3/10	DOMESTIC	
261932	HALL, JACKIE	03S	45E	20		300			11/5/10	DOMESTIC	
910869	W.C.TRUSLER #1	03S	45E	20	AA	6415				DRY HOLE	
100487	TRUSLER W C	03S	45E	20	CB	45		125TGRV	1/1/51	STOCKWATER	
253974	SH-7070	03S	45E	21	CBDB	186			8/29/70	BOREHOLE	
100488	SCHONENBACH JOHN S.	03S	45E	21	AB	210		125TGRV	1/1/39	DOMESTIC	
100489	PRICE JOHN O.	03S	45E	22	BA	140		125TGRV	1/1/61	DOMESTIC	
7392	RUKAVINA J. * 5 MI SE ASHLAND MONTANA	03S	45E	22	BAAB	250	3117	125TGRV		DOMESTIC	
7393	RUKAVINA J. * 5.5 M E ASHLAND MONTANA	03S	45E	22	BABD	250	3117	125TGRV		DOMESTIC	
7394	ARK LAND COMPANY * 4.5 MI E ASHLAND MT	03S	45E	22	BBBA	80	3076	125TGRV		PUBLIC WATER SUPPLY	
100490	HOWARD ALVIN	03S	45E	23	BBB	520		125TGRV	4/29/76	DOMESTIC	
100491	TUCKER BRYAN	03S	45E	23	DA	185		125TGRV	1/1/20	DOMESTIC	
7395	SHY GEORGE * 12 MI E ASHLAND MONTANA	03S	45E	23	DADA	150	3102	125TGRV		STOCKWATER	
7396	PHILLIPS JIM * 7 MI E ASHLAND MONTANA	03S	45E	24	ACDA	145	3125	125TGRV		STOCKWATER	
100492	PHILLIPS JAMES JR.	03S	45E	24	AD	145	3125	125TGRV	5/1/55	STOCKWATER	
705079	TRP A-1	03S	45E	26	DA					BOREHOLE	
253959	SH-7062	03S	45E	26	DBAC	160			8/20/70	BOREHOLE	
193355	BLM DH 74-104	03S	45E	26	ADAC		3204			MONITORING WELL	
193262	BLM DH 74-102	03S	45E	26	DBCB					MONITORING WELL	
190675	BLM OTTER CREEK OBS WELL	03S	45E	26	BABD	210	3120			MONITORING?	
100493	ARK LAND COMPANY	03S	45E	26		200		125TGRV	1/1/42	STOCKWATER	
100494	ARK LAND COMPANY	03S	45E	27		195		125TGRV	1/1/40	DOMESTIC	
185255	LEI SAM	03S	45E	27	BB	360		125TGRV	8/2/00	DOMESTIC	
7397	ARK LAND COMPANY* 5.5 MI SE ASHLAND MONTANA	03S	45E	27	ACBC	55	3058	125TGRV		IRRIGATION	
100495	ARK LAND COMPANY	03S	45E	27		65		125TGRV	1/1/61	STOCKWATER	
100496	ARK LAND COMPANY	03S	45E	27	DB	65		125TGRV	1/1/60	STOCKWATER	
100497	F H RANCH COMPANY	03S	45E	28	CB	468		125TGRV	7/10/41	STOCKWATER	
100498	WAUCH OSCAR	03S	45E	30	D	80		125TGRV	3/16/64	STOCKWATER	
7399	SHY G * 1.5 MI W OF WILLOW CROSSING	03S	45E	31	DCDA	168	3130	125TGRV	12/22/44	STOCKWATER	IN USE
7400	SHY G* .25 MI WEST WILLOW CROSSING*	03S	45E	32	DDAC	372	3010	125TGRV	1/1/34	DOMESTIC	
100499	F H RANCH COMPANY	03S	45E	32		408		125TGRV	8/15/40	STOCKWATER	
????	US77-24	03S	45E	32	CBCD	45	3152	CLINKER	5/11/77	TEST HOLE	
100500	POWDER RIVER SCHOOL DIST 23	03S	45E	33	CD	379	3020	125TGRV	1/1/34	PUBLIC WATER SUPPLY	
7401	TRUSSLER INC. * 5.5 MI SE ASHLAND MT	03S	45E	33	BCBB	900	2999	125TLCK		STOCKWATER	
7402	TRUSLER FLOWING WELL* .5 MI N WILLOW CROSS	03S	45E	33	BCDA	900	3022	125TLCK		STOCKWATER	
7403	SHY FLOWING WELL* .25 MI N WILLOW CROSSING	03S	45E	33	CBDA	435	3015	125TLCK	1/1/63	STOCKWATER	
7404	SHY GEORGE * 6 MI SE ASHLAND MONTANA	03S	45E	33	CBDA	435	3018	125TLCK	1/1/63	STOCKWATER	
705050	TRP 141	03S	45E	34	DA					BOREHOLE	
190766	BLM OTTER CREEK OBS WELL	03S	45E	34	AACD					MONITORING	
193267	BLM DH 74-103	03S	45E	34	AACD	187	3020	125TGRV	9/20/74	MONITORING WELL	
193232	BLM OBS-WELL 74-101	03S	45E	34	CACD	410	3259	125TGRV	8/19/74	MONITORING WELL	
193356	BLM DH 74-105	03S	45E	34	DDDA	414	3262	125TGRV	11/5/74	MONITORING WELL	
193389	BLM DH 74-108	03S	45E	35	DABA		3293			MONITORING WELL	
253960	SH-7063	03S	46E	18	DBDB	187			8/28/70	BOREHOLE	
899021	GOVT.MULLINNIX #1	03S	46E	18	DBBD	9362	3209			DRY HOLE	
7418	USDA FOREST SERVICE - COAL BANK SPRING	03S	46E	18	BDAD		3208	125TGRV		STOCKWATER	
100517	PHILLIPS JAMES JR.	03S	46E	19	ABBB	245		125TGRV	1/1/51	DOMESTIC	
100516	PHILLIPS JAMES JR.	03S	46E	19	AB	140		125TGRV	1/1/50	STOCKWATER	
7419	U S FOREST SERVICE * CUSTER	03S	46E	19	ADBA	205	3210	125TGRV	7/1/58	STOCKWATER	
7420	PHILLIPS JAMES JR	03S	46E	19	BBAC	245	3210	110ALVM	1/1/51	STOCKWATER	
7421	U S FOREST SERVICE * THOMAS DRAW WELL	03S	46E	30	BCDC	170	3253	125TGRV	6/11/62	STOCKWATER	
204979	USDA FOREST SERVICE - UD SPRING SPRING	03S	46E	31	AADC					STOCKWATER	
898266	N.P.R.R. #F43-3-N	04S	44E	3	DA	9759	3178			DRY HOLE	
101930	HALEY SHIRLEY	04S	44E	3	BC	600		125TLCK	1/1/52	STOCKWATER	
895352	UNKNOWN * 5 MI S ASHLAND	04S	44E	3	DA		3181	320MNLS		UNUSED	UNUSED

TABLE 2-13
OTTER CREEK MINE BASELINE REPORT 304E
PRIVATE WELL INVENTORY

		Well Location									
GWIC ID	Owner Name	T	R	Section	1/4	Total Depth (feet)	Elevation (feet)	Aquifer of Completion	Date	Present or Former Use	Status
101937	US DEPT OF AGRICULTURE*USFS	04S	44E	12	B	350	3295	125TGRV	10/1/59	STOCKWATER	
101936	MCKELVEY GLEN	04S	44E	12	BA	370		125TGRV	8/30/78	STOCKWATER	
198798	USDA FOREST SERVICE - KING CREEK SPRING	04S	44E	23	DACC					STOCKWATER	
101944	USDA FOREST SERVICE - KING CREEK WELL	04S	44E	23	DCAA	16	3635	110ALVM	5/1/30	STOCKWATER	
7565	USDA FOREST SERVICE - PASS SPRING	04S	44E	24	ABBB		3545			STOCKWATER	
198793	USDA FOREST SERVICE	04S	44E	36	ACDB					UNKNOWN	
190769	BLM OTTER CREEK OBS WELL	04S	45E	1	CDCA					MONITORING?	
149859	SHY GEORGE	04S	45E	1		65		125TGRV	1/1/57	STOCKWATER	
253947	SH-7054	04S	45E	2	DBDC	186			8/7/70	BOREHOLE	
193387	BLM DH 74-106	04S	45E	2	BDDD	233	3228	125TGRV	12/2/74	MONITORING WELL	
193388	BLM DH 74-107	04S	45E	2	DADC	141.5	3105	125KNCB	12/12/74	MONITORING WELL	
190770	BLM OTTER CREEK OBS WELL	04S	45E	2	BDDD					MONITORING?	
190771	BLM OTTER CREEK OBS WELL	04S	45E	2	DACD					MONITORING?	
7566	SHY GEORGE	04S	45E	2	CDDB	85	3070	125TGRV	1/1/50	STOCKWATER	
705051	TRP 142	04S	45E	3	BDB					BOREHOLE	
101946	ARK LAND COMPANY	04S	45E	3	CC	345		125TGRV	1/1/55	STOCKWATER	
101947	ARK LAND COMPANY	04S	45E	3	DD	200		125TGRV	1/1/59	STOCKWATER	
253945	SH-7053	04S	45E	4	AAAA	227			7/30/70	BOREHOLE	
133999	BREWER SION	04S	45E	4	BAC	190		125TGRV	6/28/84	DOMESTIC	
7575	FREESTAD G. * 1 MI SE WILLOW CROSSING	04S	45E	4	DBCA	250	3015	125TGRV		DOMESTIC	
210094	MBMG MONITORING WELL WO-14	04S	45E	4	BDDB	72	3010	110ALVM	12/6/79	MONITORING WELL	
7569	MBMG MONITORING WELL WO-13	04S	45E	4	BDDB	67	3020	110ALVM	12/5/79	MONITORING WELL	UNUSED
7574	MBMG MONITORING WELL WO-16	04S	45E	4	CAAC	61	3040	110ALVM	12/10/79	MONITORING?	
7567	USGS RESEARCH WELL WO-12	04S	45E	4	BADD	71	3015	110ALVM	12/4/79	RESEARCH	
7573	MBMG MONITORING WELL WO-15	04S	45E	4	BDDB	73	3022	110ALVM	12/7/79	RESEARCH	
101948	SHY GEORGE	04S	45E	4	BC	435	3025	125TGRV	1/1/40	STOCKWATER	
101949	STEVENS MARCUS	04S	45E	4	DB	31		125TGRV	11/10/79	STOCKWATER	
7576	FREESTAD G. * 1 MI S WILLOW CROSSING	04S	45E	4	DBDB	50	3014	110ALVM		STOCKWATER	
????	CONSOLIDATION COAL CO.	04S	45E	5	CACD	257	3226.9	125KNCB	07/11/80	MONITORING WELL	
????	CONSOLIDATION COAL CO.	04S	45E	5	AAAB	60	3033.4	110ALVM	07/01/80	MONITORING WELL	
????	SHY/6	04S	45E	6	DBDB	314	3255	125KNCB	6/21/78	MONITORING WELL	
7577	USGS OBS WELL US77-23	04S	45E	6	DBDB	320	3255	125KNCB	5/10/77	MONITORING WELL	
253949	SH-7055	04S	45E	6	DDBA	261	3250	125KNCB	8/8/70	TEST HOLE	
7578	CONSOL COAL OBS WELL (OC-30)	04S	45E	7	CABA	295	3230	125TGRV	6/22/80	MONITORING WELL	
207100	MBMG MONITORING WELL OC-13	04S	45E	8	DDAA	276	3230	125KNCB	5/27/80	MONITORING WELL	
????	US77-27	04S	45E	8	ACB	280	3217	125TGRV	5/12/77	TEST HOLE	
101953	BADGETT KIRK	04S	45E	9	DD	600	3035	125TLCK	1/1/50	DOMESTIC	
7581	CONSOL COAL OBS WELL (OC-02A)	04S	45E	9	DCAA	70	3035	110ALVM	7/11/80	MONITORING WELL	
101950	ARK LAND COMPANY	04S	45E	9	AC	900		211LHUD	1/1/61	STOCKWATER	
7579	BADGETT KIRK	04S	45E	9	DBBC	800	3045	125TLCK	1/1/56	STOCKWATER	
101952	BADGETT KIRK	04S	45E	9	DD	500	3035	125TLCK	1/1/30	STOCKWATER	
101954	BADGETT KIRK	04S	45E	9	DDBA	780	3030	125TLCK	6/18/65	STOCKWATER	
7582	BADGETT KIRK	04S	45E	9	DDBA	780	3030	125TLCK	6/18/65	STOCKWATER	
7583	CONSOL COAL OBS WELL (OC-08)	04S	45E	10	CCBC	50	3030	110ALVM	5/22/80	MONITORING WELL	
101955	ARK LAND COMPANY (TARTER D.B.)	04S	45E	12	D	50		125TGRV	1/1/40	DOMESTIC	
190772	BLM OTTER CREEK OBS WELL	04S	45E	12	ABBC					MONITORING?	
101956	ARK LAND COMPANY (TARTER D.B.)	04S	45E	12	AC	55		125TGRV	1/1/58	STOCKWATER	
191348	ARK LAND COMPANY (TARTER D.H.)	04S	45E	12	AC	55		125TGRV	1/1/58	STOCKWATER	
101957	ARK LAND COMPANY (TARTER D.H.)	04S	45E	12	CDB	205		125TGRV	4/20/84	STOCKWATER	
7584	USGS OBS WELL OC83-04	04S	45E	14	CACC	225	3155	125KNCB	6/4/83	MONITORING WELL	UNUSED
101958	BADGETT KIRK	04S	45E	15	CC	48		125TGRV	1/1/58	DOMESTIC	
101959	BADGETT KIRK	04S	45E	15	CC	300		125TGRV	1/1/20	DOMESTIC	
7588	BADGETT KIRK	04S	45E	15	DBBC	450	3070	125TGRV	1/1/60	DOMESTIC	
????	CONSOLIDATION COAL CO.	04S	45E	15	CBCA	151	3121.7	125KNCB	05/22/80	MONITORING WELL	
????	CONSOLIDATION COAL CO.	04S	45E	15	BCAA	65	3043.7	110ALVM	05/22/80	MONITORING WELL	
????	CONSOLIDATION COAL CO.	04S	45E	15	CCAC	49	3052.3	110ALVM	05/23/80	MONITORING WELL	
7586	USGS RESEARCH WELL	04S	45E	15	BCDD	59	3045	110ALVM		RESEARCH	UNUSED
7587	BADGETT KIRK	04S	45E	15	CCDD	700	3050	125TLCK	1/1/58	STOCKWATER	
172988	GIERKE GORGE	04S	45E	15	CDC	24		125TGRV	11/25/98	STOCKWATER	
????	CONSOLIDATION COAL CO.	04S	45E	16	CDAC	192	3139.3	125KNCB	06/17/80	MONITORING WELL	
254041	SS-6	04S	45E	16	DC	180	3160	125KNCB	9/1/67	TEST HOLE	
????	CONSOLIDATION COAL CO.	04S	45E	17	CCBD	241	3235.7	125KNCB	06/22/80	MONITORING WELL	
????	BADGET	04S	45E	17	DBCD	(SWL 153.2)	3150			STOCKWATER	
101962	BADGETT KIRK	04S	45E	18	DD	370		125TGRV	1/1/63	STOCKWATER	
101963	BADGETT KIRK & WALLACE	04S	45E	18	DD	373		125TGRV	5/1/63	STOCKWATER	
236191	NEWELL CREEK PIPELINE WELL (NEW)	04S	45E	19	DA	660	3295		6/5/07	STOCKWATER	
101965	CAPRA LOUIS	04S	45E	19	DAD	663		125TLCK	8/28/79	STOCKWATER	
7589	USDA FOREST SERVICE - NEWELL PIPELINE WELL	04S	45E	19	DADD	325	3290	125KNCB	4/20/58	STOCKWATER	
101966	USFS*CUSTER NF	04S	45E	19	DD				5/1/58	STOCKWATER	
7590	THEX-GASKILL SARA	04S	45E	20	CCAD	180	3245	125TGRV	6/1/50	DOMESTIC	
704878	C 80-OC-33	04S	45E	21	ACDA					BOREHOLE	
207101	MBMG MONITORING WELL OC-28	04S	45E	21	CCBD	236	3171	125KNCB	6/20/80	MONITORING WELL	
101968	BADGETT KIRK	04S	45E	21	DA	300		125TGRV	1/1/55	STOCKWATER	
????	CONSOLIDATION COAL CO.	04S	45E	22	BBCB	296.5	3125.8	FLOWERS-GOODALE COAL	07/26/80	MONITORING WELL	
7591	BADGETT C. * 16 MI NW SONNETTE MONTANA	04S	45E	22	ADCC	442	3058	125TGRV		STOCKWATER	
101969	BADGETT KIRK	04S	45E	22	BA	450	3055	125TGRV	1/1/56	STOCKWATER	
235642	CAPRA LOUIS & PENNY	04S	45E	22	CD	460			5/3/07	STOCKWATER	
235642	CAPRA LOUIS & PENNY	04S	45E	22	CD	460			5/3/07	STOCKWATER	
101970	THEX CLAVIN L.	04S	45E	22	CD	360	3065	125TGRV	1/1/20	STOCKWATER	
????	US77-21	04S	45E	22	BCCB	200	3095	125KNCB	5/4/77	TEST HOLE	
????	CAPRA	04S	45E	22	CBDD	700	3080	SANDSTONE (Tfl)	1956	UNKNOWN	
7592	CAPRA J. * 18 MI NW SONNETTE MONTANA	04S	45E	23	CCCB	452	3082	125TGRV	12/1/73	STOCKWATER	IN USE
207254	FORTUNE SPRING	04S	45E	24	DBDB		3240			STOCKWATER	
898134	FEE #9	04S	45E	25	BB	6570	3208			DRY HOLE	
705075	TRP 62	04S	45E	26	CD					BOREHOLE	
704842	BR 76-101A	04S	45E	26	CABD					BOREHOLE	
197214	ROSS DENSON	04S	45E	26	CABD	117.25	3255	125TGRV	7/18/02	RESEARCH	
255445	THOMAS THANE	04S	45E	27	DB	380			5/10/10	DOMESTIC	
255445	THOMAS THANE	04S	45E	27	DB	380			5/10/10	DOMESTIC	
7593	THEX C.L. * 12.5 MI N FT. HOWES MT.	04S	45E	27	DBAB	59	3075	110ALVM	1/1/69	DOMESTIC	
101972	THEX CALVIN L.	04S	45E	27	DD	360	3080	125TGRV	1/15/56	DOMESTIC	
7594	THEX CALVIN L.	04S	45E	27	DBBA	360	3078	125TGRV		STOCKWATER	
191349	THEX CALVIN L.	04S	45E	27	DB				1/1/20	STOCKWATER	
????	P-3555	04S	45E	27	BAA	200	3120	125KNBC		TEST HOLE	
????	P-1060	04S	45E	27	BBAB	220	3140	125KNBC		TEST HOLE	
????	P-1009	04S	45E	27	CBCD	240	3220	125KNBC		TEST HOLE	
916835	GOVT. #1	04S	45E	28	AAAC	3650	3168			DRY HOLE	
7596	USGS RESEARCH WELL US77-25	04S	45E	28	BDDD	269	3240	125TGRV	5/11/77	MONITORING WELL	
7595	THEX C. * 19 M NW SONNETTE MT	04S	45E	28	ADDA	130	3160	125TGRV	1/1/69	STOCKWATER	
????	Newell/28	04S	45E	28	BDDD	281	3240	125KNBC	6/12/78	TEST HOLE	
101973		04S	45E	28	AA	3650	3168	211SNNN		UNKNOWN	
198967	USDA FOREST SERVICE	04S	45E	30	AADA					STOCKWATER	
198969	USDA FOREST SERVICE	04S	45E	30	AADA					STOCKWATER	
7598	USDA FOREST SERVICE - GENE CREEK SPRING	04S	45E	30	DDBB		3452			STOCKWATER	
7599	CUSTER NF * 19 MI E SONNETTE MT.	04S	45E	32	CADC		3398	125TGRV		STOCKWATER	
205056	USDA FOREST SERVICE - CAPRA SPRING	04S	45E	32	CADD					STOCKWATER	
????	NORTH FORK CHROMO CREEK SPRING	04S	45E	32	CADB		3400			STOCKWATER	
????	P-1390	04S	45E	33	ADAD	120	3190	125KNBC		TEST HOLE	
????	P-1387	04S	45E	33	BCAA	180	3210	125KNBC		TEST HOLE	
????	P-1455	04S	45E	33	DCBB	220	3300	125KNBC		TEST HOLE	
253982	SH-7077	04S	45E	34	ABBB	186			9/13/70	BOREHOLE	
????	USGS	04S	45E	35	DABA	321		125KNCB	2/7/74	MONITORING WELL	
254040	SS-5	04S	45E	36	CBC	150			9/1/67	BOREHOLE	
101976		04S	46E	5	BCB	196	3215	125TGRV		UNKNOWN	
7600	USFS * CUSTER NF * THREE MILE WELL	04S	46E	5	BCBC	196	3215	125TGRV		STOCKWATER	
253957	SH-7060	04S	46E	6	DDBD	218			8/21/70	BOREHOLE	

TABLE 2-13
OTTER CREEK MINE BASELINE REPORT 304E
PRIVATE WELL INVENTORY

		Well Location									
GWIC ID	**Owner Name**	**T**	**R**	**Section**	**1/4**	**Total Depth (feet)**	**Elevation (feet)**	**Aquifer of Completion**	**Date**	**Present or Former Use**	**Status**
101978	TARTER DH	04S	46E	6	CAC	40		125TGRV	10/5/87	DOMESTIC	
266229	TARTER RANCH CORRALS	04S	46E	6	DAA		3188		9/6/11	STOCKWATER	
266230	TARTER RANCH HOUSE WATER	04S	46E	6	DAA		3204		9/6/11	DOMESTIC	
7602	USFS * CUSTER NF * MCLATCHY DRAW WELL	04S	46E	8	CBCC	110	3245	125TGRV	6/12/62	STOCKWATER	
253000	SH-7145	04S	46E	19	DDAA	126			9/15/71	BOREHOLE	
101988		04S	46E	30	BCD	170	3245	125TGRV		UNKNOWN	
101992	NEWCOMER EARL & OLA LUE*WELL#5	04S	46E	31					7/31/62	DOMESTIC	
7608	NEWCOMER EARL & OLA LUE	04S	46E	31	CCCC	240	3180	125TGRV	8/7/48	DOMESTIC	
101990	NEWCOMER EARL & OLA LUE*WELL#2	04S	46E	31					7/31/62	IRRIGATION	
197230	LOWER TEN MILE CREEK	04S	46E	31	CDBB		3180			STOCKWATER	
101991	NEWCOMER EARL & OLA LUE*WELL#3	04S	46E	31		20		125TGRV	1/1/41	STOCKWATER	
161284	USDA FOREST SERVICE - TENMILE WELL	04S	46E	31	CBCA	280	3215	125TGRV	5/26/93	STOCKWATER	
7609	NEWCOMER E. * 13.5 M E SONNETTE MONTANA	04S	46E	31	DDBC	18	3212	125TGRV		STOCKWATER	
199649	USDA FOREST SERVICE	04S	46E	31	ABBB					STOCKWATER	
223879	10 MILE CREEK PIPELINE WELL	04S	46E	31	CBBD		3210	125TGRV		STOCKWATER	
7753	BUG RANCH CO * 18 MI W SONNETTE MT.	05S	45E	3	ABCD	90	3110	125TGRV		STOCKWATER	
7754	PERRY D. * 17.5 MI E SONNETTE MONTANA	05S	45E	3	ACBB	700	3118	125TLCK		STOCKWATER	
103157	BUD RANCH COMPANY	05S	45E	3	BB	150		125TGRV	4/1/60	STOCKWATER	
260754	DENSON, FAYE AND ROSS, DENNIS	05S	45E	3	AC	450			4/13/11	STOCKWATER	
260754	DENSON, FAYE AND ROSS, DENNIS	05S	45E	3	AC	450			4/13/11	STOCKWATER	
????	P-1052	05S	45E	3	BAB	180	3230	125KNBC		TEST HOLE	
????	P-1039	05S	45E	3	BCDD	160	3160	125KNBC		TEST HOLE	
????	P-1047	05S	45E	3	CCBB	180	3190	125KNBC		TEST HOLE	

LEGEND

???? = Well information from previous reports
110ALVM - ALLUVIUM (QUATERNARY)
125FRUN - FORT UNION FORMATION
125KNCB - KNOBLOCH COAL OF THE FT UNION FORMATION
125TGRV - TONGUE RIVER MEMBER (OF FT UNION FM.)
125TLCK - TULLOCK MEMBER (OF FT UNION FM.)
LHUD - LANCE-HELL CREEK UNDIFFERENTIATED
211SNNN - SHANNON SANDSTONE MBR. (OF CODY OR STEELE SH)
211HLCK- HELL CREEK FORMATION

STATS IN THE HYDROLOGIC STUDY AREA EXTENTS
24 BOREHOLES
45 DOMESTIC
1 DOMESTIC/STOCKWATER
6 DRY HOLES (BOREHOLES?)
1 INDUSTRIAL
4 IRRIGATION
49 MONITORING/RESEARCH
1 PETWELL
2 PUBLIC WATER SUPPLY
97 STOCKWATER
1 STOCKWATER/IRRIGATION
15 TEST HOLES (BOREHOLES?)
7 UNKOWN
2 UNUSED

STATS IN THE TRACT 2 HYDRO STUDY AREA
13 BOREHOLES
17 DOMESTIC
1 DRY HOLES (BOREHOLES?)
2 IRRIGATION
33 MONITORING/RESEARCH
1 PUBLIC WATER SUPPLY
44 STOCKWATER
10 TEST HOLES (BOREHOLES?)
1 UNKOWN

STATS IN THE MINE AREA
2 BOREHOLES
4 DOMESTIC
1 DRY HOLES (BOREHOLES?)
8 MONITORING/RESEARCH
5 STOCKWATER

TABLE 3-1
OTTER CREEK MINE BASELINE REPORT 304E
SURFACE WATER MONITORING NETWORK

Site ID	MT State Plane, NAD83		Ground Surface Elevation (ft.)	Water Type	Sampling Frequency	Passive Sampler	Continuous Recorder	Crest Gage	Staff Gage	Purpose for Monitoring Site
	Northing (ft.)	Easting (ft.)								
SPRINGS										
Sec 33 Spring (well)	486735.79	2833101.35	3216.70	GW	NA	NA	NA	NA	NA	Downgradient Spring near Otter Creek in Section 33, T3S, R45E
Fortune Spring	465232.35	2835106.89	3261.00	GW	Q	No	No	No	No	Downgradient Spring near Otter Creek
Coal Creek Spring	458380.57	2842447.76	3329.00	GW	Q, 5	No	No	No	No	Upgradient Spring issues from overburden
SURFACE WATER										
SW1	490225.29	2819563.56	3025.08	SW	Q	No	Yes	Yes	No	Home Creek
SW1A	489384.00	2815088.00	3000	SW	Q	No	No	No	No	Culvert going under highway
SW2	475605.01	2820621.60	3032.66	SW	Q	No	Yes	No	Yes	Otter Creek downgradient, upstream of Threemile Creek
SW3	477219.68	2822604.33	3032.49	SW	1	Yes	Yes	No	No	Threemile Creek near Otter Creek
SW4	478068.55	2827264.90	3074.56	SW	1	Yes	No	Yes	No	Trib. To Threemile Creek
SW5	478084.03	2828176.13	3076.24	SW	-	No	Yes	Yes	No	Trib. To Threemile Crk (SW4 should be representative of drainage water quality)
SW6	476700.01	2830747.70	3128.16	SW	1	Yes	No	Yes	No	Trib. To Threemile Creek, flow regime considered similar to SW5
SW7	476966.40	2830911.54	3119.17	SW	1	Yes	No	Yes	No	Trib. To Threemile Creek, flow regime considered similar to SW5
SW8	477316.55	2834405.66	3114.85	SW	1	Yes	No	Yes	No	Downstream of pond P4
SW9	475095.37	2834283.77	3144.84	SW	1	Yes	Yes	No	No	Trib. To Threemile Creek, north slope
SW10	474534.81	2835005.16	3175.46	SW	1	Yes	Yes	No	No	Trib. To Threemile Creek, north slope
SW11	477580.92	2836618.80	3133.51	SW	1	Yes	Yes	No	No	Upgradient tributary to Threemile Creek
SW12	477540.09	2836627.90	3133.78	SW	1	Yes	Yes	No	No	Upgradient tributary to Threemile Creek
SW13	473913.71	2824318.22	3075.00	SW	1	Yes	Yes	No	No	Downstream of Pond P1, mine area, west facing drainage
SW14	470158.36	2823677.38	3052.85	SW	1	Yes	No	Yes	No	Downstream of proposed mine area, SW13 similar characteristics
SW15	469721.69	2823832.21	3054.02	SW	-	No	No	Yes	No	Downstream of proposed mine area, SW13 similar characteristics
SW16	467975.90	2823029.24	3050.40	SW	Q	No	Yes	No	No	Otter Creek adjacent to proposed mine area
SW17	466470.63	2826427.06	3092.30	SW	1	Yes	No	Yes	No	Downstream of proposed mine area, SW13 similar characteristics
SW18	461474.56	2827060.05	3080.69	SW	1	Yes	No	Yes	No	Downstream of proposed mine area, SW13 similar characteristics
SW19	458968.29	2827162.29	3108.28	SW	-	No	No	Yes	No	Downstream of proposed mine area, SW13 similar characteristics
SW20	457299.40	2827703.99	3118.98	SW	1	Yes	Yes	No	No	Upgradient in undisturbed drainage
SW21	451828.37	2829165.84	3114.77	SW	-	No	No	Yes	No	Similar characteristics and area to SW19, south facing drainage
SW22	448742.03	2829571.49	3108.28	SW	Q, 3	No	Yes	No	No	Otter Creek upstream
SW23	450326.97	2832168.01	3128.87	SW	-	No	No	Yes	No	Tenmile Creek below county road crossing
SW24	489159.15	2819714.10	3036.90	SW	-	No	Yes	Yes	No	Home Creek Overflow
SW25	478793.08	2818929.14	3016.18	SW	Q	No	Yes	No	No	On Otter Creek downstream of Threemile Creek
PONDS										
P1	473637.25	2828094.24	3180.58	SW	Q, 4	No	No	No	Yes	Mine area pond water quality
P2	466518.53	2829563.05	3165.24	SW	5	No	No	No	Yes	Mine area pond water quality
P3	477256.63	2830714.28	3120.32	SW	Q, 4	No	No	No	Yes	Downgradient pond water quality
P4	476685.51	2834336.27	3144.72	SW	Q, 4	No	No	No	Yes	Pond water quality, stage
P5 (Shorty Creek Reservoir)	472331.31	2838808.52	3245.41	SW	Q, 4	No	No	No	Yes	Upgradient pond quality, Shorty Creek Reservoir
P6	451708.90	2835580.89	3166.56	SW	Q, 4	No	No	No	Yes	Pond water quality, stage

Notes:

1. Passive samplers will be checked monthly or following runoff events. Only one set of samples will be submitted per quarter but, multiple stage samples will be submitted for analysis if obtained during individual runoff eve
2. Montana Bureau of Mines and Geology flow monitoring
3. Available MBMG water quality data will be used as possible
4. Samples will be collected if free water is present or ice can be broken to obtain a representative sample. Water pooled on ice will not be sampl
5. Field parameters: SC, pH, Temperature only

\- No samples planned.
GW - Groundwater
SW - Surface wate

TABLE 3-2
OTTER CREEK MINE BASELINE REPORT 304E
BASELINE SURFACE WATER MONITORING MINIMUM AND MAXIMUM DISCHARGE SUMMARY

Surface Water Site	Continuious Datalogger Installed	Min. Gage Height	Max. Gage Height	Minimum Estimated Flow	Maximum Estimated Flow	Date of Maximum Estimated Flow
		(feet-ags)	(feet-ags)	(cfs)	(cfs)	
SW-1	Yes	0	1.13	0	41.7	5/29/2013
SW-1A**	--	NR	NR	0.10	1.50	3/7/2013
SW-2	Yes	0.03	4.34	1.32	99.1	3/7/2012
SW-3	Yes	0	0.375	0	0.396	7/22/2012
SW-4	--	0	0.8	0	14.8	6/14/2011(1)
SW-5	Yes	0	1.58	0	33.0	7/22/2012
SW-6	--	0	2.08	0	48.9	6/14/2013(1)
SW-7	--	0	2.02	0	80.6	6/14/2013(1)
SW-8	--	0	1.8	0	3.44	3/21/2014(1)
SW-9	Yes	0	2.2	0	4.25	7/22/2012
SW-10	Yes	0	0.63	0	2.14	7/22/2012
SW-11	Yes	0	3.46	0	25.4	2/26/2012
SW-12	Yes	0	2.76	0	22.6	3/8/2012
SW-13	Yes	0	1.496	0	24.4	5/29/2013
SW-14	--	0	1.06	0	20.7	6/14/2011(1)
SW-15	--	0	0.89	0	18.1	6/14/2011(1)
SW-16	Yes	0.8	12.35	0.47	2831(2)	1/30/2013
SW-17	--	0	0.92	0	46.3	6/14/2011(1)
SW-18	--	0	1.25	0	24.2	6/14/2011(1)
SW-19	--	0	1.2	0	11.1	10/25/2011
SW-20	Yes	0	0.325	0	1.15	6/26/2011(1)
SW-21	--	0	0.9	0	11.9	5/21/2014(1)
SW-22	Yes	0	7.732	0	132.1	2/19/2014
SW-23	--	0	3.14	0	0.9	7/29/2013(1)
SW-24	Yes	0	3.527	0	41.5	5/31/2013
SW-25	Yes	0.915	6.587	0.1	822.4	3/8/2014

** Site is ungaged.
NR - Not recorded.
(1) - Date crest gage reading recorded. Not actual date that flow occurred.
(2) - Impacted by ice.

TABLE 3-3
OTTER CREEK MINE BASELINE REPORT 304E
ANALYTICAL PARAMETERS –SURFACE WATER

Analyte	Method	Reporting Value - Detection Limit (mg/L or otherwise noted)
FIELD PARAMETERS		
Specific Conductance	Field	1 µmhos/cm
pH	Field	0.01s.u.
Temperature	Field	0.1 ^{o} C
PHYSICAL PARAMETERS		
Specific conductance @ 25^{o} C	E120.1/A2510B	1 µmhos/cm
pH	E150.2/A 4500 H B	0.1 s.u.
Turbidity (***surface water only***)	E180.1/A2130B	0.01 NTU
Total Dissolved Solids (TDS)	EPA 160.1	4
Total Suspended Solids (TSS) ***(surface water only)***	A2540D	1
NON-METALS		
Acidity, Total as $CaCO_3$ (if pH <6.0)	A2310B	1
Alkalinity, Total as $CaCO_3$	EPA 310.2/A2320 B	1
Bicarbonate as HCO_3	EPA 310.2/A2320 B	1
Carbonate as CO_3	EPA 310.2/A2320 B	1
Hydroxide as OH	A2320 B	1
Sulfate (SO4)	EPA 300.0	1
Chloride (Cl)	EPA 300.0	1
Fluoride (F)	A 4500 F-C/Technician 380-7WE	0.1
Sodium Adsorption Ratio (SAR)	Calc	0.1
NUTRIENTS		
Nitrate + Nitrite as N	EPA 353.2	0.01
DISSOLVED/TOTAL RECOVERABLE METALS		
Calcium (Ca)	200.7 / 200.8	1
Magnesium (Mg)	200.7 / 200.8	1
Sodium (Na)	200.7 / 200.8	1
Potassium (K)	200.7 / 200.8	1
Aluminum (Al)	200.7 / 200.8	0.009
Arsenic (As)	200.7 / 200.8	0.001
Barium (Ba)	200.7 / 200.8	0.003
Beryllium (Be)	200.7 / 200.8	0.0008
Boron (B)	200.7 / 200.8	0.01
Cadmium (Cd)	200.7 / 200.8	0.00003
Chromium (Cr)	200.7 / 200.8	0.001
Copper (Cu)	200.7 / 200.8	0.001
Iron (Fe)	200.7 / 200.8	0.02
Lead (Pb)	200.7 / 200.8	0.0003
Manganese (Mn)	200.7 / 200.8	0.005
Mercury (Hg)	245.1 Low Level	0.000005
Molybdenum (Mo)	200.7 / 200.8	0.005
Nickel (Ni)	200.7 / 200.8	0.002
Selenium (Se)	200.7 / 200.8	0.001
Vanadium (V)	200.7 / 200.8	0.01
Zinc (Zn)	200.7 / 200.8	0.008

Note: Metals will be analyzed as total recoverable and dissolved metals. Dissolved metals will be field filtered using 0.45 micron filters.
** If insufficient water collected, the following analyses hierarchy should be adhered to: 1) Metals and physical parameters; 2) Non-Metals; 3) TDS, TSS, SC; 4) Nutrients and Turbidity.*

TABLE 3-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16	SW-16
		sample_date	6/15/2011	10/26/2011	3/15/2012	5/3/2012	9/6/2012	12/6/2012	3/7/2013	6/14/2013	8/1/2013	1/9/2014	3/20/2014
		sys_sample_code	OTRCR-1106-114	OTRCR-1110-765	OCC-1203-111	OCC-1205-707	OCC-1209-718	OCC-1212-406	OCC-1303-332	OCC-1306-152	OCC-1308-502	OCC-1401-206	OCC-1403-801
		lab_sample_id	H11060332-006	H11100409-012	H12030214-012	H12050095-026	H12090092-019	H12120120-007	H13030136-003	H13060241-003	H13080043-003	H14010145-014	H14030296-017
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009
ALUMINUM (AL)	mg/L	TRC	< 0.1	< 0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.07	0.243
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	0.005	0.001	0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	0.005	0.001	0.002
BARIUM (BA)	mg/L	DIS	0.087	0.007	0.043	0.031	0.037	0.015	0.015	0.031	0.03	0.022	0.066
BARIUM (BA)	mg/L	TRC	0.089	0.007	0.046	0.038	0.041	0.017	0.017	0.034	0.033	0.024	0.073
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	670	660	610	680	590	610	550	520	620	910	630
BORON (B)	mg/L	DIS	0.39	0.38	0.26	0.34	0.55	0.33	0.27	0.48	0.48	0.38	0.31
BORON (B)	mg/L	TRC	0.4	0.41	0.26	0.35	0.63	0.34	0.28	0.48	0.51	0.39	0.34
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00004	< 0.00003
CALCIUM (CA)	mg/L	DIS	140	131	133	134	51	134	119	99	62	151	125
CALCIUM (CA)	mg/L	TRC	139	130	140	125	55	131	119	100	63	159	149
CARBONATE AS CO3	mg/L	NO MEAS	44	43	< 1	36	66	54	36	44	58	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	12	21	14	19	17	13	17	12	9	23	17
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.001	< 0.001	0.001	< 0.001	0.002	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.001
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.6	0.5	0.6	0.7	0.6	0.5	0.5	0.7	0.8	0.5
IRON (FE)	mg/L	DIS	0.05	< 0.05	0.06	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	0.06
IRON (FE)	mg/L	TRC	0.17	0.11	0.75	0.6	0.43	0.25	0.35	0.37	0.18	0.25	1.08
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0005	< 0.0005	0.0006	0.0006	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	0.0006
MAGNESIUM (MG)	mg/L	DIS	245	248	207	261	302	248	211	253	300	266	235
MAGNESIUM (MG)	mg/L	TRC	249	242	209	250	344	236	212	246	303	283	259
MANGANESE (MN)	mg/L	DIS	0.085	0.047	0.618	0.117	0.061	0.084	0.201	0.055	0.062	0.097	0.548
MANGANESE (MN)	mg/L	TRC	0.089	0.051	0.63	0.292	0.084	0.091	0.217	0.076	0.069	0.102	0.566
MERCURY (HG)	mg/L	DIS	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00008	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	0.009	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	0.009	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.003
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.004
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.04	0.36	< 0.01	< 0.01	0.01	0.1	0.02	< 0.01	0.27	0.35
pH - LAB	s.u.	NO MEAS	8.6	8.6	8	8.3	8.7	8.4	8.3	8.4	8.7	7.9	8.1
PHOSPHORUS (P)	mg/L	TOT	0.034	0.021									
POTASSIUM (K)	mg/L	DIS	20	22	18	19	29	20	17	19	27	22	18
POTASSIUM (K)	mg/L	TRC	20	22	18	18	28	19	17	20	27	23	19
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3560	3410	3380	3960	4320	3690	3350	3690	4580	4150	3640
SELENIUM (SE)	mg/L	DIS	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002
SELENIUM (SE)	mg/L	TRC	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002
SODIUM (NA)	mg/L	DIS	455	513	387	493	696	455	405	466	610	504	444
SODIUM (NA)	mg/L	TRC	473	513	402	512	646	439	405	489	619	533	475
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.37	6.08	4.9	5.72	8.18	5.37	5.16	5.65	7.12	5.72	5.41
SULFATE (SO4)	mg/L	NO MEAS	1700	1800	1500	1900	2300	1700	1500	1800	2100	1800	1800
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3360	3090	2460	3220	3450	2780	2550	2900	3400	3250	2970
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	620	620	500	620	600	590	510	500	600	740	520
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05	< 0.05									
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	6	9	18	32	32	16	14	36	28	5	20
TURBIDITY (NTU) - LAB	NTU	NO MEAS	2.3	2.4	13.1	12	10	5.4	7	9.9	4.6	5.1	16.3
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008

TABLE 3-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-16	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2	SW-2
		sample_date	5/21/2014	6/15/2011	10/26/2011	3/14/2012	5/3/2012	9/6/2012	12/6/2012	3/7/2013	6/13/2013	7/30/2013	8/1/2013
		sys_sample_code	OCC-1405-153	OTRCR-1106-113	OTRCR-1110-762	OCC-1203-109	OCC-1205-709	OCC-1209-714	OCC-1212-402	OCC-1303-331	OCC-1306-151	OCC-1307-510	OCC-1308-501
		lab_sample_id	H14050407-004	H11060332-005	H11100409-009	H12030214-010	H12050095-028	H12090092-015	H12120120-003	H13030136-002	H13060241-002	H13070565-010	H13080043-002
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC	0.314	< 0.1	0.2	0.6	1.1	1.1	0.6	0.1	1.9	1.7	1.1
ARSENIC (AS)	mg/L	DIS	0.001	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC	0.002	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	0.003	0.003
BARIUM (BA)	mg/L	DIS	0.042	0.087	0.01	0.043	0.032	0.028	0.016	0.015	0.041	0.049	0.042
BARIUM (BA)	mg/L	TRC	0.047	0.091	0.012	0.048	0.047	0.044	0.021	0.016	0.061	0.066	0.051
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	680	700	670	580	660	560	620	530	520	610	630
BORON (B)	mg/L	DIS	0.43	0.4	0.38	0.24	0.32	0.62	0.31	0.27	0.45	0.57	0.52
BORON (B)	mg/L	TRC	0.43	0.4	0.39	0.25	0.34	0.7	0.32	0.27	0.47	0.57	0.54
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CALCIUM (CA)	mg/L	DIS	133	143	131	129	138	40	136	115	97	60	60
CALCIUM (CA)	mg/L	TRC	129	145	132	135	127	45	135	114	101	63	61
CARBONATE AS CO3	mg/L	NO MEAS	5	30	40	< 1	45	100	48	39	45	76	62
CHLORIDE (CL)	mg/L	NO MEAS	10	12	22	13	20	21	13	17	12	16	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	0.002	0.002	< 0.001	< 0.001	0.003	0.003	0.002
COPPER (CU)	mg/L	DIS	< 0.001	0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	< 0.001	0.001	< 0.001	0.002	0.002	0.003	< 0.001	< 0.001	0.003	0.004	0.002
FLUORIDE (F)	mg/L	NO MEAS	0.7	0.6	0.6	0.5	0.6	0.8	0.6	0.5	0.5	0.7	0.7
IRON (FE)	mg/L	DIS	< 0.02	0.08	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC	0.68	0.22	0.32	1.11	1.74	1.49	0.61	0.28	2.19	2.13	1.18
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	0.0006	< 0.0005	< 0.0005	0.0007	0.0015	0.0014	< 0.0005	< 0.0005	0.0018	0.0019	0.0011
MAGNESIUM (MG)	mg/L	DIS	269	253	251	200	269	336	261	208	245	312	325
MAGNESIUM (MG)	mg/L	TRC	265	258	252	201	253	390	250	206	240	317	322
MANGANESE (MN)	mg/L	DIS	0.172	0.099	0.055	0.571	0.062	0.026	0.047	0.127	0.037	0.026	0.045
MANGANESE (MN)	mg/L	TRC	0.222	0.106	0.063	0.595	0.295	0.086	0.06	0.135	0.088	0.087	0.077
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.007	0.007
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.011	0.005	< 0.005	< 0.005	0.007	0.007
NICKEL (NI)	mg/L	DIS	0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	0.38	< 0.01	< 0.01	< 0.01	0.07	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.3	8.5	8.6	8.1	8.4	9	8.4	8.3	8.5	8.7	8.7
PHOSPHORUS (P)	mg/L	TOT		0.029	0.02								
POTASSIUM (K)	mg/L	DIS	20	20	22	18	20	32	19	16	19	28	28
POTASSIUM (K)	mg/L	TRC	20	21	22	18	18	32	20	16	20	29	29
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3960	3640	3410	3290	3970	4730	3720	3310	3640	4570	4860
SELENIUM (SE)	mg/L	DIS	< 0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	0.001	0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS	527	479	520	375	516	756	449	389	456	668	673
SODIUM (NA)	mg/L	TRC	529	480	530	382	514	752	465	398	481	681	684
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.05	5.58	6.24	4.82	5.9	8.54	5.19	5	5.6	7.67	7.59
SULFATE (SO4)	mg/L	NO MEAS	1800	1700	1800	1400	1900	2600	1700	1500	1800	2200	2300
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3310	3200	3000	2490	3420	3940	2870	2420	2920	3670	3640
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	570	630	620	480	620	630	590	500	500	630	620
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		< 0.05	< 0.05								
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	28	6	18	34	92	78	52	12	104	108	72
TURBIDITY (NTU) - LAB	NTU	NO MEAS	16.7	3.6	9.1	20.1	48.2	50	7.8	6.6	63.7	69	13.4
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01

TABLE 3-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-2	SW-2	SW-2	SW-22	SW-22	SW-22	SW-22	SW-22	SW-22	SW-22	SW-22
		sample_date	1/9/2014	3/20/2014	5/21/2014	6/15/2011	10/26/2011	3/15/2012	5/3/2012	9/6/2012	12/6/2012	3/7/2013	6/14/2013
		sys_sample_code	OCC-1401-205	OCC-1403-802	OCC-1405-152	OTRCR-1106-115	OTRCR-1110-766	OCC-1203-114	OCC-1205-706	OCC-1209-719	OCC-1212-407	OCC-1303-333	OCC-1306-154
		lab_sample_id	H14010145-013	H14030296-018	H14050407-003	H11060332-007	H11100409-013	H12030214-015	H12050095-025	H12090092-020	H12120120-008	H13030136-004	H13060241-005
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.009	< 0.009	< 0.009	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC	0.536	0.223	0.585	< 0.1	< 0.1	0.2	0.1	0.9	0.4	0.1	< 0.1
ARSENIC (AS)	mg/L	DIS	0.001	0.001	0.001	< 0.003	< 0.003	< 0.003	< 0.003	0.005	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC	0.003	0.002	0.002	< 0.003	< 0.003	< 0.003	< 0.003	0.006	< 0.003	< 0.003	< 0.003
BARIUM (BA)	mg/L	DIS	0.023	0.068	0.042	0.093	0.023	0.042	0.031	0.045	0.021	0.022	0.029
BARIUM (BA)	mg/L	TRC	0.052	0.073	0.05	0.096	0.025	0.048	0.034	0.062	0.027	0.024	0.032
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	940	650	700	690	680	640	670	670	610	580	470
BORON (B)	mg/L	DIS	0.39	0.32	0.42	0.38	0.37	0.25	0.35	0.43	0.32	0.26	0.39
BORON (B)	mg/L	TRC	0.79	0.35	0.43	0.37	0.38	0.25	0.35	0.49	0.32	0.28	0.39
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	< 0.00004	< 0.00003	0.0001	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CALCIUM (CA)	mg/L	DIS	156	129	134	141	138	140	141	85	140	124	99
CALCIUM (CA)	mg/L	TRC	162	154	130	144	139	145	133	94	139	126	101
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	3	34	34	< 1	44	39	44	34	64
CHLORIDE (CL)	mg/L	NO MEAS	27	17	10	12	20	15	18	15	13	18	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.002	0.001	0.002	0.001	< 0.001	0.002	< 0.001	0.003	< 0.001	< 0.001	0.001
FLUORIDE (F)	mg/L	NO MEAS	0.8	0.5	0.7	0.6	0.6	0.5	0.6	0.7	0.6	0.5	0.5
IRON (FE)	mg/L	DIS	< 0.02	0.06	< 0.02	0.07	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC	0.9	1.09	0.95	0.24	0.27	0.83	0.48	1.34	0.62	0.34	0.1
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	0.0007	0.0005	0.0008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0012	0.0005	< 0.0005	< 0.0005
MAGNESIUM (MG)	mg/L	DIS	277	228	270	242	244	218	257	265	246	216	243
MAGNESIUM (MG)	mg/L	TRC	292	268	263	243	243	216	250	310	237	218	247
MANGANESE (MN)	mg/L	DIS	0.076	0.581	0.118	0.125	0.176	0.528	0.187	0.228	0.278	0.324	0.013
MANGANESE (MN)	mg/L	TRC	0.164	0.609	0.194	0.128	0.188	0.563	0.244	0.287	0.299	0.343	0.014
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.000005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.002	0.003	0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	< 0.004	0.004	0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.26	0.35	< 0.01	< 0.01	0.01	0.36	< 0.01	< 0.01	0.03	0.12	< 0.01
pH - LAB	s.u.	NO MEAS	7.8	8.1	8.3	8.5	8.5	8.1	8.4	8.4	8.5	8.3	8.7
PHOSPHORUS (P)	mg/L	TOT				0.06	0.037						
POTASSIUM (K)	mg/L	DIS	23	18	20	20	21	18	20	24	20	17	17
POTASSIUM (K)	mg/L	TRC	24	20	20	20	21	18	19	25	19	17	18
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4250	3720	4010	3430	3330	3520	3850	3790	3590	3400	3490
SELENIUM (SE)	mg/L	DIS	< 0.001	0.002	< 0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	0.002	0.002	< 0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
SODIUM (NA)	mg/L	DIS	523	464	510	428	482	405	481	545	438	396	436
SODIUM (NA)	mg/L	TRC	532	496	527	429	490	413	488	534	430	402	435
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.81	5.69	5.83	5.07	5.81	5	5.57	6.56	5.16	4.98	5.22
SULFATE (SO4)	mg/L	NO MEAS	1900	1900	1800	1700	1700	1600	1800	1900	1600	1500	1700
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3450	3100	3270	3050	3050	2700	3130	2910	2620	2580	2760
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	770	530	580	620	620	520	620	610	570	530	490
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				< 0.05	< 0.05						
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	12	20	28	20	11	32	24	64	44	12	12
TURBIDITY (NTU) - LAB	NTU	NO MEAS	12.9	14.8	25.4	5.5	5.9	15.6	7.7	43	12.2	5.8	3
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC	< 0.008	< 0.008	0.011	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

TABLE 3-4
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-22	SW-22	SW-22	SW-22	SW-25	SW-25	SW-25	SW-25	SW-25					
		sample_date	8/1/2013	1/9/2014	3/20/2014	5/21/2014	6/13/2013	8/1/2013	1/9/2014	3/20/2014	5/21/2014					
		sys_sample_code	OCC-1308-503	OCC-1401-209	OCC-1403-803	OCC-1405-154	OCC-1306-150	OCC-1308-500	OCC-1401-204	OCC-1403-800	OCC-1405-151					
		lab_sample_id	H13080043-004	H14010145-017	H14030296-019	H14050407-005	H13060241-001	H13080043-001	H14010145-012	H14030296-016	H14050407-002					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	0.016	< 0.009	< 0.009	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.009	0.1	0.074	42	1
ALUMINUM (AL)	mg/L	TRC	0.1	0.056	0.41	0.116	1.1	0.7	0.245	0.228	0.655	0.056	1.9	0.414	42	36
ARSENIC (AS)	mg/L	DIS	0.006	< 0.001	0.001	0.001	< 0.003	0.003	0.002	< 0.001	0.001	0.001	0.006	0.003	42	16
ARSENIC (AS)	mg/L	TRC	0.006	0.001	0.002	0.002	< 0.003	0.004	0.002	0.001	0.002	0.001	0.006	0.003	42	20
BARIUM (BA)	mg/L	DIS	0.019	0.026	0.063	0.034	0.044	0.035	0.046	0.068	0.041	0.007	0.093	0.038	42	42
BARIUM (BA)	mg/L	TRC	0.02	0.028	0.073	0.036	0.056	0.042	0.05	0.073	0.052	0.007	0.096	0.045	42	42
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008	0.001	0.0009	42	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.0008	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008	0.001	0.0009	42	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	420	880	590	630	500	650	960	630	670	420	960	644	42	42
BORON (B)	mg/L	DIS	0.39	0.34	0.27	0.39	0.49	0.54	0.77	0.31	0.43	0.24	0.77	0.39	42	42
BORON (B)	mg/L	TRC	0.4	0.35	0.29	0.4	0.48	0.54	0.8	0.34	0.44	0.25	0.8	0.42	42	42
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	0.00003	0.00008	0.00007	42	0
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00003	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00004	0.00004	< 0.00003	0.00003	0.0001	0.00007	42	2
CALCIUM (CA)	mg/L	DIS	56	156	121	132	96	49	156	118	131	40	156	117	42	42
CALCIUM (CA)	mg/L	TRC	55	164	145	127	99	48	165	143	127	45	165	120	42	42
CARBONATE AS CO3	mg/L	NO MEAS	97	< 1	< 1	20	51	66	< 1	< 1	12	1	100	34	42	31
CHLORIDE (CL)	mg/L	NO MEAS	5	21	16	10	12	12	26	17	12	5	27	15	42	42
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	42	0
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	0.002	0.001	< 0.001	< 0.001	0.001	0.001	0.003	0.001	42	10
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.002	0.001	42	3
COPPER (CU)	mg/L	TRC	< 0.001	< 0.001	0.002	< 0.001	0.002	0.002	0.001	0.002	0.001	0.001	0.004	0.001	42	25
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.7	0.4	0.7	0.5	0.7	0.8	0.5	0.7	0.4	0.8	0.6	42	42
IRON (FE)	mg/L	DIS	< 0.05	0.02	0.08	< 0.02	< 0.05	< 0.05	0.06	0.06	< 0.02	0.02	0.08	0.05	42	10
IRON (FE)	mg/L	TRC	0.07	0.21	1.35	0.36	1.24	0.77	0.55	0.93	1.01	0.07	2.19	0.72	42	42
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005	0.0008	< 0.0003	< 0.0003	< 0.0003	0.0003	0.0008	0.0005	42	1
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0003	0.0008	< 0.0003	0.001	0.001	0.0003	0.0005	0.0008	0.0003	0.0019	0.0007	42	21
MAGNESIUM (MG)	mg/L	DIS	267	263	216	267	246	331	281	224	269	200	336	257	42	42
MAGNESIUM (MG)	mg/L	TRC	260	280	234	260	240	325	301	248	264	201	390	262	42	42
MANGANESE (MN)	mg/L	DIS	< 0.005	0.275	0.473	0.099	0.053	0.056	0.147	0.519	0.079	0.005	0.618	0.181	42	41
MANGANESE (MN)	mg/L	TRC	0.008	0.281	0.51	0.123	0.089	0.083	0.158	0.557	0.15	0.008	0.63	0.216	42	42
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.000045	42	0
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.00005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.000046	42	1
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.007	0.008	< 0.005	< 0.005	0.005	0.01	0.005	42	8
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.007	0.008	< 0.005	< 0.005	0.005	0.011	0.006	42	10
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.002	0.003	0.002	< 0.01	< 0.01	< 0.004	0.003	0.002	0.002	0.01	0.008	42	8
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.002	0.003	0.003	< 0.01	< 0.01	< 0.007	0.004	0.003	0.002	0.01	0.008	42	8
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.01	0.22	0.24	< 0.01	< 0.01	0.01	0.26	0.34	< 0.01	0.01	0.38	0.10	42	21
pH - LAB	s.u.	NO MEAS	9.1	7.9	8	8.5	8.6	8.7	7.8	8.1	8.4	7.8	9.1	8.4	42	42
PHOSPHORUS (P)	mg/L	TOT										0.02	0.06	0.03	6	6
POTASSIUM (K)	mg/L	DIS	23	20	16	19	19	28	23	18	20	16	32	21	42	42
POTASSIUM (K)	mg/L	TRC	23	21	18	19	20	29	24	19	21	16	32	21	42	42
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3780	3960	3260	3820	3660	4990	4370	3630	3990	3260	4990	3825	42	42
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.002	0.002	< 0.001	0.001	0.002	0.001	42	14
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.002	0.002	< 0.001	0.001	0.002	0.001	42	13
SODIUM (NA)	mg/L	DIS	481	472	382	491	469	697	546	447	519	375	756	496	42	42
SODIUM (NA)	mg/L	TRC	489	489	407	498	486	708	562	467	538	382	752	505	42	42
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.95	5.35	4.81	5.64	5.76	7.88	6.04	5.58	5.96	4.81	8.54	5.87	42	42
SULFATE (SO4)	mg/L	NO MEAS	1700	1800	1600	1700	1800	2300	2000	1800	1900	1400	2600	1817	42	42
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2650	3230	2730	3220	3090	3960	3400	2860	3360	2420	3960	3082	42	42
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	500	720	480	550	490	640	790	520	570	480	790	584	42	42
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS										0.05	0.05	0.05	6	0
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	8	< 4	26	4	72	88	< 4	24	40	4	108	33	42	40
TURBIDITY (NTU) - LAB	NTU	NO MEAS	2.6	3.7	18.7	6.4	40.6	41.2	6.4	14.1	29	2.3	69	16.9	42	42
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01	0.1	0.07	42	0
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01	0.1	0.07	42	0
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.008	0.01	0.009	42	0
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.008	0.011	0.010	42	3

TABLE 3-5
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK TRIBUTARIES SURFACE RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-13	SW-13	SW-13	SW-13	SW-13	SW-13	SW-13	SW-13	SW-13	SW-13	SW-14	SW-14
		sample_date	6/14/2011	6/14/2011	10/21/2011	12/8/2011	3/14/2012	8/28/2012	2/7/2013	4/25/2013	6/20/2013	6/14/2011	10/25/2011
		sys_sample_code	OTRCR-1106-102	OTRCR-1106-103	OTRCR-1110-716	OTRCR-1112-103	OCC-1203-107	OCC-1208-203	OCC-1302-701	OCC-1304-209	OCC-1306-112	OTRCR-1106-107	OTRCR-1110-757
		lab_sample_id	H11060328-002	H11060328-003	H11100333-012	H11120137-002	H12030214-008	H12080485-004	H13020128-002	H13040428-010	H13060353-003	H11060328-007	H11100409-004
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	0.3	< 0.1	0.3	< 0.1	0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC	13.3	0.1	1.6	59.6	2.3	8.6	0.2	0.7	50.6	5.7	1.4
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC	0.009	< 0.003	< 0.003	0.033	< 0.003	0.006	< 0.003	< 0.003	0.026	< 0.003	< 0.003
BARIUM (BA)	mg/L	DIS	0.078	0.057	0.054	0.073	0.028	0.091	0.07	0.074	0.184	0.082	0.086
BARIUM (BA)	mg/L	TRC	0.257	0.06	0.057	0.932	0.057	0.202	0.074	0.081	0.639	0.165	0.116
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	0.001	< 0.001	< 0.001	0.004	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	520	590	590	270	120	260	150	390	320	180	210
BORON (B)	mg/L	DIS	0.68	1.23	0.97	0.15	0.05	0.13	0.11	0.33	0.19	0.03	0.09
BORON (B)	mg/L	TRC	0.65	1.22	1	0.16	0.05	0.16	0.11	0.34	0.52	0.03	0.06
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	0.00125	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	0.00035	< 0.00008	< 0.00008	0.00139	0.00009	0.0002	< 0.0001	< 0.00008	0.0011	0.00014	< 0.00008
CALCIUM (CA)	mg/L	DIS	273	334	278	67	18	100	42	142	91	55	243
CALCIUM (CA)	mg/L	TRC	278	341	278	155	22	111	41	141	219	65	143
CARBONATE AS CO3	mg/L	NO MEAS	< 4	23	< 4	< 1	< 1	< 1	< 1	63	< 1	< 4	< 4
CHLORIDE (CL)	mg/L	NO MEAS	15	25	21	27	3	10	4	14	8	1	18
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.022	< 0.001	0.002	0.075	0.003	0.012	< 0.001	0.001	0.064	0.009	0.003
COPPER (CU)	mg/L	DIS	0.002	0.005	0.007	0.009	0.004	0.006	0.007	0.005	0.004	0.002	0.006
COPPER (CU)	mg/L	TRC	0.023	0.006	0.009	0.102	0.007	0.019	0.007	0.006	0.074	0.013	0.006
FLUORIDE (F)	mg/L	NO MEAS	0.4	0.6	0.5	0.3	0.1	0.2	0.2	0.4	0.3	0.3	0.9
IRON (FE)	mg/L	DIS	0.06	0.08	< 0.05	0.12	0.34	0.14	0.26	< 0.05	< 0.05	0.25	< 0.05
IRON (FE)	mg/L	TRC	20.3	0.2	1.75	83.7	3.1	10.5	0.25	0.84	53.2	7.42	2.33
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	0.0191	< 0.0005	0.0016	0.0696	0.0024	0.0081	< 0.0005	0.0007	0.0539	0.0073	0.0018
MAGNESIUM (MG)	mg/L	DIS	396	600	546	72	17	100	39	232	71	28	244
MAGNESIUM (MG)	mg/L	TRC	400	606	535	104	19	110	40	253	264	31	82
MANGANESE (MN)	mg/L	DIS	0.122	0.02	0.017	0.041	0.076	0.019	0.032	0.012	0.299	0.214	0.01
MANGANESE (MN)	mg/L	TRC	0.535	0.017	0.053	2.19	0.134	0.481	0.033	0.028	1.54	0.28	0.041
MERCURY (HG)	mg/L	DIS	< 0.0001	0.0002	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.0001	< 0.0001	< 0.00005	0.0002	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00015	< 0.0001	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	0.01	0.02	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	0.04	0.02	0.01	0.12	< 0.01	0.02	< 0.01	< 0.01	0.09	0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	1.39	4.55	2.32	0.35	0.05	0.74	0.44	< 0.01	0.1	0.14	1.29
pH - LAB	s.u.	NO MEAS	8.1	8.4	8.1	7.5	7.5	7.9	7.7	8.9	7.6	8	8
PHOSPHORUS (P)	mg/L	TOT	4.58	0.016	0.1							0.211	0.074
POTASSIUM (K)	mg/L	DIS	14	14	15	24	7	19	8	17	11	6	16
POTASSIUM (K)	mg/L	TRC	16	13	15	29	8	21	9	17	22	7	9
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	9340	11000	7500	2020	690	3510	1880	8710	4650	796	3640
SELENIUM (SE)	mg/L	DIS	0.004	0.007	0.006	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
SELENIUM (SE)	mg/L	TRC	0.005	0.008	0.005	0.003	< 0.001	< 0.001	< 0.001	< 0.001	0.003	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS	1440	1650	1580	350	93	563	315	1790	384	72	437
SODIUM (NA)	mg/L	TRC	1440	1640	1580	294	96	580	335	1810	1210	74	144
SODIUM ADSORPTION RATIO	unitless	NO MEAS	13	12.5	12.7	7.06	3.73	9.35	8.43	21.5	7.31	1.98	4.74
SULFATE (SO4)	mg/L	NO MEAS	4800	6300	5700	950	220	1600	790	4800	2500	290	2400
TDS - CALCULATED	mg/L	NO MEAS											
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	7930	10000	9080	1880	414	2700	1360	6780	3690	582	3910
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	420	520	480	220	99	210	120	430	260	140	170
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.12	< 0.05	< 0.1							0.23	< 0.05
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	2670	45	830	1110	118	912	62	110	1050	122	374
TURBIDITY (NTU) - LAB	NTU	NO MEAS	87.5	4.4	100000	4770	79.9	274	42.2	8	503	14.2	100000
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS	0.04	0.01	0.03	0.02	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	< 0.01
ZINC (ZN)	mg/L	TRC	0.2	< 0.01	0.05	0.48	0.02	0.15	< 0.01	< 0.01	0.27	0.07	0.04

TABLE 3-5
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK TRIBUTARIES SURFACE RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-14	SW-14	SW-14	SW-17	SW-17	SW-17	SW-17	SW-18	SW-18	SW-18	SW-18
		sample_date	3/22/2012	8/27/2012	4/26/2013	6/14/2011	10/25/2011	3/15/2012	6/13/2013	6/15/2011	3/22/2012	2/7/2013	4/26/2013
		sys_sample_code	OCC-1203-117	OCC-1208-200	OCC-1304-210	OTRCR-1106-108	OTRCR-1110-758	OCC-1203-110	OCC-1306-102	OTRCR-1106-112	OCC-1203-116	OCC-1302-700	OCC-1304-211
		lab_sample_id	H12030308-002	H12080485-001	H13040428-011	H11060328-008	H11100409-005	H12030214-011	H13060240-003	H11060332-004	H12030308-001	H13020128-001	H13040428-012
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS		< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	2.4	< 0.1
ALUMINUM (AL)	mg/L	TRC	2.7	2.7	1	5.5	0.6	3.2	0.6	3.1	0.1	7.2	1.4
ARSENIC (AS)	mg/L	DIS		< 0.003	< 0.003	< 0.003	< 0.003		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.005	< 0.003
BARIUM (BA)	mg/L	DIS		0.14	0.071	0.084	0.064		0.068	0.07	0.066	0.064	0.06
BARIUM (BA)	mg/L	TRC	0.132	0.165	0.098	0.136	0.052	0.076	0.074	0.109	0.041	0.114	0.073
BERYLLIUM (BE)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS		150	110	210	520		110	120	210	88	97
BORON (B)	mg/L	DIS		0.04	0.03	0.18	0.24		0.19	0.04	0.07	0.03	0.03
BORON (B)	mg/L	TRC	0.05	0.07	0.04	0.17	0.18	0.1	0.19	0.05	0.04	0.04	0.04
CADMIUM (CD)	mg/L	DIS		< 0.00008	< 0.00008	< 0.00008	< 0.00008		< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	0.00021	< 0.00008	< 0.00008	0.00016	< 0.00008	0.00016	< 0.00008	0.00014	< 0.00008	0.0002	< 0.00008
CALCIUM (CA)	mg/L	DIS		33	20	181	246		430	28	39	20	17
CALCIUM (CA)	mg/L	TRC	81	36	25	179	212	193	431	33	22	20	21
CARBONATE AS CO3	mg/L	NO MEAS		< 1	< 1	< 4	4		< 1	< 4	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS		2	3	6	< 50		7	1	15	3	2
CHROMIUM (CR)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	0.003	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.003	0.004	0.002	0.009	0.001	0.006	0.001	0.008	< 0.001	0.011	0.002
COPPER (CU)	mg/L	DIS		0.003	0.004	< 0.001	0.003		0.006	0.002	0.007	0.007	0.003
COPPER (CU)	mg/L	TRC	0.02	0.008	0.008	0.013	0.005	0.024	0.007	0.009	0.005	0.018	0.007
FLUORIDE (F)	mg/L	NO MEAS		0.1	< 0.1	0.9	1.2		0.5	2	0.4	< 0.1	< 0.1
IRON (FE)	mg/L	DIS		0.59	0.38	0.1	0.07		< 0.05	0.05	0.35	1.81	0.77
IRON (FE)	mg/L	TRC	2.8	3.22	2.12	9.32	0.88	6.32	0.63	5.12	0.35	10.7	3.25
LEAD (PB)	mg/L	DIS		< 0.0005	< 0.0005	< 0.0005	< 0.0005		< 0.0005	< 0.0005	0.0007	0.0013	< 0.0005
LEAD (PB)	mg/L	TRC	0.0063	0.0026	0.0018	0.01	0.0009	0.0064	0.0008	0.0046	0.0008	0.0082	0.0019
MAGNESIUM (MG)	mg/L	DIS		7	7	172	245		146	16	21	7	5
MAGNESIUM (MG)	mg/L	TRC	45	10	10	173	149	106	140	19	11	10	8
MANGANESE (MN)	mg/L	DIS		0.012	0.102	0.166	0.025		0.016	< 0.005	0.1	0.043	0.189
MANGANESE (MN)	mg/L	TRC	0.165	0.098	0.202	0.248	0.038	0.815	0.026	0.109	0.064	0.21	0.258
MERCURY (HG)	mg/L	DIS		< 0.00005	< 0.00005	< 0.0001	< 0.00005		< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.0001	< 0.00005	0.00007	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS		< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	0.01	< 0.01	0.01	0.02	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS		2.59	0.27	0.05	0.54		0.05	< 0.01	0.02	0.18	0.02
pH - LAB	s.u.	NO MEAS		7.7	7.1	8	8.3		8.2	7.9	6.7	6.9	7
PHOSPHORUS (P)	mg/L	TOT				0.11	0.012			0.179			
POTASSIUM (K)	mg/L	DIS		12	12	14	16		20	7	65	15	9
POTASSIUM (K)	mg/L	TRC	13	10	14	15	12	37	20	8	42	12	10
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS		287	205	1760	4740		3750	536	517	173	182
SELENIUM (SE)	mg/L	DIS		< 0.001	< 0.001	0.005	0.003		0.004	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.004	0.003	0.001	0.003	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS		4	8	517	808		331	44	13	8	6
SODIUM (NA)	mg/L	TRC	78	3	6	575	415	252	322	50	8	7	7
SODIUM ADSORPTION RATIO	unitless	NO MEAS	1.72	0.16	0.38	6.6	4.48	3.61	3.52	1.65	0.42	0.29	0.3
SULFATE (SO4)	mg/L	NO MEAS		9	8	800	2100		2400	160	42	22	9
TDS - CALCULATED	mg/L	NO MEAS								325			
TDS (MEASURED AT 180 C)	mg/L	NO MEAS		180	163	1360	4850		3360		470	169	190
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS		120	89	170	430		93	100	170	72	80
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				0.45	< 0.05			0.31			
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS		92	117	18100	1230		40		8700	232	307
TURBIDITY (NTU) - LAB	NTU	NO MEAS		331	52.7	100000	100000		13.5			219	216
VANADIUM (V)	mg/L	DIS		< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS		< 0.01	0.01	< 0.01	0.01		< 0.01	0.16	0.04	0.02	< 0.01
ZINC (ZN)	mg/L	TRC	0.04	0.02	0.02	0.06	0.06	0.09	< 0.01	0.32	0.04	0.06	0.02

TABLE 3-5
OTTER CREEK MINE BASELINE REPORT 304E
OTTER CREEK TRIBUTARIES SURFACE RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	SW-18	SW-19	SW-19	SW-20	SW-20	SW-20	SW-20					
		sample_date	6/20/2013	8/27/2012	5/21/2014	6/15/2011	10/25/2011	4/26/2013	6/20/2013					
		sys_sample_code	OCC-1306-114	OCC-1208-201	OCC-1405-158	OTRCR-1106-111	OTRCR-1110-754	OCC-1304-212	OCC-1306-113					
		lab_sample_id	H13060353-005	H12080485-002	H14050407-009	H11060332-003	H11100409-001	H13040428-013	H13060353-004					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	0.2	< 0.1	0.017	< 0.1	0.6	1.5	0.1	0.017	2.4	0.271	27	9
ALUMINUM (AL)	mg/L	TRC	33.7			< 0.1	0.4	15.5	71.7	0.1	71.7	10.9	27	26
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.001	< 0.003	< 0.003	0.003	< 0.003	0.001	0.003	0.003	27	1
ARSENIC (AS)	mg/L	TRC	0.023			< 0.003	< 0.003	0.015	0.062	0.003	0.062	0.009	27	9
BARIUM (BA)	mg/L	DIS	0.069	0.166	0.06	0.048	0.117	0.128	0.071	0.028	0.184	0.082	27	27
BARIUM (BA)	mg/L	TRC	0.398			< 0.005	0.112	0.332	0.862	0.005	0.932	0.201	27	26
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	0.0008	0.001	0.0010	27	0
BERYLLIUM (BE)	mg/L	TRC	0.003			< 0.001	< 0.001	0.002	0.006	0.001	0.006	0.001	27	6
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	130	170	160	81	160	100	130	81	590	228	27	27
BORON (B)	mg/L	DIS	0.03	0.05	0.02	0.04	0.05	0.06	0.04	0.02	1.23	0.19	27	27
BORON (B)	mg/L	TRC	0.07			< 0.01	0.05	0.08	0.13	0.01	1.22	0.21	27	26
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00003	< 0.00008	< 0.00008	0.00009	< 0.00008	0.00003	0.00125	0.00012	27	2
CADMIUM (CD)	mg/L	TRC	0.00085			< 0.00008	< 0.00008	0.00064	0.0016	0.00008	0.0016	0.00031	27	14
CALCIUM (CA)	mg/L	DIS	27	70	37	25	72	40	30	17	430	110	27	27
CALCIUM (CA)	mg/L	TRC	53			2	66	96	175	2	431	127	27	27
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	< 4	< 4	< 1	< 1	1	63	5	27	3
CHLORIDE (CL)	mg/L	NO MEAS	1	4	3	1	5	3	1	1	50	9	27	26
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	0.001	0.003	0.001	27	2
CHROMIUM (CR)	mg/L	TRC	0.073			< 0.001	< 0.001	0.028	0.13	0.001	0.13	0.018	27	22
COPPER (CU)	mg/L	DIS	0.002	0.003	0.001	0.001	0.003	0.006	0.001	0.001	0.009	0.004	27	26
COPPER (CU)	mg/L	TRC	0.084			< 0.001	0.003	0.039	0.105	0.001	0.105	0.023	27	26
FLUORIDE (F)	mg/L	NO MEAS	< 0.1	0.2	0.1	0.7	0.5	< 0.1	< 0.1	0.1	2	0.4	27	21
IRON (FE)	mg/L	DIS	0.3	0.41	0.03	0.13	0.67	3.49	0.36	0.03	3.49	0.41	27	22
IRON (FE)	mg/L	TRC	73			< 0.05	0.88	33.6	148	0.05	148	17.92	27	26
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0003	< 0.0005	0.0011	0.0026	< 0.0005	0.0003	0.0026	0.0006	27	4
LEAD (PB)	mg/L	TRC	0.0578			< 0.0005	0.0006	0.0329	0.114	0.0005	0.114	0.0154	27	24
MAGNESIUM (MG)	mg/L	DIS	9	28	15	10	19	11	5	5	600	114	27	27
MAGNESIUM (MG)	mg/L	TRC	31			< 1	18	34	84	1	606	122	27	26
MANGANESE (MN)	mg/L	DIS	0.141	0.039	< 0.005	0.012	0.045	0.571	0.468	0.005	0.571	0.104	27	25
MANGANESE (MN)	mg/L	TRC	1.49			0.011	0.058	1.09	3.39	0.011	3.39	0.504	27	27
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.000005	< 0.0001	< 0.00005	< 0.00005	< 0.00005	0.000005	0.0002	0.000063	27	1
MERCURY (HG)	mg/L	TOT	0.0001			< 0.0001	< 0.00005	0.00013	0.00019	0.00005	0.0002	0.00008	27	7
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	27	0
MOLYBDENUM (MO)	mg/L	TRC	< 0.005			< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.006	0.005	27	1
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	0.002	0.02	0.010	27	3
NICKEL (NI)	mg/L	TRC	0.07			< 0.01	< 0.01	0.04	0.12	0.01	0.12	0.03	27	15
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.4			0.08	1.32	0.03	0.39	0.01	4.55	0.69	25	23
pH - LAB	s.u.	NO MEAS	7.8	7.6	7.9	8	8.1	7.1	7.4	6.7	8.9	7.8	27	27
PHOSPHORUS (P)	mg/L	TOT				0.403	0.018			0.012	4.58	0.570	10	10
POTASSIUM (K)	mg/L	DIS	7	19	9	5	16	18	8	5	65	15	27	27
POTASSIUM (K)	mg/L	TRC	16			< 1	15	22	28	1	42	16	27	26
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	338	1310	396	318	560	201	226	173	11000	2564	27	27
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.002	0.001	0.001	< 0.001	0.001	0.007	0.002	27	11
SELENIUM (SE)	mg/L	TRC	0.002			< 0.001	< 0.001	0.002	0.004	0.001	0.008	0.002	27	12
SODIUM (NA)	mg/L	DIS	21	161	18	19	23	2	2	2	1790	395	27	27
SODIUM (NA)	mg/L	TRC	24			< 1	21	3	8	1	1810	407	27	26
SODIUM ADSORPTION RATIO	unitless	NO MEAS	0.89		0.62	0.8	0.62	0.09	0.11	0.09	21.5	4.59	28	28
SULFATE (SO4)	mg/L	NO MEAS	60	530	67	82	150	11	9	8	6300	1363	27	27
TDS - CALCULATED	mg/L	NO MEAS				190				190	325	258	2	2
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	200	856	253		385	201	171	163	10000	2445	25	25
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	110	140	130	67	130	84	110	67	520	191	27	27
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				1.44	< 0.05			0.05	1.44	0.29	10	5
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	1610	26	509		286	26	26	26	18100	1548	25	25
TURBIDITY (NTU) - LAB	NTU	NO MEAS	3500	26.4	576		486	22.4	86.4	4.4	100000	17138.0	24	24
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	0.01	0.1	0.10	27	0
VANADIUM (V)	mg/L	TRC	0.1			< 0.1	< 0.1	< 0.1	0.2	0.1	0.2	0.1	27	4
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.008	0.08	0.01	0.04	< 0.01	0.008	0.16	0.024	27	14
ZINC (ZN)	mg/L	TRC	0.3			0.2	< 0.01	0.24	0.67	0.01	0.67	0.13	27	22

TABLE 3-6
OTTER CREEK MINE BASELINE REPORT 304E
TENMILE SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH MAY 2014

		sys_loc_code	SW-23	SW-23	SW-23	SW-23	SW-23	SW-23					
		sample_date	6/15/2011	3/15/2012	4/19/2012	6/14/2013	3/20/2014	5/21/2014					
		sys_sample_code	OTRCR-1106-109	OCC-1203-113	OCC-1204-100	OCC-1306-153	OCC-1403-804	OCC-1405-155					
		lab_sample_id	H11060332-001	H12030214-014	H12040346-001	H13060241-004	H14030296-020	H14050407-006					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	0.009	0.1	0.070	6	0
ALUMINUM (AL)	mg/L	TRC	0.1	< 0.1	< 0.1	< 0.1	0.009	0.62	0.009	0.62	0.172	6	3
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	0.001	0.001	0.003	0.002	6	1
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	0.002	0.001	0.003	0.003	6	1
BARIUM (BA)	mg/L	DIS	0.054	0.026	0.028	0.04	0.043	0.044	0.026	0.054	0.039	6	6
BARIUM (BA)	mg/L	TRC	0.054	0.027	0.029	0.045	0.044	0.05	0.027	0.054	0.042	6	6
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0009	6	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0009	6	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	780	620	830	750	610	780	610	830	728	6	6
BORON (B)	mg/L	DIS	0.57	0.31	0.57	0.57	0.33	0.57	0.31	0.57	0.49	6	6
BORON (B)	mg/L	TRC	0.56	0.33	0.55	0.63	0.38	0.56	0.33	0.63	0.50	6	6
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	0.00003	0.00008	0.00006	6	0
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	0.00003	0.00003	0.00008	0.00006	6	1
CALCIUM (CA)	mg/L	DIS	119	113	156	126	100	133	100	156	125	6	6
CALCIUM (CA)	mg/L	TRC	115	115	154	127	128	126	115	154	128	6	6
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 1	< 1	22	3	< 1	1	22	5	6	2
CHLORIDE (CL)	mg/L	NO MEAS	6	8	12	5	8	6	5	12	8	6	6
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	6	0
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	6	0
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	6	0
COPPER (CU)	mg/L	TRC	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001	0.001	0.001	0.001	6	3
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.5	0.6	0.6	0.4	0.7	0.4	0.7	0.6	6	6
IRON (FE)	mg/L	DIS	0.12	< 0.05	< 0.05	0.08	0.05	0.06	0.05	0.12	0.07	6	4
IRON (FE)	mg/L	TRC	0.37	0.31	0.42	0.25	0.16	1.26	0.16	1.26	0.46	6	6
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0005	0.0004	6	0
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	0.0007	0.0003	0.0007	0.0005	6	1
MAGNESIUM (MG)	mg/L	DIS	224	189	267	236	189	242	189	267	225	6	6
MAGNESIUM (MG)	mg/L	TRC	221	184	264	235	208	232	184	264	224	6	6
MANGANESE (MN)	mg/L	DIS	1.4	0.056	0.036	0.128	0.033	0.662	0.033	1.4	0.386	6	6
MANGANESE (MN)	mg/L	TRC	1.4	0.057	0.04	0.128	0.034	0.673	0.034	1.4	0.389	6	6
MERCURY (HG)	mg/L	DIS	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.00004	6	0
MERCURY (HG)	mg/L	TOT	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.00004	6	0
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	6	0
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	6	0
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.002	0.002	0.01	0.007	6	1
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.003	0.002	0.01	0.008	6	1
NITRATE + NITRITE AS N	mg/L	NO MEAS	2.39	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	2.39	0.41	6	1
pH - LAB	s.u.	NO MEAS	8.2	7.9	8	8.1	8.2	8	7.9	8.2	8.1	6	6
PHOSPHORUS (P)	mg/L	TOT	0.096						0.096	0.096	0.096	1	1
POTASSIUM (K)	mg/L	DIS	19	15	23	19	14	20	14	23	18	6	6
POTASSIUM (K)	mg/L	TRC	19	15	22	20	16	20	15	22	19	6	6
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3580	3090	4520	3750	2970	3870	2970	4520	3630	6	6
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	6	0
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	6	0
SODIUM (NA)	mg/L	DIS	494	373	604	473	379	509	373	604	472	6	6
SODIUM (NA)	mg/L	TRC	479	366	610	501	381	517	366	610	476	6	6
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.96	4.98	6.81	5.73	5.14	6.08	4.98	6.81	5.78	6	6
SULFATE (SO4)	mg/L	NO MEAS	1700	1300	2200	1800	1400	1700	1300	2200	1683	6	6
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3050	2270	3810	2970	2370	3180	2270	3810	2942	6	6
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	640	500	680	650	510	640	500	680	603	6	6
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05						0.05	0.05	0.05	1	0
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	16	< 4	6	12	6	20	4	20	11	6	5
TURBIDITY (NTU) - LAB	NTU	NO MEAS	9.5	3.5	5	2.2	2.2	26.1	2.2	26.1	8.1	6	6
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	0.01	0.1	0.07	6	0
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	0.01	0.1	0.07	6	0
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	0.008	0.01	0.009	6	0
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	0.009	0.008	0.01	0.010	6	1

TABLE 3-7
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

		sys_loc_code	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11	SW-11
		sample_date	8/25/2011	10/20/2011	3/14/2012	4/19/2012	5/24/2012	6/7/2012	8/28/2012	4/25/2013	6/14/2013	7/30/2013	3/21/2014
		sys_sample_code	OTRCR-1108-900	OTRCR-1110-707	OCC-1203-101	OCC-1204-103	OCC-1205-602	OCC-1206-100	OCC-1208-206	OCC-1304-205	OCC-1306-108	OCC-1307-503	OCC-1403-701
		lab_sample_id	H11080473-001	H11100333-003	H12030214-002	H12040346-004	H12050407-003	H12060165-001	H12080485-007	H13040428-006	H13060240-009	H13070565-004	H14030299-023
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009
ALUMINUM (AL)	mg/L	TRC	0.4	< 0.1	< 0.1	0.4	< 0.1	< 0.1	6.3	< 0.1	< 0.1	< 0.1	0.025
ARSENIC (AS)	mg/L	DIS	0.004	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.012	< 0.003	< 0.003	< 0.003	< 0.001
ARSENIC (AS)	mg/L	TRC	0.005	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.014	< 0.003	< 0.003	< 0.003	< 0.001
BARIUM (BA)	mg/L	DIS	0.037	0.02	0.046	0.033	0.033	0.032	0.05	0.023	0.037	0.024	0.052
BARIUM (BA)	mg/L	TRC	0.042	0.02	0.046	0.039	0.034	0.032	0.109	0.026	0.038	0.026	0.053
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	700	930	710	760	770	770	1100	720	720	750	690
BORON (B)	mg/L	DIS	0.45	0.42	0.25	0.33	0.35	0.36	0.42	0.31	0.36	0.38	0.3
BORON (B)	mg/L	TRC	0.47	0.43	0.25	0.31	0.35	0.38	0.44	0.35	0.35	0.39	0.3
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00011	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CALCIUM (CA)	mg/L	DIS	79	191	145	162	157	160	123	157	163	158	158
CALCIUM (CA)	mg/L	TRC	79	195	151	159	155	154	129	161	166	165	168
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 4	< 1	12	17	22	< 1	21	32	23	4
CHLORIDE (CL)	mg/L	NO MEAS	12	12	10	11	11	10	14	12	9	7	11
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.013	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC	0.001	< 0.001	< 0.001	0.002	0.001	0.001	0.011	< 0.001	< 0.001	< 0.001	0.001
FLUORIDE (F)	mg/L	NO MEAS	0.5	0.6	0.4	0.6	0.5	0.6	0.7	0.5	0.5	0.6	0.4
IRON (FE)	mg/L	DIS	0.13	0.1	< 0.05	< 0.05	< 0.05	< 0.05	1.13	< 0.05	< 0.05	< 0.05	0.05
IRON (FE)	mg/L	TRC	1.06	0.08	0.47	1.13	0.58	0.47	9.27	0.51	0.45	0.19	0.39
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC	0.0006	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0052	< 0.0005	< 0.0005	< 0.0005	< 0.0003
MAGNESIUM (MG)	mg/L	DIS	248	251	164	189	184	198	213	182	190	183	178
MAGNESIUM (MG)	mg/L	TRC	236	252	166	187	189	186	221	204	180	185	185
MANGANESE (MN)	mg/L	DIS	2.19	0.012	0.48	0.558	0.177	0.227	1.16	0.201	0.11	0.01	0.326
MANGANESE (MN)	mg/L	TRC	2.22	0.011	0.484	0.588	0.181	0.223	1.45	0.22	0.114	0.014	0.332
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.003
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.003
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.02	0.16	0.03	< 0.01	< 0.01	< 0.02	0.06	0.12	0.1	0.42
pH - LAB	s.u.	NO MEAS	8.2	8.2	8	8.1	8.3	8.2	7.7	8.1	8.2	8.2	8
PHOSPHORUS (P)	mg/L	TOT	0.101	0.006									
POTASSIUM (K)	mg/L	DIS	21	16	13	14	14	15	20	14	16	15	15
POTASSIUM (K)	mg/L	TRC	21	16	13	14	15	15	20	15	16	16	15
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3430	3720	3250	3450	3510	3480	3990	3450	3430	3400	3150
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	0.002	0.003	0.002	0.002	< 0.001	0.003	0.002	0.002	0.002
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	0.002	0.003	0.002	0.002	< 0.001	0.002	0.002	0.002	0.002
SODIUM (NA)	mg/L	DIS	552	560	394	432	426	438	532	436	428	407	374
SODIUM (NA)	mg/L	TRC	578	573	407	426	427	422	533	452	425	412	390
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.88	6.27	5.33	5.47	5.46	5.46	6.72	5.62	5.4	5.23	4.85
SULFATE (SO4)	mg/L	NO MEAS	1800	1900	1300	1500	1500	1500	1600	1500	1600	1500	1500
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3110	3800	2390	2780	2790	2780	2870	2630	2700	2690	2450
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	580	770	580	640	660	670	910	630	640	650	570
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.11	< 0.05									
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	70	< 4	6	18	12	< 4	1000	24	12	8	< 4
TURBIDITY (NTU) - LAB	NTU	NO MEAS	40.8	0.5	4.9	16.3	110	5.4	3260	5.1	6.9	3.8	4.8
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.07	< 0.01	< 0.01	< 0.01	< 0.008

* This sample was a mix of SW-11 and SW-12

TABLE 3-7
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

		sys_loc_code	SW-11*	SW-3	SW-3	SW-3	SW-3	SW-3					
		sample_date	5/15/2014	3/14/2012	8/28/2012	4/25/2013	6/13/2013	3/24/2014					
		sys_sample_code	OCC-1405-250	OCC-1203-108	OCC-1208-202	OCC-1304-201	OCC-1306-103	OCC-1403-709					
		lab_sample_id	H14050292-028	H12030214-009	H12080485-003	H13040428-002	H13060240-004	H14030353-005					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.009	0.6	< 0.1	0.1	0.2	0.114	0.009	0.6	0.13	17	4
ALUMINUM (AL)	mg/L	TRC	0.228	1.4	33	12.6	37.1	0.621	0.025	37.1	5.46	17	10
ARSENIC (AS)	mg/L	DIS	< 0.001	< 0.003	0.007	0.004	0.005	0.002	0.001	0.012	0.00	17	6
ARSENIC (AS)	mg/L	TRC	0.001	< 0.003	0.016	0.019	0.023	0.002	0.001	0.023	0.01	17	7
BARIUM (BA)	mg/L	DIS	0.03	0.059	0.106	0.105	0.073	0.085	0.02	0.106	0.050	17	17
BARIUM (BA)	mg/L	TRC	0.034	0.072	0.502	0.3	0.576	0.058	0.02	0.576	0.118	17	17
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	0.0008	0.001	0.0010	17	0
BERYLLIUM (BE)	mg/L	TRC	< 0.0008	< 0.001	0.002	< 0.001	0.002	< 0.0008	0.0008	0.002	0.0011	17	2
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	660	230	200	180	150	100	100	1100	596	17	17
BORON (B)	mg/L	DIS	0.34	0.1	0.05	0.17	0.11	0.12	0.05	0.45	0.28	17	17
BORON (B)	mg/L	TRC	0.33	0.1	0.1	0.19	0.21	0.06	0.06	0.47	0.29	17	17
CADMIUM (CD)	mg/L	DIS	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00005	0.00003	0.00008	0.00007	17	1
CADMIUM (CD)	mg/L	TRC	< 0.00003	0.00008	0.0007	0.0006	0.0011	0.00008	0.00003	0.0011	0.00020	17	6
CALCIUM (CA)	mg/L	DIS	157	58	26	41	24	29	24	191	117	17	17
CALCIUM (CA)	mg/L	TRC	157	60	58	92	59	18	18	195	125	17	17
CARBONATE AS CO3	mg/L	NO MEAS	9	< 1	< 1	< 1	< 1	< 1	1	32	9	17	8
CHLORIDE (CL)	mg/L	NO MEAS	7	5	2	3	2	2	2	14	8	17	17
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	17	0
CHROMIUM (CR)	mg/L	TRC	< 0.001	0.002	0.049	0.023	0.068	0.001	0.001	0.068	0.010	17	7
COPPER (CU)	mg/L	DIS	< 0.001	0.004	< 0.001	0.004	0.003	0.003	0.001	0.004	0.002	17	4
COPPER (CU)	mg/L	TRC	< 0.001	0.005	0.05	0.034	0.07	0.003	0.001	0.07	0.011	17	11
FLUORIDE (F)	mg/L	NO MEAS	0.5	0.1	0.1	< 0.1	0.1	< 0.1	0.1	0.7	0.4	17	15
IRON (FE)	mg/L	DIS	< 0.02	0.54	4.5	6.37	4.66	2.28	0.02	6.37	1.18	17	9
IRON (FE)	mg/L	TRC	0.88	1.91	41.7	34.9	61	1.88	0.08	61	9.23	17	17
LEAD (PB)	mg/L	DIS	< 0.0003	< 0.0005	< 0.0005	0.0006	0.001	0.0008	0.0003	0.001	0.0005	17	3
LEAD (PB)	mg/L	TRC	< 0.0003	0.0014	0.0303	0.0184	0.045	0.0011	0.0003	0.045	0.0063	17	7
MAGNESIUM (MG)	mg/L	DIS	187	44	10	14	10	15	10	251	145	17	17
MAGNESIUM (MG)	mg/L	TRC	190	49	30	38	32	10	10	252	149	17	17
MANGANESE (MN)	mg/L	DIS	0.191	0.156	0.993	0.635	0.555	0.32	0.01	2.19	0.49	17	17
MANGANESE (MN)	mg/L	TRC	0.221	0.193	1.74	1.5	1.43	0.189	0.011	2.22	0.654	17	17
MERCURY (HG)	mg/L	DIS	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000007	0.000005	0.00005	0.00004	17	1
MERCURY (HG)	mg/L	TOT	< 0.000005	< 0.00005	0.00008	0.00007	< 0.00005	0.000006	0.000005	0.00008	0.00005	17	3
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	17	0
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	17	0
NICKEL (NI)	mg/L	DIS	0.002	< 0.01	< 0.01	0.01	< 0.01	0.005	0.002	0.01	0.009	17	4
NICKEL (NI)	mg/L	TRC	0.003	< 0.01	0.05	0.03	0.07	0.003	0.003	0.07	0.016	17	7
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.02	< 0.02	0.05	0.07	< 0.01	0.01	0.42	0.07	17	10
pH - LAB	s.u.	NO MEAS	8.1	7.2	7.1	6.4	7	6.9	6.4	8.3	7.8	17	17
PHOSPHORUS (P)	mg/L	TOT							0.006	0.101	0.054	2	2
POTASSIUM (K)	mg/L	DIS	15	17	15	20	10	31	10	31	17	17	17
POTASSIUM (K)	mg/L	TRC	16	18	20	31	20	22	13	31	18	17	17
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3250	1070	291	388	281	333	281	3990	2581	17	17
SELENIUM (SE)	mg/L	DIS	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.003	0.002	17	9
SELENIUM (SE)	mg/L	TRC	0.002	< 0.001	< 0.001	< 0.002	0.002	< 0.001	0.001	0.003	0.002	17	10
SODIUM (NA)	mg/L	DIS	408	90	9	8	13	19	8	560	325	17	17
SODIUM (NA)	mg/L	TRC	413	94	11	14	11	15	11	578	330	17	17
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.22	2.09	0.29	0.28	0.56	0.72	0.28	6.88	4.23	17	17
SULFATE (SO4)	mg/L	NO MEAS	1500	340	2	35	23	70	2	1900	1128	17	17
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2670	746	186	381	240	255	186	3800	2086	17	17
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	560	190	160	140	120	82	82	910	503	17	17
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS							0.05	0.11	0.08	2	1
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	19	128	176	136	2960	80	4	2960	274	17	14
TURBIDITY (NTU) - LAB	NTU	NO MEAS	16.7	60.1	110	41.2	1790	37.8	0.5	3260	324.4	17	17
VANADIUM (V)	mg/L	DIS	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	0.01	0.1	0.08	17	0
VANADIUM (V)	mg/L	TRC	< 0.01	< 0.1	< 0.1	< 0.1	0.1	< 0.01	0.01	0.1	0.08	17	1
ZINC (ZN)	mg/L	DIS	< 0.008	0.07	< 0.01	0.08	0.01	0.052	0.008	0.08	0.020	17	5
ZINC (ZN)	mg/L	TRC	< 0.008	0.09	0.24	0.2	0.42	0.045	0.008	0.42	0.069	17	6

* This sample was a mix of SW-11 and SW-12

TABLE 3-8
OTTER CREEK MINE BASELINE REPORT 304E
SHORTY CREEK RESULTS AND STATISTICAL ANALYSIS THROUGH MARCH 2014

		sys_loc_code	SW-12	SW-12	SW-12	SW-12	SW-12	SW-12	SW-12	SW-11*					
		sample_date	10/20/2011	3/22/2012	4/19/2012	8/28/2012	4/25/2013	6/20/2013	3/21/2014	5/15/2014					
		sys_sample_code	OTRCR-1110-708	OCC-1203-118	OCC-1204-102	OCC-1208-207	OCC-1304-206	OCC-1306-110	OCC-1403-700	OCC-1405-250					
		lab_sample_id	H11100333-004	H12030308-003	H12040346-003	H12080485-008	H13040428-007	H13060353-001	H14030299-022	H14050292-028					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	0.009	0.1	0.087	7	0
ALUMINUM (AL)	mg/L	TRC	< 0.1	< 0.1	0.1	0.7	< 0.1	0.3	0.04	0.228	0.04	0.7	0.21	7	4
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	0.001	0.003	0.003	7	0
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.005	< 0.001	0.001	0.001	0.005	0.003	7	1
BARIUM (BA)	mg/L	DIS	0.126	0.045	0.03	0.048	0.023	0.031	0.054	0.03	0.023	0.126	0.051	7	7
BARIUM (BA)	mg/L	TRC	0.128	0.047	0.035	0.056	0.024	0.036	0.056	0.034	0.024	0.128	0.055	7	7
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0010	7	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0010	7	0
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	330	740	750	220	700	640	700	660	220	750	583	7	7
BORON (B)	mg/L	DIS	0.22	0.3	0.31	0.12	0.31	0.41	0.28	0.34	0.12	0.41	0.28	7	7
BORON (B)	mg/L	TRC	0.22	0.31	0.32	0.13	0.32	0.41	0.3	0.33	0.13	0.41	0.29	7	7
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	0.0001	< 0.00008	< 0.00008	< 0.00003	< 0.00003	0.00003	0.0001	0.00008	7	1
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	0.00012	< 0.00008	< 0.00008	< 0.00003	< 0.00003	0.00003	0.00012	0.00008	7	1
CALCIUM (CA)	mg/L	DIS	175	160	158	66	154	154	157	157	66	175	146	7	7
CALCIUM (CA)	mg/L	TRC	173	165	162	68	158	160	171	157	68	173	151	7	7
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 1	6	< 1	21	5	< 1	9	1	21	6	7	3
CHLORIDE (CL)	mg/L	NO MEAS	19	10	10	4	12	12	10	7	4	19	11	7	7
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	7	0
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	7	1
COPPER (CU)	mg/L	DIS	0.004	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.004	0.001	7	2
COPPER (CU)	mg/L	TRC	0.005	0.001	0.001	0.003	< 0.001	0.002	< 0.001	< 0.001	0.001	0.005	0.002	7	5
FLUORIDE (F)	mg/L	NO MEAS	0.9	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.9	0.5	7	7
IRON (FE)	mg/L	DIS	0.1	< 0.05	< 0.05	0.79	< 0.05	< 0.05	0.05	< 0.02	0.05	0.79	0.16	7	3
IRON (FE)	mg/L	TRC	0.21	0.41	0.62	2.14	0.76	0.48	0.45	0.88	0.21	2.14	0.72	7	7
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0005	0.0005	7	0
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0005	< 0.0005	0.0008	< 0.0005	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0008	0.0005	7	1
MAGNESIUM (MG)	mg/L	DIS	235	183	184	50	184	204	176	187	50	235	174	7	7
MAGNESIUM (MG)	mg/L	TRC	230	184	189	50	207	195	189	190	50	230	178	7	7
MANGANESE (MN)	mg/L	DIS	0.019	0.536	0.412	0.05	0.186	0.016	0.361	0.191	0.016	0.536	0.226	7	7
MANGANESE (MN)	mg/L	TRC	0.047	0.542	0.467	0.235	0.248	0.029	0.366	0.221	0.029	0.542	0.276	7	7
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.00005	0.000044	7	0
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005	0.00005	0.000044	7	0
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	7	0
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	7	0
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.003	0.002	0.003	0.01	0.009	7	1
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.003	0.003	0.003	0.01	0.009	7	1
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.06	0.07	0.04	0.36	0.03	0.03	0.38	< 0.01	0.03	0.38	0.14	7	7
pH - LAB	s.u.	NO MEAS	7.6	7.5	8.1	7.8	8.2	8.1	8	8.1	7.5	8.2	7.9	7	7
PHOSPHORUS (P)	mg/L	TOT	0.173								0.173	0.173	0.17	1	1
POTASSIUM (K)	mg/L	DIS	40	13	14	11	14	16	15	15	11	40	18	7	7
POTASSIUM (K)	mg/L	TRC	40	14	14	11	15	17	16	16	11	40	18	7	7
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	3390	3360	3460	1900	3450	3510	3160	3250	1900	3510	3176	7	7
SELENIUM (SE)	mg/L	DIS	0.003	0.003	0.003	< 0.001	0.003	0.003	0.002	0.002	0.001	0.003	0.003	7	6
SELENIUM (SE)	mg/L	TRC	0.002	0.002	0.003	< 0.001	0.002	0.002	0.002	0.002	0.001	0.003	0.002	7	6
SODIUM (NA)	mg/L	DIS	477	414	429	130	430	441	375	408	130	477	385	7	7
SODIUM (NA)	mg/L	TRC	478	426	423	121	453	465	396	413	121	478	395	7	7
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.53	5.3	5.49	2.73	5.53	5.48	4.88	5.22	2.73	5.53	4.99	7	7
SULFATE (SO4)	mg/L	NO MEAS	2100	1400	1500	560	1500	1500	1500	1500	560	2100	1437	7	7
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3610	2760	2650	1340	2590	2720	2540	2670	1340	3610	2601	7	7
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	270	610	620	180	610	540	580	560	180	620	487	7	7
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.12								0.12	0.12	0.12	1	1
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	334	6	8	2630	18	24	14	19	6	2630	433	7	7
TURBIDITY (NTU) - LAB	NTU	NO MEAS	34.4	5.5	7.7	1460	5.6	2.6	5.8	16.7	2.6	1460	217.4	7	7
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	0.01	0.1	0.09	7	0
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	0.01	0.1	0.09	7	0
ZINC (ZN)	mg/L	DIS	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	0.008	0.01	0.010	7	1
ZINC (ZN)	mg/L	TRC	0.01	< 0.01	< 0.01	0.03	< 0.01	< 0.01	0.009	< 0.008	0.009	0.03	0.013	7	3

* This sample was a mix of SW-11 and SW-12. Not included in statistics.

TABLE 3-9
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK TRIBUTARIES SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

			sys_loc_code	SW-4	SW-4	SW-4	SW-4	SW-4	SW-4	SW-4	SW-4	SW-6	SW-6	SW-6	SW-6
			sample_date	6/14/2011	10/21/2011	12/8/2011	3/22/2012	8/28/2012	4/25/2013	6/14/2013	5/22/2014	6/14/2011	10/21/2011	3/14/2012	8/28/2012
			sys_sample_code	OTRCR-1106-104	OTRCR-1110-714	OTRCR-1112-102	OCC-1203-119	OCC-1208-204	OCC-1304-202	OCC-1306-104	OCC-1405-167	OTRCR-1106-105	OTRCR-1110-712	OCC-1203-105	OCC-1208-205
			lab_sample_id	H11060328-004	H11100333-010	H11120137-001	H12030308-004	H12080485-005	H13040428-003	H13060240-005	H14050407-018	H11060328-005	H11100333-008	H12030214-006	H12080485-006
chemical_name	result_unit	fraction		report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS		< 0.1	< 0.1	0.9	< 0.1	< 0.1	< 0.1	< 0.1	0.023	< 0.1	< 0.1	0.8	< 0.1
ALUMINUM (AL)	mg/L	TRC		8.2	0.7	20.8	0.3	14.7	0.4	51.7	31.9	1.9	1.1	0.5	3
ARSENIC (AS)	mg/L	DIS		< 0.003	< 0.003	< 0.003	< 0.003	0.007	< 0.003	< 0.003	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC		0.004	< 0.003	0.01	< 0.003	0.014	< 0.003	0.025	0.018	< 0.003	< 0.003	< 0.003	< 0.003
BARIUM (BA)	mg/L	DIS		0.084	0.064	0.073	0.106	0.308	0.089	0.099	0.089	0.093	0.084	0.146	0.109
BARIUM (BA)	mg/L	TRC		0.174	0.07	0.31	0.121	0.527	0.108	0.82	0.658	0.115	0.091	0.13	0.146
BERYLLIUM (BE)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC		< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.003	0.0029	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS		160	170	120	110	230	120	150	210	77	110	180	120
BORON (B)	mg/L	DIS		0.04	0.03	0.03	0.04	0.04	0.02	0.03	0.02	0.02	0.02	0.03	0.03
BORON (B)	mg/L	TRC		0.03	0.03	0.03	0.04	0.06	0.02	0.1	0.04	0.02	0.02	0.02	0.04
CADMIUM (CD)	mg/L	DIS		< 0.00008	< 0.00008	0.00096	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00008	< 0.00008	0.0001	< 0.00008
CADMIUM (CD)	mg/L	TRC		0.00018	< 0.00008	0.00048	0.00009	0.00042	< 0.00008	0.0011	0.0018	< 0.00008	< 0.00008	< 0.00008	0.00009
CALCIUM (CA)	mg/L	DIS		40	23	22	43	40	25	34	32	31	38	60	25
CALCIUM (CA)	mg/L	TRC		45	23	39	44	62	34	99	81	32	37	53	27
CARBONATE AS CO3	mg/L	NO MEAS		< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 4	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS		2	5	10	3	8	3	< 1	3	2	2	17	2
CHROMIUM (CR)	mg/L	DIS		< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001
CHROMIUM (CR)	mg/L	TRC		0.028	0.001	0.04	0.001	0.026	< 0.001	0.109	0.072	0.006	0.004	0.001	0.007
COPPER (CU)	mg/L	DIS		0.003	0.002	0.008	0.006	0.001	0.004	0.002	0.002	< 0.001	0.001	0.01	< 0.001
COPPER (CU)	mg/L	TRC		0.016	0.003	0.048	0.008	0.034	0.005	0.099	0.073	0.003	0.003	0.006	0.005
FLUORIDE (F)	mg/L	NO MEAS		2	0.4	0.1	0.2	0.2	0.1	0.2	0.3	< 0.1	0.4	< 0.1	0.3
IRON (FE)	mg/L	DIS		< 0.05	0.22	1.38	0.18	9.14	0.1	0.42	0.07	2.02	0.11	1.34	2.28
IRON (FE)	mg/L	TRC		13.7	1.1	38	0.61	30.2	0.89	87.6	59.9	4.3	1.72	1.31	7.82
LEAD (PB)	mg/L	DIS		< 0.0005	< 0.0005	0.0013	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0005	< 0.0005	0.0008	< 0.0005
LEAD (PB)	mg/L	TRC		0.0091	0.0009	0.0238	0.001	0.0179	0.0005	0.059	0.0399	0.0032	0.0011	0.0006	0.0031
MAGNESIUM (MG)	mg/L	DIS		11	5	7	18	11	6	6	7	11	14	21	5
MAGNESIUM (MG)	mg/L	TRC		15	4	19	17	19	8	40	32	11	13	18	6
MANGANESE (MN)	mg/L	DIS		0.011	0.023	0.026	0.204	1.71	0.104	0.114	0.038	0.276	0.019	0.141	0.473
MANGANESE (MN)	mg/L	TRC		0.238	0.03	0.761	0.217	2.1	0.016	1.74	1.35	0.315	0.028	0.137	0.542
MERCURY (HG)	mg/L	DIS		< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000006	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT		< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00007	0.00011	< 0.0001	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.003	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC		0.02	< 0.01	0.04	< 0.01	0.04	< 0.01	0.1	0.066	< 0.01	< 0.01	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS		0.73	0.03	0.2	0.38	< 0.02	2.26	1.84	0.22	0.03	0.98	0.06	0.12
pH - LAB	s.u.	NO MEAS		8	7.7	6.5	6.8	7	7.5	7.3	7.5	7.6	7.7	7.2	7.3
PHOSPHORUS (P)	mg/L	TOT		0.223	0.259							0.813	0.03		
POTASSIUM (K)	mg/L	DIS		5	16	14	17	21	9	5	6	5	10	28	9
POTASSIUM (K)	mg/L	TRC		7	16	17	17	24	9	18	16	6	10	25	9
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS		380	778	226	241	361	257	245	273	438	423	591	213
SELENIUM (SE)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS		21	4	8	18	16	3	6	8	23	32	13	2
SODIUM (NA)	mg/L	TRC		22	3	11	18	8	3	29	9	21	30	11	1
SODIUM ADSORPTION RATIO	unitless	NO MEAS		0.74	0.2	0.37	0.59	0.58	0.12	0.25	0.33	0.92	1.11	0.4	0.06
SULFATE (SO4)	mg/L	NO MEAS		55	330	8	13	2	13	7	11	150	120	110	< 5
TDS - CALCULATED	mg/L	NO MEAS		216											
TDS (MEASURED AT 180 C)	mg/L	NO MEAS			608	318	190	200	154	152	176	324	340	500	132
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS		130	140	95	93	190	96	130	170	63	93	150	100
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		0.33	0.41							2.4	< 0.05		
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS			350	278	46	1230	312	294	61	54	11000	200	1970
TURBIDITY (NTU) - LAB	NTU	NO MEAS			262	8440	26.3	533	26.3	300	33.4	11.4	100000	111	4290
VANADIUM (V)	mg/L	DIS		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.09	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS		0.02	0.01	0.02	0.03	0.03	0.01	< 0.01	< 0.008	0.01	0.01	0.05	< 0.01
ZINC (ZN)	mg/L	TRC		0.15	0.01	0.19	0.03	0.23	< 0.01	0.4	0.4	0.22	0.04	0.04	0.02

TABLE 3-9
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK TRIBUTARIES SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

			sys_loc_code	SW-6	SW-6	SW-6	SW-7	SW-7	SW-7	SW-7	SW-8	SW-8	SW-8	SW-8	SW-8
			sample_date	4/25/2013	6/14/2013	5/22/2014	6/14/2011	3/14/2012	4/25/2013	5/22/2014	8/25/2011	10/20/2011	3/14/2012	4/19/2012	6/20/2013
			sys_sample_code	OCC-1304-204	OCC-1306-105	OCC-1405-164	OTRCR-1106-106	OCC-1203-106	OCC-1304-203	OCC-1405-165	OTRCR-1108-902	OTRCR-1110-709	OCC-1203-102	OCC-1204-104	OCC-1306-111
			lab_sample_id	H13040428-005	H13060240-006	H14050407-015	H11060328-006	H12030214-007	H13040428-004	H14050407-016	H11080473-003	H11100333-005	H12030214-003	H12040346-005	H13060353-002
chemical_name	result_unit	fraction		report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS		< 0.1	0.3	0.019	< 0.1		< 0.1	0.011	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC		0.8	13		0.8	0.6	0.3		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ARSENIC (AS)	mg/L	DIS		< 0.003	0.004	< 0.001	< 0.003		< 0.003	< 0.001	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC		< 0.003	0.01		< 0.003	< 0.003	< 0.003		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
BARIUM (BA)	mg/L	DIS		0.134	0.088	0.087	0.354		0.051	0.056	0.09	0.055	0.05	0.032	0.069
BARIUM (BA)	mg/L	TRC		0.049	0.238		0.334	0.075	0.053		0.089	0.058	0.054	0.034	0.071
BERYLLIUM (BE)	mg/L	DIS		< 0.001	< 0.001	< 0.0008	< 0.001		< 0.001	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC		< 0.001	< 0.001		< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS		140	140	150	290		87	97	520	540	550	590	590
BORON (B)	mg/L	DIS		0.02	0.04	0.02	0.06		0.02	0.03	0.11	0.09	0.07	0.09	0.11
BORON (B)	mg/L	TRC		0.02	0.04		0.07	0.07	0.03		0.11	0.09	0.07	0.08	0.12
CADMIUM (CD)	mg/L	DIS		< 0.00008	< 0.00008	< 0.00003	< 0.00008		< 0.00008	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC		< 0.00008	0.00037		< 0.00008	0.00013	< 0.00008		< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CALCIUM (CA)	mg/L	DIS		34	20	30	127		17	23	284	258	243	234	244
CALCIUM (CA)	mg/L	TRC		15	30		129	65	18		296	260	240	232	248
CARBONATE AS CO3	mg/L	NO MEAS		< 1	< 1	< 1	< 4		< 1	< 1	< 4	< 4	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS		2	< 1	2	10		2	1	10	10	11	11	7
CHROMIUM (CR)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC		< 0.001	0.031		0.002	0.002	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS		0.006	0.001	0.001	0.001		0.003	0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	TRC		0.003	0.026		0.003	0.014	0.004		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
FLUORIDE (F)	mg/L	NO MEAS		< 0.1	0.2	0.1	0.7		< 0.1	< 0.1	0.3	0.3	0.2	0.3	0.3
IRON (FE)	mg/L	DIS		0.12	2.54	0.05	0.14		0.13	0.07	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
IRON (FE)	mg/L	TRC		0.34	21.4		1.19	1.02	0.54		< 0.05	< 0.05	0.27	0.26	0.19
LEAD (PB)	mg/L	DIS		< 0.0005	0.0006	< 0.0003	< 0.0005		< 0.0005	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC		< 0.0005	0.0151		0.0014	0.0011	0.0005		< 0.0005	< 0.0005	< 0.0005	0.0006	< 0.0005
MAGNESIUM (MG)	mg/L	DIS		7	6	9	53		4	4	166	168	153	169	133
MAGNESIUM (MG)	mg/L	TRC		5	12		53	28	5		167	166	148	169	130
MANGANESE (MN)	mg/L	DIS		0.01	0.542	0.013	0.032		0.019	< 0.005	0.022	< 0.005	3.19	0.214	0.312
MANGANESE (MN)	mg/L	TRC		0.041	0.853		0.043	0.158	0.027		0.027	0.016	3.42	0.229	0.32
MERCURY (HG)	mg/L	DIS		< 0.00005	< 0.00005	< 0.000005	< 0.0001		< 0.00005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT		< 0.00005	0.00007		< 0.0001	< 0.00005	< 0.00005		< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS		< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005	< 0.005		< 0.005	0.006	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS		< 0.01	< 0.01	0.002	< 0.01		< 0.01	0.002	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC		< 0.01	0.03		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS		3.72	0.06		0.02		0.09		< 0.01	0.11	0.09	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS		6.7	7.1	7.6	8.1		6.8	7.5	8.1	8	7.5	7.7	7.9
PHOSPHORUS (P)	mg/L	TOT					0.106				0.011	0.008			
POTASSIUM (K)	mg/L	DIS		11	10	13	14		12	11	11	10	12	10	11
POTASSIUM (K)	mg/L	TRC		9	12		14	44	13		11	10	12	10	12
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS		156	259	295	1290		155	182	2860	2860	3140	3310	2850
SELENIUM (SE)	mg/L	DIS		< 0.001	< 0.001	< 0.001	0.005		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
SELENIUM (SE)	mg/L	TRC		< 0.001	< 0.001		0.006	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS		2	4	10	87		1	< 1	344	361	312	352	280
SODIUM (NA)	mg/L	TRC		2	4		87	33	1		348	368	314	345	300
SODIUM ADSORPTION RATIO	unitless	NO MEAS		0.07	0.2	0.41	1.64	0.85	0.07	0.03	4	4.29	3.87	4.27	3.58
SULFATE (SO4)	mg/L	NO MEAS		2	16	18	540		3	4	1600	1600	1400	1600	1200
TDS - CALCULATED	mg/L	NO MEAS					969								
TDS (MEASURED AT 180 C)	mg/L	NO MEAS		92	142	181			161	117	2940	3100	2500	2960	2250
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS		110	110	120	240		71	80	430	440	450	480	480
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS					0.4				< 0.05	< 0.05			
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS		25	734	95			54	14	6	6	20	< 4	16
TURBIDITY (NTU) - LAB	NTU	NO MEAS		8.7	732	50.7			29	10.7	0.7	1.1	2	2.8	2.5
VANADIUM (V)	mg/L	DIS		< 0.1	< 0.1	< 0.01	< 0.1		< 0.1	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC		< 0.1	< 0.1		< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS		< 0.01	0.02	< 0.008	0.09		0.03	< 0.008	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC		0.02	0.17		0.11	0.25	0.04		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

TABLE 3-9
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK TRIBUTARIES SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

			sys_loc_code	SW-8	SW-8	SW-8	SW-9	SW-9	SW-9	SW-9	SW-9	SW-9	SW-9	SW-9	SW-9
			sample_date	7/30/2013	3/21/2014	5/15/2014	8/25/2011	10/20/2011	12/2/2011	3/14/2012	4/19/2012	5/24/2012	6/7/2012	8/28/2012	4/25/2013
			sys_sample_code	OCC-1307-504	OCC-1403-702	OCC-1405-251	OTRCR-1108-903	OTRCR-1110-706	OTRCR-1112-101	OCC-1203-103	OCC-1204-101	OCC-1205-601	OCC-1206-102	OCC-1208-209	OCC-1304-208
			lab_sample_id	H13070565-005	H14030299-024	H14050292-029	H11080473-004	H11100333-002	H11120042-002	H12030214-004	H12040346-002	H12050407-002	H12060165-003	H12080485-010	H13040428-009
chemical_name	result_unit	fraction		report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS		< 0.1	< 0.009	< 0.009	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC		0.3	0.543	< 0.009	0.1	0.5	0.9 < 0.1	0.1	< 0.1	0.9	< 0.1	1	1.2
ARSENIC (AS)	mg/L	DIS		< 0.003	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003 < 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.008	< 0.003
ARSENIC (AS)	mg/L	TRC		< 0.003	< 0.001	< 0.001	< 0.003	< 0.003	< 0.003 < 0.003	< 0.003	0.003	< 0.003	< 0.003	0.009	< 0.003
BARIUM (BA)	mg/L	DIS		0.044	0.041	0.024	0.05	0.035	0.043	0.052	0.035	0.025	0.033	0.07	0.085
BARIUM (BA)	mg/L	TRC		0.049	0.048	0.024	0.054	0.039	0.054	0.052	0.067	0.04	0.032	0.078	0.071
BERYLLIUM (BE)	mg/L	DIS		< 0.001	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC		< 0.001	< 0.0008	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS		530	570	480	280	160	110	470	440	600	390	370	120
BORON (B)	mg/L	DIS		0.12	0.08	0.07	0.4	0.11	0.06	0.28	0.15	0.21	0.13	0.16	0.06
BORON (B)	mg/L	TRC		0.12	0.08	0.07	0.39	0.1	0.05	0.27	0.18	0.21	0.17	0.33	0.05
CADMIUM (CD)	mg/L	DIS		< 0.00008	< 0.00003	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00019	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC		< 0.00008	0.00008	< 0.00003	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00016	0.00012	< 0.00008	< 0.0002	< 0.00008
CALCIUM (CA)	mg/L	DIS		167	187	100	293	215	94	237	236	356	290	237	100
CALCIUM (CA)	mg/L	TRC		182	191	96	305	214	98	244	368	326	284	357	74
CARBONATE AS CO3	mg/L	NO MEAS		13	< 1	2	< 4	< 4	< 4	< 1	< 1	< 1	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS		3	8	3	27	27	23	15	18	25	40	51	6
CHROMIUM (CR)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001
CHROMIUM (CR)	mg/L	TRC		< 0.001	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.005	0.001	< 0.001	0.004	0.002
COPPER (CU)	mg/L	DIS		< 0.001	< 0.001	< 0.001	0.002	0.003	0.007	0.004	0.003	< 0.001	0.011	< 0.001	0.004
COPPER (CU)	mg/L	TRC		< 0.001	0.002	< 0.001	0.003	0.006	0.007	0.004	0.014	0.004	0.009	0.006	0.01
FLUORIDE (F)	mg/L	NO MEAS		0.3	0.2	0.3	0.3	1.4	0.9	0.3	0.2	0.5	0.2	0.5	0.3
IRON (FE)	mg/L	DIS		< 0.05	< 0.02	< 0.02	0.07	0.26	0.11	< 0.05	0.15	< 0.05	0.08	0.06	1.09
IRON (FE)	mg/L	TRC		0.48	0.92	0.05	1.33	0.95	0.29	0.27	6.21	1.11	0.62	1.51	2.52
LEAD (PB)	mg/L	DIS		< 0.0005	< 0.0003	< 0.0003	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC		< 0.0005	0.0008	< 0.0003	< 0.0005	0.001	< 0.0005	< 0.0005	0.0057	0.001	< 0.0005	0.0012	0.0015
MAGNESIUM (MG)	mg/L	DIS		125	96	68	530	348	66	281	265	451	337	391	59
MAGNESIUM (MG)	mg/L	TRC		123	93	64	532	342	70	285	450	448	341	896	44
MANGANESE (MN)	mg/L	DIS		0.005	0.014	0.011	0.618	0.212	0.059	0.132	< 0.005	0.065	0.282	1.15	0.51
MANGANESE (MN)	mg/L	TRC		0.025	0.06	0.01	0.883	0.21	0.065	0.134	2.09	0.084	1.8	1.15	0.412
MERCURY (HG)	mg/L	DIS		< 0.00005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT		< 0.00005	< 0.000005	< 0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC		< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS		< 0.01	< 0.002	< 0.002	< 0.01	0.01	< 0.01	0.01	< 0.01	< 0.01	0.02	0.01	< 0.01
NICKEL (NI)	mg/L	TRC		< 0.01	0.003	< 0.002	0.01	0.01	< 0.01	0.01	0.02	< 0.01	0.02	0.02	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS		< 0.01	0.06	< 0.01	0.02	< 0.02	0.25	0.01	< 0.02	0.28	0.05	< 0.02	0.45
pH - LAB	s.u.	NO MEAS		8.1	8	7.8	8.3	7	7.2	7.9	7.1	7.8	7.5	7.4	7.1
PHOSPHORUS (P)	mg/L	TOT					0.149	0.151							
POTASSIUM (K)	mg/L	DIS		10	13	6	28	44	32	12	15	17	33	43	13
POTASSIUM (K)	mg/L	TRC		11	14	6	28	45	32	13	17	18	32	72	16
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS		2670	2230	1610	6570	5150	1410	5410	3600	7470	6370	6900	1220
SELENIUM (SE)	mg/L	DIS		< 0.001	0.003	< 0.001	0.001	0.002	0.002	< 0.001	0.001	< 0.001	0.001	0.024	< 0.001
SELENIUM (SE)	mg/L	TRC		< 0.001	0.002	< 0.001	0.001	0.002	< 0.001	< 0.001	0.001	< 0.001	0.001	0.012	< 0.001
SODIUM (NA)	mg/L	DIS		294	220	185	1140	840	138	737	696	995	806	1010	389
SODIUM (NA)	mg/L	TRC		290	228	188	1160	840	144	746	963	1040	842	1850	131
SODIUM ADSORPTION RATIO	unitless	NO MEAS		4.19	3.25	3.48	9.21	8.24	3.21	7.67	7.39	8.26	7.63	9.36	7.62
SULFATE (SO4)	mg/L	NO MEAS		1200	970	560	5000	3600	690	2800	2900	4200	3700	4500	480
TDS - CALCULATED	mg/L	NO MEAS													
TDS (MEASURED AT 180 C)	mg/L	NO MEAS		2130	1710	1150	7570	6140	1160	4540	4670	6490	6180	7270	868
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS		450	470	400	230	130	87	380	360	490	320	300	97
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS					< 0.05	0.1							
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS		18	36	< 4	48	592	148	16	70	120	40	540	164
TURBIDITY (NTU) - LAB	NTU	NO MEAS		10.3	17	0.7	23.2	323	84.3	2.9	31.8	6.4	10.6	273	52.1
VANADIUM (V)	mg/L	DIS		< 0.1	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC		< 0.1	< 0.01	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS		< 0.01	< 0.008	< 0.008	< 0.01	0.19	0.04	0.04	0.04	0.13	0.13	0.01	< 0.01
ZINC (ZN)	mg/L	TRC		< 0.01	0.009	< 0.008	< 0.01	0.19	0.05	0.06	0.44	0.09	0.1	0.05	0.06

TABLE 3-9
OTTER CREEK MINE BASELINE REPORT 304E
THREEMILE CREEK TRIBUTARIES SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

		sys_loc_code	SW-9	SW-9	SW-9					
		sample_date	6/14/2013	3/24/2014	5/22/2014					
		sys_sample_code	OCC-1306-107	OCC-1403-705	OCC-1405-162					
		lab_sample_id	H13060240-008	H14030353-001	H14050407-013					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	0.019	< 0.009	0.009	0.9	0.130	37	7
ALUMINUM (AL)	mg/L	TRC	< 0.1	0.217	0.191	0.009	51.7	4.146	38	28
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.001	0.001	0.001	0.008	0.003	39	4
ARSENIC (AS)	mg/L	TRC	< 0.003	0.001	0.001	0.001	0.025	0.005	38	10
BARIUM (BA)	mg/L	DIS	0.063	0.07	0.042	0.024	0.354	0.082	38	38
BARIUM (BA)	mg/L	TRC	0.064	0.076	0.045	0.024	0.82	0.138	37	37
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0010	38	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.0008	< 0.0008	0.0008	0.003	0.0011	37	3
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	510	710	710	77	710	313	38	38
BORON (B)	mg/L	DIS	0.4	0.18	0.31	0.02	0.4	0.10	38	38
BORON (B)	mg/L	TRC	0.38	0.18	0.32	0.02	0.39	0.11	37	37
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00003	< 0.00003	0.00003	0.00096	0.00010	38	3
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00003	< 0.00003	0.00003	0.0018	0.00019	37	12
CALCIUM (CA)	mg/L	DIS	314	296	248	17	356	139	38	38
CALCIUM (CA)	mg/L	TRC	326	282	239	15	368	154	37	37
CARBONATE AS CO3	mg/L	NO MEAS	16	13	< 1	1	16	3	38	4
CHLORIDE (CL)	mg/L	NO MEAS	21	19	10	1	51	11	38	36
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	0.002	0.001	38	3
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.001	0.109	0.010	37	20
COPPER (CU)	mg/L	DIS	0.003	0.002	0.002	0.001	0.011	0.003	38	26
COPPER (CU)	mg/L	TRC	0.003	0.003	0.003	0.001	0.099	0.012	37	30
FLUORIDE (F)	mg/L	NO MEAS	0.4	0.3	0.5	0.1	2	0.4	38	33
IRON (FE)	mg/L	DIS	< 0.05	0.04	< 0.02	0.02	9.14	0.60	38	25
IRON (FE)	mg/L	TRC	0.12	0.34	0.36	0.05	87.6	7.83	37	35
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0013	0.0005	38	3
LEAD (PB)	mg/L	TRC	< 0.0005	0.0003	0.0004	0.0003	0.059	0.0053	37	25
MAGNESIUM (MG)	mg/L	DIS	398	364	331	4	530	134	38	38
MAGNESIUM (MG)	mg/L	TRC	381	368	329	4	896	158	37	37
MANGANESE (MN)	mg/L	DIS	0.041	0.013	0.047	0.005	3.19	0.281	38	35
MANGANESE (MN)	mg/L	TRC	0.046	0.021	0.074	0.01	3.42	0.53	37	37
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.000046	38	1
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.000005	0.000006	0.000005	0.00011	0.000052	37	4
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	0.005	0.005	0.005	38	0
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	0.005	0.006	0.005	37	3
NICKEL (NI)	mg/L	DIS	< 0.01	0.003	0.005	0.002	0.02	0.009	38	9
NICKEL (NI)	mg/L	TRC	< 0.01	0.004	0.006	0.002	0.1	0.017	37	15
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	< 0.01	< 0.01	0.01	3.72	0.34	36	24
pH - LAB	s.u.	NO MEAS	8.2	8.3	8.1	6.5	8.3	7.6	38	38
PHOSPHORUS (P)	mg/L	TOT				0.008	0.813	0.194	9	9
POTASSIUM (K)	mg/L	DIS	18	15	13	5	44	15	38	38
POTASSIUM (K)	mg/L	TRC	19	15	13	6	72	18	37	37
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	6790	6380	5640	155	7470	2400	38	38
SELENIUM (SE)	mg/L	DIS	0.001	0.003	< 0.001	0.001	0.024	0.002	38	11
SELENIUM (SE)	mg/L	TRC	0.001	0.003	< 0.001	0.001	0.012	0.002	37	10
SODIUM (NA)	mg/L	DIS	959	914	823	1	1140	317	38	37
SODIUM (NA)	mg/L	TRC	971	914	849	1	1850	355	37	37
SODIUM ADSORPTION RATIO	unitless	NO MEAS	8.48	8.4	8.04	0.03	9.36	3.42	39	39
SULFATE (SO4)	mg/L	NO MEAS	4400	3600	3100	2	5000	1329	38	37
TDS - CALCULATED	mg/L	NO MEAS				216	969	593	2	2
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	6330	6130	5230	92	7570	2364	36	36
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	450	600	580	63	600	258	38	38
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				0.05	2.4	0.43	9	5
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	60	16	12	4	11000	518	36	34
TURBIDITY (NTU) - LAB	NTU	NO MEAS	2.9	4.9	5.7	0.7	100000	3214.5	36	36
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.01	< 0.01	0.01	0.1	0.08	38	0
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.01	< 0.01	0.01	0.1	0.09	37	2
ZINC (ZN)	mg/L	DIS	< 0.01	0.009	< 0.008	0.008	0.19	0.029	38	20
ZINC (ZN)	mg/L	TRC	< 0.01	0.015	< 0.008	0.008	0.44	0.094	37	26

TABLE 3-10
OTTER CREEK MINE BASELINE REPORT 304E
HOME CREEK SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

		sys_loc_code	SW-1	SW-1	SW-1	SW-1	SW-1A	SW-1A	SW-1A	SW-1A	SW-1A	SW-1A	SW-1A
		sample_date	6/14/2011	3/23/2012	4/25/2013	6/13/2013	10/26/2011	3/14/2012	5/3/2012	8/29/2012	12/6/2012	3/7/2013	6/13/2013
		sys_sample_code	OTRCR-1106-101	OCC-1203-121	OCC-1304-200	OCC-1306-100	OTRCR-1110-759	OCC-1203-100	OCC-1205-711	OCC-1208-211	OCC-1212-410	OCC-1303-335	OCC-1306-101
		lab_sample_id	H11060328-001	H12030308-006	H13040428-001	H13060240-001	H11100409-006	H12030214-001	H12050095-030	H12080485-012	H12120120-011	H13030136-006	H13060240-002
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	0.2	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1
ALUMINUM (AL)	mg/L	TRC	< 0.1	< 0.1	0.4	43.2	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.2	< 0.1
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.014	< 0.003	< 0.003	0.005
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	0.029	< 0.003	< 0.003	< 0.003	0.013	< 0.003	< 0.003	0.005
BARIUM (BA)	mg/L	DIS	0.008	0.144	0.043	0.042	0.024	0.021	0.028	0.056	0.022	0.033	0.1
BARIUM (BA)	mg/L	TRC	0.011	0.079	0.044	0.632	0.024	0.028	0.027	0.057	0.025	0.035	0.104
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	< 4	230	74	56	1100	760	990	1200	820	880	970
BORON (B)	mg/L	DIS	< 0.01	0.27	0.07	0.03	0.74	0.52	0.68	0.79	0.62	0.62	1
BORON (B)	mg/L	TRC	0.01	0.09	0.04	0.1	0.76	0.62	0.67	0.78	0.63	0.71	1.02
CADMIUM (CD)	mg/L	DIS	< 0.00008	0.00016	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	0.00015	0.00009	< 0.0001	0.001	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.0001	< 0.00008
CALCIUM (CA)	mg/L	DIS	2	39	12	11	131	84	106	105	100	91	136
CALCIUM (CA)	mg/L	TRC	2	15	14	50	128	100	100	109	99	95	139
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 1	< 1	< 1	< 4	< 1	19	< 1	87	39	33
CHLORIDE (CL)	mg/L	NO MEAS	< 1	27	4	< 1	21	14	13	13	86	17	14
CHROMIUM (CR)	mg/L	DIS	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	0.001	0.073	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	< 0.001	0.015	0.004	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001
COPPER (CU)	mg/L	TRC	< 0.001	0.006	0.006	0.07	0.001	0.001	< 0.001	< 0.001	0.001	0.002	0.001
FLUORIDE (F)	mg/L	NO MEAS	5	1.3	0.6	< 0.1	1.3	0.7	1.2	1.4	1.2	0.7	1.1
IRON (FE)	mg/L	DIS	0.05	0.25	0.35	0.29	0.11	0.22	0.08	0.24	< 0.05	0.71	0.17
IRON (FE)	mg/L	TRC	< 0.05	0.24	0.7	62.8	0.18	0.4	0.18	0.27	0.39	0.98	0.57
LEAD (PB)	mg/L	DIS	< 0.0005	0.0009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	< 0.0005	0.0005	0.0008	0.0448	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0005	< 0.0005
MAGNESIUM (MG)	mg/L	DIS	< 1	18	5	2	266	196	227	220	220	285	323
MAGNESIUM (MG)	mg/L	TRC	< 1	5	5	25	260	259	219	232	209	295	312
MANGANESE (MN)	mg/L	DIS	0.038	0.207	0.069	0.082	0.094	0.471	0.047	1.51	0.134	0.766	0.908
MANGANESE (MN)	mg/L	TRC	0.019	0.125	0.057	1.48	0.091	0.551	0.051	1.53	0.145	0.799	0.947
MERCURY (HG)	mg/L	DIS	< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	< 0.0001	< 0.00005	< 0.00005	0.00017	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	0.07	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.12	0.04	0.04	0.19	0.14	0.09	< 0.01	0.21	0.17	0.09	0.06
pH - LAB	s.u.	NO MEAS	5.4	7	6.4	7.4	8.3	7.8	8	7.9	8	7.9	8.2
PHOSPHORUS (P)	mg/L	TOT	0.05				0.061						
POTASSIUM (K)	mg/L	DIS	< 1	80	14	4	31	19	22	24	20	28	27
POTASSIUM (K)	mg/L	TRC	< 1	20	8	17	29	23	20	24	20	27	26
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	40	580	157	171	4010	3580	4080	4100	3800	5240	5380
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.002	0.001	0.001	0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0.002	0.001	0.004	0.001
SODIUM (NA)	mg/L	DIS	< 1	11	2	< 1	717	536	614	615	559	830	802
SODIUM (NA)	mg/L	TRC	< 1	2	2	8	720	723	629	634	537	852	823
SODIUM ADSORPTION RATIO	unitless	NO MEAS	0.05	0.36	0.15	0.05	8.3	7.31	7.72	7.83	7.17	9.66	8.54
SULFATE (SO4)	mg/L	NO MEAS	1	24	6	2	1800	1300	1700	1600	1300	2400	2800
TDS - CALCULATED	mg/L	NO MEAS	11										
TDS (MEASURED AT 180 C)	mg/L	NO MEAS		748	163	167	3580	2540	3170	3260	2790	3910	4280
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	< 4	190	61	46	920	620	840	1000	810	790	850
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	2.6				< 0.05						
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS		94	19	55	13	10	12	28	28	40	24
TURBIDITY (NTU) - LAB	NTU	NO MEAS			12.2	140	1.7	3.1	1.2	6.3	6.5	16.9	6.5
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS	0.12	0.26	0.11	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC	0.13	0.12	0.26	0.33	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

TABLE 3-10
OTTER CREEK MINE BASELINE REPORT 304E
HOME CREEK SURFACE WATER RESULTS AND STATISTICAL ANALYSIS THROUGH MAY 2014

		sys_loc_code	SW-1A	SW-1A	SW-1A					
		sample_date	7/30/2013	3/20/2014	5/21/2014					
		sys_sample_code	OCC-1307-515	OCC-1403-806	OCC-1405-159					
		lab_sample_id	H13070565-012	H14030296-022	H14050407-010					
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	min	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.009	< 0.009	0.009	0.3	0.116	14	3
ALUMINUM (AL)	mg/L	TRC	0.2	0.011	0.017	0.011	43.2	3.209	14	7
ARSENIC (AS)	mg/L	DIS	0.014	0.002	0.003	0.002	0.014	0.005	14	5
ARSENIC (AS)	mg/L	TRC	0.014	0.002	0.003	0.002	0.029	0.006	14	6
BARIUM (BA)	mg/L	DIS	0.05	0.038	0.029	0.008	0.144	0.046	14	14
BARIUM (BA)	mg/L	TRC	0.056	0.04	0.028	0.011	0.632	0.085	14	14
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.0008	< 0.0008	0.0008	0.001	0.0010	14	0
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.0008	< 0.0008	0.0008	0.002	0.0010	14	1
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	1100	970	870	4	1200	716	14	13
BORON (B)	mg/L	DIS	0.71	0.75	0.74	0.01	1	0.54	14	13
BORON (B)	mg/L	TRC	0.73	0.8	0.76	0.01	1.02	0.55	14	14
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00003	< 0.00003	0.00003	0.00016	0.00008	14	1
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00003	< 0.00003	0.00003	0.001	0.00015	14	3
CALCIUM (CA)	mg/L	DIS	106	101	96	2	136	80	14	14
CALCIUM (CA)	mg/L	TRC	111	118	94	2	139	84	14	14
CARBONATE AS CO3	mg/L	NO MEAS	< 1	< 1	< 1	1	87	14	14	4
CHLORIDE (CL)	mg/L	NO MEAS	12	14	7	1	86	17	14	12
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	0.001	0.001	14	1
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.001	0.073	0.006	14	2
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.001	0.015	0.002	14	4
COPPER (CU)	mg/L	TRC	0.001	< 0.001	< 0.001	0.001	0.07	0.007	14	9
FLUORIDE (F)	mg/L	NO MEAS	1.3	0.8	1.2	0.1	5	1.3	14	13
IRON (FE)	mg/L	DIS	0.22	0.14	0.1	0.05	0.71	0.21	14	13
IRON (FE)	mg/L	TRC	0.86	0.47	0.3	0.05	62.8	4.89	14	13
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0009	0.0005	14	1
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0003	< 0.0003	0.0003	0.0448	0.0037	14	4
MAGNESIUM (MG)	mg/L	DIS	212	270	196	1	323	174	14	13
MAGNESIUM (MG)	mg/L	TRC	232	285	198	1	312	181	14	13
MANGANESE (MN)	mg/L	DIS	0.236	0.31	0.176	0.038	1.51	0.361	14	14
MANGANESE (MN)	mg/L	TRC	0.281	0.312	0.157	0.019	1.53	0.468	14	14
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.000005	< 0.000005	0.000005	0.0001	0.000047	14	0
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.000005	< 0.000005	0.000005	0.00017	0.000056	14	1
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	0.006	< 0.005	0.005	0.006	0.005	14	3
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	0.006	< 0.005	0.005	0.006	0.005	14	3
NICKEL (NI)	mg/L	DIS	< 0.01	0.005	0.002	0.002	0.01	0.009	14	2
NICKEL (NI)	mg/L	TRC	< 0.01	0.005	0.002	0.002	0.07	0.013	14	3
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.09	0.12	0.02	0.01	0.21	0.10	14	13
pH - LAB	s.u.	NO MEAS	7.8	8.1	8	5.4	8.3	7.6	14	14
PHOSPHORUS (P)	mg/L	TOT				0.05	0.061	0.056	2	2
POTASSIUM (K)	mg/L	DIS	21	24	20	1	80	24	14	13
POTASSIUM (K)	mg/L	TRC	23	25	21	1	29	20	14	13
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	4020	4680	3580	40	5380	3101	14	14
SELENIUM (SE)	mg/L	DIS	0.002	< 0.001	< 0.001	0.001	0.002	0.001	14	6
SELENIUM (SE)	mg/L	TRC	0.002	< 0.001	< 0.001	0.001	0.004	0.001	14	6
SODIUM (NA)	mg/L	DIS	586	733	527	1	830	467	14	12
SODIUM (NA)	mg/L	TRC	642	762	535	1	852	491	14	13
SODIUM ADSORPTION RATIO	unitless	NO MEAS	7.56	8.63	7.08	0.05	9.66	5.74	14	14
SULFATE (SO4)	mg/L	NO MEAS	1600	2300	1500	1	2800	1310	14	14
TDS - CALCULATED	mg/L	NO MEAS				11	11	11	1	1
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	3000	3700	2780	163	4280	2622	13	13
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	880	790	710	4	1000	608	14	13
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS				0.05	2.6	1.33	2	1
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	108	16	24	10	108	36	13	13
TURBIDITY (NTU) - LAB	NTU	NO MEAS	12.7	4.5	2.9	1.2	140	17.9	12	12
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.01	< 0.01	0.01	0.1	0.09	14	0
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.01	< 0.01	0.01	0.1	0.09	14	1
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.008	< 0.008	0.008	0.26	0.043	14	3
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.008	< 0.008	0.008	0.33	0.067	14	4

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1
		sample_date	10/27/2010	6/24/2011	10/21/2011	2/7/2012	5/3/2012	3/5/2013	5/15/2013	7/30/2013	1/8/2014	3/24/2014	5/22/2014
		sys_sample_code	OTC-1010-101	OTRCR-1106-021	OTRCR-1110-715	OCC-1202-901	OCC-1205-700	OCC-1303-328	OCC-1305-200	OCC-1307-508	OCC-1401-201	OCC-1403-707	OCC-1405-168
		lab_sample_id	P10272010-101	H11060450-021	H11100333-011	H12020104-002	H12050095-019	H13030104-018	H13050294-026	H13070565-009	H14010145-009	H14030353-003	H14050407-019
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS		< 0.1	< 0.1	< 0.1	< 0.1	0.7	< 0.1	< 0.1	0.01	0.235	0.088
ALUMINUM (AL)	mg/L	TRC	189	< 0.1	0.9	0.2	0.2	16.2	2.5	0.8	0.262	1.03	0.773
ARSENIC (AS)	mg/L	DIS		< 0.003	0.007	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.001	< 0.001	0.001
ARSENIC (AS)	mg/L	TRC	0.0035	< 0.003	0.008	< 0.003	< 0.003	0.008	0.004	< 0.003	0.001	< 0.001	0.002
BARIUM (BA)	mg/L	DIS		0.095	0.038	0.025	0.042	0.103	0.041	0.093	0.032	0.028	0.012
BARIUM (BA)	mg/L	TRC	0.11	0.098	0.05	0.028	0.045	0.209	0.073	0.104	0.035	0.035	0.022
BERYLLIUM (BE)	mg/L	DIS			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008
BERYLLIUM (BE)	mg/L	TRC		< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	421	330	570	360	590	420	250	340	520	95	290
BORON (B)	mg/L	DIS		0.08	0.05	0.03	0.03	0.03	0.07	0.04	0.03	0.01	0.02
BORON (B)	mg/L	TRC	0.0378	0.07	0.05	0.03	0.03	0.04	0.07	0.04	0.04	0.02	0.02
CADMIUM (CD)	mg/L	DIS		< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.0006	0.00012	< 0.00008	< 0.00003	0.00006	0.00004
CALCIUM (CA)	mg/L	DIS		136	91	61	65	172	337	66	65	14	28
CALCIUM (CA)	mg/L	TRC	22	141	91	66	66	188	360	70	61	16	29
CARBONATE AS CO3	mg/L	NO MEAS	18.3	< 4	< 4	< 1	< 1	13	< 1	9	< 1	< 1	< 1
CHLORIDE (CL)	mg/L	NO MEAS	4.5	< 5	10	9	9	< 10	24	1	6	< 1	1
CHROMIUM (CR)	mg/L	DIS		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.0027	< 0.001	0.002	< 0.001	< 0.001	0.018	0.003	0.001	< 0.001	0.001	< 0.001
COPPER (CU)	mg/L	DIS		< 0.001	< 0.001	0.005	< 0.001	0.01	0.002	< 0.001	0.002	0.001	0.001
COPPER (CU)	mg/L	TRC	0.0055	< 0.001	0.003	0.006	0.001	0.039	0.008	0.002	0.002	0.003	0.003
FLUORIDE (F)	mg/L	NO MEAS	0.61	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.5	< 0.1	0.3
IRON (FE)	mg/L	DIS		0.14	0.16	0.26	0.67	0.31	0.45	0.05	0.08	0.22	0.18
IRON (FE)	mg/L	TRC	2.71	0.43	1.53	0.74	1.1	22.3	6.23	1.35	0.5	1.42	1.33
LEAD (PB)	mg/L	DIS		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003
LEAD (PB)	mg/L	TRC	0.0024	< 0.0005	0.0012	< 0.0005	< 0.0005	0.0166	0.0028	0.0011	< 0.0003	0.0011	0.0011
MAGNESIUM (MG)	mg/L	DIS		151	211	98	56	211	335	36	43	5	19
MAGNESIUM (MG)	mg/L	TRC	18	149	206	101	57	229	335	37	40	6	18
MANGANESE (MN)	mg/L	DIS		0.356	0.542	0.317	0.339	0.436	0.92	0.044	0.562	0.041	0.046
MANGANESE (MN)	mg/L	TRC	0.234	0.374	0.598	0.331	0.359	1.02	1.54	0.087	0.518	0.041	0.079
MERCURY (HG)	mg/L	DIS		< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00001	< 0.000005	0.000009
MERCURY (HG)	mg/L	TOT	0.00001	< 0.0001	< 0.00005	< 0.00005	< 0.00005	0.00007	< 0.00005	< 0.00005	0.00001	0.000007	0.000006
MOLYBDENUM (MO)	mg/L	DIS		< 0.005	< 0.005	< 0.005	< 0.005	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	0.0037	< 0.005	< 0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS		< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02	< 0.01	0.005	< 0.002	0.002
NICKEL (NI)	mg/L	TRC	0.013	< 0.01	< 0.01	0.01	< 0.01	0.04	0.02	< 0.01	0.005	0.004	0.004
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.12	< 0.01	0.03	0.27		0.44	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	8.7	8	8	7.9	7.4	8.2	7.4	8.1	7.7	7.4	8.1
PHOSPHORUS (P)	mg/L	TOT		0.027	0.152								
POTASSIUM (K)	mg/L	DIS		11	27	18	17	44	56	7	14	4	7
POTASSIUM (K)	mg/L	TRC	10	11	27	19	17	45	55	8	13	4	7
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1240	4240	5700	3950	2460	7420	8910	1870	2220	315	1050
SELENIUM (SE)	mg/L	DIS		< 0.001	0.008	< 0.001	< 0.001	0.003	0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	0.001	0.003	< 0.001	< 0.001	0.003	0.002	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS		765	1260	715	417	1450	1590	299	395	38	184
SODIUM (NA)	mg/L	TRC	266	793	1260	740	434	1390	1570	310	390	41	182
SODIUM ADSORPTION RATIO	unitless	NO MEAS	10.2	10.7	16.6	13.2	9.14	17.4	14.7	7.36	9.33	2.18	6.62
SULFATE (SO4)	mg/L	NO MEAS	261	2200	3400	1700	880	4000	5500	700	770	72	320
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	870	4050	5170	2960	1800	4570	7890	1280	1500	218	724
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS	< 5										
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	440	270	470	290	480	370	210	290	430	78	240
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		< 0.05	< 0.05								
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	86.9	14	28	20	10	1280	248	14	< 4	25	10
TURBIDITY (NTU) - LAB	NTU	NO MEAS	110	5.3	15.1	9	9.5	590	58	32.7	5.7	38.4	13.8
VANADIUM (V)	mg/L	DIS		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01
VANADIUM (V)	mg/L	TRC	0.0058	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01
ZINC (ZN)	mg/L	DIS		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008
ZINC (ZN)	mg/L	TRC	0.0118	< 0.01	< 0.01	< 0.01	< 0.01	0.1	0.02	< 0.01	< 0.008	0.011	0.008

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	P2	P3	P3	P3	P3	P3	P3	P3	P3	P3	P3	P3
		sample_date	6/24/2011	10/27/2010	6/24/2011	10/21/2011	2/7/2012	5/3/2012	9/6/2012	12/6/2012	3/5/2013	7/30/2013	3/21/2014
		sys_sample_code	OTRCRK-1106-214	OTC-1010-102	OTRCR-1106-022	OTRCR-1110-713	OCC-1202-902	OCC-1205-702	OCC-1209-713	OCC-1212-401	OCC-1303-325	OCC-1307-507	OCC-1403-704
		lab_sample_id	H11060448-015	P10272010-102	H11060450-022	H11100333-009	H12020104-003	H12050095-021	H12090092-014	H12120120-002	H13030104-017	H13070565-008	H14030299-026
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1		< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.142
ALUMINUM (AL)	mg/L	TRC	0.5	0.541	0.1	0.3	0.4	0.2	0.1	1.3	0.2	3.5	0.441
ARSENIC (AS)	mg/L	DIS	< 0.003		< 0.003	0.005	< 0.003	< 0.003	0.006	< 0.003	< 0.003	0.006	< 0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	0.006	< 0.003	< 0.003	0.007	0.005	< 0.003	0.014	0.001
BARIUM (BA)	mg/L	DIS	0.029		0.2	0.093	0.045	0.09	0.087	0.084	0.046	0.145	0.05
BARIUM (BA)	mg/L	TRC	0.036	0.155	0.21	0.112	0.048	0.129	0.106	0.136	0.052	0.198	0.058
BERYLLIUM (BE)	mg/L	DIS	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001			< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	420	171	150	160	66	140	290	200	91	220	92
BORON (B)	mg/L	DIS	0.27		0.06	0.11	0.03	0.04	0.05	0.03	0.03	0.08	0.01
BORON (B)	mg/L	TRC	0.28	0.103	0.06	0.11	0.03	0.04	0.06	0.04	0.02	0.08	0.02
CADMIUM (CD)	mg/L	DIS	< 0.00008		< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00012	0.00005
CALCIUM (CA)	mg/L	DIS	334		102	102	30	190	38	55	46	31	19
CALCIUM (CA)	mg/L	TRC	340	37.2	96	101	30	158	41	54	48	29	20
CARBONATE AS CO3	mg/L	NO MEAS	< 4	< 0.005	< 4	< 4	< 1	< 1	5	< 1	< 1	11	2
CHLORIDE (CL)	mg/L	NO MEAS	27	4.7	5	30	3	23	3	3	2	5	1
CHROMIUM (CR)	mg/L	DIS	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001	0.006	< 0.001
COPPER (CU)	mg/L	DIS	0.004		0.003	0.003	0.005	0.003	< 0.001	0.001	0.004	0.003	0.002
COPPER (CU)	mg/L	TRC	0.006	0.0023	0.003	0.005	0.005	0.005	0.002	0.005	0.004	0.009	0.004
FLUORIDE (F)	mg/L	NO MEAS	0.4	< 0.3	0.1	0.1	< 0.1	0.1	0.2	0.1	< 0.1	0.2	< 0.1
IRON (FE)	mg/L	DIS	0.05		0.06	0.08	0.17	0.06	0.06	< 0.05	0.08	0.2	0.18
IRON (FE)	mg/L	TRC	0.54	0.902	0.32	1.26	0.44	0.71	1.12	6.04	0.43	8.96	0.65
LEAD (PB)	mg/L	DIS	< 0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.001	< 0.0005	0.0013	0.0007	< 0.0005	0.0006	0.0023	< 0.0005	0.0085	0.0007
MAGNESIUM (MG)	mg/L	DIS	600		57	95	12	73	20	29	11	14	7
MAGNESIUM (MG)	mg/L	TRC	608	16.6	57	92	12	77	23	28	12	15	6
MANGANESE (MN)	mg/L	DIS	1.19		0.13	0.01	0.022	0.299	0.097	0.009	0.056	0.316	0.01
MANGANESE (MN)	mg/L	TRC	0.834	0.0704	0.148	0.566	0.026	0.272	0.501	0.303	0.076	0.539	0.032
MERCURY (HG)	mg/L	DIS	< 0.00005		< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005		< 0.0001	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000006
MOLYBDENUM (MO)	mg/L	DIS	< 0.005		< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.007	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	0.0025	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005
NICKEL (NI)	mg/L	DIS	0.02		< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002
NICKEL (NI)	mg/L	TRC	0.02	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.002
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.01	0.12	0.03	0.18	0.23	< 0.01	0.01	0.66	< 0.01	0.17
pH - LAB	s.u.	NO MEAS	8	8.4	8.2	8	7.1	7.2	8	7.7	7.6	8.5	8.6
PHOSPHORUS (P)	mg/L	TOT	0.052		0.038	0.246							
POTASSIUM (K)	mg/L	DIS	26		12	43	12	40	19	16	12	18	7
POTASSIUM (K)	mg/L	TRC	26	169	12	44	12	38	19	16	12	19	7
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	12300	407	1420	2400	372	2160	625	928	420	378	201
SELENIUM (SE)	mg/L	DIS	0.004		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	0.004	< 0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS	2220		133	352	24	191	69	90	12	28	8
SODIUM (NA)	mg/L	TRC	2270	203	131	356	20	203	65	96	12	29	8
SODIUM ADSORPTION RATIO	unitless	NO MEAS	16.8	0.69	2.6	6.02	0.96	2.98	2.26	2.45	0.42	1.07	0.42
SULFATE (SO4)	mg/L	NO MEAS	8000	36.5	680	1200	97	1100	100	280	120	7	25
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	11600	269	1180	2180	278	1760	414	611	275	270	131
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS		< 5									
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	340	171	130	130	54	120	240	170	75	200	78
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.1		0.27	< 0.05							
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	320	31	14	68	12	144	28	239	24	206	43
TURBIDITY (NTU) - LAB	NTU	NO MEAS	351	34.1	6.7	39.8	13.3	8.8	22	42.8	13.2	188	32.8
VANADIUM (V)	mg/L	DIS	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
VANADIUM (V)	mg/L	TRC	< 0.1	0.0017	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01
ZINC (ZN)	mg/L	DIS	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	0.02	< 0.01	0.03	0.009

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	P3	P4	P4	P4	P4	P4	P4	P4	P5	P5	P5
		sample_date	5/22/2014	8/25/2011	10/20/2011	2/8/2012	5/3/2012	7/30/2013	3/21/2014	5/22/2014	10/27/2010	6/24/2011	10/20/2011
		sys_sample_code	OCC-1405-166	OTRCR-1108-901	OTRCR-1110-710	OCC-1202-904	OCC-1205-703	OCC-1307-505	OCC-1403-703	OCC-1405-163	OTC-1010-103	OTRCRK-1106-215	OTRCR-1110-705
		lab_sample_id	H14050407-017	H11080473-002	H11100333-006	H12020104-005	H12050095-022	H13070565-006	H14030299-025	H14050407-014	P10272010-103	H11060448-016	H11100333-001
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	8.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.108	0.026		< 0.1	< 0.1
ALUMINUM (AL)	mg/L	TRC	56	< 0.1	0.9	0.2	< 0.1	0.3	0.477	0.278	129	< 0.1	< 0.1
ARSENIC (AS)	mg/L	DIS	0.008	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001		< 0.003	< 0.003
ARSENIC (AS)	mg/L	TRC	0.033	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	0.001	0.0033	< 0.003	< 0.003
BARIUM (BA)	mg/L	DIS	0.284	0.172	0.088	0.035	0.056	0.091	0.032	0.052		0.141	0.025
BARIUM (BA)	mg/L	TRC	1.26	0.174	0.1	0.037	0.058	0.098	0.038	0.058	0.0489	0.144	0.026
BERYLLIUM (BE)	mg/L	DIS	< 0.0008	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008		< 0.001	< 0.001
BERYLLIUM (BE)	mg/L	TRC	0.0044	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008		< 0.001	< 0.001
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	370	400	550	80	210	180	65	120	119	330	42
BORON (B)	mg/L	DIS	0.06	0.17	0.15	0.05	0.05	0.06	0.03	0.04		0.09	0.1
BORON (B)	mg/L	TRC	0.1	0.17	0.15	0.05	0.05	0.07	0.02	0.04	0.0383	0.1	0.1
CADMIUM (CD)	mg/L	DIS	0.00021	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003		< 0.00008	< 0.00008
CADMIUM (CD)	mg/L	TRC	0.0019	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00007	0.00011	< 0.00008	< 0.00008	< 0.00008
CALCIUM (CA)	mg/L	DIS	48	214	262	43	72	44	15	30		155	150
CALCIUM (CA)	mg/L	TRC	124	205	264	43	67	46	16	32	167	158	149
CARBONATE AS CO3	mg/L	NO MEAS	< 1	8	< 4	< 1	< 1	1	< 1	< 1	39.2	14	51
CHLORIDE (CL)	mg/L	NO MEAS	3	10	12	4	5	2	1	1	17.9	7	15
CHROMIUM (CR)	mg/L	DIS	0.014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.105	< 0.001	0.002	< 0.001	< 0.001	< 0.001	0.001	< 0.001	0.0021	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	0.015	< 0.001	< 0.001	0.005	< 0.001	< 0.001	0.002	< 0.001		0.002	0.002
COPPER (CU)	mg/L	TRC	0.146	< 0.001	0.002	0.005	0.001	0.001	0.003	0.003	0.0043	0.006	0.002
FLUORIDE (F)	mg/L	NO MEAS	0.2	0.3	0.3	< 0.1	0.1	0.2	< 0.1	< 0.1	0.33	0.3	0.3
IRON (FE)	mg/L	DIS	15.2	< 0.05	0.14	0.09	0.95	0.23	0.16	0.39		< 0.05	< 0.05
IRON (FE)	mg/L	TRC	99.9	0.13	1.8	0.29	1.08	0.76	0.67	0.83	1.74	< 0.05	0.17
LEAD (PB)	mg/L	DIS	0.0101	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003		< 0.0005	< 0.0005
LEAD (PB)	mg/L	TRC	0.0813	< 0.0005	0.0011	< 0.0005	< 0.0005	0.0005	0.0007	0.0004	0.0011	< 0.0005	< 0.0005
MAGNESIUM (MG)	mg/L	DIS	19	178	205	20	38	23	7	16		140	303
MAGNESIUM (MG)	mg/L	TRC	64	168	203	21	38	24	7	16	163	142	297
MANGANESE (MN)	mg/L	DIS	1.15	0.197	0.822	0.066	0.369	0.116	0.012	0.06		0.027	0.006
MANGANESE (MN)	mg/L	TRC	2.6	0.22	0.83	0.073	0.375	0.134	0.033	0.085	0.136	0.033	< 0.005
MERCURY (HG)	mg/L	DIS	0.000013	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	0.000005		< 0.00005	< 0.00005
MERCURY (HG)	mg/L	TOT	0.00013	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000009	0.000007	0.00001	< 0.00005	< 0.00005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0203	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	0.021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002		< 0.01	< 0.01
NICKEL (NI)	mg/L	TRC	0.133	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	0.002	0.0153	< 0.01	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.09	< 0.01	0.02	0.25	0.12	< 0.01	< 0.01	< 0.01	0.01	< 0.01	0.02
pH - LAB	s.u.	NO MEAS	7.2	8.4	7.8	6.9	7.4	7.9	7	7.5	9	8.5	9.8
PHOSPHORUS (P)	mg/L	TOT		0.056	0.063							0.012	0.016
POTASSIUM (K)	mg/L	DIS	21	17	18	16	12	9	6	8		10	18
POTASSIUM (K)	mg/L	TRC	49	17	18	16	12	9	6	8	206	10	18
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	446	3010	3580	608	1030	759	205	472	7150	3650	6310
SELENIUM (SE)	mg/L	DIS	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		0.007	0.003
SELENIUM (SE)	mg/L	TRC	0.002	0.002	0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0011	0.007	0.003
SODIUM (NA)	mg/L	DIS	27	403	489	41	89	73	13	39		575	1290
SODIUM (NA)	mg/L	TRC	27	422	500	42	93	74	12	39	1580	600	1310
SODIUM ADSORPTION RATIO	unitless	NO MEAS	0.49	4.93	5.5	1.3	2.11	2.22	0.67	1.44	20.8	8.06	13.9
SULFATE (SO4)	mg/L	NO MEAS	33	1800	2000	200	380	240	45	130	4500	1800	4400
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	580	2980	3650	460	760	489	118	315	6030	3420	6520
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS									< 5		
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	310	340	450	65	170	150	53	100	158	300	120
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS		< 0.05	< 0.05							< 0.05	< 0.05
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	17900	10	142	< 4	6	21	27	292	< 6.9	14	16
TURBIDITY (NTU) - LAB	NTU	NO MEAS	9950	2.1	59	8.9	3.6	15.7	23.5	57.9		0.9	2.4
VANADIUM (V)	mg/L	DIS	0.02	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01		< 0.1	< 0.1
VANADIUM (V)	mg/L	TRC	0.16	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	0.0043	< 0.1	< 0.1
ZINC (ZN)	mg/L	DIS	0.054	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008		< 0.01	< 0.01
ZINC (ZN)	mg/L	TRC	0.52	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.011	0.014	< 0.01	< 0.01	< 0.01

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	P5	P5	P5	P5	P5	P5	P5	P5	P5	P5	P6
		sample_date	2/7/2012	5/3/2012	9/6/2012	12/6/2012	3/7/2013	5/15/2013	7/30/2013	1/8/2014	3/24/2014	5/22/2014	6/24/2011
		sys_sample_code	OCC-1202-903	OCC-1205-704	OCC-1209-712	OCC-1212-400	OCC-1303-330	OCC-1305-201	OCC-1307-502	OCC-1401-200	OCC-1403-706	OCC-1405-160	OTRCR-1106-020
		lab_sample_id	H12020104-004	H12050095-023	H12090092-013	H12120120-001	H13030136-001	H13050294-027	H13070565-003	H14010145-008	H14030353-002	H14050407-011	H11060450-020
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.02	0.076	< 0.009	< 0.1
ALUMINUM (AL)	mg/L	TRC	0.6	< 0.1	< 0.1	2.5	0.3	0.6	< 0.1	0.018	0.192	0.391	< 0.1
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	0.008	0.004	< 0.003	< 0.003	< 0.003	0.006	< 0.001	0.001	< 0.003
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	0.008	0.005	< 0.003	0.003	0.003	0.009	< 0.001	0.002	< 0.003
BARIUM (BA)	mg/L	DIS	0.052	0.031	0.066	0.031	0.023	0.026	0.037	0.027	0.032	0.016	0.008
BARIUM (BA)	mg/L	TRC	0.063	0.032	0.072	0.064	0.032	0.035	0.038	0.035	0.035	0.073	0.008
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	150	250	75	340	220	28	380	320	72	150	510
BORON (B)	mg/L	DIS	0.07	0.05	0.03	0.03	0.02	0.04	0.18	0.06	0.03	0.04	0.47
BORON (B)	mg/L	TRC	0.08	0.05	0.05	0.03	0.02	0.05	0.19	0.06	0.02	0.03	0.46
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	0.00004	< 0.00008
CADMIUM (CD)	mg/L	TRC	0.0001	< 0.00008	< 0.00008	0.00009	< 0.00008	0.0001	< 0.00008	< 0.0001	0.00005	0.00014	< 0.00008
CALCIUM (CA)	mg/L	DIS	49	72	80	113	115	88	340	116	14	33	54
CALCIUM (CA)	mg/L	TRC	50	69	86	111	125	93	352	126	14	33	54
CARBONATE AS CO3	mg/L	NO MEAS	< 1	20	76	30	< 1	54	< 1	49	< 1	5	8
CHLORIDE (CL)	mg/L	NO MEAS	10	10	12	17	29	19	21	33	1	2	3
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
CHROMIUM (CR)	mg/L	TRC	0.004	< 0.001	< 0.001	0.004	0.001	0.001	< 0.001	0.003	< 0.001	< 0.001	< 0.001
COPPER (CU)	mg/L	DIS	0.007	0.002	0.002	0.001	0.007	0.004	< 0.001	< 0.001	0.001	0.002	< 0.001
COPPER (CU)	mg/L	TRC	0.021	0.002	0.003	0.006	0.008	0.006	< 0.001	0.002	0.002	0.003	< 0.001
FLUORIDE (F)	mg/L	NO MEAS	< 0.1	0.1	0.3	0.3	0.2	0.3	< 0.2	0.4	< 0.1	< 0.1	0.5
IRON (FE)	mg/L	DIS	0.16	0.08	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	0.14	0.05	< 0.05
IRON (FE)	mg/L	TRC	1.19	0.16	0.06	3.72	0.59	1.02	0.18	0.11	0.31	0.78	0.07
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	< 0.0005
LEAD (PB)	mg/L	TRC	0.0011	< 0.0005	< 0.0005	0.0025	0.0005	0.001	< 0.0005	0.0004	< 0.0003	0.0007	< 0.0005
MAGNESIUM (MG)	mg/L	DIS	57	89	171	246	213	208	301	295	8	32	196
MAGNESIUM (MG)	mg/L	TRC	60	89	196	216	206	216	301	326	9	32	195
MANGANESE (MN)	mg/L	DIS	0.163	0.008	0.006	0.025	0.175	< 0.005	0.518	0.53	0.008	0.012	0.077
MANGANESE (MN)	mg/L	TRC	0.181	0.03	0.006	0.094	0.187	0.035	0.516	0.56	0.014	0.043	0.058
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00001	0.000006	0.000006	< 0.0001
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00001	0.000008	0.000008	< 0.0001
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	0.008	0.011	< 0.005	0.006	< 0.005	0.006	< 0.005	< 0.005	< 0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	0.009	0.011	0.005	0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01
NICKEL (NI)	mg/L	TRC	0.02	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.005	< 0.002	0.003	< 0.01
NITRATE + NITRITE AS N	mg/L	NO MEAS	0.2	< 0.01	< 0.01	0.01	1.44	< 0.01	0.11	< 0.01	< 0.01	< 0.01	< 0.01
pH - LAB	s.u.	NO MEAS	7.2	8.6	9.9	8.7	8	10.5	7.6	9	7.4	9.1	8.4
PHOSPHORUS (P)	mg/L	TOT											0.029
POTASSIUM (K)	mg/L	DIS	26	12	20	21	17	17	20	24	6	7	13
POTASSIUM (K)	mg/L	TRC	26	12	20	21	17	18	23	27	6	8	13
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	1970	3110	6480	7860	7240	8170	6370	9610	365	1250	2750
SELENIUM (SE)	mg/L	DIS	0.001	< 0.001	0.001	0.001	0.003	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001
SELENIUM (SE)	mg/L	TRC	0.001	< 0.001	0.002	0.001	0.003	0.002	< 0.001	< 0.003	< 0.001	< 0.001	< 0.001
SODIUM (NA)	mg/L	DIS	293	520	1410	1590	1450	1760	950	2120	42	195	377
SODIUM (NA)	mg/L	TRC	300	543	1360	1530	1450	1810	950	2340	44	202	378
SODIUM ADSORPTION RATIO	unitless	NO MEAS	6.75	9.68	20.4	19.2	18.4	23.4	9.04	23.8	2.24	5.83	5.35
SULFATE (SO4)	mg/L	NO MEAS	850	1500	3500	4300	4000	4500	3700	5400	110	530	1300
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	1520	2460	4960	6200	5240	6570	5800	7730	240	867	2370
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS											
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	130	240	190	330	180	110	310	350	59	140	430
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS											< 0.05
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	42	< 4	24	180	210	74	40	< 4	6	171	14
TURBIDITY (NTU) - LAB	NTU	NO MEAS	35.6	2.6	12	36.4	21.5	38	6.5	21.2	12.9	52.4	13.2
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	< 0.1
ZINC (ZN)	mg/L	DIS	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.014	< 0.008	< 0.008	< 0.01
ZINC (ZN)	mg/L	TRC	0.06	< 0.01	< 0.01	0.02	0.01	0.01	< 0.01	0.068	< 0.008	0.009	< 0.01

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

		sys_loc_code	P6	P6	P6	P6	P6	P6	P6	P6	P6	P6	P6	
		sample_date	10/25/2011	2/8/2012	5/3/2012	9/6/2012	12/6/2012	3/7/2013	5/16/2013	7/30/2013	1/9/2014	3/20/2014	5/21/2014	
		sys_sample_code	OTRCR-1110-755	OCC-1202-905	OCC-1205-705	OCC-1209-720	OCC-1212-408	OCC-1303-334	OCC-1305-203	OCC-1307-512	OCC-1401-208	OCC-1403-805	OCC-1405-157	
		lab_sample_id	H11100409-002	H12020104-006	H12050095-024	H12090092-021	H12120120-009	H13030136-005	H13050294-029	H13070565-011	H14010145-016	H14030296-021	H14050407-008	
chemical_name	result_unit	fraction	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	report_result_text	min
ALUMINUM (AL)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.009	< 0.009	< 0.009	0.009
ALUMINUM (AL)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	1	< 0.1	2.2	0.8	< 0.01	0.01	0.012	0.01
ARSENIC (AS)	mg/L	DIS	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.001	< 0.001	0.001
ARSENIC (AS)	mg/L	TRC	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.001	< 0.001	< 0.001	0.001
BARIUM (BA)	mg/L	DIS	0.009	0.019	0.007	0.008	0.019	0.022	0.025	0.009	0.022	0.045	0.012	0.007
BARIUM (BA)	mg/L	TRC	0.009	0.019	0.008	0.009	0.025	0.021	0.044	0.017	0.025	0.046	0.013	0.008
BERYLLIUM (BE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008
BERYLLIUM (BE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0008	< 0.0008	< 0.0008	0.0008
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	670	680	610	560	690	690	510	510	910	610	610	28
BORON (B)	mg/L	DIS	0.47	0.41	0.39	0.56	0.45	0.36	0.51	0.51	0.53	0.33	0.46	0.01
BORON (B)	mg/L	TRC	0.47	0.41	0.39	0.59	0.45	0.42	0.52	0.57	0.59	0.34	0.48	0.02
CADMIUM (CD)	mg/L	DIS	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00003	< 0.00003	< 0.00003	0.00003
CADMIUM (CD)	mg/L	TRC	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.00008	< 0.0002	< 0.00008	< 0.00008	< 0.0001	< 0.00003	< 0.00003	0.00003
CALCIUM (CA)	mg/L	DIS	87	127	99	35	129	124	99	40	150	103	102	14
CALCIUM (CA)	mg/L	TRC	87	138	94	37	131	130	99	42	177	127	102	14
CARBONATE AS CO3	mg/L	NO MEAS	5	< 1	29	49	53	17	48	51	< 1	< 1	7	0.005
CHLORIDE (CL)	mg/L	NO MEAS	14	9	7	6	7	9	7	7	10	8	5	1
CHROMIUM (CR)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
CHROMIUM (CR)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	0.001	< 0.001	0.003	0.002	< 0.001	< 0.001	< 0.001	0.001
COPPER (CU)	mg/L	DIS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
COPPER (CU)	mg/L	TRC	< 0.001	< 0.001	< 0.001	0.003	0.001	< 0.001	0.003	0.002	< 0.001	< 0.001	< 0.001	0.001
FLUORIDE (F)	mg/L	NO MEAS	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.7	0.4	0.6	0.1
IRON (FE)	mg/L	DIS	< 0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.08	0.03	< 0.02	0.02
IRON (FE)	mg/L	TRC	0.09	0.19	0.05	0.17	0.95	0.26	2.86	1.37	0.2	0.09	0.06	0.05
LEAD (PB)	mg/L	DIS	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0003	< 0.0003	< 0.0003	0.0003
LEAD (PB)	mg/L	TRC	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0007	< 0.0005	0.0019	0.0011	< 0.0003	< 0.0003	< 0.0003	0.0003
MAGNESIUM (MG)	mg/L	DIS	220	194	202	233	217	197	210	226	227	168	215	5
MAGNESIUM (MG)	mg/L	TRC	203	197	192	262	217	202	215	228	256	193	213	6
MANGANESE (MN)	mg/L	DIS	0.014	0.218	0.007	0.018	0.124	0.176	0.059	0.035	0.544	0.031	0.017	0.005
MANGANESE (MN)	mg/L	TRC	0.014	0.206	0.01	0.028	0.138	0.173	0.096	0.103	0.553	0.029	0.027	0.005
MERCURY (HG)	mg/L	DIS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005
MERCURY (HG)	mg/L	TOT	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.000005	< 0.000005	0.000005
MOLYBDENUM (MO)	mg/L	DIS	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005
MOLYBDENUM (MO)	mg/L	TRC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0025
NICKEL (NI)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	0.002
NICKEL (NI)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.002	< 0.002	0.002
NITRATE + NITRITE AS N	mg/L	NO MEAS	< 0.01	0.02	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01
pH - LAB	s.u.	NO MEAS	8.3	8	8.3	8.6	8	7.7	8.4	8.6	7.7	7.9	8.3	6.9
PHOSPHORUS (P)	mg/L	TOT	0.022											0.012
POTASSIUM (K)	mg/L	DIS	19	16	14	22	16	14	15	17	16	12	14	4
POTASSIUM (K)	mg/L	TRC	18	15	14	21	15	15	16	17	17	13	15	4
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	2920	3240	3060	3270	3320	3200	3160	3350	3620	2750	3150	201
SELENIUM (SE)	mg/L	DIS	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
SELENIUM (SE)	mg/L	TRC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001
SODIUM (NA)	mg/L	DIS	413	368	368	488	405	382	401	433	418	313	387	8
SODIUM (NA)	mg/L	TRC	383	368	372	459	395	389	406	440	495	318	411	8
SODIUM ADSORPTION RATIO	unitless	NO MEAS	5.36	4.78	4.88	6.57	5.06	4.97	5.23	5.88	5.03	4.42	4.99	0.42
SULFATE (SO4)	mg/L	NO MEAS	1400	1300	1300	1700	1400	1400	1300	1500	1500	1300	1400	7
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	2400	2440	2410	2580	2450	2430	2450	2660	2920	2150	2530	118
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS												5
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	560	560	550	540	660	600	490	500	750	500	510	53
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	< 0.05											0.05
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	10	8	< 4	20	40	10	96	96	< 4	< 4	4	4
TURBIDITY (NTU) - LAB	NTU	NO MEAS	1.5	2.6	0.9	3	15.8	3.2	50.6	35	27.2	1.5	1.5	0.9
VANADIUM (V)	mg/L	DIS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.01
VANADIUM (V)	mg/L	TRC	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.01	< 0.01	< 0.01	0.0017
ZINC (ZN)	mg/L	DIS	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	0.008
ZINC (ZN)	mg/L	TRC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	< 0.01	0.048	< 0.008	< 0.008	0.008

TABLE 3-11
OTTER CREEK MINE BASELINE REPORT 304E
POND SURFACE WATER RESULTS AND STATISTICAL SUMMARY THROUGH JUNE 2014

sys_loc_code sample_date sys_sample_code lab_sample_id						
chemical_name	result_unit	fraction	max	mean	count	detects
ALUMINUM (AL)	mg/L	DIS	8.2	0.260	52	12
ALUMINUM (AL)	mg/L	TRC	189	7.58	55	40
ARSENIC (AS)	mg/L	DIS	0.008	0.003	52	11
ARSENIC (AS)	mg/L	TRC	0.033	0.004	55	21
BARIUM (BA)	mg/L	DIS	0.284	0.056	52	52
BARIUM (BA)	mg/L	TRC	1.26	0.088	55	55
BERYLLIUM (BE)	mg/L	DIS	0.001	0.0009	49	0
BERYLLIUM (BE)	mg/L	TRC	0.0044	0.0010	50	2
BICARBONATE ALKALINITY AS HCO3	mg/L	NO MEAS	910	331	55	55
BORON (B)	mg/L	DIS	0.56	0.15	52	52
BORON (B)	mg/L	TRC	0.59	0.15	55	55
CADMIUM (CD)	mg/L	DIS	0.00021	0.00007	52	2
CADMIUM (CD)	mg/L	TRC	0.0019	0.00012	55	14
CALCIUM (CA)	mg/L	DIS	340	100	52	52
CALCIUM (CA)	mg/L	TRC	360	102	55	55
CARBONATE AS CO3	mg/L	NO MEAS	76	13.064	55	26
CHLORIDE (CL)	mg/L	NO MEAS	33	9	55	52
CHROMIUM (CR)	mg/L	DIS	0.014	0.001	52	1
CHROMIUM (CR)	mg/L	TRC	0.105	0.004	55	20
COPPER (CU)	mg/L	DIS	0.015	0.002	52	28
COPPER (CU)	mg/L	TRC	0.146	0.007	55	44
FLUORIDE (F)	mg/L	NO MEAS	0.7	0.3	55	43
IRON (FE)	mg/L	DIS	15.2	0.43	52	34
IRON (FE)	mg/L	TRC	99.9	3.33	55	54
LEAD (PB)	mg/L	DIS	0.0101	0.0006	52	1
LEAD (PB)	mg/L	TRC	0.0813	0.0027	55	28
MAGNESIUM (MG)	mg/L	DIS	600	138	52	52
MAGNESIUM (MG)	mg/L	TRC	608	137	55	55
MANGANESE (MN)	mg/L	DIS	1.19	0.218	52	51
MANGANESE (MN)	mg/L	TRC	2.6	0.294	55	54
MERCURY (HG)	mg/L	DIS	0.0001	0.000043	52	6
MERCURY (HG)	mg/L	TOT	0.00013	0.000044	54	13
MOLYBDENUM (MO)	mg/L	DIS	0.011	0.005	52	7
MOLYBDENUM (MO)	mg/L	TRC	0.0203	0.0055	55	11
NICKEL (NI)	mg/L	DIS	0.021	0.009	52	7
NICKEL (NI)	mg/L	TRC	0.133	0.012	55	18
NITRATE + NITRITE AS N	mg/L	NO MEAS	1.44	0.09	54	24
pH - LAB	s.u.	NO MEAS	10.5	8.1	55	55
PHOSPHORUS (P)	mg/L	TOT	0.246	0.065	11	11
POTASSIUM (K)	mg/L	DIS	56	17	52	52
POTASSIUM (K)	mg/L	TRC	206	24	55	55
SC (UMHOS/CM AT 25 C)	umhos/cm	NO MEAS	12300	3244	55	55
SELENIUM (SE)	mg/L	DIS	0.008	0.001	52	14
SELENIUM (SE)	mg/L	TRC	0.007	0.001	55	17
SODIUM (NA)	mg/L	DIS	2220	545	52	52
SODIUM (NA)	mg/L	TRC	2340	560	55	55
SODIUM ADSORPTION RATIO	unitless	NO MEAS	23.8	7.58	55	55
SULFATE (SO4)	mg/L	NO MEAS	8000	1676	55	55
TDS (MEASURED AT 180 C)	mg/L	NO MEAS	11600	2667	55	55
TOTAL ACIDITY AS CACO3	mg/L	NO MEAS	5	5	3	0
TOTAL ALKALINITY AS CACO3	mg/L	NO MEAS	750	294	55	55
TOTAL AMMONIA (NH3+NH4 AS N)	mg/L	NO MEAS	0.27	0.07	11	1
TOTAL SUSPENDED SOLIDS	mg/L	NO MEAS	17900	407	55	47
TURBIDITY (NTU) - LAB	NTU	NO MEAS	9950	225.2	54	54
VANADIUM (V)	mg/L	DIS	0.1	0.08	52	1
VANADIUM (V)	mg/L	TRC	0.16	0.0762	55	4
ZINC (ZN)	mg/L	DIS	0.054	0.011	52	4
ZINC (ZN)	mg/L	TRC	0.52	0.024	55	20

TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[(1)]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 101512 00	ROBINSON JOHN J ROBINSON KAREN S	GROUND WATER CERTIFICATE	ACTV	199707211330	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	15	NENW	12 GPM	1.63	0.25	
42C 106044 00	BAUER JENNIFER L BAUER LEONARD J	GROUND WATER CERTIFICATE	ACTV	19990128910	GROUNDWATER	DOMESTIC STOCK	3S45E	9	SWSW	15 GPM	1.93		560
42C 107120 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	GROUND WATER CERTIFICATE	ACTV	199904221330	GROUNDWATER	STOCK	4S45E	15	SWSESW	20 GPM	3.4		20
42C 109280 00	HILL JILL Y HILL KENNETH R	GROUND WATER CERTIFICATE	ACTV	199908161140	GROUNDWATER	DOMESTIC	3S45E	15	NWNE	10 GPM	1.63	1.63	380
42C 111885 00	GOLDSMITH LELA M	GROUND WATER CERTIFICATE	ACTV	200006231310	GROUNDWATER	DOMESTIC	3S45E	15	NESESE	12 GPM	1.63		150
42C 112961 00	GREEN FRANCIE	GROUND WATER CERTIFICATE	ACTV	200007171120	GROUNDWATER	DOMESTIC	3S45E	15	NESW	15 GPM	1.63		200
42C 123206 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19600909	UNNAMED TRIBUTARY OF HOME CREEK	IRRIGATION	3S45E	27	NESWSW		30	20	
42C 123207 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19600413	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E	9	NWNWSE		41	27	
42C 123208 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19610601	GROUNDWATER	STOCK	4S45E	9	SESENE	3 GPM			900
42C 123209 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19590415	GROUNDWATER	STOCK	4S45E	3	SESESE	5 GPM			200
42C 123210 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19600601	GROUNDWATER	STOCK	3S45E	27	SWSWNE	10 GPM			65
42C 123211 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19420601	GROUNDWATER	STOCK	3S45E	26	NWNENW	5 GPM			200
42C 123212 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19610601	GROUNDWATER	STOCK	3S45E	27	NWSWNE	10 GPM			65
42C 123213 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19550101	GROUNDWATER	STOCK	4S45E	3	NWSWSW	1.5 GPM			345
42C 123214 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19591015	UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S45E	11	NESESW				
42C 123215 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19600411	UNNAMED TRIBUTARY OF HOME CREEK	IRRIGATION	3S45E	26	SWSWNE		86	57	
42C 123216 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19600909	UNNAMED TRIBUTARY OF HOME CREEK	IRRIGATION	3S45E	27	NENESW		20	13	
42C 123217 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19590722	OTTER CREEK	IRRIGATION	4S45E	9	NESESE		54	36	
42C 123218 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19610601	GROUNDWATER	LAWN AND GARDEN	3S45E	27	NWSWNE	10 GPM	1	0.5	65
42C 123219 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19400601	GROUNDWATER	MULTIPLE DOMESTIC	3S45E	27	NWSWNE	10 GPM	1.7	0.25	195
42C 145602 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19100601	GROUNDWATER	STOCK	3S45E	18	NWSWSW	10 GPM			
42C 145604 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19380910	GROUNDWATER	STOCK	3S45E	17	SESESE	4 GPM			
42C 145605 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19580620	GROUNDWATER	STOCK	3S45E	14	SWSWNW	10 GPM			
42C 145606 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19400815	GROUNDWATER	STOCK	3S45E	32	NESENE	10 GPM			
42C 145607 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19811224	GROUNDWATER	STOCK	3S45E	33	SESWNW	8 GPM			
42C 145609 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19240620	GROUNDWATER	MULTIPLE DOMESTIC	3S45E	19	NWSESE	10 GPM	3.4	1	
42C 145611 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19121101	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	3S45E 3S45E	18 18	W2SWNW N2NWSW		126	78	
42C 145613 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19080314	HOME CREEK	IRRIGATION	3S45E	28	SENESE		153	95	
42C 145614 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19121101	OTTER CREEK	IRRIGATION	3S45E	19	NWSWNE		636	407	
42C 145615 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	19121101	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	3S45E	19	N2NESW		141	94	
42C 145616 00	TRUSLER INC	STATEMENT OF CLAIM	ACTV	18941106	OTTER CREEK	IRRIGATION	3S45E	29	SWSENW		204	136	
42C 167339 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19820331	GROUNDWATER	STOCK	4S45E	25	NWNWNW	2.5 GPM			
42C 167342 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19820331	GROUNDWATER	STOCK	5S45E	2	SWSWNE	10 GPM			
42C 167344 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19721231	CHROMO CREEK	IRRIGATION	5S45E	3	SENWNE		36	18	
42C 167345 00	BRIAN CREEK CATTLE CO LLC DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	18861231	OTTER CREEK	STOCK	5S45E 4S45E 4S45E	2 27 34	 E2				
42C 167347 00	BRIAN CREEK CATTLE CO LLC	STATEMENT OF CLAIM	ACTV	19580731	GROUNDWATER	MULTIPLE DOMESTIC	5S45E	2	SESWNE	10 GPM	3.6	0	
42C 167348 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19721231	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	5S45E	3	NESENE		16	8	
42C 167349 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19150731	GROUNDWATER	MULTIPLE DOMESTIC	5S45E	2	SWSWNE	10 GPM	2		
42C 167352 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19491231	GENE CREEK	IRRIGATION	4S45E	34	NWSWNE		30	31	
42C 167353 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19491231	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E	34	NENENE		30	15	
42C 167354 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19721231	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E	26	SWSWNW		40.6	20.3	
42C 167355 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19281231	OTTER CREEK	IRRIGATION	4S45E	34	NENESE		50	25	

(1) Locations given are for points of diversion associated with each water right.

TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[1]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 167359 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	19600430	GROUNDWATER	STOCK	5S45E	3	NWSENE	10 GPM			150
42C 167362 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	18860924	TENMILE CREEK	IRRIGATION	5S45E	2	NWNWNE		239.6	119.8	
42C 167363 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	18981115	TENMILE CREEK	IRRIGATION	5S45E	2	NENWNE		77.54	38.77	
42C 173250 00	RIDENOUR WILLIAM L	STATEMENT OF CLAIM	ACTV	19611231	GROUNDWATER	DOMESTIC	3S45E	22	NENW	6 GPM		4.44	
42C 173597 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	STATEMENT OF CLAIM	ACTV	19510601	GROUNDWATER	DOMESTIC	3S45E	20	NENWSW	10 GPM	1.5	0.25	
42C 173598 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	STATEMENT OF CLAIM	ACTV	19600601	GROUNDWATER	DOMESTIC	3S45E	18	NWNWNW	20 GPM	2	0.5	
42C 173599 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	STATEMENT OF CLAIM	ACTV	19600601	GROUNDWATER	STOCK	3S45E	18	NWNWNW	20 GPM			
42C 173604 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	STATEMENT OF CLAIM	ACTV	19530120	OTTER CREEK, EAST FORK	IRRIGATION	3S45E	20	NESENE		125	83	
42C 174265 00	GASKILL RAY GASKILL ROGER C GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	18971115	OTTER CREEK, EAST FORK	STOCK	3S45E 3S45E	11 12	S2				
42C 174266 00	GASKILL RAY GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	18971115	SPRING, UNNAMED TRIBUTARY OF OTTER CREEK, EAST FORK	STOCK	3S45E	12	NENWSW				
42C 174280 00	GASKILL RAY GASKILL ROGER C GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	18971115	OTTER CREEK, EAST FORK	IRRIGATION	3S45E 3S45E 3S45E	12 11 11	N2SW SE SESW			97	
42C 174281 00	GASKILL RAY GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	19300101	WILLOW CREEK	IRRIGATION	3S45E	11	SESENE		51	34	
42C 174282 00	GASKILL RAY GASKILL ROGER C GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	18971115	OTTER CREEK, EAST FORK	IRRIGATION	3S45E	11	SWNWSE		120	80	
42C 174283 00	GASKILL RAY GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	19561029	COAL CREEK	IRRIGATION	3S45E	10	NESESE		45	30	
42C 174284 00	GASKILL RAY GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	19531215	UNNAMED TRIBUTARY OF OTTER CREEK, EAST FORK	IRRIGATION	3S45E	11	NWSESW		23	15	
42C 174285 00	GASKILL RAY GASKILL WANDA J	STATEMENT OF CLAIM	ACTV	19401015	OTTER CREEK, EAST FORK	IRRIGATION	3S45E	11	SWSESW		25	17	
42C 174612 00	TRUSLER SUZANNE S TRUSLER TOM W	STATEMENT OF CLAIM	ACTV	19401231	SPRING, UNNAMED TRIBUTARY OF HOME CREEK	STOCK	3S46E	19	NENENE	6 GPM			
42C 174756 00	GRATWOHL CYNTHIA	STATEMENT OF CLAIM	ACTV	19491231	GROUNDWATER	MULTIPLE DOMESTIC	4S45E	4	SWNWSE	20 GPM	5	2	
42C 174787 00	GRATWOHL CYNTHIA	STATEMENT OF CLAIM	ACTV	18801231	OTTER CREEK	STOCK	4S45E 4S45E 4S45E	9 10 4	NENE NWNWNW NWSE				
42C 175627 00	TRUSLER SUZANNE S TRUSLER TOM W	STATEMENT OF CLAIM	ACTV	19330715	HOME CREEK	STOCK	3S46E 3S46E	19 18	N2N2NE S2SE				
42C 177646 00	HILL JILL Y HILL KENNETH R	STATEMENT OF CLAIM	ACTV	19291104	OTTER CREEK, EAST FORK	STOCK	3S45E 3S45E	15 15	SWSENE E2NE				
42C 177647 00	HILL JILL Y HILL KENNETH R	STATEMENT OF CLAIM	ACTV	19530930	GROUNDWATER	STOCK	3S45E	15	NWNWSE	8 GPM			
42C 177648 00	HILL JILL Y HILL KENNETH R	STATEMENT OF CLAIM	ACTV	19291104	OTTER CREEK, EAST FORK	IRRIGATION	3S45E	15	SWSENE		50	71.2	
42C 177649 00	COBB BARBARA A COBB STEVEN L MCDEED CREEK LIVESTOCK LLC	STATEMENT OF CLAIM	ACTV	19621231	GROUNDWATER	DOMESTIC	3S45E	21	SWNWNE	10 GPM	1.5	0.25	210
42C 179674 00	ARK LAND COMPANY HOME CREEK CATTLE COMPANY LLC	STATEMENT OF CLAIM	ACTV	19070422	HOME CREEK		3S46E	18	SESWSW		141	70.5	
42C 180231 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19331231	GROUNDWATER	DOMESTIC	4S45E	4	NWNESW	12 GPM	1.5	0.25	
42C 180233 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19501231	GROUNDWATER	STOCK	4S45E	2	NESESW	8 GPM			85
42C 180234 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19581231	GROUNDWATER	STOCK	3S45E	33	SENWSW	3.5 GPM			465
42C 180235 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19451231	GROUNDWATER	STOCK	3S45E	32	NWSESE	10 GPM			75

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TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[(1)]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 180236 00	SHY, GEORGE FAMILY TRUST	STATEMENT OF CLAIM	ACTV	19201231	GROUNDWATER	STOCK	3S45E	23	NENESE	2.5 GPM			
42C 180237 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19451231	GROUNDWATER	STOCK	3S45E	31	SESWSE	8 GPM			165
42C 180240 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19571231	GROUNDWATER	STOCK	4S45E	1	SESESW	8 GPM			65
42C 180241 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19501231	UNNAMED TRIBUTARY OF THREEMILE CREEK	STOCK	4S45E	1	SENESE				
42C 180243 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	19331231	GROUNDWATER	STOCK	4S45E	4	NWNESW	30 GPM			
42C 180244 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	18931231	OTTER CREEK	STOCK	3S45E 3S45E 4S45E 4S45E	32 33 4 4	NENWSE SESWSW NWNENW SWSWNE				
42C 180248 00 42C 180249 00	PROSPECT LAND & DEVELOPMENT CO, INC PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM STATEMENT OF CLAIM	ACTV ACTV	19580313 19161028	UNNAMED TRIBUTARY OF OTTER CREEK UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION IRRIGATION	3S45E 4S45E	32 4	SESWSE NESWSW		46 8	58.38 27.91	
42C 180250 00	PROSPECT LAND & DEVELOPMENT CO, INC	STATEMENT OF CLAIM	ACTV	18931231	OTTER CREEK	IRRIGATION	3S45E 3S45E 4S45E	32 33 4	SE SW N2		324.75	216.5	
42C 180556 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19021231	SUBIRRIGATION, UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	4S46E 5S45E	31 1	S2 N2			123.2	
42C 180557 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19120531	UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	4S46E	31	SENWSW		30	15	
42C 180558 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19120531	UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	4S46E	31	SWNESW		56	28	
42C 180561 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19021031	COAL CREEK	IRRIGATION	4S46E	31	SESESE		4.6	2.3	
42C 180562 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19430501	UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	4S46E	31	SWNWSE		15	7.5	
42C 180565 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19450501	TENMILE CREEK	IRRIGATION	5S45E	1	NENWNE		38	19	
42C 180567 00	NEWCOMER JOHN E NEWCOMER TERESA C	STATEMENT OF CLAIM	ACTV	19021029	UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	5S46E	6	NW		14.8	7.4	
42C 180570 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19440630	UNNAMED TRIBUTARY OF TENMILE CREEK	IRRIGATION	5S45E	1	SWNENE		36	18	
42C 180573 00	NEWCOMER JOHN E NEWCOMER TERESA C	STATEMENT OF CLAIM	ACTV	19480807	GROUNDWATER	STOCK	4S46E	31	SWSWSW	6 GPM			240
42C 180574 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19000401	SPRING, UNNAMED TRIBUTARY OF TENMILE CREEK	STOCK	4S46E	31	NESESW	2 GPM			
42C 180575 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19130501	GROUNDWATER	STOCK	4S46E	31	NWSESE	8 GPM			
42C 180576 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19440831	TENMILE CREEK	STOCK	5S45E	1	NWNE				
42C 180578 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	18940406	TENMILE CREEK	STOCK	5S45E	1	N2				
42C 180579 00	NEWCOMER JOHN E NEWCOMER TERESA C	STATEMENT OF CLAIM	ACTV	19480807	GROUNDWATER	MULTIPLE DOMESTIC	4S46E	31	SWSWSW	6 GPM	5.4	1.5	240
42C 180581 00	DENSON FAYE DENSON ROBERT D DENSON ROSS	STATEMENT OF CLAIM	ACTV	19440531	TENMILE CREEK	FISH AND WILDLIFE	5S45E	1	NWNE		16.5		
42C 18110 00	MONTANA, STATE OF BOARD OF LAND COMMISSIONERS	STATEMENT OF CLAIM	ACTV	19620415	SPRING CREEK	STOCK	3S44E	36	SENESW				

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TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[(1)]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 188145 00	DENSON FAYE DENSON ROSS	STATEMENT OF CLAIM	ACTV	18980420	TENMILE CREEK	IRRIGATION	5S45E	2	NWNWNE		239.6	119.8	
42C 215547 00	MONTANA, STATE OF BOARD OF LAND COMMISSIONERS	STATEMENT OF CLAIM	ACTV	19730630	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E	16	SWNENE		94	47	
42C 22610 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19570630	UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S45E	23	SWSWNE				
42C 22611 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19510831	UNNAMED TRIBUTARY OF NEWELL CREEK	STOCK	4S45E	21	SESWSW				
42C 23845 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18980103	OTTER CREEK	IRRIGATION	4S45E 4S45E 4S45E	27 27 22	SESWSE NENWNE SWNESE		330	170	
42C 23846 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18980103	OTTER CREEK	IRRIGATION	4S45E 4S45E	22 27	SE E2		340	170	
42C 23847 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19340630	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E 4S45E	27 27	SWNWSW NWNWNE		100	100	
42C 23848 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19440630	UNNAMED TRIBUTARY OF OTTER CREEK	IRRIGATION	4S45E	27	NENENE		50	32	
42C 23849 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18980103	OTTER CREEK	STOCK	4S45E 4S45E	27 22	E2 SE				
42C 23868 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19631230	SPRING, UNNAMED TRIBUTARY OF TONGUE RIVER	STOCK	3S44E	27					
42C 23870 00	ARK LAND COMPANY	STATEMENT OF CLAIM	ACTV	19201231	SPRING, UNNAMED TRIBUTARY OF BRIDGE CREEK	STOCK	3S44E	35	NESWNW	6 GPM			
42C 26901 00	GRATWOHL CYNTHIA	GROUND WATER CERTIFICATE	ACTV	198002221520	GROUNDWATER	DOMESTIC STOCK	4S45E	4	NWSE	20 GPM	9		31
42C 27205 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19001101	OTTER CREEK	IRRIGATION	4S45E	15	SESENW	2.27 CFS	120	60	
42C 27206 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18971012	NEWELL CREEK	IRRIGATION	4S45E	22	SESENW	6.8 CFS	400	200	
42C 27207 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19491013	OTTER CREEK	IRRIGATION	4S45E 4S45E	15 22	SW NW	6.8 CFS	360	180	
42C 27220 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19570818	GROUNDWATER	MULTIPLE DOMESTIC	4S45E	15	SWNESW	10 GPM	2.5	0.5	
42C 27284 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18831001	COOK CREEK	STOCK	3S45E	5	S2				
42C 27286 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19431231	UNNAMED TRIBUTARY OF COOK CREEK	STOCK	3S45E	5	SESWSE				
42C 27292 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19601031	GROUNDWATER	STOCK	4S45E	18	SESWSE	5 GPM			
42C 27293 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19500225	GROUNDWATER	STOCK	4S45E	22	SESENE	10 GPM			
42C 27322 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18831001	OTTER CREEK	STOCK	4S45E 4S45E 4S45E	15 22 22	W2 E2NW S2SWNE				
42C 27323 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18831001	NEWELL CREEK	STOCK	4S45E	18	S2				
42C 27324 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	18831001	SPRING, UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S45E	13	SESESE				
42C 27325 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19441231	UNNAMED TRIBUTARY OF THREEMILE CREEK	STOCK	4S45E	13	NWNENW				
42C 27326 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19481231	UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S45E	14	SWSWSW				
42C 27327 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19421231	UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S45E	7	SWSWNE				
42C 27328 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19810820	GROUNDWATER	STOCK	4S45E	14	SWNESW	6 GPM			280
42C 27329 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19810820	GROUNDWATER	STOCK	4S45E	15	SWNWSE	10 GPM			
42C 27330 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	STATEMENT OF CLAIM	ACTV	19570818	GROUNDWATER	STOCK	4S45E	15	SWNESE	10 GPM			340
42C 30001910	DUDEK BRUCE J	GROUND WATER CERTIFICATE	ACTV	200204231011	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	15	SESE	12 GPM	2.25	0.5	420
42C 30004507	SHEETS CLARK A	GROUND WATER CERTIFICATE	ACTV	200211041130	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	15	SESW	12 GPM	1.63		406
42C 30007527	TARTER BRYAN M	GROUND WATER CERTIFICATE	ACTV	200306041000	GROUNDWATER	STOCK	4S46E	6	NESE				
42C 30007530	TARTER BRYAN M	GROUND WATER CERTIFICATE	ACTV	200306041002	GROUNDWATER	DOMESTIC	4S46E	6	NESE				
42C 30015337	TARTER BRYAN M	GROUND WATER CERTIFICATE	ACTV	200505251109	GROUNDWATER	STOCK	4S46E	6	NWSWSE				180

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TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[(1)]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 30017741	MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	WATER RESERVATION	ACTV	197812151613	OTTER CREEK	FISHERY	3S45E	18-20			1029.2		
42C 30017759	MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	WATER RESERVATION	ACTV	197812151613	TONGUE RIVER	FISHERY	3S44E	27			244,799		
42C 30019443	BARGAS CINDY L BUNCH TRACIE M WARNKE WILLIAM MICHAEL	GROUND WATER CERTIFICATE	ACTV	200602011000	GROUNDWATER	IRRIGATION STOCK	3S45E	20	SWSWNE				
42C 30028747	CAPRA LOUIS	GROUND WATER CERTIFICATE	ACTV	200706041504	GROUNDWATER	DOMESTIC STOCK	4S45E	22	SESW				460
42C 30028972	TRUSLER WILLIAM C	GROUND WATER CERTIFICATE	ACTV	200706141217	GROUNDWATER	DOMESTIC	3S45E	18	NWNW				215
42C 30050101	THOMAS SANDY THOMAS THANE	GROUND WATER CERTIFICATE	ACTV	201006151000	GROUNDWATER	DOMESTIC LAWN AND GARDEN	4S45E	27	NWSE	12 GPM	1.28	0.11	380
42C 30050154	ANDERSON LINDA L ANDERSON RICHARD E	GROUND WATER CERTIFICATE	ACTV	201008041000	GROUNDWATER	DOMESTIC LAWN AND GARDEN STOCK	3S45E	15	NENWSW	24 GPM	1.5	0.18	140
42C 30525 00	HARRIS-HOUSEMAN PATRICIA A	GROUND WATER CERTIFICATE	ACTV	19801126828	GROUNDWATER	DOMESTIC	3S44E	27	NENE	10 GPM	1.5		300
42C 36261 00	ARK LAND COMPANY	GROUND WATER CERTIFICATE	ACTV	19810723900	GROUNDWATER	STOCK	3S45E	13	SWSE	5 GPM	0.7		133
42C 36458 00	PHILLIPS ROSE M	EXEMPT RIGHT	ACTV	19201231	GROUNDWATER	LAWN AND GARDEN	3S45E	19	NWNW	6 GPM	1	0.5	60
42C 36960 00	PHILLIPS ROSE M	GROUND WATER CERTIFICATE	ACTV	19810924910	GROUNDWATER	LAWN AND GARDEN STOCK	3S45E	19	NWNW	20 GPM	2.7	0.5	58
42C 36961 00	NELLES WARREN	GROUND WATER CERTIFICATE	ACTV	19810924940	GROUNDWATER	STOCK	3S45E	9	NWSWSW	6 GPM	0.6		
42C 36962 00	COBB BARBARA A COBB STEVEN L	GROUND WATER CERTIFICATE	ACTV	19810924945	GROUNDWATER	STOCK	3S45E	21	SWNWNE	10 GPM	0.7		
42C 36962 00	MCDEED CREEK LIVESTOCK LLC	GROUND WATER CERTIFICATE	ACTV	19810924945	GROUNDWATER	STOCK	3S45E	21	SWNWNE	10 GPM	0.7		
42C 36965 00	GATLIN JULIA H GRESS KENNETH P	GROUND WATER CERTIFICATE	ACTV	198109241525	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	29	N2NESE	25 GPM	2.4	0.5	
42C 37552 00	MONTANA, STATE OF BOARD OF LAND COMMISSIONERS	GROUND WATER CERTIFICATE	ACTV	198111091518	GROUNDWATER	STOCK	3S45E	36	NESENW	4 GPM	0.3		
42C 3906 00	TARTER BRYAN M	STATEMENT OF CLAIM	ACTV	19500518	UNNAMED TRIBUTARY OF THREEMILE CREEK	STOCK	4S45E	12	SWNWNE				
42C 39085 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	GROUND WATER CERTIFICATE	ACTV	198112011747	GROUNDWATER	STOCK	4S45E	14	SWSESW	6 GPM	6		
42C 39086 00	GREAT NORTHERN PROPERTIES LTD PRTNRSHP	GROUND WATER CERTIFICATE	ACTV	198112011746	GROUNDWATER	STOCK	4S45E	15	NWSESW	10 GPM	6		
42C 39553 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19460811	GROUNDWATER	DOMESTIC	4S45E	9	NESESE	10 GPM	1.5	0.5	486
42C 39554 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19650621	GROUNDWATER	DOMESTIC	4S45E	9	NESESE	7 GPM	1.5	0.5	780
42C 39555 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19721115	GROUNDWATER	STOCK	4S45E	17	NWNE	10 GPM			
42C 39556 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	18831001	OTTER CREEK	STOCK	4S45E 4S45E 4S45E 4S45E	9 10 15 22	E2SESE S2SWSW NWNW NWNW				
42C 39557 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	18831001	NEWELL CREEK	STOCK	4S45E	22	SWSW				
42C 39558 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19530507	GROUNDWATER	STOCK	4S45E	22	NWSWSW	20 GPM			480
42C 39559 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19460811	GROUNDWATER	STOCK	4S45E	9	NESESE	10 GPM			486
42C 39560 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19551230	GROUNDWATER	STOCK	4S45E	9	NENESW	20 GPM			800
42C 39561 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19650621	GROUNDWATER	STOCK	4S45E	9	NESESE	7 GPM			780
42C 39562 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19491013	OTTER CREEK	IRRIGATION	4S45E 4S45E 4S45E 4S45E 4S45E 4S45E	9 10 15 15 15 22	E2SESE SWSW SW W2NW W2SW W2NW	3.6 CFS	190	95	

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Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[1]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 39563 00	CONSOLIDATION COAL CO	STATEMENT OF CLAIM	ACTV	19491110	OTTER CREEK	IRRIGATION	4S45E 4S45E 4S45E 4S45E	9 10 15 22	SESE SWSW W2W2 W2NW	3.95 CFS	210	105	
42C 40832 00	CONSOLIDATION COAL CO	GROUND WATER CERTIFICATE	ACTV	198201111325	GROUNDWATER	STOCK	4S45E	17	NWNE	10 GPM	4.5		
42C 40833 00	CONSOLIDATION COAL CO	GROUND WATER CERTIFICATE	ACTV	198201111326	GROUNDWATER	DOMESTIC STOCK	4S45E	9	NESESE	7 GPM	7.5		
42C 41601 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	GROUND WATER CERTIFICATE	ACTV	19811128830	GROUNDWATER	STOCK	4S46E	31	NWNWSW	12 GPM	2.8		140
42C 41885 00	TRUSLER INC	GROUND WATER CERTIFICATE	ACTV	198112241143	GROUNDWATER	STOCK	3S45E	19	NWSESE	30 GPM	2.8		
42C 41886 00	TRUSLER INC	GROUND WATER CERTIFICATE	ACTV	198112241144	GROUNDWATER	STOCK	3S45E	19	NWSESE	30 GPM	2.8		
42C 41887 00	TRUSLER INC	GROUND WATER CERTIFICATE	ACTV	198112241145	GROUNDWATER	STOCK	3S45E	19	SWSWSE	10 GPM	2.8		
42C 41908 00	PROSPECT LAND & DEVELOPMENT CO, INC	GROUND WATER CERTIFICATE	ACTV	198112041455	GROUNDWATER	DOMESTIC	3S45E	32	NESESE	15 GPM	0.6		
42C 41909 00	SHY, GEORGE FAMILY TRUST	GROUND WATER CERTIFICATE	ACTV	198112041456	GROUNDWATER	STOCK	3S45E	23	NWSWSE	6 GPM	0.6		
42C 42300 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	GROUND WATER CERTIFICATE	ACTV	198112241142	GROUNDWATER	DOMESTIC	3S45E	18	NWNW	10 GPM	1		
42C 42951 00	HOME CREEK CATTLE COMPANY LLC	GROUND WATER CERTIFICATE	ACTV	198201081300	GROUNDWATER	DOMESTIC	3S46E	19	NWNW	20 GPM	0.7		160
42C 42952 00	ARK LAND COMPANY	GROUND WATER CERTIFICATE	ACTV	198201081302	GROUNDWATER	STOCK	3S45E	13	SWSE	10 GPM	0.5		120
42C 44167 00	STEVENS K P STEVENS KEITH	GROUND WATER CERTIFICATE	ACTV	198203261515	GROUNDWATER	DOMESTIC LAWN AND GARDEN STOCK	3S45E	27	SWNWNE	10 GPM	3.6	0.5	
42C 48766 00	HOME CREEK CATTLE COMPANY LLC	GROUND WATER CERTIFICATE	ACTV	19821206808	GROUNDWATER	DOMESTIC	3S46E	19	NWNW	8 GPM	1.5		240
42C 52473 00	BLAEDE LORI A BLAEDE TIMOTHY D	GROUND WATER CERTIFICATE	ACTV	198305051400	GROUNDWATER	DOMESTIC STOCK	3S45E	23	NWNWNW	8 GPM	1.6		520
42C 52538 00	GREER WILLIAM H TAYLOR ANN H	GROUND WATER CERTIFICATE	ACTV	19830818800	GROUNDWATER	DOMESTIC	3S45E	15	SESW	12 GPM	1.5	0.25	150
42C 55015 00	TARTER BRYAN M	GROUND WATER CERTIFICATE	ACTV	19840514900	GROUNDWATER	STOCK	4S45E	12	SWSWNE	5 GPM	0.43		205
42C 56514 00	BAIN KRISTIE S BAIN MYCO J	GROUND WATER CERTIFICATE	ACTV	198407051121	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	15	SE	6 GPM	2.25	0.5	280
42C 56556 00	BRIDGMAN JAMES W BRIDGMAN WAVA B	GROUND WATER CERTIFICATE	ACTV	198408171337	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	15	SESESE	15 GPM	2.88	0.75	484
42C 56560 00	BREWER ERNEST E HUMPHREYS CARLA J SCHONENBACH CATHY J	GROUND WATER CERTIFICATE	ACTV	198408301104	GROUNDWATER	DOMESTIC STOCK	4S45E	4	NWSESW	10 GPM	1.55	0.25	190
42C 58668 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19360601	UNNAMED TRIBUTARY OF TENMILE CREEK	STOCK	5S46E	6	NENWSE		1.25		
42C 58673 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19460501	GROUNDWATER	STOCK	4S46E	31	SWNWSW	4.49 GPM			
42C 58726 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	UNNAMED TRIBUTARY OF COAL CREEK	STOCK	4S46E	30	NESWNE				
42C 58731 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	FORTUNE SPRING	STOCK	4S45E	24	SWSESE	4.49 GPM			
42C 58733 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19360810	UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S46E	7	SESESW		4.18		
42C 58749 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S46E	19	SESENW				
42C 58750 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S46E	19	NESWNW				
42C 58751 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S46E	18	SESWSE				
42C 58752 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF COAL CREEK	STOCK	4S46E	30	SENWNE				
42C 58802 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	U D SPRING	STOCK	3S46E	31	SENENE	4.49 GPM			
42C 58854 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S46E	7	NWNW				
42C 58858 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S46E	7	NESENW				
42C 58859 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF SHORTY CREEK	STOCK	4S46E	7	NESESW				
42C 58862 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF NEWELL CREEK	STOCK	4S45E	30	SENENE				
42C 58864 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19820428	GROUNDWATER	STOCK	4S45E	5	NENENE	4.49 GPM			

(1) Locations given are for points of diversion associated with each water right.

TABLE 4-1
OTTER CREEK MINE BASELINE REPORT 304E
WATER RIGHTS WITHIN THE OTTER CREEK COAL LIFE OF MINE AREA

Water Right Number	Owner	Water Right Type	Status	Priority Date (yyyymmdd or yyyymmddhhmm)	Source Name	Purpose	TR[(1)]	Sec	Quarter Section	Max Flow Rate	Volume (ac-ft/yr)	Max Acres	Well Dpth
42C 58865 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	GENE CREEK SPRING	STOCK	4S45E	30	NWSESE	4.49 GPM			
42C 58867 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19330501	UNNAMED TRIBUTARY OF NEWELL CREEK	STOCK	4S45E	19	SENWSE		2.78		
42C 58870 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19580501	GROUNDWATER	STOCK	4S45E	19	SENESE	4.49 GPM			
42C 58923 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM GROUND WATER CERTIFICATE	ACTV	19820428 198504041124	GROUNDWATER GROUNDWATER	RECREATION STOCK	3S45E 3S45E	14 24	SESWSW SESWSE	4.49 GPM 5 GPM	1.5 3.21		
42C 58924 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19820428	GROUNDWATER	RECREATION	3S45E	14	SESWSW	4.49 GPM	1.5		
42C 58948 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	GROUND WATER CERTIFICATE	ACTV	198506121330	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	18	NWNWNW	10 GPM	3.5	1	300
42C 59162 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF COLEMAN DRAW	STOCK	3S46E	30	NENESE		5.92		
42C 59168 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19520501	GROUNDWATER	STOCK	3S46E	19	NWSWNE	4.49 GPM			
42C 59169 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19620611	GROUNDWATER	STOCK	3S46E	30	NW	4.49 GPM			170
42C 59170 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19620501	UNNAMED TRIBUTARY OF THOMAS DRAW	STOCK	3S46E	30	SW		1.74		
42C 59406 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19370501	UNNAMED TRIBUTARY OF WILLOW CREEK	STOCK	3S45E	2	SESESW		3.84		
42C 59409 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19610501	GROUNDWATER	STOCK	3S45E	10	SWNENW	4.49 GPM			
42C 59460 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF THOMAS DRAW	IRRIGATION	3S46E	30	E2SENW		3	20	
42C 59462 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF THOMAS DRAW	IRRIGATION	3S46E	30	SWSWSE		30	20	
42C 59463 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF THOMAS DRAW	IRRIGATION	3S46E	30	NWSWSE		2	1	
42C 59464 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF COLEMAN DRAW	IRRIGATION	3S46E	30	W2SWNE		30	20	
42C 59465 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19600601	UNNAMED TRIBUTARY OF THOMAS DRAW	IRRIGATION	3S46E	31	N2NWNE		30	20	
42C 59471 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF BOWMAN CREEK	STOCK	4S44E	11	NWSENW				
42C 59472 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19590501	GROUNDWATER	STOCK	4S44E	12	NWNENW	10 GPM	2.78		
42C 59512 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	19490501	UNNAMED TRIBUTARY OF BRIDGE CREEK	STOCK	4S44E	12	NWNWSE		2.1		
42C 59516 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	PASS SPRING	STOCK	4S44E	24	NWNWNE	4.49 GPM			
42C 59518 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF BOWMAN CREEK	STOCK	4S44E	11	SENESW				
42C 59519 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF NEWELL CREEK	STOCK	4S45E	30	SENENE				
42C 59520 00	USA (DEPT OF AGRICULTURE FOREST SERVICE)	STATEMENT OF CLAIM	ACTV	18800901	SPRING, UNNAMED TRIBUTARY OF BRIDGE CREEK	STOCK	4S44E	2	SWNESE				
42C 625 00	FLOOK BENJAMIN N	GROUND WATER CERTIFICATE	ACTV	197310091252	GROUNDWATER	STOCK	3S44E	27	NWNE	0.55 GPM			
42C 63149 00	ISAACS KIMBERLY A	GROUND WATER CERTIFICATE	ACTV	198611131104	GROUNDWATER	DOMESTIC	3S45E	15	SWSE	5 GPM	1.5		280
42C 63198 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	GROUND WATER CERTIFICATE	ACTV	198703041030	GROUNDWATER	MULTIPLE DOMESTIC	3S45E	20	SWSENE	20 GPM	6		275
42C 68062 00	TARTER BRYAN M	GROUND WATER CERTIFICATE	ACTV	19880421840	GROUNDWATER	STOCK	4S46E	6	SWNESW	5 GPM	0.28		40
42C 79398 00	USA (DEPT OF INTERIOR BUREAU OF LAND MGMT)	RESERVED CLAIM	ACTV	19260417	SPRING, UNNAMED TRIBUTARY OF BRIDGE CREEK	WILDLIFE	3S44E	34	SENE	4.98 GPM	7.31		
42C 79399 00	USA (DEPT OF INTERIOR BUREAU OF LAND MGMT)	STATEMENT OF CLAIM	ACTV	18831231	SPRING, UNNAMED TRIBUTARY OF BRIDGE CREEK	STOCK	3S44E	34	SENE	4.98 GPM			
42C 79663 00	USA (DEPT OF INTERIOR BUREAU OF LAND MGMT)	STATEMENT OF CLAIM	ACTV	19551231	UNNAMED TRIBUTARY OF OTTER CREEK	WILDLIFE	4S45E	6	SWNE		4.31		
42C 79664 00	USA (DEPT OF INTERIOR BUREAU OF LAND MGMT)	STATEMENT OF CLAIM	ACTV	19551231	UNNAMED TRIBUTARY OF OTTER CREEK	STOCK	4S45E	6	SWNE		0.69		
42C 79689 00	USA (DEPT OF INTERIOR BUREAU OF LAND MGMT)	STATEMENT OF CLAIM	ACTV	19541231	UNNAMED TRIBUTARY OF TONGUE RIVER	WILDLIFE	3S44E	34	NWSW		2.08		
42C 80566 00	TRUSLER JACQUELINE L TRUSLER WILLIAM C	GROUND WATER CERTIFICATE	ACTV	199201211000	GROUNDWATER	DOMESTIC LAWN AND GARDEN	3S45E	20	NWNESWNE	10 GPM	1.27	0.11	300
42C 80596 00	KANIA KENNETH A KANIA PAMELA A	GROUND WATER CERTIFICATE	ACTV	19920316830	GROUNDWATER	DOMESTIC	3S45E	20	NESENW	10 GPM	1.63		165
42C 8806 00	CAMERON RICHARD W CAMERON VEETTA L	GROUND WATER CERTIFICATE	ACTV	197607021353	GROUNDWATER	DOMESTIC	3S45E	15	SESE	3 GPM			300

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