Location	Parameters Total/Dissolved Units	Field pH pH Units		Field Diss. Oxygen mg/L		Field Specific Conductivity µmhos/cm		Field Oxidation Reduction Potential mV		Field Water Temperature °C		Hardness mg/L	
KP-P1_SRK-2													
	Sample Date												
	03/23/05	7.79	3	0.1	1	266	3			2.44	3	103	3
	05/15/05	6.84	3	0.54	2	321	3	-12	2	3.75	3	120	2
	08/19/05	7.85	3	0.72	2	279	3	-115	3	4.13	3	123	3
	11/07/05	7.67	3	0.22	2	320	2	-16	2	1.43	3	92.6	3
	03/09/06	6.38	3	0.22	2	267	3	1.3	2	1.87	3	122	3
	05/20/06	7	1	0.31	2	294	3	123.7	4	2.82	3	109	3
	08/19/06	6.7	2	0.39	2	300	1	120.2	4	3.87	3	121	3
	10/26/06	6.98	3	1.44	3	324	3	151.6	4	1.43	3	119	3
	03/16/07	7.97	3	0.19	2	159	3	-119.9	4	1.85	3	122	3
	05/15/07	7.72	3	0.31	2	176	3	-116.6	4	2.73	3	112	3
	08/19/07	7.68	3	0.33	2	169	3	-121.5	4	3.24	3	111	3
	11/09/07	7.6	2	0.71	2	297	3	33.2	3	2.48	3	123	3
	03/27/08	7.02	3	0.94	2	284	3	-7.3	2	2.28	3	104	3
	05/20/08	7.83	3	0.2	1	312	3	-135.8	4	3.38	3	111	3
	08/27/08	7.9	2	1.3	2	287	3	49.6	3	3.07	3	112	3
	10/20/08	7.86	3	0.88	2	305	3	-161.9	4	2.29	3	119	3
	08/22/09			0.5	1	281	3		R	3.87	3	106	3
	08/27/11	7.95	3	5.41	3	261.5832	FALSE	-117.8	4	5.43	3	125	3
	08/28/12			4.48	3	312	3	-29.5	3	5.52	3	102	3

Lab Conductivity		Total Dissolved Solids		Total Suspended Solids		Acidity		Alkalinity		Nitrate/ Nitrite		Nitrite		Nitrate	
µmhos/cm		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
300	1	199	3	14	2	**0.785**	3	150	2	**0.0155**	3				
310	2	212	3	0.9	1	2.38	3 J	153	3	0.06	1 J				
305	3	186	3	7.8	2	2	1 J	154	3	0.0425	3 J				
305	3	154	3	7.8	2	3.75	3 J	150	2	**0.05**	1 U				
310	2	135	3	18.1	3	**1.57**	3	158	3	**0.0155**	3				
290	2	163	3	5.70	2	**0.785**	3	156	3	0.128	3				
300	1	189	3	4.90	2	3.75	3 J	154	3	**0.0155**	3	**0.0155**	3	**0.0155**	3
280	2	178	3	41.0	2	**1.57**	3	164	3	**0.0155**	3	**0.0155**	3	**0.0155**	3
280	2	173	3	4.00	1	**1.57**	3	154	3	0.0395	3 J	**0.0155**	3	**0.0155**	3
315	3	173	3	2.80	2	**1.57**	3	156	3	0.0500	1 J				
305	3	179	3	2.50	2	5.25	3 J	151	3	**0.0155**	3				
310	2	163	3	1.44	3	**1.57**	3	156	3	**0.0155**	3				
338	3	183	3	4.10	2	**1.57**	3	159	3	0.0320	2 J				
338	3	178	3	87.3	3	**1.57**	3	160	2	**0.0155**	3				
330	2	148	3	2.29	3	**1.57**	3	160	2	**0.050**	1 U				
328	3	164	3	9.79	3	**1.57**	3	160	2	0.0425	3 J				
323	3	171	3	105	3	**1.57**	3	157	3	**0.0155**	3				
320	2	192	3	87.7	3	**1.57**	3	151	3	**0.0155**	3				
319	3	191	3	18.5	3	**5.0**	1 U	153	3	**0.050**	1 U				

Total Phosphorus		Ortho-phosphate	
mg/L		mg/L	
0.123	3		
0.047	2		
0.016	2 J		
0.017	2 J		
0.0300	1		
0.0100	1		
0.0098	2 J	**0.050**	1 UJ
0.0330	2	**0.050**	1 UJ
0.0130	2	**0.050**	1 UJ
0.0077	2 J		
0.0084	2 J		
0.0170	2		
0.0323	3		
0.0823	3		
0.0050	1 U		
0.0072	2 J		
0.0731	3		
0.137	3		
0.0284	3		

Chloride		Fluoride		Sulfate		Total Cyanide		Cyanide WAD[5]		Thiocyanate		DOC (Dissolved Organic Carbon)		Ammonia[3]
mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L
0.885	3 J+	0.091	2 J	20.6	3 J+	**0.00125**	3	**0.00125**	3	0.21	2 J			**0.0155**
0.814	3	0.081	2 J	17.5	3	**0.00125**	3	**0.00125**	3	0.074	2 J			**0.0155**
0.827	3	0.071	2 J	19.8	3	**0.00125**	3	**0.00125**	3	0.30	1 J			**0.0155**
0.817	3	0.093	2 J	18.3	3	**0.00125**	3	**0.00125**	3	0.14	2 J			**0.0155**
0.859	3	0.0750	2 J	19.2	3	**0.00125**	3	**0.00125**	3	**0.155**	3			**0.050**
0.821	3	0.0890	2 J	17.6	3	**0.00125**	3	**0.00125**	3	**0.155**	3			0.0420
0.824	3	0.0900	1 J	17.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.850	2	0.0970	2 J	17.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.050**
0.704	3	0.0700	1 J	16.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.853	3	0.0910	2 J	16.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3			0.0386
0.703	3	0.0810	2 J	16.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3			0.0906
0.740	2	0.0860	2 J	16.6	3	0.0015	2 J	**0.00075**	2	**0.155**	3			0.154
0.740	2	0.0760	2 J	16.0	2	**0.00075**	2	**0.00075**	2	**0.155**	3			0.166
0.747	3	0.083	2 J	15.9	3	**0.0025**	2 U	0.0051	2	**0.155**	3	**0.075**	2	**0.0155**
0.737	3	0.228	3	16.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.050**
0.747	3	0.078	2 J	14.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.511	3	**0.050**
0.67	2	0.072	2 J	13.3	3					**0.155**	3	0.472	3 J	0.0625
1.42	3	0.211	3	10.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.526	3	0.042
0.738	3	0.099	2 J	14.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.513	3	**0.0155**

Aluminum				Antimony				Arsenic				Barium			
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
3	556	3	534	3 J+	0.0226	3	0.0231	3	1.91	3	1.94	3	87.3	3	91.4	3
3	139	3	2.78	3 J+	0.045	2 J+	0.0312	3 J+	1.72	3	1.71	3	95.6	3	98.7	3
3	658	3	4.69	3	0.154	3	0.0772	3 J+	2.21	3	1.84	3	112	3	93.6	3
3	322	3	3.12	3 J+	0.0394	3 J+	0.0368	3 J+	1.51	3	1.66	3	86.2	3	102	3
1 U	658	3	4.27	3 J+	0.0476	3 J	0.0570	2	1.63	3	1.31	3	109	3	103	3
2 J	139	3	3.43	3	0.0736	3	0.0256	3 J	1.34	3	1.60	2	98.1	3	108	3
3	94.4	3	3.33	3 J+	0.0188	3 J	0.0160	2 J	1.88	3	1.98	3	109	3	106	3
1 U	547	3	3.52	3	**0.0250**	2 U	**0.0075**	2	1.66	3	1.09	3	108	3	96.7	3
3	150	2 J+	5.82	3 J+	**0.0150**	2	**0.0150**	2	1.49	3	1.50	2	111	3	105	3
3 J	102	3	2.71	3 J+	0.0462	3 J	0.0256	3 J	1.42	3	1.45	3	108	3	108	3
3 J	240	2	3.08	3 J+	0.0252	3 J	0.0238	3 J	1.45	3	1.67	3	104	3	111	3
3	66.6	3	2.95	3	0.0274	3 J	**0.0075**	2	1.61	3	1.46	3	113	3	109	3
3	189	3	2.86	3	0.0194	3 J	**0.0075**	2	1.31	3	1.24	3	92.1	3	97.3	3
3	674	3	14.4	3 J+	0.0392	3 J	**0.0075**	2	2.04	3	1.63	3	113	3	102	3
1 U	63.9	3	2.63	3	0.0285	3 J	0.0155	3 J	1.6	2	1.43	3	99.7	3	93.5	3
1 U	174	3	3.52	3	0.0523	3	**0.0250**	2 U	1.73	3	1.53	3	109	3	99	2
3 J	89.5	3 J+	53.8	3 J+	**0.0075**	2	**0.0075**	2	1.44	3	1.53	3	90.3	3	92.9	3
2 J	3950	3	42.6	3	**0.0300**	1	0.0156	3 J	3.8	2	1.9	2	154	3	89.8	3
3	485	3	6.47	3	0.121	3	0.0337	3 J	1.93	3	1.85	3	99	2	86.9	3

Beryllium				Bismuth				Boron				Cadmium[4]					
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
0.0184	3	0.0203	3	**0.003835**	4	**0.003835**	4	34.6	3	35.4	3	**0.003095**	4	0.00665	3 J	25400	3
0.00631	3 J	**0.001495**	4	**0.003835**	4	**0.003835**	4	34.8	3	37	2	**0.003095**	4	**0.003095**	4	28300	3
0.03	1	**0.0075**	2	0.0124	3	**0.00155**	3	33.1	3	32.3	3	**0.00775**	3	**0.00775**	3	29100	3
0.0075	2	**0.0075**	2	**0.00155**	3	**0.00155**	3	28.7	3	31.6	3	**0.00775**	3	**0.00775**	3	21100	3
0.0120	2	**0.0120**	2	**0.0250**	2 U	**0.0250**	2 U	31.8	3	29.9	3	**0.0125**	3	**0.0125**	3	27600	3
0.0120	2	**0.0120**	2	**0.0075**	2	**0.0075**	2	31.1	3	30.6	3	**0.0125**	3	**0.0125**	3	23700	3
0.0280	2 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	32.0	2	30.4	3	**0.0185**	3	**0.0185**	3	27800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	30.8	3	31.6	3	**0.0185**	3	**0.0185**	3	29100	3
0.0250	2	**0.0250**	2	**0.0150**	2	**0.0150**	2	29.2	3	28.0	2	**0.0150**	2	**0.0150**	2	28200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	29.3	3	29.5	3	**0.0075**	2	**0.0075**	2	26500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	33.3	3	36.0	2	**0.0075**	2	**0.0075**	2	26300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	32.3	3	31.0	2	**0.0075**	2	**0.0075**	2	28400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	28.8	3	29.7	3	**0.0075**	2	**0.0075**	2	23900	3
0.0271	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	29.5	3	31.1	3	**0.0075**	2	**0.0075**	2	26000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	32	2	30.9	3	**0.0075**	2	**0.0075**	2	26100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	31.6	3	30.2	3	**0.0075**	2	**0.0075**	2	27500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	26.8	3	30.3	3	**0.0075**	2	**0.0075**	2	24700	3
0.201	3	**0.0125**	3	**0.0300**	1	**0.0075**	2	31.1	3	33	2	**0.0300**	1	**0.0075**	2	29500	3
0.0262	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	26.2	3	25.1	3	0.019	2 J	**0.0075**	2	24600	3

Calcium		Chromium[4,6]				Cobalt				Copper[4]			
Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
24400	3	3.49	3	2.65	3 J+	0.548	3	0.495	3	0.572	3	0.524	3
21300	3	3.67	3	0.694	3	0.299	3	0.211	3	0.557	3 J+	0.0645	3 J+
23900	3	8.45	3	0.742	3 J+	0.826	3	0.288	3	1	1 J+	0.298	3 J+
24400	3	10	1	1.64	3	0.467	3 J+	0.236	3 J+	0.758	3 J+	0.239	3 J+
27800	3	11.1	3	1.58	3 J+	0.572	3	0.240	2	1.26	3	0.201	3 J+
26300	3	5.47	3	1.89	3	0.323	3	0.227	3	0.541	3	0.503	3
27200	3	3.05	3 J+	1.23	3 J+	0.421	3	0.226	3	0.749	3 J+	0.315	3 J+
28500	3	5.93	3	2.95	3	0.564	3	0.213	3	0.780	2 J+	0.355	3 J+
25800	3	10.7	3	1.68	3 J+	0.461	3 J+	0.183	3 J+	0.763	3 J+	**0.100**	1 U
26700	3	5.45	3	0.971	3	0.299	3	0.204	3 J+	0.597	3 J+	0.380	2 J+
28500	3	1.55	3	0.507	3	0.377	3	0.203	3	0.648	3 J+	0.283	3 J+
27900	3	1.66	3 J+	0.557	3 J+	0.218	3	0.170	2	0.530	2	0.429	3
26000	2	3.53	3	0.471	3	0.297	3	0.178	3	0.409	3	0.183	3
25700	3	7.47	3	1.07	3	0.635	3	0.188	3	1.11	3 J+	0.198	3 J+
24500	3	0.794	3	0.238	3	0.226	3	0.171	3	0.239	3 J+	0.141	3 J+
25900	3	1.59	3	0.347	3	0.31	2	0.18	2	0.414	3	0.143	3
25500	3	1.19	3	0.261	3	0.26	2 J+	0.196	3 J+	**0.250**	2 U	**0.250**	2 U
25500	3	3.5	2	0.23	2	2.79	3	0.193	3	5.11	3	**0.250**	2 U
22900	3	0.461	3	0.104	3 J	0.546	3	0.162	3	0.953	3	**0.250**	2 U

Iron				Lead[4]				Magnesium				Manganese			
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
594	3	600	1 J+	0.297	3	0.253	3	9640	3	11100	3	86	2	93.5	3
194	3	25.9	3	0.168	3 J+	**0.011**	2	11900	3	10700	3	82.2	3	80.1	3
1320	3	45.5	3	0.49	2	0.0994	3 J	12200	3	11100	3	109	3	75.8	3
536	3	59.2	3	0.519	3 J+	**0.05**	1 U	9510	3	11000	2	71.5	3	74.3	3
717	3	63.1	3	0.633	3 J+	**0.0130**	2	12800	3	13200	3	81.9	3	74.9	3
249	3	55.2	3	1.19	3	0.101	3	12000	2	12300	3	73.7	3	74.0	2
421	3	46.9	3	0.399	3 J+	0.198	3 J+	12700	3	12400	3	93.1	3	73.2	3
799	3	85.0	2	0.378	3 J+	**0.0155**	3	11200	3	11400	3	93.1	3	72.9	3
473	3 J+	60.1	3 J+	0.289	3 J+	**0.0310**	2	12500	3	11700	3	86.4	3	70.5	3
219	3	116	3	0.159	3	**0.0155**	3	11200	3	11700	3	83.2	3	78.7	3
468	3	54.9	3	0.150	2 J+	**0.0155**	3	10900	3	11800	3	87.1	3	80.9	3
153	3	87.7	3	0.109	3	**0.0155**	3	12600	3	12500	3	80.8	3	76.1	3
357	3	105	3	0.149	3	**0.0155**	3	10900	3	11500	3	80.1	3	76.7	3
879	3	144	3	0.534	3	**0.0155**	3	11100	3	11000	2	85.4	3	78.2	3
211	3	134	3	0.121	3	**0.0155**	3	11300	3	10400	3	78.3	3	73.1	3
356	3	113	3	0.299	3 J+	**0.0155**	3	12200	3	11500	3	90.7	3	79.2	3
299	3	127	3	0.243	3 J+	**0.050**	1 U	10700	3	10700	3	91.8	3	83.7	3
5010	3	127	3	3.06	3	0.062	2 J	12400	3	10900	3	237	3	102	3
746	3	58.9	3	0.891	3	**0.0155**	3	9840	3	9260	3	121	3	81.7	3

Mercury[7]				Molybdenum				Nickel[4]				Potassium			
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
0.0315	3	**0.0315**	3	1.62	3	1.6	2	1.82	3	1.71	3	1440	3	1390	3	**0.0143**	3
0.0315	3	**0.0315**	3	1.67	3	1.93	3	2.75	3	0.599	3	1610	3	1270	3	**0.0143**	3
0.031	2	**0.031**	2	1.85	3	1.75	3	6	1	2	1	1730	3	1450	3	**0.0775**	3
0.031	2	**0.031**	2	1.52	3 J+	1.81	3 J+	6.06	3	1.96	3	1260	3	1540	3	**0.0775**	3
0.00250	2 U	**0.00250**	2 U	1.81	3	1.73	3	6.80	2	1.48	3	1430	3	1520	3	**0.155**	3
0.000475	4	**0.000475**	4	1.55	3 J		R	4.06	3	1.71	3	1570	3	1640	3	**0.155**	3
0.000475	4	**0.000475**	4	1.61	3	1.76	3	2.75	3	1.62	3	1510	3	1490	3	**0.155**	3
0.000475	4	0.00189	3 J	1.78	3	1.94	3	3.80	2	2.28	3	1530	3	1490	3	**0.155**	3
0.000169	3	**0.000475**	4	1.67	3	1.82	3	5.01	3 J+	1.58	3 J+	1530	3	1470	3	**0.310**	2
0.000463	3 J	**0.000475**	4	1.83	3	1.92	3	3.78	3 J+	1.56	3 J+	1500	2	1530	3	**0.155**	3
0.00250	2 U	**0.000475**	4	1.78	3	2.05	3	1.86	3 J+	1.31	3 J+	1450	3	1550	3	**0.155**	3
0.000169	3	**0.000475**	4	1.97	3	1.94	3	1.69	3	1.10	2	1680	3	1630	3	**0.155**	3
0.00075	2	**0.00075**	2	1.63	3	1.78	3	2.58	3	0.918	3	1430	3	1500	2	**0.155**	3
0.00342	3 J	**0.00075**	2	1.92	3	1.76	3	5.31	3	1.37	3	1500	2	1460	3	**0.155**	3
0.00075	2	**0.00075**	2	1.7	2	1.66	3	1.22	3	0.9	1	1480	3	1370	3	**0.155**	3
0.00218	3 J	**0.00075**	2	1.83	3	1.81	3	1.88	3	1.15	3	1590	3	1490	3	**0.155**	3
0.00219	3 J	**0.00075**	2	1.75	3	1.77	3	1.18	3 J+	0.766	3 J+	1480	3	1480	3	**0.155**	3
0.0220	2	**0.00075**	2	1.29	3 J		R	4.58	3	0.998	3	2120	3	1540	3	**0.62**	2
0.00222	3 J	**0.00075**	2	1.75	3	1.92	3	1.56	3	1.1	2	1590	3	1450	3	**0.155**	3

Selenium

Dissolved µg/L	
0.0143	3
0.0143	3
0.0775	3
0.0775	3
0.155	3
0.155	3
0.155	3
0.155	3
0.310	2
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

Silicon		Silver[8]				Sodium				Thallium				Tir	
Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
6210	3	0.00631	3 J	0.00686	3 J	25700	3	23900	3	**0.002125**	4	0.00433	3 J	0.213	3
5280	3	**0.001435**	4	**0.001435**	4	26200	3	22100	3	**0.002125**	4	**0.002125**	4	0.19	2 J
5450	3	**0.0031**	2	**0.0031**	2	28300	3	26600	3	**0.0031**	2	**0.0031**	2	0.0638	3 J
5940	3	**0.0031**	2	**0.0031**	2	22000	2	25700	3	**0.0031**	2	**0.0031**	2	**0.031**	2
5090	3	**0.0031**	2	**0.0031**	2	30300	3	32200	3	0.0176	3	**0.0025**	2	0.0598	3 J
5000	1	**0.0031**	2	**0.0031**	2	30900	3	32100	3	**0.0025**	2	0.0116	3	**0.0155**	3
5290	3	**0.0031**	2	**0.0031**	2	30300	3	29400	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5200	2	0.0384	3	**0.0031**	2	26000	2	27200	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5190	3	**0.0062**	2	**0.0062**	2	29500	3	**31.0**	2	**0.0100**	1	**0.0100**	1	**0.100**	1
5410	3	**0.0031**	2	**0.0031**	2	28500	3	29600	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5980	3	**0.0031**	2	**0.0031**	2	27600	3	30500	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6060	3	**0.0031**	2	**0.0031**	2	27400	3	25000	2	**0.0050**	1	**0.0050**	1	**0.050**	1
5190	3	**0.0031**	2	**0.0031**	2	27600	3	30800	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5250	3	**0.0031**	2	**0.0031**	2	27700	3	27100	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5090	3	**0.0031**	2	**0.0031**	2	27000	2	25400	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5610	3	**0.0031**	2	**0.0031**	2	28900	3	27500	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5360	3	**0.0031**	2	**0.0031**	2	22200	3	21300	3	**0.0050**	1	**0.0050**	1	0.645	3 J+
5670	3	**0.0124**	3	**0.0031**	2	25900	3	24000	2	0.03	1 J	**0.0031**	2	**0.124**	3
5330	3	**0.0031**	2	**0.0031**	2	23700	3	22800	3	**0.0031**	2	**0.0031**	2	0.122	3 J

			Vanadium				**Zinc[4]**		
	Dissolved		Total		Dissolved		Total		Dissolved
	µg/L		µg/L		µg/L		µg/L		µg/L
0.0302	3	1.14	3	0.969	3	6.60	2 J+	4.21	3
0.0302	3	0.285	3	**0.0047**	2	3.61	3	3.56	3
0.031	2	1.53	3	**0.1**	1	5.39	3	3.7	2
0.031	2	0.501	3	**0.1**	1	3.04	3	2.71	3
0.0155	3	1.36	3	**0.110**	2	4.83	3 J+	3.82	3 J+
0.0155	3	**0.250**	2 U	**0.110**	2	2.58	3 J+	2.72	3 J+
0.050	1	**0.250**	2	**0.250**	2	4.76	3 J+	4.10	2 J+
0.050	1	0.997	3 J	**0.250**	2	1.97	3 J+	**0.155**	3
0.100	1	**0.310**	2	**0.310**	2	4.68	3 J+	**1.00**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	2.85	3 J+	1.40	2 J+
0.050	1	**0.155**	3	**0.155**	3	1.09	3	1.64	3
0.050	1	**0.155**	3	**0.155**	3	3.50	2	3.57	3
0.050	1	0.898	3 J	**0.155**	3	2.22	3 J+	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	2.2	2 J+	**0.50**	1 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	8.18	3	**0.155**	3	13.2	3	**1.55**	3 U
0.0310	2	1.06	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

		2	3	2	2	0	3	1	4	2	3	0	3				
Mean		7.46		1.0		274		-28		3.05		114					
Median		7.68		0.5		287		-16		2.82		112					
St. Deviation		1		1		51		100		1		9					
# of values		17		19		19		17		19		19					
Minimum		6.38		0.1		159		-161.9		1.43		92.6					
Maximum		7.97		5.41		324		151.6		5.52		125					
Lowest fifth percentile		7		0		168		-141		1		101					
# of values undetected		0		0		0		0		0		0					
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA					
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA					
% of CALC exceedences		6%		0%		0%		0%		0%		0%					
% of DWS exceedences		0%		0%		0%		0%		0%		0%					
HIDE this row - notes																	
RED criteria		result is <6.5 OR >8.5		result < 7													
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**			
Total/Dissolved																	
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L			

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
-1	2		0	3		1	2		2	3		0	3		4	3		4	3		4	3
310			175			22			2.160			156			0.0360			0			0	
310			178			8			1.570			156			0.0320			0			0	
20			18			33			1			4			0			0			0	
19			19			19			19			19			19			3			3	
280			135			0.9			0.785			150			0.0155			0.0155			0.0155	
338			212			105			5.25			164			0.128			0.0155			0.0155	
280			147			1			1			150			0			0			0	
0			0			0			14			0			12			3			3	
									74%						63%			100%			100%	
									5						6							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
			result > crit									result <20			result > crit							

	3	2	3	2		
	0.037		0			
	0.017		0			
	0		0			
	19		3			
	0.005		0.05			
	0.137		0.05			
	0		0			
	1		3			
	5%		100%			
	6					
	NA		NA			
	NA		NA			
	0%		0%			
	0%		0%			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
	Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**		**Ammonia[3]**
	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		mg/L
3	3		3	2		1	3		5	2		5	2		3	3		3	3		4
0.816			0.098			16.6			0.00106			0.00116			0.16			0			0.0484
0.814			0.086			16.7			0.00075			0.00075			0.16			0			0.0420
0			0			2			0			0			0			0			0
19			19			19			18			18			19			6			19
0.67			0.07			10.3			0.00075			0.00075			0.074			0.075			0.0155
1.42			0.228			20.6			0.0025			0.0051			0.3			0.526			0.166
1			0			13			0			0			0			0			0
0			0			0			17			17			15			2			12
									94%			94%			79%			33%			63%
			17						1						4			1			5
230			NA			NA			NA			0.0052			NA			NA			6.52
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

3		0	3		2	3		4	3		4	3		2	3		2	3		0	3		1	3			
		489			37			0.0441			0.0241			1.77			1.60			105.0			99.7				
		189			4			0.0300			0.0231			1.63			1.60			108.0			99.0				
		867			121			0			0			1			0			15			7				
		19			19			19			19			19			19			19			19				
		63.9			2.63			0.0075			0.0075			1.31			1.09			86.2			86.9				
		3950			534			0.154			0.0772			3.8			1.98			154			111				
		66			3			0			0			1			1			87			90				
		0			0			4			7			0			0			0			0				
								21%			37%																
								8			7																
		87			87			NA			NA			150			150			NA			NA				
		NA			NA			6			NA			10			NA			2,000			NA				
		89%			5%			0%			0%			0%			0%			0%			0%				
		0%			0%			0%			0%			0%			0%			0%			0%				
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit							
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF		
			Aluminum						**Antimony**						**Arsenic**						**Barium**						
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			

BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
			Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		Total
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		µg/L
4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3								
0.0260		0.0124		0.009600		0.007800		30.9		31.2		0.010900		0.00930		26500									
0.0125		0.0125		0.007500		0.007500		31.1		30.9		0.007500		0.00750		26500									
0		0		0		0		2		3		0		0		2200									
19		19		19		19		19		19		19		19		19									
0.00631		0.001495		0.00155		0.00155		26.2		25.1		0.003095		0.003095		21100									
0.201		0.025		0.03		0.025		34.8		37		0.03		0.0185		29500									
0		0		0		0		27		28		0		0		23440									
12		18		18		19		0		0		18		18		0									
63%		95%		95%		100%						95%		95%											
4												1		1											
NA		NA		NA		NA		NA		NA		0.273		0.247		NA									
4		NA		NA		NA		NA		NA		5		NA		NA									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
																		depends on Hardness				depends on Hardness			
result > crit																		result > crit				result > crit			

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium							**Chromium[4,6]**						**Cobalt**						**Copper[4]**		
Dissolved					Total			Dissolved			Total			Dissolved			Total			Dissolved	
µg/L					µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
-2	3				2	3		3	3		3	3		3	3		3	3		3	3
25700					4.69			1.04			0.549			0.219			0.907			0.269	
25800					3.53			0.74			0.421			0.203			0.648			0.250	
1900					3			1			1			0			1			0	
19					19			19			19			19			19			19	
21300					0.461			0.104			0.218			0.162			0.239			0.0645	
28500					11.1			2.95			2.79			0.495			5.11			0.524	
22740					1			0			0			0			0			0	
0					0			0			0			0			1			4	
																	5%			21%	
								1													
NA					10.98			10.56276			NA			NA			9.413			9.037	
NA					100			NA			NA			NA			NA			NA	
0%					5%			0%			0%			0%			0%			0%	
0%					0%			0%			0%			0%			0%			0%	
				depends on Hardness			depends on Hardness									depends on Hardness					
				result > crit			result > crit									result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0	3		1	3			3	3		4	3	-2	3		-2	3		1	3		1	3	
737			111				0.530			0.053		11500			11400			95			78.9		
468			85				0.299			0.016		11300			11400			86			76.7		
1076			124				1			0		1000			900			36			8		
19			19				19			19		19			19			19			19		
153			25.9				0.109			0.011		9510			9260			71.5			70.5		
5010			600				3.06			0.253		12800			13200			237			102		
190			44				0			0		9627			10286			73			73		
0			0				0			14		0			0			0			0		
										74%													
										2													
1000			1000				3.225			2.546		NA			NA			NA			NA		
NA			NA				15			NA		NA			NA			50			NA		
11%			0%				0%			0%		0%			0%			0%			0%		
0%			0%				0%			0%		0%			0%			100%			0%		
							depends on Hardness			depends on Hardness													
result > crit			result > crit				result > crit			result > crit								result > crit					

| | | |

	3	3
	0.1400	
	0.1550	
	0	
	19	
	0.0143	
	0.31	
	0	
	19	
	100%	

	4.6
	NA
	0%
	0%

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
	Silicon					**Silver[8]**						**Sodium**						**Thallium**					**Tin**
	Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
-1	3		4	2		4	2		-2	3		-2	3		4	2		4	2		3	2	
5450			0.00570			0.00340			27100			25400			0.006500			0.00490			0.106		
5330			0.00310			0.00310			27600			26600			0.005000			0.00500			0.050		
360			0			0			2500			7000			0			0			0		
19			19			19			19			19			19			19			19		
5000			0.001435			0.001435			22000			31			0.002125			0.002125			0.0155		
6210			0.0384			0.00686			30900			32200			0.03			0.0116			0.645		
5081			0			0			22180			19173			0			0			0		
0			17			18			0			1			17			17			13		
			89%			95%						5%			89%			89%			68%		
			1			1									1			1			4		
NA			3.853680893			3.276			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								

3	2	3	3	3	3	2	3	2	3										
0.0460		0.94		0.198		3.51		2.07											
0.0500		0.29		0.155		2.85		1.55											
0		2		0		3		1											
19		19		19		19		19											
0.0155		0.155		0.0047		0.5		0.155											
0.1		8.18		0.969		13.2		4.21											
0		0		0		1		0											
19		10		18		4		9											
100%		53%		95%		21%		47%											
		2																	
NA		NA		NA		120.89		119.20											
NA		NA		NA		NA		NA											
0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%											
						depends on Hardness		depends on Total Zn											
						result > crit		result > crit											
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						

KP-P3D_SRK-5D

Sample Date												
09/24/04	5.84	3	10.79	4	59	2	289	3	2.9	2	15.4	3
05/14/05	5.41	3	9.4	2	53	2	223	3	4.11	3	17.7	3
08/18/05	5.6	2	9.96	3	46	2	137	3	4.01	3	16	2
08/18/06	5.86	3			50	1	151.6	4	2.59	3	14.7	3
08/24/09			9.12	3		R		R	2.61	3	14.7	3
08/21/10	4.52	3	9.19	3 Q	56	2	172.8	4	2.51	3	13.9	3
08/26/11	4.72	3	8.4	2	46.5024	FALSE	236.5	4	2.34	3	14.3	3
08/24/12	6.29	3	8.51	3	53	2	194.5	4	2.25	3	15.1	3

60	1	63.8	3	5.26	3	4.5	2 J	8.25	3 J	0.47	2 J-				
60	1	72.5	3	**0.075**	2	19	2	7.5	2 J	0.21	2				
55	2	47.5	3	0.3	1 J	9.75	3	8	1 J	0.0795	3 J				
45.0	2	57.5	3	**0.075**	2	11.0	2	8.00	1 J	0.0905	3 J	**0.0155**	3	0.0760	2
58.1	3	51.3	3	**0.076**	2	5	1 J	17	2	0.145	3				
53.8	3	65	2	**0.075**	2	5.98	3 J	7.6	2 J	0.111	3				
53.9	3	57	2	**0.076**	2	9.11	3 J	7.33	3 J	0.117	3				
53.5	3	33	2	0.3	1 J	10.2	3	6.34	3 J	0.214	3				

	0.11	2		
	0.083	2		
	0.082	2		
J	0.0950	2	J-	R
	0.0916	3		
	0.082	2		
	0.083	2		
	0.0826	3		

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.886	3	0.043	2 J	13	2	0.003	1 J	**0.00125**	3	0.15	2 J				**0.0155**
0.836	3	0.056	2 J	12.9	3	**0.00125**	3	**0.00125**	3	0.23	2 J				**0.0155**
0.803	3	0.05	1 J	12.8	3	**0.0025**	2 UJ	**0.0025**	2 UJ	0.19	2 J				0.0996
0.805	3	0.0720	2 J	12.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0450
0.673	3	0.049	2 J	11.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.349	3 J		0.0343
0.732	3	0.082	2 J	12.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.825	3	0.084	2 J	13.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.681	3	0.073	2 J	12.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	**250**	2 U	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.05	3	2.71	3
3	12.2	3 J+	3.27	3 J+	0.0339	3 J+	0.0306	3 J+	0.158	3	0.179	3	0.859	3	0.875	3
3 J	9.53	3	3.85	3	0.0226	3 J+	0.0186	3 J+	**0.25**	2 U	**0.25**	2 U	0.843	3	0.711	3
2 J	2.93	3 J+	**1.00**	1 U	0.0256	3 J	0.0256	3 J	0.311	3 J	0.468	3 J	0.514	3	0.451	3
3 J	3.24	3 J+	**1.00**	1 U	0.0275	3 J	0.0241	3 J	**0.155**	3	**0.155**	3	0.514	3	0.426	3
3	**1.00**	1 U	**1.00**	1 U	0.0158	3 J	0.0174	3 J	0.311	3 J	**0.155**	3	0.361	3 J+	0.392	3 J+
3	**1.00**	1 U	2.2	2 J+	**0.0075**	2	**0.0075**	2	0.214	3 J	**0.075**	2	0.522	3	0.444	3
3	**1.00**	1 U	**1.00**	1 U	0.0207	3 J	0.0212	3 J	0.236	3 J	0.189	3 J	0.572	3	0.469	3

0.0075	2	**0.0075**	2	**0.75**	2	**0.75**	2	**1.55**	3	4	1 J	**0.0155**	3	**0.0155**	3	4530	3
0.001495	4	**0.001495**	4	**0.003835**	4	0.0106	3 J	2.18	3 J		R	0.0195	3 J	0.0188	3 J	5090	3
0.0075	2	**0.0075**	2	0.0086	2 J	**0.005**	1 U	**1.55**	3	3.8	2 J	**0.00775**	3	**0.00775**	3	4510	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	4160	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0250**	2 U	**0.0075**	2	4130	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3900	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.65	3 J	**0.75**	2	**0.0075**	2	**0.0075**	2	3960	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.67	3 J	**0.75**	2	**0.0075**	2	**0.0075**	2	4140	3

4220	3	0.37	2	0.195	3 J	0.104	3	0.171	3	2.46	3	2.24	3
4080	3	**0.03565**	4	**0.03565**	4	0.0937	3	0.0913	3	3.87	3	4	1
4210	3	1.12	3 J+	0.502	3 J+	0.072	2 J+	0.0766	3 J+	4.16	3	3.9	2 J+
4200	2	0.238	3 J+	0.220	2 J+	0.0290	2	0.0296	3	3.69	3	3.17	3
4100	2	**0.100**	1 U	**0.050**	1	0.0253	3 J+	0.0242	3 J+	3.23	3 J+	3.04	3 J+
4250	3	**0.050**	1	**0.100**	1 U	0.0201	3 J+	**0.0100**	1 U	3.04	3 J+	3.32	3 J+
3970	3	**0.100**	1 U	**0.100**	1 U	0.0191	3 J	0.0202	3	3.07	3	3.17	3
4230	3	**0.0310**	2	**0.0310**	2	0.0186	3 J	0.0189	3 J	3.45	3	3.47	3

50.3	3	**3.1**	2	0.106	3 J	**0.05**	1	991	3	934	3	8.59	3	7.72	3
3.10	2 J	**1.325**	4	**0.035**	2 U	**0.035**	2 U	1200	2	1110	3	1.95	3	1.96	3
13.7	3 J	9.84	3 J	0.036	2 J	**0.0155**	3	1140	3	1090	3	1.91	3	1.84	3
3.10	2	**3.10**	2	0.105	3 J+	0.113	3 J+	1060	3	1040	3	0.463	3 J+	0.495	3 J+
32.3	3	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1050	3	1040	3	0.92	2 J+	0.838	3 J+
20.2	3	14.7	3 J	**0.0155**	3	**0.0155**	3	1000	1	1200	2	0.515	3 J+	0.494	3 J+
21	2	15.1	3 J	**0.0155**	3	**0.0155**	3	1080	3	1070	3	0.646	3	0.524	3
34.8	3	28.2	3	**0.0155**	3	**0.0155**	3	1150	3	1120	3	0.871	3 J+	0.788	3 J+

0.031	2			2.65	3	2.53	3	0.992	3	1.03	3	593	3	573	3	0.63	2
0.0315	3	**0.0315**	3	2.54	3	2.69	3	0.775	3	0.852	3	596	3	581	3	0.58	2
0.031	2	0.094	2 J	2.54	3	2.54	3	1.29	3	1.28	3	639	3	596	3	0.777	3
0.000475	4	**0.000475**	4	2.44	3	2.50	2	0.825	3	0.841	3	563	3	575	3	0.323	3
0.00075	2	**0.00075**	2	2.44	3	2.51	3	0.835	3 J+	0.793	3 J+	568	3	567	3	0.575	3
0.00250	2 U	**0.00075**	2	2.46	3	2.66	3	0.815	3	0.888	3	556	3	604	3	0.587	3
0.00075	2	**0.00075**	2	2.46	3	2.49	3	0.841	3	0.797	3	572	3	575	3	0.513	3
0.00075	2	**0.00075**	2	2.55	3	2.61	3	0.888	3	0.893	3	596	3	603	3	0.559	3

J	0.55	2	J
	0.568	3	
	0.426	3	J
J	0.431	3	J
J	0.514	3	J
J	0.607	3	J
J	0.456	3	J
J	0.47	2	J

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

9280	3	**0.0031**	2	**0.0031**	2	3040	3	2980	3	**0.0125**	3	**0.0125**	3	**0.155**	3
9000	1	0.00836	3 J	**0.005**	1 U	3320	3	2740	3	**0.002125**	4		R	0.103	3 J
9620	3	0.0064	2 J	**0.0031**	2	3290	3	3170	3	0.0144	3 J	0.0092	2 J	**0.031**	2
7990	3	0.0156	3 J	0.0188	3 J	3070	3	3040	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8340	3	0.0143	3 J	0.0107	3 J	3060	3	3030	3	**0.0050**	1	**0.0050**	1	1.14	3 J+
9350	3	0.0152	3 J	0.0126	3 J	2900	2	3530	3	0.0116	3 J	0.0107	3 J	**0.050**	1
8810	3	0.0135	3 J	0.0118	3 J	3100	2	3080	3	0.0116	3 J	0.0105	3 J	**0.0310**	2
9250	3	0.0095	2 J	0.0109	3 J	3370	3	3290	3	0.0106	3 J	0.0077	2 J	**0.0310**	2

0.155	3	0.297	3 J	**0.125**	3	2.5	2	2.2	2
0.0302	3	0.0691	3	**0.0047**	2	3.37	3	3.63	3
0.031	2	**0.1**	1		R	3.81	3	3.82	3
0.050	1	**0.250**	2	**0.250**	2	3.50	2 J+	3.68	3 J+
0.050	1	**0.155**	3	**0.155**	3	5.59	3 J+	4.79	3 J+
0.050	1	**0.155**	3	**0.155**	3	3.91	3 J+	4.11	3 J+
0.0310	2	**0.155**	3	**0.155**	3	3.61	3	3.51	3
0.146	3 J	**0.155**	3	**0.155**	3	4.01	3	6.5	2

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	5.46		9.34		52		201		2.9		15.2	
Median	5.60		9.19		53		195		2.6		14.9	
St. Deviation	1		1		5		53		1		1	
# of values	7		7		7		7		8		8	
Minimum	4.52		8.4		46		137		2.25		13.9	
Maximum	6.29		10.79		59		289		4.11		17.7	
Lowest fifth percentile	5		8		46		141		2		14	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	100%		0%		0%		0%		0%		0%	
% of DWS exceedences	86%		0%		0%		0%		0%		0%	

1	3	1	3	3	2	2	3	1	2	3	3	4	3	3	2
55		56.0		0.78		9.3		8.80		0.18		0		0	
54		57.3		0.08		9.4		7.80		0.13		0		0	
5		12		2		5		3		0		NA		NA	
8		8		8		8		8		8		1		1	
45		33		0.075		4.5		6.34		0.0795		0.0155		0.076	
60		72.5		5.26		19		17		0.47		0.0155		0.076	
48		38		0		5		7		0		0		0	
0		0		5		0		0		0		1		0	
				63%								100%			
				2		4		7		3				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		100%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2		
0.09		NA	
0.08		NA	
0		NA	
8			0
0.082		NA	
0.11		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	2	1	3	5	2	5	2	3	3	2	2	4
0.780		0.064		13		0.001		0.00109		0.17		0		0.0321
0.804		0.064		13		0.001		0.00075		0.16		0		0.0155
0		0		1		0		0		0		0		0
8		8		8		8		8		8		4		8
0.673		0.043		11.7		0.00075		0.00075		0.15		0.25		0.0155
0.886		0.084		13.4		0.003		0.0025		0.23		0.349		0.0996
1		0		12		0		0		0		0		0
0		0		0		7		8		5		3		5
						88%		100%		63%		75%		63%
		8				1				3		1		3
230		NA		NA		NA		0.0052		NA		NA		7.08
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	3	3	3	3	3	3	3
	35		3.0		0.0240		0.0229		0.220		0.200		0.90		0.81				
	3		2.0		0.0241		0.0227		0.225		0.167		0.55		0.46				
	87		4		0		0		0		0		1		1				
	8		8		8		8		8		8		8		8				
	1		1		0.0075		0.0075		0.125		0.075		0.361		0.392				
	250		12.5		0.0385		0.0385		0.311		0.468		3.05		2.71				
	1		1		0		0		0		0		0		0				
	4		5		2		2		3		5		0		0				
	50%		63%		25%		25%		38%		63%								
					4		4		4		2								
	87		87		NA		NA		150		150		NA		NA				
	NA		NA		6		NA		10		NA		2,000		NA				
	13%		0%		0%		0%		0%		0%		0%		0%				
	0%		0%		0%		0%		0%		0%		0%		0%				

4	3	4	3	4	2	4	2	2	3	1	2	4	3	5	3	-1	3
0.0099		0.0099		0.10		0.10		1.54		2		0.0136		0.0113		4300	
0.0125		0.0125		0.01		0.01		1.55		1		0.0116		0.0076		4150	
0		0		0		0		0		1		0		0		390	
8		8		8		8		8		7		8		8		8	
0.001495		0.001495		0.003835		0.005		1.25		0.75		0.0075		0.0075		3900	
0.0125		0.0125		0.75		0.75		2.18		4		0.025		0.0188		5090	
0		0		0		0		1		1		0		0		3921	
8		8		7		7		5		5		7		7		0	
100%		100%		88%		88%		63%		71%		88%		88%			
				1		1		2		2		1		1			
NA		NA		NA		NA		NA		NA		0.063		0.063		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	2	2	2	4	3	4	3	2	3	2	3
4160		0.26		0.150		0.048		0.055		3.37		3.29	
4210		0.10		0.100		0.027		0.027		3.34		3.25	
100		0		0		0		0		1		1	
8		8		8		8		8		8		8	
3970		0.031		0.031		0.0186		0.01		2.46		2.24	
4250		1.12		0.502		0.104		0.171		4.16		4	
4009		0		0		0		0		3		3	
0		5		5		0		1		0		0	
		63%		63%				13%					
				1		2		1					
NA		10.98		10.56276		NA		NA		1.743		1.673	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		100%		100%	
0%		0%		0%		0%		0%		0%		0%	

1	3	2	3	4	3	4	3	-1	3	-1	3	3	3	3	3
22.3		10.7		0.043		0.03		1080		1080		1.98		1.83	
20.6		9.9		0.025		0.02		1070		1080		0.90		0.81	
16		9		0		0		70		80		3		2	
8		8		8		8		8		8		8		8	
3.1		1.325		0.0155		0.0155		991		934		0.463		0.494	
50.3		28.2		0.106		0.113		1200		1200		8.59		7.72	
3		2		0		0		994		971		0		0	
1		4		5		7		0		0		0		0	
13%		50%		63%		88%									
2		3		2											
1000		1000		0.261		0.282		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3
0.012		0		2.51		2.57		0.908		0.92		585		584		0.57	
0.002		0		2.50		2.54		0.838		0.87		583		578		0.58	
0		0		0		0		0		0		27		15		0	
8		7		8		8		8		8		8		8		8	
0.0004745		0.0004745		2.44		2.49		0.775		0.793		556		567		0.323	
0.0315		0.094		2.65		2.69		1.29		1.28		639		604		0.777	
0		0		2		2		1		1		558		569		0	
8		6		0		0		0		0		0		0		0	
100%		86%															
		1														6	
0.77		0.77		NA		NA		9.91		9.88		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.50	
0.49	
0	
8	
0.426	
0.607	
0	
0	
7	
4.6	
NA	
0%	
0%	

-1	3	5	3	4	3	-1	3	-1	3	4	3	4	2	3	2
8960		0.0107		0.0095		3140		3110		0.0091		0.0087		0.199	
9130		0.0115		0.0108		3090		3060		0.0111		0.0092		0.050	
550		0		0		160		230		0		0		0	
8		8		8		8		8		8		7		8	
7990		0.0031		0.0031		2900		2740		0.002125		0.005		0.031	
9620		0.0156		0.0188		3370		3530		0.0144		0.0125		1.14	
8113		0		0		2949		2824		0		0		0	
0		1		3		0		0		4		3		6	
		13%		38%						50%		43%		75%	
		7		5						4		4		1	
NA		0.129261976		0.110		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.068		0.167		0.143		3.8		4.0	
0.050		0.155		0.155		3.7		3.8	
0		0		0		1		1	
8		8		7		8		8	
0.0302		0.0691		0.0047		2.5		2.2	
0.155		0.297		0.25		5.59		6.5	
0		0		0		3		3	
7		6		7		0		0	
88%		75%		100%					
1		1							
NA		NA		NA		22.70		22.39	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
KP-P3M_SRK-5M																
Sample Date																
09/25/04	6.89	3	10.48	4		93	2		245	3		3.28	3	33.6	3	
10/20/04	6.78	3	11.62	4		90	1		285	3		2.92	3	29.7	3	
03/18/05	6.51	3	8.19	3		73	2					3.59	3	30.7	3	
05/14/05	6.39	3	8.97	3		88	2		166.5	4		3.88	3	36.3	3	
08/18/05	6.39	3	9.77	3		77	2		91	2		3.61	3	32.4	3	
11/08/05	5.85	3	7.1	2		95	2		63	2		2.56	3	33.5	3	
03/10/06	6.93	3	8.9	2		83	2		304	3		2.51	3	34.1	3	
05/18/06	6.1	2	10.35	4		80	1		221	3		2.92	3	34.4	3	
08/17/06	6.2	2	9.09	3		84	2		141.8	4		3.33	3	33.2	3	
10/27/06	6.34	3	8.31	3		88	2		266.2	4		3.43	3	33.0	2	
03/13/07	6.56	3	8.51	3		47	2		258.9	4		2.14	3	31.3	3	
05/12/07	6.42	3	10.15	4		48	2		93.4	3		3.37	3	22.2	3	
08/18/07	6.37	3	8.65	3		48	2		187.5	4		3.47	3	29.3	3	
11/10/07	6.48	3	7.13	3		86	2		136.3	4		2.66	3	34.7	3	
03/22/08	6.26	3	8.34	3		72	2		106.5	4		2.82	3	33.0	2	
05/21/08	6.32	3	9.11	3		87	2		166.3	4		2.91	3	33.9	3	
08/26/08	6.43	3	10.56	4		83	2		280.4	4		3.47	3	30.6	3	
10/22/08	6.49	3	7.6	2		77	2		250	2		2.09	3	36	2	
08/24/09			7.11	3			R			R		3.01	3	35	2	
08/21/10	6.28	3	8.56	3	Q	90	1		151.6	4		2.85	3	33.7	3	
08/26/11	5.85	3	7.8	2		80.5056	FALSE		205.8	4		3.12	3	32.4	3	
08/24/12	7.14	3	8.55	3		87	2		230.3	4		2.47	3	32.7	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
90	1		78.8	3		0.947	3		3.5	2	J	26.5	3		**0.5**	1	UJ					
95	2		62.5	3		**0.075**	2		10	1		29	2		0.55	2	J					
85	2		56.3	3		0.2	1	J	10.3	3		30	1		0.31	2						
90	1		88.7	3		**0.075**	2		9.13	3		30	1		0.42	2						
90	1		62.5	3		**0.075**	2		5.88	3		30	1		0.355	3	J-					
90	1		57.5	3		**0.075**	2		8.75	3		37	2		0.347	3						
70.0	1		23.7	3		**0.075**	2		7.75	3		32.0	2		0.262	3						
85.0	2		63.8	3		**0.0775**	3		5.25	3		32.0	2		0.363	3						
85.0	2		66.2	3		**0.075**	2		7.00	1	J	32.0	2		0.287	3		**0.0155**	3		0.287	3
80.0	1		65.0	2		**0.075**	2		6.25	3	J	33.0	2		0.202	3		**0.0155**	3		0.194	3
75.0	2		60.0	1		**0.075**	2		6.75	3	J	30.0	1		0.283	3		**0.0155**	3		0.285	3
90.0	1		85.0	2		**0.075**	2		19.0	2		1.55	3		**0.050**	1	U					
85.0	2		57.5	3		**0.075**	2		12.5	3		29.9	3		0.320	2						
90.0	1		23.8	3		**0.0765**	3		7.00	1	J	31.4	3		0.218	3						
94.5	3		60.0	1		0.300	1	J	7.28	3	J	32.1	3		5.14	3						
86.8	3		67.5	3		**0.150**	2		4.36	3	J	31.1	3		0.308	3						
87.9	3		52.5	3		**0.0775**	3		6.08	3	J	30.2	3		0.346	3						
97.1	3		55	2		**0.075**	2		8.08	3	J	32.1	3		0.255	3						
100	1		60	1		8.67	3		**1.57**	3		30.3	3		0.317	3						
90.9	3		58	2		0.404	3	J	**1.57**	3		29.2	3		0.289	3	J-					
91.2	3		70	1		0.404	3	J	5.24	3	J	28.1	3		0.256	3						
87	2		53	2		2.4	2		**5.0**	1	U	26.2	3		0.348	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.06	1	J			
	0.0155	3				
	0.0629	3				
	0.0925	3				
	0.027	2				
	0.024	2				
	0.0160	2				
	0.0395	3				
	0.0270	2	J-			R
	0.0320	2				R
	0.0370	2	J-			R
	0.114	3				
	0.0210	2				
	0.0278	3				
	0.0190	2				
	0.0151	3				
	0.0199	3				
	0.0244	3				
	0.0223	3				
	0.0225	3				
	0.015	2				
	0.0275	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
1.1	2		0.119	3		27.3	3		**0.00125**	3		**0.00125**	3		0.17	2	J				**0.05**			
1.03	3		**0.0155**	3		13	2		**0.00125**	3		**0.00125**	3		**0.0295**	3					**0.0155**			
0.919	3		0.059	2	J	11.3	3		**0.00125**	3		**0.00125**	3		0.16	2	J				**0.0155**			
0.873	3		0.055	2	J	10.6	3		**0.00125**	3		**0.00125**	3		0.091	2	J				**0.0155**			
0.846	3		0.044	2	J	11.3	3		**0.0025**	2	UJ	**0.0025**	2	UJ	0.20	1	J				**0.0155**			
0.844	3		0.053	2	J	12.4	3		**0.00125**	3		**0.00125**	3		0.13	2	J				**0.0155**			
0.869	3		0.0340	2	J	11.5	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.0155**			
0.846	3		0.0560	2	J	10.3	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0380			
1.22	3		0.0660	2	J	11.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.823	3		0.102	3		13.5	3	J-	**0.00075**	2		**0.0025**	2	UJ	**0.155**	3					**0.050**			
0.743	3		0.0400	1	J	9.89	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.843	3		0.0800	1	J	35.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.736	3		0.0450	2	J	10.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0663			
0.763	3		0.0520	2	J	12.0	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.752	3		0.0490	2	J	10.6	3		**0.00075**	2		0.0016	2	J	**0.155**	3					**0.0155**			
0.763	3		0.045	2	J	10.5	3		**0.00075**	2		**0.00075**	2		0.38	2	J	**0.075**	2		**0.0155**			
0.957	3		0.081	2	J	11.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.721	3		0.042	2	J	11.2	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		7.47	3		**0.050**			
0.68	2		0.053	2	J	11	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.254	3	J	**0.0155**			
0.728	3		0.097	2	J	11.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.795	3		0.083	2	J	12.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.639	3		0.07	1	J	11.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	1	U	**12.5**	3	U	**12.5**	3	U	**0.0385**	3	0.156	3	J	**0.125**	3	0.259	3	J	6.15	3	6.09	3			
	3		**12.5**	3	U	**12.5**	3	U	**0.0385**	3	**0.0385**	3		**0.125**	3	**0.125**	3		6.1	2	5.63	3			
	3		1.77	3	J+	0.925	3	J+	0.0249	3	0.0199	3	J	0.207	3	0.196	3		6.9	2	6.74	3			
	3		4.95	3	J+	3.98	3	J+	**0.01**	1	U	**0.01**	1	U	0.378	3	0.28	2	6.71	3	7.02	3			
	3		2.68	3		**1**	1	U	**0.005**	1	U		R	**0.25**	2	U	0.63	2	6.14	3	6	1			
	3		**1**	1	U	**1**	1	U	**0.00155**	3	**0.00155**	3		**0.125**	3	**0.125**	3		6.54	3	6.09	3			
	3		2.66	3	J+	**1.00**	1	U	0.0278	3	J	0.0226	3	J	**0.155**	3	**0.155**	3		6.67	3	6.44	3			
	2	J	3.16	3		2.12	3		0.0168	3	J	0.0258	3	J	**0.155**	3	**0.155**	3		5.89	3	6.07	3			
	1	U	2.06	3	J+	**1.00**	1	U	**0.0075**	2		0.0190	2	J	**0.155**	3	0.702	3		6.35	3	6.22	3			
	1	U	**1.00**	1	U	**1.00**	1	U	**0.0075**	2		**0.0250**	2	U	**0.155**	3	0.490	2	J	6.58	3	6.34	3	J+	
	3		7.86	3	J			R	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3	**0.155**	3		6.14	3	J+	6.28	3	J+	
	3		188	3		192	3		0.251	3		0.252	3		6.62	3	7.08	3		2.21	3	2.25	3			
	3	J	**1.00**	1	U	**1.00**	1	U	0.0194	3	J	0.0172	3	J	**0.155**	3	0.310	2	J	6.05	3	6.12	3			
	3		**0.310**	2		**0.310**	2		**0.0075**	2		0.0156	3	J	**0.155**	3	**0.155**	3		6.33	3	7.19	3			
	3		17.6	3		1.48	3	J	0.0180	2	J	0.0166	3	J	**0.155**	3	**0.155**	3		6.37	3	6.27	3			
	3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	0.393	3	J	6.61	3	6.52	3			
	1	U	2.46	3		**1.00**	1	U	0.0151	3	J	**0.0075**	2		**0.155**	3	**0.155**	3		5.86	3	6.07	3			
	1	U	3.75	3		**1.00**	1	U	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3	**0.155**	3		6.44	3	6.39	3			
	3		4	1	J+	**1.00**	1	U	0.0231	3	J	0.0176	3	J	**0.155**	3	**0.155**	3		6.32	3	6.12	3			
	3		6.06	3	J+	2.27	3	J+	**0.0075**	2		0.0167	3	J	**0.155**	3	**0.155**	3		6.16	3	6.3	2			
	3		6.89	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.234	3	J	0.225	3	J	6.37	3	6.37	3			
	3		76.8	3		**1.00**	1	U	0.0204	3	J		R		0.349	3	J	0.311	3	J	6.23	3	6.37	3			

result > crit																								depends on Hardness result > crit				depends on Hardness result > crit			
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
		Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**					
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.0075	2		**0.0075**	2		**0.75**	2		**0.75**	2		**1.55**	3		**1.55**	3			**0.0155**	3		**0.0155**	3	9730	3
0.0075	2		**0.0075**	2		**0.75**	2		**0.75**	2		**1.55**	3		**1.55**	3			**0.0155**	3		**0.0155**	3	8480	3
0.00381	3	J	**0.001495**	4		0.0107	3	J	**0.003835**	4		2.97	3	J+	2.41	3	J+		0.00964	3	J	**0.003095**	4	8830	3
0.001495	4		**0.001495**	4		**0.003835**	4		**0.003835**	4		2.88	3	J			R		**0.003095**	4		**0.003095**	4	10300	3
0.0075	2		**0.0075**	2		**0.005**	1	U	**0.00155**	3		**1.55**	3		**1.55**	3			**0.00775**	3		**0.00775**	3	9260	3
0.0075	2		**0.0075**	2		**0.00155**	3		**0.00155**	3		3.6	2	J	**1.55**	3			**0.00775**	3		**0.00775**	3	9620	3
0.0120	2		**0.0120**	2		0.0610	2		**0.0250**	2	U	2.24	3	J	**2.50**	2	U		**0.0125**	3		**0.0125**	3	9460	3
0.0120	2		**0.0120**	2		**0.0075**	2		**0.0075**	2		**0.75**	2		**0.75**	2			**0.0125**	3		**0.0125**	3	10000	1
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	9470	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	9270	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	8920	3
0.0294	3	J	0.0254	3	J	**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			0.245	3		0.249	3	5980	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	8180	3
0.0125	3		0.0456	3	J	**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	9980	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	9480	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	9680	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	8810	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	10000	1
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	10000	1
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.66	3	J	2.66	3	J		**0.0075**	2		**0.0075**	2	9350	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.5	2	J	2.63	3	J		**0.0075**	2		**0.0075**	2	9160	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.21	3	J	1.92	3	J		**0.0075**	2		**0.0075**	2	9150	3

				depends on Hardness				depends on Hardness												depends on Hardness							
				result > crit				result > crit												result > crit						result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
		Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
		µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
9740	3			0.544	3		0.246	3		0.0535	3	J			R		0.755	3		0.795	3
8440	3			0.257	3		**0.05**	1		**0.0155**	3		**0.05**	1	U		0.636	3	J+	0.496	3	J+
9520	3			0.261	3		0.112	3	J	0.0259	3	J	0.0177	3	J		0.442	3		0.236	3	
9280	3			**0.03565**	4		**0.03565**	4		0.0178	3	J	**0.00476**	3			0.256	3	J+	0.232	3	J+
9130	3			0.267	3	J+	0.407	3	J+	0.0366	3	J+	0.042	2	J+		0.375	3	J+	0.405	3	J+
9580	3			**0.1**	1	U	**0.1**	1	U	0.0268	3	J+	0.0248	3	J+		0.397	3	J+	0.312	3	J+
9160	3			0.581	3	J+	0.506	3	J+	0.0202	3		0.0144	3	J		0.385	3	J+	0.457	3	J+
9190	3			0.445	3		0.275	3		0.0350	2		0.0350	2			0.707	3		0.400	1	
10100	3			0.201	3	J+	0.235	3	J+	0.0326	3		0.0344	3			0.369	3	J+	0.383	3	J+
9460	3			**0.050**	1		**0.050**	1		0.0170	2	J	0.0178	3	J		0.387	3	J+	0.456	3	J+
9050	3			**0.100**	1	U	**0.100**	1	U	**0.0100**	1	U	**0.0100**	1	U		0.596	3	J+	0.583	3	J+
6130	3			0.530	2		0.511	3		3.22	3		3.31	3			1060	3		1090	3	
8840	3			0.162	3	J	0.162	3	J	0.0174	3	J	0.0190	2	J		1.17	3	J+	0.954	3	J+
10700	3			0.336	3	J+	0.210	2	J+	0.0104	3	J	0.0168	3	J		0.288	3		0.322	3	
8900	2			0.378	3		0.256	3		0.0143	3	J	0.0142	3	J		1.29	3		0.305	3	
9640	3			0.155	3	J	0.119	3	J	**0.0050**	1		**0.0050**	1			0.314	3	J+	0.315	3	J+
9000	1			**0.100**	1	U	**0.100**	1	U	0.016	2	J	0.0146	3	J		0.33	2	J+	0.324	3	J+
9710	3			**0.050**	1		0.171	3	J	0.0189	3	J	0.0167	3	J		0.367	3		0.298	3	
9710	3			**0.100**	1	U	**0.050**	1		**0.0100**	1	U	**0.0100**	1	U		0.508	3	J+	**0.250**	2	U
9350	3			3.11	3	J+	0.312	3	J+	0.0287	3	J+	0.0307	3	J+		31.7	3	J+	33.7	3	J+
9370	3			2.99	3		0.414	3		0.032	2		0.0251	3			43.2	3		44.5	3	
9470	3			2.67	3		0.478	3		0.0486	3		0.0353	3			42.1	3		33.6	3	

									depends on Hardness				depends on Hardness																
result > crit			result > crit						result > crit				result > crit												result > crit				
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
14.5	3	J	**3.1**	2		**0.05**	1		**0.05**	1		2250	3		2300	2		1.22	3		2.12	3	
10	1	U	**3.1**	2		**0.05**	1		**0.05**	1		2060	3		1990	3		1.35	3		1.16	3	
1.325	4		**1.325**	4		**0.011**	2		0.0454	3	J	2100	2		2200	2		0.576	3		0.616	3	
5.98	3	J	**1.325**	4		**0.011**	2				R	2570	3		2070	3		0.407	3	J+	0.401	3	J+
22.9	3		10.1	3	J	**0.0155**	3		0.09	1	J	2260	3		2190	3		0.766	3		0.727	3	
3.1	2		**3.1**	2		**0.0155**	3		**0.05**	1	U	2310	3		2330	3		0.455	3		0.433	3	
10.0	1	U	**10.0**	1	U	**0.0130**	2		**0.0250**	2	U	2550	3		2630	3		0.641	3		0.595	3	J+
8.13	3	J	**3.10**	2		0.0916	3		0.0998	3		2260	3		2230	3		0.367	3		0.209	3	
3.10	2		**3.10**	2		**0.050**	1	U	0.110	2	J+	2320	3		2400	2		0.707	3	J+	0.699	3	J+
3.10	2		**10.0**	1	U	**0.050**	1	U	**0.0155**	3		2400	2		2270	3		0.573	3	J			R
3.10	2		**10.0**	1	U	**0.050**	1	U	**0.050**	1	U	2180	3		2230	3		0.606	3	J			R
601	3		621	3		0.176	3		**0.050**	1	U	1780	3		1880	3		48.0	2		49.4	3	
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		2160	3		2200	2		0.411	3	J+	0.499	3	J+
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		2370	3		2510	3		0.551	3		0.584	3	
41.6	3		31.4	3		**0.0155**	3		**0.0155**	3		2270	3		2250	3		0.576	3		0.471	3	
25.3	3		27.7	3		**0.0155**	3		**0.0155**	3		2360	3		2330	3		0.626	3	J+	0.718	3	J+
33.7	3		27.3	3		**0.0155**	3		0.0414	3	J	2080	3		2180	3		0.738	3		0.648	3	
32.4	3		21.5	3		**0.0155**	3		**0.0155**	3		2660	3		2350	3		0.584	3		0.533	3	
10.0	1	U	**3.10**	2		**0.0155**	3		**0.0155**	3		2430	3		2320	3		0.549	3	J+	0.412	3	J+
19.5	3	J	8.77	3	J	**0.0155**	3		**0.0155**	3		2520	3		2530	3		0.825	3	J+	0.8	1	J+
33.2	3		11.5	3	J	**0.0155**	3		**0.0155**	3		2310	3		2370	3		0.934	3		0.746	3	
57	2		11.2	3	J	0.0442	3	J	**0.0155**	3		2400	2		2350	3		2.02	3	J+	1.03	3	J+

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
J	0.627	3	J
	0.283	3	
	0.252	3	
	0.305	3	J
J	**0.0775**	3	
	0.155	3	
	0.155	3	
J	0.312	3	J
	0.155	3	
	0.155	3	
	1.23	3	
	0.155	3	
	0.425	3	J
	0.155	3	
	0.356	3	J
	0.155	3	
J	**0.155**	3	
	0.155	3	
J	**0.155**	3	
	0.155	3	
	0.155	3	

		depends on HARD; revised 2013						depends on Total Ag																			
		result > crit						result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon				**Silver[8]**						**Sodium**						**Thallium**						**Tir**				
	Dissolved					Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			
	µg/L					µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			
7310	3			**0.0031**	2		**0.0031**	2	3360	3		3450	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
8110	3			**0.0031**	2		**0.0031**	2	3480	3	J+	3480	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
5530	3			0.0066	2	J	**0.001435**	4	3340	3		3370	3		0.0143	3		**0.002125**	4		**0.1**	1	U				
6980	3			**0.001435**	4		**0.001435**	4	4080	3		3420	3		**0.002125**	4		0.00428	3	J	0.102	3	J				
7520	3			**0.0031**	2		**0.0031**	2	3750	3		3550	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
7740	3			**0.0031**	2		**0.0031**	2	3720	3		3630	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
7480	3			**0.0031**	2		**0.0031**	2	4050	3		4120	3		**0.0025**	2		**0.0025**	2		**0.0155**	3					
3970	3			**0.0031**	2		**0.0031**	2	3820	3		3810	3		**0.0025**	2		**0.0025**	2		**0.0155**	3					
6810	3			**0.0031**	2		**0.0031**	2	3620	3		3780	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6590	3			**0.0031**	2		**0.0031**	2	3640	3		3460	3		0.0182	3	J	**0.0050**	1		**0.050**	1					
7330	3			**0.0031**	2		**0.0031**	2	3520	3		3590	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
11100	3			**0.0031**	2		**0.0031**	2	4600	2		4830	3		0.0510	2		0.0524	3		**0.050**	1					
7220	3			**0.0031**	2		**0.0031**	2	3500	2		3470	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7420	3			**0.0031**	2		**0.0031**	2	3650	3		3780	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6910	3			**0.0031**	2		**0.0031**	2	3580	3		3560	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7110	3			**0.0031**	2		**0.0031**	2	3660	3		3620	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6790	3			**0.0031**	2		**0.0031**	2	3270	3		3490	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6650	3			**0.0031**	2		**0.0031**	2	3980	3		3610	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6580	3			**0.0031**	2		**0.0031**	2	3660	3		3510	3		**0.0050**	1		**0.0050**	1		**0.100**	1	U				
7140	3			**0.0031**	2		**0.0031**	2	3900	2		3940	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7010	3			**0.0031**	2		**0.0031**	2	3490	3		3610	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
7330	3			**0.0031**	2		**0.0031**	2	3810	3		3740	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					

														depends on Hardness				depends on Total Zn	
														result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		0.371	3	J	**0.125**	3			0.712	3	J	1.73	3					
0.155	3		**0.125**	3		**0.125**	3			**0.235**	3		**0.75**	2	U				
0.1	1	U	0.0607	3	J	0.0869	3			0.548	3	J	1.01	3					
0.0302	3		0.102	3		0.0399	3			**0.2345**	4		1.10	2					
0.031	2		**0.1**	1		0.237	3	J		**0.75**	2	U	**0.75**	2	U				
0.031	2		**0.2**	1	U	**0.1**	1			**0.75**	2	U	**0.75**	2	U				
0.0155	3		**0.110**	2		**0.110**	2			2.16	3	J+			R				
0.0330	2	J	**0.110**	2		**0.250**	2	U		0.990	2	J+	1.02	3	J+				
0.050	1		**0.250**	2		**0.250**	2			1.42	3	J+			R				
0.050	1		**0.250**	2		**0.250**	2			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.581	3	J	0.586	3	J		1.40	2	J+	2.16	3	J+				
0.050	1		**0.155**	3		**0.155**	3			36.1	3		36.5	3					
0.050	1		**0.155**	3		**0.155**	3			1.95	3	J+	1.02	3	J+				
0.050	1		**0.155**	3		**0.155**	3			1.07	3		1.19	3					
0.050	1		**0.155**	3		**0.155**	3			1.46	3	J			R				
0.050	1		**0.155**	3		**0.155**	3			**0.155**	3		**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			2.2	2	J+	1.08	3	J+				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	1.02	3	J+				
0.100	1	U	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			15.2	3	J+	14.6	3	J+				
0.0310	2		**0.155**	3		**0.155**	3			17.2	3		18.3	3					
0.0310	2		**0.155**	3		**0.155**	3			15.6	3		13.8	3					

	2	3	2	3	0	2	1	4	2	3	1	3			
Mean	6.43		8.86		79		193		3.02		32.5				
Median	6.39		8.61		83		197		2.97		33.1				
St. Deviation	0		1		14		73		0		3				
# of values	21		22		21		20		22		22				
Minimum	5.85		7.1		47		63		2.09		22.2				
Maximum	7.14		11.62		95		304		3.88		36.3				
Lowest fifth percentile	6		7		48		90		2		29				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	71%		0%		0%		0%		0%		0%				
% of DWS exceedences	10%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	2		1	3		3	2		2	3		1	3		3	3		4	3		3	3
88			60.3			0.661			7.2			29.3			0.5			0			0	
90			60.0			0.076			6.9			30.1			0.3			0			0	
7			15			2			4			7			1			0			0	
22			22			22			22			22			22			3			3	
70			23.7			0.075			1.57			1.55			0.05			0.0155			0.194	
100			88.7			8.67			19			37			5.14			0.0155			0.287	
75			25			0			2			26			0			0			0	
0			0			15			3			1			2			3			0	
						68%			14%			5%			9%			100%				
						4			10						1							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			5%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3							
0.03		NA						
0.03		NA						
0		NA						
22			0					
0.015		NA						
0.114		NA						
0		NA						
1								
5%								
1								
NA			NA					
NA			NA					
0%			NA					
0%			NA					
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF		
Total Phosphorus				**Orthophosphate**				
mg/L				mg/L				

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		1	3		5	2		5	2		3	3		2	2		4
0.8			0.061			13.2			0.00099			0.00120			0.16			1			0.03
0.8			0.054			11.5			0.00075			0.00100			0.16			0			0.02
0			0			6			0			0			0			3			0
22			22			22			22			22			22			7			22
0.639			0.0155			9.89			0.00075			0.00075			0.0295			0.075			0.0155
1.22			0.119			35.3			0.0025			0.0025			0.38			7.47			0.0663
1			0			10			0			0			0			0			0
0			1			0			22			21			16			5			20
			5%						100%			95%			73%			71%			91%
			19									1			6			1			2
230			NA			NA			NA			0.0052			NA			NA			6.99
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

3		2	3		1	2		4	3		4	3		3	3		3	3		2	3		2	3
		16.4			11.4			0.0280			0.036			0.474			0.569			6.14			6.13	
		3.5			1.0			0.0170			0.018			0.155			0.176			6.33			6.28	
		42			42			0			0			1			1			1			1	
		22			21			22			20			22			22			22			22	
		0.31			0.31			0.00155			0.00155			0.125			0.125			2.21			2.25	
		188			192			0.251			0.252			6.62			7.08			6.9			7.19	
		1			1			0			0			0			0			6			6	
		7			15			13			9			17			11			0			0	
		32%			71%			59%			45%			77%			50%							
					1			7			10			2			6							
		87			87			NA			NA			150			150			NA			NA	
		NA			NA			6			NA			10			NA			2,000			NA	
		5%			5%			0%			0%			0%			0%			0%			0%	
		0%			0%			0%			0%			0%			0%			0%			0%	
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit				
NH3N NSF	NH3N NVF	AL N		AL NSF	AL NVF	AL F		AL FSF	AL FVF	SB N		SB NSF	SB NVF	SB F		SB FSF	SB FVF	AS N		AS NSF	AS NVF	AS F		AS FSF	AS FVF	BA N		BA NSF	BA NVF	BA F		BA FSF	BA FVF
		Aluminum									**Antimony**							**Arsenic**								**Barium**							
		Total			Dissolved						Total			Dissolved				Total			Dissolved					Total			Dissolved			
		µg/L			µg/L						µg/L			µg/L				µg/L			µg/L					µg/L			µg/L			

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3			3	3			3	3		4	3		4	3		3	3		3	3
9250				0.610				0.223			0.1687			0.379			53.935			54.969	
9360				0.259				0.191			0.0196			0.379			0.475			0.403	
840				1				0			1			1			225			232	
22				22				22			22			21			22			22	
6130				0.03565				0.03565			0.005			0.00476			0.256			0.232	
10700				3.11				0.511			3.22			3.31			1060			1090	
8460				0				0			0			0			0			0	
0				7				7			4			5			0			1	
				32%				32%			18%			24%						5%	
				2				4			9			8							
NA				10.98				10.56276			NA			NA			3.270			3.139	
NA				100				NA			NA			NA			NA			NA	
0%				0%				0%			0%			0%			18%			18%	
0%				0%				0%			0%			0%			0%			0%	
				depends on Hardness				depends on Hardness									depends on Hardness				
				result > crit				result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	3		4	3		4	3		-1	3		-1	3		3	3		3	3	
43.0			37.6			0.03			0.04			2300			2280			2.89			3.14		
10.0			9.4			0.02			0.03			2310			2290			0.62			0.63		
126			131			0			0			200			170			10			11		
22			22			22			21			22			22			22			20		
1.325			1.325			0.011			0.0155			1780			1880			0.367			0.209		
601			621			0.176			0.11			2660			2630			48			49.4		
3			1			0			0			2061			1994			0			0		
10			13			19			16			0			0			0			0		
45%			59%			86%			76%														
4			4			1			3														
1000			1000			0.667			0.647			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF

	3	3
	0.267	
	0.155	
	0	
	22	
	0.0775	
	1.23	
	0	
	14	
	64%	
	5	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF

Selenium

Dissolved

µg/L

| | | |

| | | |

KP-P3S_SRK-5S

Sample Date												
09/25/04	6.06	3	15.91	4	39	2	258	3	3.48	3	9.09	3
10/20/04	5.91	3	14.12	4	28	2	292	3	3.72	3	5.66	3
03/18/05	5.14	3	12.37	4	24	2			2.96	3	8.10	2
05/14/05	4.95	3	13.94	4	26	2	230	2	3.09	3	8.25	3
08/18/05	5.42	3	12.84	4	24	2	101	3	4.57	3	8.08	3
11/08/05	5.77	3	10.67	4	32	2	82	2	2.34	3	8.24	3
03/10/06	6.69	3	12.6	3	29	2	342	3	1.84	3	8.42	3
05/18/06	5.91	3	15.8	3	26	2	261.2	4	1.76	3	7.29	3
08/17/06	5.89	3	13.39	4	28	2	208.9	4	4.59	3	8.85	3
10/27/06	6.65	3	12.61	4	26	2	304.2	4	3.58	3	7.32	3
03/13/07	5.89	3	11.82	4	15	2	203.3	4	1.6	2	8.39	3
05/12/07	5.56	3	13.64	4	15	2	152.9	4	2.21	3	32.9	3
08/18/07	5.54	3	13.93	4	15	2	171.7	4	3.17	3	7.52	3
11/07/07	6.06	3	10.38	4	28	2	198.9	4	2.74	3		
11/10/07											8.30	2
03/22/08	5.87	3	12.3	3	23	2	150.8	4	2.08	3	7.49	3
05/21/08	5.92	3	13.44	4	29	2	194.6	4	2.61	3	8.47	3
08/26/08	5.29	3	15.46	4	27	2	303.2	4	2.75	3	8.01	3
10/22/08	5.7	2	11.75	4	24	2	285.6	4	2.34	3	9.1	2
08/24/09			11.11	4	45	2		R	2.42	3	7.48	3
08/21/10	5.03	3	13.92	4 Q	49	2 Q	185.9	4	2.5	2	7.37	3
08/26/11	4.78	3	12.69	4	27.7058	FALSE	221.8	4	2.09	3	9.35	3
08/24/12	6.46	3	12.01	4	38	2	349.6	4	2.94	3	10.9	3

32	2	57.5	3	2.32	3	4.5	2 J	6.75	3 J	**0.155**	3				
24	2	27.5	3	2.05	3	3.5	2 J	5	1 J	0.51	2 J				
27	2	17.5	3	0.2	1 J	5	1	7	1 J	0.58	2				
25.5	3	36.3	3	**0.15**	2	7.38	3	4	1 J	1.83	3				
26	2	26.3	3	1.3	2	3.88	3 J	6	1 J	6.53	3				
29.5	3	18.8	3	2.1	2	11.9	3	7	1 J	0.33	2				
30.0	1	15.0	2	5.00	1	5.50	2	5.00	1 J	0.312	3				
25.5	3	33.8	3	**0.150**	2	5.25	3	5.00	1 J	0.310	2				
29.0	2	35.0	2	0.500	1	6.50	2 J	5.00	1 J	0.697	3	**0.0155**	3	0.697	3
23.0	2	31.3	3	0.400	1 J	6.75	3 J	6.00	1 J	0.639	3	**0.0155**	3	0.624	3
26.5	3	28.8	3	3.90	2	6.75	3 J	7.00	1 J	0.432	3	**0.0155**	3	0.437	3
80.0	1	56.3	3	2.90	2	7.50	2 J	30.5	3	0.283	3				
27.5	3	18.8	3	2.90	2	11.5	3	5.70	2 J	0.715	3				
29.0	2	33.8	3	0.206	3 J	8.50	2 J	7.04	3 J	0.593	3				
29.8	3	26.3	3	0.500	1	7.62	3 J	7.14	3 J	0.535	3				
30.2	3	26.3	3	0.2	1 J	**1.57**	3	7.18	3 J	0.61	2				
29	2	50	1	**0.082**	2	6.34	3 J	7.02	3 J	0.711	3				
30.8	3	11.3	3	**0.078**	2	9.26	3 J	7.94	3 J	0.567	3				
28.7	3	25	2	**0.0755**	3	**1.57**	3	13.8	3	0.502	3				
26.8	3	**1.55**	3	0.714	3	4.2	2 J	5.86	3 J	0.636	3				
31.6	3	37	2	0.297	3 J	8.59	3 J	5.64	3 J	0.671	3 J-				
37.1	3	22	2	3.3	2	**5.0**	1 U	5.14	3 J	1.04	3				

0.0155	3				
0.0155	3				
0.0414	3				
0.0285	3				
0.020	1				
0.0099	2	J			
0.0120	2				
0.0070	1	J			
0.0100	1		**0.050**	1	UJ
0.0130	2		**0.0155**	3	
0.0200	1	J-			R
0.0329	3				
0.0117	3				
0.0132	3				
0.0059	2	J			
0.0046	2	J			
0.0047	2	J			
0.0032	2	J			
0.00155	3				
0.0132	3				
0.0036	2	J			
0.0134	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

1.19	3	**0.0155**	3	3.57	3	**0.00125**	3	**0.00125**	3	0.14	2 J				**0.0155**
0.974	3	**0.0155**	3	2.42	3	**0.00125**	3	0.0027	2 J	**0.0295**	3				**0.0155**
0.919	3	**0.0155**	3	3.07	3	**0.00125**	3	**0.00125**	3	0.30	1 J				**0.0155**
0.875	3	**0.0155**	3	1.44	3	**0.00125**	3	**0.00125**	3	0.12	2 J				**0.0155**
0.874	3	**0.0155**	3	2.55	3	**0.0025**	2 UJ	**0.0025**	2 UJ	0.29	2 J				**0.0155**
0.836	3	**0.0155**	3	5.02	3	**0.00125**	3	**0.00125**	3	0.12	2 J				**0.0155**
0.829	3	**0.0155**	3	5.20	2	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
0.811	3	**0.0155**	3	3.96	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.961	3	0.0400	1 J	3.81	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
1.01	3	0.0350	2 J	2.63	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.050**
0.854	3	**0.0155**	3	2.42	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.899	3	0.0600	1 J	10.2	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.781	3	**0.0155**	3	2.28	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0766
0.749	3	**0.0155**	3	2.72	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.723	3	**0.0155**	3	2.49	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.763	3	0.034	2 J	2.9	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.785	3	**0.0155**	3	2.68	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.725	3	**0.0155**	3	2.42	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	17	2		**0.050**
0.729	3	0.073	2 J	2.07	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.297	3 J		**0.0155**
0.661	3	0.062	2 J	2.36	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.516	3		**0.0155**
1.85	3	0.048	2 J	2.22	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
1.69	3	0.051	2 J	2.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	203	3	**12.5**	3 U	0.122	3 J	0.12	2 J	**0.125**	3	**0.125**	3	8.64	3	5.94	3
3	238	3	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	5.85	3	4.86	3
3	9.4	2 J+	3.4	2 J+	0.0156	3 J	0.0236	3	0.0643	3	0.0364	3 J	5.88	3	5.55	3
3	9.33	3 J+	5.21	3 J+	0.0333	3 J+	**0.00405**	3	0.0347	3 J	**0.02**	1 U	7.87	3	8.21	3
3	196	3	4.8	2	0.0124	3 J+	0.0148	3 J+	**0.25**	2 U	**0.25**	2 U	6.39	3	5.08	3
3	93.7	3	5.77	3 J+	**0.00155**	3	**0.00155**	3	**0.125**	3	**0.125**	3	6.96	3	6.91	3
1 U	212	3	8.43	3 J+	0.0210	2 J	0.0402	3 J	**0.155**	3	**0.155**	3	8.39	3	7.13	3
3	19.5	3	6.09	3	0.0176	3 J	0.0190	2 J	**0.155**	3	**0.155**	3	6.06	3	6.36	3
3	28.4	3 J+	6.00	1 J+	0.0230	2 J	0.0154	3 J	**0.155**	3	**0.155**	3	7.74	3	7.48	3
1 U	109	3	5.53	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	6.98	3	6.44	3 J+
3	365	3 J+	7.82	3 J+	**0.0250**	2 U	**0.0075**	2	0.607	3	**0.155**	3	7.82	3	5.19	3 J+
3	139	3	5.61	3 J+	0.0330	2 J	0.0284	3 J	**0.155**	3	**0.155**	3	6.44	3	5.88	3
3 J	232	3	6.23	3 J+	0.0256	3 J	**0.0075**	2	0.324	3 J	**0.155**	3	7.46	3	5.52	3
3	173	3	2.42	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5.64	3	5.16	3
3	138	3	10.5	3	0.0172	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	5.69	3	4.92	3
3	6.42	3 J+	2.77	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5	1	4.2	2
1 U	7.81	3	3.19	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.76	3	4.94	3
1 U	10.6	3	6.39	3	**0.0250**	2 U		R	**0.155**	3	**0.155**	3	4.91	3	4.86	3
3	6.25	3 J+	4.05	3 J+	0.0176	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	5.17	3	5.09	3
3	7.41	3 J+	4.69	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5.09	3	5.15	3
3	13.9	3 J+	4.46	3 J+	2.02	3	**0.0075**	2	**0.075**	2	**0.075**	2	6.29	3	5.74	3
3	100	1	3.93	3	0.0281	3 J	**0.0075**	2	**0.075**	2	**0.075**	2	6.01	3	5.48	3

0.0075	2	0.0075	2	0.75	2	0.75	2	3.3	2 J	3.2	2 J	0.0794	3 J	0.0929	3 J	2820	3
0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	1.55	3	0.0155	3	0.0155	3	1670	3
0.00543	3 J	0.00474	3 J	0.003835	4	0.003835	4	1.85	3 J+	1.86	3 J+	0.003095	4	0.003095	4	2510	3
0.005	1 J	0.00441	3 J	0.003835	4	0.003835	4	1.98	3 J		R	0.003095	4	0.003095	4	2650	3
0.0154	3 J	0.0075	2	0.005	1 U	0.00155	3	1.55	3	1.55	3	0.00775	3	0.00775	3	2430	3
0.0075	2	0.0075	2	0.00155	3	0.017	2 J+	1.55	3	1.55	3	0.00775	3	0.00775	3	2510	3
0.0120	2	0.0120	2	0.0720	2	0.0250	2 U	0.75	2	0.75	2	0.0125	3	0.0125	3	2510	3
0.0120	2	0.0120	2	0.0075	2	0.0075	2	0.75	2	0.75	2	0.0125	3	0.0125	3	2200	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	2720	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	2230	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2510	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	9560	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2240	3
0.0276	3 J		R	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2540	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2310	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2630	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2480	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2		R	2750	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2320	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	2280	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.76	3 J	1.68	3 J	0.0075	2	0.0075	2	2890	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	0.75	2	1.55	3 J	0.0075	2	0.0075	2	3280	3

	2620	3	2.28	3	1.07	3	0.166	3	J		R	3.36	3	0.428	3
J+	1990	3	J+	0.569	3	**0.05**	1	**0.05**	1	U	**0.0155**	3	1.81	3	J+	0.214	3	J+
	2780	3	3.31	3	0.611	3	0.0356	3	0.0294	3	J	0.457	3	0.282	3
	2400	2	3.83	3	0.255	3	0.0301	3	0.0163	3	J	0.366	3	J+	0.177	3	J+
	2550	3	3.11	3	J+	0.682	3	J+	0.143	3	J+	0.0458	3	J+	5.07	3	0.436	3	J+
	2880	3	1.73	3	0.46	2	0.0744	3	J+	0.0274	3	J+	2.47	3	J+	0.389	3	J+
	2540	3	4.23	3	0.812	3	J+	0.130	2	0.0296	3	4.73	3	0.407	3	J+
	2420	3	2.97	3	0.319	3	0.0510	2	0.0346	3	0.675	3	0.258	3
	2960	3	6.16	3	0.615	3	J+	0.0710	2	0.0420	2	0.977	3	J+	0.437	3	J+
J+	2200	2	J+	5.94	3	0.403	3	0.106	3	0.0420	2	3.03	3	0.284	3	J+
	2500	2	7.21	3	0.713	3	J+	0.194	3	J+	0.0332	3	J+	7.29	3	0.336	3	J+
	9330	3	0.388	3	0.255	3	0.0366	3	J+	0.0230	2	J+	1.15	3	J+	0.497	3	J+
	2330	3	4.26	3	0.575	3	0.146	3	0.0308	3	5.18	3	0.370	2	J+
	2970	3	4.12	3	0.721	3	J+	0.130	2	0.0316	3	6.10	2	0.330	2
	2470	3	2.77	3	0.959	3	0.0956	3	0.0272	3	3.28	3	0.399	3
	2790	3	2.33	3	0.51	2	0.0213	3	0.0196	3	J	0.347	3	J+	0.289	3	J+
	2610	3	3.07	3	0.481	3	0.0274	3	0.0228	3	0.398	3	J+	0.294	3	J+
	3110	3	2	1	0.266	3	0.0238	3	0.0173	3	J	0.437	3	0.276	3
	2500	2	1.67	3	0.359	3	**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	2320	3	1.36	3	J+	0.3	1	J+	**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	2710	3	2.37	3	0.374	3	0.023	2	0.016	2	J	0.597	3	**0.250**	2	U
	3400	2	4.92	3	0.476	3	0.0886	3	0.0243	3	2.66	3	**0.250**	2	U

235	3	8.4	2 J	**0.148**	3 J	**0.14**	2 J	496	3	451	3	11.7	3	11.4	3
77.1	3	**3.1**	2	**0.126**	3 J	**0.05**	1	364	3	355	3	3.36	3	2.37	3
20.1	3	6.90	2 J	0.0663	3 J		R	446	3	442	3	1.61	3	1.53	3
19.4	3	6.45	3 J	**0.035**	2 U	0.0742	3 J+	397	3	396	3	1.52	3	1.42	3
304	3	6.42	3 J	0.205	3	0.151	3	490	2	460	2	4.95	3	1.18	3
137	3	**3.1**	2	0.104	3 J+	**0.05**	1 U	481	3	545	3	3.16	3	1.02	3
324	3	**10.0**	1 U	0.170	2 J+	0.0910	2 J+	522	3	519	3	5.03	3	1.19	3
30.8	3	**3.10**	2	0.0448	3 J	**0.0130**	2	439	3	463	3	1.57	3	1.07	3
67.2	3	**3.10**	2	**0.050**	1 U	**0.050**	1 U	497	3	529	3	2.29	3	1.39	3
209	3	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	427	3 J+	414	3 J+	3.63	3	1.38	3
545	3 J+	**3.10**	2	0.253	3 J+	**0.0155**	3	518	3	474	3	8.36	3 J+	1.26	3 J+
96.1	3	31.8	3	0.105	3	0.125	3	2190	3	2200	2	2.51	3 J+	1.80	2 J+
365	3	**10.0**	1 U	0.154	3 J+	**0.0155**	3	469	3	425	3	5.08	3	0.952	3 J+
239	3	12.4	3 J	0.343	3	**0.0155**	3	472	3	512	3	5.02	3	0.900	1
211	3	25.2	3	0.120	2	**0.0155**	3	421	3	450	2	3.89	3	0.934	3
18.4	3 J	15.7	3 J	**0.050**	1 U	**0.0155**	3	462	3	488	3	0.72	2 J+	0.642	3 J+
25.2	3	12.1	3 J	**0.0155**	3	**0.0155**	3	443	3	480	2	0.861	3	0.837	3
24.3	3	7.58	3 J	**0.050**	1 U		R	541	3	468	3	0.857	3	0.628	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	406	3	440	2	0.638	3 J+	0.628	3 J+
11.6	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	409	3	465	3	0.716	3 J+	0.529	3 J+
33.3	3	10.7	3 J	**0.0155**	3	**0.0155**	3	520	2	498	3	0.879	3	0.652	3
142	3	21.7	3	0.099	2 J	**0.0155**	3	652	3	631	3	3.34	3	0.826	3 J+

0.031	2			0.438	3 J	0.32	2 J	1.31	3 J		R	301	3	272	3	**0.155**	3
0.1	1 U	**0.1**	1 U	0.346	3 J	0.313	3 J	0.347	3	0.25	2	209	3	238	3	**0.155**	3
0.0315	3	**0.0315**	3	0.364	3	0.368	3	1.9	2	1.31	3	228	3	224	3	0.144	3
0.0315	3	**0.0315**	3	0.271	3	0.26	2	2.09	3	1.08	3	246	3	235	3	0.0984	3
0.031	2		R	0.417	3	0.324	3	1.81	3	1.17	3	299	3	241	3	**0.0775**	3
0.031	2	**0.031**	2	0.222	3 J+	0.231	3 J+	1.17	3	0.8	1	236	3	285	3	0.195	3
0.00250	2 U	**0.00250**	2 U	0.358	3	0.264	3	2.36	3	1.41	3	255	3	257	3	**0.155**	3
0.000475	4	**0.000475**	4	0.234	3	0.257	3	1.69	3	0.867	3	217	3	244	3	**0.155**	3
0.000475	4	**0.000475**	4	0.312	3	0.292	3	3.05	3	1.57	3	266	3	317	3	**0.155**	3
0.000475	4	**0.000475**	4	0.448	3	0.332	3	3.33	3	2.01	3	241	3	234	3	**0.155**	3
0.000169	3	**0.000475**	4	0.599	3	0.386	3	3.74	3 J+	1.93	3 J+	257	3	227	3	**0.155**	3
0.000169	3	**0.000475**	4	1.08	3	1.14	3	0.407	3 J+	0.378	3 J+	481	3	481	3	**0.155**	3
0.00250	2 U	**0.000475**	4	0.541	3	0.335	3	2.34	3 J+	1.52	3 J+	219	3	208	3	**0.155**	3
0.000406	3 J	**0.000475**	4	0.419	3	0.460	2	2.12	3	1.60	2	274	3	293	3	**0.155**	3
0.00075	2	**0.00075**	2	0.365	3	0.344	3	1.50	2	1.18	3	222	3	229	3	**0.155**	3
0.00075	2	**0.00075**	2	0.324	3	0.365	3	1.17	3	1.18	3	249	3	237	3	**0.155**	3
0.00075	2	**0.00075**	2	0.325	3	0.342	3	1.59	3	1.28	3	218	3	236	3	**0.155**	3
0.00075	2	**0.00075**	2	0.383	3	0.309	3	1.12	3	0.808	3	241	3	222	3	**0.155**	3
0.00075	2	**0.00075**	2	0.29	2	0.319	3	1	1 J+	0.698	3 J+	215	3	236	3	**0.155**	3
0.00075	2	**0.00075**	2	0.298	3	0.305	3	0.813	3	**0.310**	2 U	229	3	225	3	**0.155**	3
0.00075	2	**0.00075**	2	0.317	3	0.292	3	1.33	3	0.672	3	253	3	242	3	**0.155**	3
0.00075	2	**0.00075**	2	0.424	3	0.349	3	2.9	2	1.17	3	264	3	269	3	**0.155**	3

	0.155	3	
	0.155	3	
	0.144	3	
	0.0964	3	
	0.253	3	J
J	**0.0775**	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.342	3	J
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4750	3		**0.0031**	2	**0.0031**	2	2290	3	2210	3	**0.0125**	3	**0.0125**	3	**0.155**	3
4220	3	J+	0.0752	3	**0.0031**	2	1530	3	J+	1670	3	J+	**0.0125**	3	**0.0125**	3	**0.155**	3
4160	3		**0.001435**	4	**0.001435**	4	1480	3	1780	3	0.00494	3	J	**0.002125**	4	**0.1**	1	U
3970	3		**0.001435**	4	**0.001435**	4	1560	3	1180	3	**0.002125**	4	**0.002125**	4	0.114	3	J
4740	3		**0.0031**	2	**0.0031**	2	1810	3	1780	3	**0.0031**	2	**0.0031**	2	**0.031**	2
5020	3		**0.0031**	2	**0.0031**	2	1640	3	1940	3	**0.0031**	2	**0.0031**	2	**0.031**	2
5130	3		**0.0031**	2	**0.0031**	2	1950	3	2060	3	**0.0025**	2	**0.0025**	2	**0.0155**	3
4220	3		**0.0031**	2	**0.0031**	2	1490	3	1660	3	**0.0025**	2	**0.0025**	2	**0.0155**	3
4510	3		**0.0031**	2	**0.0031**	2	1710	3	1900	2	**0.0050**	1	**0.0050**	1	**0.050**	1
4260	3		**0.0031**	2	**0.0031**	2	1610	3	1600	2	0.0118	3	J	**0.0050**	1	**0.050**	1
4880	3		0.0104	3	J	**0.0031**	2	1800	2	1850	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6720	3		**0.0031**	2	**0.0031**	2	3480	3	3500	2	**0.0050**	1	**0.0050**	1	**0.050**	1
4660	3		0.0084	2	J	**0.0031**	2	1750	3	1670	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5460	3		**0.0031**	2	**0.0031**	2	1800	2	2060	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4560	3		0.0077	2	J	**0.0031**	2	1590	3	1760	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5170	3		**0.0031**	2	**0.0031**	2	1840	3	1940	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4740	3		**0.0031**	2	**0.0031**	2	1700	2	1830	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4620	3		**0.0031**	2	**0.0031**	2	2140	3	1860	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4520	3		**0.0031**	2	**0.0031**	2	1610	3	1740	3	**0.0050**	1	**0.0050**	1	0.576	3	J
4560	3		**0.0031**	2	**0.0031**	2	1590	3	1820	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4600	2		**0.0031**	2	**0.0031**	2	1850	3	1770	3	**0.0031**	2	**0.0031**	2	0.0655	3	J
5250	3		**0.0031**	2	**0.0031**	2	2270	3	2300	2	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	0.45	2	**0.125**	3	1.39	3 J		R
0.155	3	**0.125**	3	**0.125**	3	**0.75**	2 U	**0.235**	3
0.0302	3	0.0159	3 J	0.0322	3	**0.2345**	4	0.638	3 J
0.0302	3	0.0306	3	**0.0047**	2	**0.2345**	4	**0.50**	1 U
0.031	2	0.314	3 J	**0.1**	1	**0.75**	2 U	**0.75**	2 U
0.031	2	**0.1**	1	**0.1**	1	**0.75**	2 U	**0.75**	2 U
0.0155	3	**0.110**	2	**0.110**	2	2.78	3 J+	3.37	3 J+
0.0155	3	**0.250**	2 U	**0.110**	2	0.616	3 J+	0.999	3 J+
0.050	1	**0.250**	2	**0.250**	2	1.63	3 J+		R
0.050	1	**0.250**	2	**0.250**	2	**0.50**	1 U	**0.155**	3
0.050	1	1.10	2	0.475	3 J	2.50	2 J+	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	2.04	3 J+	**0.50**	1 U
0.050	1	0.715	3 J	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	3.43	3	1.07	3
0.050	1	**0.155**	3	**0.155**	3	0.531	3 J	1.09	3
0.050	1	**0.155**	3	**0.155**	3	1.8	2 J+	**0.155**	3
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
	R	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	2.59	3 J	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	2	3
Mean	5.74		13.03		28		225		2.79		9.30	
Median	5.87		12.77		27		215		2.68		8.25	
St. Deviation	1		2		9		75		1		5	
# of values	21		22		22		20		22		22	
Minimum	4.78		10.38		15		82		1.6		5.66	
Maximum	6.69		15.91		49		349.6		4.59		32.9	
Lowest fifth percentile	5		11		15		100		2		7	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	90%		0%		0%		0%		0%		0%	
% of DWS exceedences	76%		0%		0%		0%		0%		0%	

1	3	1	3	2	2	2	3	2	3	3	3	4	3	3	3
31		28.9		1.33		6.3		7.60		0.872		0		1	
29		26.9		0.50		6.4		6.40		0.587		0		1	
11		14		1		3		6		1		0		0	
22		22		22		22		22		22		3		3	
23		1.55		0.0755		1.57		4		0.155		0.0155		0.437	
80		57.5		5		11.9		30.5		6.53		0.0155		0.697	
24		11		0		2		5		0		0		0	
0		1		5		3		0		1		3		0	
		5%		23%		14%				5%		100%			
				5		13		20		1					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		95%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	2
0.0140		0	
0.0130		0	
0		0	
22		2	
0.00155		0.0155	
0.0414		0.05	
0		0	
3		2	
14%		100%	
7			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	2	3	5	2	5	2	3	3	2	2	4
0.93		0.0282		3.23		0.00099		0.00113		0.16		3		0.0246
0.85		0.0155		2.61		0.00075		0.00075		0.16		0		0.0155
0		0		2		0		0		0		6		0
22		22		22		22		22		22		7		22
0.661		0.0155		1.44		0.00075		0.00075		0.0295		0.25		0.0155
1.85		0.073		10.2		0.0025		0.0027		0.3		17		0.0766
1		0		2		0		0		0		0		0
0		14		0		22		21		17		4		21
		64%				100%		95%		77%		57%		95%
		8						1		5		1		1
230		NA		NA		NA		0.0052		NA		NA		7.08
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	4	3	4	2	3	3	3	3	2	3	2	3
	105		6.0		0.114		0.02		0.167		0.136		6.41		5.73	
	97		5.6		0.019		0.01		0.155		0.155		6.18		5.50	
	103		3		0		0		0		0		1		1	
	22		22		22		21		22		22		22		22	
	6.25		2.42		0.00155		0.00155		0.0347		0.02		4.76		4.2	
	365		12.5		2.02		0.12		0.607		0.25		8.64		8.21	
	6		3		0		0		0		0		5		5	
	0		2		9		14		18		21		0		0	
			9%		41%		67%		82%		95%					
					10		5		2		1					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	55%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0119		0.0107		0.08		0.08		1.4		1.4		0.0122		0.0131		2820	
0.0125		0.0125		0.01		0.01		1.3		1.3		0.0075		0.0075		2510	
0		0		0		0		1		0		0		0		1540	
22		21		22		22		22		21		22		21		22	
0.005		0.00441		0.00155		0.00155		0.75		0.75		0.003095		0.003095		1670	
0.0276		0.0125		0.75		0.75		3.3		3.2		0.0794		0.0929		9560	
0		0		0		0		1		1		0		0		2202	
18		19		21		21		18		17		21		20		0	
82%		90%		95%		95%		82%		81%		95%		95%			
4		2						2		3		1		1			
NA		NA		NA		NA		NA		NA		0.039		0.040		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		5%		5%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	2	3	3	3
2930		3.21		0.51		0.076		1.68		2.31		0.323	
2580		3.02		0.48		0.061		1.68		1.48		0.292	
1470		2		0		0		0		2		0	
22		22		22		22		21		22		22	
1990		0.388		0.05		0.01		0.01		0.25		0.177	
9330		7.21		1.07		0.194		0.0458		7.29		0.497	
2206		1		0		0		0		0		0	
0		0		1		3		3		2		4	
				5%		14%		14%		9%		18%	
								5					
NA		10.09373471		8.680611848		NA		NA		0.996		0.956	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		55%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	2	4	3	4	3	0	3	0	3	2	3	2	3
143		10.0		0.102		0.05		548		550		3.3		1.6	
87		9.0		0.083		0.02		471		467		2.8		1.1	
145		8		0		0		372		373		3		2	
22		22		22		20		22		22		22		22	
10		3.1		0.0155		0.013		364		355		0.638		0.529	
545		31.8		0.343		0.151		2190		2200		11.7		11.4	
12		3		0		0		397		397		1		1	
1		10		9		15		0		0		0		0	
5%		45%		41%		75%									
2		9		5		1									
1000		1000		0.114		0.133		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		36%		10%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	3	2	3	0	3	0	3	3	3
0.012		0		0.399		0.36		1.78		11.88		255		257		0.150	
0.001		0		0.361		0.32		1.64		11.88		244		238		0.155	
0		0		0		0		1		0		56		56		0	
22		20		22		22		22		21		22		22		22	
0.000169		0.0004745		0.222		0.231		0.347		0.25		209		208		0.0775	
0.1		0.1		1.08		1.14		3.74		2.01		481		481		0.195	
0		0		0		0		0		0		215		222		0	
21		20		0		0		0		1		0		0		19	
95%		100%								5%						86%	
1				2		2										1	
0.77		0.77		NA		NA		5.69		5.68		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.161	
0.155	
0	
22	
0.0775	
0.342	
0	
18	
82%	
2	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4760		0.0070		0.0029		1840		1900		0.0050		0.0048		0.084	
4640		0.0031		0.0031		1730		1830		0.0050		0.0050		0.050	
580		0		0		430		420		0		0		0	
22		22		22		22		22		22		22		22	
3970		0.001435		0.001435		1480		1180		0.002125		0.002125		0.0155	
6720		0.0752		0.0031		3480		3500		0.0125		0.0125		0.576	
4163		0		0		1492		1603		0		0		0	
0		18		22		0		0		20		22		19	
		82%		100%						91%		100%		86%	
		3								2				2	
NA		0.041883638		0.036		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		5%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	3	3	3	3
0.051		0.24		0.154		1.30		81.33	
0.050		0.16		0.155		1.07		81.33	
0		0		0		1		1	
21		22		22		22		20	
0.0155		0.0159		0.0047		0.2345		0.155	
0.155		1.1		0.475		3.43		3.37	
0		0		0		0		0	
21		16		20		12		15	
100%		73%		91%		55%		75%	
		3		1		3		1	
NA		NA		NA		13.03		12.85	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
KP-P4																
Sample Date																
03/22/05	7.52	3	10.86	4		100	1					2.92	3	62.7	3	
05/14/05	7.37	3	11.15	4		112	3		90.7	3		4.04	3	54.7	3	
08/19/05	7.15	3	11.6	3		91	2		41	2		4.6	2	49.4	3	
11/07/05	7.53	3	10.74	4		188	3		279	3		2.07	3	49.3	3	
03/09/06	6.67	3	10.57	4		99	2		152	3		2.39	3	51.1	3	
05/19/06	6.4	2	10.64	4		114	3		192.9	4		3.01	3	46.7	3	
08/19/06	6.64	3	10.51	4		104	3		158.5	4		3.57	3	48.9	3	
10/26/06	7.28	3	13.28	4		120	2		172.7	4		3.06	3	54.0	2	
03/15/07	7.28	3	9.53	3		62	2		70.5	3		2.38	3	66.9	3	
05/13/07	7.05	3	11.48	4		59	2		112.8	4		3.05	3	51.5	3	
08/17/07	6.95	3	11.48	4		63	2		66.9	3		3.46	3	45.3	3	
11/09/07	6.42	3	12.14	4		112	3		125.9	4		2.67	3	54.0	2	
03/26/08	7.04	3	10.22	4		110	2		112.6	4		2.65	3	57.5	3	
05/21/08	6.61	3	11.92	4		107	3		162.7	4		2.9	2	46.4	3	
08/26/08	7.3	2	11.14	4		103	3		193.4	4		3.38	3	47	2	
10/20/08	7.51	3	11.4	3		109	3		85.3	3		2.62	3	50.5	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
115	3		91.3	3		3.3	2		**0.785**	3		57	2		0.21	2						
115	3		70	1		1	1		5.5	2		55	2		0.33	2						
110	2		62.5	3		0.5	1		2.5	2	J	53.5	3		0.396	3						
115	3		62.5	3		2.6	2	J	2.5	2	J	61	2		0.139	3						
105	3		43.8	3		2.30	2		3.00	1	J	60.0	1		0.299	3						
110	2		83.8	3		**0.075**	2		2.50	2	J	54.0	2		0.489	3						
100	1		87.5	3		**0.075**	2		**1.57**	3		54.0	2		0.337	3		**0.0155**	3		0.337	3
95.0	2		76.3	3		0.300	1	J	**1.57**	3		61.5	3		0.112	3		**0.0155**	3		0.112	3
100	1		72.5	3		9.80	2		3.25	3	J	58.0	2		0.263	3		**0.0155**	3		0.253	3
105	3		62.5	3		1.80	2		3.75	3	J	53.0	2		0.382	3						
105	3		70.0	1		0.600	1	J	5.25	3	J	52.3	3		0.424	3	J-					
120	2		67.5	3		0.700	1		**1.57**	3		60.5	3		0.168	3						
125	3		71.3	3		4.23	3		**1.57**	3		58.5	3		0.575	3						
114	3		66.3	3		0.5	1		**1.57**	3		53.5	3		0.65	2						
111	3		108	3		0.745	3		**1.57**	3		54	2		0.463	3						
116	3		72.5	3		**0.0775**	3		3.48	3	J	56.8	3		0.315	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		
	0.08	1				
	0.043	2				
	0.018	2	J			
	0.016	2	J			
	0.0110	2				
	0.0090	1	J			
	0.0150	2		**0.0155**	3	
	0.0180	2		**0.0155**	3	
	0.0290	2	J-			R
	0.0107	3				
	0.0100	1				
	0.0199	3				
	0.0669	3				
	0.0053	2	J			
	0.0102	3				
	0.0057	2	J			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.709	3		0.057	2 J		3.09	3		**0.00125**	3		**0.00125**	3		0.15	2 J					**0.0155**			
0.727	3		0.057	2 J		2.49	3		**0.00125**	3		**0.00125**	3		0.18	2 J					**0.0155**			
0.675	3		0.045	2 J		2.92	3		**0.00125**	3		**0.00125**	3		0.30	1 J					**0.0155**			
0.664	3		0.067	2 J		1.49	3		**0.00125**	3		**0.0025**	2 UJ		0.11	2 J					0.0356			
0.685	3		0.0360	2 J		3.00	1		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.692	3		0.0690	2 J		3.17	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0430			
0.725	3		0.0750	2 J		3.18	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.686	3		0.102	3		1.50	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.600	1		0.0420	2 J		2.83	3		**0.00075**	2		**0.0025**	2 UJ		0.39	2 J					**0.0155**			
0.759	3		0.0590	2 J		2.87	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.606	3		0.0470	2 J		2.81	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.121			
0.593	3		0.0540	2 J		1.32	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.609	3		0.0520	2 J		2.89	3		**0.00075**	2		0.0015	2 J		**0.155**	3					0.0345			
0.586	3		0.053	2 J		2.26	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.874	3		0.147	3		3	1		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.050**			
0.615	3		0.057	2 J		1.89	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			

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									depends on Hardness				depends on Hardness																		
result > crit				result > crit					result > crit				result > crit																result > crit		
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
37.2	3		2.86	3 J			0.142	3			0.0324	3 J			4000	1		3270	3		3.39	3		1.96	3	
59.5	3		11.3	3			0.146	3 J+			0.146	3 J+			4070	3		3250	3		2.71	3		1.95	3	
48.7	3		13.1	3 J			0.0556	3 J			0.0712	3 J			3640	3		3600	2		2.15	3		1.53	3	
16.3	3 J		10.9	3 J			0.371	3 J+			**0.0155**	3			3500	2		3960	3		1.6	2		1.35	3	
95.3	3		**10.0**	1 U			1.19	3 J+			**0.0130**	2			3940	3		4050	3		4.11	3		0.787	3	
11.9	3 J		6.55	3 J			0.0432	3 J			0.0262	3 J			3430	3		3990	3		0.727	3		0.531	3	
6.22	3 J		**3.10**	2			**0.050**	1 U			**0.050**	1 U			3500	2		3540	3		0.664	3 J+		0.497	3 J+	
40.6	3		23.1	3			**0.050**	1 U			**0.050**	1 U			4090	3		4230	3		1.04	3		0.543	3 J+	
7360	3		53.4	3 J+			1.78	3 J+			**0.050**	1 U			5660	3		2970	3		173	3		1.14	3 J+	
140	2		37.9	3			0.191	3			**0.050**	1 U			3940	3		3770	3		7.45	3 J+		0.441	3 J+	
55.1	3		**10.0**	1 U			**0.0155**	3			**0.0155**	3			3280	3		3420	3		1.17	3 J+		0.249	3 J+	
80.0	1		43.8	3			**0.0155**	3			**0.0155**	3			3790	3		3890	3		1.28	3		0.263	3	
153	3		65.2	3			0.0603	3 J			**0.0155**	3			4400	2		3930	3		4.06	3		0.234	3	
58	2		47.8	3			**0.0155**	3			**0.0155**	3			3330	3		3340	3		0.386	3 J+		0.224	3 J+	
57.3	3		47.8	3			**0.0155**	3			**0.0155**	3			3360	3		3280	3		0.636	3		0.218	3	
63.2	3		33.3	3			**0.0155**	3			**0.0155**	3			3750	3		3760	3		0.957	3		0.208	3	

CALC revised 2013																													
result > crit																													
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.100	1	U	**0.0315**	3	0.338	3	J			R		0.784	3	J+	0.56	2	341	3	316	3	0.0515	3			
0.0315	3		**0.0315**	3	0.405	3		0.405	3			3.8	2		2.4	2	319	3	324	3	0.0342	3			
0.031	2		**0.031**	2	0.27	2		0.239	3			1.72	3		1.45	3	322	3	330	2	**0.0775**	3			
0.031	2		**0.031**	2	0.274	3	J+	0.308	3	J+		1.16	3		1	1	338	3	372	3	**0.0775**	3			
0.000475	4		**0.000475**	4	0.335	3		0.218	3			1.48	3		1.08	3	324	3	380	2	**0.155**	3			
0.000475	4		**0.000475**	4	0.213	3		0.249	3			1.18	3		1.06	3	296	3	353	3	**0.155**	3			
0.000475	4		**0.000475**	4	0.245	3		0.244	3			1.22	3		1.03	3	313	3	323	3	**0.155**	3			
0.000991	3	J	**0.000475**	4	0.403	3		0.434	3			1.93	3		1.85	3	362	3	376	3	**0.155**	3			
0.000169	3		**0.000475**	4	0.141	3	J			R		5.05	3	J+	1.99	3	J+	562	3	265	3	**0.310**	2		
0.000169	3		**0.000475**	4	0.249	3		0.258	3			1.91	3	J+	1.38	3	J+	339	3	322	3	**0.155**	3		
0.000169	3		**0.000475**	4	0.234	3		0.243	3			1.03	3	J+	0.917	3	J+	293	3	296	3	**0.155**	3		
0.000169	3		**0.000475**	4	0.317	3		0.342	3			1.46	3		1.25	3	363	3	352	3	**0.155**	3			
0.00075	2		**0.00075**	2	0.277	3		0.243	3			2.10	2		1.06	3	367	3	316	3	**0.155**	3			
0.00075	2		**0.00075**	2	0.233	3		0.245	3			1.01	3		0.891	3	308	3	304	3	**0.155**	3			
0.00075	2		**0.00075**	2	0.242	3		0.238	3			1.26	3		0.838	3	298	3	291	3	**0.155**	3			
0.00075	2		**0.00075**	2	0.297	3		0.284	3			1.21	3		0.979	3	337	3	327	3	**0.155**	3			

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
J	0.0468	3	J
J	0.0351	3	J
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
Silicon					**Silver[8]**								**Sodium**								**Thallium**									**Tin**
Dissolved				Total				Dissolved				Total				Dissolved				Total				Dissolved				Total		
µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L		
5630	3			**0.001435**	4			**0.001435**	4			3490	3			2850	3		0.0112	3 J+		**0.002125**	4			0.0701	3 J		
6480	3			**0.001435**	4			**0.001435**	4			3310	3			2730	3		**0.002125**	4		**0.002125**	4			0.152	3 J		
7060	3			**0.0031**	2			**0.0031**	2			3170	3			3130	3		**0.0031**	2		**0.0031**	2			**0.031**	2		
6690	3			**0.0031**	2			**0.0031**	2			3520	3			3990	3		**0.0031**	2		**0.0031**	2			**0.031**	2		
5400	2			**0.0031**	2			**0.0031**	2			3280	3			3250	3		0.0162	3		**0.0025**	2			**0.0155**	3		
6680	3			**0.0031**	2			**0.0031**	2			2880	3			3430	3		**0.0025**	2		**0.0025**	2			**0.0155**	3		
6430	3			**0.0031**	2			**0.0031**	2			3150	3			3210	3		**0.0050**	1		**0.0050**	1			**0.050**	1		
6630	3			**0.0031**	2			**0.0031**	2			3990	3			3850	3		**0.0050**	1		**0.0050**	1			**0.050**	1		
4970	3			**0.0062**	2			**0.0031**	2			4100	2			2460	3		**0.0100**	1		**0.0050**	1			**0.100**	1		
6560	3			**0.0031**	2			**0.0031**	2			3330	3			3260	3		**0.0050**	1		**0.0050**	1			0.282	3		
6580	3			**0.0031**	2			**0.0031**	2			2900	2			3020	3		**0.0050**	1		**0.0050**	1			0.453	3		
6400	2			**0.0031**	2			**0.0031**	2			3370	3			3480	3		**0.0050**	1		**0.0050**	1			**0.050**	1		
6640	3			**0.0031**	2			**0.0031**	2			3750	3			3360	3		**0.0050**	1		**0.0050**	1			0.113	3 J		
6350	3			**0.0031**	2			**0.0031**	2			2910	3			2950	3		**0.0050**	1		**0.0050**	1			**0.050**	1		
5930	3			**0.0031**	2			**0.0031**	2			2960	3			2860	3		**0.0050**	1		**0.0050**	1			**0.050**	1		
6370	3			**0.0031**	2			**0.0031**	2			3280	3			3290	3		**0.0050**	1		**0.0050**	1			**0.050**	1		

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium														**Zinc[4]**		
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.0302	3		1.15	3		1.01	3			3.74	3		3.22	3									
0.0302	3		1.1	2		0.975	3			**0.2345**	4		**0.50**	1	U								
0.031	2		1.26	3		1.1	2			**0.75**	2	U	**0.75**	2	U								
0.031	2		1.19	3		1.44	3			**0.75**	2	U	**0.75**	2	U								
0.0155	3		0.899	3		**0.110**	2			2.35	3	J+		R									
0.0155	3		1.05	3		1.14	3			0.554	3	J+	0.583	3	J+								
0.050	1		0.977	3	J	1.04	3			**0.50**	1	U	1.18	3	J+								
0.050	1		0.968	3	J	0.694	3	J		**0.155**	3		**0.50**	1	U								
0.050	1		15.4	3		1.03	3			12.9	3	J+	1.65	3	J+								
0.050	1		0.793	3	J	0.526	3	J		1.01	3	J+	**0.50**	1	U								
0.050	1		0.994	3	J	0.991	3	J		**0.50**	1	U	**0.50**	1	U								
0.050	1		1.37	3		1.16	3			**0.50**	1	U	1.63	3									
0.050	1		1.18	3		0.938	3	J		0.928	3	J	0.360	2	J								
0.050	1		0.94	2	J	0.98	2	J		**0.50**	1	U	**0.50**	1	U								
0.050	1		0.808	3	J	0.798	3	J		**0.155**	3		**0.155**	3									
0.050	1		0.969	3	J	1.02	3			1.22	3	J+	**0.50**	1	U								

	2	3	2	4	-1	3	1	4	2	3	1	3
Mean	7.05		11.17		103		135		3.05		52.2	
Median	7.10		11.15		106		126		2.97		50.8	
St. Deviation	0		1		30		62		1		6	
# of values	16		16		16		15		16		16	
Minimum	6.4		9.53		59		41		2.07		45.3	
Maximum	7.53		13.28		188		279		4.6		66.9	
Lowest fifth percentile	6		10		61		59		2		46	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	13%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	3	1	3	2	2	2	3	0	2	3	3	4	3	3	3
110		73.0		1.8		2.620		56		0.35		0		0	
111		70.7		0.7		2.500		56		0.33		0		0	
8		15		2		1		3		0		0		0	
16		16		16		16		16		16		3		3	
95		43.8		0.075		0.785		52.3		0.112		0.0155		0.112	
125		108		9.8		5.5		61.5		0.65		0.0155		0.337	
99		58		0		1		53		0		0		0	
0		0		3		7		0		0		3		0	
				19%		44%						100%			
				2		8									
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	4	3
0.02		0	
0.02		0	
0		0	
16		2	
0.0053		0.0155	
0.08		0.0155	
0		0	
0		2	
		100%	
5			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	3	2	4
0.675		0.064		2.54		0.00094		0.00120		0.18		0		0.0349
0.680		0.057		2.85		0.00075		0.00100		0.16		0		0.0250
0		0		1		0		0		0		0		0
16		16		16		16		16		16		3		16
0.586		0.036		1.32		0.00075		0.00075		0.11		0.075		0.0155
0.874		0.147		3.18		0.00125		0.0025		0.39		0.25		0.121
1		0		1		0		0		0		0		0
0		0		0		16		15		11		3		12
						100%		94%		69%		100%		75%
		14						1		5				3
230		NA		NA		NA		0.0052		NA		NA		6.74
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	4	3	4	3	3	3	3	3	2	3	2	3
	647.3		3.6		0.0330		0.0306		0.284		0.240		9.70		5.41	
	40.0		2.1		0.0311		0.0257		0.155		0.155		5.83		5.39	
	2385		5		0		0		0		0		14		1	
	16		16		16		16		16		16		16		16	
	5.43		1		0.0075		0.0156		0.155		0.155		4.91		4.79	
	9590		21.5		0.0781		0.0804		0.955		0.434		63.1		6.91	
	7		1		0		0		0		0		5		5	
	0		6		3		3		11		10		0		0	
			38%		19%		19%		69%		63%					
			2		9		9		2		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	25%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	5	3	5	3	-2	3
0.0214		0.010400		0.008100		0.007900		1.78		1.71		0.011290		0.009000		14600	
0.0125		0.012500		0.007500		0.007500		1.25		1.25		0.007500		0.007500		14100	
0		0		0		0		1		1		0		0		1600	
16		16		16		16		16		15		16		16		16	
0.00531		0.001495		0.00155		0.00155		0.75		0.75		0.003095		0.003095		12800	
0.154		0.0125		0.025		0.025		4.7		6.2		0.0444		0.0185		18500	
0		0		0		0		1		1		0		0		13025	
12		16		15		15		12		12		15		16		0	
75%		100%		94%		94%		75%		80%		94%		100%			
1				1				2		2		1					
NA		NA		NA		NA		NA		NA		0.153		0.143		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	3	3	4	3	4	3	3	3	3	3	3
14000		2.79		0.968		0.299		0.051		10.500		1.590		
13900		2.16		0.855		0.057		0.042		2.540		0.306		
1000		2		1		1		0		23		2		
16		16		16		16		16		16		16		
12100		1.46		0.401		0.0325		0.0265		0.214		0.101		
16100		8.56		2.56		3.62		0.202		92		5.81		
12700		2		0		0		0		0		0		
0		0		0		0		0		0		0		

NA	10.98	10.56276	NA	NA	4.816	4.623
NA	100	NA	NA	NA	NA	NA
0%	0%	0%	0%	0%	44%	6%
0%	0%	0%	0%	0%	0%	0%

1	3	1	3	4	3	4	3	-1	3	-1	3	2	3	3	3
517.6		26.30		0.260		0.0373		3860		3640		12.83		0.76	
57.7		18.10		0.053		0.0209		3770		3680		1.44		0.51	
1825		21		0		0		580		360		43		1	
16		16		16		16		16		16		16		16	
6.22		2.86		0.0155		0.013		3280		2970		0.386		0.208	
7360		65.2		1.78		0.146		5660		4230		173		1.96	
10		3		0		0		3318		3180		1		0	
0		3		7		12		0		0		0		0	
		19%		44%		75%									
3		4		3		3									
1000		1000		1.188		1.074		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
6%		0%		13%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		6%		0%	

6	3	7	4	3	3	3	3	2	3	2	3	0	3	0	3	3	3
0.012		0.0082		0.280		0.45		1.770		1.23		343		328		0.1410	
0.001		0.0006		0.272		0.45		1.360		1.06		331		324		0.1550	
0		0		0		0		1		0		63		32		0	
16		16		16		14		16		16		16		16		16	
0.000169		0.0004745		0.141		0.218		0.784		0.56		293		265		0.0342	
0.1		0.0315		0.405		0.434		5.05		2.4		562		380		0.31	
0		0		0		0		1		1		295		285		0	
15		16		0		0		0		0		0		0		14	
94%		100%														88%	
1																2	
0.77		0.77		NA		NA		27.11		27.02		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.1310	
0.1550	
0	
16	
0.0351	
0.155	
0	
14	
88%	
2	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
6300		0.003100		0.002900		3340		3200		0.0058		0.004100		0.0980			
6460		0.003100		0.003100		3300		3230		0.0050		0.005000		0.0500			
550		0		0		370		390		0		0		0			
16		16		16		16		16		16		16		16			
4970		0.001435		0.001435		2880		2460		0.002125		0.002125		0.0155			
7060		0.0062		0.0031		4100		3990		0.0162		0.005		0.453			
5293		0		0		2895		2663		0		0		0			
0		16		16		0		0		14		16		11			
		100%		100%						88%		100%		69%			
														3			
NA		0.999930778		0.850		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	3	3	2	2
0.0410		1.94		0.93		1.67		0.89	
0.0500		1.02		1.00		0.65		0.50	
0		4		0		3		1	
16		16		16		16		15	
0.0155		0.793		0.11		0.155		0.155	
0.05		15.4		1.44		12.9		3.22	
0		1		0		0		0	
16		0		1		9		9	
100%				6%		56%		60%	
		7		6		1		1	
NA		NA		NA		62.20		61.33	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
SRK-3																
Sample Date																
11/08/05	7.53	3	0.24	2		391	3		-17	2		2.13	3	216	3	
03/09/06	6.74	3	0.3	1		328	3		32	2		2.06	3	239	3	
05/20/06	6.86	3	0.81	2		358	3		153.5	4		2.59	3	206	3	
08/19/06	6.63	3	0.41	2		374	3		121.3	4		3.22	3	218	3	
10/26/06	7.06	3	1.46	3		404	3		185.5	4		2.13	3	226	3	
03/16/07	7.52	3	0.25	2		202	3		-48.9	3		1.92	3	213	3	
05/13/07	7.52	3	0.29	2		210	2		-54.8	3		2.53	3	215	3	
08/19/07	7.41	3	0.3	1		214	3		-124.4	4		2.84	3	202	3	
11/09/07	7.18	3	0.74	2		382	3		48.9	3		2.32	3	227	3	
03/27/08	6.67	3	0.78	2		369	3		-21.9	3		1.96	3	206	3	
05/20/08	7.4	2	0.23	2		403	3		-84.7	3		2.68	3	205	3	
08/26/08	7.58	3	0.37	2		380	2		-8.3	2		2.58	3	199	3	
10/20/08	7.5	2	0.76	2		396	3		-124	3		1.98	3	207	3	
08/22/09			0.57	2		409	3				R	2.58	3	204	3	
08/23/10	7.52	3	0.18	2		455	3		-16.8	3		3.06	3	212	3	
08/25/11	7.85	3	0.65	2		350.154	FALSE		-39.3	3		3.54	3	200	1	
08/26/12	7.54	3	0.25	2		416	3		34.4	3		2.6	2	200	1	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
335	3		190	2		0.2	1 J		6.5	2		214	3		0.117	3 J-						
390	2		206	3		0.500	1		2.00	1 J		226	3		0.0825	3 J						
360	2		213	3		0.400	1 J		4.75	3 J		216	3		0.338	3						
380	2		233	3		0.200	1 J		8.25	3 J		221	3		**0.0155**	3		**0.0155**	3		**0.0155**	3
360	2		211	3		0.200	1 J		5.00	1 J		222	3		0.0355	3 J		**0.0155**	3		0.0355	3
350	2		198	3		0.400	1 J		7.75	3 J		226	3		**0.0155**	3		**0.0155**	3		**0.0155**	3
380	2		203	3		**0.075**	2		5.75	3 J		226	3		**0.050**	1 U						
370	2		210	2		0.200	1 J		14.8	3		225	3		0.0310	2 J						
370	2		226	3		0.300	1 J		6.50	2 J		224	3		**0.0155**	3						
448	3		223	3		0.306	3 J		3.30	2 J		234	3		0.0720	2 J						
432	3		218	3		0.503	3		5.21	3 J		231	3		**0.0155**	3						
430	2		230	2		0.816	3		5.2	2 J		231	3		**0.050**	1 U						
431	3		216	3		0.316	3 J		3.7	2 J		236	3		0.0385	3 J						
434	3		226	3		0.442	3 J		5.9	2 J		229	3		**0.0155**	3						
430	2		170	2		**0.0775**	3		**1.57**	3		225	3		**0.050**	1 U						
424	3		230	2		**0.0725**	3		4.06	3 J		223	3		0.0385	3 J						
418	3		191	3		**0.075**	2		7.2	2 J		219	3		**0.050**	1 U						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0099	2	J			
	0.00155	3				
	0.0090	1	J			
	0.0080	1	J	**0.050**	1	UJ
J	0.0240	2		**0.0155**	3	
	0.0120	2		**0.050**	1	UJ
	0.0036	2	J			
	0.0032	2	J			
	0.0103	3				
	0.0137	3				
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.0059	2	J			
	0.00155	3				
	0.00155	3				
	0.0039	2	J			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.743	3		0.093	2 J		2.59	3		**0.00125**	3		**0.00125**	3		0.14	2 J					**0.0155**			
0.759	3		0.0540	2 J		2.74	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.734	3		0.0820	2 J		2.37	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0420			
0.719	3		0.0730	2 J		2.36	3		**0.00075**	2		**0.0025**	2 UJ		**0.155**	3					0.0530			
0.732	3		0.0920	2 J		2.43	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.599	3		0.0590	2 J		2.01	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.767	3		0.0770	2 J		2.16	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.571	3		0.0580	2 J		1.99	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0665			
0.621	3		0.0670	2 J		2.30	2		0.0017	2 J		**0.00075**	2		**0.155**	3					**0.0155**			
0.619	3		0.0570	2 J		3.84	3		**0.00075**	2		**0.00075**	2		0.92	2 J					0.119			
0.656	3		0.07	1 J		2.12	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		0.682	3		**0.0155**			
0.647	3		0.077	2 J		2.39	3		**0.00075**	2		**0.00075**	2		1.3	2 J+		0.594	3		**0.050**			
0.587	3		0.075	2 J		2	1		**0.00075**	2		**0.00075**	2		**0.155**	3		0.277	3 J		**0.050**			
0.605	3		0.05	1 J		2.16	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.641	3		**0.0155**			
0.647	3		0.101	3		2.51	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.675	3		0.068			
0.664	3		0.096	2 J		2.68	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.733	3		**0.0155**			
0.502	3		0.084	2 J		2.74	3		**0.00075**	2		**0.00075**	2		**0.50**	1 UJ		0.736	3		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	3.53	3	J+	**1**	1	U	0.0152	3	J			R	**0.125**	3		0.484	3	J	330	2		376	3
		1	U	4.55	3	J+	2.26	3	J+	0.0838	3		0.0640	2	**0.155**	3		**0.155**	3		371	3		358	3
		2	J	13.2	3		9.42	3		0.0480	2	J	0.0242	3	J	**0.155**	3		**0.155**	3		334	3		397	3
		2	J	5.46	3	J+	4.45	3	J+	**0.0075**	2		**0.0075**	2		0.698	3		0.585	3		378	3		375	3
		1	U	**1.00**	1	U	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		364	3		390	2
		3		**2.00**	1	U	**2.00**	1	U	**0.0150**	2		**0.0150**	2		**0.310**	2		**0.310**	2		380	2		417	3
		3		**1.00**	1	U	**1.00**	1	U	0.0200	1	J	0.0250	2	J	**0.155**	3		**0.155**	3		407	3		403	3
		3	J	2.36	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.312	3	J	**0.155**	3		405	3		400	1
		3		2.37	3		**1.00**	1	U	**0.0075**	2		0.0206	3	J	0.366	3	J	0.346	3	J	472	3		478	3
		3		1.88	3	J	2.16	3		**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		373	3		378	3
		3		5.14	3	J+	4.29	3	J+	**0.0075**	2		**0.0075**	2		0.49	2	J	0.602	3		422	3		399	3
		1	U	**1.00**	1	U	**1.00**	1	U	0.0165	3	J	**0.0075**	2		0.448	3	J	0.702	3		360	2		406	3
		1	U	2.15	3		**1.00**	1	U	**0.0075**	2		0.0533	3		0.591	3		0.593	3		391	3		420	2
		3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.539	3		0.591	3		399	3		402	3
		2	J	2.88	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.622	3		0.559	3		399	3		389	3
		3		2.19	3	J+	2.85	3	J+	**0.0075**	2		**0.0075**	2		0.746	3		0.743	3		378	3		381	3
		3		**1.00**	1	U	**1.00**	1	U	0.0295	3	J	0.0351	3	J	0.748	3		0.573	3		391	3		380	2

| | | |

| | | |

										depends on Hardness				depends on Hardness																	
result > crit				result > crit						result > crit				result > crit																	
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF								
Iron						**Lead[4]**						**Magnesium**						**Manganese**													
Total				Dissolved		Total				Dissolved		Total				Dissolved		Total				Dissolved									
µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L									
178	3		186	3		**0.05**	1	U			R	23200	3		22600	3		113	3		128	3									
190	2		171	3		6.62	3			0.178	3	J+	26700	3		26300	3		125	3		131	3								
208	3		194	3		1.12	3			0.201	3		21500	3		24900	3		125	3		133	3								
161	3		147	3		0.376	3	J+		0.148	3	J+	22600	3		21800	3		136	3		131	3								
143	3		151	3		**0.050**	1	U		**0.050**	1	U	21900	3		22100	3		138	3		149	3								
314	3	J+	191	3	J+	**0.100**	1	U		**0.0310**	2		21300	3		22600	3		135	3		152	3								
261	3		258	3		**0.0155**	3			**0.050**	1	U	22100	3		21800	3		142	3		143	3								
154	3		141	3		0.118	3	J+		**0.0155**	3		19200	3		19100	3		143	3		142	3								
205	3		201	3		**0.0155**	3			**0.0155**	3		21600	3		23200	3		163	3		164	3								
259	3		308	3		**0.0155**	3			**0.0155**	3		20600	3		21300	3		142	3		140	2								
325	3		251	3		**0.0155**	3			**0.0155**	3		19500	3		20000	1		138	3		149	3								
300	1		308	3		0.0571	3	J		**0.0155**	3		19900	3		21700	3		132	3		146	3								
266	3		278	3		**0.0155**	3			**0.0155**	3		20400	3		22100	3		154	3		166	3								
165	3		169	3		**0.0155**	3			**0.0155**	3		20800	3		20600	3		148	3		150	2								
171	3		165	3		**0.0155**	3			**0.0155**	3		21900	3		21000	2		145	3		144	3								
203	3		194	3		0.0612	3	J		**0.0155**	3		19000	2		17800	3		147	3		147	3								
253	3		239	3		**0.0155**	3			**0.0155**	3		19900	3		20100	3		150	2		151	3								

CALC revised 2013																										
result > crit			result > crit												2013: DWS = NA				2013: DWS = NA							result > crit
result > crit																										
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.031	2		**0.031**	2		0.673	3	J			R		1.7	2	J			R	1060	3		1270	3		**0.0775**	3
0.00250	2	U	**0.000475**	4		3.18	3		0.726	3			1.22	3		1.34	3		1250	3		1200	2		**0.155**	3
0.000475	4		0.00100	1	J	0.646	3	J			R		1.43	3	J			R	1200	2		1260	3		**0.155**	3
0.000475	4		**0.000475**	4		0.711	3		0.693	3			1.16	3		1.19	3		1110	3		1090	3		**0.155**	3
0.000475	4		**0.000475**	4		0.746	3		0.814	3			1.12	3		1.13	3		1180	3		1360	3		**0.155**	3
0.000169	3		**0.000475**	4		0.696	3		0.773	3			1.88	3	J+	1.63	3	J+	1090	3		1160	3		**0.310**	2
0.000169	3		**0.000475**	4		0.691	3		0.722	3			1.35	3	J+	1.59	3	J+	1080	3		1070	3		**0.155**	3
0.00250	2	U	**0.000475**	4		0.733	3		0.728	3			1.50	2	J+	1.58	3	J+	1040	3		1030	3		**0.155**	3
0.000169	3		**0.000475**	4		0.743	3		0.758	3			1.48	3		1.55	3		1210	3		1230	3		**0.155**	3
0.00075	2		**0.00075**	2		0.655	3		0.664	3			0.994	3		1.13	3		1080	3		1090	3		**0.155**	3
0.00075	2		**0.00075**	2		0.768	3		0.676	3			1.31	3		1.09	3		1060	3		1080	3		**0.155**	3
0.00075	2		**0.00075**	2		0.626	3		0.669	3			1.19	3		1.24	3		1040	3		1130	3		**0.155**	3
0.00075	2		**0.00075**	2		0.654	3		0.687	3			1.72	3		1.66	3		1040	3		1120	3		**0.155**	3
0.00075	2		**0.00075**	2		0.667	3		0.627	3			0.691	3	J+	0.77	2	J+	1050	3		1060	3		**0.155**	3
0.00075	2		**0.00075**	2		0.636	3		0.607	3			1.63	3		1.2	2		1090	3		1050	3		**0.155**	3
0.00075	2		**0.00075**	2		0.682	3		0.645	3			1.71	3		1.6	2		1080	3		1080	3		**0.155**	3
0.00075	2		**0.00075**	2		0.643	3		0.647	3			1.66	3		1.52	3		1070	3		1060	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.310	2	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tin**								
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total							
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L							
6370	3		**0.0031**	2			**0.0031**	2		5210	3		6000	1		**0.0031**	2		**0.0031**	2		**0.031**	2						
5800	2		0.0172	3 J			**0.0031**	2		6580	3		6030	3		0.0220	2		**0.0025**	2		0.0952	3 J						
4130	3		**0.0031**	2			**0.0031**	2		6070	3		6200	2		**0.0025**	2		0.0112	3		0.0584	3 J						
5660	3		**0.0031**	2			**0.0031**	2		5620	3		5490	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
6430	3		**0.0031**	2			**0.0031**	2		5700	2		5640	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
6040	3		**0.0062**	2			**0.0062**	2		5760	3		6140	3		**0.0100**	1		**0.0100**	1		**0.100**	1						
5870	3		**0.0031**	2			**0.0031**	2		6010	3		5910	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5920	3		**0.0031**	2			**0.0031**	2		5670	3		5740	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
6820	3		**0.0031**	2			**0.0031**	2		6270	3		6460	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5890	3		**0.0031**	2			**0.0031**	2		5820	3		6040	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5820	3		**0.0031**	2			**0.0031**	2		5370	3		5480	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5800	2		**0.0031**	2			**0.0031**	2		5570	3		5920	3		**0.0050**	1		**0.0050**	1		0.116	3 J						
6470	3		**0.0031**	2			**0.0031**	2		5610	3		6060	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5640	3		**0.0031**	2			**0.0031**	2		5650	3		5510	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5590	3		**0.0031**	2			**0.0031**	2		5840	3		5680	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
5690	3		**0.0031**	2			**0.0031**	2		5280	3		5440	3		**0.0031**	2		**0.0031**	2		0.0639	3 J						
5620	3		**0.0031**	2			**0.0031**	2		5580	3		5750	3		**0.0031**	2		0.0216	3		**0.0310**	2						

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.031	2		**0.1**	1		**0.1**	1			6.19	3		7.08	3									
0.0155	3		**0.110**	2		**0.110**	2			11.5	3	J+	9.48	3	J+								
0.0155	3		**0.110**	2		**0.110**	2			10.8	3		11.9	3									
0.050	1		**0.250**	2		**0.250**	2			16.8	3	J+	15.6	3	J+								
0.050	1		**0.250**	2		**0.250**	2			**0.50**	1	U	**0.50**	1	U								
0.100	1		**0.310**	2		**0.310**	2			9.90	2	J+	7.65	3	J+								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	1.25	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.44	3	J+	1.45	3	J+								
0.050	1		**0.155**	3		**0.155**	3			2.43	3		2.37	3									
0.050	1		**0.155**	3		**0.155**	3			12.4	3	J		R									
0.050	1		**0.155**	3		**0.155**	3			2.53	3	J+	2.88	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.74	3	J+	1.13	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.16	3	J+	1.19	3	J+								
0.100	1	U	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			16.8	3	J+	15.5	3	J+								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	0.96	2	J								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								

	2	3	2	2	0	3	1	3	2	3	0	3
Mean	7.28		0.51		355		2		2.51		211	
Median	7.46		0.37		380		-17		2.58		207	
St. Deviation	0		0		76		91		0		11	
# of values	16		17		17		16		17		17	
Minimum	6.63		0.18		202		-124.4		1.92		199	
Maximum	7.85		1.46		455		185.5		3.54		239	
Lowest fifth percentile	7		0		208		-124		2		200	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

-1	2	0	3	2	2	1	2	0	3	4	3	4	3	4	3
400		211		0.3		5.7		225		0.061		0		0	
390		213		0.3		5.2		225		0.039		0		0	
40		17		0		3		6		0		0		0	
17		17		17		17		17		17		3		3	
335		170		0.0725		1.57		214		0.0155		0.0155		0.0155	
448		233		0.816		14.8		236		0.338		0.0155		0.0355	
347		186		0		2		216		0		0		0	
0		0		4		1		0		9		3		2	
				24%		6%				53%		100%		67%	
				10		14				6				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	2	3	2
0.0066		0	
0.0039		0	
0		0	
17		3	
0.00155		0.0155	
0.024		0.05	
0		0	
6		3	
35%		100%	
7			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4
0.657		0.074		2.43		0.00110		0.00104		0.29		1		0.0396
0.647		0.075		2.37		0.00075		0.00075		0.16		1		0.0420
0		0		0		0		0		0		0		0
17		17		17		17		17		17		7		17
0.502		0.05		1.99		0.00075		0.00075		0.14		0.277		0.0155
0.767		0.101		3.84		0.0025		0.0025		1.3		0.736		0.119
1		0		2		0		0		0		0		0
0		0		0		16		17		14		0		12
						94%		100%		82%				71%
		16				1				2		1		4
230		NA		NA		NA		0.0052		NA		NA		6.49
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	2	4	2	3	3	3	3	0	3	0	3
	3.10		2		0.0178		0.0338		0.398		0.413		386		397	
	2.19		1		0.0075		0.0338		0.366		0.484		380		397	
	3		2		0		0		0		0		33		26	
	17		17		17		16		17		17		17		17	
	1		1		0.0075		0.0075		0.125		0.155		330		358	
	13.2		9.42		0.0838		0.064		0.748		0.743		472		478	
	1		1		0		0		0		0		333		372	
	6		11		11		10		7		7		0		0	
	35%		65%		65%		63%		41%		41%					
	1				4		4		4		2					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0147		0.0129		0.01280		0.009		5		4.7		0.01070		0.010		49800	
0.0125		0.0125		0.00750		0.008		5		4.9		0.00750		0.008		49200	
0		0		0		0		1		1		0		0		2500	
17		17		17		17		17		17		17		17		17	
0.0075		0.0075		0.00155		0.005		2.5		2.5		0.0075		0.0075		46600	
0.0422		0.025		0.075		0.025		8		6.3		0.0272		0.0185		55200	
0		0		0		0		3		3		0		0		46920	
16		17		15		17		1		1		16		16		0	
94%		100%		88%		100%		6%		6%		94%		94%			
				1				10		11		1		1			
NA		NA		NA		NA		NA		NA		0.452		0.397		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
50600		0.229		0.474		0.262		0.268		0.440		0.268			
49300		0.152		0.474		0.260		0.264		0.250		0.250			
3100		0		0		0		0		1		0			
17		17		15		17		17		17		16			
46900		0.05		0.05		0.228		0.248		0.117		0.141			
56400		0.518		0.538		0.313		0.299		2.36		0.539			
47220		0		0		0		0		0		0			
0		6		6		0		0		4		4			
		35%		40%						24%		25%			
		3		3											
NA		10.98		10.56276		NA		NA		16.853		16.179			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%			

0	3	0	3	4	3	4	3	-2	3	-2	3	0	3	0	3
221		209		0.51		0.342		21300		21700		140		145	
205		194		0.05		0.342		21300		21800		142		146	
59		55		2		0		1800		2000		12		11	
17		17		17		16		17		17		17		17	
143		141		0.0155		0.0155		19000		17800		113		128	
325		308		6.62		0.201		26700		26300		163		166	
152		146		0		0		19160		18840		123		130	
0		0		11		13		0		0		0		0	
				65%		81%									
				2											
1000		1000		7.679		5.300		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	3	3	3	3	2	3	2	3	-1	3	-1	3	3	3
0.003		0.002		0.832		1.826		1.4		21.12		1100		1140		0.1600	
0.001		0.001		0.682		1.826		1.4		21.12		1080		1090		0.1550	
0		0		1		0		0		0		70		90		0	
17		17		17		15		17		15		17		17		17	
0.000169		0.0004745		0.626		0.607		0.691		0.77		1040		1030		0.0775	
0.031		0.031		3.18		0.814		1.88		1.66		1250		1360		0.31	
0		0		1		1		1		1		1040		1046		0	
17		16		0		0		0		0		0		0		17	
100%		94%														100%	
		1															
0.77		0.77		NA		NA		93.68		93.40		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.1600	
0.1550	
0	
17	
0.0775	
0.31	
0	
17	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
5860		0.0041		0.0033		5740		5850		0.0058		0.0063		0.059			
5820		0.0031		0.0031		5670		5910		0.0050		0.0050		0.050			
570		0		0		350		290		0		0		0			
17		17		17		17		17		17		17		17			
4130		0.0031		0.0031		5210		5440		0.0025		0.0025		0.031			
6820		0.0172		0.0062		6580		6460		0.022		0.0216		0.116			
5298		0		0		5266		5472		0		0		0			
0		16		17		0		0		16		15		13			
		94%		100%						94%		88%		76%			
		1												4			
NA		12.44582232		10.579		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	2	3	2	3
0.048		0.2		0.2		5.84		5.13	
0.050		0.2		0.2		2.43		1.96	
0		0		0		6		5	
17		17		17		17		16	
0.0155		0.1		0.1		0.5		0.5	
0.1		0.31		0.31		16.8		15.6	
0		0		0		1		1	
17		17		17		5		3	
100%		100%		100%		29%		19%	
								1	
NA		NA		NA		215.38		212.37	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-4AD																
Sample Date																
08/23/09	8.02	3	3.14	3		959	3		-58.3	3		4.46	3	287	3	
08/23/10	7.63	3	0.75	2		769	3		115.6	4		7.22	3	267	3	
08/27/11	7.74	3	2.62	3		569.1644	FALSE		-70.8	3		5.42	3	283	3	
08/26/12	7.97	3	1.98	3		725	3		-73.2	3		8.04	3	260	2	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
764	3		488	3		15.4	3		**1.57**	3		125	3		**0.050**	1 U						
730	2		497	3		30.3	3		**1.57**	3		121	3		**0.050**	1 U						
731	3		509	3		281	3		3.29	3 J		125	3		**0.0155**	3						
726	3		496	3		184	3		**5.0**	1 U		126	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0361	3				
	0.107	3				
	0.34	2				
	0.392	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.911	3		0.153	3		247	3		**0.00075**	2		**0.00075**	2		0.49	2 J		2.54	3		0.1			
0.933	3		0.178	3		249	3		**0.00075**	2		**0.00075**	2		0.46	2 J		0.57	2		**0.0155**			
1.15	3		0.164	3		254	3		**0.00075**	2		**0.00075**	2		**0.155**	3		1.98	3		0.0813			
0.919	3		0.165	3		244	3		**0.00075**	2		**0.00075**	2		**0.155**	3		1.52	3		0.0583			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum							**Antimony**						**Arsenic**						**Barium**			
			Total			Dissolved				Total			Dissolved			Total			Dissolved			Total			Dissolved
			µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
1		233	3		2.03	3	J+	0.071	2		0.0527	3			4.57	3		4.06	3		14.6	3		10.5	3
3		130	2		4.53	3	J+	0.0517	3		0.0295	3	J		3	1		2.63	3		12.7	3		10	1
3	J	5320	3		1990	3		**0.0300**	1		0.0272	3	J		6.56	3		5.03	3		76.2	3		32.5	3
3	J	2360	3		523	3		0.0601	3		0.0417	3	J		4.61	3		3.94	3		38.6	3		17.2	3

| | | |

| | | |

								depends on Hardness			depends on Hardness																
result > crit			result > crit					result > crit			result > crit																
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
384	3		**10.0**	1 U		0.146	3 J+		**0.0155**	3		22400	3		19700	3		530	2		471	3	
196	3		11.6	3 J		0.283	3		**0.0155**	3		21400	3		20500	3		254	3		164	3	
6830	3		2110	3		3.09	3		0.912	3		23300	3		21800	3		705	3		577	3	
3890	3		815	3		1.72	3		0.276	3		21200	3		19700	3		613	3		498	3	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013					depends on Total Ag																					
			result > crit					result > crit																					
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tin**								
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total							
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L							
5980	3		**0.0031**	2			**0.0031**	2		47700	3		41900	3		**0.0050**	1		**0.0050**	1		**0.100**	1 U						
6650	3		**0.0031**	2			**0.0031**	2		43500	3		42000	2		**0.0050**	1		**0.0050**	1		0.197	3 J						
10800	3		**0.0124**	3			0.0074	2 J		49400	3		48300	3		0.0322	3 J		0.0119	3 J		**0.124**	3						
8110	3		**0.0100**	1 U			**0.0031**	2		44700	3		43700	3		0.012	2 J		**0.0031**	2		**0.0310**	2						

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
					Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
		R	0.646	3	J	**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		0.467	3	J	**0.155**	3				7.07	3	J+		**1.55**	3	U	
0.0714	3	J	11.5	3		3.52	3				19.6	3			6.34	3		
0.0310	2		5.62	3		1.17	3				11	2			3.33	3		

	2	3	2	3	0	3	1	3	2	3	0	3
Mean	7.84		2.12		756		-21.7		6.29		274	
Median	7.86		2.30		747		-64.6		6.32		275	
St. Deviation	0		1		160		92		2		13	
# of values	4		4		4		4		4		4	
Minimum	7.63		0.75		569		-73.2		4.46		260	
Maximum	8.02		3.14		959		115.6		8.04		287	
Lowest fifth percentile	8		1		593		-73		5		261	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	3	0	3	1	3	2	3	0	3	3	2								
738		498		128.0		2.86		124		0.033		NA		NA					
731		497		107.0		2.43		125		0.033		NA		NA					
18		9		127		2		2		0		NA		NA					
4		4		4		4		4		4		0		0					
726		488		15.4		1.57		121		0.016		NA		NA					
764		509		281.0		5.00		126		0.050		NA		NA					
727		489		18		2		122		0		NA		NA					
0		0		0		3		0		4									
						75%				100%									
						1													
NA		NA		NA		NA		>=20		NA		NA		NA					
NA		500		NA		NA		NA		10		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					
0%		25%		0%		0%		0%		0%		NA		NA					

3	3		
0.2190		NA	
0.2240		NA	
0		NA	
4			0
0.0361		NA	
0.3920		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	3	0	3	5	2	5	2	3	3	2	3						4
0.978		0.165		249		0.00075		0.00075		0.32		1.65							0.1
0.926		0.165		248		0.00075		0.00075		0.31		1.75							0.1
0		0		4		0		0		0		1							0
4		4		4		4		4		4		4							4
0.911		0.153		244		0.00075		0.00075		0.16		0.57							0.0
1.150		0.178		254		0.00075		0.00075		0.49		2.54							0.1
1		0		244		0		0		0		1							0
0		0		0		4		4		2		0							1
						100%		100%		50%									25%
										2									2
230		NA		NA		NA		0.0052		NA		NA							3.79
250		4		250		NA		0.2		NA		NA							NA
0%		0%		0%		0%		0%		0%		0%							0%
0%		0%		25%		0%		0%		0%		0%							0%

3	-1	3	1	3	4	3	4	3	2	3	2	3	1	3	1	3	
	2011		629.90		0.053		0.0378		4.69		3.92		35.5		17.6		
	1297		263.80		0.056		0.0356		4.59		4.00		26.6		13.9		
	2434		939		0		0		1		1		30		11		
	4		4		4		4		4		4		4		4		
	130		2.03		0.030		0.0272		3.00		2.63		12.7		10.0		
	5320		1990.00		0.071		0.0527		6.56		5.03		76.2		32.5		
	145		2		0		0		3		3		13		10		
	0		0		1		0		0		0		0		0		
					25%												
							3										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	100%		50%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	1	3	1	3	3	2	4	2	-2	3
0.0920		0.0343		0.018		0.0075		21.9		21.6		0.0310		0.0150		73300	
0.0870		0.0125		0.018		0.0075		22.1		22.0		0.0290		0.0140		73200	
0		0		0		0		3		3		0		0		3800	
4		4		4		4		4		4		4		4		4	
0.0125		0.0125		0.008		0.0075		18.5		17.9		0.0075		0.0075		69100	
0.1810		0.0998		0.030		0.0075		25.0		24.7		0.0578		0.0250		77800	
0		0		0		0		19		18		0		0		69460	
2		3		3		4		0		0		2		3		0	
50%		75%		75%		100%						50%		75%			
1				1								1		1			
NA		NA		NA		NA		NA		NA		0.551		0.478		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	2	3	2	3	3	3	3	2	3	3	3
68600		1.630		0.550		1.680		0.505		3.500		1.330	
68400		1.040		0.290		1.330		0.353		2.710		1.020	
2800		2		1		2		0		3		1	
4		4		4		4		4		4		4	
65500		0.050		0.050		0.277		0.126		0.784		0.536	
72200		4.410		1.550		3.790		1.190		7.790		2.720	
65875		0		0		0		0		1		1	
0		2		2		0		0		0		0	
		50%		50%									
NA		10.98		10.56276		NA		NA		21.180		20.333	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

-1	3	1	3	3	3	4	3	-2	3	-2	3	0	3	0	3
2825		737.0		1.310		0.3050		22100		20400		526		428	
2137		413.0		1.000		0.1460		21900		20100		572		485	
3165		991		1		0		1000		1000		195		181	
4		4		4		4		4		4		4		4	
196		10.0		0.146		0.0155		21200		19700		254		164	
6830		2110.0		3.090		0.9120		23300		21800		705		577	
224		10		0		0		21230		19700		295		210	
0		1		0		2		0		0		0		0	
		25%				50%									
		1													
1000		1000		10.793		7.028		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
50%		25%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

4	3	5	3	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3
0.0279		0.00188		4.2		4.78		3.84		2.16		3160		2850		0.271	
0.0189		0.00155		3.9		4.78		3.35		2.07		3040		2770		0.155	
0		0		1		0		3		1		370		240		0	
4		4		4		2		4		4		4		4		4	
0.0018		0.00075		3.6		4.73		1.59		1.21		2860		2680		0.155	
0.0722		0.00367		5.2		4.83		7.05		3.31		3700		3190		0.620	
0		0		4		5		2		1		2884		2683		0	
0		2		0		0		0		0		0		0		4	
		50%														100%	
1		2															
0.77		0.77		NA		NA		117.47		117.11		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
4	
0.155	
0.155	
0	
4	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-2	3	-2	3	3	2	4	2	3	3
7890		0.0070		0.0042		46300		44000		0.0140		0.0060		0.110	
7380		0.0070		0.0031		46200		42900		0.0090		0.0050		0.110	
2140		0		0		2700		3000		0		0		0	
4		4		4		4		4		4		4		4	
5980		0.0031		0.0031		43500		41900		0.0050		0.0031		0.031	
10800		0.0124		0.0074		49400		48300		0.0322		0.0119		0.197	
6081		0		0		43680		41915		0		0		0	
0		4		3		0		0		2		3		3	
		100%		75%						50%		75%		75%	
				1						2		1		1	
NA		19.71351756		16.756		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
1.29		4.560		1.250		9.80		3.19	
1.29		3.130		0.660		9.00		2.44	
0		5		2		8		2	
3		4		4		4		4	
1.29		0.467		0.155		1.55		1.55	
1.29		11.500		3.520		19.60		6.34	
0		0		0		2		2	
2		0		2		1		2	
67%				50%		25%		50%	
1		2							
NA		NA		NA		270.15		266.37	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-4AS																
Sample Date																
11/08/05	7.35	3	11.7	3		150	2		182	3		2.86	3	46.4	3	
03/09/06	6.56	3	8.03	3		104	3		124	3		2.88	3	43.0	2	
05/20/06	5.94	3	1.63	3		236	3		224	3		3.04	3	92.3	3	
08/19/06	6.3	2	6.95	3		129	3		167.9	4		3.55	3	52.6	3	
10/26/06	6.99	3	4.09	3		225	3		192.2	4		2.99	3	90.3	3	
03/16/07	5.9	2	5.47	3		70	1		213.3	4		2.24	3	54.6	3	
05/13/07	6.2	2	1.53	3		124	3		162.6	4		3.15	3	96.1	3	
08/18/07	6.12	3	7.11	3		70	1		158.3	4		3.83	3	43.2	3	
11/09/07	6.26	3	5.5	2		147	3		102	3		3.17	3	59.2	3	
03/26/08	6.9	2	4.98	3		133	3		153.6	4		3.19	3	50.2	3	
05/20/08	6.16	3	1.5	2		256	3		177.1	4		3.62	3	97.6	3	
08/26/08	6.17	3	7.06	3		127	3		166.1	4		3.59	3	49.8	3	
10/21/08	6.16	3	4.77	3		193	3		222.1	4		2.87	3	81.7	3	
08/23/09	6.43	3	7.13	3		209	3		81.3	3		3.47	3	54.9	3	
08/22/10	7.03	3	6.03	3		158	3		134.5	4		3.25	3	59.6	3	
08/26/11	5.93	3	4.61	3		172.152	FALSE		162.3	4		3.27	3	82.8	3	
08/25/12	6.17	3	5.73	3		170	2		144.3	4		3.14	3	64.4	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
140	2		92.5	3		2	1		11.5	3		25	2		0.11	2						
125	3		77.5	3		**0.150**	2		8.50	2		88.0	2		0.109	3						
230	2		190	2		0.200	1	J	15.8	3		37.0	2		**0.0155**	3						
160	2		129	3		0.200	1	J	13.0	2		30.0	1		**0.0155**	3		**0.0155**	3		**0.0155**	3
210	2		165	3		0.300	1	J	13.3	3		28.5	3		0.0670	2	J	**0.0155**	3		0.0670	2
120	2		95.0	2		**0.075**	2		15.8	3		29.0	2		0.0815	3	J	**0.0155**	3		0.0690	2
235	3		144	3		0.800	1	J	16.5	3		41.0	2		0.235	3	J-					
125	3		75.0	2		0.300	1	J	19.5	3		27.5	3		0.0885	3	J					
120	2		126	3		0.400	1	J	12.5	3		27.8	3		0.0625	3	J					
152	3		103	3		0.821	3		7.12	3	J	28.7	3		0.131	3						
261	3		165	3		0.6	1		18.5	3		36.4	3		0.0595	3	J					
148	3		133	3		0.5	1	J	9.42	3	J	26.1	3		0.114	3						
230	2		148	3		**0.0775**	3		**1.57**	3		32.9	3		0.059	2	J					
170	2		111	3		**0.0785**	3		7.7	2	J	25	2		0.0945	3	J					
185	3		141	3	J	2.44	3		7.44	3	J	28	2		**0.050**	1	U					
223	3		152	3		**0.075**	2		12.4	3		28.5	3		**0.050**	1	U					
176	3		93	2		**0.0755**	3		7.2	2	J	23.3	3		0.556	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.069	2				
	0.0630	2				
	0.0520	2				
	0.0640	2				R
J	0.0666	3				R
J	0.0520	2				R
	0.0372	3				
	0.0417	3				
	0.0472	3				
	0.0377	3				
	0.0331	3				
	0.0283	3				
	0.0299	3				
	0.0479	3				
	0.0274	3				
	0.0222	3				
	0.0235	3				

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.689	3		0.215	3		42.9	3		**0.00125**	3		**0.00125**	3		0.14	2	J				**0.0155**			
0.717	3		0.111	3		32.7	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.795	3		0.152	3		79.9	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0370			
0.804	3		0.163	3		55.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.810	2		0.201	3		83.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.655	3		0.119	3		34.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.835	3		0.118	3		71.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.702	3		0.124	3		32.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0649			
0.751	3		0.126	3		50.0	1		0.0015	2	J	**0.00075**	2		**0.155**	3					**0.0155**			
0.708	3		0.112	3		36.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.746	3		0.103	3		81.6	3		**0.0025**	2	U	0.0065	2		0.31	2	J	**0.075**	2		**0.0155**			
0.742	3		0.139	3		38.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.673	3		0.129	3		64.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.639	3		0.113	3		44	2		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.166	3	J	**0.050**			
0.685	3		0.159	3		58.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.751	3		0.14	2		71.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.569	3		0.125	3		52.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	106	3	4.3	2 J+	0.0158	3 J+	0.0104	3 J+	0.605	3	**0.25**	2 U	12.9	3	13.1	3							
		1 U	6.61	3 J+	**1.00**	1 U	0.0298	3 J	0.0240	2 J	0.800	1	0.421	3 J	12.0	2	10.9	3							
		2 J	12.8	3	3.36	3	0.0352	3 J	0.0404	3 J	**0.155**	3	0.315	3 J	23.9	3	26.6	3							
		3	7.10	2 J+	2.64	3 J+	0.0268	3 J	0.0214	3 J	0.550	2	0.534	3	13.8	3	14.3	3							
		1 U	14.6	3	5.18	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	22.2	3	22.0	2							
		3	5.06	3 J+	2.76	3 J+	**0.0250**	2 U	**0.0250**	2 U	0.438	3 J	0.482	3 J	12.5	3	13.0	2							
		3	13.8	3 J+	**1.00**	1 U	0.0344	3 J	0.0346	3 J	**0.155**	3	**0.155**	3	25.3	3	25.2	3							
		3 J	14.5	3 J+	2.22	3 J+	0.0240	2 J	0.0224	3 J	0.319	3 J	**0.155**	3	12.2	3	12.5	3							
		3	9.44	3	**1.00**	1 U	0.0250	2 J	**0.0075**	2	**0.155**	3	**0.155**	3	15.9	3	16.7	3							
		3	54.7	3	1.78	3 J	0.0245	3 J	0.0208	3 J	**0.155**	3	**0.155**	3	14.6	3	14.6	3							
		3	4.34	3 J+	2.3	2 J+	0.0171	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	28.1	3	29.3	3							
		1 U	2.15	3	**1.00**	1 U	0.0213	3 J	0.0215	3 J	**0.155**	3	**0.155**	3	13.5	3	13.8	3							
		1 U	3.79	3	1.6	2 J	**0.0075**	2	**0.0250**	2 U	**0.155**	3	**0.155**	3	20.4	3	23.2	3							
		1 U	2.08	3 J		R	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	14.9	3	15.1	3							
		3	11.6	3 J+	**1.00**	1 U	0.0178	3 J	0.015	2 J	**0.155**	3	**0.155**	3	15	2	16	2							
		3	3.47	3 J+	2.35	3 J+	**0.0075**	2	**0.0075**	2	0.189	3 J	0.246	3 J	21.2	3	21.8	3							
		3	2.29	3	**1.00**	1 U	0.019	2 J	0.0179	3 J	**0.075**	2	0.255	3 J	17.1	3	17.4	3							

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CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.031	2		**0.031**	2		0.368	3	J+	0.416	3	J+	4.05	3		3.7	2		1270	3		1290	3		**0.0775**	3
0.00250	2	U	**0.00250**	2	U	0.449	3		0.328	3		5.36	3		4.49	3		1240	3		1240	3		**0.155**	3
0.000475	4		0.00102	3	J	0.163	3		0.189	3		5.30	2		5.69	3		1760	3		2000	1		**0.155**	3
0.000475	4		**0.000475**	4		0.252	3		0.243	3		3.40	2		3.33	3		1380	3		1390	3		**0.155**	3
0.000475	4		**0.000475**	4		0.189	3		0.217	3		4.54	3		4.39	3		1590	3		1690	3		**0.155**	3
0.000169	3		**0.000475**	4		0.137	3		0.163	3		3.33	3	J+	3.42	3	J+	1380	3		1260	3		**0.155**	3
0.000169	3		**0.000475**	4		0.153	3		0.150	2		5.23	3	J+	5.06	3	J+	1690	3		1670	3		**0.155**	3
0.00250	2	U	**0.000475**	4		0.174	3		0.173	3		3.08	3		3.45	3		1070	3		1250	3		**0.155**	3
0.000169	3		**0.000475**	4		0.173	3		0.177	3		3.57	3		3.61	3		1380	3		1410	3		**0.155**	3
0.00075	2		**0.00075**	2		0.153	3		0.154	3		4.22	3		3.87	3		1250	3		1290	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0941	3		0.0745	3		5.88	3		6.14	3		1660	3		1740	3		**0.155**	3
0.00075	2		**0.00075**	2		0.135	3		0.145	3		3.27	3		3.25	3		1230	3		1270	3		**0.155**	3
0.00075	2		**0.00075**	2		0.195	3		0.225	3		4.54	3		4.91	3		1550	3		1700	2		**0.155**	3
0.00075	2		**0.00075**	2		0.148	3		0.111	3		3.28	3	J+	3.19	3	J+	1280	3		1310	3		**0.155**	3
0.00075	2		**0.00075**	2		0.153	3		0.133	3		3.82	3		3.69	3		1360	3		1390	3		**0.155**	3
0.00075	2		**0.00075**	2		0.267	3		0.156	3		5.79	3		5.01	3		1580	3		1600	2		**0.155**	3
0.00075	2		**0.00075**	2		0.124	3		0.128	3		5.34	3		4.76	3		1440	3		1440	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon				**Silver[8]**						**Sodium**						**Thallium**								**Tir**					
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total								
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L								
10600	3		**0.0031**	2		**0.0031**	2		6570	3		6590	3		**0.0031**	2		**0.0031**	2		**0.031**	2							
9310	3		**0.0031**	2		**0.0031**	2		5430	3		5430	3		0.0054	2	J	**0.0025**	2		**0.0155**	3							
10600	3		**0.0031**	2		**0.0031**	2		6490	3		7530	3		**0.0025**	2		**0.0025**	2		**0.0155**	3							
9970	3		**0.0031**	2		**0.0031**	2		5270	3		5260	3		0.0126	3	J	0.0150	2	J	**0.050**	1							
10700	3		**0.0031**	2		**0.0031**	2		6550	3		6780	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
9230	3		**0.0031**	2		**0.0031**	2		4620	3		4230	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
10600	3		**0.0031**	2		**0.0031**	2		5830	3		5760	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
10500	3		**0.0031**	2		**0.0031**	2		3940	3		4260	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
10500	3		**0.0031**	2		**0.0031**	2		4380	3		4500	2		**0.0050**	1		**0.0050**	1		**0.050**	1							
10800	3		**0.0031**	2		**0.0031**	2		4010	3		4320	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
11600	3		**0.0031**	2		**0.0031**	2		5010	3		5260	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
9890	3		**0.0031**	2		**0.0031**	2		3820	3		3950	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
11200	3		**0.0031**	2		**0.0031**	2		5520	3		6010	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
9880	3		**0.0031**	2		**0.0031**	2		3820	3		3940	3		**0.0050**	1		**0.0050**	1		0.288	3	J+						
10400	3		**0.0031**	2		**0.0031**	2		4430	3		4670	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
10600	3		**0.0031**	2		**0.0031**	2		5010	3		5060	3		**0.0031**	2		**0.0031**	2		0.0686	3	J						
10800	3		**0.0031**	2		**0.0031**	2		4510	3		4560	3		**0.0031**	2		**0.0031**	2		**0.0310**	2							

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.031	2		1.64	3		1.18	3			2.88	3		2.84	3									
0.0155	3		1.21	3		1.03	3			3.25	3	J+	3.45	3	J+								
0.0155	3		1.42	3		1.38	3			2.66	3	J+	3.25	3	J+								
0.050	1		1.76	3		1.51	3			2.32	3	J+		R									
0.050	1		0.549	3	J	0.773	3	J		1.98	3	J+	2.31	3	J+								
0.050	1		1.27	3		0.990	2	J		3.03	3	J+	2.90	2	J+								
0.050	1		0.714	3	J	0.718	3	J		2.68	3	J+	2.50	2	J+								
0.050	1		1.09	3		0.751	3	J		1.65	3	J+	2.42	3	J+								
0.050	1		1.05	3		0.976	3	J		2.49	3		2.92	3									
0.050	1		0.890	2	J	0.679	3	J		2.03	3		2.17	3									
0.050	1		0.552	3	J	0.636	3	J		3.65	3	J+	3.74	3	J+								
0.050	1		0.642	3	J	0.599	3	J		1.53	3	J+	1.64	3	J+								
0.050	1		0.715	3	J	0.791	3	J		2.57	3	J+	2.56	3	J+								
0.050	1		0.528	3	J	0.574	3	J		**1.55**	3	U	**1.55**	3	U								
0.050	1		0.628	3	J	0.613	3	J		**1.55**	3	U	**1.55**	3	U								
0.0310	2		0.787	3	J	0.698	3	J		6.02	3		3.25	3									
0.0310	2		0.429	3	J	0.493	3	J		**1.55**	3	U	**1.55**	3	U								

		2	3	2	3	0	3	1	4	2	3	1	3		
Mean		6.39		5.5		157		163		3.18		65.8			
Median		6.20		5.5		150		163		3.17		59.2			
St. Deviation		0		3		54		39		0		20			
# of values		17		17		17		17		17		17			
Minimum		5.90		1.5		70		81		2.24		43.0			
Maximum		7.35		11.7		256		224		3.83		97.6			
Lowest fifth percentile		6		2		70		98		3		43			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		71%		0%		0%		0%		0%		0%			
% of DWS exceedences		18%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		2	2		1	3		1	3		4	3		4	3		3	2
177			126.0			1			11.6			33			0.11			0			0	
170			129.0			0			12.4			29			0.08			0			0	
46			33			1			5			15			0			0			0	
17			17			17			17			17			17			3			3	
120			75.0			0			1.6			23			0.02			0.0155			0.0155	
261			190.0			2			19.5			88			0.56			0.0155			0.069	
120			77			0			6			25			0			0			0	
0			0			6			1			0			4			3			1	
						35%			6%						24%			100%			33%	
						7			5						7						2	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3		
0.044		NA	
0.042		NA	
0		NA	
17			0
0.022		NA	
0.069		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
Total Phosphorus				**Orthophosphate**		
mg/L				mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	3		1	3		5	2		5	2		3	3		2	2		4
0.722			0.138			54.7			0.00109			0.00118			0.16			0			0.0298
0.717			0.126			52.7			0.00075			0.00075			0.16			0			0.0155
0			0			18			0			0			0			0			0
17			17			17			17			17			17			7			17
0.569			0.103			32.3			0.00075			0.00075			0.14			0.075			0.0155
0.835			0.215			83.4			0.00250			0.00650			0.31			0.25			0.0649
1			0			33			0			0			0			0			0
0			0			0			16			16			15			6			15
									94%			94%			88%			86%			88%
									1						2			1			2
230			NA			NA			NA			0.0052			NA			NA			6.97
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			6%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3	2	3	1	2	4	3	3	2	3	3	3	3	1	3	1	3									
	16		2.2		0.0203		0.0190		0.266		0.24		17.4		18.0										
	7		2.0		0.0213		0.0210		0.155		0.16		15.0		16.0										
	26		1		0		0		0		0		5		6										
	17		16		17		17		17		17		17		17										
	2		1.0		0.0075		0.0075		0.075		0.16		12.0		10.9										
	106		5.2		0.0352		0.0404		0.800		0.53		28.1		29.3										
	2		1		0		0		0		0		12		12										
	0		6		5		7		11		11		0		0										
			38%		29%		41%		65%		65%														
			2		11		9		3		5														
	87		87		NA		NA		150		150		NA		NA										
	NA		NA		6		NA		10		NA		2,000		NA										
	6%		0%		0%		0%		0%		0%		0%		0%										
	0%		0%		0%		0%		0%		0%		0%		0%										
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit												

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	3	-2	3						
0.0129		0.0121		0.00820		0.01000		2.0		1.95		0.01180		0.01260		17500							
0.0125		0.0125		0.00750		0.00750		1.3		1.55		0.00750		0.01250		15500							
0		0		0		0		1		1		0		0		5300							
17		17		17		17		17		17		17		17		17							
0.0075		0.0075		0.00155		0.00155		0.8		0.75		0.00750		0.00750		11100							
0.0250		0.0125		0.02500		0.03810		4.5		3.29		0.02320		0.02200		25900							
0		0		0		0		1		1		0		0		11180							
17		17		17		16		10		9		14		12		0							
100%		100%		100%		94%		59%		53%		82%		71%									
						1		7		8		3		5									
NA		NA		NA		NA		NA		NA		0.145		0.137		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE N	BE NSF	BE NVF	BE F	BE FSF	BE FVF	BI N	BI NSF	BI NVF	BI F	BI FSF	BI FVF	B N	B NSF	B NVF	B F	B FSF	B FVF	CD N	CD NSF	CD NVF	CD F	CD FSF	CD FVF	CA N	CA NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved				Total	
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3	2	3	3	3	4	3	4	3	3	3	3	3								
18200		2.01		0.62		0.063		0.052		1.139		0.852									
16600		1.50		0.53		0.049		0.036		0.892		0.764									
5900		1		0		0		0		1		0									
17		17		17		17		17		17		17									
11100		0.77		0.30		0.024		0.024		0.451		0.367									
27400		6.39		1.52		0.271		0.215		2.350		1.990									
12140		1		0		0		0		1		0									
0		0		0		0		0		0		0									
NA		10.98		10.56276		NA		NA		4.550		4.368									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness				depends on Hardness						depends on Hardness									
		result > crit				result > crit						result > crit									

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
1	3	1	3	4	3	4	3	-1	3	-1	3	2	3	2	3								
57		29.4		0.066		0.041		5380		5630		1.83		1.28									
42		12.0		0.038		0.016		4580		4760		1.40		1.13									
44		26		0		0		1560		1710		1		0									
17		17		17		16		17		17		17		16									
10		7.3		0.016		0.016		3670		3900		0.90		0.82									
161		80.0		0.446		0.192		8000		9050		4.05		2.08									
16		9		0		0		3678		3956		1		1									
1		4		11		13		0		0		0		0									
6%		24%		65%		81%																	
1		6		2																			
1000		1000		1.092		0.997		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit												result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
5	2		5	2		3	3		3	3		2	3		2	3		-1	3		-1	3		3	3
0.003			0.003			0.196			0.187			4.35			4.2			1420			1470			0.1500	
0.001			0.001			0.163			0.163			4.22			3.9			1380			1390			0.1550	
0			0			0			0			1			1			190			220			0	
17			17			17			17			17			17			17			17			17	
0.000			0.000			0.094			0.075			3.08			3.2			1070			1240			0.0775	
0.031			0.031			0.449			0.416			5.88			6.1			1760			2000			0.1550	
0			0			0			0			3			3			1198			1248			0	
17			16			0			0			0			0			0			0			17	
100%			94%																					100%	
			1																						
0.77			0.77			NA			NA			25.62			25.55			NA			NA			5	
2			2			NA			NA			NA			NA			NA			NA			50	
0%			0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%			0%	
CALC revised 2013												2013: DWS = NA			2013: DWS = NA										
result > crit			result > crit									result > crit			result > crit									result > crit	

	3	3
	0.1500	
	0.1550	
	0	
	17	
	0.0775	
	0.1550	
	0	
	17	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

| | | |

| | | |

PQ-4

Sample Date												
11/09/05	6.31	3	0.75	2	109	3	164	3	1.78	3	28	2
03/09/06	6.33	3	0.34	2	85	2	155	3	1.94	3	24.0	2
05/19/06	5.4	2	0.32	2	97	2	202.7	4	2.67	3	24.2	3
08/18/06	5.55	3	0.28	2	92	2	153.3	4	3	1	22.3	3
10/28/06	5.38	3	0.95	2	97	2	188.7	4	2.45	3	21.4	3
03/16/07	4.39	3	0.27	2	50	1	161	3	2.1	2	24.9	3
05/12/07	4.68	3	0.35	2	54	2	182.3	4	3.34	3	7.43	3
08/18/07	4.55	3	0.24	2	52	2	175.8	4	2.99	3	21.2	3
11/17/07	4.87	3	0.83	2	92	2	192.8	4	1.98	3	25.5	3
03/25/08	5.23	3	0.58	2	94	2	150.8	4	2.64	3	22.5	3
05/24/08	4.63	3	0.16	2	97	2	150	2	2.71	3	23.3	3
08/28/08	4.38	3	1.22	3	93	2	70.2	3	2.84	3	22.8	3
10/21/08	4.94	3	0.38	2	97	2	212.9	4	2.4	2	22	2
08/25/09			0.75	2	177	3		R	2.69	3	21.6	3
08/22/10	4.78	3	0.1	1 Q	114	3	202.5	4	3.12	3	21.5	3
08/27/11	3.98	3	2.62	3	78.804	FALSE	168.1	4	3.36	3	23.5	3
08/29/12	4.66	3	0.02	1	98	2	205.5	4	3.01	3	22.2	3

100	1	104	3	19.1	3	17.1	3	25	2	**0.05**	1 U				
105	3	80.0	1	1.22	3	19.5	3	1.55	3	0.144	3				
100	1	60.0	1	**0.075**	2	12.5	3	1.55	3	0.0335	3 J				
900	1	106	3	0.300	1 J	23.5	3	1.55	3	**0.0155**	3	**0.050**	1 U	**0.0155**	3
90.0	1	82.5	3	**0.075**	2	25.0	2	1.55	3	**0.0155**	3	**0.0155**	3	**0.0155**	3
80.0	1	82.5	3	0.200	1 J	27.0	2	1.55	3	0.0440	2 J	**0.0155**	3	0.0360	2
27.0	2	23.8	3	0.200	1 J	6.00	1 J	7.00	1 J	0.371	3				
95.0	2	72.5	3	0.400	1 J	41.5	3	1.55	3	**0.0155**	3				
95.0	2	80.0	1	**0.094**	2	19.8	3	1.55	3	**0.0155**	3				
102	3	87.5	3	0.600	1	15.2	3	1.55	3	0.167	3				
94.4	3	96.3	3	0.3	1 J	12	2	1.55	3	0.126	3				
96	2	68.8	3	**0.1665**	4	13.4	3	1.55	3	**0.0100**	1 U				
102	3	67.5	3	**0.0785**	3	17.4	3	1.55	3	**0.0155**	3				
108	3	87.5	3	0.404	3 J	22.6	3	1.55	3	0.066	2 J				
100	1	63	2	0.205	3 J	14.6	3	1.55	3	**0.0155**	3				
98.5	3	89	2	0.404	3 J	17.2	3	1.55	3	**0.0155**	3				
98.8	3	69	2	0.882	3	13.1	3	1.55	3	**0.050**	1 U				

	0.56	2				
	0.143	3				
	0.118	3				
	0.129	3	J-			R
	0.149	3	J-	0.170	2	J+
J	0.137	3	J-			R
	0.0065	2	J			
	0.135	3				
	0.135	3				
	0.125	3				
	0.132	3				
	0.124	3				
	0.118	3				
	0.134	3				
	0.139	3				
	0.132	3				
	0.147	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.883	3	0.067	2 J	38.8	3	**0.0025**	2 UJ	**0.00125**	3	0.36	2 J				**0.0155**
0.888	3	0.0840	2 J	50.4	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
0.813	3	0.154	3	41.3	3	**0.00125**	3	**0.0025**	2 UJ	**0.155**	3				**0.050**
0.837	3	0.114	3	43.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.686	3	0.0650	2 J	35.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.716	3	0.0640	2 J	34.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.946	3	0.0340	2 J	2.76	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.682	3	0.0620	2 J	35.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0640
0.714	3	0.0720	2 J	36.0	2	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.708	3	0.0690	2 J	35.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.741	3	0.063	2 J	35.6	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	**0.250**	2 U		**0.0155**
0.751	3	0.082	2 J	38.2	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.792	3	0.073	2 J	35.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.532	3	0.076	2 J	36.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.295	3 J		0.0373
0.883	3	0.108	3	35.2	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.832	3	0.078	2 J	35.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.713	3	0.079	2 J	35.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	1370	3	92.5	3	0.268	3 J+	0.244	3 J+	10.6	3	9.89	3	7.19	3	6.17	3
1 U	199	3	152	3	0.328	3	0.275	3	10.8	3	9.15	3	3.56	3	3.20	2
1 UJ	197	3	219	3	0.246	3 J		R	7.91	3	8.80	2	2.73	3 J		R
3	180	2	186	3	0.218	3	0.259	3	7.42	3	8.83	3	2.37	3	2.60	2
3	156	3	151	3	0.254	3 J+	0.255	3 J+	7.43	3	7.75	3	2.40	2 J+	2.52	3 J+
3	241	3 J+	216	3 J+	0.368	3	0.254	3	7.65	3	7.33	3	2.52	3 J+	2.38	3 J+
3	11.5	3 J+	4.48	3 J+	**0.0075**	2	0.0152	3 J	**0.155**	3	**0.155**	3	4.94	3	5.15	3
2 J	215	3	216	3	0.222	3	0.239	3	6.93	3	7.59	3	2.12	3	2.21	3
3	229	3	216	3	0.256	3	0.230	2	7.49	3	7.08	3	2.29	3	2.14	3
3	192	3	197	3	0.211	3	0.218	3	7.03	3	7.07	3	2.01	3	2.09	3
3	214	3	212	3	0.124	3	0.117	3	7.15	3	7.15	3	2.11	3	2.08	3
3	203	3	205	3	0.228	3	0.237	3	7.23	3	7.3	2	2.08	3	2.08	3
1 U	203	3	214	3	0.203	3	0.239	3	7.01	3	7.61	3	1.86	3	2.02	3
3 J	191	3	201	3	0.211	3	0.219	3	6.43	3	6.51	3	1.91	3	2.06	3
3	207	3	235	3	0.229	3	0.23	2	6.65	3	6.81	3	1.8	2 J+	1.99	3 J+
3	228	3	224	3	0.222	3 J		R	7.21	3	7.14	3	1.99	3	1.89	3
3	212	3	195	3	0.28	2	0.228	3	6.94	3	6.34	3	2.32	3	2.04	3

0.0878	3	0.061	2	**0.00155**	3	**0.00155**	3	3.8	2 J	**1.55**	3	0.113	3 J		R	7650	3
0.0620	2	0.0380	2	**0.0250**	2 U	**0.0250**	2 U	3.58	3 J	1.53	3 J	0.329	3	0.308	3	6730	3
0.0274	3 J	0.0502	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	0.251	3	0.256	3	6810	3
0.0430	2 J	0.0348	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.234	3	0.272	3	6180	3
0.0125	3	0.0358	3 J	0.0152	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	0.214	3	0.231	3	6010	3
0.0250	2	**0.0250**	2	**0.0150**	2	**0.0150**	2	**2.50**	2	**2.50**	2	0.274	3	0.246	3	6870	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	2250	3
0.0456	3 J	0.0462	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.228	3	0.254	3	5760	3
0.0424	3 J	0.0444	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.256	3	0.247	3	7030	3
0.0250	2 U	**0.0250**	2 U	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.240	2	0.241	3	6260	3
0.0287	3 J	0.0294	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.256	3	0.243	3	6330	3
0.0358	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.259	3	0.266	3	6190	3
0.0447	3 J	0.0361	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.237	3	0.26	2	5910	3
0.0274	3 J	0.0294	3 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.234	3 J+	0.229	3 J+	5990	3
0.0328	3 J	0.034	2 J	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.242	3	0.246	3	5780	3
0.0425	3 J	0.0387	3 J	**0.0075**	2	**0.0075**	2	2.19	3 J	1.93	3 J	0.247	3	0.254	3	6290	3
0.0464	3 J	0.0387	3 J	**0.0075**	2	**0.0075**	2	1.98	3 J	1.95	3 J	0.254	3	0.245	3	5990	3

7300	2	1.16	3	0.442	3	3.81	3	3.54	3	569	3	476	3
6060	3	0.889	3 J+	0.660	2 J+	3.34	3	3.09	3	962	3	898	3
6140	3	0.587	3	**0.050**	1	3.28	3	3.13	3	1030	3	943	3
6920	3	0.885	3 J+	0.306	3 J+	3.08	3	3.45	3	1010	3	1090	3
6140	3	**0.050**	1	**0.050**	1	3.40	2	3.50	2	1030	3	1040	3
6900	2	2.25	3 J+	0.677	3 J+	3.50	2	3.19	3	1180	3	1060	3
2500	2	3.65	3	0.568	3	0.0308	3 J+	0.0262	3 J+	0.416	3 J+	0.317	3 J+
6590	3	0.832	3	0.526	3	3.10	2	3.62	3	1110	3	1210	3
6660	3	0.869	3 J+	0.496	3 J+	3.53	3	3.37	3	1050	3	1100	2
6320	3	0.738	3	0.443	3	3.26	3	3.28	3	1090	3	1160	3
6240	3	0.54	2	0.396	3	3.34	3	3.28	3	1100	2	1080	3
6290	3	0.562	3	0.407	3	3.37	3	3.4	2	1130	3	1150	3
6460	3	0.262	3	0.266	3	3.19	3	3.51	3	1040	3	1120	3
5970	3	0.787	3	0.435	3	3.12	3 J+	3.06	3 J+	1090	3	1050	3
6160	3	1.16	3 J+	0.731	3 J+	3.1	2 J+	3.26	3 J+	1120	3	1170	3
6220	3	0.753	3	0.595	3	3.34	3	3.33	3	1180	3	1150	3
5760	3	0.404	3	0.109	3 J	4.56	3	3.82	3	1130	3	1050	3

1670	3	1370	3	0.941	3 J+	0.218	3 J+	2150	3	1790	3	66.2	3	63.1	3
943	3	799	3	0.958	3 J+		R	1760	3	1770	3	51.7	3	46.2	3
797	3	739	3	0.205	3	0.161	3	1750	3	1640	3	48.1	3	47.5	3
699	3	762	3	0.174	3 J+	0.187	3 J+	1660	3	1870	3	49.7	3	55.1	3
718	3	756	3	0.115	3 J+	0.123	3 J+	1550	3	1500	2	51.6	3	54.6	3
750	2 J+	674	3 J+	**0.100**	1 U	**0.100**	1 U	1890	3	1920	3	51.5	3	47.1	3
24.2	3	**10.0**	1 U	**0.050**	1 U	**0.050**	1 U	439	3	486	3	0.941	3 J+	0.908	3 J+
564	3	667	3	0.152	3 J+	0.173	3 J+	1670	3	1810	3	45.1	3	53.0	2
676	3	637	3	**0.050**	1 U	**0.050**	1 U	1920	3	1920	3	53.8	3	49.9	3
609	3	617	3	0.0752	3 J	0.0709	3 J	1660	3	1740	3	47.8	3	48.2	3
590	2	576	3	**0.050**	1 U	**0.050**	1 U	1810	3	1800	2	48.3	3	47.5	3
593	3	605	3	0.0762	3 J	0.103	3	1770	3	1740	3	48.6	3	49.7	3
573	3	624	3	**0.050**	1 U	**0.050**	1 U	1760	3	1880	3	47.9	3	52	2
487	3	494	3	**0.050**	1 U	**0.050**	1 U	1610	3	1690	3	43.2	3	43.5	3
503	3	535	3	0.0478	3 J	0.0371	3 J	1720	3	1880	3	44.9	3	46.1	3
539	3	520	2	0.0802	3 J	0.0795	3 J	1890	3	1890	3	49.1	3	48.3	3
515	3	447	3	0.181	3	0.0555	3 J	1760	3	1720	3	46.3	3	44.7	3

0.031	2	**0.031**	2	9.98	3	9.24	3	2.89	3	2.4	2	1220	3	1140	3	0.84	2
0.00250	2 U	**0.00250**	2 U	10.8	3	9.13	3	2.32	3	2.19	3	1110	3	1040	3	1.45	3
0.000475	4	**0.000475**	4	9.36	3	8.76	3	2.19	3	2.28	3	1020	3	993	3	1.21	3
0.000475	4	**0.000475**	4	8.87	3	9.85	3	2.07	3	2.35	3	979	3	1110	3	0.838	3
0.000475	4	**0.000475**	4	8.78	3	9.28	3	2.19	3	2.32	3	955	3	978	3	0.972	3
0.000169	3	**0.000475**	4	9.87	3	9.23	3	2.49	3 J+	2.24	3 J+	1070	3	1060	3	1.37	3
0.000169	3	**0.000475**	4	0.329	3	0.357	3	1.93	3 J+	1.31	3 J+	212	3	239	3	**0.155**	3
0.00250	2 U	**0.000475**	4	9.57	3	10.4	3	2.20	2 J		R	903	3	1040	3	1.04	3
0.000169	3	**0.000475**	4	10.4	3	9.85	3	2.42	3	2.43	3	1120	3	1060	3	1.27	3
0.00075	2	**0.00075**	2	9.11	3	8.99	3	2.30	2	2.38	3	976	3	1020	3	1.17	3
0.00075	2	**0.00075**	2	9.35	3	9.28	3	2.1	2	2.06	3	1020	3	1020	3	1.07	3
0.00075	2	**0.00075**	2	9.5	2	9.69	3	2.01	3	2.2	2	991	3	980	2	1.23	3
0.00075	2	0.0028	2 J	9.36	3	9.92	3	1.99	3	2.23	3	960	2	1020	3	1.15	3
0.00075	2	**0.00075**	2	9	1	8.68	3	2.1	2 J+	1.99	3 J+	941	3	947	3	1.19	3
0.00075	2	**0.00075**	2	9.17	3	9.5	2	1.91	3	1.92	3	980	2	1000	1	1.13	3
0.00075	2	**0.00075**	2	9.78	3	9.58	3	2.23	3	2.17	3	1050	3	1040	3	1.24	3
0.00075	2	**0.00075**	2	10.1	3	9.23	3	2.3	2	2.09	3	1040	3	1000	1	1.1	2

	1.3	2	
	1.31	3	
	1.14	3	
J	1.11	3	
J	1.07	3	
J	1.25	3	J
	0.155	3	
	1.12	3	
	1.20	2	
	1.26	3	
	1.03	3	
	1.36	3	
	1.25	3	
	1.21	3	
	1.22	3	
	1.18	3	
	1.11	3	

12600	3	0.0672	3	**0.0031**	2	6090	3	5650	3	**0.0031**	2	0.026	2	**0.1**	1 U
9970	3	0.0100	1 J	**0.0031**	2	5020	3	5050	3	0.0828	3	0.0718	3	0.0982	3 J
10800	3	**0.0031**	2	**0.0031**	2	4890	3	4520	3	0.0604	3	0.0642	3	0.0672	3 J
11300	3	**0.0031**	2	**0.0031**	2	4500	2	5080	3	0.0364	3	0.0332	3	**0.050**	1
11200	3	0.0242	3	0.0146	3 J	4160	3	4080	3	0.0578	3	0.0496	3	**0.050**	1
11400	3	0.704	3	**0.0062**	2	4900	2	4980	3	0.0666	3	0.0566	3	**0.100**	1
4640	3	**0.0031**	2	**0.0031**	2	1670	3	1870	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11800	3	**0.0031**	2	**0.0031**	2	4500	2	5010	3	0.0474	3	0.0624	3	**0.050**	1
12100	3	**0.0031**	2	**0.0031**	2	5370	3	5250	3	0.0616	3	0.0570	2	**0.050**	1
10600	3	**0.0031**	2	**0.0031**	2	4420	3	4600	2	0.0517	3	0.0518	3	**0.050**	1
11400	3	**0.0031**	2	**0.0031**	2	4560	3	4550	3	0.052	2	0.0516	3	**0.050**	1
11200	3	**0.0031**	2	**0.0031**	2	4530	3	4460	3	0.0501	3	0.0517	3	**0.050**	1
11400	3	**0.0031**	2	**0.0031**	2	4420	3	4730	3	0.0455	3	0.0515	3	**0.050**	1
10000	1	**0.0031**	2	**0.0031**	2	4010	3	4330	3	0.0418	3	0.0468	3	1.1	2 J+
11300	3	**0.0031**	2	**0.0031**	2	4250	3	4840	3	0.0536	3	0.0575	3	**0.050**	1
11700	3	**0.0031**	2	**0.0031**	2	4720	3	4720	3	0.0608	3	0.0587	3	**0.0310**	2
11300	3	**0.0031**	2	**0.0031**	2	4560	3	4430	3	0.0438	3	0.045	2	0.105	3 J

0.031	2	1.73	3	0.814	3	40.8	3	38.4	3
0.0155	3	**0.250**	2 U	**0.110**	2	38.2	3	34.0	2
0.0400	1 J	0.590	2	0.630	2	36.7	3	36.7	3
0.050	1	0.552	3 J	0.780	2 J	34.7	3 J		R
0.050	1	0.851	3 J	1.04	3	35.7	3	36.6	3
0.100	1	**0.310**	2	**0.310**	2	39.2	3	40.0	1
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	0.625	3 J	**0.155**	3	35.3	3	41.7	3
0.050	1	0.502	3 J	0.437	3 J	40.0	1	37.7	3
0.050	1	0.389	3 J	**0.155**	3	38.1	3	38.5	3
0.050	1	0.405	3 J	0.396	3 J	39.5	3	38.6	3
0.050	1	0.411	3 J	0.396	3 J	39.9	3	43.3	3
0.050	1	0.365	3 J	0.417	3 J	35.7	3	39.9	3
0.821	3 J+	0.347	3 J	0.328	3 J	36	2 J+	36.7	3 J+
0.050	1	**0.155**	3	0.424	3 J	35.3	3 J+	37.5	3 J+
0.0310	2	0.438	3 J	0.419	3 J	38.7	3	38.3	3
0.0310	2	0.339	3 J	**0.155**	3	36.2	3	35.8	3

	2	3	2	2	0	2	1	4	2	3	1	3					
Mean	5.00		0.60		93		171		2.65		22						
Median	4.83		0.35		94		172		2.69		23						
St. Deviation	1		1		29		34		0		4						
# of values	16		17		17		16		17		17						
Minimum	3.98		0.02		50		70		1.78		7						
Maximum	6.33		2.62		177		213		3.36		28						
Lowest fifth percentile	4		0		52		130		2		18						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	100%		0%		0%		0%		0%		0%						
% of DWS exceedences	88%		0%		0%		0%		0%		0%						

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	2		1	3		2	2		1	3		2	3		4	3		4	3		4	3
141			78			1.5			18.7			3			0.07			0			0	
99			80			0.3			17.2			2			0.03			0			0	
197			19			5			8			6			0			0			0	
17			17			17			17			17			17			3			3	
27			24			0.1			6.0			2			0.01			0.0155			0.0155	
900			106			19.1			41.5			25			0.37			0.05			0.036	
69			53			0			11			2			0			0			0	
0			0			5			0			15			10			3			2	
						29%						88%			59%			100%			67%	
						8			1			1			3						1	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			94%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
			result > crit									result <20			result > crit							

	3	3		2		2
	0.15			0		
	0.13			0		
	0		NA			
	17			1		
	0.01			0.17		
	0.56			0.17		
	0			0		
	0			0		
	1					
	NA			NA		
	NA			NA		
	0%			0%		
	0%			0%		
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

3	3	3	2	1	3	5	2	5	2	3	3	2	2	4													
0.772		0.079		35.6		0.0010		0.00101		0.17		0		0.0257													
0.751		0.073		35.6		0.0008		0.00075		0.16		0		0.0155													
0		0		9		0		0		0		0		0													
17		17		17		17		17		17		7		17													
0.532		0.034		2.8		0.0008		0.00075		0.16		0.075		0.0155													
0.946		0.154		50.4		0.0025		0.00250		0.36		0.295		0.0640													
1		0		28		0		0		0		0		0													
0		0		0		17		17		16		6		15													
						100%		100%		94%		86%		88%													
		14								1		1		2													
230		NA		NA		NA		0.0052		NA		NA		7.09													
250		4		250		NA		0.2		NA		NA		NA													
0%		0%		0%		0%		0%		0%		0%		0%													
0%		0%		0%		0%		0%		0%		0%		0%													
																										depends on field pH and field Temp	
result > crit		result > crit		result > crit				result > crit																		result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N							
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**								**Ammonia[3]**	
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L								mg/L	

3		0	3		0	3		3	3		3	3		2	3		2	3		2	3		2	3					
		262			184.0			0.228			0.217			7.2			7.21			2.72			2.66						
		203			205.0			0.228			0.237			7.2			7.30			2.29			2.12						
		290			58			0			0			2			2			1			1						
		17			17			17			15			17			17			17			16						
		12			4.5			0.008			0.015			0.2			0.16			1.80			1.89						
		1370			235.0			0.368			0.275			10.8			9.89			7.19			6.17						
		127			75			0			0			5			5			2			2						
		0			0			1			0			1			1			0			0						
								6%						6%			6%												
											1																		
		87			87			NA			NA			150			150			NA			NA						
		NA			NA			6			NA			10			NA			2,000			NA						
		94%			94%			0%			0%			0%			0%			0%			0%						
		0%			0%			0%			0%			12%			0%			0%			0%						
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit									
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF				
			Aluminum						**Antimony**						**Arsenic**						**Barium**								
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved					
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					

4	3	4	3	4	2	4	2	2	3	2	3	3	3	3	3	-1	3						
0.0377		0.035		0.00910		0.00860		1.7		1.41		0.228		0.195		6120							
0.0358		0.036		0.00750		0.00750		1.3		1.25		0.242		0.195		6190							
0		0		0		0		1		0		0		0		1120							
17		17		17		17		17		17		17		16		17							
0.0125		0.013		0.00155		0.00155		0.8		0.75		0.008		0.195		2250							
0.0878		0.061		0.02500		0.02500		3.8		2.50		0.329		0.195		7650							
0		0		0		0		1		1		0		0		5058							
4		4		16		17		13		14		1		1		0							
24%		24%		94%		100%		76%		82%		6%		6%									
11		10		1				4		3													
NA		NA		NA		NA		NA		NA		0.077		0.076		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		94%		94%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved			Total			Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L			µg/L			µg/L				
-1	3			3	3			3	3		2	3		2	3		-1	3		-1	3
6150				0.96				0.421			3.20			3.17			990			990	
6240				0.79				0.442			3.34			3.33			1090			1080	
1020				1				0			1			1			290			300	
17				17				17			17			17			17			17	
2500				0.05				0.050			0.03			0.03			0			0	
7300				3.65				0.731			4.56			3.82			1180			1210	
5108				0				0			2			2			455			381	
0				1				2			0			0			0			0	
				6%				12%													
								1													
NA				10.98				10.56276			NA			NA			2.201			2.113	
NA				100				NA			NA			NA			NA			NA	
0%				0%				0%			0%			0%			94%			94%	
0%				0%				0%			0%			0%			0%			0%	
				depends on Hardness				depends on Hardness									depends on Hardness				
				result > crit				result > crit									result > crit			result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
0	3	0	3	4	3	4	3	-1	3	-1	3	1	3	1	3								
662		637		0.197		0.097		1690		1710		46.7		46.9									
593		624		0.080		0.075		1760		1790		48.3		48.2									
322		260		0		0		350		330		13		13									
17		17		17		16		17		17		17		17									
24		10		0.048		0.037		439		486		0.9		0.9									
1670		1370		0.958		0.218		2150		1920		66.2		63.1									
394		360		0		0		1328		1297		35		35									
0		1		6		6		0		0		0		0									
		6%		35%		38%																	
				4		4																	
1000		1000		0.370		0.384		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
6%		6%		12%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		29%		0%									
						depends on Hardness		depends on Hardness															
result > crit		result > crit				result > crit		result > crit						result > crit									

| | | |

	2	3
	1.1	
	1.2	
	0	
	17	
	0.2	
	1.4	
	1	
	1	
	6%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
-2	3		4	2		4	2		-1	3		-1	3		4	3		4	3		3	2	
10900			0.0497			0.0040			4500			4600			0.0483			0.049			0.1		
11300			0.0031			0.0031			4530			4720			0.0517			0.052			0.1		
1700			0			0			880			800			0			0			0		
17			17			17			17			17			17			17			17		
4640			0.0031			0.0031			1670			1870			0.0031			0.005			0.0		
12600			0.7040			0.0146			6090			5650			0.0828			0.072			1.1		
8904			0			0			3542			3638			0			0			0		
0			13			16			0			0			2			1			13		
			76%			94%									12%			6%			76%		
			1			1															3		
NA			0.206705083			0.176			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			6%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tir**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

| | | |

P-05-28D

Sample Date												
03/22/09	6.98	3	11.79	4	57	2	-20.6	3	3.07	3	42.2	3
05/22/09	8.35	3	11.39	4	109	3	113.3	4	3.71	3	39.8	3
08/23/09			9.42	3	84	2		R	3.64	3	38.3	3
10/15/09	8.05	3	10.86	4	84	2	-117.9	4	3.62	3	38.5	3
05/19/10	8.4	2	10.77	4	140	2 Q	101.4	4	3.62	3	41	2
08/20/10	8.28	3	10.66	4	99	2	63.6	3	3.66	3	38.7	3
10/22/10	8.51	3	8.99	3	127	3	136.1	4	3.32	3	42.1	3
03/26/11	8.53	3	9.63	3	88	2 Q	193.7	4	3.32	3	38.8	3
05/23/11	8.39	3	10.35	4	161	3	197.9	4	3.12	3	40.1	3
08/25/11	7.67	3	9.88	3	77.4576	FALSE	189.8	4	3.28	3	39	2
10/25/11	8.97	3	10.2	3	91	2	47.8	3	3.11	3	40.1	3
03/24/12	8.53	3	11.58	4	95	2	73.9	3	2.95	3	39.8	3
05/18/12	8.37	3	10.3	3	97	2	-35.1	3	3.4	2	45.1	3
08/25/12	8.76	3	11.63	4	94	2	103.7	4	3.69	3	40.9	3
08/26/12												
10/15/12	8.43	3	7.69	3	94	2	219.1	4	2.14	3	44	2

102	3	63.8	3	0.208	3 J	**1.57**	3	41.3	3	0.691	3
95.6	3	55	2	**0.076**	2	**1.57**	3	41	2	0.78	2
100	1	60	1	**0.075**	2	**1.57**	3	39.5	3	0.767	3
87.3	3	57.5	3	5.2	2	**1.57**	3	39.2	3	0.378	3
115	3	75	2	**0.0765**	3	14.6	3	37.3	3	0.662	3
91.7	3	52	2	0.204	3 J	**1.57**	3	38.4	3	0.657	3
97	2	74	2	**0.076**	2	**1.57**	3	38.2	3	0.645	3
96.3	3	54	2	**0.076**	2	**1.57**	3	39	2	0.673	3
99.3	3	34	2	**0.0745**	3	**1.57**	3	39.6	3	0.685	3
96.8	3	75	2	0.3	1 J	**1.57**	3	37	2	0.613	3 J-
96.6	3	59	2	0.299	3 J	**1.57**	3	36.6	3	0.634	3
97.1	3	65	2	**0.0745**	3	**1.57**	3	36.9	3	0.671	3
98.7	3	53	2	**0.075**	2	**1.57**	3	37.6	3	0.512	3
94.9	3	35	2	0.2	1 J	3.34	3 J	37	2	0.645	3
96.4	3	55	2	0.309	3 J	**1.57**	3	41.2	3	0.521	3

0.0295	3	
0.0151	3	
0.0050	1	U
0.0073	2	J
0.0233	3	
0.0124	3	
0.0095	2	J
0.0109	3	
0.0101	3	
0.0128	3	
0.0156	3	
0.0050	1	U
0.0123	3	
0.0116	3	
0.0137	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.62	2	**0.0155**	3	4.96	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.629	3	0.089	2 J	4.81	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	0.0361
0.582	3	**0.0155**	3	4.71	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.075**	2	**0.050**
0.646	3	**0.0155**	3	1.7	2	**0.00075**	2	**0.00075**	2	1	1 J+	**0.075**	2	**0.0155**
0.609	3	**0.0155**	3	4.97	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.0522
0.662	3	0.074	2 J	5.22	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.721	3	0.084	2 J	5.62	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.676	3	0.068	2 J	5.39	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.778	3	**0.0155**	3	5.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.701	3	0.058	2 J	5.41	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.643	3	0.067	2 J	5.5	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.622	3	0.037	2 J	5.55	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.178	3 J	**0.0155**
0.599	3	0.073	2 J	5.4	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.589	3	0.055	2 J	5.54	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
												0.250	2 U	
0.608	3	**0.0155**	3	5.82	3	**0.00075**	2	0.005	1	**0.155**	3	0.21	2 J	**0.0155**

3	7.73	3	3.54	3	0.0464	3 J	**0.0075**	2	4.07	3	4.03	3	4.07	3	4	1
3 J	3.31	3	4.06	3	0.0662	3	0.0213	3 J	3.7	2	4.05	3	3.7	2	3.95	3
1 U	2.51	3 J+	2.42	3 J+	0.0342	3 J	0.0353	3 J	3.55	3	3.56	3	3.55	3	3.56	3
3	348	3	4.34	3	0.0465	3 J	0.0305	3 J	0.732	3	0.6	1	8.12	3	3.4	2
3 J	3.35	3 J		R	0.0545	3	0.0623	3	3.88	3	3.92	3	4.13	3 J+	4.23	3 J+
3	3.35	3 J+	3.89	3 J+	0.0606	3	0.0581	3	3.68	3	3.67	3	3.68	3 J+	3.62	3 J+
3	2.79	3 J		R	0.0696	3	0.0699	3	4.09	3	4.23	3	3.92	3 J+	4.38	3
3	2.89	3 J+	2.87	3 J+	**0.0075**	2	**0.0075**	2	3.74	3	3.76	3	3.73	3	3.72	3
3	4.25	3 J+	4.42	3 J+	0.0658	3 J+	0.0699	3 J+	3.79	3	3.8	2	4.52	3 J+	4.74	3 J+
3	10.2	3 J+	6.29	3 J+	0.129	3 J		R	3.85	3	3.76	3	3.98	3 J		R
3	6.64	3 J+	3.62	3 J+	0.0639	3	0.0691	3	3.82	3	4.1	2	4.22	3	4.35	3
3	2.59	3	**1.00**	1 U	0.0532	3	0.0716	3	3.67	3	3.94	3	4.21	3	4.45	3
3	4.88	3 J+	2.97	3 J+	0.0667	3	0.0842	3	4.02	3	4.07	3	4.22	3 J+	4.19	3 J+
3	2.27	3	2.02	3	0.0666	3	0.0669	3	4.02	3	3.62	3	3.87	3	3.59	3
3	6.39	3 J+	2.57	3 J+	0.0595	3	0.0891	3	4.08	3	4.05	3	5.21	3	4.2	2

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	0.0283	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12400	3
0.0125	3	**0.0125**	3	**0.0250**	2 U	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.03	3 J	2.21	3 J	**0.0075**	2	**0.0075**	2	12600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.54	3 J	**0.75**	2	**0.0075**	2	**0.0075**	2	12900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.66	3 J	1.73	3 J	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	14400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.69	3 J	1.7	2 J	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	14200	3

	13500	3	1.46	3	0.878	3	0.0584	3	J+	0.0432	3	J+	3.2	2	J	R
	13700	3	0.935	3	J+	0.738	3	J+	0.0632	3	0.041	2	**0.250**	2	U	**0.250**	2	U
	12300	3	0.575	3	0.422	3	0.0356	3	J+	0.0303	3	J+	2.41	3	J+	2.83	3	J+
	11500	3	6.08	3	0.823	3	0.475	3	0.0245	3	1.18	3	**0.250**	2	U
J+	12900	3	J+	0.678	3	0.623	3	0.033	2	J+	0.0344	3	J+	**0.250**	2	U	**0.250**	2	U
	12500	3	0.752	3	J+	0.435	3	J+	0.0276	3	J+	0.0255	3	J+	**0.250**	2	U	**0.250**	2	U
	14000	2	0.464	3	0.4	1	0.0299	3	0.0284	3	**0.250**	2	U	0.577	3
	12000	2	0.619	3	0.449	3	0.02	1	0.0201	3	2.02	3	1.38	3
	12900	3	0.535	3	0.484	3	0.0234	3	0.0167	3	J	2.21	3	2.32	3
	12900	3	1.63	3	1.3	2	0.025	2	0.0224	3	0.792	3	0.769	3
	13400	3	1.19	3	0.957	3	0.015	2	J	0.0194	3	J	**0.250**	2	U	0.713	3
	13600	3	0.627	3	0.646	3	0.0202	3	0.0191	3	J	**0.250**	2	U	**0.250**	2	U
	13900	3	0.989	3	J+	0.717	3	J+	**0.0100**	1	U	0.0214	3	**0.250**	2	U	**0.250**	2	U
	12200	3	0.447	3	0.35	2	0.0232	3	0.0249	3	**0.250**	2	U	**0.250**	2	U
	13900	3	0.829	3	0.727	3	0.0341	3	0.0338	3	0.664	3	J+	0.597	3	J+

65	2	62.8	3	13.1	3	12.7	3	2030	3	2050	3	0.495	3 J		R
154	3	75.9	3	0.221	3	0.183	3	1810	3	1970	3	0.113	3 J+	0.156	3 J+
3.10	2	**3.10**	2	0.746	3 J		R	1810	3	1860	3	0.292	3 J+	0.0848	3 J+
505	3	**3.10**	2	0.432	3	**0.0155**	3	1760	3	1520	3	31	2	0.371	3
3.10	2	**3.10**	2	0.0681	3 J	0.0715	3 J	2030	3 J+	2060	3 J+	0.0723	3 J+		R
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1830	3	1820	3	0.0849	3 J+	0.0614	3 J+
3.10	2	**3.10**	2	0.0613	3 J	**0.0155**	3	1960	3	2000	1	0.0641	3 J		R
3.10	2		R	0.168	3	0.126	3	1900	2	1820	3	**0.0250**	2 U	**0.0250**	2 U
3.10	2	**3.10**	2	0.12	2	0.11	2	1960	3	1980	3	**0.0250**	2 U	**0.0250**	2 U
10.8	3 J	9.56	3 J	0.139	3	0.103	3	1820	3	1890	3	0.271	3	0.172	3
10.0	1 U	**10.0**	1 U	0.0385	3 J	0.0642	3 J	1900	2	1940	3	0.148	3	0.194	3
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	2080	3	2040	3	0.0628	3 J+	0.0542	3 J+
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	2220	3	2160	3	0.205	3 J+	0.108	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1970	3	1910	3	0.0593	3 J+	0.0595	3 J+
10.3	3 J	14.3	3 J	0.0826	3 J	0.0525	3 J	2080	3	2020	3	0.216	3 J+	0.121	3 J+

0.00075	2	**0.00075**	2	0.53	2	0.519	3	**0.310**	2 U	**0.310**	2 U	369	3	363	3	**0.155**	3
0.00075	2	**0.00075**	2	0.501	3	0.522	3	0.356	3 J	0.378	3 J	342	3	380	2	**0.155**	3
0.00075	2	**0.00075**	2	0.454	3	0.482	3	**0.310**	2 U	**0.310**	2 U	340	2	345	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.296	3	0.239	3	3.41	3	0.763	3	404	3	325	3	**0.155**	3
0.00075	2	**0.00075**	2	0.467	3 J+	0.498	3 J+	**0.310**	2 U	**0.310**	2 U	378	3 J+	389	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	0.48	2	0.45	2	**0.310**	2 U	**0.310**	2 U	347	3	342	3	**0.155**	3
0.00075	2	**0.00075**	2	0.529	3	0.522	3	0.344	3 J	**0.310**	2 U	373	3	395	3	**0.155**	3
0.00075	2	**0.00075**	2	0.469	3	0.469	3	0.371	3 J	0.308	3 J	351	3	347	3	**0.155**	3
0.00075	2	**0.00075**	2	0.485	3	0.523	3	0.259	3 J	0.241	3 J	344	3	352	3	**0.155**	3
0.00075	2	**0.00075**	2	0.506	3	0.5	1	0.954	3	0.778	3	359	3	366	3	**0.155**	3
0.00075	2	**0.00075**	2	0.513	3	0.512	3	0.495	3 J	0.465	3 J	362	3	378	3	**0.155**	3
0.00075	2	**0.00075**	2	0.533	3	0.528	3	**0.310**	2 U	**0.310**	2 U	365	3	397	3	**0.155**	3
0.00075	2	**0.00075**	2	0.528	3	0.516	3	**0.310**	2 U	**0.310**	2 U	397	3	387	3	**0.155**	3
0.00075	2	0.00213	3 J	0.467	3	0.459	3	**0.310**	2 U	**0.310**	2 U	369	3	350	2	**0.155**	3
0.00075	2	**0.00075**	2	0.507	3	0.501	3	0.67	2 J+	**0.310**	2 U	388	3	376	3	**0.155**	3

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Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

5280	3	0.0293	3	0.0187	3 J	2360	3	2350	3	**0.0050**	1	**0.0050**	1	6.06	3
5380	3	**0.0031**	2	**0.0031**	2	2160	3	2370	3	**0.0050**	1	**0.0050**	1	0.113	3 J
5050	3	**0.0031**	2	**0.0031**	2	2170	3	2210	3	**0.0050**	1	**0.0050**	1	0.614	3 J+
5820	3	**0.0031**	2	**0.0031**	2	2490	3	2220	3	**0.0050**	1	**0.0050**	1	7.75	3
5470	3 J+	**0.0031**	2	**0.0031**	2	2260	3 J+	2330	3 J+	**0.0050**	1	**0.0050**	1	0.423	3 J
5080	3	**0.0031**	2	**0.0031**	2	2200	2	2180	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5740	3 J+	**0.0031**	2	**0.0031**	2	2360	3 J+	2400	2 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5090	3	**0.0031**	2	**0.0031**	2	2260	3	2180	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5320	3	**0.0031**	2	**0.0031**	2	2230	3	2230	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5370	3	**0.0031**	2	**0.0031**	2	2210	3	2310	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5520	3	**0.0031**	2	**0.0031**	2	2260	3	2300	2	**0.0031**	2	**0.0031**	2	**0.0310**	2
5770	3	**0.0031**	2	**0.0031**	2	2460	3	2420	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5640	3	**0.0031**	2	**0.0031**	2	2580	3	2490	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5360	3	**0.0031**	2	**0.0031**	2	2420	3	2320	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5580	3	**0.0031**	2	**0.0031**	2	2550	3	2460	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

5.24	3		6.19	3	6.14	3	**1.55**	3	U	**1.55**	3 U
0.050	1		6.22	3	6.36	3	**1.55**	3	U	**1.55**	3 U
0.37	2	J+	5.91	3	5.94	3	**1.55**	3	U	**1.55**	3 U
0.282	3		1.85	3	1.2	2	7.33	3		**1.55**	3 U
		R	6	1	5.99	3	0.493	3	J	3.17	3
0.050	1		5.83	3	5.97	3	**1.55**	3	U	**1.55**	3 U
0.100	1	U	6.49	3	6.54	3	**1.55**	3	U	4.68	3 J+
0.050	1		6.15	3	5.83	3	**1.55**	3	U	**1.55**	3 U
0.050	1		5.9	2	6.03	3	**1.55**	3	U	**0.155**	3
0.0310	2		6.18	3	6.25	3	**1.55**	3	U	3.69	3
0.0310	2		5.59	3	6.01	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		6.27	3	6.44	3	**0.200**	1		**1.55**	3 U
0.167	3	J	6.48	3	6.46	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		5.97	3	5.79	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		6.65	3	6.49	3	**1.55**	3	U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	8.30		10.34		100		90.5		3.31		40.6	
Median	8.40		10.35		94		102.6		3.32		40.1	
St. Deviation	0		1		26		98		0		2	
# of values	14		15		15		14		15		15	
Minimum	6.98		7.69		57		-117.9		2.14		38.3	
Maximum	8.97		11.79		161		219.1		3.71		45.1	
Lowest fifth percentile	7		9		71		-64		3		38	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	36%		0%		0%		0%		0%		0%	
% of DWS exceedences	36%		0%		0%		0%		0%		0%	

1	3	0	2	3	2	2	3	1	3	3	3								
98		58.0		0.488		2.56		38.7		0.636		NA		NA					
97		58.0		0.077		1.57		38.4		0.657		NA		NA					
6		12		1		3		2		0		NA		NA					
15		15		15		15		15		15		0		0					
87.3		34		0.0745		1.57		36.6		0.378		NA		NA					
115		75		5.2		14.6		41.3		0.78		NA		NA					
90		35		0		2		37		0		NA		NA					
0		0		8		13		0		0									
				53%		87%													
				6		1													
NA		NA		NA		NA		>=20		NA		NA		NA					
NA		500		NA		NA		NA		10		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					

4	3		
0.0129		NA	
0.0123		NA	
0		NA	
15			0
0.005		NA	
0.0295		NA	
0		NA	
2			
13%			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.65		0.0470		5.08		0.00087		0.00103		0.211		0.170		0.0216
0.63		0.0550		5.40		0.00075		0.00075		0.155		0.210		0.0155
0		0		1		0		0		0		0		0
15		15		15		15		15		15		15		15
0.582		0.0155		1.7		0.00075		0.00075		0.155		0.075		0.0155
0.778		0.089		5.82		0.0025		0.005		1		0.25		0.0522
1		0		4		0		0		0		0		0
0		6		0		15		14		14		13		13
		40%				100%		93%		93%		87%		87%
		9										2		2
230		NA		NA		NA		0.0052		NA		NA		4.63
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	4	3	2	3	2	3	2	3	2	3	
	27.41		3.39		0.0593		0.0531		3.65		3.68		4.34		4		
	3.35		3.54		0.0606		0.0646		3.82		3.92		4.07		4		
	89		1		0		0		1		1		1		0		
	15		13		15		14		15		15		15		14		
	2.27		1		0.0075		0.0075		0.732		0.6		3.55		3.4		
	348		6.29		0.129		0.0891		4.09		4.23		8.12		4.74		
	2		2		0		0		3		3		4		4		
	0		1		1		2		0		0		0		0		
			8%		7%		14%										
					3		3										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	7%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0125		0.0125		0.0101		0.0075		1.43		1.39		0.0075		0.0075		13000	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		12900	
0		0		0		0		0		0		0		0		700	
15		15		15		15		15		15		15		15		15	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		12300	
0.0125		0.0125		0.0283		0.0075		2.5		2.5		0.0075		0.0075		14400	
0		0		0		0		1		1		0		0		12370	
15		15		14		15		11		12		15		15		0	
100%		100%		93%		100%		73%		80%		100%		100%			
				1				4		3							
NA		NA		NA		NA		NA		NA		0.133		0.126		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	4	3	4	3	2	2	3	3
13000		1.19		0.663		0.0596		0.0270		1.0		4.84	
12900		0.75		0.646		0.0276		0.0249		0.3		4.44	
800		1		0		0		0		1		1	
15		15		15		15		15		15		14	
11500		0.447		0.35		0.01		0.0167		0.25		0.25	
14000		6.08		1.3		0.475		0.0432		3.2		2.83	
11850		0		0		0		0		0		0	
0		0		0		1		0		8		7	
						7%				53%		50%	
						1		3					
NA		10.98		10.56276		NA		NA		4.121		3.956	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	2	1	2	4	3	4	3	-1	3	-1	3	3	3	4	3
53		14.8		1.0		1.0		1940		1940		2.209		0.979	
3		3.1		0.1		0.1		1960		1970		0.113		0.979	
131		24		3		3		130		150		8		0	
15		14		15		14		15		15		15		12	
3.1		3.1		0.0155		0.0155		1760		1520		0.025		0.025	
505		75.9		13.1		12.7		2220		2160		31		0.371	
3		3		0		0		1795		1730		0		0	
10		10		4		6		0		0		2		2	
67%		71%		27%		43%						13%		17%	
2		2		4		3									
1000		1000		0.942		0.876		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		7%		7%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	2	2	2	0	3	0	3	3	3
0.00087		0.00084		0.48		0.483		0.600		0.380		366		366		0.155	
0.00075		0.00075		0.50		0.501		0.310		0.310		365		366		0.155	
0		0		0		0		1		0		20		22		0	
15		15		15		15		15		15		15		15		15	
0.00075		0.00075		0.296		0.239		0.259		0.241		340		325		0.155	
0.0025		0.00213		0.533		0.528		3.41		0.778		404		397		0.155	
0		0		0		0		0		0		341		337		0	
15		14		0		0		7		9		0		0		15	
100%		93%						47%		60%						100%	
		1						5		4							
0.77		0.77		NA		NA		23.23		23.16		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
15	
0.155	
0.155	
0	
15	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5430		0.0048		0.0041		2330		2320		0.0042		0.0042		1.02	
5380		0.0031		0.0031		2260		2320		0.0050		0.0050		0.05	
250		0		0		140		100		0		0		2	
15		15		15		15		15		15		15		15	
5050		0.0031		0.0031		2160		2180		0.0031		0.0031		0.031	
5820		0.0293		0.0187		2580		2490		0.005		0.005		7.75	
5071		0		0		2167		2180		0		0		0	
0		14		14		0		0		15		15		10	
		93%		93%						100%		100%		67%	
				1										1	
NA		0.730847518		0.621		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	2	3	2	3	2	3	2	3
0.47		5.85		5.83		1.77		1.92	
0.05		6.15		6.03		1.55		1.55	
1		1		1		2		1	
14		15		15		15		15	
0.031		1.85		1.2		0.2		0.155	
5.24		6.65		6.54		7.33		4.68	
0		4		4		0		1	
10		0		0		13		12	
71%						87%		80%	
1						1			
NA		NA		NA		53.30		52.55	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-05-28S																
Sample Date																
03/22/09	6.96	3	13.13	4		46	2		-31.2	3		1.95	3	35.4	3	
05/23/09	7.95	3	12.2	3		85	2		79.5	3		3.52	3	34.8	3	
08/23/09			10.05	4		73	2			R		4.78	3	34.4	3	
10/15/09	8.55	3	11.67	4		70	1		-131.1	4		3.63	3	42.1	3	
03/16/10	8.66	3	11.99	4		70	1		227.7	4		3.28	3	34.5	3	
05/19/10	8.59	3	12.48	4		118	3	Q	130.8	4		3.85	3	34.6	3	
08/20/10	8.61	3	12.52	4		86	2		78.1	3		4.09	3	33.7	3	
10/22/10	8.63	3	10.26	4		109	3		160.9	4		3.68	3	35.4	3	
03/26/11	6.78	3	11.05	4		74	2	Q	196.2	4		3.54	3	33.2	3	
05/22/11	8.57	3	13.73	4		56	2		200.1	4		3.77	3	32.2	3	
08/24/11	7.78	3	12.22	4		66.7588	FALSE		169.8	4		3.98	3	31.6	3	
10/25/11	9.05	3	11.45	4		77	2		53.8	3		3.18	3	34.2	3	
03/22/12	8.54	3	11.7	3		81	2		220	2		2.76	3	33.3	3	
05/18/12	8.34	3	11.72	4		80	1		-31.5	3		3.88	3	35.8	3	
08/25/12	8.87	3	13.67	4		79	2		111	3		3.82	3	34	2	
10/15/12	8.95	3	9	1		76	2		-87.2	3		2.53	3	37.1	3	

			result > crit												result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
83.6	3		53.8	3		1.41	3		**1.57**	3		37.5	3		0.429	3						
83.7	3		46.2	3		0.943	3		**1.57**	3		38	2		0.5	1						
88.3	3		58.8	3		0.309	3	J	**1.57**	3		39	2		0.467	3						
101	3		60	1		1.49	3		**1.57**	3		39.4	3		**0.0155**	3						
80.5	3		58.8	3		0.625	3	J	**1.57**	3		35.1	3		0.461	3						
93.1	3		59	2		0.213	3	J	13.9	3		34.2	3		0.464	3						
78.7	3		50	1		0.2	1	J	**1.57**	3		37.2	3		0.356	3						
83.6	3		61	2		**0.075**	2		**1.57**	3		36.7	3		0.342	3						
81.2	3		47	2		**0.076**	2		**1.57**	3		36.2	3		0.413	3						
85.3	3		46	2		0.2	1	J	**1.57**	3		37.5	3		0.414	3						
79.9	3		58	2		**0.075**	2		**1.57**	3		34.3	3		0.31	2						
80.7	3		47	2		0.396	3	J	**5.0**	1	UJ	34.5	3		0.316	3	J-					
80.3	3		62	2		0.3	1	J	**1.57**	3		34.2	3		0.351	3						
81.6	3		48	2		**0.074**	2		**1.57**	3		34.6	3		0.281	3						
80	1		24	2		**0.075**	2		3.54	3	J	34.2	3		0.276	3						
80.1	3		51	2		**0.075**	2		**1.57**	3		37.8	3		0.421	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L			mg/L	
	0.00155	3				
	0.011	2				
	0.0050	1	U			
	0.0032	2	J			
	0.00155	3				
	0.0050	1	U			
	0.0132	3				
	0.004	1	J			
	0.00155	3				
	0.0047	2	J			
	0.0039	2	J			
	0.0046	2	J			
	0.00155	3				
	0.0045	2	J			
	0.0072	2	J			
	0.0078	2	J			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.684	3		0.032	2 J		1.51	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.739	3		0.087	2 J		2.05	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.201	3 J		**0.0155**			
0.599	3		**0.0155**	3		1.76	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.594	3		**0.0155**	3		5.06	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.65	2		**0.0155**	3		1.85	3		0.0015	2 J		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.64	2		**0.0155**	3		1.99	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.656	3		0.068	2 J		2.01	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.721	3		0.083	2 J		2.13	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.191	3 J		**0.0155**			
0.69	2		0.071	2 J		1.94	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.683	3		0.073	2 J		2.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.724	3		0.069	2 J		1.76	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.617	3		0.066	2 J		1.73	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.634	3		0.038	2 J		1.71	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.226	3 J		**0.0155**			
0.561	3		0.073	2 J		1.71	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.563	3		0.056	2 J		1.78	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.597	3		**0.0155**	3		1.97	3		0.0017	2 J		**0.00075**	2		**0.155**	3		0.332	3 J		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		21.1	3	3.53	3	0.0473	3 J	**0.0075**	2	0.657	3	0.554	3	3.48	3	3.29	3								
3		12	2	4.33	3	**0.0075**	2	**0.0075**	2	0.488	3 J	0.508	3	3.53	3	3.67	3								
1 U		7.79	3 J+	2.59	3 J+	0.0236	3 J	0.0576	3	0.571	3	0.68	2	4.18	3	3.3	2								
3		6.64	3	2.94	3	0.0649	3	0.0637	3	3.98	3	3.86	3	30.9	3	3.87	3								
3		20.1	3	6.72	3	0.0447	3 J	0.0332	3 J	0.566	3	0.487	3 J	3.27	3	3.23	3								
3		5.97	3 J		R	0.0194	3 J		R	0.549	3	0.511	3	3.31	3 J+	3.43	3 J+								
3		9.06	3 J+	3.8	2 J+	0.0357	3 J	0.0345	3 J	0.569	3	0.652	3	3.49	3 J+	3.41	3 J+								
3		14	2 J+	3.92	3 J+	0.0369	3 J	0.0576	3	0.744	3	0.694	3	3.89	3 J+	3.66	3 J+								
3		5.36	3 J+	3.4	2 J+	**0.0250**	2 U	**0.0250**	2 U	0.574	3	0.555	3	3.17	3	3	1								
3		10.9	3 J+	9.48	3 J+	**0.0250**	2 U	**0.0250**	2 U	0.563	3	0.685	3	3.84	3 J+	4.03	3 J+								
3		6.28	3 J+	3.49	3 J+	0.039	2 J	0.0384	3 J	0.688	3	0.764	3	3.55	3	3.65	3								
3		16.3	3 J+	3.21	3 J+	0.0359	3 J	0.0242	3 J	0.711	3	0.592	3	3.76	3	3.44	3								
3		8.33	3	4.14	3	0.0502	3	**0.0250**	2 U	0.504	3	0.522	3	3.57	3	3.37	3								
3		3.87	3 J+	2.82	3 J+	0.125	3	0.0319	3 J	0.55	2	0.698	3	3.22	3 J+	3.13	3 J+								
3		3	1	2.15	3	0.0321	3 J	0.0289	3 J	0.804	3	0.704	3	3.21	3	3.04	3								
3		3.13	3 J+	**1.00**	1 U	0.0313	3 J	0.0369	3 J	0.737	3	0.737	3	3.63	3	3.25	3								

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CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		**0.00075**	2		0.196	3		0.173	3		1.93	3		0.729	3		327	3		319	3		**0.155**	3
0.00075	2		**0.00075**	2		0.142	3		0.0902	3		0.54	2	J	0.5	1	J	331	3		359	3		**0.155**	3
0.00075	2		**0.00075**	2		0.125	3		0.148	3		0.67	2	J+	**0.310**	2	U	333	3		332	3		**0.155**	3
0.00075	2		**0.00075**	2		0.506	3		0.498	3		0.328	3	J	0.268	3	J	368	3		365	3		**0.155**	3
0.00075	2		**0.00075**	2		0.279	3		0.199	3		0.94	2		0.836	3		327	3		339	3		**0.155**	3
0.00165	3	J	**0.00075**	2		0.137	3	J+	0.115	3	J+	0.775	3	J+	0.671	3	J+	331	3	J+	323	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		0.12	2		0.112	3		1.74	3		1.06	3		334	3		345	3		**0.155**	3
0.00075	2		**0.00075**	2		0.168	3		0.137	3		1.68	3		1.15	3		347	3		350	2		**0.155**	3
0.00075	2		**0.00075**	2		0.121	3		0.124	3		0.842	3		0.856	3		335	3		311	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0942	3		0.12	2		0.634	3		0.713	3		291	3		305	3		**0.155**	3
0.00075	2		**0.00075**	2		0.123	3		0.102	3		0.917	3		0.809	3		321	3		331	3		**0.155**	3
0.00075	2		**0.00075**	2		0.112	3		0.127	3		0.571	3	J	0.64	2		339	3		330	2		**0.155**	3
0.00075	2		**0.00075**	2		0.121	3		0.146	3		1.26	3		1.47	3		333	3		348	3		**0.155**	3
0.00075	2		**0.00075**	2		0.083	2		0.101	3		**0.310**	2	U	0.864	3	J+	328	3		330	2		**0.155**	3
0.00075	2		**0.00075**	2		0.0796	3		0.082	2		**0.310**	2	U	**0.310**	2	U	329	3		311	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0871	3		0.0891	3		**0.310**	2	U	**0.310**	2	U	350	2		335	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

				depends on HARD; revised 2013						depends on Total Ag																					
				result > crit						result > crit																					
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF	
	Silicon					**Silver[8]**									**Sodium**								**Thallium**								**Tin**
	Dissolved			Total					Dissolved			Total					Dissolved			Total				Dissolved				Total			
	µg/L			µg/L					µg/L			µg/L					µg/L			µg/L				µg/L				µg/L			
6080	3			**0.0031**	2				**0.0031**	2		2240	3		2360	3			**0.0050**	1			**0.0050**	1			**0.100**	1	U	
6440	3			**0.0031**	2				**0.0031**	2		2460	3		2650	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
5750	3			**0.0031**	2				**0.0031**	2		2270	3		2300	2			**0.0050**	1			**0.0050**	1			6.52	3	J+	
5320	3			**0.0031**	2				**0.0031**	2		2350	3		2330	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6090	3			**0.0031**	2				**0.0031**	2		2250	3		2370	3			**0.0050**	1			**0.0050**	1			0.578	3		
5940	3	J+		**0.0031**	2				**0.0031**	2		2230	3	J+	2120	3	J+		**0.0050**	1			**0.0050**	1			0.592	3	J	
6180	3			**0.0031**	2				**0.0031**	2		2290	3		2490	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6120	3			**0.0031**	2				**0.0031**	2		2470	3	J+	2390	3	J+		**0.0050**	1			**0.0050**	1			**0.050**	1		
5740	3			**0.0031**	2				**0.0031**	2		2190	3		2180	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
5810	3			**0.0031**	2				**0.0031**	2		2010	3		2140	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6020	3			**0.0031**	2				**0.0031**	2		1870	3		2110	3			**0.0031**	2			**0.0031**	2			0.0636	3	J	
5890	3			0.009	1	J			0.0077	2	J	2270	3		2260	3			**0.0031**	2			**0.0031**	2			0.132	3	J	
6610	3			**0.0031**	2				**0.0031**	2		2290	3		2340	3			**0.0031**	2			**0.0031**	2			0.208	3		
6160	3			0.0089	2	J			**0.0031**	2		2440	3		2450	3			**0.0031**	2			**0.0031**	2			**0.0310**	2		
5830	3			**0.0100**	1	U			**0.0031**	2		2370	3		2230	3			**0.0031**	2			**0.0031**	2			**0.0310**	2		
6120	3			**0.0031**	2				**0.0031**	2		2310	3		2210	3			**0.0031**	2			**0.0031**	2			**0.0310**	2		

																						depends on Hardness	depends on Total Zn
																						result > crit	result > crit
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									

		2	3	2	4	0	2	0	3	2	3	1	3		
Mean		8.32		11.80		78		90.0		3.52		34.8			
Median		8.57		11.86		77		111.0		3.66		34.5			
St. Deviation		1		1		17		115		1		2			
# of values		15		16		16		15		16		16			
Minimum		6.78		9		46		-131.1		1.95		31.6			
Maximum		9.05		13.73		118		227.7		4.78		42.1			
Lowest fifth percentile		7		10		54		-100		2		32			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		67%		0%		0%		0%		0%		0%			
% of DWS exceedences		67%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		2	2		2	3		1	3		3	3						
83.9			52.0			0.41			2.68			36.3			0.364			NA			NA	
81.4			52.0			0.21			1.57			36.5			0.385			NA			NA	
6			9			0			3			2			0			NA			NA	
16			16			16			16			16			16			0			0	
78.7			24			0.074			1.57			34.2			0.0155			NA			NA	
101			62			1.49			13.9			39.4			0.5			NA			NA	
80			41			0			2			34			0			NA			NA	
0			0			6			14			0			1							
						38%			88%						6%							
						7			1													
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	2		
0.00500		NA	
0.00460		NA	
0		NA	
16			0
0.00155		NA	
0.0132		NA	
0		NA	
6			
38%			
8			
NA			NA
NA			NA
0%			NA
0%			NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.647			0.050			2.07			0.00097			0.00075			0.155			0.210			0.0177
0.645			0.061			1.90			0.00075			0.00075			0.155			0.250			0.0155
0			0			1			0			0			0			0			0
16			16			16			16			16			16			16			16
0.561			0.0155			1.51			0.00075			0.00075			0.155			0.075			0.0155
0.739			0.087			5.06			0.0025			0.00075			0.155			0.332			0.05
1			0			2			0			0			0			0			0
0			5			0			14			16			16			12			16
			31%						88%			100%			100%			75%			100%
			11						2									4			
230			NA			NA			NA			0.0052			NA			NA			6.11
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3		2	3	2	3	4	3	4	3	3	3	3	3	2	3	2	3								
		9.6		3.83		0.0402		0.0331		0.828		0.825		5.25		3.42									
		8.1		3.49		0.0358		0.0319		0.573		0.666		3.54		3.39									
		6		2		0		0		1		1		7		0									
		16		15		16		15		16		16		16		16									
		3		1		0.0075		0.0075		0.488		0.487		3.17		3									
		21.1		9.48		0.125		0.0637		3.98		3.86		30.9		4.03									
		3		2		0		0		1		1		3		3									
		0		1		3		5		0		0		0		0									
				7%		19%		33%																	
						10		7		1		1													
		87		87		NA		NA		150		150		NA		NA									
		NA		NA		6		NA		10		NA		2,000		NA									
		0%		0%		0%		0%		0%		0%		0%		0%									
		0%		0%		0%		0%		0%		0%		0%		0%									
		result > crit		result > crit		result > crit				result > crit		result > crit		result > crit											

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3						
0.0125		0.0125		0.0093		0.0084		1.69		1.76		0.0075		0.0075		11400							
0.0125		0.0125		0.0075		0.0075		1.25		1.46		0.0075		0.0075		11300							
0		0		0		0		1		1		0		0		700							
16		16		16		16		16		16		16		16		16							
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		10400							
0.0125		0.0125		0.0224		0.0216		2.59		2.95		0.0075		0.0075		13600							
0		0		0		0		1		1		0		0		10550							
16		16		14		15		10		9		16		16		0							
100%		100%		88%		94%		63%		56%		100%		100%									
				2		1		6		7													
NA		NA		NA		NA		NA		NA		0.116		0.111		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE N	BE NSF	BE NVF	BE F	BE FSF	BE FVF	BI N	BI NSF	BI NVF	BI F	BI FSF	BI FVF	B N	B NSF	B NVF	B F	B FSF	B FVF	CD N	CD NSF	CD NVF	CD F	CD FSF	CD FVF	CA N	CA NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved				Total	
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3		2	3		2	3		4	3		4	3		3	3		2	2		
11400			1.58			1.15			0.039			0.0274			0.621			0.380			
11400			1.32			1.14			0.032			0.0266			0.387			0.250			
800			1			0			0			0			1			0			
16			16			15			16			16			16			15			
10200			0.498			0.532			0.0208			0.01			0.209			0.15			
13600			3.89			1.84			0.121			0.0636			2.88			1.65			
10500			1			1			0			0			0			0			
0			0			0			0			1			7			11			
												6%			44%			73%			
												2			1			1			
NA			10.98			10.56276			NA			NA			3.528			3.387			
NA			100			NA			NA			NA			NA			NA			
0%			0%			0%			0%			0%			0%			0%			
0%			0%			0%			0%			0%			0%			0%			
			depends on Hardness			depends on Hardness									depends on Hardness						
			result > crit			result > crit									result > crit					result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		2	3		4	3		4	3		-1	3		-1	3		3	3		3	3	
27			13.8			0.038			0.0195			1550			1570			0.64			0.215		
18			7.8			0.016			0.0155			1550			1560			0.56			0.174		
28			20			0			0			150			140			0			0		
16			16			16			16			16			16			16			15		
10			3.1			0.0155			0.0155			1360			1410			0.133			0.0902		
112			75.6			0.103			0.05			1960			1980			1.62			0.453		
10			3			0			0			1368			1418			0			0		
3			8			12			15			0			0			0			0		
19%			50%			75%			94%														
6			6			3			1														
1000			1000			0.747			0.715			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.00081		0.00075		0.156		0.148		0.86		0.719		333		333		0.155									
0.00075		0.00075		0.122		0.122		0.72		0.721		332		332		0.155									
0		0		0		0		1		0		16		17		0									
16		16		16		16		16		16		16		16		16									
0.00075		0.00075		0.0796		0.082		0.31		0.268		291		305		0.155									
0.00165		0.00075		0.506		0.498		1.93		1.47		368		365		0.155									
0		0		0		0		0		0		314		310		0									
15		16		0		0		3		3		0		0		16									
94%		100%						19%		19%						100%									
1								3		2															
0.77		0.77		NA		NA		19.92		19.86		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	
Mercury[7]				**Molybdenum**				**Nickel[4]**				**Potassium**													
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved										Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L										µg/L	

	3	3
	0.155	
	0.155	
	0	
	16	
	0.155	
	0.155	
	0	
	16	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2	
6010			0.0043			0.0034			2270			2310			0.0043			0.0043			0.537		
6050			0.0031			0.0031			2280			2320			0.0050			0.0050			0.050		
300			0			0			160			150			0			0			2		
16			16			16			16			16			16			16			16		
5320			0.0031			0.0031			1870			2110			0.0031			0.0031			0.031		
6610			0.01			0.0077			2470			2650			0.005			0.005			6.52		
5635			0			0			1975			2118			0			0			0		
0			14			15			0			0			16			16			10		
			88%			94%									100%			100%			63%		
			2			1															2		
NA			0.534593387			0.454			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
			depends on HARD; revised 2013			depends on Total Ag																	
			result > crit			result > crit									result > crit								
SI F	SI FSF	SI FVF	AG N		AG NSF	AG NVF	AG F		AG FSF	AG FVF	NA N	NA NSF	NA NVF	NA F	NA FSF	NA FVF	TL N	TL NSF	TL NVF	TL F	TL FSF	TL FVF	SN N	SN NSF	SN NVF
Silicon					**Silver[8]**							**Sodium**						**Thallium**							**Tin**
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total				
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				

| | | |

P-05-33D

Sample Date												
04/01/09	7	1	2.14	3	487	3	-46.3	3	1.84	3	311	3
05/20/09	7.46	3	0.58	2	606	3	0.6	1	2.6	2	291	3
08/18/09	7.92	3	0.34	2	860	2	12.5	3	2.93	3	315	3
10/15/09	7.4	2	0.383	3	544	3	-24.3	3	2.3	2	280	2
03/16/10	7.59	3	1.39	3	514	3	252.8	4	1.65	3	306	3
05/18/10	7.09	3	0.61	2	403	3 Q	-133.4	4	2.54	3	257	3
08/22/10	8.04	3	1.26	3	574	3	148.7	4	2.66	3	262	3
10/23/10	7.64	3	0.23	2	574	3	150.6	4	2.64	3	288	3
03/26/11	7.31	3	0.47	2	421	3 Q	201.9	4	1.44	3	262	3
05/23/11	7.61	3	0.15	2	406	3	80.9	3	2.29	3	256	3
08/24/11	7.56	3	0.92	2	470.3184	FALSE	-48.1	3	2.42	3	253	3
10/24/11	7.6	2		R	535	3	188	3	1.93	3	285	3
03/22/12	7.43	3	0.72	2	559	3	179	3	1.12	3	281	3
05/19/12	7.49	3	0.29	2	56.1	3	30.9	3	2.07	3	298	3
08/27/12	7.7	2	2.04	3	531	3	183.1	4	2.28	3	269	3
10/13/12	7.7	2	0.83	2	564	3	188.4	4	1.55	3	294	3

612	3	335	3	7.68	3	5.7	2 J	325	3	**0.050**	1 U
603	3	310	2	23.9	3	**1.57**	3	327	3	**0.0155**	3
623	3	325	3	0.816	3	12.4	3	324	3	0.035	2 J
618	3	313	3	0.513	3	**5.0**	1 U	319	3	**0.0155**	3
597	3	329	3	1.03	3	3.92	3 J	314	3	0.0325	3 J
620	2	327	3	**0.1595**	4	**5.0**	1 U	307	3	0.035	2 J
587	3	293	3	**0.076**	2	3.82	3 J	312	3	**0.050**	1 U
588	3	299	3	**0.075**	2	6.52	3 J	318	3	**0.0155**	3
581	3	308	3	2.19	3	5.12	3 J	314	3	**0.050**	1 U
574	3	280	2	1.63	3	7.35	3 J	309	3	**0.0155**	3
572	3	310	2	35.1	3	4.19	3 J	303	3	**0.050**	1 U
565	3	302	3	2.57	3	5.98	3 J	301	3	**0.0155**	3
575	3	306	3	10.3	3	11.5	3	298	3	**0.050**	1 U
567	3	307	3	**0.0735**	3	5.14	3 J	299	3	**0.0155**	3
573	3	300	1	0.4	1 J	10.1	3	313	3	**0.050**	1 U
568	3	290	2	0.2	1 J	**1.57**	3	312	3	**0.0155**	3

0.0178	3	
0.0745	3	
0.004	1	J
0.00155	3	
0.00155	3	
0.0094	2	J
0.0082	2	J
0.0045	2	J
0.0056	2	J
0.004	1	J
0.0073	2	J
0.0084	2	J
0.00155	3	
0.0109	3	
0.0050	1	U
0.0095	2	J

0.713	3	0.046	2 J	7.98	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	1.18	3	**0.050**
0.69	2	0.044	2 J	7.62	3	**0.00075**	2	**0.00075**	2	0.31	2 J	1.33	3	**0.050**
0.656	3	0.052	2 J	7.42	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.65	3	**0.0155**
0.659	3	0.047	2 J	8.04	3	0.0015	2 J	**0.00075**	2	**0.155**	3	1.17	3	**0.0155**
0.66	2	0.043	2 J	7.48	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.49	3	**0.050**
0.666	3	0.044	2 J	7.35	3	**0.00075**	2	**0.00075**	2	0.38	2 J	1.69	3 J+	**0.0155**
0.75	2	0.102	3	7.88	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.32	3	**0.0155**
0.763	3	0.097	2 J	7.75	3	**0.00075**	2	**0.00075**	2	0.31	2 J	1.45	3	**0.0155**
0.809	3	0.09	1 J	7.59	3	**0.00075**	2	**0.00075**	2	**0.155**	3	2.23	3	**0.0155**
0.803	3	0.096	2 J	7.72	3	**0.00075**	2	**0.00075**	2	**0.155**	3	2.17	3	**0.0155**
0.81	2	0.091	2 J	7.41	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	2.01	3	0.0386
0.735	3	0.092	2 J	7.51	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.83	3	**0.0155**
0.743	3	0.06	1 J	7.25	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.87	3	**0.0155**
0.683	3	0.093	2 J	7.01	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.83	3	**0.0155**
0.708	3	0.077	2 J	7.13	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.69	3	**0.0155**
0.723	3	0.046	2 J	7.69	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.93	3	**0.0155**

1 U	403	3	27.4	3	0.0201	3 J	**0.0075**	2	0.432	3 J	0.396	3 J	89.2	3	82.9	3
1 U	1140	3	6.88	3	0.0262	3 J	0.0236	3 J	0.603	3	0.593	3	91.7	3	84	2
3	122	3	2.23	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	89.2	3	77.6	3
3	24.2	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.57	2	0.515	3	84.2	3	82.2	3
1 U	25	2	**1.00**	1 U	0.0193	3 J	0.0168	3 J	0.343	3 J	0.409	3 J	82.5	3	78.1	3
3	2.92	3	2.5	2	**0.0075**	2	**0.0075**	2	0.473	3 J	**0.250**	2 U	74.6	3	77.3	3
3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	0.406	3 J	81.4	3	81.6	3
3	48.1	3	**1.00**	1 U	0.0269	3 J	**0.0075**	2	0.541	3	0.443	3 J	90.7	3	86.7	3
3	16.4	3 J+	4.24	3 J+	**0.0075**	2	**0.0250**	2 U	0.406	3 J	0.493	3 J	75.2	3	79.2	3
3	4.96	3 J+	2.56	3 J+	**0.0075**	2	**0.0250**	2 U	0.498	3 J	0.459	3 J	77.1	3	78.9	3
3 J	709	3	3.19	3 J+	0.0303	3 J	0.0248	3 J	0.613	3	0.268	3 J	89.5	3	82.4	3
3	19.3	3 J+	3.14	3 J+	0.0304	3 J	0.0593	3	0.458	3 J	0.433	3 J	84.8	3	82.5	3
3	177	3	7.25	3	0.539	3	0.33	2	0.537	3	0.434	3 J	82.2	3	79.3	3
3	2.72	3 J+	**1.00**	1 U	0.0433	3 J	0.0564	3	0.536	3	0.526	3	81.7	3	87.7	3
3	4.2	2	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.405	3 J	0.409	3 J	77.5	3	79.2	3
3	52.6	3	9.66	3 J+	**0.0300**	1	**0.0300**	1	**0.300**	1	**0.300**	1	79.9	3	78.1	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	11.5	3	11.1	3	**0.0075**	2	**0.0075**	2	71500	3
0.053	2	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.2	3	10.4	3	0.0151	3 J	**0.0075**	2	64600	3
0.0125	3	**0.0125**	3	0.0325	3 J	**0.0075**	2	10.6	3	8.52	3	**0.0075**	2	**0.0075**	2	71000	2
0.0125	3	**0.0125**	3	0.0429	3 J	**0.0075**	2	7.81	3	8.81	3	**0.0075**	2	**0.0075**	2	63900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10	1	8.81	3	**0.0075**	2	**0.0075**	2	66400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	8.6	2	9.02	3	**0.0075**	2	**0.0075**	2	52600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	8.79	3	11.1	3	**0.0075**	2	**0.0075**	2	61300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.84	3 J+	10.2	3 J+	**0.0075**	2	**0.0075**	2	66800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.2	3	9.82	3	**0.0075**	2	**0.0075**	2	56200	3
0.0125	3	**0.0125**	3	**0.0250**	2 U	**0.0075**	2	11.4	3	10.3	3	**0.0075**	2	**0.0075**	2	58400	3
0.0518	3	**0.0125**	3	0.0273	3 J	**0.0075**	2	10.8	3	11.5	3	**0.0075**	2	**0.0075**	2	60000	1
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.4	3	10.4	3	**0.0075**	2	**0.0075**	2	62900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	11.3	3	10.6	3	0.0266	3 J	0.0201	3 J	61200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	12.1	3	13.6	3	**0.0075**	2	**0.0075**	2	64000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.9	2	10.1	3	**0.0075**	2	**0.0075**	2	58100	3
0.050	1	**0.050**	1	**0.0300**	1	**0.0300**	1	11.9	3 J	11.8	3 J	**0.0300**	1	**0.0300**	1	61400	3

	70400	3	1.16	3	0.273	3	0.376	3 J+	0.272	3 J+	0.617	3 J+	**0.250**	2 U
	63800	3	2.74	3	0.433	3 J+	0.617	3	0.361	3	1.1	2	0.537	3
	64000	2	0.716	3	**0.050**	1	0.312	3 J+	0.141	3 J+	0.733	3 J+	**0.250**	2 U
	64400	3	0.234	3	**0.050**	1	0.173	3	0.142	3	**0.250**	2 U	**0.250**	2 U
	65100	3	0.491	3	0.12	2 J	0.167	3	0.151	3	0.441	3 J	**0.250**	2 U
J+	57900	3 J+	0.247	3	0.292	3	0.14	2 J+	0.145	3 J+	**0.250**	2 U	**0.250**	2 U
	62400	3	0.293	3 J+	**0.100**	1 U	0.15	2 J+	0.179	3 J+	**0.250**	2 U	**0.250**	2 U
	65100	3	0.341	3	0.155	3 J	0.314	3	0.19	2	0.657	3	**0.250**	2 U
	57200	3	0.286	3	0.439	3	0.16	2	0.174	3	**0.250**	2 U	**0.250**	2 U
	58300	3	0.272	3	**0.100**	1 U	0.153	3	0.154	3	**0.0250**	2	**0.0250**	2
	59500	3	0.974	3	0.307	3	0.406	3	0.163	3	0.584	3	0.738	3
	61400	3	0.336	3	0.215	3	0.169	3	0.148	3	**0.250**	2 U	**0.250**	2 U
	58300	3	0.962	3	0.116	3 J	0.316	3	0.168	3	10.5	3	6.05	3
	70800	3	**0.100**	1 U	0.209	3 J+	0.16	2	0.167	3	1.03	3 J		R
	58200	3	0.268	3	0.276	3	0.208	3	0.208	3	0.766	3	0.567	3
	60400	3	**0.400**	1 U	**0.400**	1 U	0.22	2	0.21	2	**1.00**	1 U	**1.00**	1 U

681	3	431	3	0.208	3	**0.050**	1 U	32300	3	34200	3	251	3	239	3
1350	3	716	3	0.57	2	**0.0155**	3	31400	3	31600	3	268	3	252	3
305	3	**10.0**	1 U	0.16	2 J+	**0.0155**	3	33500	3	29300	3	268	3	226	3
63.3	3	6.81	3 J	0.0718	3 J	**0.0155**	3	29100	3	25800	3	233	3	225	3
23.1	3	**3.10**	2	0.0592	3 J	**0.0155**	3	34000	2	32600	3	245	3	234	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	0.0377	3 J	29600	3 J+	30300	3 J+	205	3 J+	217	3 J+
8.49	3 J	10.1	3 J	**0.0155**	3	**0.0155**	3	26400	3	31300	3	221	3	225	3
247	3	12.2	3 J	0.101	3	**0.0155**	3	29300	3	32700	3	254	3	240	2
18.6	3 J		R	**0.0155**	3	**0.0155**	3	29500	3	29600	3	220	2	230	2
13.6	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	26600	3	26200	3	217	3	215	3
547	3	48.3	3	0.889	3	0.156	3	25100	3	26800	3	237	3	218	3
50.5	3	22.7	3	0.116	3	**0.0155**	3	31200	3	29800	3	241	3	226	3
263	3	20.3	3	0.526	3	0.128	3	31100	3	31200	3	227	3	228	3
10.0	1 U	**10.0**	1 U	0.0325	3 J	0.132	3	33500	3	37000	2	222	3	235	3
24.1	3	18.6	3 J	0.0312	3 J	**0.0155**	3	30000	1	30800	3	222	3	228	3
27.7	3 J	**12.4**	3	**0.062**	2	**0.062**	2	34200	3	33000	2	221	3	201	3

0.00075	2	**0.00075**	2	1.51	3	1.48	3	1.87	3	1.34	3	2000	1	1930	3	**0.155**	3
0.0141	3	**0.00075**	2	1.34	3	1.48	3	2.54	3	1.72	3	1860	3	1830	3	**0.155**	3
0.00584	3	**0.00075**	2	1.45	3	1.35	3	2.09	3 J+	1.24	3 J+	1940	3	1740	3	**0.155**	3
0.00075	2	**0.00075**	2	1.39	3	1.4	2	1.2	2	1.02	3	1760	3	1720	3	**0.155**	3
0.00075	2	**0.00075**	2	7.27	3	1.45	3	1.4	2	1.25	3	1960	3	1880	3	**0.155**	3
0.00075	2	**0.00075**	2	1.3	2 J+	1.34	3 J+	1.18	3 J+	1.29	3 J+	1660	3 J+	1730	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	1.22	3	1.42	3	1.22	3	1.72	3	1860	3	1870	3	**0.155**	3
0.00075	2	**0.00075**	2	1.49	3	1.51	3	2.01	3	1.89	3	2020	3	1970	3	**0.155**	3
0.00075	2	**0.00075**	2	1.25	3	1.34	3	1.69	3	1.7	2	1750	3	1770	3	**0.155**	3
0.00075	2	**0.00075**	2	1.38	3	1.4	2	1.3	2	1.38	3	1740	3	1740	3	**0.155**	3
0.0163	3	**0.00075**	2	1.31	3	1.4	2	2.53	3	2.19	3	1880	3	1850	3	**0.155**	3
0.00075	2	**0.00075**	2	1.45	3	1.39	3	1.48	3	1.4	2	1910	3	1860	3	**0.155**	3
0.00403	3 J	**0.00075**	2	1.34	3	1.54	3	2.36	3	1.84	3	1960	3	1940	3	**0.155**	3
0.00075	2	**0.00075**	2	1.35	3	1.46	3	1.63	3 J+	1.65	3 J+	1920	3	2040	3	**0.155**	3
0.00075	2	**0.00075**	2	1.37	3	1.39	3	1.8	2	1.84	3	1780	3	1820	3	**0.155**	3
0.00075	2	**0.00075**	2	1.28	3	1.27	3	**1.24**	3 U	**1.24**	3 U	1880	3	1830	3	**0.62**	2

0.155	3
0.155	3
0.155	3
0.155	3
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0.155	3
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0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.62	2

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

6510	3	**0.0031**	2	**0.0031**	2	15900	3	15700	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6570	3	0.0093	2 J	**0.0031**	2	14300	3	14600	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5870	3	**0.0031**	2	**0.0031**	2	15400	3	13600	3	**0.0050**	1	**0.0050**	1	1.68	3 J+
5680	3	**0.0031**	2	**0.0031**	2	12300	3	11600	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6350	3	**0.0031**	2	**0.0031**	2	15600	3	14800	3	**0.0050**	1	**0.0050**	1	0.167	3 J
6320	3 J+	**0.0031**	2	**0.0031**	2	13300	3 J+	13700	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
6710	3	**0.0031**	2	**0.0031**	2	14100	3	14800	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6730	3	**0.0031**	2	**0.0031**	2	14300	3	14800	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6100	2	**0.0031**	2	**0.0031**	2	14000	2	13700	3	**0.0050**	1	**0.0050**	1	0.672	3 J+
6070	3	**0.0031**	2	**0.0031**	2	13600	3	13300	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
6400	2	0.0103	3 J	**0.0031**	2	12500	3	13800	3	0.0085	2 J	**0.0031**	2	0.235	3
6240	3	**0.0031**	2	**0.0031**	2	14900	3	14400	3	**0.0031**	2	**0.0031**	2	0.0987	3 J
6860	3	**0.0031**	2	**0.0031**	2	14400	3	14500	3	**0.0031**	2	**0.0031**	2	0.281	3
7110	3	**0.0031**	2	**0.0031**	2	15000	2	16200	3	**0.0031**	2	**0.0031**	2	0.658	3
6530	3	**0.0031**	2	**0.0031**	2	14100	3	14300	3	**0.0031**	2	**0.0031**	2	**0.100**	1 U
6510	3	**0.0124**	3	**0.0124**	3	15900	3	15500	3	**0.0124**	3	**0.0124**	3	**0.124**	3

0.050	1	0.652	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	1.3	2	**0.155**	3	3.71	3	**1.55**	3 U
0.216	3 J+	0.355	3 J	**0.155**	3	5.7	2 J+	**1.55**	3 U
0.253	3	**0.155**	3	**0.155**	3	0.498	3 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	3.85	3 J+	3.73	3 J+
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	4.18	3 J+
0.758	3 J+	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.197	3 J	0.927	3 J	**0.155**	3	3.84	3	**1.55**	3 U
0.11	2 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.262	3	0.367	3 J	**0.155**	3	11	2	5.38	3
0.767	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.124	3	**0.62**	2	**0.62**	2	**6.2**	2 U	**6.2**	2 U

	2	3	2	2	0	3	0	3	2	3	0	3
Mean	8		0.82		507		85.0		2.14		282	
Median	8		0.61		533		115.0		2.29		283	
St. Deviation	0		1		160		115		1		20	
# of values	16		15		16		16		16		16	
Minimum	7		0.15		56.1		-133.4		1.12		253	
Maximum	8.04		2.14		860		252.8		2.93		315	
Lowest fifth percentile	7		0		316		-69		1		255	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	3	0	3	3	3	2	3	0	3	4	3								
589		308		5.42		5.9		312		0.032		NA		NA					
584		308		0.92		5.1		313		0.034		NA		NA					
20		15		10		3		9		0		NA		NA					
16		16		16		16		16		16			0		0				
565		280		0.0735		1.57		298		0.0155		NA		NA					
623		335		35.1		12.4		327		0.05		NA		NA					
567		288		0		2		299		0		NA		NA					
0		0		4		4		0		13									
				25%		25%				81%									
				2		9				3									
NA		NA		NA		NA		>=20		NA			NA		NA				
NA		500		NA		NA		NA		10			NA		NA				
0%		0%		0%		0%		0%		0%			NA		NA				
0%		0%		0%		0%		0%		0%			NA		NA				

4	2		
0.0109		NA	
0.0065		NA	
0		NA	
16			0
0.00155		NA	
0.0745		NA	
0		NA	
4			
25%			
9			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	2	3	4
0.723		0.070		7.55		0.00080		0.0010		0.188		1.68		0.023
0.718		0.069		7.55		0.00075		0.0008		0.155		1.69		0.016
0		0		0		0		0		0		0		0
16		16		16		16		16		16		16		16
0.656		0.043		7.01		0.00075		0.00075		0.155		1.17		0.0155
0.81		0.102		8.04		0.0015		0.0025		0.38		2.23		0.05
1		0		7		0		0		0		1		0
0		0		0		15		16		13		0		15
						94%		100%		81%				94%
		15				1				3				1
230		NA		NA		NA		0.0052		NA		NA		5.75
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	4	3	3	2	3	3	3	3	1	3	1	3	
	172		4.7		0.0510		0.0400		0.439		0.406		83.2		81.1		
	25		2.5		0.0200		0.0200		0.466		0.421		82.4		80.5		
	321		7		0		0		0		0		6		3		
	16		16		16		16		16		16		16		16		
	1		1		0.0075		0.0075		0.155		0.155		74.6		77.3		
	1140		27.4		0.539		0.33		0.613		0.593		91.7		87.7		
	2		1		0		0		0		0		75		78		
	1		6		8		10		3		3		0		0		
	6%		38%		50%		63%		19%		19%						
					7		3		7		10						
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	31%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3
0.0198		0.0148		0.0150		0.0089		10.3		10.4		0.0106		0.0097		62500	
0.0125		0.0125		0.0075		0.0075		10.3		10.4		0.0075		0.0075		62200	
0		0		0		0		1		1		0		0		5000	
16		16		16		16		16		16		16		16		16	
0.0125		0.0125		0.0075		0.0075		7.81		8.52		0.0075		0.0075		52600	
0.053		0.05		0.0429		0.03		12.1		13.6		0.03		0.03		71500	
0		0		0		0		8		9		0		0		55300	
14		16		13		16		0		0		14		15		0	
88%		100%		81%		100%						88%		94%			
				3				1		1		2		1			
NA		NA		NA		NA		NA		NA		0.542		0.470		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	3	3	3	3	3	3	2	2	
62300		0.61		0.221		0.253		0.186		1.170		0.740		
61900		0.34		0.212		0.191		0.168		0.600		0.250		
4200		1		0		0		0		3		1		
16		16		16		16		16		16		15		
57200		0.1		0.05		0.14		0.141		0.025		0.025		
70800		2.74		0.439		0.617		0.361		10.5		6.05		
57725		0		0		0		0		0		0		
0		2		5		0		0		7		11		
		13%		31%						44%		73%		
				3						1				
NA		10.98		10.56276		NA		NA		20.777		19.946		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		0%		0%		
0%		0%		0%		0%		0%		0%		0%		

1	3	1	3	4	3	4	3	-2	3	-2	3	0	3	0	3
228		89		0.181		0.045		30400		30800		235		227	
39		12		0.067		0.016		30600		31000		230		227	
364		204		0		0		2800		2900		19		12	
16		15		16		16		16		16		16		16	
8.49		3.1		0.0155		0.0155		25100		25800		205		201	
1350		716		0.889		0.156		34200		37000		268		252	
10		6		0		0		26075		26100		214		212	
2		6		5		12		0		0		0		0	
13%		40%		31%		75%									
4		4		4		1									
1000		1000		10.488		6.864		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
6%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3
0.00308		0.00075		1.73		1.41		1.72		1.54		1870		1850		0.184	
0.00075		0.00075		1.36		1.40		1.66		1.53		1880		1840		0.155	
0		0		1		0		0		0		100		90		0	
16		16		16		16		16		16		16		16		16	
0.00075		0.00075		1.22		1.27		1.18		1.02		1660		1720		0.155	
0.0163		0.00075		7.27		1.54		2.54		2.19		2020		2040		0.62	
0		0		1		1		1		1		1720		1728		0	
12		16		0		0		1		1		0		0		16	
75%		100%						6%		6%						100%	
1																	
0.77		0.77		NA		NA		115.25		114.91		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.184	
0.155	
0	
16	
0.155	
0.62	
0	
16	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	2	2
6410		0.0045		0.0037		14400		14300		0.0052		0.0049		0.280	
6460		0.0031		0.0031		14300		14500		0.0050		0.0050		0.100	
370		0		0		1100		1100		0		0		0	
16		16		16		16		16		16		16		16	
5680		0.0031		0.0031		12300		11600		0.0031		0.0031		0.05	
7110		0.0124		0.0124		15900		16200		0.0124		0.0124		1.68	
5823		0		0		12450		12875		0		0		0	
0		14		16		0		0		15		16		9	
		88%		100%						94%		100%		56%	
		2								1				2	
NA		18.96620566		16.121		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

2	2	3	3	3	3	2	3	2	3
0.200		0.361		0.184		3.05		2.38	
0.100		0.155		0.155		1.55		1.55	
0		0		0		3		2	
16		16		16		16		16	
0.05		0.155		0.155		0.498		1.55	
0.767		1.3		0.62		11		6.2	
0		0		0		1		2	
9		11		16		10		13	
56%		69%		100%		63%		81%	
2		4				1			
NA		NA		NA		265.06		261.35	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-05-35D																
Sample Date																
03/31/09	6.95	3	0.97	2		317	3		-46.6	3		1.12	3	126	3	
05/20/09	7.57	3	0.73	2		370	2		-19.3	3		1.83	3	120	2	
08/19/09	8.77	3	0.95	2		532	3		-21	2		2.54	3	121	3	
10/17/09	7.27	3	1.5	2		349	3		17.6	3		1.4	2	123	3	
03/19/10	7.55	3	1.24	3		293	3		217.1	4		1.23	3	123	3	
05/19/10	7.26	3	0.77	2		518	3	Q	-111.1	4		1.94	3	120	2	
08/20/10	8.54	3	0.3	1	Q	577	3		-34.5	3		2.16	3	120	2	
10/21/10	8.18	3	0.54	2		421	3		127.5	4		1.43	3	118	3	
03/27/11	7.83	3	0.43	2		327	3	Q	-199.6	4		0.82	2	109	3	
05/25/11	7.96	3	0.35	2		245	3		68.8	3		2.14	3	121	3	
08/25/11	7.97	3	0.72	2		289.2	4		-13.4	3		2.7	2	113	3	
10/25/11	8.09	3	0.28	2		344	3		38.2	3		1.49	3	120	2	
03/22/12	7.44	3	0.42	2		367	3		221.2	4		0.23	2	117	3	
05/18/12	8.19	3	0.02	1		361	3		-82.2	3		2.73	3	124	3	
08/27/12	8.11	3	0.04	1		369	3		173.1	4		1.98	3	119	3	
10/10/12	8.06	3	0.06	1		368	3		42.7	3		1.97	3	127	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
372	3		190	2		**0.150**	2		**1.57**	3		185	3		**0.0155**	3						
359	3		188	3		0.326	3 J		**1.57**	3		191	3		**0.0155**	3						
387	3		203	3		**0.078**	2		**1.57**	3		191	3		0.0735	3 J						
374	3		206	3		0.5	1		**1.57**	3		186	3		**0.0155**	3						
384	3		214	3		**0.076**	2		**1.57**	3		182	3		**0.0155**	3						
388	3		224	3		**0.0775**	3		17.4	3		191	3		**0.0155**	3						
348	3		188	3		0.309	3 J		**1.57**	3		188	3		**0.050**	1 U						
366	3		201	3		**0.076**	2		**1.57**	3		187	3		**0.0155**	3						
366	3		189	3		**0.075**	2		**1.57**	3		190	2		**0.050**	1 U						
369	3		207	3		**0.075**	2		**1.57**	3		190	2		**0.0155**	3						
369	3		197	3		0.505	3		**1.57**	3		186	3		**0.0155**	3						
365	3		216	3		0.197	3 J		**1.57**	3		185	3		0.0745	3 J						
366	3		209	3		0.2	1 J		**1.57**	3		182	3		**0.050**	1 U						
370	2		212	3		**0.073**	2		**1.57**	3		185	3		**0.0155**	3						
374	3		203	3		**0.0755**	3		**5.0**	1 U		192	3		**0.050**	1 U						
353	3		200	1		**0.075**	2		**1.57**	3		189	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0602	3				
	0.0585	3				
	0.0554	3				
	0.0475	3				
	0.045	2				
	0.0601	3				
	0.0555	3				
	0.0495	3				
	0.152	3				
	0.0544	3				
	0.0529	3				
	0.0481	3				
	0.0432	3				
	0.0479	3				
	0.0496	3				
	0.0418	3				

																														depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit														result > crit	
CL_N	CL_NSF	CL_NVF	F_N		F_NSF	F_NVF	SO4_N		SO4_NSF	SO4_NVF	CN_N		CN_NSF	CN_NVF	CNWAD_N		CNWAD_NSF	CNWAD_NVF	SCN_N		SCN_NSF	SCN_NVF	DOC_F		DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**				**Sulfate**				**Total Cyanide**				**Cyanide WAD[5]**				**Thiocyanate**				**Carbon)**				**Ammonia[3]**				
mg/L			mg/L				mg/L				mg/L				mg/L				mg/L				mg/L				mg/L				
0.71	2		0.137	3			5.87	3			**0.00075**	2			**0.00075**	2			**0.155**	3			**0.075**	2			**0.050**				
0.678	3		0.124	3			5.67	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.294	3	J		**0.050**				
0.711	3		0.165	3			5.53	3			**0.0025**	2	U		**0.0025**	2	U		**0.155**	3			0.571	3			0.0509				
0.668	3		0.118	3			5.91	3			**0.00075**	2			**0.00075**	2			**0.155**	3			**0.250**	2	U		**0.0155**				
0.695	3		0.117	3			5.91	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.667	3			**0.0155**				
0.724	3		0.115	3			6.06	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.792	3	J+		0.0359				
0.868	3		0.192	3			6.37	3			**0.00075**	2			0.0021	2	J		**0.155**	3			0.701	3			**0.0155**				
0.833	3		0.176	3			6.82	3			**0.0025**	2	U		**0.00075**	2			**0.155**	3			0.766	3			**0.050**				
0.796	3		0.152	3			6.48	3			**0.00075**	2			**0.00075**	2			**0.155**	3			32.4	3			0.0474				
0.803	3		0.161	3			6.76	3			**0.00075**	2			**0.0025**	2	U		**0.155**	3			1.23	3			0.0403				
0.863	3		0.16	2			6.85	3			**0.00075**	2			**0.00075**	2			**0.155**	3			1	1			**0.0155**				
0.773	3		0.156	3			7	1			**0.00075**	2			**0.00075**	2			**0.155**	3			0.94	2			**0.0155**				
0.715	3		0.129	3			6.67	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.759	3			**0.0155**				
0.672	3		0.15	2			6.48	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.898	3			0.0421				
0.684	3		0.143	3			6.7	2			**0.00075**	2			**0.00075**	2			**0.155**	3			0.899	3			**0.0155**				
0.707	3		0.121	3			7.01	3			**0.00075**	2			**0.00075**	2			**0.155**	3			0.702	3			0.153				

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit			
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	1	U	27.8	3	2.33	3	**0.0075**	2	0.0252	3	J	2.13	3	2.15	3	40.9	3	38.9	3						
	1	U	6.56	3	2.72	3	0.0267	3	J	0.0221	3	J	2	1	2.02	3	40.3	3	41.9	3					
	3	J	4.87	3	J+	**1.00**	1	U	**0.0075**	2	**0.0075**	2	1.71	3	1.79	3	39.5	3	38.8	3					
	3		3.83	3	2.12	3	0.0202	3	J	0.019	2	J	2.04	3	2.09	3	40.5	3	41.6	3					
	3		41.1	3	4.54	3	0.0329	3	J	0.0283	3	J	1.9	2	1.89	3	38.6	3	38.5	3					
	3	J	9.23	3	2.89	3	0.0156	3	J	**0.0075**	2	1.98	3	1.98	3	42.3	3	39.9	3						
	3		4.94	3	J+	4.07	3	J+	0.0213	3	J	0.0492	3	J	1.93	3	1.9	2	39.6	3	40.5	3			
	1	U	8.77	3	J+	2.82	3	J+	0.0258	3	J	**0.0075**	2	1.97	3	1.95	3	38.5	3	41.2	3				
	3	J	4.93	3	J+	2.92	3	J+	**0.0075**	2	**0.0250**	2	U	1.82	3	1.92	3	37.7	3	38.9	3				
	3	J	6.04	3	J+	3.33	3	J+	0.098	2	J+	**0.0075**	2	1.81	3	1.84	3	42.7	3	40.5	3				
	3		4.39	3	J+	2.38	3	J+	0.0357	3	J	0.0217	3	J	2.12	3	2.07	3	41.7	3	42.8	3			
	3		4.12	3	J+	2.56	3	J+	**0.0075**	2	0.0167	3	J	1.66	3	1.96	3	40.6	3	43.9	3				
	3		4.53	3	**0.310**	2	**0.0250**	2	U	0.0257	3	J	1.89	3	2	1	41.2	3	42.9	3					
	3	J	2.86	3	J+	2.96	3	J+	0.026	2	J	0.0479	3	J	2.04	3	2.06	3	42.1	3	40.8	3			
	3		2.1	2	**1.00**	1	U	**0.0075**	2	**0.0075**	2	2.01	3	1.85	3	40.8	3	40.8	3					
	3		**1.00**	1	U	**1.00**	1	U	0.0167	3	J	0.0187	3	J	1.89	3	2.09	3	43.2	3	46.6	3			

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CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		**0.00075**	2		3.94	3		3.95	3		0.659	3		0.701	3		1480	3		1460	3		**0.155**	3
0.00075	2		**0.00075**	2		3.94	3		4.17	3		0.946	3		0.858	3		1330	3		1380	3		**0.155**	3
0.00075	2		**0.00075**	2		3.79	3		3.55	3		**0.310**	2	U	**0.310**	2	U	1370	3		1300	2		**0.155**	3
0.00075	2		**0.00075**	2		3.85	3		3.92	3		0.535	3	J	0.528	3	J	1390	3		1430	3		**0.155**	3
0.00075	2		**0.00075**	2		3.62	3		3.56	3		0.898	3		0.485	3	J	1350	3		1310	3		**0.155**	3
0.00075	2		**0.00250**	2	U	3.84	3	J+	3.64	3	J+	0.655	3	J+	**0.310**	2	U	1420	3	J+	1390	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		3.71	3		3.77	3		**0.310**	2	U	0.804	3		1370	3		1390	3		**0.155**	3
0.00075	2		**0.00075**	2		3.66	3		3.77	3		0.862	3		0.73	2		1340	3		1430	3		**0.155**	3
0.00075	2		**0.00075**	2		3.36	3		3.57	3		0.769	3		0.792	3		1280	3		1360	3		**0.155**	3
0.00075	2		**0.00075**	2		3.73	3		3.57	3		0.953	3		0.883	3		1380	3		1360	3		**0.155**	3
0.00075	2		**0.00075**	2		3.62	3		3.79	3		0.941	3		1.01	3		1370	3		1400	2		**0.155**	3
0.00075	2		**0.00075**	2		3.55	3		3.85	3		0.667	3		0.684	3		1420	3		1440	3		**0.155**	3
0.00075	2		**0.00075**	2		4.01	3		3.76	3		0.69	2		0.784	3		1420	3		1430	3		**0.155**	3
0.00075	2		**0.00075**	2		3.74	3		3.74	3		0.694	3	J+	0.725	3	J+	1410	3		1420	3		**0.155**	3
0.00075	2		**0.00075**	2		3.67	3		3.69	3		0.869	3		0.923	3		1380	3		1390	3		**0.155**	3
0.00075	2		**0.00075**	2		3.95	3		4.13	3		1.21	3	J+	1.14	3	J+	1460	3		1520	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				result > crit
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**								**Sodium**								**Thallium**							**Tin**
	Dissolved			Total					Dissolved			Total					Dissolved			Total				Dissolved			Total		
	µg/L			µg/L					µg/L			µg/L					µg/L			µg/L				µg/L			µg/L		
6450	3			**0.0031**	2		**0.0031**	2			31600	3			30800	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
6490	3			**0.0031**	2		**0.0031**	2			29700	3			32200	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
5860	3			**0.0031**	2		**0.0031**	2			29300	3			28900	3			**0.0050**	1			**0.0050**	1			0.456	3	J+
6320	3			**0.0031**	2		**0.0031**	2			30100	3			27000	2			**0.0050**	1			**0.0050**	1			0.199	3	J
6040	3			**0.0031**	2		**0.0031**	2			32000	2			32300	3			**0.0050**	1			**0.0050**	1			0.118	3	J
6270	3	J+		**0.0031**	2		**0.0031**	2			31500	3	J+		32700	3	J+		**0.0050**	1			**0.0050**	1			**0.050**	1	
6300	2			**0.0031**	2		**0.0031**	2			30400	3			30500	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
6280	3			**0.0031**	2		**0.0031**	2			27600	3			32000	2			**0.0050**	1			**0.0050**	1			**0.050**	1	
5970	3			**0.0031**	2		**0.0031**	2			29600	3			28200	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
6100	2			**0.0031**	2		**0.0031**	2			31000	2			30900	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
6060	3			**0.0031**	2		**0.0031**	2			25900	3			26500	3			**0.0031**	2			**0.0031**	2			0.0976	3	J
6200	2			**0.0031**	2		**0.0031**	2			30900	3			33000	2			**0.0031**	2			**0.0031**	2			**0.0310**	2	
6180	3			**0.0031**	2		**0.0031**	2			32400	3			29800	3			**0.0031**	2			**0.0031**	2			**0.100**	1	U
6460	3			**0.0031**	2		**0.0031**	2			28600	3			32600	3			**0.0031**	2			**0.0031**	2			0.0908	3	J
6220	3			**0.0031**	2		**0.0031**	2			30800	3			32500	3			**0.0031**	2			**0.0031**	2			**0.100**	1	U
7000	1			**0.0031**	2		**0.0031**	2			31000	2			28600	3			**0.0031**	2			**0.0031**	2			0.125	3	J

														depends on Hardness				depends on Total Zn	
														result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.050	1		0.43	2 J		0.428	3 J			**1.55**	3 U		**1.55**	3 U					
0.116	3 J		0.494	3 J		0.4	1 J			**1.55**	3 U		**1.55**	3 U					
0.289	3 J+		**0.155**	3		0.34	2 J			**1.55**	3 U		**1.55**	3 U					
0.050	1		0.396	3 J		0.425	3 J			0.416	3 J		**1.55**	3 U					
0.307	3		0.495	3 J		0.316	3 J			**1.55**	3 U		**1.55**	3 U					
0.050	1		**0.155**	3		**0.155**	3			1.54	3 J		**1.55**	3 U					
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.050	1		0.312	3 J		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.107	3 J		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.0310	2		0.311	3 J		0.353	3 J			**1.55**	3 U		**1.55**	3 U					
0.100	1 U		**0.155**	3		**0.155**	3			**1.55**	3 U		**1.55**	3 U					
0.106	3 J		0.394	3 J		0.336	3 J			2.26	3 J		1.8	2 J					

	2	3	2	2	0	3	1	3	2	3	0	3
Mean	7.86		0.58		378		23.7		1.73		120	
Median	7.97		0.49		364		2.1		1.89		120	
St. Deviation	0		0		92		117		1		5	
# of values	16		16		16		16		16		16	
Minimum	6.95		0.02		245		-199.6		0.23		109	
Maximum	8.77		1.5		577		221.2		2.73		127	
Lowest fifth percentile	7		0		278		-133		1		112	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	13%		0%		0%		0%		0%		0%	
% of DWS exceedences	13%		0%		0%		0%		0%		0%	

0	3	0	3	3	2	2	3	0	3	4	3		
369		203		0.179		2.77		188		0.0314		NA	NA
369		203		0.078		1.57		188		0.0155		NA	NA
11		11		0		4		3		0		NA	NA
16		16		16		16		16		16		0	0
348		188		0.073		1.57		182		0.0155		NA	NA
388		224		0.505		17.4		192		0.0745		NA	NA
352		188		0		2		182		0		NA	NA
0		0		10		15		0		14			
				63%		94%				88%			
				4						2			
NA		NA		NA		NA		>=20		NA		NA	NA
NA		500		NA		NA		NA		10		NA	NA
0%		0%		0%		0%		0%		0%		NA	NA
0%		0%		0%		0%		0%		0%		NA	NA

4	3		
0.0576		NA	
0.0513		NA	
0		NA	
16			0
0.0418		NA	
0.152		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	3	2	3	5	2	5	2	3	3	3	3	4
0.74		0.145		6.38		0.00097		0.00105		0.155		2.684		0.039
0.71		0.147		6.48		0.00075		0.00075		0.155		0.763		0.038
0		0		0		0		0		0		8		0
16		16		16		16		16		16		16		16
0.668		0.115		5.53		0.00075		0.00075		0.155		0.075		0.0155
0.868		0.192		7.01		0.0025		0.0025		0.155		32.4		0.153
1		0		6		0		0		0		0		0
0		0		0		16		15		16		2		10
						100%		94%		100%		13%		63%
								1				1		5
230		NA		NA		NA		0.0052		NA		NA		5.44
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	4	3	2	3	2	3	1	3	1	3	
	8.6		2.43		0.0240		0.0211		1.93		1.97		40.6		41.2		
	4.9		2.64		0.0210		0.0204		1.95		1.97		40.7		40.8		
	11		1		0		0		0		0		2		2		
	16		16		16		16		16		16		16		16		
	1		0.31		0.0075		0.0075		1.66		1.79		37.7		38.5		
	41.1		4.54		0.098		0.0492		2.13		2.15		43.2		46.6		
	2		1		0		0		2		2		38		39		
	1		4		6		6		0		0		0		0		
	6%		25%		38%		38%										
					9		10										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	0%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3
0.0125		0.0125		0.0086		0.0075		77.0		79.4		0.0086		0.0086		27700	
0.0125		0.0125		0.0075		0.0075		76.1		78.5		0.0075		0.0075		27700	
0		0		0		0		4		6		0		0		1000	
16		16		16		16		16		16		16		16		16	
0.0125		0.0125		0.0075		0.0075		70.6		72		0.0075		0.0075		24900	
0.0125		0.0125		0.025		0.0075		83.2		90.7		0.025		0.025		29000	
0		0		0		0		71		72		0		0		26475	
16		16		16		16		0		0		16		16		0	
100%		100%		100%		100%						100%		100%			
NA		NA		NA		NA		NA		NA		0.294		0.266		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	2	2	2	4	3	4	3	3	3	2	2
28200		0.180		0.110		0.086		0.082		1.500		0.420	
27700		0.130		0.100		0.078		0.071		1.180		0.250	
1400		0		0		0		0		1		0	
16		16		16		16		16		16		16	
26700		0.031		0.031		0.0578		0.0599		0.025		0.105	
31400		0.693		0.321		0.163		0.16		3.24		1.61	
26700		0		0		0		0		0		0	
0		8		12		0		0		4		12	
		50%		75%						25%		75%	
		3		2						1		1	
NA		10.98		10.56276		NA		NA		10.278		9.866	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	3	4	3	4	3	-2	3	-2	3	0	3	0	3
55		48		0.031		0.0155		12400		12500		145		146	
22		18		0.016		0.0155		12400		12600		145		145	
92		90		0		0		600		800		6		7	
16		16		16		16		16		16		16		16	
10		10		0.0155		0.0155		10800		11000		134		137	
348		347		0.119		0.0155		13400		14000		157		160	
10		10		0		0		11250		11225		136		137	
3		3		12		16		0		0		0		0	
19%		19%		75%		100%									
3		6		3											
1000		1000		3.675		2.847		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	-1	3	-1	3	3	3
0.00075		0.00086		3.75		3.78		0.748		0.729		1390		1400		0.155	
0.00075		0.00075		3.74		3.77		0.732		0.757		1380		1400		0.155	
0		0		0		0		0		0		50		50		0	
16		16		16		16		16		16		16		16		16	
0.00075		0.00075		3.36		3.55		0.31		0.31		1280		1300		0.155	
0.00075		0.0025		4.01		4.17		1.21		1.14		1480		1520		0.155	
0		0		4		4		0		0		1318		1308		0	
16		16		0		0		2		2		0		0		16	
100%		100%						13%		13%						100%	
								1		2							
0.77		0.77		NA		NA		57.41		57.24		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
16	
0.155	
0.155	
0	
16	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	3	2
6260		0.0031		0.0031		30200		30500		0.0043		0.0043		0.104	
6250		0.0031		0.0031		30600		30900		0.0050		0.0050		0.070	
260		0		0		1700		2100		0		0		0	
16		16		16		16		16		16		16		16	
5860		0.0031		0.0031		25900		26500		0.0031		0.0031		0.031	
7000		0.0031		0.0031		32400		33000		0.005		0.005		0.456	
5943		0		0		27175		26875		0		0		0	
0		16		16		0		0		16		16		10	
		100%		100%						100%		100%		63%	
														5	
NA		4.598904204		3.909		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.090		0.26		0.250		1.52		1.57	
0.050		0.16		0.155		1.55		1.55	
0		0		0		0		0	
16		16		16		16		16	
0.031		0.155		0.155		0.416		1.55	
0.307		0.495		0.428		2.26		1.8	
0		0		0		1		2	
11		9		9		13		15	
69%		56%		56%		81%		94%	
3		7		7		3		1	
NA		NA		NA		131.89		130.05	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-37D(A)																
Sample Date																
11/04/06	6.62	3	0.84	2		258	3		135.3	4		2.43	3	70.9	3	
03/23/07	7	1	0.23	2		149	3		-95	2		2.17	3	83.9	3	
05/15/07	6.96	3	0.16	2		163	3		-115.6	4		3.33	3	76.9	3	
08/20/07	6.81	3	0.23	2		146	3		-82.5	3		3.55	3	73.4	3	
11/17/07	6.58	3	0.8	1		267	3		-30.6	3		2.39	3	79.2	3	
03/25/08	6.6	2	0.79	2		269	3		-89.2	3		2.24	3	78.3	3	
05/24/08	6.75	3	0.11	2		255	3		-113.1	4		3.43	3	80.5	3	
08/27/08	7.21	3	4.33	3		260	2		-20	1		3.9	2	72.7	3	
10/19/08	6.97	3	0.74	2		277	3		-121.7	4		2.82	3	76.6	3	
03/28/09	6.72	3	0.32	2		295	3		-62.7	3		2.18	3	79.8	3	
05/20/09	6.8	2	0.3	1		303	3		-37.1	3		2.95	3	76.7	3	
08/19/09	7.23	3	0.36	2		443	3		-23.9	3		3.16	3	76.6	3	
10/16/09	7.79	3	0.81	2		293	3		-48.5	3		3	1	75.3	3	
03/19/10	10.93	4	0.58	2		239	3		-184.7	4		2.92	3	83.9	3	
05/19/10	6.25	3	0.22	2		186	3	Q	-173.6	4		3.55	3	73.5	3	
08/20/10	6.8	2	0.33	2		307	3		37.3	3		3.76	3	72.6	3	
05/24/11	7.36	3	0.86	2		180	2		-119.6	4		3.21	3	76.4	3	
08/26/11	6.76	3	6.7	2		249.2376	FALSE		21.8	3		3.38	3	74.8	3	
10/25/11	7.08	3	0.36	2		285	3		-18.6	3		2.76	3	74.9	3	
03/20/12	5.85	3	0.23	2		293	3		58.7	3		2.13	3	77.6	3	
05/18/12	7.14	3	0.03	1		290	2		-16.5	3		3.18	3	79.2	3	
08/27/12	9	1	-0.37	2		289	3		9.3	2		3.07	3	72.6	3	
10/12/12	7.07	3	0.29	2		285	3		11.9	3		2.98	3	79.5	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
280	2		132	3		1.10	2		9.25	3 J		124	3		0.0680	2 J		**0.0155**	3		0.0500	1
280	2		161	3		0.800	1		6.50	2 J		125	3		**0.050**	1 U		**0.050**	1 U		**0.0155**	3
280	2		163	3		0.400	1 J		7.00	1 J		125	3		0.0345	3 J						
280	2		154	3		0.400	1 J		11.0	2		122	3		0.0415	3 J						
290	2		164	3		1.12	3		12.5	3		123	3		**0.0155**	3						
308	3		163	3		3.30	2		9.66	3 J		127	3		0.199	3						
295	3		184	3		1.8	2		5.93	3 J		126	3		0.123	3						
295	3		153	3		0.43	2 J		7.64	3 J		127	3		**0.050**	1 U						
296	3		168	3		0.207	3 J		5.86	3 J		127	3		0.0445	3 J						
302	3		156	3		0.86	2		10.5	3		125	3		**0.0155**	3						
303	3		169	3		**0.0805**	3		6.86	3 J		124	3		**0.0155**	3						
300	1		166	3		1.86	3		7.3	2 J		123	3		**0.0155**	3						
307	3		164	3		1.61	3		**5.0**	1 U		121	3		**0.0155**	3						
325	3		184	3		0.612	3		5.75	3 J		118	3		**0.0155**	3						
314	3		186	3		1.52	3		22.2	3		118	3		**0.0155**	3						
299	3		162	3		0.297	3 J		7.58	3 J		123	3		**0.050**	1 U						
294	3		158	3		0.707	3		7.45	3 J		121	3		0.032	2 J						
291	3		150	2		1.1	2		7.91	3 J		117	3		**0.0155**	3						
287	3		159	3		0.5	1		5.64	3 J		116	3		0.0445	3 J						
293	3		176	3		1.3	2		10.1	3		120	2		0.0405	3 J						
292	3		154	3		0.985	3		5.14	3 J		117	3		**0.050**	1 UJ						
298	3		162	3		0.7	1		**5.0**	1 U		123	3		**0.050**	1 U						
290	2		162	3		**0.1415**	4		**1.57**	3		121	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
J	0.0370	2				R
	0.0150	2		**0.050**	1	UJ
	0.0099	2	J			
	0.0095	2	J			
	0.0170	2				
	0.0102	3				
	0.0058	2	J			
	0.0142	3				
	0.0069	2	J			
	0.0134	3				
	0.0122	3				
	0.0064	2	J			
	0.00155	3				
	0.00155	3				
	0.013	2				
	0.0088	2	J			
	0.0102	3				
	0.0071	2	J			
	0.0052	2	J			
	0.00155	3				
	0.0050	1	U			
	0.0050	1	U			
	0.0169	3				

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
3.68	3		0.132	3		22.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.733			
3.91	3		0.158	3		22.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
3.91	3		0.157	3		22.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
3.68	3		0.143	3		22.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0817			
3.66	3		0.161	3		22.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0488			
3.71	3		0.146	3		21.8	3		**0.00075**	2		**0.00075**	2		0.51	2	J				0.0507			
3.86	3		0.177	3		22.3	3		**0.0025**	2	U	0.0053	2		**0.155**	3		**0.250**	2	U	**0.0155**			
4.01	3		0.162	3		24	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
3.57	3		0.135	3		21	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
3.74	3		0.144	3		22.2	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.075**	2		**0.050**			
3.64	3		0.141	3		21.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
3.57	3		0.132	3		21.2	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		0.264	3	J	0.0379			
3.73	3		0.135	3		22.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
3.65	3		0.127	3		22.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
3.74	3		0.115	3		22.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	0.0639			
3.98	3		0.179	3		23	2		0.002	1	J	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
3.96	3		0.152	3		22.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3		1.25	3		**0.0155**			
3.91	3		0.162	3		23	2		**0.00075**	2		**0.00075**	2		**0.155**	3		1.2	2		**0.0155**			
3.86	3		0.169	3		22.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.594	3		**0.0155**			
3.86	3		0.138	3		23	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.431	3	J	**0.0155**			
3.79	3		0.167	3		23.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
3.82	3		0.153	3		23.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
3.93	3		0.134	3		24	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.378	3	J	0.0506			

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	6.25	3	**1.00**	1 U	0.169	3 J+	0.141	3 J+	3.08	3	2.91	3	53.6	3	54.0	2							
		3	5.57	3 J+	**1.00**	1 U	0.116	3	0.114	3	3.25	3	3.10	2	64.7	3	63.8	3							
		3	**1.00**	1 U	**1.00**	1 U	0.136	3	0.102	3	3.03	3	2.90	2	60.6	3	54.6	3							
		3 J	4.30	2 J+	**1.00**	1 U	0.0976	3	0.107	3	2.92	3	3.11	3	55.8	3	60.4	3							
		3 J	5.02	3	**1.00**	1 U	0.104	3 J		R	3.12	3	3.02	3	60.1	3	60.4	3							
		3 J	20.9	3	1.31	3 J	0.0932	3	0.0785	3	3.17	3	2.87	3	57.0	2	56.4	3							
		3	7.15	3 J+	4.12	3 J+	**0.0075**	2	0.0168	3 J	3.47	3	3.43	3	63.4	3	57.6	3							
		1 U	2.05	3	**1.00**	1 U	0.0986	3	0.0998	3	3.28	3	3.4	2	57.9	3	59.2	3							
		1 U	3.08	3	1.17	3 J	0.0981	3	0.0959	3	3.26	3	3.15	3	57.5	3	56	2							
		1 U	**1.00**	1 U	**1.00**	1 U	0.085	2	0.0999	3	3.37	3	3.35	3	59.8	3	63.6	3							
		1 U	4.19	3	**1.00**	1 U	0.0991	3	0.0962	3	3.29	3	3.17	3	60.5	3	60.1	3							
		3 J	3.01	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	3.09	3	3.01	3	59	2	60.3	3							
		3	12.1	3	3.71	3	0.0928	3	0.0849	3	3.52	3	3.05	3	61.8	3	58.7	3							
		3	**1.00**	1 U	**1.00**	1 U	0.0848	3	**0.0075**	2	3.36	3	3.15	3	60.7	3	61.5	3							
		3 J	2.33	3	**1.00**	1 U	0.0809	3	0.0795	3	3.37	3	3.35	3	60.1	3	60.8	3							
		3	2.36	3 J+	**1.00**	1 U	**0.0075**	2		R	3.07	3	3.08	3	60	1	61.9	3							
		3	12.4	3 J+	6.55	3 J+	0.125	3 J+	0.105	3 J+	3.38	3	3.29	3	63.8	3	62.8	3							
		3	**1.00**	1 U	**1.00**	1 U	0.0616	3	0.051	2	3.28	3	3.1	2	58.9	3	58.7	3							
		3	**1.00**	1 U	2.51	3 J+	0.0987	3	0.105	3	3.31	3	3.32	3	61	2	63	2							
		3	**1.00**	1 U	**1.00**	1 U	0.0994	3	0.0976	3	3.44	3	3.67	3	60.7	3	63.7	3							
		3	3.12	3 J+	**1.00**	1 U	0.111	3	0.117	3	3.23	3	3.2	2	62.1	3	64.5	3							
		3	**1.00**	1 U	**1.00**	1 U	0.0933	3	0.118	3	3.25	3	3.32	3	57.5	3	59.2	3							
		3 J	**1.00**	1 U		R	0.0383	3 J	0.0438	3 J	3.71	3	3.56	3	61.9	3	60.9	3							

| | | |

| | | |

									depends on Hardness		depends on Hardness																		
result > crit				result > crit					result > crit		result > crit														result > crit				
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total				Dissolved			Total				Dissolved				Total			Dissolved			Total				Dissolved	
µg/L				µg/L			µg/L				µg/L				µg/L			µg/L			µg/L				µg/L	
619	3			594	3		1.53	3	J+		1.22	3	J+		5990	3		6190	3		72.7	3			70.7	3
707	3	J+		663	3	J+	**0.050**	1	U		**0.0155**	3			8020	3		7700	2		81.2	3			72.5	3
721	3			652	3		0.115	3			**0.050**	1	U		6870	3		6530	3		79.7	3			72.6	3
638	3			659	3		**0.0155**	3			**0.050**	1	U		6410	3		6930	3		73.1	3			76.3	3
682	3			660	2		**0.050**	1	U		**0.0155**	3			6900	2		6740	3		78.6	3			76.9	3
730	2			696	3		0.0733	3	J		**0.0155**	3			7080	3		7010	3		77.5	3			77.9	3
720	2			657	3		0.122	3			**0.0155**	3			7400	2		6900	2		79.8	3			71.8	3
670	2			697	3		0.0338	3	J		**0.0155**	3			6520	3		6800	2		73.1	3			75.4	3
700	1			664	3		**0.0155**	3			**0.0155**	3			6920	3		6570	3		78.3	3			74	2
769	3			832	3		**0.0155**	3			**0.050**	1	U		7160	3		7620	3		74.9	3			79.7	3
846	3			904	3		**0.0155**	3			**0.0155**	3			6750	3		6590	3		76.9	3			80	1
658	3			665	3		**0.0155**	3			**0.0155**	3			6810	3		6780	3		79.8	3			80.1	3
945	3			627	3		0.111	3			**0.0155**	3			6190	3		6390	3		91.5	3			75.2	3
693	3			702	3		**0.0155**	3			**0.0155**	3			7790	3		7430	3		76.8	3			76.1	3
660	2			667	3		**0.0155**	3			**0.0155**	3			6660	3	J+	6830	3	J+	72.5	3	J+		75.7	3 J+
619	3			646	3		**0.0155**	3			**0.0155**	3			6210	3		6710	3		71.7	3			77.6	3
652	3			636	3		0.0721	3	J		**0.0155**	3			6850	3		6960	3		83.6	3			82.8	3
641	3			643	3		**0.0155**	3			**0.0155**	3			6590	3		6460	3		78.3	3			76.5	3
693	3			674	3		**0.0155**	3			**0.0155**	3			6680	3		6590	3		85.3	3			85.5	3
712	3			743	3		**0.0155**	3			**0.0155**	3			6980	3		7520	3		84.3	3			88.7	3
668	3			705	3		**0.0155**	3			**0.0155**	3			7060	3		7360	3		81.6	3			85.8	3
631	3			643	3		0.0549	3	J		**0.0155**	3			6640	3		5810	3		79.5	3			77.4	3
676	3			698	3		**0.0155**	3			**0.0155**	3			7360	3		7200	2		88.2	3			88.1	3

CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.000475	4		**0.000475**	4		2.38	3		2.46	3		0.469	3		0.463	3		980	2		984	3		**0.155**	3
0.000169	3		**0.000475**	4		2.98	3		2.98	3		0.778	3	J+	0.892	3	J+	1210	3		1150	3		**0.155**	3
0.000169	3		**0.000475**	4		2.75	3		2.53	3		0.651	3	J+	0.600	1	J+	1150	3		1070	3		**0.155**	3
0.000169	3		**0.000475**	4		2.65	3		2.77	3		0.520	2	J+	0.536	3	J+	1060	3		1150	3		**0.155**	3
0.000169	3		**0.000475**	4		2.70	2		2.67	3		0.504	3		0.420	2		1150	3		1170	3		**0.155**	3
0.00075	2		**0.00075**	2		2.56	3		2.49	3		0.529	3		0.439	3		1170	3		1160	3		**0.155**	3
0.00075	2		0.00313	3	J	2.54	3		2.39	3		0.312	3		0.37	2		1220	3		1130	3		**0.155**	3
0.00075	2		**0.00075**	2		2.49	3		2.61	3		0.443	3		0.453	3		1100	2		1130	3		**0.155**	3
0.00375	3	J	**0.00075**	2		2.62	3		2.5	2		0.967	3		0.817	3		1130	3		1090	3		**0.155**	3
0.00075	2		**0.00075**	2		2.72	3		2.9	2		**0.310**	2	U	**0.310**	2	U	1160	3		1230	3		**0.155**	3
0.00075	2		**0.00075**	2		2.75	3		2.81	3		0.494	3	J	0.475	3	J	1120	3		1130	3		**0.155**	3
0.00075	2		**0.00075**	2		2.63	3		2.66	3		**0.310**	2	U	**0.310**	2	U	1140	3		1150	3		**0.155**	3
0.00075	2		**0.00075**	2		2.73	3		2.59	3		0.784	3		0.29	2	J	1130	3		1100	2		**0.155**	3
0.00075	2		**0.00075**	2		2.74	3		2.68	3		0.641	3		0.243	3	J	1180	3		1200	2		**0.155**	3
0.00179	3	J	**0.00075**	2		2.65	3	J+	2.77	3	J+	0.895	3	J+	0.653	3	J+	1170	3	J+	1200	2	J+	**0.155**	3
0.00075	2		**0.00075**	2		2.52	3		2.57	3		**0.310**	2	U	**0.310**	2	U	1140	3		1170	3		**0.155**	3
0.00075	2		**0.00075**	2		2.68	3		2.64	3		0.725	3		0.48	2	J	1210	3		1170	3		**0.155**	3
0.00075	2		**0.00075**	2		2.59	3		2.49	3		0.742	3		0.627	3		1150	3		1130	3		**0.155**	3
0.00075	2		**0.00075**	2		2.73	3		2.7	2		0.416	3	J	0.407	3	J	1190	3		1180	3		**0.155**	3
0.00075	2		**0.00075**	2		2.88	3		2.98	3		0.626	3		0.671	3		1200	2		1280	3		**0.155**	3
0.00075	2		**0.00075**	2		2.8	2		2.74	3		**0.310**	2	U	**0.310**	2	U	1180	3		1270	3		**0.155**	3
0.00075	2		**0.00075**	2		2.6	2		2.7	2		**0.310**	2	U	0.665	3		1130	3		1130	3		**0.155**	3
0.00075	2		**0.00075**	2		3.11	3		2.93	3		0.653	3	J+	0.638	3	J+	1210	3		1200	2		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

		depends on HARD; revised 2013					depends on Total Ag																				
		result > crit					result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon				**Silver[8]**						**Sodium**						**Thallium**						**Tir**				
	Dissolved				Total			Dissolved			Total			Dissolved			Total			Dissolved			Total				
	µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				
5730	3			0.0114	3	J	0.0096	2	J	30800	3	32200	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7810	3			**0.0031**	2		**0.0031**	2		37300	3	35400	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7190	3			**0.0031**	2		**0.0031**	2		33400	3	31800	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8340	3			**0.0031**	2		0.0150	2	J	31700	3	35300	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7610	3			**0.0031**	2		**0.0031**	2		32300	3	33300	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7640	3			**0.0031**	2		**0.0031**	2		34800	3	32600	3		**0.0050**	1		**0.0050**	1		0.117	3	J				
7820	3			**0.0031**	2		**0.0031**	2		34500	3	31500	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7570	3			**0.0031**	2		**0.0031**	2		30000	1	31200	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7450	3			**0.0031**	2		**0.0031**	2		32800	3	30600	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7920	3			**0.0031**	2		**0.0031**	2		30100	3	32800	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7700	2			**0.0031**	2		**0.0031**	2		31400	3	30200	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7540	3			**0.0031**	2		**0.0031**	2		29000	2	28900	3		**0.0050**	1		**0.0050**	1		0.227	3	J+				
7170	3			**0.0031**	2		**0.0031**	2		28400	3	23700	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7910	3			**0.0031**	2		**0.0031**	2		33400	3	31700	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8000	1	J+		**0.0031**	2		**0.0031**	2		30600	3	J+	31000	2	J+	**0.0050**	1		**0.0050**	1		0.183	3	J				
7530	3			**0.0031**	2		**0.0031**	2		24300	3	29200	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7890	3			**0.0031**	2		**0.0031**	2		29200	3	30700	3		**0.0050**	1		**0.0050**	1		0.326	3					
7550	3			**0.0031**	2		**0.0031**	2		26200	3	27000	2		**0.0031**	2		**0.0031**	2		0.472	3					
7550	3			**0.0031**	2		**0.0031**	2		30700	3	30100	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
8490	3			**0.0031**	2		0.0122	3	J	29900	3	30500	3		**0.0031**	2		**0.0031**	2		0.113	3	J				
8150	3			**0.0031**	2		**0.0031**	2		29200	3	35600	3		**0.0031**	2		**0.0031**	2		0.498	3					
7650	3			**0.0031**	2		**0.0031**	2		29700	3	26300	3		**0.0031**	2		0.0141	3	J	1.05	3					
7870	3			**0.0031**	2		**0.0031**	2		33500	3	33900	3		**0.0031**	2		**0.0031**	2		0.0667	3	J				

												depends on Hardness				depends on Total Zn					
												result > crit				result > crit					
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N				ZN_NSF	ZN_NVF	ZN_F				ZN_FSF	ZN_FVF	
						Vanadium									**Zinc[4]**						
	Dissolved			Total			Dissolved						Total						Dissolved		
	µg/L			µg/L			µg/L						µg/L						µg/L		
0.050	1		**0.250**	2		**0.250**	2						2.87	3	J+				**0.50**	1	U
0.050	1		**0.155**	3		**0.155**	3						2.91	3	J+				2.94	3	J+
0.050	1		**0.155**	3		**0.155**	3						2.20	2	J+				**0.50**	1	U
0.050	1		**0.155**	3		**0.155**	3						1.04	3	J						R
0.050	1		**0.155**	3		**0.155**	3						1.16	3					**0.50**	1	U
0.050	1		**0.155**	3		**0.155**	3						3.62	3					3.71	3	
0.050	1		**0.155**	3		**0.155**	3						1.08	3	J+				1.35	3	J+
0.050	1		**0.155**	3		**0.155**	3						**0.50**	1	U				**0.50**	1	U
0.050	1		**0.155**	3		**0.155**	3						1.49	3	J+				1.04	3	J+
0.050	1		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.119	3	J	0.353	3	J	**0.155**	3						1.94	3	J				**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.156	3	J	**0.155**	3		**0.155**	3						0.743	3	J				**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3						3.96	3					**1.55**	3	U
0.0947	3	J	**0.155**	3		**0.155**	3						2.12	3	J				**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.0725	3	J	**0.155**	3		**0.155**	3						3.38	3					**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3						3.74	3					**1.55**	3	U
0.999	3		**0.155**	3		**0.155**	3						**1.55**	3	U				**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3						**1.55**	3	U				4.29	3	

	2	3	2	2	0	3	1	3	2	3	1	3
Mean	7.14		0.84		260		-46.9		2.98		76.8	
Median	6.96		0.33		269		-37.1		3.00		76.6	
St. Deviation	1		2		65		76		1		4	
# of values	23		23		23		23		23		23	
Minimum	5.85		-0.37		146		-184.7		2.13		70.9	
Maximum	10.93		6.7		443		135.3		3.9		83.9	
Lowest fifth percentile	6		0		150		-168		2		73	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	17%		0%		0%		0%		0%		0%	
% of DWS exceedences	13%		0%		0%		0%		0%		0%	

0	3	0	3	2	2	2	3	0	3	4	3	3	2	3	2
296		163		0.95		7.97		122		0.0442		0.0330		0.0330	
295		162		0.80		7.30		123		0.0405		0.0330		0.0330	
11		12		1		4		3		0		0		0	
23		23		23		23		23		23		2		2	
280		132		0.0805		1.57		116		0.0155		0.0155		0.0155	
325		186		3.3		22.2		127		0.199		0.05		0.05	
280		150		0		5		117		0		0		0	
0		0		2		3		0		14		2		1	
				9%		13%				61%		100%		50%	
				5		15				7				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	2	3	2
0.0101		0.0650	
0.0095		0.0650	
0		NA	
23		1	
0.00155		0.05	
0.037		0.05	
0		0	
5		1	
22%		100%	
8			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

2	3	3	3	1	3	5	2	5	2	3	3	2	2	4
3.79		0.149		22.5		0.00096		0.00110		0.170		0		0.063
3.79		0.146		22.3		0.00075		0.00075		0.155		0		0.016
0		0		1		0		0		0		0		0
23		23		23		23		23		23		17		23
3.57		0.115		21		0.00075		0.00075		0.155		0.075		0.0155
4.01		0.179		24		0.0025		0.0053		0.51		1.25		0.733
4		0		21		0		0		0		0		0
0		0		0		22		22		22		11		16
						96%		96%		96%		65%		70%
						1				1		3		6
230		NA		NA		NA		0.0052		NA		NA		6.83
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		4%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	2	3	2	3	1	3	1	3
	4.43		1.60		0.087		0.084		3.27		3.20		59.9		60.1	
	3.01		1.00		0.098		0.098		3.28		3.15		60.1		60.4	
	5		1		0		0		0		0		3		3	
	23		22		23		21		23		23		23		23	
	1		1		0.0075		0.0075		2.92		2.87		53.6		54	
	20.9		6.55		0.169		0.141		3.71		3.67		64.7		64.5	
	1		1		0		0		3		3		56		55	
	8		16		3		2		0		0		0		0	
	35%		73%		13%		10%									
			2		1		2									
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3
0.0484		0.0452		0.0124		0.0108		23.4		23.1		0.0092		0.0080		19400	
0.0480		0.0458		0.0075		0.0075		23.3		22.8		0.0075		0.0075		19500	
0		0		0		0		2		2		0		0		700	
23		23		23		23		23		23		23		23		23	
0.0125		0.0125		0.0075		0.0075		19		19.7		0.0075		0.0075		18100	
0.11		0.0615		0.0862		0.0834		27.1		27.2		0.025		0.0185		20800	
0		0		0		0		21		20		0		0		18400	
2		1		22		22		0		0		22		23		0	
9%		4%		96%		96%						96%		100%			
12		15										1					
NA		NA		NA		NA		NA		NA		0.213		0.197		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	2	2	4	3	4	3	3	3	2	2
19500		0.178		0.100		0.0466		0.0434		0.284		0.250	
19500		0.121		0.100		0.0405		0.0383		0.250		0.250	
900		0		0		0		0		0		0	
23		23		22		23		23		23		22	
18000		0.05		0.031		0.0245		0.0262		0.167		0.0966	
21200		0.46		0.28		0.0877		0.0968		0.607		0.572	
18200		0		0		0		0		0		0	
0		10		16		0		0		10		12	
		43%		73%						43%		55%	
		3		2						2		1	
NA		10.98		10.56276		NA		NA		7.096		6.812	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

0	3	0	3	4	3	4	3	-1	3	-1	3	1	3	1	3
698		684		0.10		0.07		6860		6850		79.1		78.1	
682		664		0.02		0.02		6850		6800		78.6		76.9	
74		67		0		0		480		470		5		5	
23		23		23		23		23		23		23		23	
619		594		0.0155		0.0155		5990		5810		71.7		70.7	
945		904		1.53		1.22		8020		7700		91.5		88.7	
620		628		0		0		6192		6210		73		72	
0		0		15		22		0		0		0		0	
				65%		96%									
				4											
1000		1000		2.116		1.773		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	-1	3	-1	3	3	3
0.000810		0.000790		2.69		2.68		0.552		0.495		1150		1160		0.155	
0.000750		0.000750		2.68		2.67		0.520		0.463		1150		1150		0.155	
0		0		0		0		0		0		50		60		0	
23		23		23		23		23		23		23		23		23	
0.000169		0.0004745		2.38		2.39		0.31		0.243		980		984		0.155	
0.00375		0.00313		3.11		2.98		0.967		0.892		1220		1280		0.155	
0		0		2		2		0		0		1064		1072		0	
21		22		0		0		5		4		0		0		23	
91%		96%						22%		17%						100%	
2		1						2		5							
0.77		0.77		NA		NA		39.78		39.67		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
23	
0.155	
0.155	
0	
23	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	3	2
7660		0.0035		0.0043		31000		31100		0.0045		0.0050		0.162	
7650		0.0031		0.0031		30700		31200		0.0050		0.0050		0.050	
530		0		0		2900		2900		0		0		0	
23		23		23		23		23		23		23		23	
5730		0.0031		0.0031		24300		23700		0.0031		0.0031		0.031	
8490		0.0114		0.015		37300		35600		0.005		0.0141		1.05	
7172		0		0		26420		26370		0		0		0	
0		22		20		0		0		23		22		14	
		96%		87%						100%		96%		61%	
		1		3								1		4	
NA		2.181776963		1.855		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.099		0.168		0.159		1.96		1.61	
0.050		0.155		0.155		1.55		1.55	
0		0		0		1		1	
23		23		23		23		22	
0.031		0.155		0.155		0.5		0.5	
0.999		0.353		0.25		3.96		4.29	
0		0		0		1		1	
18		22		23		9		17	
78%		96%		100%		39%		77%	
4		1				3			
NA		NA		NA		91.35		90.07	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-37M																
Sample Date																
11/03/06	6.22	3	4.11	3		93	2		229.9	4		3.01	3	40.8	3	
03/23/07	6	1	5.22	3		54	2		116.6	4		2.83	3	41.6	3	
05/15/07	6.06	3	3.79	3		54	2		96.7	3		3.5	2	40.6	3	
08/20/07	6.05	3	4.79	3		51	2		63.7	3		3.58	3	38.3	3	
11/17/07	6.13	3	5.06	3		96	2		141	3		2.04	3	43.0	2	
03/25/08	5.93	3	4.69	3		95	2		69.6	3		2.59	3	38.5	3	
05/24/08	6.06	3	4.92	3		101	3		121.1	4		3.15	3	42.2	3	
08/27/08	6.2	2	4.4	2		93	2		148.3	4		3.46	3	39.2	3	
10/19/08	6.04	3	4.91	3		100	1		123.4	4		2.88	3	51.9	3	
03/28/09	5.6	2	4.24	3		104	3		137.3	4		1.98	3	43.7	3	
05/20/09	5.95	3	3.8	2		108	3		104.2	4		2.9	2	43.1	3	
08/19/09	6.79	3	5.82	3		158	3		7.7	2		3.2	2	42.1	3	
10/16/09	6.95	3	5.46	3	C	105	3		35	2	C	2.94	3	41.3	3	
03/19/10	6.1	2	4.18	3		84	2		149.8	4		2.61	3	42.4	3	
05/19/10	5.27	3	4.46	3		151	3	Q	78.1	3		3.2	2	40.3	3	
08/20/10	6.44	3	4.67	3		109	3		38.7	3		3.46	3	40.5	3	
10/21/10	6.09	3	4.41	3		104	3		131.2	4		2.89	3	39.4	3	
03/28/11	6.04	3	3.7	2		107	3	Q	155.6	4		2.34	3	29.9	3	
05/25/11	5.75	3	4.77	3		63	2		127.8	4		2.99	3	47.5	3	
08/26/11	5.97	3	8.23	3		89.4412	FALSE		145	3		2.87	3	41.5	3	
10/24/11	5.71	3			R	95	2		102	3		2.88	3	41.9	3	
03/20/12	5.65	3	1.18	3		104	3		135.6	4		2.22	3	43.5	3	
05/18/12	6.35	3	2.3	2		106	3		197.3	4		2.69	3	43.1	3	
08/27/12	6.06	3	3.97	3		106	3		160.3	4		3.33	3	40	1	
10/12/12	6.19	3	2.57	3		104	3		212.1	4		2.49	3	46.4	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
95.0	2		68.8	3		2.00	1		17.5	3		47.0	2		0.0445	3	J	**0.0155**	3		**0.0155**	3
90.0	1		71.2	3		**0.075**	2		26.0	2		50.0	1		**0.050**	1	U	**0.050**	1	U	**0.0155**	3
100	1		73.8	3		**0.075**	2		10.0	1		50.0	1		0.0760	2	J					
100	1		56.3	3		**0.075**	2		26.5	3		47.5	3		0.0785	3	J					
100	1		65.0	2		**0.0765**	3		31.0	2		48.3	3		0.0355	3	J					
109	3		82.5	3		**0.0755**	3		14.0	2		49.7	3		0.676	3						
101	3		83.8	3		**0.075**	2		13.2	3		50	1		0.06	1	J					
105	3		61.3	3		**0.077**	2		5.58	3	J	50.5	3		0.112	3	J					
108	3		70	1		**0.077**	2		8.58	3	J	50.8	3		0.075	2	J					
109	3		73.8	3		**0.085**	2		15.8	3		51.2	3		**0.050**	1	U					
109	3		66.2	3		**0.081**	2		10.6	3		50.2	3		0.066	2	J					
119	3		75	2		**0.0775**	3		16	2		48	2		0.0685	3	J					
107	3		68.8	3		**0.0755**	3		15.2	3		47.8	3		**0.050**	1	U					
107	3		88.8	3		**0.0765**	3		9.04	3	J	43.9	3		0.0925	3	J					
116	3		86	2		**0.1565**	4		27.3	3		45.2	3		**0.050**	1	U					
109	3		65	2		**0.075**	2		23.6	3		48.7	3		**0.050**	1	U					
108	3		77	2		**0.075**	2		16.7	3		47.4	3		**0.050**	1	U					
94.5	3		39	2		0.901	3		5.26	3	J	41.6	3		0.234	3						
107	3		64	2		**0.0765**	3		21.4	3		49	2		0.0575	3	J					
108	3		60	1		0.3	1	J	17.8	3		47.1	3		0.114	3						
106	3		76	2		0.299	3	J	7.64	3	J	46.3	3		0.063	2	J					
106	3		76	2		2.4	2		26.6	3		46.7	3		**0.0155**	3						
108	3		57	2		0.196	3	J	13.3	3		46.5	3		**0.050**	1	U					
108	3		60	1		**0.075**	2		13	2		47.1	3		**0.050**	1	U					
108	3		60	1		0.3	1	J	**1.57**	3		49.4	3		**0.050**	1	U					

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0420	2		**0.050**	1	UJ
	0.00155	3		**0.050**	1	UJ
	0.0110	2				
	0.0087	2	J			
	0.0186	3				
	0.0206	3				
	0.013	2				
	0.0050	1	U			
	0.0183	3				
	0.0128	3				
	0.0122	3				
	0.0054	2	J			
	0.0125	3				
	0.00155	3				
	0.0194	3				
	0.0081	2	J			
	0.004	1	J			
	0.0282	3				
	0.0057	2	J			
	0.0079	2	J			
	0.0059	2	J			
	0.0034	2	J			
	0.0121	3				
	0.0104	3				
	0.0043	2	J			

																								depends on field pH and field Temp
result > crit			result > crit			result > crit							result > crit											result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
0.903	3		0.0430	2 J		4.55	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.943	3		0.0660	2 J		3.91	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.933	3		0.0640	2 J		3.72	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.746	3		0.0450	2 J		3.30	2		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0714		
0.923	3		0.0550	2 J		3.81	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.793	3		0.0570	2 J		4.94	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0367		
0.804	3		0.059	2 J		3.38	3		**0.0025**	2 U		0.0054	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.844	3		0.052	2 J		3.83	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.050**		
0.852	3		0.049	2 J		3.57	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**		
0.77	2		0.053	2 J		3.43	3		**0.00075**	2		**0.0025**	2 U		**0.155**	3		**0.075**	2		**0.050**		
0.759	3		0.048	2 J		3.29	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**		
0.77	2		0.049	2 J		3.22	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		0.378	3 J		**0.0155**		
0.753	3		0.042	2 J		3.66	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**		
0.719	3		0.041	2 J		3.44	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.74	2		0.039	2 J		3.46	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.822	3		0.098	2 J		3.69	3		0.0018	2 J		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.877	3		0.106	3		4.07	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.234	3 J		0.368		
0.681	3		0.085	2 J		4.06	3		**0.00075**	2		**0.00075**	2		**0.155**	3		9.86	3		**0.0155**		
0.89	2		0.093	2 J		3.87	3		**0.00075**	2		**0.0025**	2 U		**0.155**	3		0.666	3		**0.0155**		
0.839	3		0.069	2 J		3.7	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.782	3		0.085	2 J		3.91	3		**0.00075**	2		**0.00075**	2		0.687	3 J		**0.250**	2 U		**0.0155**		
0.745	3		0.056	2 J		3.67	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.367	3 J		**0.0155**		
0.699	3		0.088	2 J		3.47	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.739	3		0.073	2 J		3.71	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**		
0.795	3		0.042	2 J		4.15	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.433	3 J		**0.0155**		

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3	152	3	**1.00**	1 U	0.162	3 J+	0.183	3 J+	**0.155**	3	**0.155**	3	14.8	3	11.9	3								
	3	10.1	3 J+	**1.00**	1 U	0.200	1	0.199	3	**0.155**	3	**0.155**	3	13.5	3	13.1	3								
	3	2.64	3 J+	3.33	3 J+	0.175	3 J		R	**0.155**	3	**0.155**	3	13.2	3	13.8	3								
	3 J	2.33	3 J+	**1.00**	1 U	0.161	3	0.173	3	**0.155**	3	**0.155**	3	12.2	3	12.4	3								
	3	2.83	3	**1.00**	1 U	0.162	3	0.162	3	**0.155**	3	**0.155**	3	12.6	3	12.9	3								
	3 J	3.05	3	1.89	3 J	0.150	2	0.165	3	**0.155**	3	**0.155**	3	12.1	3	12.8	3								
	3	**1.00**	1 U	**1.00**	1 U	0.0543	3	0.0766	3	**0.155**	3	**0.155**	3	13.2	3	12.4	3								
	1 U	**1.00**	1 U	**1.00**	1 U	0.153	3	0.159	3	**0.155**	3	**0.155**	3	12.5	3	13.2	3								
	1 U	17.5	3	1	1 J	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	4.74	3	4.4	2								
	1 U	**1.00**	1 U	**1.00**	1 U	0.152	3	0.155	3	**0.155**	3	**0.155**	3	13.5	3	13.2	3								
	3	**1.00**	1 U	**1.00**	1 U	0.12	2	0.162	3	**0.155**	3	**0.155**	3	13.9	3	13.2	3								
	3	2.62	3 J+	2.04	3 J+	0.0363	3 J	0.0289	3 J	**0.155**	3	**0.155**	3	13.3	3	13.2	3								
	3	**1.00**	1 U	**1.00**	1 U	0.149	3	0.166	3	**0.155**	3	**0.155**	3	13.1	3	13.7	3								
	3	3.39	3	**1.00**	1 U	0.148	3	**0.0075**	2	**0.155**	3	**0.155**	3	13.5	3	13	2								
	3	3.29	3	4.36	3	0.181	3	0.179	3	**0.155**	3	**0.155**	3	13.2	3	12.9	3								
	3	2.35	3 J+	2.2	2 J+	0.15	2	0.153	3	**0.155**	3	**0.155**	3	13.4	3	13.3	3								
	3	2.09	3 J+	**1.00**	1 U	0.114	3	0.122	3	**0.155**	3	**0.155**	3	12.9	3	13.5	3								
	3	13.9	3 J+	4.67	3 J+	**0.0250**	2 U	**0.0075**	2	0.476	3 J	**0.155**	3	6.2	2	6.45	3								
	3	8.71	3 J+	2.08	3 J+	19.9	3	0.279	3 J+	**0.155**	3	**0.155**	3	28.5	3	13.1	3								
	3	8.52	3 J+	3.43	3 J+	0.136	3 J		R	0.164	3 J	0.223	3 J	13.4	3	13.8	3								
	3	6.95	3 J+	**1.00**	1 U	0.15	2	0.168	3	**0.075**	2	**0.075**	2	14	2	14.6	3								
	3	3.42	3	**1.00**	1 U	0.172	3	0.166	3	**0.075**	2	**0.075**	2	14.2	3	13.8	3								
	3	2.34	3 J+	**1.00**	1 U	0.165	3	0.18	2	**0.075**	2	0.157	3 J	14	2	13.8	3								
	3	3.15	3	**1.00**	1 U	0.132	3	0.126	3	**0.075**	2	**0.075**	2	13.3	3	13.5	3								
	3	**0.310**	2		R	0.161	3	0.081	2	**0.075**	2	0.175	3 J	14.7	3	13.6	3								

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								depends on Hardness				depends on Hardness																	
result > crit				result > crit				result > crit				result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
130	2		**10.0**	1 U		1.20	2 J+		**0.050**	1 U		3580	3		3290	3		8.76	3		6.25	3	
25.4	3 J+		**10.0**	1 U		0.264	3 J+		0.144	3 J+		3850	3		3920	3		5.11	3 J+		5.05	3 J+	
31.3	3		35.1	3		0.303	3 J			R		3690	3		3940	3		4.01	3 J			R	
10.0	1 U		**10.0**	1 U		0.128	3 J+		0.116	3 J+		3420	3		3660	3		3.24	3		3.38	3	
23.4	3		14.9	3 J		0.157	3		**0.0155**	3		3980	3		3770	3		2.73	3		2.44	3	
40.0	1		41.6	3		0.103	3		0.0323	3 J		3580	3		3820	3		2.09	3		2.13	3	
24	2		33.3	3		**0.050**	1 U		**0.0155**	3		3880	3		3710	3		2.06	3		2.01	3	
32.9	3		34.7	3		0.15	2		0.0925	3 J		3520	3		3710	3		2.3	2		2.48	3	
76.6	3		48.5	3		**0.0155**	3		**0.0155**	3		3110	3		3010	3		5.77	3		0.373	3	
50.2	3		49.3	3		**0.050**	1 U		**0.050**	1 U		4060	3		3930	3		2.27	3 J+		2.04	3 J+	
88.1	3 J			R		0.0539	3 J		0.0514	3 J		3970	3		3680	3		2.21	3		2.14	3	
10.0	1 U		**10.0**	1 U		0.113	3 J+		**0.050**	1 U		3810	3		3770	3		1.93	3 J+		1.88	3 J+	
3.10	2		**3.10**	2		0.0568	3 J		0.0586	3 J		3760	3		3690	3		1.52	3		1.66	3	
12.7	3 J		**3.10**	2		0.151	3		0.121	3		4010	3		3950	3		1.32	3		1.2	2	
3.10	2		**3.10**	2		0.0786	3 J		**0.050**	1 U		3730	3 J+		3920	3 J+		1.19	3 J+			R	
3.10	2		**3.10**	2		0.0325	3 J		0.0629	3 J		3820	3		3770	3		1.04	3 J			R	
3.10	2		**3.10**	2		0.244	3		0.216	3		3710	3		4040	3		1.1	2 J+		0.987	3 J+	
18.9	3 J		**3.10**	2		**0.0155**	3		**0.0155**	3		1620	3		1590	3		0.933	3		0.453	3 J+	
10.2	3 J		**3.10**	2		0.0876	3 J		0.0664	3 J		3770	3		3710	3		2.11	3		0.874	3 J+	
13.8	3 J		7.73	3 J		0.227	3		0.132	3		3830	3		3980	3		1.74	3		1.16	3	
10.0	1 U		**10.0**	1 U		0.191	3		0.147	3		3850	3		3930	3		1.16	3		0.918	3	
13.3	3 J		9.19	3 J		0.109	3		0.103	3		4070	3		3930	3		1.46	3 J+		1.1	2 J+	
10.0	1 U		**3.10**	2		0.0372	3 J		0.0346	3 J		3850	3		4000	1		0.694	3 J+		0.687	3 J+	
12.8	3 J		9.52	3 J		0.0925	3 J		0.0382	3 J		3720	3		3740	3		2.04	3 J+		1.72	3 J+	
8.11	3 J		8.11	3 J		0.0647	3 J		0.0683	3 J		4400	2		4120	3		0.703	3 J+		0.687	3 J+	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA								
result > crit			result > crit									result > crit		result > crit								result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.000475	4		**0.000475**	4		1.35	3		1.31	3		1.65	3		1.40	2		209	3		164	3		**0.155**	3
0.000411	3	J	**0.000475**	4		1.34	3		1.34	3		1.17	3	J+	1.07	3	J+	190	2		192	3		**0.155**	3
0.000169	3		**0.000475**	4		1.35	3		1.47	3		0.850	2	J			R	184	3		204	3		**0.155**	3
0.000169	3		**0.000475**	4		1.26	3		1.30	2		0.648	3	J+	0.636	3	J+	173	3		181	3		**0.155**	3
0.00250	2	U	**0.000475**	4		1.28	3		1.26	3		0.673	3		0.595	3		193	3		193	3		**0.155**	3
0.00075	2		**0.00075**	2		1.17	3		1.23	3		0.658	3	J			R	172	3		187	3		**0.155**	3
0.00075	2		**0.00075**	2		0.948	3		1.02	3		0.31	2		0.393	3		191	3		188	3		**0.155**	3
0.00075	2		**0.00075**	2		1.2	2		1.26	3		0.384	3		0.399	3		178	3		182	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0908	3		0.0788	3		2.02	3		1.66	3		517	3		493	3		**0.155**	3
0.00075	2		**0.00075**	2		1.29	3		1.25	3		**0.310**	2	U	**0.310**	2	U	186	3		183	3		**0.155**	3
0.00075	2		**0.00075**	2		1.31	3		1.26	3		0.339	3	J	0.328	3	J	185	3		174	3		**0.155**	3
0.00075	2		**0.00075**	2		1.21	3		1.21	3		**0.310**	2	U	**0.310**	2	U	189	3		192	3		**0.155**	3
0.00075	2		**0.00075**	2		1.22	3		1.29	3		0.317	3	J	0.334	3	J	182	3		185	3		**0.155**	3
0.00075	2		**0.00075**	2		1.31	3		1.2	2		0.557	3	J	0.395	3	J	188	3		194	3		**0.155**	3
0.00075	2		**0.00075**	2		1.22	3	J+	1.21	3	J+	**0.310**	2	U	**0.310**	2	U	190	2	J+	193	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		1.16	3		1.14	3		**0.310**	2	U	**0.310**	2	U	182	3		186	3		**0.155**	3
0.00075	2		**0.00075**	2		1.16	3		1.22	3		0.504	3	J	**0.310**	2	U	200	1		196	3		**0.155**	3
0.00075	2		**0.00075**	2		0.296	3		0.312	3		0.758	3		0.644	3		415	3		429	3		**0.155**	3
0.00075	2		**0.00075**	2		1.22	3		1.22	3		0.553	3	J	0.476	3	J	192	3		182	3		**0.155**	3
0.00075	2		**0.00075**	2		1.19	3		1.22	3		1.37	3		1	1		189	3		191	3		**0.155**	3
0.00075	2		**0.00075**	2		1.28	3		1.31	3		0.879	3		0.88	2		194	3		190	2		**0.155**	3
0.00075	2		**0.00075**	2		1.39	3		1.34	3		0.92	2		0.934	3		203	3		194	3		**0.155**	3
0.00075	2		**0.00075**	2		1.19	3		1.19	3		**0.310**	2	U	**0.310**	2	U	190	2		185	3		**0.155**	3
0.00075	2		**0.00075**	2		1.18	3		1.28	3		1.03	3		0.879	3		185	3		190	2		**0.155**	3
0.00075	2		**0.00075**	2		1.24	3		1.33	3		0.647	3	J+	**0.310**	2	U	207	3		193	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**								**Sodium**								**Thallium**							**Tir**
	Dissolved			Total					Dissolved			Total					Dissolved			Total				Dissolved			Total		
	µg/L			µg/L					µg/L			µg/L					µg/L			µg/L				µg/L			µg/L		
7610	3			**0.0031**	2		**0.0031**		2		4550		3		4370		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10100	3			**0.0031**	2		**0.0031**		2		5120		3		5240		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
11000	2			**0.0031**	2		**0.0031**		2		4830		3		5370		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10800	3			**0.0031**	2		**0.0031**		2		4630		3		4840		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10500	3			**0.0031**	2		**0.0031**		2		5150		3		4960		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10400	3			**0.0031**	2		**0.0031**		2		4440		3		4750		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10400	3			**0.0031**	2		**0.0031**		2		4660		3		4490		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10100	3			**0.0031**	2		**0.0031**		2		4250		3		4530		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
9590	3			**0.0031**	2		**0.0031**		2		3870		3		3730		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10100	3			**0.0031**	2		**0.0031**		2		4880		3		4710		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
9950	3			**0.0031**	2		**0.0031**		2		4930		3		4600		2		**0.0050**		1		**0.0050**		1		**0.050**		1	
10100	3			**0.0031**	2		**0.0031**		2		4610		3		4540		3		**0.0050**		1		**0.0050**		1		**0.100**		1	U
9990	3			**0.0031**	2		**0.0031**		2		4550		3		4450		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10400	3			**0.0031**	2		**0.0031**		2		4760		3		4830		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10300	3	J+		**0.0031**	2		**0.0031**		2		4540		3	J+	4680		3	J+	**0.0050**		1		**0.0050**		1		0.203		3	
9880	3			**0.0031**	2		**0.0031**		2		4690		3		4710		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10600	3			**0.0031**	2		**0.0031**		2		4540		3		4890		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
7820	3			**0.0031**	2		**0.0031**		2		5480		3		5130		3		**0.0050**		1		**0.0050**		1		**0.100**		1	U
9950	3			**0.0031**	2		**0.0031**		2		4440		3		4410		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
10400	3			**0.0031**	2		**0.0031**		2		4600		2		4740		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
10400	3			**0.0031**	2		**0.0031**		2		4640		3		4720		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
10800	3			**0.0031**	2		**0.0031**		2		4830		3		4650		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
10300	3			**0.0031**	2		**0.0031**		2		4820		3		4770		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
10400	3			**0.0031**	2		**0.0031**		2		4420		3		4540		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
10500	3			**0.0031**	2		**0.0031**		2		5200		2		4940		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	

														depends on Hardness				depends on Total Zn	
														result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.050	1		**0.250**	2		**0.250**	2			3.26	3	J+	3.44	3	J+				
0.050	1		**0.155**	3		**0.155**	3			4.30	2	J+	2.88	3	J+				
0.050	1		**0.155**	3		**0.155**	3			1.84	3	J			R				
0.050	1		**0.155**	3		**0.155**	3			8.50	2	J+	4.44	3	J+				
0.050	1		**0.155**	3		**0.155**	3			1.72	3		1.69	3					
0.050	1		**0.155**	3		**0.155**	3			2.76	3		2.81	3					
0.050	1		**0.155**	3		**0.155**	3			1.66	3	J+	1.7	2	J+				
0.050	1		**0.155**	3		**0.155**	3			3.09	3	J+	2.36	3	J+				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			1.43	3	J	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			3.62	3		**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.100	1	U	0.431	3	J	0.432	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			11	2		**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			2.95	3	J	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			4.58	3		**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			2.94	3	J	3.43	3					

	2	3	2	3	0	3	1	4	2	3	1	3
Mean	6.06		4.40		97		121.1		2.88		41.7	
Median	6.06		4.44		101		127.8		2.89		41.6	
St. Deviation	0		1		25		53		0		4	
# of values	25		24		25		25		25		25	
Minimum	5.27		1.18		51		7.7		1.98		29.9	
Maximum	6.95		8.23		158		229.9		3.58		51.9	
Lowest fifth percentile	6		2		54		36		2		38	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	92%		0%		0%		0%		0%		0%	
% of DWS exceedences	32%		0%		0%		0%		0%		0%	

0	3	0	2	3	2	1	3	1	3	3	2	3	2	4	3
106.0		69.0		0.31		15.7		48.0		0.0930		0.0330		0.0155	
107.0		69.0		0.08		15.2		48.0		0.0580		0.0330		0.0155	
6		11		1		8		2		0		0		0	
25		25		25		25		25		25		2		2	
90		39		0.075		1.57		41.6		0.0155		0.0155		0.0155	
119		88.8		2.4		31		51.2		0.676		0.05		0.0155	
95		56		0		5		44		0		0		0	
0		0		18		1		0		10		2		2	
				72%		4%				40%		100%		100%	
				4		5				11					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	2
0.0120		0.050	
0.0100		0.050	
0		0	
25		2	
0.00155		0.05	
0.042		0.05	
0		0	
3		2	
12%		100%	
9			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.805		0.0620		3.75		0.00100		0.00115		0.176		1		0.0368
0.793		0.0560		3.70		0.00075		0.00075		0.155		0		0.0155
0		0		0		0		0		0		2		0
25		25		25		25		25		25		19		25
0.681		0.039		3.22		0.00075		0.00075		0.155		0.075		0.0155
0.943		0.106		4.94		0.0025		0.0054		0.687		9.86		0.368
1		0		3		0		0		0		0		0
0		0		0		24		24		24		13		22
						96%		96%		96%		68%		88%
		24				1				1		4		2
230		NA		NA		NA		0.0052		NA		NA		7.03
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		4%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	3	3	3	3	3	3	3	3	1	3	1	3
	10		1.70		0.925		0.136		0.152		0.149		13.4		12.6	
	3		1.00		0.150		0.162		0.155		0.155		13.3		13.2	
	30		1		4		0		0		0		4		2	
	25		24		25		23		25		25		25		25	
	0.31		1		0.025		0.0075		0.075		0.075		4.74		4.4	
	152		4.67		19.9		0.279		0.476		0.223		28.5		14.6	
	1		1		0		0		0		0		7		8	
	6		15		2		3		23		22		0		0	
	24%		63%		8%		13%		92%		88%					
			2		1		1		2		3					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	4%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		4%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0142		0.0125		0.0082		0.0082		1.80		1.70		0.0083		0.0084		10600	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		10300	
0		0		0		0		1		1		0		0		1200	
25		25		25		25		25		25		25		25		25	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		9300	
0.043		0.0125		0.025		0.025		4.37		3.64		0.0185		0.0186		15600	
0		0		0		0		1		1		0		0		9552	
23		25		25		25		17		18		24		24		0	
92%		100%		100%		100%		68%		72%		96%		96%			
2								8		7		1		1			
NA		NA		NA		NA		NA		NA		0.133		0.126		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	3	3	4	3	4	3	2	3	3	3
10500		0.78		0.289		0.038		0.036		1.120		0.870			
10300		0.53		0.269		0.029		0.029		1.160		0.933			
1000		1		0		0		0		1		0			
25		25		25		25		25		25		23			
9050		0.05		0.05		0.01		0.017		0.239		0.188			
15200		2.7		0.752		0.185		0.158		3.22		1.4			
9914		0		0		0		0		0		0			
0		1		8		1		0		1		1			
		4%		32%		4%				4%		4%			
		2		1				2							
NA		10.98		10.56276		NA		NA		4.112		3.948			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%			

1	3	1	2	3	3	4	3	-1	3	-1	3	2	3	2	3
27		15.0		0.16		0.073		3700		3700		2.38		1.89	
13		10.0		0.10		0.055		3810		3770		2.04		1.69	
31		16		0		0		500		500		2		1	
25		24		25		24		25		25		25		22	
3.1		3.1		0.0155		0.0155		1620		1590		0.694		0.373	
130		49.3		1.2		0.216		4400		4120		8.76		6.25	
3		3		0		0		3172		3066		1		0	
8		13		4		8		0		0		0		0	
32%		54%		16%		33%									
7		5		8		9									
1000		1000		0.939		0.874		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		4%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3
0.000750		0.000690		1.15		1.17		0.71		0.62		211		210		0.155	
0.000750		0.000750		1.22		1.25		0.65		0.40		190		190		0.155	
0		0		0		0		0		0		79		77		0	
25		25		25		25		25		23		25		25		25	
0.000169		0.0004745		0.0908		0.0788		0.31		0.31		172		164		0.155	
0.0025		0.00075		1.39		1.47		2.02		1.66		517		493		0.155	
0		0		0		0		0		0		174		175		0	
24		25		0		0		5		7		0		0		25	
96%		100%						20%		30%						100%	
1								5		4							
0.77		0.77		NA		NA		23.18		23.11		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
25	
0.155	
0.155	
0	
25	
100%	
4.6	
NA	
0%	
0%	

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
10100		0.0031		0.0031		4700		4700		0.0045		0.0045		0.056			
10300		0.0031		0.0031		4640		4710		0.0050		0.0050		0.050			
800		0		0		330		320		0		0		0			
25		25		25		25		25		25		25		25			
7610		0.0031		0.0031		3870		3730		0.0031		0.0031		0.031			
11000		0.0031		0.0031		5480		5370		0.005		0.005		0.203			
8174		0		0		4284		4378		0		0		0			
0		25		25		0		0		25		25		24			
		100%		100%						100%		100%		96%			
NA		0.727580399		0.618		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	2	3	2	3		
0.047		0.170		0.170		2.79		1.94			
0.050		0.155		0.155		1.66		1.55			
0		0		0		2		1			
25		25		25		25		24			
0.031		0.155		0.155		0.5		0.5			
0.1		0.431		0.432		11		4.44			
0		0		0		1		2			
25		24		24		11		16			
100%		96%		96%		44%		67%			
		1		1		3					
NA		NA		NA		53.18		52.44			
NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%			

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-37S																
Sample Date																
11/03/06	6.28	3	9.83	3		106	3		250.7	4		3.01	3	51.9	3	
03/23/07	6.11	3	11.67	4		63	2		151	3		2.49	3	53.4	3	
05/15/07	6.31	3	8.51	3		64	2		104.2	4		3.35	3	50.5	3	
08/20/07	6.29	3	10.25	4		61	2		122.8	4		3.32	3	51.6	3	
11/17/07	6.26	3	13.06	4		112	3		155.1	4		2.14	3	54.4	3	
03/23/08	6.58	3	9.51	3		113	3		83.6	3		2.65	3			
03/24/08														51.2	3	
05/25/08	5.72	3	9.65	3		124	3		176.9	4		2.61	3	53	2	
08/28/08	6.3	2	9.36	3		112	3		150.1	4		3.07	3	52.2	3	
10/19/08	6.33	3	10.52	4		118	3		111.5	4		3.02	3	41.8	3	
03/28/09	5.97	3	8.58	3		123	3		136.3	4		1.89	3	53.7	3	
05/20/09	6.1	2	8.24	3		128	3		99.1	3		2.9	2	52.3	3	
08/19/09	7.05	3	12.19	4		189	3		45.6	3		3.17	3	53.5	3	
10/16/09	6.2	2	10.28	4		127	3		50.6	3		2.96	3	54.5	3	
03/19/10	4.94	3	8.24	3		101	3		296.6	4		2.72	3	54.7	3	
05/19/10	5.47	3	9.71	3		179	3	Q	78.7	3		3.15	3	51.7	3	
08/20/10	6.65	3	9.6	2		131	3		65.2	3		3.26	3	51.3	3	
10/21/10	6.32	3	9.17	3		135	3		111.8	4		2.57	3	53.3	3	
03/28/11	6.39	3	7.24	3		130	2	Q	165.5	4		2.85	3	30.7	3	
05/24/11	6.54	3	9.14	3		83	2		92.4	3		2.62	3	54.4	3	
08/25/11	6.28	3	9	1		102.2116	FALSE		144.1	4		3.02	3	55.5	3	
10/24/11	6.17	3			R	126	3		170.5	4		2.46	3	54	2	
03/20/12	5.93	3	1.94	3		129	3		115.2	4		1.52	3	57.4	3	
05/18/12	6.55	3	4.9	2		131	3		162.3	4		2.6	2	58.2	3	
08/26/12	6.37	3	8.65	3		131	3		108.3	4		2.57	3	52.9	3	
10/12/12	6.34	3	5.97	3		128	3		215.9	4		2.15	3	63.1	3	

			result > crit												result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF	
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate		
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
110	2		71.2	3		**0.075**	2		15.0	2		61.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3	
110	2		82.5	3		**0.150**	2		20.5	3		63.0	2		**0.050**	1	U	**0.050**	1	U	0.0410	2	
120	2		76.3	3		**0.075**	2		10.5	3		62.0	2		0.0495	3	J						
120	2		76.3	3		**0.075**	2		22.8	3		60.5	3		0.0685	3	J						
115	3		72.5	3		0.200	1	J	22.0	2		61.5	3		**0.050**	1	UJ						
127	3		75.0	2		**0.076**	2		16.2	3		63.6	3		0.0940	2	J						
121	3		104	3		**0.075**	2		14.3	3		63.2	3		0.274	3							
124	3		66.3	3		**0.1665**	4		13.8	3		63.1	3		**0.0100**	1	U						
127	3		92.5	3		0.213	3	J	5.04	3	J	64.2	3		0.079	2	J						
129	3		77.5	3		**0.0775**	3		13.9	3		62	2		**0.050**	1	U						
129	3		78.8	3		**0.078**	2		10.6	3		63.9	3		0.0525	3	J						
133	3		86.3	3		**0.0815**	3		12.5	3		63.5	3		0.262	3							
134	3		77.5	3		**0.075**	2		**5.0**	1	U	62.3	3		0.087	2	J						
128	3		90	1		0.625	3		9.11	3	J	56.8	3		0.135	3							
135	3		109	3		0.632	3		23.2	3		62.9	3		**0.050**	1	U						
128	3		79	2		**0.0765**	3		12.4	3		61.8	3		**0.050**	1	U						
129	3		89	2		**0.075**	2		12.1	3		61.8	3		**0.050**	1	U						
83.9	3		42	2		0.2	1	J	11.6	3		37.2	3		0.231	3							
131	3		89	2		0.918	3		9.73	3	J	62.8	3		0.05	1	J						
135	3		83	2		0.498	3		6.33	3	J	63.4	3		0.0385	3	J						
130	2		85	2		**0.0745**	3		9.64	3	J	62.2	3		0.04	1	J						
130	2		87	2		**0.075**	2		22.5	3		62	2		0.0735	3	J						
133	3		77	2		**0.072**	2		12.8	3		62	2		**0.050**	1	U						
135	3		69	2		0.4	1	J	13.4	3		64.6	3		**0.050**	1	U						
132	3		79	2		**0.075**	2		7.22	3	J	65.8	3		**0.050**	1	U						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.0340	2				R
J	0.0160	2	J-			R
	0.0218	3				
	0.0139	3				
	0.0342	3				
	0.0214	3				
	0.0868	3				
	0.021	2				
	0.0142	3				
	0.0276	3				
	0.0273	3				
	0.0187	3				
	0.0183	3				
	0.0132	3				
	0.0399	3				
	0.025	2				
	0.0181	3				
	0.0504	3				
	0.0224	3				
	0.0232	3				
	0.021	2				
	0.0143	3				
	0.0221	3				
	0.0197	3				
	0.0152	3				

result > crit			result > crit			result > crit							result > crit											depends on field pH and field Temp result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.591	3		0.0490	2 J		1.13	3		**0.00075**	2		**0.00075**	2		**0.155**	3					1.11			
0.755	3		0.0710	2 J		1.33	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.772	3		0.0700	1 J		1.37	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.605	3		0.0530	2 J		1.16	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.609	3		0.0630	2 J		1.18	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.623	3		0.0660	2 J		1.15	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.641	3		0.053	2 J		2.89	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		0.586	3		**0.0155**			
0.668	3		0.056	2 J		1.33	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.574	3		**0.0155**			
0.584	3		0.068	2 J		1.08	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.619	3		0.059	2 J		1.19	3		**0.00075**	2		**0.0025**	2 U		**0.155**	3		**0.075**	2		**0.050**			
0.63	2		0.056	2 J		1.18	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.487	3		0.055	2 J		1.15	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		0.337	3 J		**0.0155**			
0.575	3		0.047	2 J		1.23	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.59	2		0.044	2 J		1.21	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.59	2		0.045	2 J		1.27	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.539	3 J+		**0.0155**			
0.629	3		0.102	3		1.38	3		0.0023	2 J		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.661	3		0.11	2		1.43	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.348	3 J		**0.0155**			
0.649	3		0.076	2 J		3.22	3		**0.00075**	2		**0.00075**	2		**0.155**	3		12.6	3		**0.0155**			
0.668	3		0.089	2 J		1.39	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.662	3		0.089	2 J		1.53	3		0.0031	2 J		**0.00075**	2		**0.155**	3		0.717	3		**0.0155**			
0.568	3		0.088	2 J		1.34	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.501	3		**0.0155**			
0.554	3		0.059	2 J		1.36	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.301	3 J		**0.0155**			
0.543	3		0.093	2 J		1.39	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.54	2		0.077	2 J		1.46	3		**0.00075**	2		**0.00075**	2		0.525	3 J		**0.250**	2 U		**0.0155**			
0.483	3		0.049	2 J		1.28	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.55	2		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3	J+	7.67	3	**1.00**	1	U	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3		**0.155**	3		5.12	3	J+	4.46	3	J+
	3		2.13	3	J+ **1.00**	1	U	0.0508	3		0.0554	3		**0.155**	3		**0.155**	3		5.12	3	J+	5.07	3	J+
	3		8.79	3	J+ **1.00**	1	U	0.0358	3	J	0.0392	3	J	**0.155**	3		**0.155**	3		5.02	3		5.03	3	
	3		9.50	2	J+ **1.00**	1	U	0.0400	1	J	0.0402	3	J	**0.155**	3		**0.155**	3		4.87	3		4.80	2	
	3		35.3	3	**1.00**	1	U	0.0384	3	J	0.0344	3	J	**0.155**	3		**0.155**	3		5.25	3		4.95	3	
	3		7.10	2	0.704	3	J	0.0369	3	J	0.0356	3	J	**0.155**	3		**0.155**	3		4.78	3		4.58	3	
	3		9.86	3	J+ 5.05	3	J+	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		4.94	3		4.57	3	
	3		4.2	2	**1.00**	1	U	0.0343	3	J	0.0354	3	J	**0.155**	3		**0.155**	3		4.91	3		4.77	3	
	1	U	1.79	3	J 1.07	3	J	0.169	3		0.156	3		**0.155**	3		**0.155**	3		12.8	3		12	2	
	1	U	98.1	3	**1.00**	1	U	0.0277	3	J	0.0187	3	J	0.33	2	J	**0.155**	3		6.3	2		4.74	3	
	3		3.6	2	**1.00**	1	U	0.0329	3	J	0.044	2	J	**0.155**	3		**0.155**	3		4.67	3		4.46	3	
	3		6.16	3	J+ 6.5	2	J+	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		4.64	3		4.7	2	
	3		2.31	3	2.1	2		0.0262	3	J	0.0317	3	J	**0.155**	3		**0.155**	3		4.65	3		4.8	2	
	3		8.61	3	6.91	3		0.0259	3	J	0.0339	3	J	**0.155**	3		**0.155**	3		4.75	3		4.45	3	
	3		28.7	3	3.6	2		0.038	2	J	**0.0075**	2		**0.155**	3		**0.155**	3		5.05	3	J+	4.63	3	J+
	3		3.74	3	J+ **1.00**	1	U	0.0305	3	J	0.0283	3	J	**0.155**	3		**0.155**	3		4.54	3		4.25	3	
	3		6.71	3	J+ 2.18	3	J+	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		4.98	3		4.8	2	
	3		5.09	3	J+ 2.72	3	J+	**0.0250**	2	U	**0.0075**	2		**0.155**	3		**0.155**	3		4.8	2		5.31	3	
	3		29.4	3	J+ 4.2	2	J+	**0.0250**	2	U	0.0529	3	J+	0.363	3	J	**0.155**	3		5.53	3	J+	5.08	3	J+
	3		9.67	3	J+ 4.16	3	J+	0.0347	3	J	**0.0075**	2		**0.250**	2	U	0.167	3	J	5.56	3		5.1	2	
	3		3.71	3	J+ **1.00**	1	U	0.0246	3	J	0.0248	3	J	**0.075**	2		**0.075**	2		4.95	3		5.27	3	
	3		2.96	3	**1.00**	1	U	0.0376	3	J	0.0322	3	J	**0.075**	2		**0.075**	2		4.88	3		4.7	2	
	3		2.33	3	J+ **1.00**	1	U	0.0408	3	J	0.0782	3		0.271	3	J	**0.075**	2		5.11	3	J+	4.71	3	J+
	3		**1.00**	1	U **0.310**	2		0.0309	3	J	0.0304	3	J	0.284	3	J	0.159	3	J	4.39	3		4.74	3	
	3		**0.310**	2	**1.00**	1	U	0.0313	3	J	0.0294	3	J	0.164	3	J	0.249	3	J	5.41	3		4.5	2	

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								depends on Hardness		depends on Hardness																	
result > crit			result > crit					result > crit		result > crit															result > crit		
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
28.5	3		**10.0**	1 U		0.120	2 J+		**0.050**	1 U		2960	3		2610	3		4.10	2		0.574	3 J+	
10.0	1 U		**10.0**	1 U		0.139	3 J+		**0.0155**	3		3270	3		3290	3		0.582	3 J+		0.402	3 J+	
54.1	3		42.1	3		**0.050**	1 U		**0.0155**	3		3040	3		3170	3		1.26	3 J+		0.397	3 J+	
21.4	3		**10.0**	1 U		**0.0155**	3		**0.050**	1 U		2990	3		3010	3		1.10	2 J+		0.318	3 J+	
70.0	1		28.0	2		**0.050**	1 U		**0.0155**	3		3220	3		3190	3		7.09	3		0.741	3	
66.8	3		61.8	3		**0.0155**	3		**0.0155**	3		3170	3		3100	2		0.998	3		0.262	3	
58.1	3		57.6	3		**0.0155**	3		**0.0155**	3		3180	3		3060	3		1.65	3 J+		0.576	3 J+	
70.7	3		69	2		**0.0155**	3		**0.0155**	3		3110	3		3050	3		1.32	3		0.447	3	
31.5	3		21.7	3		0.111	3 J+		**0.050**	1 U		3840	3		3700	2		2.53	3		2.42	3	
252	3		81.4	3		0.103	3		**0.0155**	3		3270	3		3280	3		25.1	3		0.553	3 J+	
202	3		189	3		**0.0155**	3		**0.0155**	3		3110	3		2940	3		0.867	3		0.322	3 J+	
10.0	1 U		**10.0**	1 U		**0.0155**	3		**0.0155**	3		3170	3		3240	3		1.42	3 J+		0.437	3 J+	
9.82	3 J		13.2	3 J		**0.0155**	3		**0.0155**	3		3280	3		3420	3		0.479	3		0.377	3	
28.1	3		20.8	3		**0.0155**	3		**0.0155**	3		3400	2		3300	2		1.72	3		1.78	3	
58.8	3		20.2	3		0.054	2 J		**0.0155**	3		3090	3 J+		3440	3 J+		5.06	3 J+		2.19	3 J+	
12.2	3 J		8.24	3 J		**0.0155**	3		**0.0155**	3		3140	3		3110	3		0.979	3 J+		0.269	3 J+	
23.7	3		12.5	3 J		**0.0155**	3		**0.0155**	3		3340	3		3280	3		1.52	3		0.532	3 J+	
9.41	3 J		7.57	3 J		**0.0155**	3		**0.0155**	3		2460	3		2500	2		0.364	3 J+		0.384	3 J+	
46.7	3		**10.0**	1 U		0.0724	3 J		**0.0155**	3		3350	3		3410	3		3.87	3		0.426	3 J+	
41.4	3		22.1	3		0.0428	3 J		**0.0155**	3		3120	3		3200	2		2.04	3		1.69	3	
10.0	1 U		**10.0**	1 U		**0.0155**	3		**0.0155**	3		3250	3		3370	3		0.919	3		0.366	3	
20	1		18	2 J		**0.0155**	3		**0.0155**	3		3510	3		3370	3		1	1 J+		0.388	3 J+	
10.0	1 U		**10.0**	1 U		**0.0155**	3		**0.0155**	3		3550	3		3500	2		0.286	3 J+		0.219	3 J+	
8.1	2 J		7.35	3 J		**0.0155**	3		**0.0155**	3		3260	3		3520	3		0.297	3 J+		0.182	3 J+	
16	2 J		7.09	3 J		**0.0155**	3		**0.0155**	3		3920	3		3370	3		0.284	3 J+		0.2	1 J+	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.000475	4		**0.000475**	4		0.142	3		0.119	3		1.03	3		0.825	3		527	3		451	3		**0.155**	3
0.000169	3		**0.000475**	4		0.132	3		0.133	3		1.16	3	J+	1.10	2	J+	551	3		548	3		**0.155**	3
0.000169	3		**0.000475**	4		0.132	3		0.117	3		1.03	3	J+	1.01	3	J+	534	3		536	3		**0.155**	3
0.000703	3	J	0.00180	2	J	0.122	3		0.124	3		0.937	3	J+	0.898	3	J+	514	3		520	2		**0.155**	3
0.00250	2	U	**0.000475**	4		0.141	3		0.144	3		1.43	3		1.15	3		536	3		561	3		**0.155**	3
0.00075	2		**0.00075**	2		0.128	3		0.125	3		1.65	3		1.11	3		512	3		501	3		**0.155**	3
0.00075	2		**0.00075**	2		**0.0075**	2		**0.0075**	2		1.89	3		1.76	3		526	3		527	3		**0.155**	3
0.00075	2		**0.00075**	2		0.166	3		0.162	3		1.99	3		1.7	2		510	2		504	3		**0.155**	3
0.00155	3	J	0.00172	3	J	1.19	3		1.14	3		0.681	3		0.481	3		185	3		170	2		**0.155**	3
0.00075	2		**0.00075**	2		0.253	3		0.179	3		3.99	3		1.94	3		540	2		525	3		**0.155**	3
0.00075	2		**0.00075**	2		0.131	3		0.14	2		1.09	3		1.03	3		502	3		480	2		**0.155**	3
0.00075	2		**0.00075**	2		0.121	3		0.128	3		1.27	3	J+	1.13	3	J+	521	3		547	3		**0.155**	3
0.00075	2		**0.00075**	2		0.165	3		0.158	3		1.12	3		1.2	2		515	3		543	3		**0.155**	3
0.00075	2		**0.00075**	2		0.276	3		0.189	3		1.34	3		0.747	3		544	3		524	3		**0.155**	3
0.00173	3	J	**0.00075**	2		0.157	3	J+	0.174	3	J+	1.85	3	J+	1.6	2	J+	533	3	J+	549	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		0.113	3		0.118	3		1.06	3		0.836	3		508	3		495	3		**0.155**	3
0.00075	2		**0.00075**	2		0.154	3		0.148	3		1.96	3		1.67	3		549	3		533	3		**0.155**	3
0.00075	2		**0.00075**	2		0.132	3		0.136	3		0.701	3		0.657	3		521	3		542	3		**0.155**	3
0.00250	2	U	**0.00075**	2		0.141	3		0.148	3		1.59	3		1.16	3		542	3		522	3		**0.155**	3
0.00075	2		**0.00075**	2		0.147	3		0.135	3		1.75	3		1.53	3		550	2		528	3		**0.155**	3
0.00075	2		**0.00075**	2		0.136	3		0.138	3		1.32	3		1.36	3		527	3		548	3		**0.155**	3
0.00075	2		**0.00075**	2		0.159	3		0.154	3		1.64	3		1.51	3		569	3		550	2		**0.155**	3
0.00075	2		**0.00075**	2		0.121	3		0.103	3		0.94	2	J+	1.01	3	J+	550	2		537	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0971	3		0.106	3		0.895	3		1.05	3		505	3		530	2		**0.155**	3
0.00075	2		**0.00075**	2		0.0845	3		0.13	2		1.13	3	J+	0.953	3	J+	595	3		508	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3

			depends on HARD; revised 2013						depends on Total Ag																		
			result > crit						result > crit																		result > crit
SI_F	SI_FSF	SI_FVF	AG_N			AG_NSF	AG_NVF	AG_F			AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**									**Sodium**							**Thallium**							**Tin**
	Dissolved				Total						Dissolved					Total				Dissolved					Total					
	µg/L				µg/L						µg/L					µg/L				µg/L					µg/L					
7850	3				**0.0031**		2				**0.0031**		2	3720		3	3340		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9660	3				**0.0031**		2				**0.0031**		2	4220		3	4180		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10300	3				**0.0031**		2				**0.0031**		2	3780		3	4030		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10400	3				**0.0031**		2				**0.0031**		2	3980		3	3940		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10100	3				**0.0031**		2				**0.0031**		2	4070		3	4150		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9770	3				**0.0031**		2				**0.0031**		2	3950		3	3880		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9700	2				**0.0031**		2				**0.0031**		2	3870		3	3930		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9960	3				**0.0031**		2				**0.0031**		2	3800		2	3830		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9530	3				**0.0031**		2				**0.0031**		2	4730		3	4490		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9810	3				**0.0031**		2				**0.0031**		2	4040		3	4090		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9380	3				**0.0031**		2				**0.0031**		2	3860		3	3620		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9990	3				**0.0031**		2				**0.0031**		2	3840		3	3930		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10200	3				**0.0031**		2				**0.0031**		2	3990		3	4130		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9730	3				**0.0031**		2				**0.0031**		2	4110		3	4020		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9970	3	J+			**0.0031**		2				0.0071		2	3840	J	3	4310	J+	3		**0.0050**		1		**0.0050**		1		**0.050**		1
9370	3				**0.0031**		2				**0.0031**		2	3880		3	3770		3		**0.0050**		1		**0.0050**		1		**0.050**		1
9670	3				**0.0031**		2				**0.0031**		2	4060		3	3990		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10100	3				**0.0031**		2				**0.0031**		2	3140		3	3080		3		**0.0050**		1		**0.0050**		1		**0.050**		1
10100	3				**0.0031**		2				**0.0031**		2	4030		3	4170		3		**0.0050**		1		**0.0050**		1		**0.100**		1 U
9610	3				**0.0031**		2				**0.0031**		2	3640		3	3730		3		**0.0031**		2		**0.0031**		2		**0.0310**		2
9720	3				**0.0031**		2				**0.0031**		2	3790		3	3950		3		**0.0031**		2		**0.0031**		2		**0.0310**		2
9930	3				**0.0031**		2				**0.0031**		2	4220		3	4010		3		**0.0031**		2		**0.0031**		2		0.0802		3 J
9820	3				**0.0031**		2				**0.0031**		2	4280		3	4180		3		**0.0031**		2		**0.0031**		2		**0.0310**		2
9930	3				**0.0031**		2				**0.0031**		2	3830		3	4150		3		**0.0031**		2		**0.0031**		2		**0.0310**		2
9200	2				**0.0031**		2				**0.0031**		2	4600		2	3980		3		**0.0031**		2		0.0104		3 J		**0.0310**		2

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
						Vanadium								**Zinc[4]**				
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
0.050	1		**0.250**	2		**0.250**	2				1.62	3	J+		**0.50**	1	U	
0.050	1		**0.155**	3		**0.155**	3				2.81	3	J+		1.36	3	J+	
0.050	1		**0.155**	3		**0.155**	3				1.39	3	J+		1.19	3	J+	
0.050	1		**0.155**	3		**0.155**	3				3.00	1	J+		2.76	3	J+	
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U				R	
0.050	1		**0.155**	3		**0.155**	3				2.00	1			0.326	3	J	
0.050	1		**0.155**	3		**0.155**	3				1.46	3	J+		2.17	3	J+	
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U		1.5	2	J+	
0.050	1		**0.155**	3		**0.155**	3				2.09	3	J+		2.1	2	J+	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.218	3		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		0.343	3	J			0.504	3	J		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				2.33	3	J		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				14.2	3			1.32	3	J	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				2.62	3	J		1.44	3	J	

	2	3	2	3	0	3	1	4	2	3	1	3
Mean	6.22		8.97		118		134.6		2.72		52.4	
Median	6.29		9.27		124		122.8		2.72		53.3	
St. Deviation	0		2		30		59		0		6	
# of values	25		24		25		25		25		25	
Minimum	4.94		1.94		61		45.6		1.52		30.7	
Maximum	7.05		13.06		189		296.6		3.35		63.1	
Lowest fifth percentile	6		5		63		54		2		44	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	80%		0%		0%		0%		0%		0%	
% of DWS exceedences	20%		0%		0%		0%		0%		0%	

0	3	1	3	3	2	1	3	1	3	3	2	3	2	4	3
125		80.6		0.206		13.3		61.5		0.0800		0.0330		0.0280	
129		79.0		0.078		12.5		62.3		0.0500		0.0330		0.0280	
11		13		0		5		5		0		0		0	
25		25		25		25		25		25		2		2	
83.9		42		0.072		5		37.2		0.01		0.0155		0.0155	
135		109		0.918		23.2		65.8		0.274		0.05		0.041	
110		67		0		5		58		0		0		0	
0		0		17		1		0		11		2		1	
				68%		4%				44%		100%		50%	
				4		6				10				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3		
0.0256		NA	
0.0214		NA	
0		NA	
25			0
0.0132		NA	
0.0868		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.612		0.0670		1.43		0.00112		0.00096		0.170		1		0.06
0.609		0.0630		1.33		0.00075		0.00075		0.155		0		0.02
0		0		1		0		0		0		3		0
25		25		25		25		25		25		19		25
0.483		0.044		1.08		0.00075		0.00075		0.155		0.075		0.0155
0.772		0.11		3.22		0.0031		0.0025		0.525		12.6		1.11
0		0		1		0		0		0		0		0
0		0		0		23		25		24		9		24
						92%		100%		96%		47%		96%
		23				2				1		3		
230		NA		NA		NA		0.0052		NA		NA		7.04
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3
	11.95		2.10		0.0354		0.0348		0.178		0.150		5.32		5.06	
	6.16		1.00		0.0313		0.0317		0.155		0.155		4.95		4.74	
	20		2		0		0		0		0		2		1	
	25		25		25		25		25		25		25		25	
	0.31		0.31		0.0075		0.0075		0.075		0.075		4.39		4.25	
	98.1		6.91		0.169		0.156		0.363		0.249		12.8		12	
	1		1		0		0		0		0		5		4	
	2		14		6		7		20		22		0		0	
	8%		56%		24%		28%		80%		88%					
	1		2		17		14		5		3					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	4%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0125		0.0133		0.0080		0.0082		1.58		1.58		0.0079		0.0086		15700	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		16000	
0		0		0		0		1		1		0		0		2100	
25		25		25		25		25		25		25		25		25	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		8230	
0.0125		0.0315		0.0195		0.0253		2.97		2.78		0.0185		0.025		18800	
0		0		0		0		1		1		0		0		11360	
25		24		24		24		19		19		25		25		0	
100%		96%		96%		96%		76%		76%		100%		100%			
		1		1		1		6		6							
NA		NA		NA		NA		NA		NA		0.146		0.138		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	3	3	4	3	4	3	2	2	2	2
15500		2.16		0.724		0.058		0.041		0.370		0.310	
16000		1.88		0.702		0.045		0.034		0.250		0.250	
2100		1		0		0		0		0		0	
25		25		25		25		25		25		24	
8170		0.432		0.161		0.0207		0.0215		0.208		0.025	
17300		7.87		1.24		0.248		0.11		1.64		1.6	
10896		1		0		0		0		0		0	
0		0		0		0		0		12		14	
										48%		58%	
				1						2		1	
NA		10.98		10.56276		NA		NA		4.584		4.401	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	3	4	3	4	3	-1	3	-1	3	2	3	3	3
46.8		30.3		0.040		0.020		3240		3220		2.67		0.658	
28.1		13.2		0.016		0.016		3220		3280		1.26		0.402	
59		39		0		0		280		270		5		1	
25		25		25		25		25		25		25		25	
8.1		7.09		0.0155		0.0155		2460		2500		0.284		0.182	
252		189		0.139		0.05		3920		3700		25.1		2.42	
9		7		0		0		2966		2676		0		0	
4		7		18		25		0		0		0		0	
16%		28%		72%		100%									
5		7		3											
1000		1000		1.104		1.007		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	3	2	3	0	3	0	3	3	3
0.000900		0.000790		0.182		0.174		1.42		1.180		519		511		0.155	
0.000750		0.000750		0.136		0.136		1.27		1.110		527		528		0.155	
0		0		0		0		1		0		73		75		0	
25		25		25		25		25		25		25		25		25	
0.000169		0.0004745		0.0075		0.0075		0.681		0.481		185		170		0.155	
0.0025		0.0018		1.19		1.14		3.99		1.94		595		561		0.155	
0		0		0		0		1		1		503		457		0	
22		23		1		1		0		0		0		0		25	
88%		92%		4%		4%										100%	
3		2															
0.77		0.77		NA		NA		25.81		25.74		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
25	
0.155	
0.155	
0	
25	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
9750		0.0031		0.0033		3970		3960		0.0045		0.0048		0.049	
9810		0.0031		0.0031		3950		3990		0.0050		0.0050		0.050	
490		0		0		310		290		0		0		0	
25		25		25		25		25		25		25		25	
7850		0.0031		0.0031		3140		3080		0.0031		0.0031		0.031	
10400		0.0031		0.0071		4730		4490		0.005		0.0104		0.1	
9234		0		0		3656		3396		0		0		0	
0		25		24		0		0		25		24		24	
		100%		96%						100%		96%		96%	
				1								1		1	
NA		0.905497915		0.770		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.052		0.159		0.166		2.14		1.52	
0.050		0.155		0.155		1.55		1.55	
0		0		0		3		0	
25		25		25		25		24	
0.031		0.155		0.155		0.5		0.326	
0.218		0.25		0.343		14.2		2.76	
0		0		0		1		1	
24		25		24		14		15	
96%		100%		96%		56%		63%	
				1		3		3	
NA		NA		NA		59.23		58.40	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-38D																
Sample Date																
08/23/07	7.65	3	0.23	2		117	3		-131.1	4		7.15	3	57.2	3	
08/19/09	8.05	3	0.89	2		325	3		-74.3	3		4.3	2	63.1	3	
10/17/09			0.59	2		269	3		-118.9	4		4.69	3	64.9	3	
08/27/11	7.88	3	5.22	3		155.716	FALSE		-169.4	4		4.22	3	57.7	3	
08/27/12	7.63	3	-0.19	2		193	3		110.8	4		4.08	3	60.5	3	
10/09/12	7.76	3	0.56	2		197	3		-108.6	4		4.02	3	116	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
185	3		103	3		1.00	1		**1.57**	3 J		73.6	3		**0.0155**	3						
220	2		124	3		8.77	3		**1.57**	3		82.8	3		**0.0155**	3						
207	3		119	3		84.6	3		**1.57**	3		75.9	3		**0.0155**	3						
193	3		115	3		0.693	3		**1.57**	3		72.2	3		**0.050**	1 U						
200	1		110	2		10.7	3		**5.0**	1 U		75.6	3		**0.050**	1 U						
194	3		99	2		121	3 J		6.08	3 J		78	2		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.426	3				
	0.402	3				
	0.447	3				
	0.47	2				
	0.451	3				
	0.553	3	J-			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp
result > crit				result > crit				result > crit								result > crit								result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
0.558	3		**0.0155**	3		0.615	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.178		
0.584	3		0.388	3		19.3	3		**0.0025**	2	U	**0.0025**	2	U	0.36	2	J	0.483	3	J	0.222		
0.665	3		0.364	3		20	1		**0.00075**	2		**0.00075**	2		5.2	2	J+	**0.075**	2		0.274		
0.758	3		0.324	3		20	1		**0.00075**	2		**0.00075**	2		**0.155**	3		0.596	3		0.262		
0.666	3		0.349	3		20.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.607	3		0.222		
0.759	3		0.423	3		21.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.56	2		0.296		

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	32.2	3	J+	2.70	2	J+	0.299	3	0.294	3	48.3	3	49.0	2	40.3	3	40.2	3					
		3	348	3		**1.00**	1	U	0.0954	3	0.142	3	52	2	46	2	47.6	3	39.2	3					
		3	2120	3		183	3		0.278	3	0.195	3	50.6	3	51.4	3	55.7	3	42.8	3					
		3	11.8	3	J+	**1.00**	1	U	0.159	3	0.145	3	54.2	3	53	2	40.3	3	39.2	3					
		3	93.3	3		2.12	3		0.0856	3	0.0831	3	51.8	3	46.7	3	43.3	3	36.9	3					
		3	7790	3		**1.00**	1	U	0.283	3	0.196	3	56.2	3	48.2	3	160	2	39.9	3					

| | | |

| | | |

							depends on Hardness			depends on Hardness															
result > crit			result > crit				result > crit			result > crit															

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
263	3		244	3		0.232	3	J+	**0.0155**	3		4400	2		4560	3		90.6	3		91.3	3	
409	3		234	3		0.332	3	J+	0.208	3	J+	4990	3		4300	2		118	3		95.7	3	
927	3		339	3		1.62	3		0.191	3		5130	3		4960	3		121	3		107	3	
309	3		265	3		0.0335	3	J	**0.0155**	3		4820	3		4680	3		97.7	3		94.6	3	
301	3		216	3		0.17	2		**0.0155**	3		5030	3		4330	3		110	2		96.4	3	
3480	3		225	3		12.5	3		**0.0155**	3		8110	3		4760	3		254	3		100	1	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tin**								
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total							
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L							
7210	3		**0.0031**	2			**0.0031**	2		20000	1		20800	3		**0.0050**	1		**0.0050**	1		**0.050**	1						
6000	1		**0.0031**	2			**0.0031**	2		20600	3		18300	3		**0.0050**	1		**0.0050**	1		0.205	3	J+					
7570	3		0.0092	2	J		**0.0031**	2		18300	3		19400	3		0.0146	3	J	**0.0050**	1		0.246	3						
7110	3		**0.0031**	2			**0.0031**	2		17100	3		17800	3		**0.0031**	2		**0.0031**	2		0.0988	3	J					
6830	3		**0.0031**	2			**0.0031**	2		20100	3		17200	3		0.0062	2	J	**0.0031**	2		**0.0310**	2						
6740	3		0.0342	3	J		**0.0031**	2		21700	3		20200	3		0.126	3		0.0067	2	J	0.397	3	J					

												depends on Hardness				depends on Total Zn			
												result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.050	1		**0.155**	3		**0.155**	3			2.36	3	J+	1.82	3	J+				
0.264	3	J+	**0.155**	3		**0.155**	3			3.22	3	J+	**1.55**	3	U				
0.050	1		1.28	3		**0.155**	3			6.13	3		**1.55**	3	U				
0.0888	3	J	**0.155**	3		**0.155**	3			5.38	3		**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			6.43	3		6.86	3					
0.0310	2		5.08	3		**0.155**	3			41.3	3		5.04	3					

	2	3	2	2	0	3	1	4	2	3	1	3
Mean	7.79		1.22		209		-81.9		4.74		69.9	
Median	7.76		0.58		195		-113.8		4.26		61.8	
St. Deviation	0		2		76		99		1		23	
# of values	5		6		6		6		6		6	
Minimum	7.63		-0.19		117		-169.4		4.02		57.2	
Maximum	8.05		5.22		325		110.8		7.15		116	
Lowest fifth percentile	8		0		127		-160		4		57	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	3	0	3	2	3	2	3	1	3	4	3		
200		112		37.80		2.89		76.4		0.0270		NA	NA
197		113		9.70		1.57		75.8		0.0155		NA	NA
12		10		52		2		4		0		NA	NA
6		6		6		6		6		6		0	0
185		99		0.693		1.57		72.2		0.0155		NA	NA
220		124		121		6.08		82.8		0.05		NA	NA
187		100		1		2		73		0		NA	NA
0		0		0		5		0		6			
						83%				100%			
						1							
NA		NA		NA		NA		>=20		NA		NA	NA
NA		500		NA		NA		NA		10		NA	NA
0%		0%		0%		0%		0%		0%		NA	NA
0%		0%		0%		0%		0%		0%		NA	NA

3	3		
0.458		NA	
0.449		NA	
0		NA	
6			0
0.402		NA	
0.553		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	3	1	3	5	2	5	2	3	3	3	3	3
0.665		0.3110		16.900		0.00104		0.00104		1.030		0		0.242
0.666		0.3570		20.000		0.00075		0.00075		0.155		1		0.242
0		0		8		0		0		2		0		0
6		6		6		6		6		6		5		6
0.558		0.0155		0.615		0.00075		0.00075		0.155		0.075		0.178
0.759		0.423		21.1		0.0025		0.0025		5.2		0.607		0.296
1		0		5		0		0		0		0		0
0		1		0		6		6		4		1		0
		17%				100%		100%		67%		20%		
										1		1		
230		NA		NA		NA		0.0052		NA		NA		3.84
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	1	2	3	3	3	3	1	3	1	3	1	3	1	3
	1733.0		32.00		0.200		0.176		52.2		49.0		64.5		39.7	
	221.0		2.00		0.219		0.170		51.9		49.0		45.5		39.6	
	3076		74		0		0		3		3		47		2	
	6		6		6		6		6		6		6		6	
	11.8		1		0.0856		0.0831		48.3		46		40.3		36.9	
	7790		183		0.299		0.294		56.2		53		160		42.8	
	17		1		0		0		49		46		40		37	
	0		3		0		0		0		0		0		0	
			50%													
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	67%		17%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		100%		0%		0%		0%	

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3
0.2632		0.0152		0.0533		0.0075		18.8		16.8		0.0253		0.0075		19100	
0.0426		0.0125		0.0075		0.0075		17.9		17.1		0.0075		0.0075		16500	
1		0		0		0		3		2		0		0		6900	
6		6		6		6		6		6		6		6		6	
0.0125		0.0125		0.0075		0.0075		16.3		14.4		0.0075		0.0075		15200	
1.29		0.0287		0.244		0.0075		25.3		18.2		0.106		0.0075		33100	
0		0		0		0		16		15		0		0		15300	
2		5		4		6		0		0		4		6		0	
33%		83%		67%		100%						67%		100%			
2		1		1								2					
NA		NA		NA		NA		NA		NA		0.179		0.167		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	4	3	4	3	3	3	2	2	
15100		1.517		0.421		0.2310		0.0440		0.810		0.250		
15000		0.448		0.190		0.0820		0.0420		0.330		0.250		
700		3		1		0		0		1		0		
6		6		6		6		6		6		5		
14300		0.1		0.05		0.0319		0.0253		0.25		0.25		
16000		7.33		1.75		0.897		0.0647		2.96		0.274		
14375		0		0		0		0		0		0		
0		2		2		0		0		3		4		
		33%		33%						50%		80%		
				1										
NA		10.98		10.56276		NA		NA		5.799		5.567		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		0%		0%		
0%		0%		0%		0%		0%		0%		0%		

0	3	0	3	3	3	4	3	-1	3	-1	3	0	3	1	3
948		254		2.481		0.0768		5410		4600		132.0		97.5	
359		239		0.282		0.0155		5010		4620		114.0		96.1	
1265		45		5		0		1350		260		61		5	
6		6		6		6		6		6		6		6	
263		216		0.0335		0.0155		4400		4300		90.6		91.3	
3480		339		12.5		0.208		8110		4960		254		107	
273		218		0		0		4505		4308		92		92	
0		0		0		4		0		0		0		0	
						67%									
				1											
1000		1000		1.567		1.366		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
17%		0%		33%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

6	3	5	2	2	3	2	3	2	2	3	3	-1	3	-1	3	3	3
0.002780		0.000700		1.07		1.09		1.160		0.520		1350		1120		0.233	
0.000750		0.000750		1.14		1.10		0.590		0.360		1240		1140		0.155	
0		0		0		0		1		0		340		50		0	
6		6		6		5		6		6		6		6		6	
0.000695		0.0004745		0.732		1.01		0.31		0.31		1140		1030		0.155	
0.0108		0.00075		1.16		1.16		3.8		1.35		2040		1170		0.62	
0		0		1		1		0		0		1145		1050		0	
3		6		0		0		2		3		0		0		6	
50%		100%						33%		50%						100%	
2								1		1							
0.77		0.77		NA		NA		32.58		32.48		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
6	
0.155	
0.155	
0	
6	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	4	3
6910		0.0093		0.0031		19600		19000		0.0267		0.0050		0.171	
6970		0.0031		0.0031		20100		18900		0.0056		0.0050		0.152	
530		0		0		1700		1400		0		0		0	
6		6		6		6		6		6		6		6	
6000		0.0031		0.0031		17100		17200		0.0031		0.0031		0.031	
7570		0.0342		0.0031		21700		20800		0.126		0.0067		0.397	
6185		0		0		17400		17350		0		0		0	
0		4		6		0		0		3		5		2	
		67%		100%						50%		83%		33%	
		2								2		1		2	
NA		1.453286212		1.235		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.086		1.163		0.155		10.80		3.06	
0.050		0.155		0.155		5.76		1.69	
0		2		0		15		2	
6		6		6		6		6	
0.031		0.155		0.155		2.36		1.55	
0.264		5.08		0.155		41.3		6.86	
0		0		0		3		2	
4		4		6		0		3	
67%		67%		100%				50%	
1									
NA		NA		NA		74.78		73.73	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-38M																
Sample Date																
03/27/08														194	3	
05/22/08	7.38	3	0.74	2 Q		122	3		119	3		4.71	3	147	3	
08/27/08	7.32	3	2.04	3		119	3		94.4	3		7.54	3	144	3	
10/21/08	7.64	3	1.5	2		122	3		114.6	4		1.43	3	94.5	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
147	3		139	3		2750	3		3.36	3 J		65.3	3		0.0680	2 J						
125	3		145	3		42.1	3		**1.57**	3		72.8	3		0.098	2 J						
124	3		143	3		5750	3		**1.57**	3		69.4	3		0.0462	3						
132	3		119	3		2220	3		**1.57**	3		65.3	3		0.039	2 J						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L			mg/L	
	0.949	3				
	0.00775	3				
	5.27	3				
	1.62	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

result > crit			result > crit			result > crit							result > crit											depends on field pH and field Temp result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
0.682	3		0.0680	2	J	5.20	2		**0.00075**	2		**0.00075**	2		4.8	2	J+				0.208
0.691	3		0.08	1	J	5.19	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**
0.571	3		0.084	2	J	5.74	3		**0.00075**	2		**0.00075**	2		0.34	2	J	**0.250**	2	U	**0.050**
0.821	3		0.07	1	J	5.03	3		**0.00075**	2		**0.00075**	2		1	1	J+	0.294	3	J	**0.0155**

		result > crit			result > crit			result > crit									result > crit			result > crit			result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3		74500	3		6020	3		**0.0300**	1		0.0741	3 J		16.8	3		6.91	3		647	3		66.1	3
	3		74800	3		3260	3		0.0956	3		0.0589	3		12.2	3		5.93	3		847	3		43.5	3
	1 U		34600	3		2.86	3		0.0681	3		0.0322	3 J		16.5	3		5.14	3		433	3		16.2	3
	3		26800	3		3.61	3		**0.0250**	2 U		**0.0250**	2 U		12.1	3		5.78	3		286	3		18.3	3

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CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.0584	3		0.0215	3		0.208	3	J			R	50.1	3		3.85	3		5780	3		1880	3		**0.62**	2
0.00075	2		0.00211	3	J	0.132	3	J			R	56.6	3		2.14	3		4340	3		1420	3		0.505	3
0.0916	3		**0.00075**	2		0.25	2	J			R	27.6	3		0.38	2		3950	3		1190	3		0.63	2
0.0503	3		0.00743	3		0.278	3	J			R	19.5	3		0.748	3		2750	3		1250	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
		0.310	2	
J		**0.155**	3	
J		**0.155**	3	
		0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tin**								
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total								
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L								
17900	3		0.390	2		0.0271	3	J	7650	3		5000	1		0.299	3		0.0291	3	J	1.94	3							
13400	3		0.482	3		0.016	2	J	4780	3		4100	2		0.406	3		0.0166	3	J	1.72	3							
8780	3		0.205	3		**0.0031**	2		5670	3		4300	2		0.197	3	J	**0.0050**	1		1.91	3							
9560	3		0.167	3		**0.0031**	2		4720	3		4810	3		0.144	3		**0.0050**	1		1.93	3							

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
					Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
0.267	3	J	136	3		11.9	3				236	3			16.8	3		
0.179	3	J	143	3		6.71	3				224	3			9.41	3	J+	
0.050	1		83.9	3		**0.155**	3				129	3			**0.50**	1	U	
0.154	3	J	59.4	3		**0.155**	3				87.9	3			1.15	3	J+	

		2	3	1	2	0	3	0	3	2	3	0	3				
Mean		7		1		121		109		5		145					
Median		7		2		122		115		5		146					
St. Deviation		0		1		2		13		3		41					
# of values		3		3		3		3		3		4					
Minimum		7.32		0.74		119		94.4		1.43		94.5					
Maximum		7.64		2.04		122		119		7.54		194					
Lowest fifth percentile		7		1		119		96		2		102					
# of values undetected		0		0		0		0		0		0					
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA					
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA					
% of CALC exceedences		0%		0%		0%		0%		0%		0%					
% of DWS exceedences		0%		0%		0%		0%		0%		0%					
HIDE this row - notes																	
RED criteria		result is <6.5 OR >8.5		result < 7													
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**			
Total/Dissolved																	
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L			

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		-1	3		2	3		1	3		3	2						
132			137			2690			2.02			68.2			0.0630			NA			NA	
129			141			2490			1.57			67.4			0.0570			NA			NA	
11			12			2350			1			4			0			NA			NA	
4			4			4			4			4			4				0			0
124			119			42.1			1.57			65.3			0.039			NA			NA	
147			145			5750			3.36			72.8			0.098			NA			NA	
124			122			369			2			65			0			NA			NA	
0			0			0			3			0			0							
									75%													
									1						3							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

3	3		
1.960		NA	
1.280		NA	
2		NA	
4			0
0.00775		NA	
5.27		NA	
0		NA	
1			
25%			
NA			NA
NA			NA
0%			NA
0%			NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		

3	3	3	2	2	3	5	2	5	2	2	2	2	2	4
0.691		0.0800		5.29		0.00119		0.00119		1.6		0		0.072
0.687		0.0800		5.20		0.00075		0.00075		0.7		0		0.033
0		0		0		0		0		2		0		0
4		4		4		4		4		4		3		4
0.571		0.068		5.03		0.00075		0.00075		0.155		0.25		0.0155
0.821		0.084		5.74		0.0025		0.0025		4.8		0.294		0.208
1		0		5		0		0		0		0		0
0		0		0		4		4		1		2		3
						100%		100%		25%		67%		75%
		4								1		1		
230		NA		NA		NA		0.0052		NA		NA		4.99
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%
														depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit						result > crit
CL N	CL NSF	CL NVF	F N	F NSF	F NVF	SO4 N	SO4 NSF	SO4 NVF	CN N	CN NSF	CN NVF	CNWAD N	CNWAD NSF	CNWAD NVF	SCN N	SCN NSF	SCN NVF	DOC F	DOC FSF	DOC FVF	NH3N N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
-3	3			1	3			3	3		1	3		3	3		1	3		3	3
13300				48.7				1.84			28.5			0.93			75.7			2.82	
13200				48.3				1.51			28.4			0.71			76.4			2.23	
1400				22				2			13			1			35			3	
4				4				4			4			4			4			4	
12000				26.7				0.1			13.9			0.0406			38			0.201	
15000				71.7				4.25			43.2			2.27			112			6.63	
12075				28				0			15			0			41			0	
0				0				1			0			0			0			0	
								25%													
NA				10.98				10.56276			NA			NA			9.482			9.103	
NA				100				NA			NA			NA			NA			NA	
0%				100%				0%			0%			0%			100%			0%	
0%				0%				0%			0%			0%			0%			0%	
				depends on Hardness				depends on Hardness									depends on Hardness				
				result > crit				result > crit									result > crit			result > crit	
Calcium						**Chromium[4,6]**								**Cobalt**						**Copper[4]**	
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
-2	3	0	3	1	3	3	3	-2	3	-1	3	-1	3	0	3								
61400		2425		31.1		0.99		18400		5160		2450		190									
63600		1731		29.2		0.74		18500		4970		2520		170									
27800		2978		14		1		6200		680		1100		106									
4		4		4		4		4		4		4		4									
31000		38.1		17.3		0.0155		10900		4570		1220		91.2									
87600		6200		48.5		2.45		25800		6140		3550		328									
33070		39		18		0		11815		4626		1315		96									
0		0		0		2		0		0		0		0									
						50%																	
1000		1000		3.260		2.569		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
100%		50%		100%		0%		0%		0%		0%		0%									
0%		0%		100%		0%		0%		0%		100%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit						result > crit											

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
4	3	5	3	3	3							1	3	3	3	-1	3	-1	3	3	3				
0.0503		0.0080		0.217		NA						38.5		1.78		4210		1440			0.48				
0.0544		0.0048		0.229		NA						38.9		1.44		4150		1340			0.56				
0		0		0		NA						18		2		1250		310			0				
4		4		4			0					4		4		4		4			4				
0.00075		0.00075		0.132		NA						19.5		0.38		2750		1190			0.155				
0.0916		0.0215		0.278		NA						56.6		3.85		5780		1880			0.63				
0		0		0		NA						21		0		2930		1199			0				
1		1		0								0		0		0		0			2				
25%		25%																			50%				
		1																			2				
0.77		0.77		NA		NA						53.01		52.85		NA		NA			5				
2		2		NA		NA						NA		NA		NA		NA			50				
0%		0%		0%		NA						25%		0%		0%		0%			0%				
0%		0%		0%		NA						0%		0%		0%		0%			0%				
CALC revised 2013												2013: DWS = NA		2013: DWS = NA											
result > crit			result > crit									result > crit		result > crit											result > crit

	3	3
	0.194	
	0.155	
	0	
	4	
	0.155	
	0.31	
	0	
	4	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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| | | |

P-06-40D

Sample Date												
05/23/09	6.9	2	0.81	2	534	3	75.1	3	4.38	3	269	3
08/20/09	7.41	3	0.82	2	481	3	-7.2	2	3.09	3	238	3
10/19/09	7.16	3	0.61	2	480	2	4.7	2	2.67	3	269	3
05/21/10	5.68	3	0.84	2	846	3 Q	-37.2	3	3.13	3	250	2
08/21/10	7.43	3	0.52	2	492	3	136.5	4	2.74	3	244	3
10/22/10	7.13	3	0.3	1	556	3	75.2	3	2.73	3	260	2
05/23/11	7.26	3	0.1	1	311	3	-1	1	3.04	3	239	3
08/25/11	6.91	3	2.47	3	392.9016	FALSE	131.5	4	3.04	3	235	3
05/20/12	6.69	3	0.07	1	466	3	17.3	3	2.6	2	261	3
08/28/12	7.13	3	0.25	2	487	3	98.5	3	3.9	2	219	3
10/11/12	7.06	3	0.31	2	480	2	-58.3	3	3.87	3	241	3

541	3	275	3	**0.0815**	3	8.94	3 J	285	3	**0.0155**	3
545	3	280	2	**0.078**	2	6.2	2 J	288	3	**0.0155**	3
546	3	275	3	**0.150**	2	15	2	278	3	**0.050**	1 U
532	3	298	3	108	3	17.4	3	278	3	**0.0155**	3
511	3	275	3	0.505	3	10.9	3	272	3	**0.050**	1 U
515	3	273	3	0.306	3 J	19.2	3	274	3	**0.050**	1 U
516	3	261	3	**0.0765**	3	16.8	3	272	3	**0.0155**	3
509	3	275	3	**0.076**	2	6.16	3 J	267	3	**0.0155**	3
515	3	296	3	0.392	3 J	12.4	3	267	3	**0.0155**	3
495	3	262	3	**0.0735**	3	14.1	3	258	3	**0.050**	1 U
475	3	258	3	0.3	1 J	8.62	3 J	259	3	**0.050**	1 U

0.0309	3	
0.0203	3	
0.00155	3	
0.0134	3	
0.0055	2	J
0.00155	3	
0.0114	3	
0.00155	3	
0.0050	1	U
0.013	2	
0.0267	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.698	3	0.043	2 J	3.68	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.629	3	**0.0155**
0.711	3	0.045	2 J	3.41	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	0.67	2	**0.0155**
0.68	2	0.037	2 J	3.74	3	**0.00075**	2	0.0021	2 J	**0.155**	3	**0.250**	2 U	**0.050**
0.714	3	0.036	2 J	3.81	3	**0.00075**	2	**0.00075**	2	0.54	2 J	1.05	3 J+	**0.0155**
0.784	3	0.09	1 J	4.13	3	0.0016	2 J	**0.00075**	2	**0.155**	3	0.588	3	**0.0155**
0.826	3	0.087	2 J	4.17	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.699	3	**0.0155**
0.852	3	0.081	2 J	4.45	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.32	3	**0.0155**
0.858	3	0.082	2 J	4.52	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.45	3	**0.0155**
0.725	3	0.086	2 J	4.31	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.42	3	**0.0155**
0.77	2	0.07	1 J	5.11	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.876	3	**0.0155**
0.797	3	0.041	2 J	5.52	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.34	3	**0.050**

3	5.76	3 J		R	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.4	2 J		R
3	**1.00**	1 U	**0.310**	2	**0.0075**	2	**0.0075**	2	**0.155**	3	0.377	3 J	0.846	3	0.854	3
1 U	2.33	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	0.39	2 J	0.912	3	0.945	3
3	19.4	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.46	2 J	**0.155**	3	1.3	2 J+	1.13	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0167	3 J	0.0186	3 J	0.486	3 J	0.465	3 J	0.999	3 J+	1.06	3 J+
3	26	2 J+	2.18	3 J+	0.0226	3 J	**0.0250**	2 U	0.378	3 J	0.38	2 J	2.08	3 J+	1.44	3 J+
3	6.51	3 J+	3.33	3 J+	**0.0250**	2 U	0.051	2 J+	0.397	3 J	0.382	3 J	1.73	3 J+	1.41	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0306	3 J	**0.0075**	2	**0.250**	2 U	0.372	3 J	1.21	3	1.05	3
3	2.24	3 J+	**1.00**	1 U	0.0511	3	0.0293	3 J	0.416	3 J	0.422	3 J	1.27	3 J+	1.35	3 J+
3	**1.00**	1 U	**0.310**	2	0.0212	3 J	0.0238	3 J	0.373	3 J	0.492	3 J	0.836	3	0.87	2
1 U	**0.310**	2	**0.310**	2	0.0182	3 J	0.0187	3 J	0.414	3 J	0.367	3 J	0.908	3	0.961	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	4.47	3 J	4.17	3 J	0.0346	3 J	0.0354	3 J	68200	3
0.0125	3	**0.0125**	3	0.052	2	0.0428	3 J	3.02	3 J	3.72	3 J	**0.0075**	2	**0.0250**	2 U	62700	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	4.09	3 J	4.05	3 J	0.0382	3 J	0.0365	3 J	69800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0250**	2 U	**0.0250**	2 U	64400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.88	3 J	5.02	3	**0.0250**	2 U	**0.0250**	2 U	64900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	0.0346	3 J	0.0326	3 J	68900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	4.6	2 J	4.53	3 J	0.0293	3 J	0.0218	3 J	64600	3
0.0125	3	**0.0125**	3	0.0256	3 J	**0.0075**	2	4.19	3 J	4.17	3 J	0.0333	3 J	0.029	2 J	65100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	68400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.74	3 J	3.73	3 J	0.0152	3 J	0.0152	3 J	59100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.6	2 J	3.59	3 J	**0.0075**	2	**0.0075**	2	64600	3

	70800	3	0.215	3	J		R	0.284	3	0.322	3	**0.250**	2	U	**0.250**	2 U
	64400	3	**0.050**	1		**0.050**	1	0.173	3	J+	0.174	3	J+	**0.250**	2 U	**0.250**	2 U
	71200	3	**0.050**	1		**0.050**	1	0.173	3		0.181	3		**0.250**	2 U	**0.250**	2 U
J+	66100	3	J+	0.33	2	**0.100**	1	U	0.21	2	J+	0.181	3	J+	**0.250**	2 U	**0.250**	2 U
	66700	3	**0.100**	1	U	0.207	3	J+	0.161	3	J+	0.175	3	J+	**0.250**	2 U	**0.250**	2 U
	70700	3	0.684	3		0.211	3		0.241	3		0.218	3		0.959	3	**0.250**	2 U
	63100	3	**0.050**	1		**0.050**	1		0.185	3		0.174	3		0.0503	3 J	**0.0250**	2
	66000	2	0.503	3		**0.100**	1	U	0.188	3		0.174	3		0.577	3	**0.250**	2 U
	70400	3	0.249	3	J+	**0.100**	1	U	0.171	3		0.172	3		**0.250**	2 U	**0.250**	2 U
	59100	3	**0.0310**	2		**0.0310**	2		0.206	3		0.211	3		**0.250**	2 U	**0.250**	2 U
	66800	3	**0.0310**	2		**0.0310**	2		0.235	3		0.254	3		**0.250**	2 U	**0.250**	2 U

419	3	438	3	**0.0155**	3	**0.0155**	3	21400	3	23200	3	647	3	670	2
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	19600	3	19200	3	555	3	536	3
10.3	3 J	9.3	2 J	0.0648	3 J	**0.0155**	3	22900	3	23500	3	631	3	652	3
67.6	3	**10.0**	1 U	**0.0155**	3	**0.0155**	3	21700	3 J+	22000	2 J+	636	3 J+	635	3 J+
8.89	3 J	7.79	3 J	**0.0155**	3	**0.0155**	3	19800	3	20400	3	590	2	609	3
56.5	3	12.1	3 J	0.044	2 J	**0.0155**	3	21300	3	22000	2	660	2	641	3
19	2 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	18700	3	17900	3	595	3	587	3
14.1	3 J	12.8	3 J	**0.0155**	3	**0.0155**	3	17600	3	18800	3	616	3	590	2
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	21800	3	23100	3	618	3	665	3
3.10	2	6.58	3 J	**0.0155**	3	**0.0155**	3	17400	3	17600	3	561	3	558	3
12.4	3 J	11.8	3 J	**0.0155**	3	**0.0155**	3	19400	3	21800	3	634	3	664	3

0.00075	2	**0.00075**	2	2.72	3	2.8	2	1.34	3	1.64	3	704	3	727	3	**0.155**	3
0.00075	2	**0.00075**	2	2.38	3	2.36	3	1.05	3 J+	1	1 J+	689	3	627	3	**0.155**	3
0.00075	2	**0.00075**	2	2.55	3	2.56	3	0.962	3	1	1	680	2	687	3	**0.155**	3
0.00075	2	**0.00075**	2	2.52	3 J+	2.62	3 J+	1.23	3 J+	1.28	3 J+	690	2 J+	716	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	2.38	3	2.54	3	1.04	3	1.04	3	629	3	650	2	**0.155**	3
0.00075	2	**0.00075**	2	2.75	3	2.75	3	2.06	3	1.94	3	712	3	713	3	**0.155**	3
0.00075	2	0.00328	3 J	2.65	3	2.57	3	1.37	3	1.3	2	644	3	629	3	**0.155**	3
0.00075	2	**0.00075**	2	2.74	3	2.57	3	2.41	3	1.99	3	704	3	665	3	**0.155**	3
0.00075	2	**0.00075**	2	2.61	3	2.58	3	1.61	3 J+	1.6	2 J+	676	3	743	3	**0.155**	3
0.00075	2	**0.00075**	2	2.83	3	2.88	3	1.93	3	1.99	3	662	3	668	3	**0.155**	3
0.00075	2	**0.00075**	2	2.83	3	2.96	3	2.2	2 J+	2.38	3 J+	698	3	729	3	**0.155**	3

0.155	3
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0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

7660	3	**0.0031**	2	**0.0031**	2	10600	3	10800	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6590	3	**0.0031**	2	**0.0031**	2	8570	3	8700	2	**0.0050**	1	**0.0050**	1	**0.050**	1
7390	3	**0.0031**	2	**0.0031**	2	10100	3	9970	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7780	3 J+	**0.0031**	2	**0.0031**	2	9770	3 J+	9990	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
7320	3	**0.0031**	2	**0.0031**	2	8730	3	10300	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7780	3	0.0127	3 J	**0.0031**	2	9980	3	9930	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6860	3	**0.0031**	2	**0.0031**	2	8810	3	8660	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7060	3	**0.0031**	2	**0.0031**	2	8730	3	8890	3	**0.0031**	2	**0.0031**	2	0.0741	3 J
7690	3	**0.0031**	2	**0.0031**	2	9940	3	10200	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7380	3	**0.0031**	2	**0.0031**	2	8990	3	9060	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7980	3	**0.0031**	2	**0.0031**	2	10100	3	10600	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.050	1	**0.155**	3	0.337	3 J	**1.55**	3 U	**1.55**	3 U
0.100	1 U	0.312	3 J	**0.155**	3	4.02	3 J+	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	0.969	3 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U		R
0.050	1	0.385	3 J	**0.155**	3	4.36	3 J+	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	0.45	2 J	4.36	3	2.91	3 J
0.0310	2	**0.155**	3	0.355	3 J	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	0.867	3 J	1.38	3 J

	2	3	2	2		0	3		1	3		2	3		0	3		
Mean	7.0		0.65			502			39.6			3.20			248			
Median	7.1		0.52			481			17.3			3.04			244			
St. Deviation	0		1			132			67			1			16			
# of values	11		11			11			11			11			11			
Minimum	5.68		0.07			311			-58.3			2.6			219			
Maximum	7.43		2.47			846			136.5			4.38			269			
Lowest fifth percentile	6		0			352			-48			3			227			
# of values undetected	0		0			0			0			0			0			
% of values undetected																		
# of values between MDL and PQL																		
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7			NA			NA			NA			NA			
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4			NA			NA			NA			NA			
% of CALC exceedences	9%		0%			0%			0%			0%			0%			
% of DWS exceedences	9%		0%			0%			0%			0%			0%			

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**			**Field Diss. Oxygen**		**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**			**Hardness**		
Total/Dissolved																	
Units	pH Units			mg/L		µmhos/cm			mV			°C			mg/L		

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	3		0	3		3	3		1	3		0	3		4	3						
518			275			10.0040			12.30			273			0.0312			NA			NA	
515			275			0.1500			12.40			272			0.0155			NA			NA	
22			13			33			5			10			0			NA			NA	
11			11			11			11			11			11				0			0
475			258			0.0735			6.16			258			0.0155			NA			NA	
546			298			108			19.2			288			0.05			NA			NA	
485			260			0			6			259			0			NA			NA	
0			0			6			0			0			11							
						55%									100%							
						3			4													
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
			result > crit									result <20			result > crit							

	4	3					
	0.0119		NA				
	0.0114		NA				
	0		NA				
	11			0			
	0.00155		NA				
	0.0309		NA				
	0		NA				
	4						
	36%						
	1						
	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
	Total Phosphorus				**Orthophosphate**		
		mg/L				mg/L	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4										
0.765		0.063		4.26		0.00099		0.00103		0.190		0.936		0.0218										
0.770		0.070		4.17		0.00075		0.00075		0.155		0.876		0.0155										
0		0		1		0		0		0		0		0										
11		11		11		11		11		11		11		11										
0.68		0.036		3.41		0.00075		0.00075		0.155		0.25		0.0155										
0.858		0.09		5.52		0.0025		0.0025		0.54		1.45		0.05										
1		0		4		0		0		0		0		0										
0		0		0		10		10		10		1		11										
						91%		91%		91%		9%		100%										
		11				1		1		1														
230		NA		NA		NA		0.0052		NA		NA		6.88										
250		4		250		NA		0.2		NA		NA		NA										
0%		0%		0%		0%		0%		0%		0%		0%										
0%		0%		0%		0%		0%		0%		0%		0%										
																								depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		

| | | |

4	3	4	3	4	2	4	2	2	3	2	3	4	3	3	2	-2	3						
0.0125		0.0125		0.0132		0.0107		3.55		3.68		0.0234		0.0240		65500							
0.0125		0.0125		0.0075		0.0075		3.74		3.73		0.0250		0.0250		64900							
0		0		0		0		1		1		0		0		3100							
11		11		11		11		11		11		11		11		11							
0.0125		0.0125		0.0075		0.0075		2.5		2.5		0.0075		0.0075		59100							
0.0125		0.0125		0.052		0.0428		4.6		5.02		0.0382		0.0365		69800							
0		0		0		0		3		3		0		0		60900							
11		11		9		10		3		3		5		5		0							
100%		100%		82%		91%		27%		27%		45%		45%									
				1		1		8		7		6		6									
NA		NA		NA		NA		NA		NA		0.497		0.434		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			2	2			3	2	3	3		3	3		2	2			2	2
66800				0.210				0.583		0.202			0.203			0.330				0.230	
66700				0.100				0.583		0.188			0.181			0.250				0.250	
3800				0				0		0			0			0				0	
11				11				10		11			11			11				11	
59100				0.031				0.031		0.161			0.172			0.0503				0.025	
71200				0.684				0.211		0.284			0.322			0.959				0.25	
61100				0				0		0			0			0				0	
0				6				8		0			0			8				11	
				55%				80%								73%				100%	
																1					
NA				10.98				10.56276		NA			NA			18.796				18.044	
NA				100				NA		NA			NA			NA				NA	
0%				0%				0%		0%			0%			0%				0%	
0%				0%				0%		0%			0%			0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
	Iron						**Lead[4]**						**Magnesium**						**Manganese**				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
1	3		1	3			4	3		4	3		-2	3		-2	3		0	3		0	3
57			48				0.0226			0.0155			20100			20900			613			619	
12			10				0.0155			0.0155			19800			21800			618			635	
122			129				0			0			1800			2200			34			46	
11			11				11			11			11			11			11			11	
3.1			3.1				0.0155			0.0155			17400			17600			555			536	
419			438				0.0648			0.0155			22900			23500			660			670	
6			5				0			0			17500			17750			558			547	
3			4				9			11			0			0			0			0	
27%			36%				82%			100%													
5			6				2																
1000			1000				9.034			6.067			NA			NA			NA			NA	
NA			NA				15			NA			NA			NA			50			NA	
0%			0%				0%			0%			0%			0%			0%			0%	
0%			0%				0%			0%			0%			0%			100%			0%	
							depends on Hardness			depends on Hardness													
result > crit			result > crit				result > crit			result > crit									result > crit				

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				Total
			µg/L						µg/L						µg/L						µg/L				µg/L
5	2	5	2	2	3	2	3	2	3	2	3	0	3	0	3	3	3								
0.00075		0.00098		2.63		2.7		1.56		1.56		681		687		0.155									
0.00075		0.00075		2.65		2.6		1.37		1.60		689		687		0.155									
0		0		0		0		1		0		26		41		0									
11		11		11		11		11		11		11		11		11									
0.00075		0.00075		2.38		2.36		0.962		1		629		627		0.155									
0.00075		0.00328		2.83		2.96		2.41		2.38		712		743		0.155									
0		0		2		2		1		1		637		628		0									
11		10		0		0		0		0		0		0		11									
100%		91%														100%									
		1																							
0.77		0.77		NA		NA		104.37		104.05		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.155	
	0.155	
	0	
	11	
	0.155	
	0.155	
	0	
	11	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2	
7410			0.0040			0.0031			9480			9740			0.0043			0.0043			0.047		
7390			0.0031			0.0031			9770			9970			0.0050			0.0050			0.050		
430			0			0			720			770			0			0			0		
11			11			11			11			11			11			11			11		
6590			0.0031			0.0031			8570			8660			0.0031			0.0031			0.031		
7980			0.0127			0.0031			10600			10800			0.005			0.005			0.0741		
6725			0			0			8650			8680			0			0			0		
0			10			11			0			0			11			11			10		
			91%			100%									100%			100%			91%		
			1																		1		
NA			15.50114714			13.176			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tir**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.048		0.190		0.217		2.17		1.67															
0.050		0.155		0.155		1.55		1.55															
0		0		0		1		0															
11		11		11		11		10															
0.031		0.155		0.155		0.867		1.38															
0.1		0.385		0.45		4.36		2.91															
0		0		0		1		1															
11		9		8		6		8															
100%		82%		73%		55%		80%															
		2		3		2		2															
NA		NA		NA		239.98		236.62															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
												depends on Hardness		depends on Total Zn									
												result > crit		result > crit									
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-06-40S

Sample Date														
05/23/09	7.51	3		R			R		C,R					
08/21/09	7.24	3	4.64	3	809		3	-8.3	2	8.63	3	282	3
10/19/09	7.8	2	2.13	3	797		3	-31.3	3	3.29	3		
10/20/09												234	3
05/19/10			0.41	2 Q	945		3 Q	-161.6	4	3.65	3		
05/21/10												360	2
08/21/10	8.79	3	8.51	3	637		3	41.7	3	7.55	3		
08/22/10												191	3
10/22/10	7.49	3	0.81	2 Q	714		3 Q	39.2	3 Q	4.08	3		
05/23/11	7.67	3	0.72	2 Q	426		3	-103.9	4	3	1		
05/24/11												285	3
08/25/11	7.39	3	5.73	3	545.298	FALSE		137.5	4	5.09	3		
08/26/11												212	3

1000	1	593	3	8.99	3	16.2	3	479	3	0.0555	3 J
800	1	453	3	537	3	10.2	3	420	2	**0.0155**	3
723	3	413	3	251	3	35	2	373	3	**0.050**	1 U
743	3	418	3	88.5	3	5.86	3 J	376	3	**0.050**	1 U
694	3	374	3	141	3	9.6	2 J	368	3	**0.0155**	3
666	3	366	3	6.98	3	10.2	3	350	2	**0.050**	1 U

0.107	3
0.767	3
0.248	3
0.0312	3
0.716	3
0.0106	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

6.46	3	0.238	3	68.3	3	**0.0025**	2 U	**0.00075**	2	1.2	2 J+	15.1	3	**0.0155**
2.32	3	0.297	3	25.3	3	0.0026	2 J	0.0017	2 J	0.67	2 J	5.81	3	**0.0155**
1.53	3	0.159	3	14.9	3	**0.00075**	2	**0.00075**	2	0.62	2 J	4.37	3 J+	**0.0155**
2.39	3	0.24	2	26.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.03	3	**0.0155**
1.67	3	0.244	3	14.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.87	3	**0.0155**
1.39	3	0.212	3	10.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	3.51	3	**0.0155**

3	104	3	**1.00**	1	U	0.0361	3	J		R	4.68	3	2.74	3	87.8	3	75.7	3
3	1500	2	3.57	3		0.196	3		0.21	2	2.6	2	J		R	122	3	94.1	3
3	20300	3	92.7	3		**0.0300**	1		0.0193	3	J	9.2	2	2.4	2	380	2	105	3
3	1460	3	213	3		0.0741	3	J		R	3.42	3	1.4	2	108	3	J		R
3	6870	3	3.46	3	J+	**0.100**	1	U	0.1	1	J+	2.7	2	2.02	3	187	3	113	3
3	55.6	3	3.94	3	J+	0.0321	3	J	0.0423	3	J	2.74	3	0.816	3	104	3	119	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	40.4	3	35.3	3	**0.0075**	2	**0.0075**	2	53600	3
0.101	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	34.8	3	38.3	3	0.0314	3 J	**0.0075**	2	46700	3
1.48	3	**0.0125**	3	0.297	3	**0.0075**	2	28.1	3	25.5	3	0.252	3	**0.0075**	2	76600	3
0.0881	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	22	2 J		R	0.228	3	**0.0250**	2 U	41300	3
0.262	3	**0.0125**	3	**0.100**	1 U	**0.0250**	2 U	28.7	3	25.1	3	**0.0300**	1	**0.0075**	2	55100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	26.6	3	22.2	3	0.0371	3 J	0.02	1 J	43500	3

	46100	3	0.215	3	**0.050**	1	1.39	3 J+	1.35	3 J+	0.645	3 J+	0.506	3 J+
	35700	3	0.476	3	**0.050**	1	0.8	1	0.256	3	1.8	2	**0.250**	2 U
J+	43800	3 J+	15.5	3	**0.050**	1	15.8	3	0.409	3 J+	33.5	3	**0.250**	2 U
	48300	3	4.25	3	1.36	3 J+	1.92	3 J+	1.12	3 J+	7.74	3 J+	0.934	3 J+
	43700	3	2.6	2	0.213	3	3.43	3	0.33	2	5.47	3	0.205	3 J
	45300	3	0.268	3	**0.100**	1 U	0.249	3 J		R	1.25	3	**0.250**	2 U

415	3	**10.0**	1 U	0.287	3 J+	**0.0155**	3	35900	3	32600	3	191	3	163	3
1140	3	6.35	3 J	1.57	3	**0.0155**	3	28600	3	18800	3	125	3	116	3
34100	3	147	3	18	2	0.095	2 J	41000	2 J+	28200	3 J+	1110	3 J+	135	3 J+
2010	3	375	3	1.92	3	0.175	3	21400	3 J		R	211	3	158	3
6520	3	28.7	3	3.57	3	**0.0155**	3	35700	3	30200	3	353	3	132	3
156	3	9.93	3 J	0.161	3	**0.0155**	3	25200	3 J		R	142	3	112	3

0.00075	2	**0.00075**	2	9.42	3	8.7	2	3.13	3 J+	2.9	2 J+	3460	3	3030	3	**0.155**	3
0.00478	3 J	**0.00075**	2	7.38	3	5.42	3	2.99	3	1.59	3	3540	3	2920	3	**0.155**	3
0.344	3	0.00221	3 J	2.78	3 J+		R	23.2	3	1.56	3 J+	6310	3 J+	2840	3 J+	**0.62**	2
0.00363	3 J	0.00257	3 J	2.53	3 J		R	7.44	3	6.14	3	2670	3	3170	3	**0.155**	3
0.0766	3	**0.00075**	2	4.58	3	5.16	3	6.42	3	1.98	3	3800	2	2940	3	**0.62**	2
0.00075	2	**0.00075**	2	3.88	3 J		R	2.2	2	2.33	3	2710	3	2840	3	**0.155**	3

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

5130	3	**0.0031**	2	**0.0031**	2	89600	3	71000	2	**0.0050**	1	**0.0050**	1	**0.050**	1
6910	3	0.0084	2 J	**0.0031**	2	101000	3	122000	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7220	3 J+	0.165	3	**0.0031**	2	79500	3 J+	82000	2 J+	0.197	3	**0.0050**	1	0.609	3 J
7450	3	0.0133	3 J	**0.0031**	2	60800	3	68600	3	**0.0050**	1	**0.0050**	1	4.13	3
6500	2	**0.0124**	3	**0.0031**	2	64500	3	60100	3	**0.0200**	1	**0.0050**	1	**0.200**	1
5540	3	**0.0031**	2	**0.0031**	2	58200	3	45300	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.205	3 J+	0.962	3 J	**0.155**	3	33.1	3 J+	37.1	3 J+
	R	3.56	3	1.48	3	23.5	3	12.6	3
0.050	1	48.8	3	1.22	3	4130	3	303	3
0.731	3	3.26	3	0.848	3 J	904	3	197	3
0.050	1	12	2	1.23	3	299	3	70.8	3
0.0310	2	0.864	3 J	0.589	3 J	201	3	116	3

	2	3	2	3		0	3		1	3		2	3		0	3		
Mean	7.70		93.37			975			-3712.8			115.79			261			
Median	7.51		92.37			975			-378.8			114.79			258			
St. Deviation	1		3			175			99			2			61			
# of values	7		7			7			7			7			6			
Minimum	7.24		0.41			426			-161.6			3			191			
Maximum	8.79		8.51			945			137.5			8.63			360			
Lowest fifth percentile	7		1			462			-144			3			196			
# of values undetected	0		0			0			0			0			0			
% of values undetected																		
# of values between MDL and PQL																		
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7			NA			NA			NA			NA			
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4			NA			NA			NA			NA			
% of CALC exceedences	14%		0%			0%			0%			0%			0%			
% of DWS exceedences	14%		0%			0%			0%			0%			0%			

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	3		0	3		1	3		1	3		0	3		3	2						
771			436			172			15			394			0			NA			NA	
733			416			115			10			375			0			NA			NA	
121			83			201			11			47			0			NA			NA	
6			6			6			6			6			6				0			0
666			366			6.98			5.86			350			0.0155			NA			NA	
1000			593			537			35			479			0.0555			NA			NA	
673			368			7			7			355			0			NA			NA	
0			0			0			0			0			5							
															83%							
									2						1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			17%			0%			0%			0%			0%				NA			NA
			result > crit									result <20			result > crit							

	3	3					
	0		NA				
	0		NA				
	0		NA				
	6			0			
	0.0106		NA				
	0.767		NA				
	0		NA				
	0						

	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

| | | |

3		-1	3		2	3		4	3		3	3		2	3		2	3		0	3		0	3					
		5050			53			0			0			4			2			165			101						
		1480			4			0			0			3			2			115			105						
		7880			86			0			0			3			1			111			17						
		6			6			6			4			6			5			6			5						
		55.6			1			0.03			0.0193			2.6			0.816			87.8			75.7						
		20300			213			0.196			0.21			9.2			2.74			380			119						
		68			2			0			0			3			1			92			79						
		0			1			2			0			0			0			0			0						
					17%			33%																					
								2			2																		
		87			87			NA			NA			150			150			NA			NA						
		NA			NA			6			NA			10			NA			2,000			NA						
		83%			33%			0%			0%			0%			0%			0%			0%						
		0%			0%			0%			0%			0%			0%			0%			0%						
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit									
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF				
			Aluminum						**Antimony**						**Arsenic**						**Barium**								
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved					
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					

| | | |

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			3	3			3	2	2	3		3	3		2	3			3	3
43800				4				0		4			1			8				0	
44600				2				0		2			0			4				0	
4300				6				1		6			1			13				0	
6				6				6		6			5			6				6	
35700				0.215				0.05		0.249			0.256			0.645				0.205	
48300				15.5				1.36		15.8			1.35			33.5				0.934	
37700				0				0		0			0			1				0	
0				0				4		0			0			0				3	
								67%												50%	
																				1	
NA				10.98				10.56276		NA			NA			16.597				15.933	
NA				100				NA		NA			NA			NA				NA	
0%				17%				0%		0%			0%			17%				0%	
0%				0%				0%		0%			0%			0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
-1	3	1	3	2	3	4	3	-2	3	-2	3	0	3	0	3								
7390		96		4		0		31300		27500		355		136									
1580		19		2		0		32200		29200		201		134									
13290		147		7		0		7400		6000		378		21									
6		6		6		6		6		4		6		6									
156		6.35		0.161		0.0155		21400		18800		125		112									
34100		375		18		0.175		41000		32600		1110		163									
221		7		0		0		22350		20210		129		113									
0		1		0		4		0		0		0		0									
		17%				67%																	
		2				1																	
1000		1000		7.506		5.200		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
67%		0%		17%		0%		0%		0%		0%		0%									
0%		0%		17%		0%		0%		0%		100%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit								result > crit									

| | | |

	3	3
	0	
	0	
	0	
	6	
	0.155	
	0.155	
	0	
	6	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		

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| | | |

P-06-41D

Sample Date													
05/22/09	9.14	3	0.57	2	597	3	-23.1	3		3.29	3	7.71	3
08/23/09			0.51	2	508	3		R		3.71	3	3.18	3
10/13/09	8.76	3	0.24	2	452	3	-133	3		4.06	3	11.5	3
05/18/10	8.06	3	0.68	2	384	3 Q	-261.1	4		3.15	3	3.31	3
08/22/10	9.91	3	0.31	2	538	3	18.3	3		3.73	3	3.32	3
10/20/10	9.51	3	0	1 Q	529	3	18.1	3		2.89	3	3.4	2
05/23/11	8.94	3	0.25	2	306	3	46.1	3		2.68	3	2.58	3
08/24/11	9.13	3	2.13	3	546.0632	FALSE	153.6	4		2.96	3	3.7	2
10/24/11	9.65	3	0.2	1	406	3	0.9	1		2.79	3	2.45	3
05/19/12	9.09	3	0.1	1	444	3	63.2	3		2.78	3	3.43	3
08/27/12			1.98	3	506	3	-20.2	3		3.88	3	2.67	3
10/13/12	9.16	3	1.23	3	505	3	43.9	3		2.06	3	**2.00**	1

490	2	325	3	3.38	3	**1.57**	3	262	3	**0.0155**	3
531	3	299	3	1.41	3	**1.57**	3	264	3	**0.0155**	3
546	3	366	3	18.1	3	**1.57**	3	258	3	**0.0155**	3
558	3	329	3	105	3	**1.57**	3	255	3	0.111	3
534	3	301	3	2.35	3	**1.57**	3	256	3	**0.0155**	3
521	3	305	3	1.29	3	**1.57**	3	257	3	**0.050**	1 U
509	3	260	2	1.43	3	**1.57**	3	256	3	**0.0155**	3
509	3	320	2	2.12	3	**1.57**	3	251	3	**0.050**	1 U
503	3	298	3	0.297	3 J	**1.57**	3	249	3	**0.050**	1 UJ
515	3	298	3	0.4	1 J	**1.57**	3	248	3	**0.0155**	3
520	2	322	3	**0.075**	2	**1.57**	3	256	3	**0.050**	1 U
508	3	283	3	0.3	1 J	**1.57**	3	257	3	0.095	2 J

0.0863	3
0.0434	3
0.193	3
0.0398	3
0.0436	3
0.0331	3
0.0305	3
0.0422	3
0.0228	3
0.0256	3
0.024	2
0.0234	3

3.6	2	0.134	3	8.5	2	**0.00075**	2	**0.00075**	2	2.5	2 J	**0.075**	2	**0.0155**
3.24	3	0.124	3	7.85	3	**0.0025**	2 U	0.002	1 J	1.2	2 J+	0.679	3	0.034
2.46	3	0.126	3	6.68	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
2.73	3	0.112	3	7.4	2	**0.00075**	2	**0.00075**	2	0.55	2 J	0.838	3 J+	**0.0155**
3.5	2	0.162	3	9.28	3	**0.00075**	2	**0.0025**	2 U	0.39	2 J	0.713	3	**0.0155**
3.02	3	0.177	3	8.59	3	**0.0025**	2 U	**0.00075**	2	0.55	2 J	0.626	3	**0.0155**
2.16	3	0.167	3	5.94	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.09	3	**0.0155**
2.08	3	0.154	3	6.06	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	0.971	3	**0.0155**
2.23	3	0.167	3	6.31	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.99	2	**0.0155**
2.29	3	0.156	3	6.64	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.968	3	**0.0155**
2.39	3	0.146	3	6.92	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.22	3	**0.0155**
2.28	3	0.13	2	6.75	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	1.09	3	**0.0155**

3	3300	2	152	3	**0.0075**	2	**0.0075**	2	3.84	3	3.63	3	35.9	3	5.67	3
2 J	733	3	13.6	3 J+	**0.0075**	2	0.052	2	3.61	3	3.92	3	8.93	3	3.48	3
3	1710	3	496	3	0.0211	3 J	0.029	2 J	3.06	3	3.18	3	56.5	3	16.2	3
3	453	3	16.6	3	**0.0075**	2	**0.0075**	2	3.93	3	3.98	3	10.2	3 J+	3.38	3 J+
3	405	3	26.8	3 J+	0.0789	3	0.0483	3 J	4.48	3	4.28	3	8.88	3	3.58	3 J+
3	444	3	24.7	3 J+	0.0687	3	**0.0075**	2	4.65	3	4.57	3	9.76	3	4.34	3
3	221	3	21.1	3 J+	0.0925	3 J+	**0.0250**	2 U	3.12	3	2.73	3	7.18	3 J+	3.89	3 J+
3	731	3	51.8	3	0.0375	3 J	0.0306	3 J	3.38	3	3.14	3	14.2	3	4.26	3
3	176	3	15	2 J+	0.0382	3 J	**0.0250**	2 U	3.44	3	3.36	3	5.32	3	3.5	2
3	85.1	3	13.9	3 J+	0.069	2	0.05	1	3.46	3	3.32	3	5.1	2 J+	4.04	3 J+
3	44.7	3	18.2	3	0.0252	3 J	0.0231	3 J	3.66	3	3.3	2	4.42	3	4.07	3
3	48.8	3	27.8	3	**0.0300**	1	**0.0300**	1	3.15	3	3.16	3	4.11	3	3.85	3

0.129	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	25.3	3	25.3	3	**0.0075**	2	**0.0075**	2	1410	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	23	2 J		R	**0.0075**	2	**0.0075**	2	856	3
0.221	3	0.0594	3	**0.0075**	2	**0.0075**	2	19.3	3	20.5	3	**0.0075**	2	**0.0075**	2	2330	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	19.8	3	21.5	3	**0.0075**	2	**0.0075**	2	872	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	24.3	3	25.8	3	0.0250	2 U	**0.0075**	2	907	3
0.0291	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	24.8	3 J+	25.9	3 J+	**0.0075**	2	0.0173	3 J	882	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	23.2	3	21.7	3	**0.0075**	2	**0.0075**	2	777	3
0.0313	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	22.9	3	21.6	3	**0.0075**	2	**0.0075**	2	882	3
0.125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	23.5	3 J	22	2 J	**0.0075**	2	**0.0075**	2	786	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	24.7	3	24.5	3	**0.0075**	2	**0.0075**	2	1200	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	22.8	3	22.7	3	**0.0075**	2	**0.0075**	2	923	3
0.050	1	**0.050**	1	**0.0300**	1	**0.0300**	1	30.7	3	29.7	3	**0.0300**	1	**0.0300**	1	920	2

	855	3	2.1	2	J+	0.24	2	J+	1.3	2	0.129	3	2.14	3	**0.250**	2	U
	837	3	0.603	3		**0.050**	1		0.301	3	J+	0.0316	3	J+	0.739	3	J+	**0.250**	2	U
	1060	3	1.86	3		0.552	3		2.35	3		0.594	3		3.59	3		0.941	3	
J+	737	3	J+	0.409	3		**0.050**	1		0.287	3	J+	0.0276	3	J+	0.538	3		**0.250**	2	U
J+	832	3	J+	0.814	3	J+	**0.100**	1	U	0.303	3	J+	0.0453	3	J+	0.769	3	J+	**0.250**	2	U
J+	811	3	J+	0.941	3		**0.050**	1		0.339	3		0.0422	3		0.681	3		**0.250**	2	U
J+	651	3	J+	0.334	3		**0.100**	1	U	0.141	3		0.0267	3		0.266	3	J	**0.0250**	2	
	630	2	0.863	3		0.21	2		0.463	3		0.0554	3		0.834	3		**0.250**	2	U
	679	3	0.387	3		**0.100**	1	U	0.115	3		0.0234	3		**0.250**	2	U	**0.250**	2	U
	1120	3	0.409	3	J+	0.305	3	J+	0.0867	3		0.0337	3		**0.250**	2	U	**0.250**	2	U
	891	3	0.44	2		0.293	3		0.0681	3		0.0353	3		**0.250**	2	U	**0.250**	2	U
	864	3	**0.124**	3		**0.124**	3		**0.0400**	1	U	**0.0400**	1	U	**1.00**	1	U	**1.00**	1	U

3190	3	203	3	0.892	3	**0.0498**	3 J	1010	3	150	2	48.9	3	7.66	3
575	3	**10.0**	1 U	0.643	3 J+	**0.0155**	3	253	3	82.5	3	12.7	3 J+	4.92	3 J+
3670	3	983	3	2.49	3	0.656	3	1380	3	423	3	100	1	26.1	3
550	2	22.9	3	0.613	3	**0.0155**	3	275	3 J+	80.3	3 J+	14.6	3 J+	4.66	3 J+
509	3	37.1	3	0.77	2	**0.0642**	3 J	257	3	94.2	3 J+	12.2	3 J+	5.14	3 J+
622	3	32.5	3	0.722	3	**0.0548**	3 J	291	3	91.4	3	12.9	3	5.56	3
268	3	26.8	3	0.221	3	**0.0155**	3	156	3	70.9	3	7.85	3	3.64	3
945	3	79.1	3	0.497	3	**0.0547**	3 J	364	3	84.5	3	19.5	3	4.7	2
178	3	**10.0**	1 U	0.265	3	**0.0155**	3	118	3	59.8	3	7.59	3	3.74	3
114	3	23.8	3	0.29	2	**0.0391**	3 J	106	3	75.1	3	5.55	3	3.89	3 J+
74.5	3	28.6	3	0.222	3	**0.0755**	3 J	88.1	3	72.3	3	4.33	3	3.51	3
72.7	3 J	36.8	3 J	**0.189**	3 J	**0.062**	2	89.9	3	77.1	3 J	3.76	3 J+	3.39	3 J+

0.00537	3	**0.00075**	2	5.2	2	5.38	3	2.08	3	0.309	3 J	868	3	339	3	**0.155**	3
0.00351	3 J	**0.00075**	2	5.5	2	5.88	3	**0.310**	2 U	**0.310**	2 U	403	3	318	3	**0.155**	3
0.0104	3	0.00191	3 J	1.86	3 J		R	3.03	3	0.863	3	474	3	319	3	**0.155**	3
0.00474	3 J	**0.00075**	2	4.9	2 J+	5.41	3 J+	**0.310**	2 U	**0.310**	2 U	381	3 J+	304	3 J+	**0.155**	3
0.00312	3 J	**0.00075**	2	5.64	3	6.14	3	**0.310**	2 U	**0.310**	2 U	417	3	335	3	**0.155**	3
0.00281	3 J	**0.00075**	2	5.64	3	5.71	3	0.529	3 J	**0.310**	2 U	412	3	326	3	**0.155**	3
0.00075	2	0.00183	3 J	5.06	3	4.56	3	0.266	3 J	0.125	3 J	314	3	245	3	**0.155**	3
0.00230	2 J	**0.00075**	2	4.65	3	4.52	3	0.766	3	0.17	2 J	434	3	258	3	**0.155**	3
0.00075	2	**0.00075**	2	5.25	3	4.89	3	0.28	2 J	0.204	3 J	311	3	274	3	**0.155**	3
0.00075	2	**0.00075**	2	5.41	3	5.26	3	**0.310**	2 U	**0.310**	2 U	404	3	378	3	**0.155**	3
0.00075	2	**0.00075**	2	5.22	3	5.17	3	**0.310**	2 U	**0.310**	2 U	352	3	343	3	**0.155**	3
0.00075	2	**0.00075**	2	4.7	2	4.45	3	**0.124**	3	**0.124**	3	357	3	337	3	**0.62**	2

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.62	2

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

3910	3	0.0312	3	**0.0031**	2	112000	3	111000	3	0.0127	3 J	**0.0050**	1	0.272	3
3790	3	**0.0031**	2	**0.0031**	2	101000	3	107000	3	**0.0050**	1	**0.0050**	1	0.365	3 J+
4150	3	0.0069	2 J	**0.0031**	2	101000	3	103000	3	**0.0050**	1	**0.0050**	1	**0.050**	1
3970	3 J+	**0.0031**	2	**0.0031**	2	117000	3	116000	3	**0.0050**	1	**0.0050**	1	0.565	3 J
3850	3	**0.0031**	2	**0.0031**	2	116000	3	118000	3	**0.0050**	1	**0.0050**	1	0.484	3
4050	3 J+	0.0065	2 J	**0.0031**	2	106000	3	127000	3	**0.0050**	1	**0.0050**	1	0.711	3
3710	3	**0.0031**	2	**0.0031**	2	99400	3	95200	3	**0.0050**	1	**0.0050**	1	1.41	3
3630	3	0.0111	3 J	**0.0031**	2	99900	3	93700	3	**0.0031**	2	**0.0031**	2	1.01	3
3710	3	0.0098	2 J	0.0064	2 J	120000	2	125000	3	**0.0031**	2	**0.0031**	2	1.51	3
3970	3	**0.0031**	2	**0.0031**	2	139000	3	133000	3	**0.0031**	2	**0.0031**	2	3.46	3
3870	3	**0.0031**	2	**0.0031**	2	115000	3	115000	3	**0.0031**	2	**0.0031**	2	2.66	3
3940	3	0.0124	3	0.0124	3	135000	3	130000	2	**0.0124**	3	**0.0124**	3	1.83	3

0.050	1	4.82	3	**0.155**	3	5.22	3	**1.55**	3 U
0.333	3 J+	0.968	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	4.39	3	1.27	3	6.85	3	**1.55**	3 U
	R	0.723	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.274	3	0.459	3 J	**0.155**	3	3.49	3 J+	**1.55**	3 U
0.331	3 J+	1.01	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
1.01	3	0.387	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.568	3	1.24	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.972	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
1.86	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
1.63	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
1.39	3	**0.62**	2	**0.62**	2	**6.2**	2 U	**6.2**	2 U

	2	3	2	2	0	3	1	3	2	3	2	3
Mean	9.14		0.68		477		-8.5		3.17		4.10	
Median	9.14		0.41		506		18.1		3.06		3.32	
St. Deviation	1		1		81		109		1		3	
# of values	10		12		12		11		12		12	
Minimum	8.06		0		306		-261.1		2.06		2	
Maximum	9.91		2.13		597		153.6		4.06		11.5	
Lowest fifth percentile	8		0		349		-197		2		2	
# of values undetected	0		0		0		0		0		1	
% of values undetected											8%	
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	90%		0%		0%		0%		0%		0%	
% of DWS exceedences	90%		0%		0%		0%		0%		0%	

0	3	0	3	2	3	2	3	0	3	4	3				
520		309		11.35		1.57		256		0.0416		NA		NA	
518		303		1.42		1.57		256		0.0328		NA		NA	
19		26		30		0		5		0		NA		NA	
12		12		12		12		12		12			0		0
490		260		0.075		1.57		248		0.0155		NA		NA	
558		366		105		1.57		264		0.111		NA		NA	
497		273		0		2		249		0		NA		NA	
0		0		1		12		0		10					
				8%		100%				83%					
				3						1					
NA		NA		NA		NA		>=20		NA			NA		NA
NA		500		NA		NA		NA		10			NA		NA
0%		0%		0%		0%		0%		0%			NA		NA
0%		0%		0%		0%		0%		0%			NA		NA

4	3		
0.0506		NA	
0.0365		NA	
0		NA	
12			0
0.0228		NA	
0.193		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

2	3	3	3	2	3	5	2	5	2	3	3	3	3	4
2.7		0.146		7.2		0.00119		0.00115		0.5		0.793		0.0170
2.4		0.150		6.8		0.00075		0.00075		0.2		0.903		0.0155
1		0		1		0		0		1		0		0
12		12		12		12		12		12		12		12
2.08		0.112		5.94		0.00075		0.00075		0.155		0.075		0.0155
3.6		0.177		9.28		0.0025		0.0025		2.5		1.22		0.034
2		0		6		0		0		0		0		0
0		0		0		12		11		7		2		11
						100%		92%		58%		17%		92%
								1		3				1
230		NA		NA		NA		0.0052		NA		NA		1.35
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	0	3	1	3	4	3	3	2	2	3	2	3	2	3	2	3	2	3	
	696		73		0.0403		0.0280		3.65		3.55		14.2		5.02				
	425		23		0.0338		0.0270		3.54		3.34		8.9		3.97				
	941		139		0		0		1		1		16		4				
	12		12		12		12		12		12		12		12				
	44.7		13.6		0.0075		0.0075		3.06		2.73		4.11		3.38				
	3300		496		0.0925		0.052		4.65		4.57		56.5		16.2				
	47		14		0		0		3		3		4		3				
	0		0		4		6		0		0		0		0				
					33%		50%												
					4		4												
	87		87		NA		NA		150		150		NA		NA				
	NA		NA		6		NA		10		NA		2,000		NA				
	75%		17%		0%		0%		0%		0%		0%		0%				
	0%		0%		0%		0%		0%		0%		0%		0%				

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	0	3
0.055		0.0195		0.0094		0.0094		23.7		23.7		0.0108		0.0102		1062	
0.021		0.0125		0.0075		0.0075		23.4		22.7		0.0075		0.0075		895	
0		0		0		0		3		3		0		0		438	
12		12		12		12		12		11		12		12		12	
0.0125		0.0125		0.0075		0.0075		19.3		20.5		0.0075		0.0075		777	
0.221		0.0594		0.03		0.03		30.7		29.7		0.03		0.03		2330	
0		0		0		0		20		21		0		0		782	
8		11		12		12		0		0		12		11		0	
67%		92%		100%		100%						100%		92%			
2								1		1				1			
NA		NA		NA		NA		NA		NA		0.016		0.017		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		17%		8%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

0	3	3	3	2	2	3	3	4	3	3	3	2	2	
831		0.8		0.20		0.5		0.090		0.94		0.350		
835		0.5		0.10		0.3		0.038		0.71		0.250		
150		1		0		1		0		1		0		
12		12		12		12		12		12		12		
630		0.124		0.05		0.04		0.0234		0.25		0.025		
1120		2.1		0.552		2.35		0.594		3.59		1		
642		0		0		0		0		0		0		
0		1		7		1		1		4		11		
		8%		58%		8%		8%		33%		92%		
										1				
NA		3.849877544		3.310894688		NA		NA		0.364		0.350		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		67%		17%		
0%		0%		0%		0%		0%		0%		0%		

0	3	1	3	3	3	4	3	0	3	1	3	1	3	2	3
897		125		0.651		0.0932		366		113		20.8		6.41	
530		31		0.555		0.0523		255		81		12.5		4.68	
1217		275		1		0		405		100		28		6	
12		12		12		12		12		12		12		12	
72.7		10		0.189		0.0155		88.1		59.8		3.76		3.39	
3670		983		2.49		0.656		1380		423		100		26.1	
74		10		0		0		89		66		4		3	
0		2		0		5		0		0		0		0	
		17%				42%									
1		1		1		6				1					
1000		1000		0.025		0.034		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
17%		0%		100%		67%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		8%		0%	

5	3	5	2	2	3	2	3	3	3	2	2	0	3	0	3	3	3
0.00300		0.00094		4.9		5.22		0.72		0.300		427		315		0.194	
0.00260		0.00075		5.2		5.26		0.31		0.310		404		323		0.155	
0		0		1		1		1		0		147		39		0	
12		12		12		11		12		12		12		12		12	
0.00075		0.00075		1.86		4.45		0.124		0.124		311		245		0.155	
0.0104		0.00191		5.64		6.14		3.03		0.863		868		378		0.62	
0		0		3		4		0		0		313		252		0	
5		10		0		0		6		7		0		0		12	
42%		83%						50%		58%						100%	
5		2						3		4							
0.77		0.77		NA		NA		2.10		2.10		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		8%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.194	
0.155	
0	
12	
0.155	
0.62	
0	
12	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-3	3	-3	3	4	2	4	2	3	3
3880		0.0080		0.0042		113000		114000		0.0060		0.0050		1.190	
3890		0.0048		0.0031		114000		116000		0.0050		0.0050		0.860	
150		0		0		13000		13000		0		0		1	
12		12		12		12		12		12		12		12	
3630		0.0031		0.0031		99400		93700		0.0031		0.0031		0.05	
4150		0.0312		0.0124		139000		133000		0.0127		0.0124		3.46	
3674		0		0		99675		94525		0		0		0	
0		7		11		0		0		11		12		1	
		58%		92%						92%		100%		8%	
		4		1						1					
NA		0.005532518		0.005		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		50%		17%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	3	3	3	3	3	2	3	2	3
0.770		1.26		0.287		2.85		1.94	
0.568		0.67		0.155		1.55		1.55	
1		2		0		2		1	
11		12		12		12		12	
0.05		0.155		0.155		1.55		1.55	
1.86		4.82		1.27		6.85		6.2	
0		0		0		2		2	
2		4		11		9		12	
18%		33%		92%		75%		100%	
		4							
NA		NA		NA		4.81		4.74	
NA		NA		NA		NA		NA	
0%		0%		0%		25%		8%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-06-41M																
Sample Date																
05/22/09	8.29	3	0.93	2		630	2		-88.5	3		3.07	3	7.38	3	
08/23/09			0.52	2		491	3			R		4.14	3	7.29	3	
10/13/09	7.92	3	0.21	2		459	3		-152.7	4		3.39	3	7.09	3	
05/18/10	5.57	3	0.47	2		380	2 Q		-231.9	4		2.95	3	6.79	3	
08/22/10	8.91	3	0.58	2		516	3 Q		69	2		3.56	3	7.01	3	
10/20/10	8.58	3	0.31	2 Q		495	3		9.8	2		2.83	3	6.91	3	
05/23/11	8.59	3	0.15	2		300	1		-39.1	3		2.4	2	6.45	3	
08/24/11	8.3	2	3.72	3		522.5748	FALSE		142.2	4		3.02	3	6.5	2	
10/24/11	8.8	2	0.34	2		396	3		10.1	3		2.56	3	6.24	3	
05/19/12	8.18	3	0.34	2		416	3		-16.1	3		2.31	3	6.49	3	
08/27/12	8.69	3	1.68	3		501	3		-56.4	3		4.39	3	5.77	3	
10/13/12	8.56	3	0.85	2		471	3		73.6	3		2.14	3	5.86	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
507	3		306	3		1.42	3		**1.57**	3		260	2		**0.0155**	3						
518	3		295	3		0.207	3 J		**1.57**	3		257	3		**0.0155**	3						
516	3		288	3		0.314	3 J		**1.57**	3		252	3		0.0375	3 J						
540	2		311	3		**0.0775**	3		13.7	3		251	3		0.0465	3 J						
472	3		282	3		**0.0775**	3		**1.57**	3		248	3		**0.0155**	3						
498	3		309	3		0.8	1		**1.57**	3		253	3		**0.050**	1 U						
495	3		264	3		**0.076**	2		**1.57**	3		250	2		**0.0155**	3						
490	2		301	3		**0.075**	2		**1.57**	3		244	3		**0.050**	1 UJ						
480	2		308	3		**0.0745**	3		**1.57**	3		242	3		**0.0155**	3						
487	3		297	3		0.294	3 J		**1.57**	3		241	3		**0.0155**	3						
495	3		281	3		**0.075**	2		**5.0**	1 U		247	3		**0.050**	1 U						
481	3		275	3		**0.075**	2		**1.57**	3		249	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0348	3				
	0.0974	3				
	0.023	2				
	0.0355	3				
	0.03	1				
	0.03	1				
	0.0265	3				
	0.0248	3				
	0.0178	3				
	0.0252	3				
	0.0253	3				
	0.0235	3				

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										depends on Hardness		depends on Hardness																	
result > crit				result > crit						result > crit		result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
73.6	3		44.8	3			0.173	3			**0.0155**	3			507	3		515	3		33	2		32.6	3	
36.9	3		24	2			0.485	3	J+		**0.0155**	3			518	3		465	3		30.1	3		27.6	3	
49.3	3		22.6	3			0.383	3			0.0411	3	J		493	3		449	3		28.8	3		25.6	3	
35.5	3		26.2	3			0.196	3			0.0373	3	J		527	3	J+	522	3	J+	28.3	3	J+	28.6	3	J+
30.4	3		18.5	3	J		0.166	3			**0.0155**	3			500	1		444	3		27.7	3		22.9	3	J+
90.5	3		25.9	3			0.3	1			0.0401	3	J		505	3		487	3		26.9	3		27.5	3	
27.1	3		24.1	3			0.13	2			**0.0155**	3			471	3		476	3		24.4	3		24.5	3	
38.6	3		19.3	3	J		0.187	3			**0.0155**	3			477	3		449	3		25.1	3		23.7	3	
30.4	3		30.7	3			0.102	3			**0.0155**	3			419	3		436	3		27.8	3		27.9	3	
30.3	3		26	2			0.148	3			**0.0155**	3			426	3		429	3		23.2	3		23.6	3	
27.1	3		23.2	3			0.0718	3	J		0.04	1	J		413	3		409	3		23.2	3		23.2	3	
12.4	3		**12.4**	3			**0.062**	2			**0.062**	2			408	3		403	3		19.3	3		19.3	3	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.62	2	

				depends on HARD; revised 2013						depends on Total Ag																			
				result > crit						result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
Silicon					**Silver[8]**								**Sodium**								**Thallium**									**Tin**
Dissolved				Total				Dissolved				Total				Dissolved				Total				Dissolved				Total		
µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L		
5280	3			**0.0031**	2			**0.0031**	2			113000	3			113000	3			**0.0050**	1			**0.0050**	1			0.185	3	J
4880	3			**0.0031**	2			**0.0031**	2			108000	3			95200	3			**0.0050**	1			**0.0050**	1			0.273	3	J+
5190	3			**0.0031**	2			**0.0031**	2			100000	1			104000	3			**0.0050**	1			**0.0050**	1			0.138	3	J
5610	3	J+		**0.0031**	2			**0.0031**	2			113000	3			115000	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
5250	3			0.0174	3	J		**0.0031**	2			120000	2			88800	3			**0.0050**	1			**0.0050**	1			0.156	3	J
5410	3	J+		**0.0031**	2			**0.0031**	2			110000	2			117000	3			**0.0050**	1			**0.0050**	1			0.164	3	J
5500	2			**0.0031**	2			**0.0031**	2			97800	3			99500	3			**0.0050**	1			**0.0050**	1			**0.050**	1	
5510	3			**0.0031**	2			**0.0031**	2			99700	3			95300	3			**0.0031**	2			**0.0031**	2			0.157	3	J
5410	3			**0.0031**	2			**0.0031**	2			114000	3			112000	3			**0.0031**	2			**0.0031**	2			0.117	3	J
5640	3			**0.0031**	2			**0.0031**	2			127000	3			125000	3			**0.0031**	2			**0.0031**	2			**0.100**	1	U
5360	3			**0.0031**	2			**0.0031**	2			107000	3			110000	2			**0.0031**	2			**0.0031**	2			**0.100**	1	U
5560	3			**0.0124**	3			**0.0124**	3			128000	3			125000	3			**0.0124**	3			**0.0124**	3			**0.124**	3	

											depends on Hardness					depends on Total Zn			
											result > crit					result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.138	3	J	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.207	3	J+	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.108	3	J	**0.155**	3	**0.155**	3				0.873	3	J	**1.55**	3	U				
0.050	1		**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3	**0.155**	3				4.75	3	J+	**1.55**	3	U				
0.050	1		**0.155**	3	**0.155**	3				**1.55**	3	U	**0.155**	3					
0.128	3	J	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.103	3	J	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.100	1	U	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.100	1	U	**0.155**	3	**0.155**	3				**1.55**	3	U	**1.55**	3	U				
0.124	3		**0.62**	2	**0.62**	2				**6.2**	2	U	**6.2**	2	U				

	2	3	2	2	0	3	1	3	2	3	2	3			
Mean	8.22		0.84		465		-25.5		3.06		6.65				
Median	8.56		0.50		481		-16.1		2.99		6.65				
St. Deviation	1		1		84		107		1		1				
# of values	11		12		12		11		12		12				
Minimum	5.57		0.15		300		-231.9		2.14		5.77				
Maximum	8.91		3.72		630		142.2		4.39		7.38				
Lowest fifth percentile	7		0		344		-192		2		6				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	64%		0%		0%		0%		0%		0%				
% of DWS exceedences	64%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		4	3		2	3		0	3		4	3						
498			293			0.30			2.87			250			0.0285			NA			NA	
495			296			0.08			1.57			250			0.0155			NA			NA	
19			15			0			4			6			0			NA			NA	
12			12			12			12			12			12				0			0
472			264			0.0745			1.57			241			0.0155			NA			NA	
540			311			1.42			13.7			260			0.05			NA			NA	
476			270			0			2			242			0			NA			NA	
0			0			7			11			0			10							
						58%			92%						83%							
						3									2							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3		
0.0328		NA	
0.0259		NA	
0		NA	
12			0
0.0178		NA	
0.0974		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
2	3		3	3		2	3		5	2		5	2		3	3		2	3		4
2.28			0.157			8.8			0.00104			0.00090			0.186			1.28			0.0155
2.28			0.158			8.1			0.00075			0.00075			0.155			1.29			0.0155
0			0			3			0			0			0			0			0
12			12			12			12			12			12			12			12
2.06			0.125			6.69			0.00075			0.00075			0.155			0.741			0.0155
2.56			0.204			16.1			0.0025			0.0025			0.53			1.91			0.0155
2			0			7			0			0			0			1			0
0			0			0			12			12			11			0			12
									100%			100%			92%						100%
															1						
230			NA			NA			NA			0.0052			NA			NA			6.38
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

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| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
-1	3			3	3			3	2	4	3	4	3			2	2			2	2
1830				0.274				0.148		0.0436		0.0282				0.350				0.200	
1830				0.299				0.050		0.0334		0.0236				0.250				0.250	
130				0				0		0		0				0				0	
12				12				11		12		12				12				12	
1620				0.1				0.05		0.02		0.01				0.025				0.025	
2110				0.4				0.4		0.0844		0.0682				1				0.25	
1642				0				0		0		0				0				0	
0				2				8		1		2				9				12	
				17%				73%		8%		17%				75%				100%	
				2																	
NA				8.39162807				7.21680014		NA		NA				0.821				0.788	
NA				100				NA		NA		NA				NA				NA	
0%				0%				0%		0%		0%				8%				0%	
0%				0%				0%		0%		0%				0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	
Calcium					**Chromium[4,6]**					**Cobalt**							**Copper[4]**				
				Dissolved				Total		Dissolved				Total			Dissolved				
				µg/L				µg/L		µg/L				µg/L			µg/L				

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
1	3	1	3	3	3	4	3	0	3	0	3	1	3	1	3								
40.2		24.8		0.200		0.0274		472		457		27		25.6									
33.0		24.1		0.170		0.0155		485		449		27		25.1									
22		8		0		0		44		38		4		4									
12		12		12		12		12		12		12		12									
12.4		12.4		0.062		0.0155		408		403		19.3		19.3									
90.5		44.8		0.485		0.062		527		522		33		32.6									
20		16		0		0		411		406		21		21									
1		1		1		8		0		0		0		0									
8%		8%		8%		67%																	
		2		1		4																	
1000		1000		0.085		0.103		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		83%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit								result > crit									

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF

	3	3
	0.194	
	0.155	
	0	
	12	
	0.155	
	0.62	
	0	
	12	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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P-06-41S

Sample Date												
05/22/09	7.96	3	0.84	2	526	3	30.3	3	3.32	3	62.5	3
08/23/09			1.29	3		R		R	3.34	3	60.2	3
10/13/09	7.74	3	1.72	3	408	3	-65.3	3	3.39	3	62.5	3
05/18/10	7.05	3	1.2	2	325	3 Q	-185.7	4	3.16	3	59.1	3
08/22/10	8.79	3	1.64	3	458	3	129.7	4	3.14	3	61.9	3
10/20/10	8.17	3	0.62	2 Q	454	3	58.9	3	2.71	3	61.2	3
05/23/11	8.26	3	0.79	2 Q	279	3	60.6	3	2.5	2	60	1
08/24/11	8.01	3	0.4	1	373.219	FALSE	-45	2	2.95	3	64.9	3
10/24/11	8.26	3	1.16	3	365	3	26.6	3	2.44	3	61.3	3
05/19/12	7.8	2	0.27	2	395	3	60.2	3	2.25	3	64.1	3
08/27/12	8.34	3	2.29	3	450	2	-27.4	3	3.49	3	55.3	3
10/13/12	8.23	3	0.88	2	455	3	103.7	4	2.18	3	69.6	3

465	3	261	3	8.92	3	**1.57**	3	250	2	**0.0155**	3
474	3	263	3	16	2	**1.57**	3	251	3	0.131	3
489	3	270	2	1.69	3	**1.57**	3	246	3	0.0405	3 J
506	3	296	3	8.57	3	15.1	3	242	3	0.035	2 J
443	3	254	3	37.3	3	**1.57**	3	242	3	**0.0155**	3
464	3	272	3	3.3	2	**1.57**	3	245	3	**0.050**	1 U
465	3	255	3	8.56	3	**1.57**	3	243	3	**0.0155**	3
466	3	284	3	17.6	3	**1.57**	3	240	2	**0.0155**	3
457	3	274	3	1.58	3	**1.57**	3	238	3	**0.0155**	3
466	3	274	3	0.693	3	**1.57**	3	238	3	**0.0155**	3
468	3	259	3	**0.147**	3	**5.0**	1 U	245	3	**0.050**	1 U
463	3	270	2	34.2	3	**1.57**	3	248	3	**0.0155**	3

0.0473	3
1.25	3
0.0294	3
0.0399	3
0.0781	3
0.0662	3
0.0327	3
0.0478	3
0.0261	3
0.0296	3
0.0271	3
0.0761	3

1.23	3	0.109	3	3.48	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.307	3 J	**0.0155**
1.18	3	0.102	3	3.23	3	**0.0025**	2 U	**0.00075**	2	0.33	2 J	0.607	3	0.0403
1.16	3	0.108	3	3.24	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
1.2	2	0.094	2 J	3.32	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.813	3 J+	**0.0155**
1.37	3	0.151	3	3.73	3	**0.00075**	2	0.0015	2 J	0.67	2 J	**0.250**	2 U	**0.0155**
1.44	3	0.171	3	3.96	3	**0.0025**	2 U	**0.00075**	2	0.46	2 J	0.464	3 J	**0.0155**
1.48	3	0.153	3	3.79	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.94	2	**0.0155**
1.53	3	0.143	3	3.86	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	1.08	3	**0.0155**
1.47	3	0.149	3	3.95	3	**0.00075**	2	**0.00075**	2	1.21	3	1.11	3	**0.0155**
1.35	3	0.147	3	3.86	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.875	3	**0.0155**
1.41	3	0.131	3	4	1	**0.00075**	2	**0.00075**	2	0.412	3 J	1.28	3	**0.0155**
1.42	3	0.105	3	4.01	3	0.0061	2	**0.00075**	2	**0.155**	3	0.956	3	**0.0155**

3	721	3	2.09	3	0.0274	3 J	0.0156	3 J	2.43	3	2.17	3	97.3	3	86	2
3 J	155	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	2.01	3	2.03	3	86.8	3	79	2
3	26.9	3	2.13	3	0.0206	3 J	0.0204	3 J	2.3	2	2.2	2	86	2	83.5	3
3	11.4	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	2.3	2	2.28	3	87.6	3	86.5	3
3	257	3	2.26	3 J+	0.0187	3 J	**0.0075**	2	2.2	2	2.28	3	91.3	3	82	2
3	54.4	3	**1.00**	1 U	0.0245	3 J	**0.0075**	2	2.28	3	2.21	3	86.7	3	85.7	3
3	130	2	9.61	3 J+	**0.0250**	2 U	**0.0250**	2 U	2.19	3	2.2	2	90.2	3	85.5	3
3	245	3	5.61	3 J+	0.0606	3	0.0286	3 J	2.43	3	2.38	3	93.2	3	89.7	3
3	19.7	3 J+	5.74	3 J+	0.0247	3 J	0.0176	3 J	2.25	3	2.19	3	90.9	3	89.2	3
3	19.9	3 J+	**1.00**	1 U	0.043	2 J	0.02	1 J	2.23	3	2.15	3	88.1	3	88.8	3
3	2.48	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	2.14	3	2.24	3	80.5	3	85.2	3
3	363	3	**4.00**	1 U	**0.0300**	1	**0.0300**	1	2.48	3	2.14	3	97.7	3	81.6	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	25.8	3	26.9	3	**0.0075**	2	**0.0075**	2	13400	3
0.0125	3	**0.0125**	3	**0.0075**	2	0.0373	3 J	23.1	3	22.3	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	23.7	3	21.3	3	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	20.9	3	21.5	3	**0.0075**	2	**0.0075**	2	11700	3
0.0251	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	23.2	3	25.4	3	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	24.6	3 J+	24	2 J+	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	22.6	3	21.8	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	25.8	3	23.5	3	**0.0075**	2	**0.0075**	2	13300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	21.3	3	21.7	3	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	24	2	24.4	3	**0.0075**	2	**0.0075**	2	13900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	21.2	3	22.2	3	**0.0075**	2	**0.0075**	2	11600	3
0.050	1	**0.050**	1	**0.0300**	1	**0.0300**	1	29.2	3	27.5	3	**0.0300**	1	**0.0300**	1	14200	3

	13100	3	1.02	3	J+	**0.050**	1	0.471	3	0.123	3	1.28	3	**0.250**	2 U
	11600	3	0.52	2		**0.050**	1	0.156	3	J+	0.0475	3	J+	**0.250**	2 U	**0.250**	2 U
	12700	3	0.359	3		**0.050**	1	0.0889	3	0.0517	3	**0.250**	2 U	**0.250**	2 U
J+	11900	3	J+	0.216	3	**0.050**	1	0.0654	3	J+	0.0531	3	J+	**0.250**	2 U	**0.250**	2 U
	12800	3	3.4	2	J+	0.586	3	J+	0.485	3	J+	0.0536	3	J+	0.906	3	J+	**0.250**	2 U
	12500	3	1.13	3	0.158	3	J	0.0946	3	0.054	2	**0.250**	2 U	**0.250**	2 U
	12000	2	4.71	3	0.801	3	0.25	2	0.0588	3	0.257	3	J	**0.0250**	2
	12900	3	1.86	3	0.599	3	0.285	3	0.0902	3	0.945	3	0.53	2
	13100	3	0.58	2	0.441	3	0.0724	3	0.0577	3	**0.250**	2 U	**0.250**	2 U
	14100	3	0.448	3	J+	0.276	3	J+	0.075	2	0.0619	3	**0.250**	2 U	**0.250**	2 U
	11900	3	0.619	3	0.476	3	0.0639	3	0.0679	3	**0.250**	2 U	**0.250**	2 U
	12600	3	**0.400**	1	U	**0.400**	1	U	0.742	3	**0.0400**	1	U	**1.00**	1 U	**0.100**	1

883	3	165	3	0.228	3	**0.0155**	3	7020	3	7020	3	61	2	44.7	3
203	3	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	7050	3	6170	3	46.1	3	36.1	3
68.6	3	10.3	3 J	0.0507	3 J	**0.0155**	3	7200	2	6850	3	44.6	3	41.1	3
33.7	3	**10.0**	1 U	0.0933	3 J	**0.0155**	3	7260	3 J+	7230	3 J+	44.1	3 J+	40.7	3 J+
792	3	16.1	3 J	0.194	3	**0.0155**	3	7100	2	7550	3	73.3	3	41.2	3
88.8	3	12.7	3 J	0.0539	3 J	**0.0155**	3	7280	3	7430	3	43.5	3	44.3	3
401	3	28.4	3	0.0953	3 J	**0.0155**	3	6510	3	6260	3	58.6	3	41	2
434	3	46.9	3	0.23	2	0.104	3	7690	3	6150	3	59.8	3	44.9	3
51.1	3	24.3	3	0.0682	3 J	0.0313	3 J	6970	3	6890	3	50	1	49.8	3
50.7	3	**10.0**	1 U	0.0441	3 J	**0.0155**	3	7150	3	7140	3	48.1	3	47	2
19.4	3 J	14.5	3 J	**0.0155**	3	**0.0155**	3	6410	3	6750	3	41.1	3	43.1	3
1100	2	**12.4**	3	0.437	3	**0.062**	2	8280	3	7530	3	86.1	3	39.6	3

0.0101	3	**0.00075**	2	3.83	3	4.17	3	1.29	3	0.631	3	1750	3	1690	3	**0.155**	3
0.00258	3 J	**0.00075**	2	3.74	3	3.57	3	**0.310**	2 U	**0.310**	2 U	1680	3	1530	3	**0.155**	3
0.00075	2	**0.00075**	2	3.82	3	3.79	3	0.674	3	0.33	2 J	1660	3	1630	3	**0.155**	3
0.00075	2	**0.00075**	2	3.88	3 J+	3.99	3 J+	**0.310**	2 U	**0.310**	2 U	1670	3 J+	1670	3 J+	**0.155**	3
0.00378	3 J	**0.00075**	2	3.58	3	3.81	3	2.74	3	0.75	2	1700	2	1710	3	**0.155**	3
0.00151	3 J	**0.00075**	2	3.83	3	3.84	3	0.94	2	**0.310**	2 U	1690	3	1750	3	**0.155**	3
0.00334	3 J	**0.00075**	2	3.94	3	3.78	3	2.98	3	0.794	3	1660	3	1580	3	**0.155**	3
0.00713	3	**0.00075**	2	3.78	3	4.2	2	1.64	3	1.07	3	1780	3	1740	3	**0.155**	3
0.00075	2	**0.00075**	2	3.99	3	4	1	0.584	3 J	0.52	2 J	1810	3	1790	3	**0.155**	3
0.00075	2	**0.00075**	2	4.18	3	4.22	3	0.757	3 J+	**0.310**	2 U	1870	3	1900	2	**0.155**	3
0.00075	2	**0.00075**	2	3.75	3	4.04	3	0.688	3	0.721	3	1600	2	1670	3	**0.155**	3
0.0350	2	**0.00075**	2	2.58	3 J		R	**1.24**	3 U	**1.24**	3 U	1800	2	1710	3	**0.62**	2

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.62	2

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

5980	3	0.0078	2 J	**0.0031**	2	79900	3	75100	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5250	3	**0.0031**	2	**0.0031**	2	74100	3	64700	3	**0.0050**	1	**0.0050**	1	0.237	3 J+
5570	3	**0.0031**	2	**0.0031**	2	70800	3	65700	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6370	3 J+	**0.0031**	2	**0.0031**	2	82600	3 J+	80500	3 J+	**0.0050**	1	**0.0050**	1	0.131	3 J
6080	3	**0.0031**	2	**0.0031**	2	79100	3	75800	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6080	3 J+	**0.0031**	2	**0.0031**	2	74500	3	86200	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5590	3	**0.0031**	2	**0.0031**	2	72300	3	69700	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5970	3	**0.0031**	2	**0.0031**	2	68000	2	69200	3	**0.0031**	2	**0.0031**	2	0.148	3 J
5860	3	**0.0031**	2	**0.0031**	2	82900	3	82200	3	**0.0031**	2	**0.0031**	2	0.0718	3 J
6520	3	**0.0031**	2	**0.0031**	2	92800	3	92500	3	**0.0031**	2	**0.0031**	2	**0.100**	1 U
6120	3	**0.0031**	2	**0.0031**	2	75200	3	81600	3	0.023	2	**0.0031**	2	**0.0310**	2
6160	3	**0.0124**	3	**0.0124**	3	93800	3	90100	3	**0.0124**	3	**0.0124**	3	**0.124**	3

0.050	1	1.34	3	**0.155**	3	3.14	3	**1.55**	3 U
0.100	1 U	0.359	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	0.712	3 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.836	3 J	**0.155**	3	5.65	3 J+	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.444	3 J	**0.155**	3	3.74	3	**1.55**	3 U
0.162	3 J	0.638	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	3.47	3	**1.55**	3 U
0.124	3	1.43	3 J	**0.62**	2	**6.2**	2 U	**6.2**	2 U

	2	3	2	2		0	3		1	3		2	3		1	3		
Mean	8.06		1.10			408			13.3			2.91			61.9			
Median	8.17		1.00			408			30.3			3.05			61.6			
St. Deviation	0		1			70			89			0			4			
# of values	11		12			11			11			12			12			
Minimum	7.05		0.27			279			-185.7			2.18			55.3			
Maximum	8.79		2.29			526			129.7			3.49			69.6			
Lowest fifth percentile	7		0			302			-126			2			57			
# of values undetected	0		0			0			0			0			0			
% of values undetected																		
# of values between MDL and PQL																		
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7			NA			NA			NA			NA			
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4			NA			NA			NA			NA			
% of CALC exceedences	9%		0%			0%			0%			0%			0%			
% of DWS exceedences	9%		0%			0%			0%			0%			0%			

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**			**Field Diss. Oxygen**		**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**			**Hardness**		
Total/Dissolved																	
Units	pH Units			mg/L		µmhos/cm			mV			°C			mg/L		

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	3		0	3		2	3		2	3		0	3		4	3						
469			269			11.55			2.98			244			0.0346			NA			NA	
466			270			8.57			1.57			244			0.0155			NA			NA	
16			12			13			4			4			0			NA			NA	
12			12			12			12			12			12				0			0
443			254			0.147			1.57			238			0.0155			NA			NA	
506			296			37.3			15.1			251			0.131			NA			NA	
451			255			0			2			238			0			NA			NA	
0			0			1			11			0			9							
						8%			92%						75%							
															2							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
				result > crit									result <20			result > crit						

	4	3					
	0.1459		NA				
	0.0436		NA				
	0		NA				
	12			0			
	0.0261		NA				
	1.25		NA				
	0		NA				
	0						

	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
	Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**		**Ammonia[3]**
	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		mg/L
2	3		3		3	2		3	5		2	5		2	3		3	3		3	4
1.35			0.130			3.70			0.00149			0.00096			0.347			0.744			0.0176
1.39			0.137			3.83			0.00075			0.00075			0.155			0.844			0.0155
0			0			0			0			0			0			0			0
12			12			12			12			12			12			12			12
1.16			0.094			3.23			0.00075			0.00075			0.155			0.25			0.0155
1.53			0.171			4.01			0.0061			0.0025			1.21			1.28			0.0403
1			0			3			0			0			0			0			0
0			0			0			11			11			7			2			11
									92%			92%			58%			17%			92%
			1									1			4			2			1
230			NA			NA			NA			0.0052			NA			NA			4.75
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

| | | |

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3										
0.0167		0.0156		0.0094		0.0119		23.8		23.5		0.0094		0.0094		12900											
0.0125		0.0125		0.0075		0.0075		23.5		22.9		0.0075		0.0075		13100											
0		0		0		0		2		2		0		0		800											
12		12		12		12		12		12		12		12		12											
0.0125		0.0125		0.0075		0.0075		20.9		21.3		0.0075		0.0075		11600											
0.05		0.05		0.03		0.0373		29.2		27.5		0.03		0.03		14200											
0		0		0		0		21		21		0		0		11655											
11		12		12		11		0		0		12		12		0											
92%		100%		100%		92%						100%		100%													
1						1																					
NA		NA		NA		NA		NA		NA		0.179		0.167		NA											
4		NA		NA		NA		NA		NA		5		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
												depends on Hardness		depends on Hardness													
result > crit												result > crit		result > crit													
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			3	3			3	3	4	3			4	3			2	2	2	2
12600				1.27				0.328		0.237				0.063				0.51		0.240	
12700				0.60				0.338		0.125				0.056				0.25		0.250	
700				1				0		0				0				0		0	
12				12				12		12				12				12		12	
11600				0.216				0.05		0.0639				0.04				0.25		0.025	
14100				4.71				0.801		0.742				0.123				1.28		0.53	
11765				0				0		0				0				0		0	
0				1				5		0				1				8		11	
				8%				42%						8%				67%		92%	
								1										1			
NA				10.98				10.56276		NA				NA				5.804		5.572	
NA				100				NA		NA				NA				NA		NA	
0%				0%				0%		0%				0%				0%		0%	
0%				0%				0%		0%				0%				0%		0%	
				depends on Hardness				depends on Hardness										depends on Hardness			
				result > crit				result > crit										result > crit		result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
1	3	1	3	4	3	4	3	-1	3	-1	3	1	3	1	3								
344		30		0.130		0.0281		7160		6910		55		42.8									
146		14		0.081		0.0155		7130		6960		49		42.2									
382		44		0		0		490		510		14		4									
12		12		12		12		12		12		12		12									
19.4		10		0.0155		0.0155		6410		6150		41.1		36.1									
1100		165		0.437		0.104		8280		7550		86.1		49.8									
27		10		0		0		6465		6161		42		38									
0		4		2		10		0		0		0		0									
		33%		17%		83%																	
1		4		6		1																	
1000		1000		1.569		1.368		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
8%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		42%		0%									
						depends on Hardness		depends on Hardness															
result > crit		result > crit				result > crit		result > crit						result > crit									

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				Total
			µg/L						µg/L						µg/L						µg/L				µg/L
5	3	5	2	2	3	2	3	3	3	2	2	-1	3	-1	3	3	3								
0.0056		0.00075		3.74		3.95		1.18		0.610		1720		1700		0.194									
0.0020		0.00075		3.83		3.99		0.85		0.580		1700		1700		0.155									
0		0		0		0		1		0		80		100		0									
12		12		12		11		12		12		12		12		12									
0.00075		0.00075		2.58		3.57		0.31		0.31		1600		1530		0.155									
0.035		0.00075		4.18		4.22		2.98		1.24		1870		1900		0.62									
0		0		3		4		0		0		1633		1558		0									
5		12		0		0		3		5		0		0		12									
42%		100%						25%		42%						100%									
4								1		2															
0.77		0.77		NA		NA		32.61		32.51		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.194	
	0.155	
	0	
	12	
	0.155	
	0.62	
	0	
	12	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3		4	2		4	2		-2	3		-2	3		4	2		4	2		3	2	
5960			0.0043			0.0039			78800			77800			0.0066			0.0050			0.090		
6030			0.0031			0.0031			77200			78200			0.0050			0.0050			0.060		
350			0			0			8100			9300			0			0			0		
12			12			12			12			12			12			12			12		
5250			0.0031			0.0031			68000			64700			0.0031			0.0031			0.031		
6520			0.0124			0.0124			93800			92500			0.023			0.0124			0.237		
5426			0			0			69540			65250			0			0			0		
0			11			12			0			0			11			12			8		
			92%			100%									92%			100%			67%		
			1																		3		
NA			1.456121689			1.238			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013				depends on Total Ag															
				result > crit				result > crit										result > crit					

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tin**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.065		0.50		0.194		2.68		1.94															
0.050		0.26		0.155		1.55		1.55															
0		0		0		2		1															
12		12		12		12		12															
0.031		0.155		0.155		0.712		1.55															
0.162		1.43		0.62		6.2		6.2															
0		0		0		1		2															
11		6		12		7		12															
92%		50%		100%		58%		100%															
1		5				1																	
NA		NA		NA		74.85		73.80															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
								depends on Hardness		depends on Total Zn													
								result > crit		result > crit													
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-07-45D

Sample Date												
03/31/09	6.94	3	1.46	3	360	2	-35.6	3	1.22	3	213	3
05/20/09	7.22	3	0.65	2	443	3	-42.2	3	1.69	3	201	3
08/21/09			1.75	3	458	3		R	2.89	3	181	3
10/17/09	7.42	3	0.7	1	417	3	-12	2	2.07	3	212	3
03/16/10	7.5	2	1.57	3	383	3	199.8	4	2.28	3	200	1
05/18/10	6.69	3	0.96	2	321	3 Q	-73.4	3	2.36	3	188	3
08/21/10	7.79	3	1.01	3	403	3	145.7	4	2.09	3	198	3
10/23/10	7.46	3	0.32	2	423	3	116.1	4	1.61	3	209	3
03/25/11	7.24	3	0.33	2	285	3 Q	138.6	4	1.59	3	177	3
05/24/11	7.3	2	0.7	1	256	3	-59.9	3	1.65	3	199	3
08/26/11	8.89	3	5.67	3	297.619	FALSE	105.2	4	2.41	3	198	3
10/24/11	7.21	3		R	387	3	58.7	3	1.32	3	197	3
03/20/12	7.17	3	0.85	2	397	3	-22.7	3	0.46	2	195	3
05/18/12	7.2	2	0.33	2	419	3	-84.4	3	1.66	3	200	1
08/27/12			2.47	3	263	3	149.8	4	2.36	3	183	3
10/13/12	9.3	2	1.17	3	356	3	174	3	92	2	203	3

423	3	193	3	2.35	3	**1.57**	3	217	3	**0.050**	1 U
407	3	212	3	0.326	3 J	3.5	2 J	230	2	**0.0155**	3
410	2	214	3	7.89	3	**1.57**	3	219	3	0.0455	3 J
447	3	220	2	0.5	1	3.48	3 J	218	3	**0.0155**	3
415	3	224	3	0.842	3	**1.57**	3	210	2	**0.0155**	3
460	2	250	2	0.306	3 J	29.8	3	225	3	0.0585	3 J
400	1	219	3	3.28	3	**1.57**	3	211	3	**0.050**	1 U
428	3	222	3	0.8	1	6.55	3 J	226	3	**0.050**	1 U
402	3	201	3	0.606	3	4.09	3 J	213	3	**0.050**	1 U
409	3	210	2	0.515	3	5.65	3 J	214	3	**0.0155**	3
314	3	172	3	44.8	3	**1.57**	3	160	2	0.15	2
401	3	207	3	7.48	3	4.86	3 J	206	3	**0.050**	1 U
384	3	130	2	0.6	1	6.56	3 J	201	3	**0.0155**	3
410	2	220	2	**0.073**	2	6.83	3 J	210	2	**0.0155**	3
284	3	142	3	62.2	3	**1.57**	3	149	3	**0.050**	1 U
330	2	162	3	23.1	3	**1.57**	3	178	3	0.036	2 J

0.0050	1	U
0.0105	3	
0.0133	3	
0.00155	3	
0.00155	3	
0.0074	2	J
0.0036	2	J
0.00155	3	
0.00155	3	
0.0032	2	J
0.0048	2	J
0.00155	3	
0.00155	3	
0.0050	1	U
0.0055	2	J
0.0038	2	J

0.626	3	0.093	2 J	2.11	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.075**	2	**0.050**
0.57	2	0.06	1 J	2.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.050**
0.554	3	0.066	2 J	1.78	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	51	2	0.0462
0.567	3	0.059	2 J	2.09	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.583	3	0.06	1 J	2.08	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.588	3	0.057	2 J	2.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.63	2	0.097	2 J	2.03	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.652	3	0.111	3	2.46	3	0.0015	2 J	**0.00075**	2	**0.155**	3	0.251	3 J	**0.0155**
0.685	3	0.106	3	2.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.65	2	**0.0155**
0.634	3	0.1	1	1.92	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.904	3	**0.0155**
0.62	2	0.1	1	1.69	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.11	3	0.0379
0.563	3	0.099	2 J	2.01	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.534	3	**0.0155**
0.57	2	0.072	2 J	2.06	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.569	3	**0.0155**
0.54	2	0.102	3	2.02	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.577	3	**0.0155**
0.529	3	0.077	2 J	1.64	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.508	3	0.055	2 J	1.77	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.774	3	**0.0155**

1 U	18.1	3	**1.00**	1 U	**0.0075**	2	0.0228	3 J	**0.155**	3	**0.155**	3	151	3	139	3
1 U	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	149	3	147	3
3 J	39.1	3 J+	2.19	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	124	3	122	3
3	9.07	3	**1.00**	1 U	0.0184	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	160	2	146	3
3	3.76	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	138	3	134	3
3	**0.310**	2	**0.310**	2	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	146	3	140	2
3	19	2 J+	2.03	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	146	3	135	3
3	2.78	3 J+	**1.00**	1 U	0.0218	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	163	3	151	3
3	2.15	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	131	3	132	3
3	2.08	3 J		R	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	143	3	148	3
3 J	18.6	3 J+	14.7	3 J+	**0.0075**	2	**0.0075**	2	0.191	3 J	**0.075**	2	132	3	128	3
3	4.97	3 J+	2.33	3 J+	**0.0075**	2	**0.0075**	2	**0.250**	2 U	**0.075**	2	147	3	142	3
3	**1.00**	1 U	**1.00**	1 U	0.0214	3 J	**0.0075**	2	**0.075**	2	**0.075**	2	142	3	141	3
3	2.11	3 J+	**1.00**	1 U	0.0328	3 J	0.0177	3 J	0.15	2 J	**0.075**	2	144	3	142	3
3	39.4	3	21.1	3	0.058	2	0.0498	3 J	**0.075**	2	**0.075**	2	121	3	117	3
3	31.4	3	7.65	3 J+	**0.0075**	2	0.0262	3 J	**0.075**	2	**0.075**	2	128	3	123	3

0.0125	3	**0.0125**	3	**0.0075**	2	0.0225	3 J	7.94	3	10.2	3	**0.0075**	2	**0.0250**	2 U	44200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.1	3	10.2	3	**0.0075**	2	**0.0075**	2	38500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	5.99	3	6.57	3	**0.0075**	2	**0.0075**	2	35900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9	1	9.33	3	**0.0075**	2	**0.0075**	2	43400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	7.75	3	7.5	2	**0.0075**	2	**0.0075**	2	39500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	7.22	3	7.68	3	**0.0075**	2	**0.0075**	2	34800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	8.22	3	10.9	3	**0.0075**	2	**0.0075**	2	41400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.13	3 J+	9.43	3 J+	**0.0075**	2	**0.0075**	2	42100	3
0.0125	3	**0.0125**	3	0.0168	3 J	**0.0075**	2	9.02	3	8.08	3	**0.0075**	2	**0.0075**	2	34700	3
0.0125	3	**0.0125**	3	**0.0250**	2 U		R	10.7	3	10.8	3	**0.0075**	2	**0.0075**	2	39300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	7.51	3	8.13	3	**0.0075**	2	**0.0075**	2	43800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.81	3	7.94	3	**0.0075**	2	**0.0075**	2	37900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.2	3	10.8	3	**0.0075**	2	**0.0075**	2	37900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.1	3	11.4	3	**0.0075**	2	**0.0075**	2	38600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	6.16	3	5.84	3	**0.0075**	2	**0.0075**	2	41500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	8.4	2	8.09	3	**0.0075**	2	**0.0075**	2	42700	3

	40400	3		0.505	3		**0.100**	1	U	0.44	2	J+	0.46	2	J+	0.778	3	J+	**0.250**	2	U
	38000	2		0.296	3	J+	**0.100**	1	U	0.436	3		0.425	3		**0.250**	2	U	**0.250**	2	U
	33300	3		0.6	1		**0.050**	1		0.205	3	J+	0.185	3	J+	1.43	3	J+	**0.250**	2	U
	39800	3		0.297	3		**0.050**	1		0.325	3		0.281	3		0.577	3	J			R
	38500	3		0.159	3	J	**0.050**	1		0.295	3		0.303	3		0.236	3	J	**0.250**	2	U
J+	34900	3	J+	**0.050**	1		**0.050**	1		0.274	3	J+	0.272	3	J+	**0.250**	2	U	**0.250**	2	U
	36700	3		**0.100**	1	U	**0.100**	1	U	0.288	3	J+	0.26	2	J+	0.788	3	J+	**0.250**	2	U
	39400	3		**0.050**	1		**0.050**	1		0.346	3		0.326	3		**0.250**	2	U	**0.250**	2	U
	35600	3		0.143	3	J	**0.050**	1		0.279	3		0.291	3		**0.250**	2	U	**0.250**	2	U
	37700	3		**0.050**	1		**0.100**	1	U	0.275	3		0.29	2		0.13	2	J	0.127	3	J
	38100	3		0.675	3	J			R	0.263	3		0.209	3		0.815	3		0.666	3	
	36100	3		0.257	3		**0.100**	1	U	0.277	3		0.256	3		**0.250**	2	U	**0.250**	2	U
	38600	3		0.107	3	J	**0.0310**	2		0.298	3		0.29	2		**0.250**	2	U	**0.250**	2	U
	39900	3		**0.0310**	2		**0.100**	1	U	0.269	3		0.265	3		**0.250**	2	U	**0.250**	2	U
	25200	3		0.493	3		0.325	3		0.239	3		0.18	2		0.979	3		0.714	3	
	39100	3		0.736	3		**0.100**	1	U	0.296	3		0.232	3		0.904	3	J+	**0.250**	2	U

537	3	469	3	**0.050**	1 U	**0.0155**	3	25000	2	24600	3	62.2	3	57.5	3
762	3	730	2	0.0448	3 J	**0.0155**	3	25500	3	25700	3	65.5	3	65.9	3
91.1	3	84.4	3	**0.050**	1 U	**0.0155**	3	22300	3	23000	2	37.6	3	38.9	3
376	3	295	3	0.173	3	**0.0155**	3	25200	3	25300	3	64.4	3	60.9	3
275	3	242	3	0.0556	3 J	**0.0155**	3	24500	3	24300	3	61.8	3	61.3	3
293	3	286	3	**0.0155**	3	**0.0155**	3	24600	3 J+	24400	3 J+	57.9	3 J+	57.2	3 J+
324	3	233	3	0.181	3	**0.0155**	3	23000	2	25400	3	56	2	54.3	3
314	3	290	2	**0.0155**	3	**0.0155**	3	25300	3	24800	3	65.7	3	62.8	3
226	3	227	3	**0.0155**	3	**0.0155**	3	22000	2	22300	3	58.7	3	60	1
287	3	297	3	**0.0155**	3	**0.0155**	3	24600	3	25100	3	56.4	3	59.2	3
96.9	3	20.4	3	**0.0155**	3	**0.0155**	3	21600	3	22600	3	33.7	3	29.9	3
277	3	257	3	**0.0155**	3	**0.0155**	3	24800	3	23200	3	58.9	3	56.7	3
280	2	274	3	**0.0155**	3	**0.0155**	3	24400	3	25100	3	64.2	3	64.7	3
286	3	291	3	**0.0155**	3	**0.0155**	3	25300	3	27300	3	57.7	3	59.8	3
28	2	**3.10**	2	0.0383	3 J	**0.0155**	3	19400	3	18800	3	11.5	3	9.3	2
139	3	23.6	3	0.0358	3 J	**0.0155**	3	23300	3	22600	3	34	2	32.5	3

0.00075	2	**0.00075**	2	0.409	3	0.453	3	1.03	3	0.994	3	8010	3	7780	3	**0.155**	3
0.00075	2	0.0015	2 J	0.352	3	0.347	3	1.01	3	1.03	3	7600	2	7620	3	**0.155**	3
0.00075	2	**0.00075**	2	0.406	3	0.393	3	2.09	3 J+	0.644	3 J+	7070	3	7000	1	**0.155**	3
0.00075	2	**0.00075**	2	0.357	3	0.369	3	0.85	2	0.877	3	8010	3	7970	3	**0.155**	3
0.00075	2	**0.00075**	2	0.478	3	0.381	3	0.92	2	0.851	3	7640	3	7770	3	**0.155**	3
0.00075	2	**0.00075**	2	0.309	3 J+	0.293	3 J+	0.848	3 J+	0.841	3 J+	7550	3	7400	2	**0.155**	3
0.00075	2	**0.00075**	2	0.335	3	0.339	3	0.846	3	0.739	3	7420	3	7520	3	**0.155**	3
0.00075	2	**0.00075**	2	0.327	3	0.305	3	1.64	3	1.47	3	8470	3	8040	3	**0.155**	3
0.00075	2	**0.00075**	2	0.371	3	0.367	3	1.05	3	1.08	3	7100	2	7290	3	**0.155**	3
0.00075	2	**0.00075**	2	0.32	2	0.335	3	0.958	3	1.15	3	7550	3	7830	3	**0.155**	3
0.00075	2	**0.00075**	2	0.351	3	0.358	3	1.56	3	1.4	2	7280	3	7470	3	**0.155**	3
0.00075	2	**0.00075**	2	0.289	3	0.279	3	0.843	3	0.789	3	7890	3	7660	3	**0.155**	3
0.00075	2	**0.00075**	2	0.398	3	0.399	3	1.01	3	1.07	3	7840	3	8040	3	**0.155**	3
0.00075	2	**0.00075**	2	0.305	3	0.306	3	0.892	3 J+	0.936	3 J+	7780	3	8030	3	**0.155**	3
0.00075	2	**0.00075**	2	0.382	3	0.353	3	1.55	3	1.05	3	7060	3	6970	3	**0.155**	3
0.00075	2	**0.00075**	2	0.306	3	0.296	3	1.92	3 J+	1.17	3 J+	7530	3	7200	2	**0.155**	3

0.155	3
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0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

8540	3	**0.0031**	2	0.0081	2 J	6160	3	5960	3	**0.0050**	1	**0.0050**	1	0.126	3 J
9520	3	**0.0031**	2	**0.0031**	2	5620	3	5640	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7620	3	**0.0031**	2	**0.0031**	2	29800	3	6090	3	**0.0050**	1	**0.0050**	1	0.923	3 J+
9090	3	**0.0031**	2	**0.0031**	2	5540	3	5760	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8580	3	**0.0031**	2	**0.0031**	2	5830	3	5870	3	**0.0050**	1	**0.0050**	1	0.291	3
9380	3 J+	**0.0031**	2	**0.0031**	2	5130	3 J+	5150	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
8840	3	**0.0031**	2	**0.0031**	2	5100	2	5990	3	**0.0050**	1	**0.0050**	1	0.125	3 J
9420	3	**0.0031**	2	**0.0031**	2	5420	3	5350	3	**0.0050**	1	**0.0050**	1	0.158	3 J
8120	3	0.0791	3	**0.0031**	2	5220	3	5020	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
9020	3	**0.0031**	2	**0.0031**	2	5540	3	5660	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
7820	3	**0.0031**	2	**0.0031**	2	6410	3	6680	3	**0.0031**	2	**0.0031**	2	0.239	3
8510	3	**0.0031**	2	**0.0031**	2	5560	3	5190	3	**0.0031**	2	**0.0031**	2	0.225	3
9000	1	**0.0031**	2	**0.0031**	2	5880	3	6070	3	**0.0031**	2	**0.0031**	2	0.366	3
9260	3	**0.0031**	2	**0.0031**	2	5730	3	6220	3	**0.0031**	2	**0.0031**	2	0.36	2
6840	3	**0.0031**	2	**0.0031**	2	7470	3	7400	2	0.0199	3 J	**0.0031**	2	0.201	3
7640	3	**0.0031**	2	**0.0031**	2	6790	3	6500	2	**0.0031**	2	0.0102	3 J	0.122	3 J

0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	43.8	3 J+	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	0.991	3 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	4.5	2 J+	3.57	3 J+
0.050	1	**0.155**	3	**0.155**	3	3.98	3 J+	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.202	3	**0.155**	3	**0.155**	3	2.33	3 J		R
0.186	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.265	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.233	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.129	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0884	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	2		0	3	1	3	2	3	0	3					
Mean	7.52		1.33			367		50.5		7.48		197						
Median	7.27		0.96			385		58.7		1.88		199						
St. Deviation	1		1			64		101		23		10						
# of values	14		15			16		15		16		16						
Minimum	6.69		0.32			256		-84.4		0.46		177						
Maximum	9.30		5.67			458		199.8		92.00		213						
Lowest fifth percentile	7		0			261		-77		1		180						
# of values undetected	0		0			0		0		0		0						
% of values undetected																		
# of values between MDL and PQL																		
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7			NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4			NA		NA		NA		NA						
% of CALC exceedences	14%		0%			0%		0%		0%		0%						
% of DWS exceedences	14%		0%			0%		0%		0%		0%						

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	3		0	3		3	3		2	3		0	3		4	3						
395			200			9.73			5.14			205			0.043			NA			NA	
408			211			0.82			3.49			212			0.048			NA			NA	
47			32			18			7			23			0			NA			NA	
16			16			16			16			16			16				0			0
284			130			0.07			1.57			149			0.016			NA			NA	
460			250			62.20			29.80			230			0.150			NA			NA	
307			139			0			2			157			0			NA			NA	
0			0			1			7			0			12							
						6%			44%						75%							
						2			8						3							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
						result > crit						result <20			result > crit							

	5	3					
	0.0045		NA				
	0.0037		NA				
	0		NA				
	16			0			
	0.0016		NA				
	0.0133		NA				
	0		NA				
	8						
	50%						
	6						
	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
	Total Phosphorus				**Orthophosphate**		
		mg/L				mg/L	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4													
0.589		0.082		2.03		0.00102		0.0010		0.155		3.600		0.023													
0.577		0.085		2.05		0.00075		0.0008		0.155		0.390		0.016													
0		0		0		0		0		0		13		0													
16		16		16		16		16		16		16		16													
0.508		0.055		1.64		0.00075		0.0008		0.155		0.075		0.016													
0.685		0.111		2.46		0.00250		0.0025		0.155		51.000		0.050													
1		0		2		0		0		0		0		0													
0		0		0		15		16		16		7		14													
						94%		100%		100%		44%		88%													
		11				1						1		2													
230		NA		NA		NA		0.0052		NA		NA		6.21													
250		4		250		NA		0.2		NA		NA		NA													
0%		0%		0%		0%		0%		0%		0%		0%													
0%		0%		0%		0%		0%		0%		0%		0%													
																											depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																			result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N							
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**						
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L						

| | | |

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3						
0.0125		0.0125		0.0092		0.0085		8.58		8.9		0.0075		0.0086		39800							
0.0125		0.0125		0.0075		0.0075		8.70		8.7		0.0075		0.0075		39400							
0		0		0		0		1		2		0		0		3100							
16		16		16		15		16		16		16		16		16							
0.0125		0.0125		0.0075		0.0075		5.99		5.8		0.0075		0.0075		34700							
0.0125		0.0125		0.0250		0.0225		10.70		11.4		0.0075		0.0250		44200							
0		0		0		0		6		6		0		0		34775							
16		16		15		14		0		0		16		16		0							
100%		100%		94%		93%						100%		100%									
				1		1																	
NA		NA		NA		NA		NA		NA		0.418		0.369		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			3	3			2	2	3	3			3	3	3	3			2	2
37000				0.284				0.090		0.30				0.28		0.520				0.300	
38100				0.208				0.100		0.28				0.28		0.250				0.250	
3700				0				0		0				0		0				0	
16				16				15		16				16		16				15	
25200				0.031				0.031		0.21				0.18		0.130				0.127	
40400				0.736				0.325		0.44				0.46		1.430				0.714	
31275				0				0		0				0		0				0	
0				5				14		0				0		7				12	
				31%				93%								44%				80%	
				3												2				1	
NA				10.98				10.56276		NA				NA		15.416				14.799	
NA				100				NA		NA				NA		NA				NA	
0%				0%				0%		0%				0%		0%				0%	
0%				0%				0%		0%				0%		0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
0	3	0	3	4	3	4	3	-2	3	-2	3	1	3	1	3								
287		251		0.047		0.0155		23800		24000		52.9		51.9									
283		266		0.026		0.0155		24600		24500		58.3		58.4									
176		179		0		0		1700		1900		15		16									
16		16		16		16		16		16		16		16									
28		3		0.016		0.0155		19400		18800		11.5		9.3									
762		730		0.181		0.0155		25500		27300		65.7		65.9									
75		16		0		0		21050		21425		28		25									
0		1		10		16		0		0		0		0									
		6%		63%		100%																	
				4																			
1000		1000		6.724		4.743		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		75%		0%									
						depends on Hardness		depends on Hardness															
result > crit		result > crit				result > crit		result > crit				result > crit											

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				Total
			µg/L						µg/L						µg/L						µg/L				µg/L
5	2	5	2	3	3	3	3	2	3	3	3	-1	3	-1	3	3	3								
0.00075		0.00080		0.356		0.348		1.19		1.010		7610		7600		0.155									
0.00075		0.00075		0.352		0.350		1.01		1.010		7580		7640		0.155									
0		0		0		0		0		0		390		360		0									
16		16		16		16		16		16		16		16		16									
0.00075		0.00075		0.289		0.279		0.84		0.644		7060		6970		0.155									
0.00075		0.00150		0.478		0.453		2.09		1.470		8470		8040		0.155									
0		0		0		0		1		1		7068		6993		0									
16		15		0		0		0		0		0		0		16									
100%		94%														100%									
		1																							
0.77		0.77		NA		NA		85.77		85.51		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.155	
	0.155	
	0	
	16	
	0.155	
	0.155	
	0	
	16	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	3	
8580			0.0079			0.0034			7330			5910			0.0053			0.0047			0.218		
8710			0.0031			0.0031			5680			5920			0.0050			0.0050			0.142		
780			0			0			6030			620			0			0			0		
16			16			16			16			16			16			16			16		
6840			0.0031			0.0031			5100			5020			0.0031			0.0031			0.050		
9520			0.0791			0.0081			29800			7400			0.0199			0.0102			0.923		
7425			0			0			5123			5118			0			0			0		
0			15			15			0			0			15			15			5		
			94%			94%									94%			94%			31%		
						1									1			1			4		
NA			10.4008318			8.841			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tir**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.106		0.155		0.155		4.54		1.68															
0.069		0.155		0.155		1.55		1.55															
0		0		0		11		1															
16		16		16		16		15															
0.050		0.155		0.155		0.99		1.55															
0.265		0.155		0.155		43.80		3.57															
0		0		0		1		2															
10		16		16		11		14															
63%		100%		100%		69%		93%															
3						2																	
NA		NA		NA		197.16		194.40															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
						depends on Hardness		depends on Total Zn															
						result > crit		result > crit															
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-08-54D

Sample Date												
08/20/09	6.55	3	0.91	2	103	3	90.9	3	2.88	3	32.5	3
10/17/09	9.96	3	0.47	2	144	3	29.1	3 Q	2.64	3	35.9	3
10/23/10	5.76	3	5.63	3	103	3	168.7	4	2.38	3	36	2
05/26/11	5.13	3	0.62	2	200	1	204	3	2.68	3	32.4	3
08/24/11	4.66	3	0.72	2	91.4382	FALSE	270.4	4	2.43	3	32.8	3
05/22/12	5.38	3	0.2	1	112	3	305	3	2.73	3	33.7	3
08/25/12	5.42	3	3.85	3	111	3	249	3	2.55	3	33.1	3
10/11/12	5.26	3	0.55	2	109	3	273.1	4	2.68	3	34	2

120	2	87.5	3	**0.0805**	3	11.5	3	11	2	0.146	3
121	3	95	2	6.39	3	8.2	2 J	11.7	3	**0.050**	1 U
105	3	77	2	0.196	3 J	11.1	3	14.7	3	0.33	2
112	3	83	2	0.594	3	22.8	3	5.08	3 J	**0.0155**	3
113	3	88	2	0.612	3 J	6.54	3 J	4.32	3 J	**0.050**	1 U
111	3	77	2	**0.075**	2	7.42	3 J	4.32	3 J	0.296	3
111	3	81	2	0.4	1 J	17.7	3	1.55	3	**0.050**	1 U
108	3	86	2	0.3	1 J	7.88	3 J	4.72	3 J	**0.050**	1 U

0.0197	3	
0.028	2	
0.0077	2	J
0.0226	3	
0.0153	3	
0.0212	3	
0.0199	3	
0.0161	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.659	3	0.09	1 J	37.3	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	0.254	3 J	**0.0155**
0.671	3	0.09	1 J	39.3	3	**0.00075**	2	**0.00075**	2	0.68	2 J	**0.250**	2 U	**0.0155**
0.753	3	0.126	3	26.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.191	3 J	**0.0155**
0.824	3	0.123	3	38.9	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
0.772	3	0.118	3	38.3	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
0.683	3	0.12	2	38.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.698	3	0.11	2	37.6	3	**0.00075**	2	**0.0025**	2 UJ	**0.155**	3	**0.250**	2 U	**0.0155**
0.726	3	0.083	2 J	39.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.256	3 J	0.115

3	23.8	3 J+	21.6	3 J+	0.152	3	0.132	3	6.65	3	6.24	3	3.41	3	3.22	3
3	342	3	26.8	3	0.233	3	0.237	3	8.24	3	7.86	3	3.82	3	3.44	3
3	5.53	3 J+	2.9	2 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.39	3 J+	3.33	3 J+
3	31	2 J+	24.2	3 J+	0.216	3 J+	0.212	3 J+	6.94	3	6.46	3	3.78	3 J+	3.52	3 J+
3	23.6	3 J+	23.1	3 J+	0.199	3	0.205	3	6.11	3	5.94	3	3.72	3	3.61	3
3	22.7	3	22.9	3	0.188	3	0.188	3	6.06	3	5.99	3	3.39	3 J+	3.25	3 J+
3	23.3	3	21.6	3	0.174	3	0.176	3	5.76	3	5.34	3	3.56	3	3.22	3
3	23.4	3	22.4	3	0.123	3 J		R	5.97	3	6.04	3	3.36	3	3.49	3

0.0125	3	**0.0125**	3	0.0426	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0250**	2 U	**0.0250**	2 U	8910	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0534	3	0.0536	3	9710	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0225	3 J	0.018	2 J	10400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.23	3 J	2.58	3 J	0.0471	3 J	0.0539	3	8770	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.42	3 J	2.54	3 J	0.0502	3	0.0464	3 J	8950	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	0.0521	3	0.0498	3 J	8980	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.88	3 J	2.04	3 J	0.0524	3	0.0518	3	9010	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.21	3 J	1.52	3 J	0.055	2	0.0508	3	8970	3

8460	3	**0.050**	1	**0.050**	1	1.95	3 J+	1.86	3 J+	305	3	286	3
9280	3	0.297	3	0.172	3 J	2.17	3	2.12	3	342	3	328	3
10200	3	0.118	3 J	0.119	3 J	0.0212	3	0.0229	3	15	2	14.4	3
8770	3	**0.050**	1	**0.050**	1	2.02	3	1.94	3	305	3	297	3
8770	3	**0.100**	1 U	**0.100**	1 U	1.99	3	1.95	3	299	3	293	3
9050	3	0.467	3 J+	0.439	3 J+	1.87	3	1.88	3	293	3	291	3
8340	3	**0.0310**	2	**0.0310**	2	2.04	3	1.9	2	287	3	271	3
9280	3	0.246	3	**0.0310**	2	2.01	3	2.13	3	305	3	314	3

10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	2500	2	2390	3	2.95	3 J+	2.87	3 J+
93	2	18.5	3 J	0.137	3	**0.0155**	3	2830	3	2720	3	4.38	3	3.92	3
9.96	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	2410	3	2300	2	0.23	2 J+	0.209	3 J+
19.5	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	2560	3	2570	3	3.49	3	3.42	3
14.4	3 J	11.5	3 J	**0.0155**	3	**0.0155**	3	2530	3	2560	3	2.51	3	2.53	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	2730	3	2820	3	2.57	3 J+	2.61	3 J+
10.5	3 J	11	2 J	0.0385	3 J	**0.0155**	3	2580	3	2580	3	1.78	3 J+	1.78	3 J+
11	2 J	11.1	3 J	**0.0155**	3	**0.0155**	3	2810	3	2820	3	2	1 J+	2.23	3 J+

0.00075	2	**0.00075**	2	2.15	3	2.03	3	2.29	3 J+	2.12	3 J+	967	3	918	3	2.84	3
0.00187	3 J	**0.00075**	2	2.41	3	2.38	3	2.34	3	2.26	3	1070	3	1020	3	3.16	3
0.00075	2	**0.00075**	2	0.414	3	0.414	3	1.2	2	1.19	3	996	3	978	3	1.23	3
0.00404	3 J	**0.00075**	2	2.38	3	2.34	3	2.46	3	2.24	3	982	3	979	3	3.56	3
0.00075	2	**0.00075**	2	2.08	3	2.06	3	2.27	3	2.24	3	1030	3	1010	3	3.19	3
0.00075	2	**0.00075**	2	1.99	3	2.03	3	2.19	3 J+	2.27	3 J+	1010	3	1020	3	2.92	3
0.00075	2	**0.00075**	2	2.11	3	1.99	3	2.34	3	2.19	3	1040	3	967	3	3	1
0.00075	2	**0.00250**	2 U	2.1	2	2.27	3	2.37	3 J+	2.52	3 J+	1020	3	1080	3	2.86	3

2.58	3
3.1	2
1.12	3
3.36	3
2.87	3
2.94	3
2.85	3
3.16	3

11300	3	**0.0031**	2	**0.0031**	2	4300	2	4150	3	0.062	2	0.0584	3	0.758	3 J+
12400	3	0.0073	2 J	**0.0031**	2	5100	2	5020	3	0.0666	3	0.0626	3	0.196	3 J
12000	2	**0.0031**	2	**0.0031**	2	4270	3	4090	3	**0.0050**	1	**0.0050**	1	**0.050**	1
12400	3	**0.0031**	2	**0.0031**	2	4420	3	4430	3	0.0706	3	0.0642	3	**0.050**	1
12300	3	**0.0031**	2	**0.0031**	2	4350	3	4310	3	0.0615	3	0.0637	3	**0.0310**	2
12700	3	**0.0031**	2	**0.0031**	2	4710	3	4930	3	0.0533	3	0.0571	3	**0.0310**	2
12300	3	**0.0100**	1 U	**0.0031**	2	4310	3	4370	3	0.0648	3	0.0606	3	**0.0310**	2
13300	3	**0.0031**	2	**0.0031**	2	4790	3	4760	3	0.0754	3	0.0524	3	**0.0310**	2

0.695	3	J+	**0.155**	3	**0.155**	3	11	2	J+	7.3	2 J+
0.050	1		**0.155**	3	**0.155**	3	7.52	3		6.94	3
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U		R
0.050	1		**0.155**	3	**0.155**	3	7.65	3		7.74	3
0.0310	2		**0.155**	3	**0.155**	3	7.85	3		7.65	3
0.0310	2		**0.155**	3	**0.155**	3	7.81	3		9.91	3
0.0310	2		**0.155**	3	**0.155**	3	7.03	3		9.58	3
0.0310	2		**0.155**	3	**0.155**	3	8.14	3		10.9	3

	2	3	2	2	0	3	0	3	2	3	1	3
Mean	6.02		1.62		122		199.0		2.62		33.8	
Median	5.40		0.67		110		227.0		2.66		33.4	
St. Deviation	2		2		35		97		0		1	
# of values	8		8		8		8		8		8	
Minimum	4.66		0.20		91		29.1		2.38		32.4	
Maximum	9.96		5.63		200		305.0		2.88		36.0	
Lowest fifth percentile	5		0		95		51		2		32	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	88%		0%		0%		0%		0%		0%	
% of DWS exceedences	88%		0%		0%		0%		0%		0%	

0	3	0	2	3	3	2	3	2	3	3	2								
113		84.0		1.0810		11.6		7		0.120		NA		NA					
112		85.0		0.3500		9.7		5		0.050		NA		NA					
5		6		2		6		5		0		NA		NA					
8		8		8		8		8		8			0		0				
105		77.0		0.0750		6.5		2		0.016		NA		NA					
121		95.0		6.3900		22.8		15		0.330		NA		NA					
106		77		0		7		3		0		NA		NA					
0		0		2		0		1		5									
				25%				13%		63%									
				4		4		4											
NA		NA		NA		NA		>=20		NA			NA			NA			
NA		500		NA		NA		NA		10			NA			NA			
0%		0%		0%		0%		100%		0%			NA			NA			
0%		0%		0%		0%		0%		0%			NA			NA			

4	3		
0.0188		NA	
0.0198		NA	
0		NA	
8			0
0.0077		NA	
0.0280		NA	
0		NA	
0			
1			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	2	2	1	3	5	2	5	2	3	3	2	2	4
0.723		0.11		37.0		0.0010		0.0016		0.221		0.240		0.0279
0.712		0.11		38.3		0.0008		0.0016		0.155		0.250		0.0155
0		0		4		0		0		0		0		0
8		8		8		8		8		8		8		8
0.659		0.08		26.7		0.0008		0.0008		0.155		0.191		0.0155
0.824		0.13		39.7		0.0025		0.0025		0.680		0.256		0.1150
1		0		30		0		0		0		0		0
0		0		0		8		8		7		5		7
						100%		100%		88%		63%		88%
		3								1		3		
230		NA		NA		NA		0.0052		NA		NA		7.08
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	1	3	3	3	3	3	2	3	2	3	2	3	2	3	
	61.9		20.7		0.162		0.165		5.74		5.50		3.55		3.39		
	23.5		22.7		0.181		0.188		6.09		6.02		3.49		3.39		
	113		7		0		0		2		2		0		0		
	8		8		8		7		8		8		8		8		
	5.5		2.9		0.008		0.008		0.16		0.16		3.36		3.22		
	342.0		26.8		0.233		0.237		8.24		7.86		3.82		3.61		
	12		9		0		0		2		2		3		3		
	0		0		1		1		1		1		0		0		
					13%		14%		13%		13%						
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	13%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-1	3
0.0125		0.0125		0.0119		0.0075		2.00		1.87		0.0447		0.0437		9210	
0.0125		0.0125		0.0075		0.0075		2.05		1.78		0.0512		0.0503		8980	
0		0		0		0		1		1		0		0		560	
8		8		8		8		8		8		8		8		8	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0225		0.0180		8770	
0.0125		0.0125		0.0426		0.0075		3.23		2.58		0.0550		0.0539		10400	
0		0		0		0		1		1		0		0		8819	
8		8		7		8		4		4		1		1		0	
100%		100%		88%		100%		50%		50%		13%		13%			
				1				4		4		2		3			
NA		NA		NA		NA		NA		NA		0.118		0.112		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	2	2	3	2	3	0	3	0	3
9020		0.170		0.120		1.76		1.73		269		262	
8910		0.110		0.080		2.00		1.92		302		292	
590		0		0		1		1		104		101	
8		8		8		8		8		8		8	
8340		0.031		0.031		0.02		0.02		15		14	
10200		0.467		0.439		2.17		2.13		342		328	
8382		0		0		1		1		110		104	
0		4		5		0		0		0		0	
		50%		63%									
		1		2									
NA		10.98		10.56276		NA		NA		3.564		3.422	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		100%		100%	
0%		0%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	4	3	-1	3	-1	3	2	3	2	3
22.0		11.0		0.038		0.0155		2620		2600		2.49		2.45	
11.0		11.0		0.016		0.0155		2570		2580		2.54		2.57	
29		4		0		0		150		190		1		1	
8		8		8		8		8		8		8		8	
10.0		3.1		0.016		0.0155		2410		2300		0.23		0.21	
93.0		18.5		0.137		0.0155		2830		2820		4.38		3.92	
10		6		0		0		2442		2332		1		1	
2		4		6		8		0		0		0		0	
25%		50%		75%		100%									
5		4		1											
1000		1000		0.759		0.725		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	2	3
0.00130		0.00097		1.95		1.94		2.18		2.13		1010		997		2.85	
0.00075		0.00075		2.11		2.05		2.32		2.24		1020		995		2.96	
0		0		1		1		0		0		30		48		1	
8		8		8		8		8		8		8		8		8	
0.00075		0.00075		0.41		0.41		1.20		1.19		967		918		1.23	
0.00404		0.00250		2.41		2.38		2.46		2.52		1070		1080		3.56	
0		0		1		1		2		2		972		935		2	
6		8		0		0		0		0		0		0		0	
75%		100%															
2																	
0.77		0.77		NA		NA		20.12		20.06		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

	2	3
	2.75	
	2.91	
	1	
	8	
	1.12	
	3.36	
	2	
	0	

4.6
NA
0%
0%

-2	3	4	2	4	2	-1	3	-1	3	4	3	4	3	3	2
12300		0.0045		0.0031		4530		4510		0.057		0.0530		0.147	
12400		0.0031		0.0031		4390		4400		0.063		0.0595		0.041	
600		0		0		300		350		0		0		0	
8		8		8		8		8		8		8		8	
11300		0.0031		0.0031		4270		4090		0.005		0.0050		0.031	
13300		0.0100		0.0031		5100		5020		0.075		0.0642		0.758	
11545		0		0		4281		4111		0		0		0	
0		7		8		0		0		1		1		6	
		88%		100%						13%		13%		75%	
		1												1	
NA		0.545686584		0.464		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.121		0.155		0.155		7		8.6	
0.041		0.155		0.155		8		7.7	
0		0		0		3		2	
8		8		8		8		7	
0.031		0.155		0.155		2		6.9	
0.695		0.155		0.155		11		10.9	
0		0		0		3		7	
7		8		8		1		0	
88%		100%		100%		13%			
NA		NA		NA		46.15		45.51	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-54S																
Sample Date																
08/20/09	7.56	3	6.62	3		99	2		69.1	3		2.57	3	36	2	
10/17/09	10.59	4	6.33	3		138	3		-52.7	3 Q		2.46	3	36.9	3	
08/23/10	5.53	3	7.2	2		104	3 Q		116.9	4		3.34	3	32.2	3	
05/26/11	5.71	3	7.7	2		183	3		185.7	4		2.56	3	32.4	3	
08/24/11	5.01	3	7.56	3		84.3668	FALSE		296	3		2.27	3	31.3	3	
05/22/12	6.06	3	3.84	3		102	3		229.1	4		2.59	3	32.7	3	
08/25/12	6.03	3	7.11	3		100	1		217.3	4		2.38	3	33.3	3	
10/11/12	5.86	3	3.94	3		98	2		231.4	4		2.71	3	33.7	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
116	3		83.8	3		0.319	3 J		**1.57**	3		34.2	3		0.385	3						
113	3		82.5	3		0.444	3 J		7.44	3 J		36	2		0.357	3						
103	3		52	2		**0.075**	2		5.14	3 J		13.3	3		0.338	3						
102	3		75	2		0.199	3 J		15.3	3		13.9	3		0.296	3						
104	3		75	2		0.302	3 J		4.91	3 J		13.4	3		0.347	3						
101	3		71	2		0.68	2		8.61	3 J		12.6	3		0.312	3						
100	1		46	2		**0.076**	2		**5.0**	1 U		12.1	3		0.275	3						
101	3		86	2		0.6	1		3.52	3 J		13.4	3		0.284	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.0063	2	J			
	0.0050	1	U			
	0.008	1	J			
	0.0074	2	J			
	0.0034	2	J			
	0.11	2				
	0.0098	2	J			
	0.00155	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.678	3		0.1	1		26.2	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		0.312	3	J	**0.0155**			
0.686	3		0.095	2	J	27.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.832	3		0.128	3		27.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.801	3		0.11	2		27.9	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.832	3		0.113	3		27.4	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.708	3		0.115	3		27	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.716	3		0.101	3		27.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	0.0963			
0.725	3		0.07	1	J	28.1	3		**0.00075**	2		0.0023	2	J	**0.155**	3		0.296	3	J	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		18.1	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		3.43	3		2.88	3	
3		14.4	3		2.72	3		**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		3.06	3		3.08	3	
3		93.1	3		2.08	3	J+	**0.0075**	2		**0.0075**	2		**0.155**	3		**0.155**	3		3.76	3	J+	2.82	3	J+
3		6.86	3	J+	3.67	3	J+	**0.0075**	2		**0.0075**	2		0.318	3	J	0.35	2	J	3.39	3	J+	3.51	3	J+
3		6.7	2	J+	2.29	3	J+	0.0163	3	J	**0.0075**	2		**0.075**	2		**0.075**	2		3.13	3		3.24	3	
3		73.5	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.178	3	J	0.201	3	J	3.54	3	J+	2.82	3	J+
3	J	6.01	3		**1.00**	1	U	0.0179	3	J	**0.0075**	2		0.187	3	J	0.239	3	J	2.85	3		2.72	3	
3		3.49	3	J+			R	**0.0075**	2		**0.0075**	2		0.318	3	J	0.26	2	J	2.89	3		2.82	3	

| | | |

| | | |

								depends on Hardness		depends on Hardness																			
result > crit				result > crit				result > crit		result > crit														result > crit					
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N		MN_NSF	MN_NVF	MN_F		MN_FSF	MN_FVF
Iron											**Lead[4]**							**Magnesium**								**Manganese**			
Total				Dissolved				Total				Dissolved			Total				Dissolved			Total				Dissolved			
µg/L				µg/L				µg/L				µg/L			µg/L				µg/L			µg/L				µg/L			
24.5	3		**3.10**		2			**0.050**		1	U	**0.0155**		3	2310		3	2350		3	0.724		3	J+	0.437		3	J+
28.4	3		8.84		3	J		**0.0155**		3		0.0499		3	J	2420		3	2540		3	0.44		2		0.398		3	
228	3		**3.10**		2			0.14		2		**0.0155**		3	2410		3	2200		2	2.6		2	J+	0.311		3	J+
23.1	3		**3.10**		2			**0.0155**		3		**0.0155**		3	2240		3	2360		3	0.263		3	J+	0.194		3	J+
23.2	3		9.17		3	J		**0.0155**		3		**0.0155**		3	2170		3	2170		3	0.27		2		0.225		3	
94.4	3		**10.0**		1	U		0.0346		3	J	**0.0155**		3	2360		3	2350		3	1.32		3	J+	0.98		2	J+
11.4	3	J	**3.10**		2			**0.0155**		3		**0.0155**		3	2430		3	2210		3	0.261		3	J+	0.226		3	J+
40.9	3		8.6		2	J		**0.0155**		3		**0.0155**		3	2520		3	2270		3	0.554		3	J+	0.267		3	J+

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
J		0.969	3	J
		1.16	3	
		0.931	3	J
		1.13	3	
		1.1	2	
		1.14	3	
		1.09	3	
		1.21	3	

| | | |

																		depends on Hardness				depends on Total Zn	
																		result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium												**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			1.88	3	J	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			6.25	3	J+	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	3.35	3									
0.111	3	J	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			6.91	3		4.92	3									
0.0310	2		**0.155**	3		**0.155**	3			3.83	3		3.85	3									
0.0310	2		**0.155**	3		**0.155**	3			4.32	3		5.15	3									

	2	3	2	3	0	3	1	4	2	3	1	3
Mean	6.54		6.29		114		161.6		2.61		34	
Median	5.95		6.87		101		201.5		2.57		33	
St. Deviation	2		2		32		112		0		2	
# of values	8		8		8		8		8		8	
Minimum	5.01		3.84		84		-52.7		2.27		31	
Maximum	10.59		7.70		183		296.0		3.34		37	
Lowest fifth percentile	5		4		89		-10		2		32	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	88%		0%		0%		0%		0%		0%	
% of DWS exceedences	63%		0%		0%		0%		0%		0%	

0	3	0	2	3	3	2	3	1	3	3	3								
105		71.0		0.340		6.44		18.6		0.324		NA		NA					
103		75.0		0.310		5.07		13.4		0.325		NA		NA					
6		15		0		4		10		0		NA		NA					
8		8		8		8		8		8		0		0					
100		46.0		0.075		1.57		12.1		0.275		NA		NA					
116		86.0		0.680		15.30		36.0		0.385		NA		NA					
100		48		0		2		12		0		NA		NA					
0		0		2		2		0		0									
				25%		25%													
				4		5													
NA		NA		NA		NA		>=20		NA		NA		NA					
NA		500		NA		NA		NA		10		NA		NA					
0%		0%		0%		0%		75%		0%		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					

4	2		
0.0189		NA	
0.0069		NA	
0		NA	
8			0
0.0016		NA	
0.1100		NA	
0		NA	
2			
25%			
5			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	3	1	3	5	2	5	2	3	3	2	2	4
0.747		0.1		27.4		0.00075		0.0016		0.155		0.240		0.0256
0.721		0.1		27.4		0.00075		0.0015		0.155		0.250		0.0155
0		0		1		0		0		0		0		0
8		8		8		8		8		8		8		8
0.678		0.1		26.2		0.00075		0.0008		0.155		0.075		0.0155
0.832		0.1		28.1		0.00075		0.0025		0.155		0.312		0.0963
1		0		26		0		0		0		0		0
0		0		0		8		7		8		6		7
						100%		88%		100%		75%		88%
		2						1				2		1
230		NA		NA		NA		0.0052		NA		NA		7.07
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	2	4	2	3	3	3	3	2	3	2	3
	27.8		1.97		0.0099		0.0075		0.193		0.199		3.26		2.99	
	10.6		2.08		0.0075		0.0075		0.167		0.178		3.26		2.85	
	35		1		0		0		0		0		0		0	
	8		7		8		8		8		8		8		8	
	3.5		1.00		0.0075		0.0075		0.075		0.075		2.85		2.72	
	93.1		3.67		0.0179		0.0075		0.318		0.350		3.76		3.51	
	4		1		0		0		0		0		3		3	
	0		3		6		8		4		4		0		0	
			43%		75%		100%		50%		50%					
					2				4		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	13%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-1	3
0.0125		0.0125		0.011		0.0116		2.05		2.08		0.0179		0.0152		9560	
0.0125		0.0125		0.008		0.0075		2.07		1.86		0.0195		0.0185		9290	
0		0		0		0		1		1		0		0		720	
8		8		8		8		8		8		8		8		8	
0.0125		0.0125		0.008		0.0075		1.25		1.25		0.0075		0.0075		8940	
0.0125		0.0125		0.037		0.0404		3.36		4.31		0.0253		0.0217		10800	
0		0		0		0		1		1		0		0		8951	
8		8		7		7		4		4		3		3		0	
100%		100%		88%		88%		50%		50%		38%		38%			
				1		1		4		4		5		5			
NA		NA		NA		NA		NA		NA		0.115		0.110		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	1	3	1	3
9560		0.93		0.35		0.0441		0.0238		17.2		14.4	
9280		0.35		0.24		0.0290		0.0231		16.1		14.9	
880		2		0		0		0		6		2	
8		8		7		8		8		8		8	
8660		0.03		0.05		0.0167		0.0100		11.3		10.7	
11200		4.51		1.17		0.1280		0.0490		31.9		16.6	
8762		0		0		0		0		12		12	
0		3		2		0		1		0		0	
		38%		29%				13%					
				1		2		2					
NA		10.98		10.56276		NA		NA		3.487		3.348	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		100%		100%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	2	4	3	4	3
59.2		6.10		0.038		0.0198	
26.5		5.90		0.016		0.0155	
73		3		0		0	
8		8		8		8	
11.4		3.10		0.016		0.0155	
228.0		10.00		0.140		0.0499	
15		3		0		0	
0		5		6		7	
		63%		75%		88%	
1		3		1		1	
1000		1000		0.735		0.704	
NA		NA		15		NA	
0%		0%		0%		0%	
0%		0%		0%		0%	

-1	3	-1	3	3	3	3	3
2360		2310		0.804		0.380	
2390		2310		0.497		0.289	
110		120		1		0	
8		8		8		8	
2170		2170		0.261		0.194	
2520		2540		2.600		0.980	
2195		2181		0		0	
0		0		0		0	
NA		NA		NA		NA	
NA		NA		50		NA	
0%		0%		0%		0%	
0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	3	2	3	0	3	0	3	2	3
0.00121		0.00075		0.412		0.43		1.54		1.49		933		928		1.060	
0.00075		0.00075		0.359		0.34		1.32		1.30		936		921		1.080	
0		0		0		0		1		1		23		23		0	
8		8		8		6		8		8		8		8		8	
0.00075		0.00075		0.208		0.18		1.19		1.09		902		906		0.619	
0.00250		0.00075		0.717		0.75		3.24		2.98		963		974		1.290	
0		0		0		0		1		1		905		907		1	
6		8		0		0		0		0		0		0		0	
75%		100%															
2																1	
0.77		0.77		NA		NA		19.69		19.63		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

2	3
1.090	
1.120	
0	
8	
0.931	
1.210	
1	
0	
2	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
11900		0.0063		0.0044		4270		4180		0.0050		0.0050		0.050			
11800		0.0047		0.0031		4200		4190		0.0050		0.0050		0.040			
300		0		0		240		220		0		0		0			
8		8		8		8		8		8		8		8			
11600		0.0031		0.0031		4000		3820		0.0031		0.0031		0.031			
12300		0.0143		0.0100		4720		4520		0.0071		0.0079		0.100			
11635		0		0		4018		3866		0		0		0			
0		5		7		0		0		6		7		8			
		63%		88%						75%		88%		100%			
		3		1						2		1					
NA		0.522174482		0.444		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	2	3	2	3
0.050		0.155		0.155		3.48		2.93	
0.050		0.155		0.155		2.86		2.45	
0		0		0		2		2	
8		8		8		8		8	
0.031		0.155		0.155		1.55		1.55	
0.111		0.155		0.155		6.91		5.15	
0		0		0		2		2	
7		8		8		3		4	
88%		100%		100%		38%		50%	
1						1			
NA		NA		NA		45.16		44.53	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-56M																
Sample Date																
08/21/09	6.8	2	0.42	2		181	3		-7.6	2		3.25	3	76.7	3	
10/20/09	6.62	3	0.46	2		231	3		-13.5	3		2.91	3	87.3	3	
03/18/10	8.97	3	2.14	3		262	3		-299.4	4		2.72	3	82	2	
05/17/10	6.57	3	0.48	2		222	3		-28	2		3.03	3	70.9	3	
08/19/10	7.52	3	0.78	2		206	3		42.8	3		2.78	3	77.8	3	
10/19/10	6.63	3	-0.02	1		233	3		-16.7	3		2.73	3	80.9	3	
05/23/11	6.16	3	0.45	2		221	3		177	3		2.92	3	73.3	3	
08/25/11	6.23	3	0.72	2		171.384	FALSE		75.6	3		3.59	3	73	2	
10/26/11	6.84	3	0.12	2		218	3		18.8	3		2.26	3	69.7	3	
03/21/12	6.17	3	0.27	2		219	3		180.1	4		1.92	3	78.5	3	
05/19/12	6.66	3				227	3		35.5	3		2.89	3	84.9	3	
08/25/12	6.43	3	0.13	2		213	3		70.8	3		3.07	3	72.7	3	
10/11/12	6.27	3	0.62	2		213	3		116.5	4		2.78	3	70.4	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
253	3		155	3		1.05	3		9.5	2	J	67.5	3		**0.050**	1	U					
256	3		146	3		0.206	3	J	4.9	2	J	74.8	3		**0.0155**	3						
259	3		179	3		0.202	3	J	5.62	3	J	65.2	3		0.098	2	J					
277	3		176	3		12.1	3		19.8	3		63	2		0.168	3						
238	3		120	2		0.202	3	J	10.2	3		63.5	3		**0.0155**	3						
236	3		147	3		**0.075**	2		5.91	3	J	62.2	3		**0.050**	1	U					
225	3		134	3		0.198	3	J	11.6	3		55.2	3		**0.0155**	3						
221	3		133	3		1.64	3		7.83	3	J	52.3	3		**0.0155**	3						
220	2		133	3		**0.0745**	3		6.56	3	J	51.3	3		**0.050**	1	U					
222	3		155	3		**0.075**	2		21.2	3		57.4	3		**0.050**	1	UJ					
227	3		154	3		**0.0735**	3		7.45	3	J	57	2		**0.050**	1	U					
214	3		100	1		0.4	1	J	9.44	3	J	49.7	3		**0.050**	1	U					
206	3		138	3		0.4	1	J	8.87	3	J	50.3	3		0.141	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0156	3				
	0.0291	3				
	0.00155	3				
	0.0218	3				
	0.00155	3				
	0.019	2				
	0.0144	3				
	0.0043	2	J			
	0.0046	2	J			
	0.00155	3				
	0.0125	3				
	0.0197	3				
	0.0159	3				

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NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		54.2	3	J+	2.56	3	J+	**0.0075**	2		**0.0075**	2		0.346	3	J	0.343	3	J	12	2		11.8	3	
3		4.9	2		5.97	3		**0.0075**	2			R		1.66	3		1.49	3		16.2	3		16.5	3	
3		22.3	3		3.55	3		0.0236	3	J	0.0259	3	J	0.532	3		0.483	3	J	12.3	3		12.7	3	
3		547	3		18.8	3		**0.0075**	2		**0.0075**	2		0.462	3	J	**0.155**	3		13.8	3		12.5	3	
1		8.07	3	J+	2.64	3	J+	**0.0075**	2		**0.0075**	2		0.794	3		0.8	1		14.3	3		13.3	3	
3		4.67	3	J+	2.87	3	J+	**0.0075**	2		**0.0075**	2		0.688	3		0.591	3		13.9	3		13.5	3	
3		7.89	3	J+	3.14	3	J+	**0.0075**	2		**0.0075**	2		0.436	3	J	0.426	3	J	11.5	3		11.2	3	
3	J	16.7	3	J+	3.2	2	J+	0.0168	3	J	0.0198	3	J	**0.250**	2	U	**0.250**	2	U	11.1	3		10.5	3	
3		8.21	3	J+	2.96	3	J+	**0.0075**	2		0.0182	3	J	0.419	3	J	**0.250**	2	U	10.4	3		10.5	3	
2		3.36	3		2.39	3		**0.0250**	2	U	**0.0250**	2	U	0.534	3		0.553	3		12.7	3		12.2	3	
3		5.07	3	J+	3.03	3	J+	0.0258	3	J	0.038	2	J	0.587	3		0.663	3		13.5	3		13.9	3	
3	J	**1.00**	1	U	**1.00**	1	U	**0.0075**	2		**0.0075**	2		0.322	3	J	0.355	3	J	9.41	3		8.86	3	
3		**1.00**	1	U	2.1	2	J+	**0.0075**	2		**0.0075**	2		0.204	3	J	**0.075**	2		8.79	3		9.17	3	

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									depends on Hardness		depends on Hardness																		
result > crit				result > crit					result > crit		result > crit																		result > crit
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
73.4	3		28.9	3			**0.050**	1 U			**0.0155**	3			6950	3		7290	3		394	3		421	3	
68.8	3		73.8	3			**0.0155**	3			**0.0155**	3			7390	3		7430	3		401	3		416	3	
161	3		115	3			0.0464	3 J			**0.050**	1 U			7650	3		7800	2		544	3		557	3	
334	3		56.3	3			0.6	1			**0.050**	1 U			6800	2 J+		6980	3 J+		565	3 J+		562	3 J+	
110	2		91.4	3			**0.0155**	3			0.0388	3 J			7340	3		7140	3		430	2		421	3	
62.8	3		59.5	3			**0.0155**	3			**0.0155**	3			7670	3		7330	3		449	3		449	3	
147	3		137	3			**0.0155**	3			**0.0155**	3			6740	3		6430	3		458	3		457	3	
180	2		159	3			0.0537	3 J			**0.0155**	3			6660	3		6350	3		484	3		474	3	
204	3		180	2			0.0311	3 J			**0.0155**	3			6590	3		6450	3		485	3		497	3	
122	3		129	3			**0.0155**	3			**0.0155**	3			7490	3		7720	3		452	3		458	3	
156	3		175	3			**0.0155**	3			**0.0155**	3			7700	2		7670	3		429	3		430	2	
220	2		161	3			**0.0155**	3			**0.0155**	3			7300	2		7080	3		483	3		458	3	
146	3		155	3			**0.0155**	3			**0.0155**	3			7000	1		7740	3		487	3		504	3	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

											depends on Hardness				depends on Total Zn				
											result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.050	1		0.701	3	J	0.534	3	J		**1.55**	3	U	**1.55**	3	U				
		R	0.616	3	J	0.586	3	J		1.32	3	J	**1.55**	3	U				
0.050	1		0.495	3	J	0.34	2	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		1.04	3		0.369	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		0.437	3	J	0.395	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		0.455	3	J	0.482	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.201	3		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		0.344	3	J		**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			1.45	3	J	**1.55**	3	U				

	2	3	2	2	0	3	1	3	2	3	1	3
Mean	6.8		0.55		217		27.1		2.83		76.8	
Median	6.6		0.46		219		35.5		2.89		76.7	
St. Deviation	1		1		23		120		0		6	
# of values	13		12		13		13		13		13	
Minimum	6.2		-0.02		171		-299.4		1.92		69.7	
Maximum	9.0		2.14		262		180.1		3.59		87.3	
Lowest fifth percentile	6		0		177		-137		2		70	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	46%		0%		0%		0%		0%		0%	
% of DWS exceedences	8%		0%		0%		0%		0%		0%	

0	3	0	3	3	3	2	3	1	3	3	2								
235		144		1.28		9.9		59.2		0.059		NA		NA					
227		146		0.20		8.9		57.4		0.050		NA		NA					
21		21		3		5		8		0		NA		NA					
13		13		13		13		13		13		0		0					
206		100		0.07		4.9		49.7		0.016		NA		NA					
277		179		12.10		21.2		74.8		0.168		NA		NA					
211		112		0		5		50		0		NA		NA					
0		0		4		0		0		10									
				31%						77%									
				6		9				1									
NA		NA		NA		NA		>=20		NA		NA		NA					
NA		500		NA		NA		NA		10		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					

4	3		
0.0124		NA	
0.0144		NA	
0		NA	
13			0
0.0016		NA	
0.0291		NA	
0		NA	
3			
23%			
2			
NA			NA
NA			NA
0%			NA
0%			NA

2	3	3	3	1	3	5	2	5	2	3	3	3	3	3
1.24		0.228		46.9		0.0012		0.0009		0.186		0.400		0.207
1.02		0.227		46.2		0.0008		0.0008		0.155		0.359		0.181
1		0		3		0		0		0		0		0
13		13		13		13		13		13		13		13
0.74		0.207		43.1		0.0008		0.0008		0.155		0.250		0.074
2.12		0.266		51.9		0.0025		0.0025		0.560		0.749		0.359
1		0		43		0		0		0		0		0
0		0		0		12		13		12		5		0
						92%		100%		92%		38%		
						1				1		4		2
230		NA		NA		NA		0.0052		NA		NA		6.89
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	2	4	2	3	3	3	3	1	3	1	3
	52.6		4.17		0.0122		0.0150		0.556		0.495		12		12.0	
	7.9		2.96		0.0075		0.0075		0.462		0.426		12		12.2	
	149		5		0		0		0		0		2		2	
	13		13		13		12		13		13		13		13	
	1.0		1.00		0.0075		0.0075		0.204		0.075		9		8.9	
	547.0		18.80		0.0258		0.0380		1.660		1.490		16		16.5	
	1		2		0		0		0		0		9		9	
	2		1		10		8		1		4		0		0	
	15%		8%		77%		67%		8%		31%					
					3		4		6		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	8%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	3	2	4	2	-2	3
0.0143		0.0125		0.0075		0.0082		4.17		4.28		0.0170		0.0141		18900	
0.0125		0.0125		0.0075		0.0075		4.51		4.31		0.0160		0.0075		19000	
0		0		0		0		1		1		0		0		1800	
13		13		13		13		13		13		13		13		13	
0.0125		0.0125		0.0075		0.0075		2.50		2.50		0.0075		0.0075		16700	
0.0360		0.0125		0.0075		0.0162		5.52		5.55		0.0527		0.0250		22800	
0		0		0		0		3		3		0		0		16880	
12		13		13		12		2		2		6		8		0	
92%		100%		100%		92%		15%		15%		46%		62%			
1						1		8		8		6		5			
NA		NA		NA		NA		NA		NA		0.208		0.192		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	3	3	2	3	2	3	2	2	2	2
19000		1.43		0.632		1.84		1.85		0.620		0.310	
19100		1.12		0.654		1.95		1.90		0.250		0.250	
1700		1		0		0		0		1		0	
13		13		13		13		13		13		12	
16200		0.57		0.226		1.31		1.34		0.145		0.123	
22600		5.36		1.310		2.45		2.53		3.310		0.843	
17040		1		0		1		1		0		0	
0		0		0		0		0		7		9	
										54%		75%	
										1		1	
NA		10.98		10.56276		NA		NA		6.888		6.613	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

0	3	0	3	4	3	4	3	-1	3	-1	3	0	3	0	3
153.0		117.0		0.070		0.0226		7180		7190		466		470	
147.0		129.0		0.016		0.0155		7300		7290		458		458	
74		50		0		0		400		510		50		48	
13		13		13		13		13		13		13		13	
62.8		28.9		0.016		0.0155		6590		6350		394		416	
334.0		180.0		0.600		0.0500		7700		7800		565		562	
66		45		0		0		6632		6398		398		419	
0		0		9		12		0		0		0		0	
				69%		92%									
				3		1									
1000		1000		2.025		1.706		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3
0.00106		0.00081		1.58		1.59		1.39		1.08		2210		2220		0.155	
0.00075		0.00075		1.27		1.30		1.22		1.05		2170		2230		0.155	
0		0		1		1		1		0		320		340		0	
13		13		13		13		13		13		13		13		13	
0.00075		0.00075		0.46		0.40		1.02		0.70		1790		1760		0.155	
0.00337		0.00157		5.48		5.70		3.55		1.49		2660		2790		0.155	
0		0		0		0		1		1		1826		1820		0	
11		12		0		0		0		0		0		0		13	
85%		92%														100%	
2		1															
0.77		0.77		NA		NA		38.63		38.52		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
13	
0.155	
0.155	
0	
13	
100%	
4.6	
NA	
0%	
0%	

-2	3	4	2	4	2	-2	3	-2	3	4	2	4	2	3	2
10300		0.0055		0.0047		12200		12400		0.0060		0.0055		0.076	
10300		0.0031		0.0031		12400		12000		0.0050		0.0050		0.050	
700		0		0		1400		1800		0		0		0	
13		13		13		13		13		13		13		13	
8980		0.0031		0.0031		10300		10000		0.0031		0.0031		0.031	
11400		0.0223		0.0234		14600		15600		0.0238		0.0156		0.508	
9298		0		0		10420		10060		0		0		0	
0		11		12		0		0		11		11		12	
		85%		92%						85%		85%		92%	
		1								1		2			
NA		2.055168548		1.747		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.050		0.371		0.306		1.52		1.55	
0.050		0.155		0.340		1.55		1.55	
0		0		0		0		0	
12		13		13		13		13	
0.031		0.155		0.155		1.32		1.55	
0.201		1.040		0.586		1.55		1.55	
0		0		0		1		2	
11		7		6		11		13	
92%		54%		46%		85%		100%	
		5		7		2			
NA		NA		NA		88.69		87.45	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-56S																
Sample Date																
08/21/09	7.25	3	0.9	1		136	3		-66.3	3		2.99	3	36	2	
10/20/09	7.39	3	0.68	2		167	3		-60.6	3		3.21	3	37.4	3	
03/18/10	11.5	3	0.75	2		195	3		-398.8	4		3.07	3	36.4	3	
05/17/10	5.8	2	0.6	1		166	3		-153.9	4		2.81	3	36.1	3	
08/19/10	6.88	3	1.58	3		159	3		47.2	3		2.25	3	33.3	3	
10/19/10	6.11	3	0.08	1		177	3		-103.4	4		2.12	3	32.5	3	
03/27/11	6.3	2	0.2	1		214	3	Q	-49.3	3		1.77	3	32.1	3	
05/24/11	6.12	3	1.02	3		308	3		55.6	3		1.92	3	30	1	
08/26/11	6.62	3	1.23	3		115.392	FALSE		-44.5	3		2.88	3	27.4	3	
10/26/11	7.13	3	0.36	2		165	3		28.3	3		0.66	2	25.9	3	
03/22/12	6.08	3	0.32	2		177	3		-27.6	3		0.97	2	31.3	3	
05/20/12	6.43	3	0.08	1		179	3		-78.7	3		1.29	3	28.5	3	
08/25/12	6.22	3	0.6	1		175	3		-50.7	3		1.51	3	26.9	3	
10/11/12	6.28	3	0.28	2		174	3		-28.7	3		1.25	3	28.9	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
147	3		108	3		43.3	3		20	1		70	1		0.257	3						
100	1		114	3		6.08	3		42.3	3		85.6	3		**0.050**	1	U					
94.7	3		123	3		26.8	3		12	2		50.4	3		0.143	3						
103	3		121	3		15.4	3		36.6	3		68	2		0.055	2	J					
153	3		55	2		6	1		66.1	3		76.9	3		**0.050**	1	U					
159	3		185	3		2.2	2		16.8	3		79.6	3		**0.050**	1	U					
124	3		118	3		3.58	3		43.4	3		63.6	3		0.204	3						
111	3		61	2		16.5	3		57.3	3		50.1	3		0.138	3	J-					
117	3		68	2		25.5	3		77.3	3		45.8	3		**0.0155**	3						
104	3		107	3		20.7	3		25.8	3		47.8	3		**0.050**	1	U					
114	3		104	3		8.91	3		24.3	3		53.6	3		0.187	3						
121	3		120	2		9.9	2		35.4	3		57.5	3		**0.050**	1	U					
119	3		70	1		28.5	3		31.9	3		55.8	3		0.119	3						
152	3		125	3		5.2	2		44.4	3		80.4	3		0.119	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.432	3				
	0.557	3				
	0.399	3				
	0.437	3				
	0.407	3				
	0.368	3				
	0.562	3				
	0.602	3				
	0.486	3				
	0.807	3				
	0.58	2				
	0.628	3				
	1.73	3				
	0.588	3				

																								depends on field pH and field Temp
result > crit				result > crit				result > crit								result > crit								result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
0.644	3		0.039	2 J		0.901	3								0.63	2 J		4.31	3		0.177		
0.624	3		0.036	2 J		0.813	3		**0.00075**	2		0.0017	2 J		0.51	2 J		4.85	3		0.181		
1.08	3		0.035	2 J		0.202	3		**0.00075**	2		**0.00075**	2		**0.155**	3		3.92	3		0.199		
0.651	3		0.034	2 J		0.705	3		**0.00075**	2		**0.00075**	2		0.55	2 J		4.83	3 J+		0.201		
0.695	3		0.085	2 J		0.871	3		0.0019	2 J		**0.00075**	2		0.37	2 J		4.99	3		0.211		
0.754	3		**0.050**	1 U		1.18	3		**0.0025**	2 U		**0.00075**	2		0.73	2 J		3.91	3		0.173		
0.717	3		0.08	1 J		0.651	3		**0.00075**	2		**0.00075**	2		**0.155**	3		32.7	3		0.195		
0.719	3		0.076	2 J		1.44	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.44	3		0.243		
0.735	3		0.075	2 J		1.72	3		**0.00075**	2		**0.00075**	2		**0.155**	3		6.64	3		0.261		
0.622	3		0.072	2 J		1.63	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.71	3		0.241		
0.622	3		0.046	2 J		1.11	3		**0.00075**	2		**0.00075**	2		**0.155**	3		4.65	3		0.226		
0.596	3		0.08	1 J		0.901	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.27	3		0.725		
0.609	3		0.066	2 J		0.906	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.41	3		0.25		
0.637	3		**0.0155**	3		0.756	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.32	3		0.363		

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	132	3		35.2	3	J+	**0.0075**	2		**0.0075**	2		10.3	3		9.48	3		25.7	3		23.4	3
		3	109	3		20.4	3		**0.0075**	2				R	10.2	3		10.2	3		27.1	3		24.9	3
		3	35.7	3		9.53	3		**0.0075**	2		**0.0075**	2		10.9	3		11	2		22.6	3		23.6	3
		3	93	2		14.9	3		**0.0300**	1		**0.0300**	1		10.8	3		10.3	3		27.6	3		24.9	3
		3	78.1	3		12.7	3	J+	**0.0075**	2		**0.0075**	2		9.2	2		9.3	2		23.4	3		22.4	3
		3	101	3		13.5	3	J+	**0.0075**	2		**0.0075**	2		9.16	3		9.4	2		22.9	3		22.8	3
		3	16.8	3	J+	12.7	3	J+	**0.0075**	2		**0.0075**	2		8.81	3		9.28	3		23	2		23.8	3
		3	591	3		24	2	J+	0.308	3	J			R	9	1		8.23	3		29.7	3		24.9	3
		3	321	3		48.7	3		0.0319	3	J	**0.0075**	2		7.6	2		6.55	3		25.2	3		21.3	3
		3	58.5	3		44.7	3		0.0159	3	J	**0.0075**	2		6.03	3		5.65	3		23.8	3		23.5	3
		3	24.4	3		16.7	3		**0.0250**	2	U	**0.0075**	2		8.37	3		8.01	3		23.1	3		23.2	3
		3	26.2	3		20	1	J+	0.0153	3	J	**0.0075**	2		6.7	2		7.16	3		20.7	3		24.2	3
		2	26.9	3		22	2		**0.0075**	2		**0.0075**	2		6.39	3		6.59	3		21.9	3		22	2
		3	27.3	3		25.6	3		0.0154	3	J	**0.0075**	2		7.72	3		7.27	3		23.7	3		23.9	3

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									depends on Hardness		depends on Hardness																		
result > crit				result > crit					result > crit		result > crit														result > crit				
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
30200	3		29600	3			0.204	3 J+			**0.0155**	3			2550	3		2540	3		968	3		968	3	
29600	3		29000	2			0.228	3			**0.0155**	3			2680	3		2630	3		949	3		935	3	
29000	2		30100	3			0.104	3			**0.0155**	3			2750	3		2900	2		846	3		883	3	
32100	3		30600	3			0.154	3 J			**0.062**	2			2840	3 J+		2720	3 J+		1010	3 J+		958	3 J+	
31500	3		32400	3			0.104	3			**0.0155**	3			2530	3		2570	3		960	2		980	2	
30800	3		31700	3			0.142	3			**0.0155**	3			2500	2		2570	3		968	3		1010	3	
30500	3		32500	3			0.047	2 J			**0.0155**	3			2420	3		2420	3		990	2		1010	3	
33600	3		32300	3			0.584	3			**0.0155**	3			2310	3		2310	3		1070	3		1080	3	
28100	3		27300	3			0.423	3			**0.0155**	3			2030	3		1900	2		989	3		949	3	
31300	3		31500	3			0.0923	3 J			**0.0155**	3			1900	2		1970	3		1040	3		1060	3	
33900	3		32800	3			0.0905	3 J			**0.0155**	3			2410	3		2360	3		1080	3		1070	3	
31800	3		32300	3			0.0543	3 J			**0.0155**	3			2150	3		2250	3		1030	3		1120	3	
32300	3		31500	3			0.0751	3 J			**0.0155**	3			2080	3		2070	3		1110	3		1100	2	
32500	3		33900	3			0.0714	3 J			**0.0155**	3			2180	3		2180	3		1040	3		1080	3	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.0128	3		0.00252	3 J		4.09	3		3.98	3		1.15	3 J+		0.764	3 J+		457	3		417	3		**0.155**	3
0.0115	3		0.00212	3 J		3.78	3		4.09	3		1.11	3		0.773	3		449	3		443	3		**0.155**	3
0.00683	3		0.00259	3 J		4.21	3		4.43	3		0.832	3		0.76	2		434	3		435	3		**0.155**	3
0.00844	3		0.00207	3 J		4.12	3 J+		4.16	3 J+		**1.24**	3 U		**1.24**	3 U		480	2 J+		455	3 J+		**0.62**	2
0.00755	3		0.00241	3 J		3.4	2		3.64	3		0.989	3		0.629	3		406	3		408	3		**0.155**	3
0.00755	3		0.00207	3 J		3.67	3		3.83	3		0.906	3		0.725	3		405	3		413	3		**0.155**	3
0.00451	3 J		0.00150	2 J		3.89	3		4.22	3		0.785	3		0.763	3		396	3		421	3		**0.155**	3
0.0134	3		**0.00075**	2		4.31	3		3.46	3		1.55	3		0.528	3 J		462	3		397	3		**0.155**	3
0.00740	2		**0.00075**	2		3.53	3		2.65	3		1.2	2		0.495	3 J		384	3		338	3		**0.155**	3
0.00459	3 J		**0.00075**	2		2.52	3		2.3	2		0.419	3 J		0.367	3 J		349	3		358	3		**0.155**	3
0.00491	3 J		**0.00075**	2		3.62	3		3.66	3		0.691	3		0.647	3		404	3		413	3		**0.155**	3
0.00250	2 U		**0.00075**	2		2.83	3		2.96	3		**0.310**	2 U		**0.310**	2 U		364	3		398	3		**0.155**	3
0.00355	3 J		**0.00075**	2		2.72	3		2.7	2		0.656	3		**0.310**	2 U		386	3		371	3		**0.155**	3
0.00250	2 U		**0.00075**	2		3.26	3		2.93	3		**0.310**	2 U		**0.310**	2 U		391	3		390	2		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.62	2	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

		depends on HARD; revised 2013						depends on Total Ag																					
		result > crit						result > crit																					
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
Silicon					**Silver[8]**						**Sodium**								**Thallium**								**Tin**			
Dissolved			Total					Dissolved				Total				Dissolved				Total				Dissolved				Total		
µg/L			µg/L					µg/L				µg/L				µg/L				µg/L				µg/L				µg/L		
12400	3		0.0076		2	J		**0.0031**		2	3190		3		3800		2		**0.0050**		1		**0.0050**		1		5.57		3	J+
13500	3		0.0121		3	J		0.0072		2	J	3720		3		3700		2	**0.0050**		1		**0.0050**		1		**0.050**		1	
13400	3		**0.0031**		2			**0.0031**		2	3550		3		3720		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
14400	3	J+	**0.0124**		3			**0.0124**		3	3700		2	J+	3570		3	J+	**0.0200**		1		**0.0200**		1		**0.200**		1	
13100	3		**0.0031**		2			**0.0031**		2	3370		3		3500		2		**0.0050**		1		**0.0050**		1		**0.050**		1	
12900	3		0.0073		2	J		**0.0031**		2	3320		3	J+	3480		3	J+	**0.0050**		1		**0.0050**		1		**0.050**		1	
14000	2		0.01		1	J		0.0096		2	J	3310		3		3300		2	**0.0050**		1		**0.0050**		1		**0.050**		1	
14400	3		0.0255		3			0.0087		2	J	3440		3		3590		3	0.0143		3	J	**0.0050**		1		0.322		3	
13000	2		0.0181		3	J		0.008		1	J	3420		3		3280		3	0.0073		2	J	**0.0031**		2		0.0667		3	J
13600	3		0.0081		2	J		**0.0031**		2	3130		3		3340		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
15000	2		0.0314		3			**0.0031**		2	3540		3		3470		3		0.007		1	J	**0.0031**		2		**0.0310**		2	
14800	3		**0.0100**		1	U		**0.0031**		2	3290		3		3450		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
14400	3		**0.0100**		1	U		**0.0100**		1	U	3410		3		3310		3	**0.0031**		2		**0.0031**		2		**0.0310**		2	
14700	3		0.0278		3			0.0239		3	3470		3		3440		3		**0.0031**		2		0.0072		2	J	**0.0310**		2	

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
1.22	3	J+	3.04	3			2.14	3		**1.55**	3	U	**1.55**	3	U								
0.144	3	J	3.3	2			2.31	3		1.24	3	J	**1.55**	3	U								
0.050	1		2.54	3			1.93	3		**1.55**	3	U	**1.55**	3	U								
0.200	1		3.08	3	J		2.24	3	J	**6.2**	2	U	**6.2**	2	U								
0.050	1		2.75	3			2.16	3		**1.55**	3	U	**1.55**	3	U								
0.050	1		2.86	3			2.18	3		**1.55**	3	U	**1.55**	3	U								
0.231	3	J+	2.37	3			2.05	3		**1.55**	3	U	**1.55**	3	U								
0.050	1		5.54	3			3.31	3		4.62	3		**1.55**	3	U								
0.0310	2		5.48	3			4.17	3		3.16	3		1.75	3	J								
0.0310	2		4.84	3			4.77	3		**1.55**	3	U	**1.55**	3	U								
0.0310	2		3.65	3			2.88	3		**1.55**	3	U	**1.55**	3	U								
0.0310	2		3.64	3			3.66	3		**1.55**	3	U	**1.55**	3	U								
0.0732	3	J	3.85	3			3.46	3		5.03	3		**1.55**	3	U								
0.0310	2		4.1	2			3.73	3		1.63	3	J	1.73	3	J								

		2	3	2	2	0	3	1	3	2	3	1	3		
Mean		6.87		0.6		179		-66.5		2.05		32			
Median		6.37		0.6		175		-50.0		2.02		32			
St. Deviation		1		0		44		111		1		4			
# of values		14		14		14		14		14		14			
Minimum		5.80		0.1		115		-398.8		0.66		26			
Maximum		11.50		1.6		308		55.6		3.21		37			
Lowest fifth percentile		6		0		129		-240		1		27			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		64%		0%		0%		0%		0%		0%			
% of DWS exceedences		14%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		2	3		1	3		1	3		4	3						
123			106			15.6			38			63			0.106			NA			NA	
118			111			12.7			36			61			0.087			NA			NA	
21			34			12			19			14			0			NA			NA	
14			14			14			14			14			14				0			0
95			55			2.2			12			46			0.016			NA			NA	
159			185			43.3			77			86			0.257			NA			NA	
98			59			3			15			47			0			NA			NA	
0			0			0			0			0			6							
															43%							
															1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

3	3		
0.613		NA	
0.560		NA	
0		NA	
14			0
0.368		NA	
1.730		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		3	3		5	2		5	2		3	3		2	3		3
0.693			0.056			0.985			0			0			0.30			7.00			0.260
0.648			0.058			0.901			0			0			0.16			5.13			0.219
0			0			0			0			0			0			7			0
14			14			14			13			13			14			14			14
0.596			0.016			0.202			0.00075			0.00075			0.16			3.91			0.173
1.080			0.085			1.720			0.0025			0.0017			0.73			32.70			0.725
1			0			0			0			0			0			4			0
0			2			0			12			12			9			0			0
			14%						92%			92%			64%						
			12						1			1			5						
230			NA			NA			NA			0.0052			NA			NA			6.95
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3	2	3	2	3	3	3	3	3	2	3	3	3	3	3	2	3	3	3		
8800		1.21		0.97		0.80		0.700		6.32		0.67									
8890		1.09		1.05		0.87		0.740		5.34		0.65									
1050		0		0		0		0		3		0									
14		14		14		14		14		14		14									
7280		0.20		0.20		0.44		0.423		3.56		0.25									
10400		2.02		1.29		1.15		0.941		13.70		1.45									
7319		1		1		1		0		4		0									
0		1		1		0		0		0		6									
		7%		7%								43%									
NA		10.98		10.56276		NA		NA		3.004		2.884									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		100%		0%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness		depends on Hardness						depends on Hardness											
		result > crit		result > crit						result > crit						result > crit					

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
-2	3	-2	3			3	3			4	3	-1	3	-1	3			-1	3			-1	3
31200		31300				0.170				0.0188		2380		2390				1004				1010	
31400		31600				0.104				0.0155		2420		2390				1000				1010	
1700		1800				0				0		280		290				67				70	
14		14				14				14		14		14				14				14	
28100		27300				0.047				0.0155		1900		1900				846				883	
33900		33900				0.584				0.0620		2840		2900				1110				1120	
28685		28405				0				0		1985		1946				913				917	
0		0				0				14		0		0				0				0	
										100%													
						7																	
1000		1000				0.588				0.579		NA		NA				NA				NA	
NA		NA				15				NA		NA		NA				50				NA	
100%		100%				0%				0%		0%		0%				0%				0%	
0%		0%				0%				0%		0%		0%				100%				0%	
						depends on Hardness				depends on Hardness													
result > crit		result > crit				result > crit				result > crit								result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	3	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3								
0.0070		0.00150		3.57		3.50		0.87		0.616		412		404		0.188									
0.0071		0.00110		3.65		3.65		0.87		0.638		405		411		0.155									
0		0		1		1		0		0		39		32		0									
14		14		14		14		14		14		14		14		14									
0.0025		0.00075		2.52		2.30		0.31		0.310		349		338		0.155									
0.0134		0.00259		4.31		4.43		1.55		1.240		480		455		0.620									
0		0		3		3		0		0		359		351		0									
2		7		0		0		3		4		0		0		14									
14%		50%						21%		29%						100%									
4		7						1		3															
0.77		0.77		NA		NA		16.99		16.94		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.188	
	0.155	
	0	
	14	
	0.155	
	0.620	
	0	
	14	
	100%	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF

Selenium

Dissolved

µg/L

| | | |

| | | |

P-08-61D

Sample Date												
08/27/09	7.24	3	7.47	3	213	3	121.9	4	6.49	3	75.6	3
10/18/09	6.93	3	5.13	3	100	1	34.9	3	3.6	2	66.7	3
08/19/10	6.52	3	9.2	2	84	2 Q	175.1	4	5.26	3	33.8	3
10/22/10	6.34	3	15.28	4	74	2	-30.5	3	4.27	3	28.4	3
03/29/11	6.25	3	11.12	4	65	2 Q	221	3	2.91	3		
05/26/11	6.7	2	10.54	4	44	2 Q	110.4	4	4.92	3	27.8	3
08/30/11	5.88	3	7.65	3			125.8	4	4.96	3	61.4	3
10/27/11	6.6	2	11.63	4	59	2	153.3	4	4.5	2	28.3	3
05/21/12	7.06	3	9.92	3	81	2	30.8	3	5.44	3	32.6	3
08/22/12	6.44	3	15.27	4	76	2	-232.7	4	7.06	3	27.9	3
10/12/12	6.12	3	5.57	3	61	2	-58	2	4.55	3	21.1	3

152	3	261	3	420	2	4.5	2 J	28	2	1.49	3
122	3	100	1	232	3	**1.57**	3	26	2	2.42	3
75.4	3	64	2 J	62.1	3	3.8	2 J	22.4	3	0.661	3
75.3	3	59	2	9.59	3	3.64	3 J	21	2	0.6	1
76.9	3	60	1	10.3	3	5.32	3 J	17.5	3	1.66	3
70.6	3	58	2	19	2	3.79	3 J	16.7	3	9.52	3
61.4	3	60	1	54.5	3	3.23	3 J	15.4	3	0.758	3
77.3	3	46	2	5.24	3	3.24	3 J	16.2	3	1.7	2
82.4	3	58	2	113	3	**5.0**	1 U	16	2	2.06	3
54.5	3	42	2	3.67	3	**1.57**	3	15.7	3	0.41	2

0.113	3	
0.0235	3	
0.0634	3	
0.0051	2	J
0.0317	3	
0.0779	3	
0.0129	3	
0.00155	3	
0.0475	3	
0.0038	2	J

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4.11	3	0.037	2 J	19.4	3	**0.00075**	2	**0.00075**	2	1.5	2 J+	1.75	3	0.781
3.13	3	0.032	2 J	13.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.194
1.11	3	0.094	2 J	11.4	3	0.0017	2 J	**0.00075**	2	**0.155**	3	0.607	3	**0.0155**
1.41	3	0.095	2 J	9.73	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.25	2 J	**0.0155**
1.83	3	0.075	2 J	7.93	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
1.17	3	0.063	2 J	7.88	3	0.0033	2 J	**0.00075**	2	**0.155**	3	0.975	3	**0.0155**
1.19	3	0.082	2 J	5.74	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
1.34	3	0.08	1 J	9.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
1.55	3	0.066	2 J	7.73	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.79	2	0.031	2 J	6.21	3	**0.00075**	2	0.003	1 J	**0.155**	3	0.221	3 J	**0.0155**

3	9830	3	8920	3	**0.0375**	3	**0.0375**	3	5.19	3	3.8	2	41	2	31.7	3
3	6330	3	1680	3	0.358	3	0.311	3	5.37	3	1.57	3	36.8	3	13.6	3
3	1080	3	383	3	0.0706	3	0.112	3	1.4	2	1.04	3	6.16	3	4.13	3
3	125	3	10.9	3 J+	0.0987	3	0.116	3	1.05	3	0.899	3	4.11	3 J+	3.54	3 J+
3	184	3	4.46	3 J+	0.0861	3 J		R	0.789	3	0.728	3	3.86	3 J+	3.13	3 J+
3	10300	3	5980	3	0.178	3 J		R	5.47	3	3.6	2	38.6	3	23.5	3
3	1720	3	43.6	3	0.0597	3	0.0828	3	1.34	3	0.891	3	7.86	3	2.66	3
3	270	2	4.51	3 J+	0.0671	3	0.0719	3	0.984	3	0.804	3	3.94	3 J+	2.69	3 J+
3	138	3	4.1	2	0.0674	3	0.0602	3	1.05	3	0.826	3	2.78	3	2.3	2
3	60.6	3	**1.00**	1 U	0.0255	3 J	0.0425	3 J	0.944	3	0.77	2	2.43	3	2.08	3

1.16	3	0.812	3	0.721	3	0.284	3	**6.25**	3	**6.25**	3	**0.0375**	3	**0.0375**	3	20900	3
0.626	3	0.184	3	0.55	2	0.099	2	11.8	3 J	8.4	2	**0.0300**	1	0.0207	3 J	18100	3
0.115	3	0.0279	3 J	0.0467	3 J	**0.0075**	2	3.96	3 J	3.1	2 J	**0.0075**	2	**0.0075**	2	10200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**1.25**	3	**0.0075**	2	**0.0075**	2	8810	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.64	3 J	2.77	3 J	**0.0075**	2	**0.0075**	2	8530	3
1.28	3	0.753	3	0.819	3	0.422	3	7.09	3 J	**3.00**	1	0.11	2 J	**0.0300**	1	15200	3
0.246	3	**0.0125**	3	0.115	3	**0.0075**	2	2.38	3 J	**0.75**	2	0.0189	3 J	**0.0075**	2	8070	3
0.0125	3	**0.0125**	3	0.0156	3 J	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	9940	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.34	3 J	2.16	3 J	**0.0075**	2	**0.0075**	2	8540	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.71	3 J	1.76	3 J	**0.0075**	2	**0.0075**	2	6430	3

17600	3	29.4	3	18.8	3	3.35	3 J+	2.1	2 J+	13.2	3 J+	9.37	3 J+
11700	3	17.7	3	6.28	3	3.66	3	0.66	2	11.1	3	2.15	3
9340	3	6.83	3	1.61	3 J+	0.349	3 J+	0.129	3 J+	3.18	3 J+	0.93	2 J+
8110	3	1.72	3	0.305	3	0.104	3	0.0417	3	1.29	3	0.966	3
7870	3	3.05	3	0.298	3	0.193	3	0.0474	3	2.35	3	1.81	3
12500	3	16.8	3	9.13	3	12.3	3	7.73	3	21.3	3	12.7	3
6900	2	6.93	3	0.64	2	2.19	3	0.107	3	5.22	3	0.841	3
9170	3	2.38	3 J+	0.349	3 J+	0.332	3	0.0292	3	2.06	3	0.904	3
8280	3	3	1	0.368	3	0.285	3	0.0546	3	1.5	2	0.832	3
5930	3	0.875	3	0.304	3	0.0513	3	0.0274	3	0.976	3 J+	0.671	3 J+

6300	2	4080	3	13.7	3 J+	9.69	3 J+	5660	3	4570	3	144	3	92.2	3
8470	3	1490	3	13.8	3	2.94	3	5250	3	2660	3	170	2	28	2
566	3	141	3	0.929	3	0.196	3	2030	3	1720	3	15.5	3 J+	5.07	3 J+
105	3	16.2	3 J	0.161	3	**0.0155**	3	1550	3	1390	3	3.19	3	0.734	3 J+
182	3	**10.0**	1 U	0.182	3	**0.0155**	3	1570	3	1400	2	5.24	3	0.55	2 J+
10400	3	6680	3	13.5	3	7.32	3	5720	3	4110	3	451	3	278	3
1760	3	50.5	3	1.86	3	0.0605	3 J	1980	3	1220	3	75.8	3	2.89	3
266	3	**10.0**	1 U	0.315	3	**0.0155**	3	1890	3	1670	3	13.5	3	0.596	3 J+
205	3	11.6	3 J	0.183	3	**0.0155**	3	1590	3	1490	3	8.72	3	0.699	3 J+
45.9	3	8.75	3 J	0.166	3	**0.0155**	3	1220	3	1110	3	1.91	3 J+	0.809	3 J+

0.0276	3	0.00914	3	0.794	3 J		R	17.7	3 J+	12.6	3 J+	6670	3	6950	3	**0.775**	3
0.0221	3	0.00261	3 J	2.05	3 J		R	10.7	3	6.85	3	4800	2	3710	3	**0.62**	2
0.00242	3 J	**0.00075**	2	1.02	3	1.06	3	3.79	3	2.48	3	1050	3	974	3	0.418	3
0.00075	2	**0.00075**	2	0.729	3	0.718	3	1.31	3	1.18	3	1030	3	960	2	**0.155**	3
0.00075	2	**0.00075**	2	0.693	3	0.569	3	2.13	3	1.65	3	774	3	708	3	**0.155**	3
0.0111	3	**0.00075**	2	0.47	2	0.47	2	13.9	3	8.53	3	2720	3	2060	3	**0.62**	2
0.00250	2 U	**0.00075**	2	0.589	3	0.585	3	4.37	3	1.63	3	1010	3	673	3	**0.155**	3
0.00075	2	**0.00075**	2	0.573	3	0.524	3	1.65	3 J+	**0.310**	2 U	760	2	669	3	0.37	2
0.00234	3 J	0.00195	3 J	0.533	3	0.524	3	2.35	3	1.48	3	661	3	635	3	0.339	3
0.00075	2	**0.00075**	2	0.473	3	0.535	3	0.789	3 J+	0.727	3 J+	638	3	585	3	**0.155**	3

	0.775	3	
	0.155	3	
J	0.317	3	J
	0.155	3	
	0.348	3	J
	0.62	2	
	0.155	3	
J	**0.155**	3	
J	**0.155**	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

7810	3	0.155	3	0.101	3	12000	2	13500	3	0.109	3	0.0719	3 J	**0.250**	2
15300	3	0.136	3	0.0235	3	7660	3	8490	3	0.142	3	0.0291	3	1.17	3
6880	3	0.0388	3	0.0107	3 J	3980	3	3980	3	0.0115	3 J	**0.0050**	1	0.24	2
6030	3 J+	**0.0031**	2	**0.0031**	2	3380	3 J+	3060	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5780	3	**0.0031**	2	**0.0031**	2	2650	3	2490	3	**0.0050**	1	**0.0050**	1	0.374	3
16100	3	0.0893	3	0.0399	3 J	2420	3	2860	3	0.304	3	0.171	3	0.409	3 J
6080	3	0.0146	3 J	**0.0031**	2	2250	3	2250	3	0.0461	3	**0.0031**	2	0.168	3 J
6360	3	**0.0031**	2	**0.0031**	2	3260	3	2960	3	0.0092	2 J	**0.0031**	2	0.347	3
6060	3	**0.0031**	2	**0.0031**	2	2710	3	2620	3	**0.0031**	2	**0.0031**	2	0.0978	3 J
6300	2	**0.0031**	2	**0.0031**	2	2620	3	2480	3	**0.0031**	2	0.0202	3	**0.0310**	2

0.250	2	11.1	3	6.62	3	26.3	3 J+	23.5	3 J+
0.389	3	14.8	3	1.96	3	25.6	3	4.95	3
0.050	1	0.82	2 J	0.315	3 J	3.4	2 J+	**1.55**	3 U
0.050	1	0.407	3 J	**0.155**	3	**1.55**	3 U	3.12	3 J+
0.522	3	0.86	2 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.124	3	31.6	3	21.7	3	34.8	3	20.1	3
0.0310	2	5.46	3	**0.155**	3	6.71	3	3.5	2
0.0310	2	0.715	3 J	**0.155**	3	3.34	3	**1.55**	3 U
0.0310	2	0.815	3 J	**0.155**	3	5.01	3	**1.55**	3 U
0.0310	2	0.487	3 J	**0.155**	3	4.08	3	3.16	3

	2	3	2	3	0	2	1	4	2	3	1	3					
Mean	6.55		9.89		86		59.3		4.91		40.4						
Median	6.52		9.92		75		110.4		4.92		30.5						
St. Deviation	0		3		47		130		1		20						
# of values	11		11		10		11		11		10						
Minimum	5.88		5.13		44		-232.7		2.91		21.1						
Maximum	7.24		15.28		213		221.0		7.06		75.6						
Lowest fifth percentile	6		5		51		-145		3		24						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	45%		0%		0%		0%		0%		0%						
% of DWS exceedences	9%		0%		0%		0%		0%		0%						

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**			**Field Diss. Oxygen**		**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**			**Hardness**		
Total/Dissolved																	
Units	pH Units			mg/L		µmhos/cm			mV			°C			mg/L		

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
1	3		0	2		1	3		2	3		1	3		2	3						
85			81			93			3.6			20			2.13			NA			NA	
76			60			37			3.7			17			1.58			NA			NA	
30			65			135			1			5			3			NA			NA	
10			10			10			10			10			10				0			0
55			42			4			1.6			15			0.41			NA			NA	
152			261			420			5.3			28			9.52			NA			NA	
58			44			4			2			16			0			NA			NA	
0			0			0			3			0			0							
									30%													
									7													
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			60%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
			result > crit									result <20			result > crit							

	4	3					
	0.038		NA				
	0.028		NA				
	0		NA				
	10			0			
	0.002		NA				
	0.113		NA				
	0		NA				
	1						
	10%						
	2						
	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
	Total Phosphorus				**Orthophosphate**		
		mg/L				mg/L	

2	3	3	2	2	3	5	2	5	2	3	3	2	2	4										
1.76		0.066		9.9		0.00110		0.00115		0.3		0.51		0.110										
1.38		0.071		8.5		0.00075		0.00075		0.2		0.25		0.016										
1		0		4		0		0		0		1		0										
10		10		10		10		10		10		10		10										
0.79		0.031		5.7		0.00075		0.00075		0.2		0.22		0.016										
4.11		0.095		19.4		0.00330		0.00300		1.5		1.75		0.781										
1		0		6		0		0		0		0		0										
0		0		0		8		9		9		5		8										
						80%		90%		90%		50%		80%										
		10				2		1				2												
230		NA		NA		NA		0.0052		NA		NA		6.95										
250		4		250		NA		0.2		NA		NA		NA										
0%		0%		0%		0%		0%		0%		0%		0%										
0%		0%		0%		0%		0%		0%		0%		0%										
																								depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		

3		-1	3		1	3		4	3		4	3		2	3		3	3		2	3		2	3			
		3004			1703			0.1049			0.1042			2.36			1.5			15			8.9				
		675			27			0.0690			0.0774			1.20			0.9			5			3.3				
		4174			3150			0			0			2			1			17			11				
		10			10			10			8			10			10			10			10				
		61			1			0.0255			0.0375			0.79			0.7			2			2.1				
		10300			8920			0.3580			0.3110			5.47			3.8			41			31.7				
		90			2			0			0			1			1			3			2				
		0			1			1			1			0			0			0			0				
					10%			10%			13%																
								2			1																
		87			87			NA			NA			150			150			NA			NA				
		NA			NA			6			NA			10			NA			2,000			NA				
		90%			40%			0%			0%			0%			0%			0%			0%				
		0%			0%			0%			0%			0%			0%			0%			0%				
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit							
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF		
			Aluminum						**Antimony**						**Arsenic**						**Barium**						
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			

4	3	4	3	4	3	4	2	2	3	2	3			4	2			4	2	-1	3						
0.35		0.185		0.230		0.086		4.42		3.20				0.0241				0.0141		11470							
0.06		0.013		0.031		0.008		3.07		2.60				0.0075				0.0075		9380							
0		0		0		0		3		2				0				0		4850							
10		10		10		10		10		10				10				10		10							
0.01		0.013		0.008		0.008		1.71		0.75				0.0075				0.0075		6430							
1.28		0.812		0.819		0.422		11.80		8.40				0.1100				0.0375		20900							
0		0		0		0		2		1				0				0		7168							
5		6		4		7		3		5				8				9		0							
50%		60%		40%		70%		30%		50%				80%				90%									
		1		2				7		4				2				1									
NA		NA		NA		NA		NA		NA				0.094				0.091		NA							
4		NA		NA		NA		NA		NA				5				NA		NA							
0%		0%		0%		0%		0%		0%				10%				0%		0%							
0%		0%		0%		0%		0%		0%				0%				0%		0%							
														depends on Hardness				depends on Hardness									
result > crit														result > crit				result > crit									
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

| | | |

| | | |

5	3	5	2	3	3	3	3	2	3	2	3	-1	3	0	3	3	3						
0.0071		0.00190		0.792		11.38		5.9		3.7		2010		1792		0.376							
0.0024		0.00075		0.641		11.38		3.1		1.6		1020		834		0.355							
0		0		0		0		6		4		2100		2060		0							
10		10		10		8		10		10		10		10		10							
0.0008		0.00075		0.470		1.38		0.8		0.3		638		585		0.155							
0.0276		0.00914		2.050		11.38		17.7		12.6		6670		6950		0.775							
0		0		0		0		1		0		648		608		0							
5		7		0		0		0		1		0		0		7							
50%		70%								10%						70%							
2		2														3							
0.77		0.77		NA		NA		15.66		15.61		NA		NA		5							
2		2		NA		NA		NA		NA		NA		NA		50							
0%		0%		0%		0%		10%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
CALC revised 2013								2013: DWS = NA		2013: DWS = NA													
result > crit		result > crit						result > crit		result > crit							result > crit						
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

	3	3
	0.299	
	0.155	
	0	
	10	
	0.155	
	0.775	
	0	
	8	
	80%	
	2	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

| | | |

3	2	3	3	3	3	2	3	2	3														
0.151		6.7		3.15		11.2		6.5															
0.050		0.8		0.16		4.6		3.1															
0		10		7		13		8															
10		10		10		10		10															
0.031		0.4		0.16		1.6		1.6															
0.522		31.6		21.70		34.8		23.5															
0		0		0		2		2															
8		0		6		2		4															
80%				60%		20%		40%															
		6		1																			
NA		NA		NA		35.90		35.40															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
																		depends on Hardness		depends on Total Zn			
																		result > crit		result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-08-61S

Sample Date												
08/27/09	6.7	2	12.04	4	90	1	145.9	4	5.65	3	176	3
10/18/09	6.52	3	11.76	4	42	2	59.8	3	3.72	3	20.4	3
08/19/10	6.14	3	11.43	4	59	2 Q	143.4	4	5.39	3	16.3	3
10/22/10	5.9	2	13.38	4	52	2	-30.8	3	3.9	2	20.6	3
03/30/11	6.83	3	19.3	3	48	2 Q	204.9	4	0.12	2	27.6	3
08/30/11	6.05	3	7.15	3			109.3	4	7.02	3	24.9	3
10/27/11	6.63	3	12.43	4	48	2	181.4	4	2.73	3	29.1	3
08/22/12	6.33	3	12.07	4	44	2	-236.8	4	6.37	3	18.1	3
10/12/12	6.3	2	6.99	3	46	2	-254.2	4	2.81	3	18.8	3

67.9	3	53.8	3	299	3	**1.57**	3	21.9	3	0.309	3
50.6	3	37.5	3	12.9	3	**1.57**	3	32.1	3	0.491	3
44.7	3	37	2	8.7	2	**1.57**	3	15.9	3	0.149	3 J-
51.3	3	43	2	15.1	3	3.32	3 J	16.4	3	0.111	3
59.4	3	35	2	9.19	3	**1.57**	3	21.4	3	0.117	3
49.5	3	43	2	149	3	**1.57**	3	15.4	3	0.153	3
48.7	3	68	2	38.6	3	**1.57**	3	15.5	3	0.0595	3 J
42.7	3	29	2	17	2	**5.0**	1 U	14.2	3	0.13	2
46.3	3	35	2	8.66	3	**1.57**	3	16.4	3	0.109	3

0.381	3
0.0175	3
0.0236	3
0.0497	3
0.034	2
0.203	3
0.222	3
0.0208	3
0.0323	3

0.722	3	0.036	2 J	6.17	3	0.0015	2 J	**0.00075**	2	**0.155**	3	0.461	3 J		**0.0155**
0.681	3	**0.0155**	3	4.04	3	**0.00075**	2	**0.00075**	2	0.62	2 J	**0.075**	2		**0.0155**
0.743	3	0.077	2 J	4.19	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.954	3	0.093	2 J	4.77	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.192	3 J		**0.0155**
0.917	3	**0.050**	1 U	6.09	3	**0.00075**	2	**0.00075**	2	**0.155**	3	4.77	3		**0.0155**
0.719	3	0.063	2 J	4.13	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.693	3	0.077	2 J	3.71	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.563	3	0.065	2 J	3.01	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.536	3	0.037	2 J	3.38	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.181	3 J		**0.0155**

3	7070	3	58.1	3 J+	1.72	3	0.0234	3 J	101	3	1.31	3	182	3	2.6	2
3	641	3	3.96	3	0.0829	3	0.0475	3 J	2.02	3	0.76	2	8.24	3	1.62	3
3	360	2	7.59	3 J+	**0.0075**	2	0.0335	3 J	1.51	3	0.702	3	4.3	2	1.36	3 J+
3	257	3	**1.00**	1 U	0.074	2	**0.0250**	2 U	1.78	3	1.15	3	2.98	3 J+	0.849	3 J+
3	2000	1	6.96	3 J+	0.305	3 J+	0.0878	3 J+	9.75	3	1.48	3	14.1	3	0.597	3
3	2190	3	96.7	3	0.309	3	0.0469	3 J	8.19	3	1.31	3	17.4	3	1.91	3
3	2230	3	6.82	3 J+	0.421	3	0.0706	3	11.4	3	1.22	3	17	2	0.957	3 J+
3	624	3	2.41	3	0.192	3	0.0406	3 J	3.9	2	1.19	3	4.22	3	0.908	3
3	216	3	**1.00**	1 U	0.105	3	**0.0075**	2	1.64	3	1.01	3	2.41	3	0.904	3

0.974	3	**0.0125**	3	0.649	3	**0.0075**	2	**5.0**	1	**1.25**	3	0.766	3 J+	**0.0075**	2	41200	3
0.0267	3 J	**0.0125**	3	**0.0075**	2		R	**1.25**	3	**1.25**	3	0.025	2 J	0.0164	3 J	5920	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4730	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	6170	3
0.0954	3	**0.0125**	3	0.0361	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	0.0793	3	**0.0075**	2	7400	2
0.0999	3	**0.0125**	3	0.0858	3	**0.0075**	2	2.28	3 J	2.23	3 J	0.0632	3	**0.0075**	2	6310	3
0.094	2	**0.0125**	3	0.0262	3 J	**0.0075**	2	**0.75**	2	**0.75**	2	0.105	3	**0.0075**	2	7560	3
0.0355	3 J	**0.0125**	3	0.0159	3 J	**0.0075**	2	2.35	3 J	2.06	3 J	0.0328	3 J	**0.0075**	2	5100	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.5	2 J	1.62	3 J	0.0152	3 J	**0.0075**	2	5470	3

7960	3	49.3	3	0.352	3	40.2	3	0.0927	3	J+	148	3	0.831	3 J+
5820	3	1.02	3	0.28	2	0.6	1	0.0183	3	J	2.29	3	**0.250**	2 U
5020	3	0.755	3	J+	0.326	3 J+	0.342	3 J+	**0.0100**	1	U	1.57	3 J+	**0.250**	2 U
5760	3	0.489	3	0.186	3 J	0.276	3	0.0119	3	J	1.21	3	**0.250**	2 U
6790	3	4.24	3	0.267	3	2.65	3	0.024	2		10.9	3	**0.250**	2 U
5540	3	4.9	2	0.63	2	3.01	3	0.148	3		11.9	3	0.678	3
5210	3	6.37	3	0.33	2	5.68	3	0.0745	3		19.6	3	**0.250**	2 U
4880	3	1.97	3	0.34	2	1.09	3	0.152	3		4.77	3	**0.250**	2 U
4800	2	0.687	3	0.425	3	0.285	3	0.0286	3		1.44	3 J+	**0.250**	2 U

52800	3	86.6	3	14.5	3	0.115	3 J+	17800	3	1520	3	976	3	9.54	3 J+
1020	3	8.41	3 J	0.568	3	0.0472	3 J	1360	3	1170	3	45	2	2	1
637	3	14.1	3 J	0.285	3	**0.0155**	3	1090	3	1080	3	25.8	3 J+	1.53	3 J+
425	3	**3.10**	2	0.177	3	**0.0155**	3	1270	3	1120	3	20	1	0.393	3 J+
4110	3	18.5	3 J	1.32	3	**0.0155**	3	2220	3	1360	3	200	1	1.08	3
4350	3	185	3	1.49	3	0.0684	3 J	2210	3	1190	3	235	3	27	2
5470	3	26.6	3	1.31	3	**0.0155**	3	2490	3	1000	1	460	2	64.1	3
1450	3	10.4	3 J	0.383	3	**0.0155**	3	1290	3	981	3	197	3	117	3
438	3	6.52	3 J	0.144	3	**0.0155**	3	1240	3	1050	3	25.4	3	5.95	3

0.0276	3	**0.00075**	2	6.55	3	0.701	3	39.2	3	**0.310**	2 U	7070	3	739	3	**0.62**	2
0.00221	3 J	**0.00075**	2	0.418	3	0.392	3	0.904	3	0.246	3 J	539	3	436	3	**0.155**	3
0.00152	3 J	**0.00075**	2	0.269	3 J		R	**0.310**	2 U	**0.310**	2 U	430	2	388	3	**0.155**	3
0.00161	3 J	**0.00075**	2	0.492	3	0.448	3	0.509	3 J	**0.310**	2 U	522	3	451	3	**0.155**	3
0.00661	3	**0.00075**	2	1.09	3	0.768	3	2.58	3	0.248	3 J	941	3	499	3	**0.155**	3
0.00917	3	**0.00075**	2	0.785	3	0.529	3	3.27	3	0.471	3 J	870	2	463	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.638	3	0.467	3	4.15	3	0.239	3 J	966	3	425	3	**0.155**	3
0.0621	3	**0.00075**	2	0.529	3	0.462	3	1.51	3	**0.310**	2 U	551	3	430	2	**0.155**	3
0.00075	2	**0.00075**	2	0.504	3	0.451	3	**0.310**	2 U	**0.310**	2 U	490	2	381	3	**0.155**	3

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

6220	3	0.491	3	**0.0031**	2	10400	3	2620	3	0.661	3	**0.0050**	1	2.43	3 J+
6730	3	0.0118	3 J	**0.0031**	2	2130	3	2160	3	**0.0050**	1	**0.0050**	1	0.193	3 J
6480	3	**0.0031**	2	**0.0031**	2	1880	3	2100	2	**0.0050**	1	**0.0050**	1	**0.050**	1
6420	3	0.0063	2 J	**0.0031**	2	2040	3 J+	1940	3 J+	**0.0050**	1	**0.0050**	1	0.189	3 J
6500	2	0.0725	3	**0.0031**	2	2120	3	2010	3	0.0794	3	**0.0050**	1	0.628	3 J+
7090	3	0.0454	3	**0.0031**	2	2240	3	2110	3	0.082	2	**0.0031**	2	0.284	3
6160	3	0.0305	3	**0.0031**	2	2020	3	1810	3	0.113	3	**0.0031**	2	0.145	3 J
6640	3	0.0074	2 J	**0.0031**	2	2040	3	2020	3	0.0278	3	0.0095	2 J	0.314	3
6400	2	**0.0031**	2	**0.0031**	2	2160	3	2040	3	0.0086	2 J	**0.0031**	2	0.0912	3 J

3.2	2 J+	116	3	**0.155**	3	114	3	4.57	3 J+
0.050	1	2.09	3	**0.155**	3	4.73	3	**1.55**	3 U
0.050	1	1.27	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.966	3 J	**0.155**	3	4.38	3 J		R
0.050	1	9.5	2	**0.155**	3	33.9	3	**1.55**	3 U
0.0310	2	10.7	3	0.71	2 J	12.7	3	1.64	3 J
0.102	3 J	14.8	3	**0.155**	3	15.6	3	**1.55**	3 U
0.0988	3 J	3.84	3	**0.155**	3	9.26	3	**1.55**	3 U
0.0310	2	1.25	3	0.372	3 J	8.87	3	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3					
Mean	6.4		11.84		54		35.9		4.19		39						
Median	6.3		12.04		48		109.3		3.90		21						
St. Deviation	0		4		16		174		2		52						
# of values	9		9		8		9		9		9						
Minimum	5.9		6.99		42		-254.2		0.12		16						
Maximum	6.8		19.30		90		204.9		7.02		176						
Lowest fifth percentile	6		7		43		-247		1		17						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	56%		0%		0%		0%		0%		0%						
% of DWS exceedences	11%		0%		0%		0%		0%		0%						

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
1	3		0	2		1	3		2	3		1	3		3	3						
51.2			42.0			62			2.15			18.8			0.181			NA			NA	
49.5			38.0			15			1.57			16.4			0.130			NA			NA	
8			12			100			1			6			0			NA			NA	
9			9			9			9			9			9				0			0
42.7			29.0			9			1.57			14.2			0.060			NA			NA	
67.9			68.0			299			5.00			32.1			0.491			NA			NA	
44			31			9			2			15			0			NA			NA	
0			0			0			8			0			0							
									89%													
									1						1							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			67%			0%			NA			NA	
0%			0%			0%			0%			0%			0%			NA			NA	
			result > crit									result <20			result > crit							

	4	3					
	0.109		NA				
	0.034		NA				
	0		NA				
	9			0			
	0.018		NA				
	0.381		NA				
	0		NA				
	0						

	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4											
0.725		0.057		4.39		0.0008		0.00075		0.207		0.720		0.0155											
0.719		0.063		4.13		0.0008		0.00075		0.155		0.250		0.0155											
0		0		1		0		0		0		2		0											
9		9		9		9		9		9		9		9											
0.536		0.016		3.01		0.0008		0.00075		0.155		0.075		0.0155											
0.954		0.093		6.17		0.0015		0.00075		0.620		4.770		0.0155											
1		0		3		0		0		0		0		0											
0		2		0		8		9		8		5		9											
		22%				89%		100%		89%		56%		100%											
		7				1				1		3													
230		NA		NA		NA		0.0052		NA		NA		6.96											
250		4		250		NA		0.2		NA		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%											
																									depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																	result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			

3		0	3		2	3		3	3		4	3		2	3		2	3		2	3		3	3					
		1732			20.5			0.36			0.0425			16			1.13			28			1.3						
		641			6.8			0.19			0.0406			4			1.19			8			1.0						
		2174			34			1			0			32			0			58			1						
		9			9			9			9			9			9			9			9						
		216			1.0			0.01			0.0075			2			0.70			2			0.6						
		7070			96.7			1.72			0.0878			101			1.48			182			2.6						
		232			1			0			0			2			1			3			1						
		0			2			1			2			0			0			0			0						
					22%			11%			22%																		
											5																		
		87			87			NA			NA			150			150			NA			NA						
		NA			NA			6			NA			10			NA			2,000			NA						
		100%			11%			0%			0%			0%			0%			0%			0%						
		0%			0%			0%			0%			22%			0%			0%			0%						
					result > crit			result > crit			result > crit						result > crit			result > crit			result > crit						
NH3N_NSF	NH3N_NVF	AL_N		AL_NSF	AL_NVF	AL_F		AL_FSF	AL_FVF	SB_N		SB_NSF	SB_NVF	SB_F		SB_FSF	SB_FVF	AS_N		AS_NSF	AS_NVF	AS_F		AS_FSF	AS_FVF	BA_N		BA_NSF	BA_NVF	BA_F		BA_FSF	BA_FVF
				Aluminum								**Antimony**								**Arsenic**								**Barium**					
				Total				Dissolved				Total				Dissolved				Total				Dissolved				Total				Dissolved	
				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L				µg/L	

| | | |

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-1	3			2	3			3	3	2	3		4	3		2	3		2	2	
5750				7.8				0.348		6.0			0.0622			22			0.360		
5540				2.0				0.330		1.1			0.0286			5			0.250		
1030				16				0		13			0			48			0		
9				9				9		9			9			9			9		
4800				0.5				0.186		0.3			0.0100			1			0.250		
7960				49.3				0.630		40.2			0.1520			148			0.831		
4832				1				0		0			0			1			0		
0				0				0		0			1			0			7		
													11%						78%		
								1					2								
NA				10.98				10.56276		NA			NA			2.054			1.972		
NA				100				NA		NA			NA			NA			NA		
0%				11%				0%		0%			0%			67%			0%		
0%				0%				0%		0%			0%			0%			0%		
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
-1	3	1	3	3	3	4	3	-1	3	-1	3	0	3	2	3								
7860		39.9		2.2		0.036		3440		1160		243		25.40									
1450		14.1		0.6		0.016		1360		1120		197		5.95									
16960		60		5		0		5410		180		311		40									
9		9		9		9		9		9		9		9									
425		3.1		0.1		0.016		1090		981		20		0.39									
52800		185.0		14.5		0.115		17800		1520		976		117.00									
430		4		0		0		1150		989		22		1									
0		1		0		6		0		0		0		0									
		11%				67%																	
		5				2																	
1000		1000		0.334		0.350		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
67%		0%		67%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		56%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit						result > crit											

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				
			µg/L						µg/L						µg/L						µg/L				
5	3	5	2	3	3	3	3	2	3	2	2	0	3	0	3	3	3								
0.0127		0.00075		1.25		0.527		5.9		0.310		1375		468		0.21									
0.0025		0.00075		0.53		0.465		1.5		0.310		551		436		0.16									
0		0		2		0		13		0		2146		108		0									
9		9		9		8		9		9		9		9		9									
0.0008		0.00075		0.27		0.392		0.3		0.239		430		381		0.16									
0.0621		0.00075		6.55		0.768		39.2		0.471		7070		739		0.62									
0		0		0		0		0		0		454		384		0									
2		9		0		0		2		5		0		0		9									
22%		100%						22%		56%						100%									
3								1		4															
0.77		0.77		NA		NA		11.66		11.63		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		11%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	9	
	0.155	
	0.155	
	0	
	9	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
	Silicon			**Silver[8]**						**Sodium**						**Thallium**							**Tin**
	Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
-1	3		4	3		4	2		-1	3		-1	3		3	2		4	2		3	3	
6520			0.075			0.0031			3000			2090			0.110			0.0049			0.48		
6480			0.012			0.0031			2120			2040			0.028			0.0050			0.19		
280			0			0			2780			220			0			0			1		
9			9			9			9			9			9			9			9		
6160			0.003			0.0031			1880			1810			0.005			0.0031			0.05		
7090			0.491			0.0031			10400			2620			0.661			0.0095			2.43		
6184			0			0			1936			1862			0			0			0		
0			2			9			0			0			3			8			1		
			22%			100%									33%			89%			11%		
			3												1			1			4		
NA			0.17999059			0.153			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			11%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								

3	2	2	3	3	3	2	3	2	3														
0.4		18		0.241		23		1.94															
0.1		4		0.155		9		1.55															
1		37		0		36		1															
9		9		9		9		8															
0.0		1		0.155		2		1.55															
3.2		116		0.710		114		4.57															
0		1		0		3		2															
6		0		7		1		6															
67%				78%		11%		75%															
2		1		2				1															
NA		NA		NA		26.72		26.35															
NA		NA		NA		NA		NA															
0%		0%		0%		22%		0%															
0%		0%		0%		0%		0%															
						depends on Hardness		depends on Total Zn															
						result > crit		result > crit															
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-08-69D

Sample Date													
08/26/09	9.41	3	3.46	3	384	3		139.1	4	3.88	3	61.5	3
10/19/09	7.52	3	0.68	2	184	3		-15.3	3	3.51	3	44	2
03/19/10	9.64	3	1.2	2	310	2		84.2	3	4.19	3		
03/20/10												94.4	3
05/19/10	10.84	4	0.88	2			R	-112.2	4	4.09	3		
08/20/10			0.47	2 Q	721	3	Q	-138.1	4	5.28	3	103	3
10/23/10	10.21	4	0.88	2	170	2		-62.5	3 Q	4.85	3	54.3	3
03/29/11	9.65	3	0.74	2	500	1	Q	-5	1	3.73	3	61.9	3
05/25/11	9.09	3	1.07	3	190	2		28.7	3	5.93	3	60.2	3
08/28/11	10.76	4	8.71	3	246.2452	FALSE	Q	40.7	3	5.83	3	66.2	3
10/26/11	10.51	4	1.31	3	222	3	Q	34.1	3	3.41	3	43.4	3
03/24/12	8.84	3	0.97	2	231	3		49.9	3	3.64	3	47.5	3
05/21/12	11.37	4	1.59	3	239	3		-29.3	3	5.98	3	49.8	3
08/26/12			2.74	3	195	3		-61.9	3	6.51	3	47.4	3
10/13/12	8.41	3	0.62	2	196	3		-291.8	4	1.92	3	47.7	3

28.1	3	175	3	**0.0805**	3	**1.57**	3	47	2	0.0555	3 J
161	3	92.5	3	4.97	3	**1.57**	3	41	2	**0.050**	1 U
366	3	205	3	9.49	3	**1.57**	3	45.4	3	0.096	2 J
463	3	158	3	2.32	3	**1.57**	3	105	3	0.172	3
196	3	95	2	8.7	2	**1.57**	3	36.9	3	0.11	2 J-
302	3	171	3	6.8	2	**1.57**	3	36	2	**0.050**	1 U
280	2	180	2	1.13	3	**1.57**	3	42.6	3	0.048	2 J
233	3	149	3	0.707	3	**1.57**	3	32.1	3	**0.050**	1 U
188	3	100	1	**0.147**	3	**1.57**	3	26.8	3	**0.050**	1 U
198	3	124	3	0.396	3 J	**1.57**	3	36.3	3	**0.050**	1 U
207	3	118	3	0.6	1	**1.57**	3	44.2	3	0.059	2 J
205	3	126	3	0.7	1	**1.57**	3	49.5	3	**0.050**	1 U
185	3	108	3	1.84	3	**1.57**	3	52.2	3	0.082	2 J

0.0255	3	
0.0239	3	
0.0092	2	J
0.0149	3	
0.0142	3	
0.0128	3	
0.0146	3	
0.0153	3	
0.0163	3	
0.0050	1	U
0.00155	3	
0.0186	3	
0.0172	3	

7.54	3	0.125	3	61.7	3					**0.155**	3	8.61	3	0.363
3.06	3	0.075	2 J	27	2	**0.00075**	2	0.0015	2 J	**0.155**	3	3.2	2	0.043
32.9	3	0.071	2 J	64.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	4.87	3	0.774
13.7	3	0.142	3	18.6	3	0.0016	2 J	**0.00075**	2	**0.155**	3	2.97	3	0.797
13.4	3	0.149	3	27.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	2.59	3	0.36
21.1	3	0.11	2	67.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	12.6	3	0.301
11.5	3	0.12	2	70.4	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	11.1	3	0.209
9.67	3	0.12	2	54.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3	9.87	3	0.166
7.79	3	0.123	3	37.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.69	3	0.0789
7.79	3	0.083	2 J	37	2	**0.00075**	2	**0.00075**	2	**0.155**	3	5.83	3	0.086
9.42	3	0.115	3	36.2	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.22	3	0.081
4.95	3	0.099	2 J	36.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	7.12	3	**0.0155**
5.98	3	0.068	2 J	28.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	4.67	3	0.0553

3	459	3	16.2	3 J+	0.472	3	0.384	3	3.21	3	2.99	3	13	2	9.5	2
2 J	584	3	11.7	3	0.144	3	0.048	2 J	1.96	3	2	1	12	2	7.06	3
3 J+	1240	3	11.7	3	1.15	3	0.455	3	1.71	3	1.74	3	34.3	3	23.8	3
3	84.1	3	77.9	3	0.324	3	0.312	3	1.27	3	1.26	3	53.7	3	56.1	3
2	422	3	13.3	3 J+	0.393	3	0.188	3	2.05	3	1.25	3	33.9	3	26.3	3
3	4.82	3 J		R	0.101	3 J+	0.143	3 J+	1.73	3	1.69	3	20.2	3	20.3	3
3	14.9	3 J+	4.54	3 J+	0.153	3 J+	0.156	3 J+	1.72	3	1.55	3	16.6	3	16.5	3
3	43.9	3	5.08	3 J+	0.278	3	0.213	3	1.7	2	1.77	3	19.5	3	17.9	3
3 J	10.4	3 J+	6.87	3 J+	0.228	3	0.274	3	1.62	3	1.68	3	16.8	3	18.6	3
2 J	6.79	3	**1.00**	1 U	0.125	3	0.156	3	1.9	2	1.62	3	12.8	3	12.7	3
2 J	8.19	3 J+	3.43	3 J+	0.105	3	0.096	2	1.95	3	1.91	3	8.57	3	7.95	3 J+
3	6.17	3	2.72	3	0.125	3	0.123	3	1.77	3	1.69	3	7.43	3	7.64	3
3 J	25	2	6.35	3 J+	0.133	3	0.163	3	1.86	3	1.72	3	7.19	3	7.33	3

0.0257	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.62	3	8.71	3	**0.0075**	2	**0.0075**	2	16800	3
0.0627	3	**0.0125**	3	0.0441	3 J	**0.0075**	2	7.66	3	6.76	3	**0.0075**	2	**0.0075**	2	12000	2
0.0489	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	10.5	3	10.2	3	**0.0075**	2	**0.0075**	2	27100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	5.51	3	5.52	3	**0.0075**	2	**0.0075**	2	40700	3
0.0125	3	**0.0125**	3	0.0351	3 J	0.0284	3 J	5.83	3 J+	**2.50**	2 U	0.0188	3 J	**0.0075**	2	18000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	9.1	2	10.5	3	**0.0075**	2	**0.0075**	2	18300	3
0.0125	3	**0.0125**	3	0.0568	3	**0.0075**	2	12.5	3	12.6	3	**0.0075**	2	**0.0075**	2	17200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	14.3	3	13.4	3	**0.0075**	2	**0.0075**	2	23400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	6.38	3	10.4	3	**0.0075**	2	**0.0075**	2	14500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	13.5	3	11.5	3	**0.0075**	2	**0.0075**	2	13200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	15	2	13.3	3	**0.0075**	2	**0.0075**	2	13200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	11.7	3	13.2	3	**0.0075**	2	**0.0075**	2	12600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	12.6	3	12.8	3	**0.0075**	2	**0.0075**	2	12800	3

15600	3	14.8	3	2.5	2	0.535	3 J+	0.145	3 J+	6.3	2 J+	0.51	2 J+
11400	3	20	1	2.77	3	1.06	3	0.145	3	14.4	3	**0.250**	2 U
24800	3	47.8	3	3.03	3	1.52	3	0.125	3	15.6	3	1.19	3
42000	2	6.1	2	1.36	3 J+	0.217	3 J+	0.181	3 J+	3.33	3 J+	2.68	3 J+
12700	3	16.2	3	0.808	3	0.42	2	0.0667	3	4.33	3	0.752	3
18900	3	8.75	3	4.83	3	0.114	3	0.104	3	0.887	3	1.07	3
17400	3	15.2	3	3.69	3	0.162	3	0.102	3	1.15	3	0.393	3 J
20600	3	7.51	3	3.35	3	0.137	3	0.0914	3	2.03	3	0.727	3
16300	3	7.16	3	1.55	3	0.0931	3	0.052	2	1.08	3	0.745	3
12900	3	4.84	3	1.22	3	0.0732	3	0.0539	3	0.981	3 J+	**0.250**	2 U
12300	3	3.39	3	0.49	2 J+	0.061	2	0.0383	3	**0.250**	2 U	**0.250**	2 U
12800	3	5.84	3	1.71	3	0.107	3	0.0729	3	0.685	3	**0.250**	2 U
13700	3	6.53	3	1.44	3	0.124	3	0.0619	3	0.734	3 J+	**0.250**	2 U

469	3	**10.0**	1 U	0.517	3 J+	**0.050**	1 U	4730	3	4370	3	57.5	3	44.3	3
757	3	15.7	3 J	0.637	3	**0.0155**	3	3430	3	3070	3	62.9	3	32.4	3
2010	3	34	2	1.01	3	**0.0155**	3	6480	3	5710	3	57.5	3	9.67	3
41.8	3	15.8	3 J	0.0611	3 J	**0.0155**	3	406	3	396	3 J+	1.47	3 J+	0.332	3 J+
441	3	**3.10**	2	0.41	2	**0.0155**	3	2240	3	952	3	12.3	3	0.31	2 J+
40	1	44.6	3	0.0398	3 J	0.0457	3 J	3940	3	3960	3	4.02	3	4.19	3
64.7	3	**10.0**	1 U	0.127	3	0.0366	3 J	4200	2	4200	2	6.26	3	4.62	3
78.5	3	33	2	0.105	3	0.0364	3 J	1870	3	1970	3	4.04	3	2.32	3
41.5	3	**10.0**	1 U	0.0399	3 J	**0.0155**	3	1170	3	1360	3	2.64	3	1.87	3
28.3	3	11.9	3 J	0.0457	3 J	**0.0155**	3	3540	3	3180	3	4.06	3	3.28	3
26.2	3	**10.0**	1 U	0.0379	3 J	**0.0155**	3	4090	3	3940	3	4.7	2	3.25	3 J+
35.6	3	13.9	3 J	0.0584	3 J	**0.0155**	3	3860	3	4110	3	8.59	3	8.6	2
58.7	3	15.6	3 J	0.0872	3 J	**0.0155**	3	3840	3	4240	3	10.2	3	6.6	2

0.00522	3	0.00225	3 J	5.84	3	5.38	3	7.34	3 J+	1.37	3 J+	2180	3	1900	2	0.315	3
0.00442	3 J	**0.00075**	2	1.86	3	2.22	3	18	2	2.47	3	1420	3	1280	3	**0.155**	3
0.00535	3	**0.00075**	2	10.7	3	10.8	3	27.8	3	2.57	3	6080	3	5410	3	**0.155**	3
0.00228	3 J	0.0024	2 J	5.55	3	5.67	3	5.64	3	3.3	2	4290	3	4460	3	**0.155**	3
0.00267	3 J	**0.00075**	2	4.05	3	4.28	3	9.06	3	1.71	3	2680	3	2610	3	**0.155**	3
0.00194	3 J	**0.00075**	2	5.7	2	6.09	3	4.93	3	3.53	3	2870	3	3070	3	**0.155**	3
0.00250	2 U	**0.00075**	2	3.52	3	3.52	3	8.66	3	4.99	3	2270	3	2270	3	**0.155**	3
0.00276	3 J	0.00173	3 J	3.94	3	3.85	3	5.35	3	3.74	3	3490	3	3280	3	**0.155**	3
0.00164	3 J	**0.00075**	2	3.03	3	3.33	3	4.33	3	1.71	3	2410	3	2750	3	**0.155**	3
0.00163	3 J	**0.00075**	2	3.87	3	3.43	3	3.05	3	2.41	3	2460	3	2350	3	**0.155**	3
0.00075	2	**0.00075**	2	2.76	3	2.84	3	2.24	3 J+	1.1	2 J+	1690	3	1730	3	**0.155**	3
0.00163	3 J	**0.00075**	2	1.8	2	1.91	3	3.85	3	2.26	3	1500	2	1540	3	**0.155**	3
0.00075	2	**0.00075**	2	2.4	2	2.78	3	4.64	3 J+	2.2	2 J+	1490	3	1700	2	**0.155**	3

J	0.31	2 J
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4770	3	0.0088	2 J	**0.0031**	2	29900	3	22700	3	**0.0050**	1	**0.0050**	1	13.5	3
4880	3	**0.0031**	2	**0.0031**	2	17300	3	14400	3	**0.0050**	1	**0.0050**	1	4.44	3
4910	3	**0.0031**	2	**0.0031**	2	40800	3	40000	1	0.0132	3 J	**0.0050**	1	48.7	3
4320	3	0.0076	2 J	**0.0031**	2	20500	3	21900	3	**0.0050**	1	**0.0050**	1	5.51	3 J
3520	3 J+	0.0072	2 J	**0.0031**	2	17000	2	15000	2	**0.0050**	1	**0.0050**	1	4.34	3
3860	3	**0.0031**	2	**0.0031**	2	26200	3	30300	3	**0.0050**	1	**0.0050**	1	0.21	2 J
4080	3	**0.0031**	2	**0.0031**	2	25600	3	25600	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
3920	3	**0.0031**	2	**0.0031**	2	23800	3	23600	3	**0.0031**	2	**0.0031**	2	0.56	2
3970	3	0.0091	2 J	**0.0031**	2	14700	3 J		R	**0.0031**	2	**0.0031**	2	0.377	3
4340	3	**0.0031**	2	**0.0031**	2	21800	3	22100	3	**0.0031**	2	**0.0031**	2	0.0875	3 J
4910	3	**0.0031**	2	**0.0031**	2	27100	3	24800	3	**0.0031**	2	0.0074	2 J	0.0948	3 J
5020	3	**0.0100**	1 U	**0.0031**	2	20300	3	21300	3	**0.0031**	2	**0.0031**	2	0.156	3 J
5100	2	**0.0031**	2	**0.0031**	2	21300	3	22000	2	**0.0031**	2	**0.0031**	2	0.12	2 J

2.26	3	J+	11.7	3	9.97	3	3.59	3	J+	**1.55**	3 U
0.333	3		24.8	3	17.3	3	4.11	3		**1.55**	3 U
10.3	3		21.5	3	19.9	3	27.1	3		**1.55**	3 U
		R	28.1	3	28.7	3	**1.55**	3	U	3.36	3 J+
0.264	3	J+	22.1	3	15.6	3	11.1	3	J+	**1.55**	3 U
		R	8.7	2	8.94	3	**1.55**	3	U	**1.55**	3 U
0.100	1	U	8.17	3	8.15	3	**1.55**	3	U	**1.55**	3 U
0.316	3		11.7	3	11	2	3.75	3		**1.55**	3 U
0.138	3	J	10.6	3	12.3	3	**1.55**	3	U	**1.55**	3 U
0.092	2	J	8.99	3	8.71	3	**1.55**	3	U	**1.55**	3 U
0.102	3	J	6.94	3	6.42	3	**1.55**	3	U	**1.55**	3 U
0.0808	3	J	7.3	2	7.44	3	**1.55**	3	U	**1.55**	3 U
0.0881	3	J	8.19	3	7.36	3	**1.55**	3	U	**1.55**	3 U

	2	3	2	2	0	3	1	3	2	3	1	3
Mean	9.69		1.80		291		-24.2		4.48		60.1	
Median	9.65		1.00		231		-10.2		4.14		54.3	
St. Deviation	1		2		159		107		1		19	
# of values	12		14		13		14		14		13	
Minimum	7.52		0.47		170		-291.8		1.92		43.4	
Maximum	11.37		8.71		721		139.1		6.51		103.0	
Lowest fifth percentile	8		1		178		-192		3		44	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	83%		0%		0%		0%		0%		0%	
% of DWS exceedences	83%		0%		0%		0%		0%		0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0	3	0	3	2	3	2	3	1	3	3	2								
232.0		139		2.9100		1.57		46		0.0710		NA		NA					
205.0		126		1.1300		1.57		43		0.0500		NA		NA					
105		37		3		0		19		0		NA		NA					
13		13		13		13		13		13			0		0				
28.1		93		0.0805		1.57		27		0.0480		NA		NA					
463.0		205		9.4900		1.57		105		0.1720		NA		NA					
108		94		0		2		30		0		NA		NA					
0		0		2		13		0		6									
				15%		100%				46%									
				1						5									
NA		NA		NA		NA		>=20		NA			NA		NA				
NA		500		NA		NA		NA		10			NA		NA				
0%		0%		0%		0%		0%		0%			NA		NA				
0%		0%		0%		0%		0%		0%			NA		NA				

4	3		
0.0145		NA	
0.0149		NA	
0		NA	
13			0
0.0016		NA	
0.0255		NA	
0		NA	
2			
15%			
1			
NA			NA
NA			NA
0%			NA
0%			NA

2	3	2	2	1	3	5	2	5	2	3	3	2	3	3
11.45		0.110		43.7		0		0		0.155		6.49		0.256
9.42		0.120		37.0		0		0		0.155		5.69		0.166
8		0		18		0		0		0		3		0
13		13		13		12		12		13		13		13
3.06		0.068		18.6		0.00075		0.00075		0.155		2.59		0.016
32.90		0.149		70.4		0.0016		0.0025		0.155		12.60		0.797
4		0		24		0		0		0		3		0
0		0		0		11		11		13		0		1
						92%		92%		100%				8%
		5				1		1						5
230		NA		NA		NA		0.0052		NA		NA		2.40
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	3	3	3	3	2	3	2	3	1	3	1	3	
	224		13.4		0.287		0.209		1.88		1.76		20		17.8		
	25		6.6		0.153		0.163		1.77		1.69		17		16.5		
	368		21		0		0		0		0		14		13		
	13		12		13		13		13		13		13		13		
	5		1.0		0.101		0.048		1.27		1.25		7		7.1		
	1240		77.9		1.150		0.455		3.21		2.99		54		56.1		
	6		2		0		0		1		1		7		7		
	0		1		0		0		0		0		0		0		
			8%														
							1										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	31%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	1	3	1	3	4	2	4	2	-2	3
0.0202		0.0125		0.0162		0.0091		10.30		10.10		0.0084		0.0075		18400	
0.0125		0.0125		0.0075		0.0075		10.50		10.50		0.0075		0.0075		16800	
0		0		0		0		3		3		0		0		8000	
13		13		13		13		13		13		13		13		13	
0.0125		0.0125		0.0075		0.0075		5.51		2.50		0.0075		0.0075		12000	
0.0627		0.0125		0.0568		0.0284		15.00		13.40		0.0188		0.0075		40700	
0		0		0		0		6		4		0		0		12360	
10		13		10		12		0		1		12		13		0	
77%		100%		77%		92%				8%		92%		100%			
2				2		1						1					
NA		NA		NA		NA		NA		NA		0.147		0.138		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	2	3	3	3	4	3	2	3	3	3
17800		12.6		2.2		0.356		0.095		4.0		0.72	
15600		7.5		1.7		0.137		0.091		1.2		0.51	
8200		12		1		0		0		5		1	
13		13		13		13		13		13		13	
11400		3.4		0.5		0.061		0.038		0.3		0.25	
42000		47.8		4.8		1.520		0.181		15.6		2.68	
11940		4		1		0		0		1		0	
0		0		0		0		0		1		5	
										8%		38%	
												1	
NA		10.98		10.56276		NA		NA		4.604		4.420	
NA		100		NA		NA		NA		NA		NA	
0%		38%		0%		0%		0%		23%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	4	3	-1	3	-1	3	2	3	2	3
315		18.0		0.244		0.024		3370		3190		18.2		9.4	
59		14.0		0.087		0.016		3840		3940		6.3		4.2	
560		12		0		0		1600		1570		24		13	
13		13		13		13		13		13		13		13	
26		3.1		0.038		0.016		406		396		1.5		0.3	
2010		44.6		1.010		0.050		6480		5710		62.9		44.3	
27		7		0		0		864		730		2		0	
0		5		0		10		0		0		0		0	
		38%				77%									
		5		7		3									
1000		1000		1.111		1.013		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
8%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		23%		0%	

5	3	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3
0.00258		0.00107		4.23		4.32		8.07		2.57		2680		2640		0.167	
0.00228		0.00075		3.87		3.52		5.35		2.41		2410		2350		0.155	
0		0		2		2		7		1		1320		1190		0	
13		13		13		13		13		13		13		13		13	
0.00075		0.00075		1.80		1.91		2.24		1.10		1420		1280		0.155	
0.00535		0.00240		10.70		10.80		27.80		4.99		6080		5410		0.315	
0		0		2		2		3		1		1462		1436		0	
3		10		0		0		0		0		0		0		12	
23%		77%														92%	
8		3														1	
0.77		0.77		NA		NA		25.92		25.85		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		8%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.17	
0.16	
0	
13	
0.16	
0.31	
0	
12	
92%	
1	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	3	3
4430		0.0052		0.0031		23600		23600		0.0048		0.0045		6.0	
4340		0.0031		0.0031		21800		22400		0.0050		0.0050		0.4	
530		0		0		6800		6700		0		0		13	
13		13		13		13		12		13		13		13	
3520		0.0031		0.0031		14700		14400		0.0031		0.0031		0.1	
5100		0.0100		0.0031		40800		40000		0.0132		0.0074		48.7	
3724		0		0		16080		14730		0		0		0	
0		9		13		0		0		12		12		1	
		69%		100%						92%		92%		8%	
		4								1		1		4	
NA		0.913381778		0.776		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	3	1	3	2	3	2	3	2	3		
1.28		13.8		12.45		4.77		1.69			
0.14		10.6		9.97		1.55		1.55			
3		8		6		7		1			
11		13		13		13		13			
0.08		6.9		6.42		1.55		1.55			
10.30		28.1		28.70		27.10		3.36			
0		7		7		2		2			
1		0		0		8		12			
9%						62%		92%			
5											
NA		NA		NA		59.48		58.65			
NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%			

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-69S																
Sample Date																
08/23/10	7.58	3	12.17	4		36	2 Q		110.6	4		3.28	3	14.7	3	
08/28/11	5.27	3	16.87	4					135.8	4		3.69	3	12	2	
10/26/11	6.69	3	13.75	4		31	2		170.7	4		2.24	3	11.3	3	
05/22/12	5.61	3	13.58	4		39	2		61.9	3		2.37	3			

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
34.7	3		31	2 J		46.5	3		**1.57**	3		13.9	3		**0.050**	1 U						
33.6	3		24	2		0.816	3		3.18	3 J		13.2	3		**0.050**	1 U						
32.7	3		22	2		1.08	3		**1.57**	3		13	2		**0.050**	1 U						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0486	3				
	0.0222	3				
	0.0201	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

result > crit			result > crit			result > crit						result > crit												depends on field pH and field Temp result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
0.505	3		0.07	1 J		0.985	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**
0.545	3		0.066	2 J		0.803	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.613	3		0.11
0.359	3		0.065	2 J		0.706	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum							**Antimony**						**Arsenic**						**Barium**			
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	818	3	8.27	3	J+	0.492	3	**0.0075**	2	0.904	3	0.321	3	J	12.3	3	1.93	3	J+				
		2	61.5	3	5.79	3	J+	0.0372	3	J	0.0189	3	J	0.473	3	J	0.367	3	J	3.64	3	2.78	3		
		3	90.9	3	3.22	3	J+	0.135	3	0.0298	3	J	0.448	3	J	0.398	3	J	3.68	3	2.5	2	J+		

| | | |

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										depends on Hardness		depends on Hardness																	
result > crit				result > crit						result > crit		result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N		MN_NSF	MN_NVF	MN_F		MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**							
Total				Dissolved			Total					Dissolved			Total				Dissolved		Total					Dissolved		
µg/L				µg/L			µg/L					µg/L			µg/L				µg/L		µg/L					µg/L		
969	3		**3.10**	2			1.09	3				**0.0155**	3		941	3		570	2		48.4	3		0.233	3	J+		
64.8	3		11.8	3	J		0.0766	3	J			0.0324	3	J	765	3		780	2		1.89	3		0.335	3			
97.8	3		**10.0**	1	U		0.0762	3	J			**0.0155**	3		726	3		666	3		2.88	3		0.21	2			

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
						Vanadium							**Zinc[4]**					
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
0.050	1		1.64	3		0.502	3	J			15.6	3	J+		**1.55**	3	U	
0.226	3		0.662	3	J	0.318	3	J			3.55	3			**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				3.12	3			**1.55**	3	U	

	2	3	2	4	0	2	1	4	2	3	1	3			
Mean	6.29		14.09		35		119.8		2.90		12.7				
Median	6.15		13.67		36		123.2		2.83		12.0				
St. Deviation	1		2		4		46		1		2				
# of values	4		4		3		4		4		3				
Minimum	5.27		12.17		31		61.9		2.24		11.3				
Maximum	7.58		16.87		39		170.7		3.69		14.7				
Lowest fifth percentile	5		12		32		69		2		11				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	50%		0%		0%		0%		0%		0%				
% of DWS exceedences	50%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		2	3		2	3		1	3		3	2						
33.7			26			16.1			2.11			13.4			0.050			NA			NA	
33.6			24			1.1			1.57			13.2			0.050			NA			NA	
1			5			26			1			1			0			NA			NA	
3			3			3			3			3			3				0			0
32.7			22			0.8			1.57			13.0			0.050			NA			NA	
34.7			31			46.5			3.18			13.9			0.050			NA			NA	
33			22			1			2			13			0			NA			NA	
0			0			0			2			0			3							
									67%						100%							
									1													
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			100%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3		
0.0303		NA	
0.0222		NA	
0		NA	
3			0
0.0201		NA	
0.0486		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

NO3N_NVF_P_N	P_NSF_P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
Total Phosphorus		**Orthophosphate**		
mg/L		mg/L		

| | | |

| | | |

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3		2	2		3	3		4	3		4	2			3	3		2	2	
3240			0.82			0.42			0.27			0.0074				2.38			0.250		
3210			0.50			0.37			0.05			0.0050				0.69			0.250		
110			1			0			0			0				3			0		
3			3			3			3			3				3			3		
3150			0.37			0.28			0.04			0.0050				0.25			0.250		
3370			1.58			0.61			0.71			0.0123				6.21			0.250		
3156			0			0			0			0				0			0		
0			0			0			0			2				1			3		
												67%				33%			100%		
												1									
NA			10.98			10.56276			NA			NA				1.455			1.397		
NA			100			NA			NA			NA				NA			NA		
0%			0%			0%			0%			0%				33%			0%		
0%			0%			0%			0%			0%				0%			0%		
					depends on Hardness			depends on Hardness									depends on Hardness				
					result > crit			result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3	0	2	4	3	4	3	0	3	-1	2	2	3	3	3								
377		8.00		0.41		0.0211		811		670		17.7		0.259									
98		10.00		0.08		0.0155		765		670		2.9		0.233									
513		5		1		0		115		110		27		0									
3		3		3		3		3		3		3		3									
65		3.10		0.08		0.0155		726		570		1.9		0.210									
969		11.80		1.09		0.0324		941		780		48.4		0.335									
68		4		0		0		730		580		2		0									
0		2		0		2		0		0		0		0									
		67%				67%																	
		1		2		1																	
1000		1000		0.200		0.221		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		33%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit								result > crit									

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.00118		0.00075		0.230		0.1430		0.76		0.221		454		406		0.155									
0.00075		0.00075		0.200		0.1620		0.34		0.216		380		367		0.155									
0		0		0		0		1		0		128		85		0									
3		3		3		3		3		3		3		3		3									
0.00075		0.00075		0.181		0.0943		0.26		0.136		379		347		0.155									
0.00205		0.00075		0.308		0.1720		1.69		0.310		602		504		0.155									
0		0		0		0		0		0		379		349		0									
2		3		0		0		0		1		0		0		3									
67%		100%								33%						100%									
1								2		2															
0.77		0.77		NA		NA		8.29		8.26		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	3	
	0.155	
	0.155	
	0	
	3	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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P-08-70D

Sample Date												
08/28/09			3.65	3	120	2		R	3.25	3	43.8	3
10/14/09	8.05	3	3.83	3	82	2	-142.2	4	3.13	3	39.2	3
03/19/10	8.44	3	2.76	3	91	2	118.8	4	2.73	3	40.4	3
05/18/10	7.8	2	4.01	3	101	3 Q	197.6	4	2.45	3	35.6	3
08/20/10	8.35	3	3.34	3 Q	183	3	120	2	3.2	2	39.2	3
10/23/10	8.09	3	3.81	3	92	2	-66.6	3	2.62	3	45.3	3
03/29/11	8.08	3	3.71	3	78	2 Q	166.5	4	2.64	3	38	2
05/25/11	7.92	3	4.38	3	93	2	194.9	4	3.05	3	37.8	3
08/29/11	8.46	3	8.28	3			176.4	4	4.33	3	39.9	3
10/26/11	8.8	2	3.33	3	99	2	51.5	3	2.17	3	39.8	3
03/25/12	8.53	3	3.01	3	102	3	69.7	3	2.5	2	39.5	3
05/21/12	7.78	3	2.13	3	93	2	1.2	2	2.87	3	43.2	3
08/23/12	8.91	3	4.46	3	100	1	158.7	4	3.28	3	39.6	3
10/10/12	9	1	1.71	3	102	3	114.5	4	3	1	42.7	3

103	3	60	1	7.85	3	**1.57**	3	45.2	3	0.107	3
101	3	57.5	3	1.98	3	**1.57**	3	45.4	3	0.148	3
112	3	68.8	3	0.44	2 J	**1.57**	3	47.3	3	0.137	3
98.5	3	66	2	1.06	3	14.9	3	43.4	3	**0.0155**	3
97.9	3	60	1	**0.0765**	3	**1.57**	3	47.1	3	**0.050**	1 U
102	3	46	2	**0.0765**	3	**1.57**	3	46.2	3	**0.050**	1 U
99.5	3	36	2	0.4	1 J	**1.57**	3	46.2	3	**0.050**	1 U
92.9	3	62	2	**0.0745**	3	3.19	3 J	43.9	3	**0.0155**	3
101	3	64	2	0.2	1 J	**1.57**	3	44.4	3	**0.050**	1 U
103	3	57	2	**0.0745**	3	**1.57**	3	44.1	3	**0.050**	1 U
98.8	3	63	2	0.297	3 J	**1.57**	3	43	2	0.118	3 J-
91.3	3	56	2	0.196	3 J	**1.57**	3	41.3	3	0.052	2 J
99.4	3	63	2	0.6	1	**5.0**	1 U	43.9	3	0.235	3
100	1	57	2	**0.075**	2	**1.57**	3	47.4	3	0.0495	3 J

0.0062	2	J
0.00155	3	
0.00155	3	
0.0294	3	
0.01	1	
0.0083	2	J
0.0114	3	
0.008	1	J
0.00155	3	
0.0075	2	J
0.00155	3	
0.00155	3	
0.0092	2	J
0.0062	2	J

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.612	3	0.033	2 J	2.78	3					0.44	2 J	0.243	3 J	0.049
0.78	2	0.031	2 J	2.26	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	0.233
1.02	3	0.031	2 J	2.41	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.154
0.592	3	**0.0155**	3	2.05	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.0372
0.8	1	0.073	2 J	2.8	2	0.0028	2 J	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.117
0.863	3	0.084	2 J	2.74	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.172	3 J	0.112
0.968	3	**0.050**	1 U	2.33	3	**0.00075**	2	**0.00075**	2	**0.155**	3	7.62	3	0.113
0.817	3	0.077	2 J	2.01	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.0531
1.13	3	0.063	2 J	2.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.223
1.18	3	0.079	2 J	2.73	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.16
0.927	3	0.047	2 J	2.32	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.266	3 J	0.111
0.523	3	0.079	2 J	1.77	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.932	3	0.065	2 J	2.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.0979
1.03	3	0.036	2 J	2.9	2	**0.00075**	2	**0.00075**	2	**0.155**	3	0.267	3 J	0.221

2 J	303	3	16.7	3 J+	0.127	3	0.0972	3	3.46	3	3.57	3	10.1	3	7.17	3
3	18.6	3	5.2	2	0.176	3	0.169	3	3.5	2	3.65	3	6.51	3	3.89	3
3 J+	15.3	3	9.3	2	0.188	3	0.183	3	3.56	3	3.91	3	3.69	3	2.98	3
3 J	27.7	3	3.34	3	0.132	3	0.156	3	2.95	3	3.33	3	3.52	3 J+	1.77	3 J+
3	4.83	3 J+	2.99	3 J+	0.169	3	0.177	3	3.1	2	3.28	3	9.17	3	9.08	3
3	4.99	3 J+	4.35	3 J+	0.196	3	0.198	3	3.71	3	3.62	3	7.95	3	7.13	3
3	5.69	3 J+	3.22	3 J+	0.1	1 J+	0.0985	3 J+	3.49	3	3.42	3	3.19	3	2.44	3
3 J	4.22	3 J+	4.23	3 J+	0.167	3 J+	0.157	3 J+	3.13	3	3.12	3	2.24	3 J+	2.11	3 J+
3	15.6	3 J+	12.8	3 J+	0.254	3	0.228	3	3.45	3	3.05	3	5.32	3	5.64	3
2	8.95	3 J+	8.03	3 J+	0.225	3	0.223	3	3.33	3	3.2	2	4.4	2	4.65	3
3	6.61	3	5.46	3	0.203	3	0.204	3	3.08	3	3.15	3	5.11	3	5.22	3
3	3.31	3 J+	3.04	3 J+	0.142	3	0.132	3	2.49	3	2.5	2	3.82	3 J+	3.66	3 J+
3 J	5.31	3	5.07	3	0.19	2	0.192	3	2.92	3	2.92	3	15	2	14.8	3
3	4.21	3 J+	2.99	3 J+	0.218	3	0.239	3	3.01	3	3.06	3	21.7	3	22.5	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	14200	3
0.0125	3	**0.0125**	3	**0.0075**	2		R	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	11600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	13000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	15200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	0.303	3 J		R	2.56	3 J	**1.25**	3	**0.0075**	2	**0.0075**	2	12500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.76	3 J	2.96	3 J	**0.0075**	2	**0.0075**	2	13000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	13300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.6	2 J	1.73	3 J	**0.0075**	2	**0.0075**	2	13100	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	14500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	13300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	14300	3

	13600	3	2.43	3	0.219	3	0.0831	3	J+	0.0333	3	J+	0.904	3	J+	**0.250**	2	U
	14000	2	0.5	1	0.209	3	0.0501	3		0.028	2		**0.250**	2	U	**0.250**	2	U
	14100	3	1.52	3	0.401	3	0.0512	3		0.0387	3		0.392	3	J	**0.250**	2	U
J+	13600	3	J+	0.349	3	**0.100**	1	U	0.0358	3	J+	0.026	2	J+	**0.250**	2	U	**0.250**	2	U
	13300	3	0.562	3	J+	0.208	3	J+	0.0581	3	J+	0.0601	3	J+	**0.250**	2	U	**0.250**	2	U
	14300	3	0.743	3	**0.050**	1	0.0642	3		0.0558	3		**0.250**	2	U		R
	12300	3	0.791	3	0.338	3	0.0425	3		0.0348	3		**0.250**	2	U	**0.250**	2	U
	12200	3	1	1	0.602	3	0.0312	3		0.0278	3		0.18	2	J	0.138	3	J
	12300	3	2.08	3	0.7	1	0.0587	3		0.0507	3		**0.250**	2	U	**0.250**	2	U
	13500	3	1.36	3	0.508	3	0.0428	3		0.0388	3		0.763	3		**0.250**	2	U
	13100	3	1.47	3	0.993	3	0.0465	3		0.0486	3		0.653	3	J+	**0.250**	2	U
	14500	3	1.13	3	J+	0.282	3	J+	0.0248	3		0.0241	3		**0.250**	2	U	**0.250**	2	U
	13400	3	0.803	3	0.122	3	J	0.083	2		0.0782	3		**0.250**	2	U	0.632	3	
	14600	3	0.681	3	0.262	3	0.108	3		0.117	3		**0.250**	2	U	0.573	3	J+

73.2	3	**10.0**	1 U	0.12	2 J+	**0.0155**	3	2010	3	1790	3	5.17	3 J+	2.54	3 J+
9.16	3 J	7.29	3 J	**0.0155**	3	**0.0155**	3	1660	3	1690	3	2.72	3	1.73	3
13.5	3 J	8.87	3 J	**0.0155**	3	**0.0155**	3	1830	3	1890	3	2.03	3	1.17	3
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	1610	3 J+	1690	3 J+	2.5	2 J+	1.29	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1650	3	1720	3	1.02	3 J+	0.949	3 J+
6.76	3 J	**3.10**	2	**0.0155**	3		R	1790	3	1640	3	0.996	3 J+	0.762	3 J+
7.29	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	1640	3	1600	2	0.687	3	0.509	3 J+
6.64	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1630	3	1650	3	0.463	3 J+	0.403	3 J+
13.9	3 J	6.65	3 J	**0.0155**	3	**0.0155**	3	1820	3	1610	3	1.4	2	0.259	3
10.0	1 U	**10.0**	1 U	0.0331	3 J	**0.0155**	3	1610	3	1640	3	0.52	2	0.249	3
10.5	3 J	7.95	3 J	0.0368	3 J	**0.0155**	3	1640	3	1720	3	0.424	3 J+	0.247	3 J+
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1700	2	1710	3	0.584	3 J+	0.568	3 J+
7.22	3 J	13.6	3 J	**0.0155**	3	**0.0155**	3	1570	3	1570	3	0.456	3 J+		R
10.0	1 U	8.48	3 J	**0.0155**	3	**0.0155**	3	1720	3	1730	3	0.407	3 J+	0.358	3 J+

0.00301	3 J	**0.00075**	2	2.84	3	2.93	3	1.12	3 J+	**0.310**	2 U	1020	3	661	3	**0.155**	3
0.00161	3 J	**0.00075**	2	2.77	3	2.85	3	0.582	3 J	0.42	2 J	900	1	474	3	**0.155**	3
0.00204	3 J	0.00152	3 J	3.07	3	3.24	3	0.929	3	0.719	3	1200	2	814	3	**0.155**	3
0.00415	3 J	0.00191	3 J	2.34	3 J+	2.36	3 J+	**0.310**	2 U	**0.310**	2 U	990	2 J+	330	2 J+	**0.155**	3
0.00191	3 J	0.00183	3 J	2.54	3	2.65	3	0.672	3	**0.310**	2 U	678	3	676	3	**0.155**	3
0.00075	2	**0.00075**	2	2.9	2	2.79	3	0.812	3	0.792	3	665	3	582	3	**0.155**	3
0.00075	2	**0.00075**	2	2.63	3	2.53	3	0.689	3	0.579	3 J	527	3	422	3	**0.155**	3
0.00075	2	**0.00075**	2	2.3	2	2.22	3	0.933	3	0.777	3	455	3	297	3	**0.155**	3
0.00075	2	**0.00075**	2	2.89	3	2.74	3	1.38	3	1.05	3	1220	3	1270	3	**0.155**	3
0.00075	2	**0.00075**	2	2.67	3	2.71	3	0.906	3	0.783	3	821	3	893	3	**0.155**	3
0.00075	2	**0.00075**	2	2.58	3	2.62	3	1.06	3	1	1	729	3	717	3	**0.155**	3
0.00075	2	**0.00075**	2	1.7	2	1.78	3	0.88	2 J+	0.852	3 J+	274	3	275	3	**0.155**	3
0.00075	2	**0.00075**	2	2.34	3	2.37	3	1.02	3	0.83	2	739	3	802	3	**0.155**	3
0.00075	2	**0.00075**	2	2.61	3	2.59	3	0.887	3 J+	0.899	3 J+	851	3	905	3	**0.155**	3

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Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

5690	3	0.0065	2 J	**0.0031**	2	4180	3	3260	3	**0.0050**	1	**0.0050**	1	0.932	3 J+
5570	3	**0.0031**	2	**0.0031**	2	3770	3	2920	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6100	2	**0.0031**	2	**0.0031**	2	4690	3	3940	3	**0.0050**	1	**0.0050**	1	0.153	3 J
6120	3 J+	**0.0031**	2	**0.0031**	2	3960	3 J+	2860	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5580	3	**0.0031**	2	**0.0031**	2	3420	3	3450	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5750	3 J+	**0.0031**	2	**0.0031**	2	3340	3 J+	3000	1 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5520	3	**0.0031**	2	**0.0031**	2	2980	3	2760	3	**0.0050**	1	**0.0050**	1	0.497	3 J+
5850	3	0.152	3	**0.0031**	2	2840	3	2700	2	**0.0050**	1	**0.0050**	1	**0.100**	1 U
5910	3	**0.0031**	2	**0.0031**	2	4790	3	4560	3	**0.0031**	2	**0.0031**	2	0.103	3 J
5600	2	**0.0031**	2	**0.0031**	2	3430	3	3600	2	**0.0031**	2	**0.0031**	2	0.0854	3 J
5990	3	**0.0031**	2	**0.0031**	2	3460	3	3520	3	**0.0031**	2	**0.0031**	2	0.111	3 J
6440	3	**0.0031**	2	**0.0031**	2	2870	3	2880	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5800	2	**0.0031**	2	**0.0031**	2	3370	3	3300	2	**0.0031**	2	**0.0031**	2	0.0686	3 J
6200	2	**0.0031**	2	**0.0031**	2	3790	3	3960	3	0.0099	2 J	**0.0031**	2	0.0718	3 J

0.100	1 U	0.818	3 J	0.487	3 J	**1.55**	3 U	**1.55**	3 U
0.108	3 J	0.539	3 J	0.584	3 J	**1.55**	3 U	**1.55**	3 U
0.172	3 J	0.939	3 J	0.774	3 J	**1.55**	3 U	**1.55**	3 U
0.050	1	0.809	3 J	0.475	3 J	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.632	3 J	0.414	3 J	4.53	3 J+	3.82	3 J+
0.287	3 J+	0.692	3 J	0.636	3 J	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	55.3	3	**1.55**	3 U
0.0733	3 J	1.35	3	1.47	3	1.37	3 J	1.89	3 J
0.0310	2	0.533	3 J	0.572	3 J	**1.55**	3 U	**1.55**	3 U
0.097	2 J	0.94	2 J	0.901	3 J	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.703	3 J	0.657	3 J	**1.55**	3 U	3.11	3
0.0310	2	1.08	3	1.05	3	2.37	3 J	1.38	3 J

	2	3	2	3	0	2	1	4	2	3	1	3					
Mean	18.18		3.74		103		-31289.5		2.94		40.3						
Median	18.18		3.68		99		-312119.5		2.94		39.7						
St. Deviation	0		2		26		105		1		3						
# of values	13		14		13		13		14		14						
Minimum	18.18		1.71		78		--312142.5		2.17		35.6						
Maximum	19.18		8.28		183		-312198.5		4.33		45.3						
Lowest fifth percentile	8		2		80		-97		2		37						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	31%		0%		0%		0%		0%		0%						
% of DWS exceedences	31%		0%		0%		0%		0%		0%						

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
1	3		0	2		3	3		2	3		1	3		4	3						
100			58			0.96			2.88			44.9			0.081			NA			NA	
100			60			0.25			1.57			44.8			0.050			NA			NA	
5			8			2			4			2			0			NA			NA	
14			14			14			14			14			14				0			0
91			36			0.07			1.57			41.3			0.016			NA			NA	
112			69			7.85			14.90			47.4			0.235			NA			NA	
92			43			0			2			42			0			NA			NA	
0			0			5			12			0			7							
						36%			86%						50%							
						5			1						2							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit						result <20			result > crit							

	5	3					
	0.0074		NA				
	0.0069		NA				
	0		NA				
	14			0			
	0.0016		NA				
	0.0294		NA				
	0		NA				
	5						
	36%						
	6						
	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
	Total Phosphorus				**Orthophosphate**		
		mg/L				mg/L	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
	Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**		**Ammonia[3]**
	mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		3
0.870			0.055			2.45			0			0			0.18			0.760			0.121
0.895			0.057			2.50			0			0			0.16			0.250			0.113
0			0			0			0			0			0			2			0
14			14			14			13			13			14			14			14
0.523			0.016			1.77			0.00075			0.00075			0.16			0.075			0.016
1.180			0.084			2.90			0.0028			0.00075			0.44			7.620			0.233
1			0			2			0			0			0			0			0
0			2			0			12			13			13			9			1
			14%						92%			100%			93%			64%			7%
			12						1						1			4			4
230			NA			NA			NA			0.0052			NA			NA			3.21
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

| | | |

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3										
0.0125		0.0125		0.0286		0.0075		1.46		1.39		0.0075		0.0075		13300											
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		13200											
0		0		0		0		1		1		0		0		900											
14		14		14		12		14		14		14		14		14											
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		11600											
0.0125		0.0125		0.3030		0.0075		2.76		2.96		0.0075		0.0075		15200											
0		0		0		0		1		1		0		0		12185											
14		14		13		12		11		12		14		14		0											
100%		100%		93%		100%		79%		86%		100%		100%													
								3		2																	
NA		NA		NA		NA		NA		NA		0.130		0.123		NA											
4		NA		NA		NA		NA		NA		5		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
												depends on Hardness		depends on Hardness													
result > crit												result > crit		result > crit													
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			3	3			3	3	4	3			4	3	2	2			2	2
13500				1.10				0.357		0.0557				0.0473		0.370				0.300	
13600				0.90				0.272		0.0507				0.0388		0.250				0.250	
800				1				0		0				0		0				0	
14				14				14		14				14		14				13	
12200				0.35				0.050		0.0248				0.0241		0.180				0.138	
14600				2.43				0.993		0.1080				0.1170		0.904				0.632	
12265				0				0		0				0		0				0	
0				0				2		0				0		9				10	
								14%								64%				77%	
								1								2				1	
NA				10.98				10.56276		NA				NA		3.992				3.832	
NA				100				NA		NA				NA		NA				NA	
0%				0%				0%		0%				0%		0%				0%	
0%				0%				0%		0%				0%		0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
	Iron						**Lead[4]**						**Magnesium**						**Manganese**				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
1	3	1	2	4	3	4	3	-1	3	-1	3	3	3	3	3								
13.7		7.5		0.03		0.0155		1710		1690		1.38		0.85									
10.0		8.2		0.02		0.0155		1660		1690		0.84		0.57									
17		3		0		0		120		80		1		1									
14		14		14		13		14		14		14		13									
3.1		3.1		0.02		0.0155		1570		1570		0.41		0.25									
73.2		13.6		0.12		0.0155		2010		1890		5.17		2.54									
5		3		0		0		1596		1590		0		0									
5		8		11		13		0		0		0		0									
36%		57%		79%		100%																	
8		6		2																			
1000		1000		0.898		0.841		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit						result > crit											

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				
			µg/L						µg/L						µg/L						µg/L				
5	2	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3								
0.00139		0.00097		2.58		2.60		0.87		0.688		791		651		0.155									
0.00075		0.00075		2.62		2.64		0.90		0.780		780		669		0.155									
0		0		0		0		0		0		270		280		0									
14		14		14		14		14		14		14		14		14									
0.00075		0.00075		1.70		1.78		0.31		0.310		274		275		0.155									
0.00415		0.00191		3.07		3.24		1.38		1.050		1220		1270		0.155									
0		0		2		2		0		0		392		289		0									
9		11		0		0		1		3		0		0		14									
64%		79%						7%		21%						100%									
5		3						1		2															
0.77		0.77		NA		NA		22.51		22.44		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	14	
	0.155	
	0.155	
	0	
	14	
	100%	

	4.6
	NA
	0%
	0%

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		4	3		
5870			0.0140			0.0031			3640			3340			0.0047			0.0042			0.168			
5830			0.0031			0.0031			3450			3280			0.0050			0.0050			0.079			
280			0			0			610			540			0			0			0			
14			14			14			14			14			14			14			14			
5520			0.0031			0.0031			2840			2700			0.0031			0.0031			0.031			
6440			0.1520			0.0031			4790			4560			0.0099			0.0050			0.932			
5553			0			0			2860			2739			0			0			0			
0			12			14			0			0			13			14			6			
			86%			100%									93%			100%			43%			
			1												1						6			
NA			0.685348946			0.583			NA			NA			NA			NA			NA			
NA			NA			NA			NA			NA			2			NA			NA			
0%			0%			0%			0%			0%			0%			0%			0%			
0%			0%			0%			0%			0%			0%			0%			0%			
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tir**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.083		0.679		0.606		5.65		1.84															
0.050		0.698		0.578		1.55		1.55															
0		0		0		14		1															
14		14		14		14		14															
0.031		0.155		0.155		1.37		1.38															
0.287		1.350		1.470		55.30		3.82															
0		0		0		1		1															
9		3		3		10		10															
64%		21%		21%		71%		71%															
4		9		9		2		2															
NA		NA		NA		51.64		50.91															
NA		NA		NA		NA		NA															
0%		0%		0%		7%		0%															
0%		0%		0%		0%		0%															
						depends on Hardness		depends on Total Zn															
						result > crit		result > crit															
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-08-70S

Sample Date													
08/28/09			7.21	3	53	2			R	3.26	3	16.5	3
10/14/09	6.43	3	6.56	3	36	2		-59.1	3	2.89	3	17.3	3
03/19/10	5.81	3	4.84	3			R	123.1	4	2.7	2	13.8	3
05/18/10	6.14	3	3.19	3	40	1	Q	202.9	4	2.36	3	12.9	3
08/20/10	5.53	3	7.68	3 Q	79	2	Q	193.3	4	3.29	3	14.7	3
10/23/10	5.24	3	5.97	3	43	2	Q	-7.1	2	2.65	3	17.9	3
03/29/11	5.3	2	7.89	3	29	2	Q	201.7	4	2.2	2	12	2
05/25/11	5.86	3	10.33	4	39	2		203.4	4	2.28	3	13.3	3
08/29/11	5.41	3	11.53	4				120.8	4	3.03	3	13.9	3
10/27/11	6.84	3	8.15	3	39	2		17.2	3	2.3	2	16.1	3
03/25/12	5.97	3	5.78	3	36	2		68.1	3	1.26	3	13.9	3
05/21/12	6.2	2	4.35	3	38	2		192	3	2.26	3	15.8	3
08/23/12	6.14	3	8.78	3	37	2		86.3	3	3.22	3	13.9	3
10/10/12	5.97	3	2.54	3	40	1		145.7	4	2.93	3	15.4	3

46.2	3	35	2	0.729	3	6.7	2 J	20.3	3	**0.050**	1 U
49.1	3	32.5	3	**0.073**	2	14.4	3	23.9	3	0.0415	3 J
473	3	58.8	3	0.202	3 J	56.6	3	**1.55**	3	0.0655	3 J
41.3	3	51	2	**0.078**	2	14.9	3	33.3	3	0.057	2 J
39.6	3	27	2	**0.076**	2	8.13	3 J	17.6	3	0.16	2
44.4	3	23	2	**0.076**	2	7.93	3 J	20.4	3	**0.050**	1 U
36.6	3	**1.55**	3	**0.081**	2	**1.57**	3	15.5	3	**0.050**	1 U
38.7	3	28	2	**0.0745**	3	11.2	3	16.7	3	**0.0155**	3
38.8	3	33	2	0.513	3	5.51	3 J	16.1	3	**0.050**	1 U
42.3	3	32	2	**0.0745**	3	5.67	3 J	16.9	3	**0.050**	1 U
37.5	3	29	2	1.09	3	5.88	3 J	15.1	3	**0.050**	1 U
38.1	3	19	2	**0.0735**	3	5.19	3 J	15.6	3	0.051	2 J
37.9	3	32	2	0.5	1	**5.0**	1 U	15.2	3	0.195	3
39.5	3	26	2	**0.075**	2	4.2	2 J	16.9	3	**0.0155**	3

0.0372	3	
0.0247	3	
0.0111	3	
0.022	2	
0.0142	3	
0.0092	2	J
0.0154	3	
0.0122	3	
0.03	1	
0.0083	2	J
0.0050	1	U
0.00155	3	
0.0135	3	
0.0058	2	J

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.449	3	**0.0155**	3	0.791	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.423	3 J	0.0566
0.453	3	**0.0155**	3	0.843	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	0.0324
0.547	3	**0.0155**	3	0.652	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.473	3	**0.0155**	3	0.565	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.508	3 J+	**0.0155**
0.413	3	0.07	1 J	0.847	3	0.0031	2 J	0.0017	2 J	**0.155**	3	**0.250**	2 U	**0.0155**
0.48	2	0.079	2 J	0.952	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.27	2 J	**0.0155**
0.465	3	**0.050**	1 U	0.622	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.95	3	**0.0155**
0.559	3	**0.0155**	3	0.63	2	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
0.435	3	0.052	2 J	0.79	2	**0.00075**	2	**0.00075**	2	**0.155**	3	0.562	3	**0.0155**
0.496	3	0.067	2 J	0.888	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.502	3	**0.0155**
0.466	3	0.035	2 J	0.599	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.323	3 J	**0.0155**
0.47	2	0.07	1 J	0.566	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.471	3	0.052	2 J	0.817	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.597	3	**0.0155**	3	0.845	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.34	2 J	0.106

3	J	7.87	3	J+	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.53	3	2.43	3
3	J	5.25	3		**1.00**	1	U	0.0575	3	0.0641	3	**0.155**	3	**0.155**	3	2.46	3	2.41	3
3		16.7	3		6.22	3		0.137	3	0.0561	3	**0.155**	3	**0.155**	3	2.57	3	2.5	2
3		3.83	3		**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.6	2	J+	2.55	3	J+
3		2.79	3	J+	2.04	3	J+	0.0323	3	J	0.0297	3	J	**0.155**	3	**0.155**	3	2.15	3	J+	2.1	2	J+
3		**1.00**	1	U	2.5	2	J+	0.0384	3	J	**0.0250**	2	U	**0.155**	3	**0.155**	3	2.45	3	J+	2.48	3	J+
3		3.92	3	J+	3.66	3	J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.24	3	2.71	3
3		3.09	3	J+	3.51	3	J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.13	3	J+	2.96	3	J+
3		4.25	3	J+	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	2.32	3	2.38	3
3		3.08	3	J+	**1.00**	1	U	0.0404	3	J	0.0401	3	J	**0.075**	2	**0.075**	2	2.53	3	J+	2.4	2	J+
3		11.8	3		**1.00**	1	U	0.0287	3	J	0.0316	3	J	**0.075**	2	**0.075**	2	2.92	3	2.92	3
3		2.3	2	J+	2.34	3	J+	0.0209	3	J	0.0217	3	J	**0.075**	2	**0.075**	2	2.83	3	J+	3.35	3	J+
3		**1.00**	1	U	**1.00**	1	U	0.0286	3	J	0.0263	3	J	0.231	3	J	**0.075**	2	2.12	3	2.04	3
3		2.27	3	J+	**0.310**	2		0.0274	3	J	0.0427	3	J	**0.075**	2	**0.075**	2	2.24	3	2.08	3

0.0125	3	**0.0125**	3	0.0473	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5290	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5620	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4400	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4140	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4690	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5830	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3820	3
0.0125	3	**0.0125**	3	0.0547	3	0.0656	3	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4220	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.73	3 J	1.55	3 J	**0.0075**	2	**0.0075**	2	4390	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	5220	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	4490	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**2.50**	2 U	**0.0075**	2	**0.0075**	2	5070	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	4460	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	4910	3

	5300	2	1.63	3	0.349	3	0.0347	3 J+	0.0295	3 J+	**0.250**	2 U	**0.250**	2 U
	5650	3	1.07	3	0.263	3	0.0211	3	0.0203	3	2.56	3	2.87	3
	4320	3	2.15	3	1.13	3	0.035	2	0.0307	3	1.32	3	1.05	3
J+	4030	3 J+	1.55	3	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
	4630	3	0.868	3 J+	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	1.48	3 J		R
	5800	2	0.541	3	0.146	3 J	0.0189	3 J	0.0191	3 J	**0.250**	2 U	0.572	3
	4050	3	1.24	3	0.438	3	0.0203	3	0.0274	3	0.556	3	0.773	3
	4220	3	0.943	3	0.267	3	0.0166	3 J	0.0145	3 J	0.288	3 J	0.526	3
	4710	3	2.03	3	0.454	3	0.0259	3	0.0217	3	0.824	3	0.902	3
	5170	3	1.04	3	0.279	3	0.0201	3	0.0148	3 J	1.3	2	1.63	3
	4340	3	3.35	3	0.855	3	0.0561	3	0.0462	3	0.836	3 J+	**0.250**	2 U
	5020	3	2.3	2 J+	0.593	3 J+	0.0267	3	0.0243	3	**0.250**	2 U	**0.250**	2 U
	4500	2	1.09	3	0.251	3	0.0206	3	0.0189	3 J	2.99	3	**0.250**	2 U
	4810	3	1.04	3	0.311	3	0.0203	3	0.0217	3	0.744	3 J+	0.599	3 J+

10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	797	3	799	3	0.722	3 J+	0.584	3 J+
11.3	3 J	7.53	3 J	0.0656	3 J	0.0647	3 J	793	3	815	3	0.398	3	0.334	3
23.8	3	14.3	3 J	1.03	3	0.685	3	685	3	669	3	0.992	3	0.738	3
10.0	1 U	**10.0**	1 U	0.0442	3 J	**0.0155**	3	637	3 J+	649	3 J+	0.478	3 J+	0.37	2 J+
7.1	2 J	**3.10**	2	0.34	2 J		R	718	3	685	3	0.232	3 J+	0.23	2 J+
3.10	2	6.22	3 J	0.0331	3 J	0.0819	3 J	820	2	792	3	0.19	2 J+	0.199	3 J+
8.87	3 J	10.5	3 J	0.0842	3 J	0.109	3	597	3	588	3	0.42	2 J+	0.489	3 J+
7.49	3 J	**3.10**	2	0.0313	3 J	0.0382	3 J	676	3	662	3	0.398	3 J+	0.424	3 J+
25.2	3	12.9	3 J	0.166	3	0.177	3	722	3	730	2	0.597	3	0.35	2
10.0	1 U	**10.0**	1 U	0.159	3	0.21	2	751	3	747	3	0.296	3	0.261	3
27.3	3	16.4	3 J	0.108	3	0.0702	3 J	658	3	671	3	1.03	3 J+	0.834	3 J+
10.0	1 U	**10.0**	1 U	**0.0155**	3	0.0375	3 J	777	3	762	3	0.553	3 J+	0.571	3 J+
12.9	3 J	11.7	3 J	0.076	2 J	**0.0155**	3	664	3	645	3	0.267	3 J+	0.284	3 J+
23.1	3	13.2	3 J	0.0414	3 J	0.035	2 J	760	2	738	3	0.273	3 J+	0.222	3 J+

0.0796	3	**0.00075**	2	0.392	3	0.372	3	0.953	3 J+	0.724	3 J+	106	3	105	3	**0.155**	3
0.00075	2	**0.00075**	2	0.453	3	0.401	3	0.708	3	0.51	2 J	110	2	110	2	**0.155**	3
0.00075	2	**0.00075**	2	0.381	3	0.327	3	1.27	3	1.04	3	105	3	82.8	3	**0.155**	3
0.00166	3 J	**0.00075**	2	0.2	1 J+	0.191	3 J+	0.657	3 J+	**0.310**	2 U	85.9	3 J+	81.9	3 J+	**0.155**	3
0.00187	3 J	0.00157	3 J	0.336	3	0.348	3	**0.310**	2 U	0.709	3	100	1	98.9	3	**0.155**	3
0.00075	2	**0.00075**	2	0.483	3	0.458	3	0.459	3 J	**0.310**	2 U	118	3	119	3	**0.155**	3
0.00075	2	**0.00075**	2	0.246	3	0.26	2	0.652	3	0.696	3	84.4	3	93.1	3	**0.155**	3
0.00075	2	**0.00075**	2	0.206	3	0.217	3	0.733	3	0.581	3 J	91.1	3	82.1	3	**0.155**	3
0.00075	2	**0.00075**	2	0.404	3	0.361	3	1.06	3	0.83	2	99	2	102	3	**0.155**	3
0.00075	2	**0.00075**	2	0.479	3	0.45	2	0.627	3	0.509	3 J	106	3	107	3	**0.155**	3
0.00075	2	**0.00075**	2	0.319	3	0.335	3	2.18	3	1.79	3	94.9	3	84.7	3	**0.155**	3
0.00075	2	**0.00075**	2	0.262	3	0.255	3	1.16	3 J+	0.986	3 J+	92.8	3	90.5	3	**0.155**	3
0.00075	2	**0.00075**	2	0.351	3	0.36	2	0.952	3	0.737	3	93.1	3	97.4	3	**0.155**	3
0.00075	2	**0.00075**	2	0.446	3	0.359	3	0.75	2 J+	0.651	3 J+	109	3	103	3	**0.155**	3

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Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

5260	3	**0.0031**	2	**0.0031**	2	2100	2	2120	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5080	3	**0.0031**	2	**0.0031**	2	1930	3	2030	3	**0.0050**	1	**0.0050**	1	3.08	3
5250	3	**0.0031**	2	**0.0031**	2	2350	3	2280	3	**0.0050**	1	**0.0050**	1	1.88	3
5150	3 J+	**0.0031**	2	**0.0031**	2	2170	3 J+	2170	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
4910	3	**0.0031**	2	**0.0031**	2	1970	3	1870	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5590	3 J+	**0.0031**	2	**0.0031**	2	2050	3 J+	1990	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5460	3	**0.0031**	2	**0.0031**	2	1990	3	1960	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
5100	2	**0.0031**	2	**0.0031**	2	2080	3	2070	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5400	2	**0.0031**	2	**0.0031**	2	2000	1	2020	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5250	3	0.0086	2 J	**0.0031**	2	1890	3	1980	3	**0.0031**	2	**0.0031**	2	0.113	3 J
5450	3	**0.0031**	2	**0.0031**	2	2100	2	2170	3	**0.0031**	2	**0.0031**	2	0.117	3 J
5720	3	**0.0031**	2	**0.0031**	2	2340	3	2350	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5150	3	**0.0031**	2	**0.0031**	2	1850	3	1780	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5260	3	**0.0031**	2	**0.0031**	2	1970	3	1970	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
3.25	3	**0.155**	3	**0.155**	3	19	2	**1.55**	3 U
1.33	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.124	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	0.338	3 J	2.11	3 J	1.81	3 J
0.144	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.097	2 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	3.68	3	2.69	3 J

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	5.91		6.77		42		114.5		2.62		14.8	
Median	5.97		6.89		39		123.1		2.68		14.3	
St. Deviation	0		3		13		89		1		2	
# of values	13		14		12		13		14		14	
Minimum	5.24		2.54		29		-59.1		1.26		12.0	
Maximum	6.84		11.53		79		203.4		3.29		17.9	
Lowest fifth percentile	5		3		33		-28		2		13	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	92%		0%		0%		0%		0%		0%	
% of DWS exceedences	62%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	2	3	1	3	3	2								
71.6		31		0.265		10.9		17.5		0.064		NA		NA					
39.6		31		0.077		6.3		16.8		0.050		NA		NA					
116		13		0		14		7		0		NA		NA					
14		14		14		14		14		14			0				0		
36.6		2		0.073		1.6		1.6		0.016		NA		NA					
473.0		59		1.090		56.6		33.3		0.195		NA		NA					
37		13		0		3		10		0		NA		NA					
0		1		9		2		1		8									
		7%		64%		14%		7%		57%									
				1		8				4									
NA		NA		NA		NA		>=20		NA			NA				NA		
NA		500		NA		NA		NA		10			NA				NA		
0%		0%		0%		0%		71%		0%			NA				NA		
0%		0%		0%		0%		0%		0%			NA				NA		

4	3		
0.0150		NA	
0.0129		NA	
0		NA	
14			0
0.0016		NA	
0.0372		NA	
0		NA	
2			
14%			
3			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	3	3	5	2	5	2	3	3	2	2	4
0.484		0.0410		0.743		0.00104		0.00094		0.155		0.730		0.0261
0.471		0.0430		0.791		0.00075		0.00075		0.155		0.300		0.0155
0		0		0		0		0		0		2		0
14		14		14		14		14		14		14		14
0.413		0.0155		0.565		0.00075		0.00075		0.155		0.075		0.0155
0.597		0.0790		0.952		0.00310		0.00250		0.155		5.950		0.1060
0		0		1		0		0		0		0		0
0		7		0		13		13		14		6		11
		50%				93%		93%		100%		43%		79%
		7				1		1				4		2
230		NA		NA		NA		0.0052		NA		NA		7.06
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3
	4.94		2.00		0.0321		0.0268		0.132		0.121		2.51		2.52	
	3.46		1.00		0.0280		0.0257		0.155		0.155		2.50		2.46	
	4		2		0		0		0		0		0		0	
	14		14		14		14		14		14		14		14	
	1.00		0.31		0.0075		0.0075		0.075		0.075		2.12		2.04	
	16.70		6.22		0.1370		0.0641		0.231		0.155		3.13		3.35	
	1		1		0		0		0		0		2		2	
	2		8		5		6		13		14		0		0	
	14%		57%		36%		43%		93%		100%					
					7		6		1							
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0137		0.0117		1.11		1.22		0.0075		0.0075		4750	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		4590	
0		0		0		0		0		0		0		0		590	
14		14		14		14		14		14		14		14		14	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		3820	
0.0125		0.0125		0.0547		0.0656		1.73		2.50		0.0075		0.0075		5830	
0		0		0		0		1		1		0		0		4028	
14		14		12		13		13		13		14		14		0	
100%		100%		86%		93%		93%		93%		100%		100%			
				1				1		1							
NA		NA		NA		NA		NA		NA		0.058		0.058		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	3	3	3	3	3
4750		1.49		0.395		0.0240		0.0221		0.993		0.782		
4670		1.17		0.295		0.0205		0.0210		0.784		0.572		
570		1		0		0		0		1		1		
14		14		14		14		14		14		13		
4030		0.54		0.100		0.0100		0.0100		0.250		0.250		
5800		3.35		1.130		0.0561		0.0462		2.990		2.870		
4043		1		0		0		0		0		0		
0		0		2		2		2		4		5		
				14%		14%		14%		29%		38%		
				1		2		4		1				
NA		10.98		10.56276		NA		NA		1.587		1.524		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		14%		15%		
0%		0%		0%		0%		0%		0%		0%		

1	3	1	3	4	3	4	3	0	3	0	3	3	3	3	3
13.6		9.9		0.1578		0.1196		718		711		0.489		0.421	
10.0		10.0		0.0708		0.0647		720		708		0.409		0.360	
8		4		0		0		67		68		0		0	
14		14		14		13		14		14		14		14	
3.1		3.1		0.0155		0.0155		597		588		0.190		0.199	
27.3		16.4		1.0300		0.6850		820		815		1.030		0.834	
6		3		0		0		623		625		0		0	
5		6		2		3		0		0		0		0	
36%		43%		14%		23%									
5		8		7		6									
1000		1000		0.227		0.249		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		14%		8%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	3	3	1	3	1	3	3	3
0.0065		0.00081		0.354		0.335		0.891		0.742		100		97		0.155	
0.0008		0.00075		0.366		0.354		0.742		0.703		100		98		0.155	
0		0		0		0		0		0		10		12		0	
14		14		14		14		14		14		14		14		14	
0.0008		0.00075		0.200		0.191		0.310		0.310		84		82		0.155	
0.0796		0.00157		0.483		0.458		2.180		1.790		118		119		0.155	
0		0		0		0		0		0		85		82		0	
11		13		0		0		1		2		0		0		14	
79%		93%						7%		14%						100%	
2		1						1		3							
0.77		0.77		NA		NA		9.03		9.01		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
14	
0.155	
0.155	
0	
14	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5290		0.0035		0.0031		2060		2050		0.0042		0.0042		0.405	
5260		0.0031		0.0031		2030		2030		0.0050		0.0050		0.050	
220		0		0		150		150		0		0		1	
14		14		14		14		14		14		14		14	
4910		0.0031		0.0031		1850		1780		0.0031		0.0031		0.031	
5720		0.0086		0.0031		2350		2350		0.0050		0.0050		3.080	
5021		0		0		1876		1839		0		0		0	
0		13		14		0		0		14		14		10	
		93%		100%						100%		100%		71%	
		1												2	
NA		0.107089503		0.091		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.384		0.155		0.168		2.99		1.65	
0.050		0.155		0.155		1.55		1.55	
1		0		0		5		0	
14		14		14		14		14	
0.031		0.155		0.155		1.55		1.55	
3.250		0.155		0.338		19.00		2.69	
0		0		0		2		2	
9		14		13		11		12	
64%		100%		93%		79%		86%	
3				1		1		2	
NA		NA		NA		20.69		20.40	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-72D																
Sample Date																
08/22/09	8.21	3	4.67	3		122	3		13.2	3		4.06	3	35.5	3	
10/19/09	7.16	3	4.01	3		86	2		26.4	3		3.59	3	39.6	3	
03/17/10			3.9	2		122	3		110.3	4		3.24	3	40.3	3	
08/21/10	7.28	3	5.64	3 Q		108	3 Q		134.7	4		3.89	3	33.6	3	
10/22/10	7.32	3	7.92	3		86	2		-39.3	3 Q		3.33	3	39	2	
03/28/11	7.12	3	6.69	3		87	2 Q		204.6	4		2.71	3	31.9	3	
05/25/11	7.16	3	5.28	3			R		126	3		3.64	3	33.9	3	
08/28/11	6.66	3	11.68	4					141.1	4		3.86	3	32.4	3	
10/26/11	7.53	3	6.84	3		80	1		176.8	4		2.53	3	33.7	3	
03/24/12	6.99	3	4.85	3		89	2		147.5	4		3.1	2	35.6	3	
05/19/12	7.72	3	3.63	3		89	2		196.4	4		4.37	3	38.5	3	
08/21/12			4.97	3		86	2		-126.5	4		4.56	3	35.8	3	
10/08/12	7.27	3	4.21	3		84	2		80.3	3		4.88	3	35.3	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
94.8	3		63.8	3		1.81	3		**1.57**	3		34	2		0.094	2 J						
93.5	3		52.5	3		0.606	3		**1.57**	3		34	2		**0.050**	1 U						
91	2		83.8	3		**0.0775**	3		**1.57**	3		33.5	3		0.112	3						
86.5	3		47	2		0.41	2 J		**1.57**	3		32.4	3		0.109	3						
85	2		58	2		0.408	3 J		**1.57**	3		32.6	3		**0.050**	1 U						
87.3	3		29	2		**0.0815**	3		**1.57**	3		34.2	3		0.138	3						
87.7	3		56	2		**0.150**	2		3.28	3 J		34.4	3		0.098	2 J						
82.5	3		75	2		0.302	3 J		**1.57**	3		30.4	3		**0.050**	1 U						
75.6	3		51	2		**0.075**	2		**1.57**	3		27.6	3		2.72	3						
86.5	3		60	1		**0.0745**	3		**1.57**	3		31.8	3		0.101	3						
85.3	3		60	1		**0.0735**	3		**1.57**	3		31.3	3		**0.050**	1 U						
84.5	3		34	2		0.3	1 J		**5.0**	1 U		29.9	3		**0.050**	1 U						
85.2	3		48	2		0.4	1 J		**1.57**	3		32.8	3		0.0495	3 J						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0325	3				
	0.0124	3				
	0.0083	2	J			
	0.0233	3				
	0.0151	3				
	0.0112	3				
	0.0162	3				
	0.0203	3				
	0.0098	2	J			
	0.0050	1	U			
	0.017	2				
	0.015	2				
	0.0159	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.617	3		0.039	2 J		7.16	3		**0.0025**	2 U		**0.00075**	2		0.36	2 J		0.262	3 J		**0.0155**			
0.745	3		0.034	2 J		7.84	3		**0.00075**	2		0.0018	2 J		**0.155**	3		**0.075**	2		**0.0155**			
0.55	2		0.034	2 J		7.6	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.601	3		0.087	2 J		7.63	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.685	3		0.097	2 J		7.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.253	3 J		**0.0155**			
0.621	3		0.079	2 J		7.4	2		**0.00075**	2		**0.00075**	2		**0.155**	3		6.9	2		**0.0155**			
0.625	3		0.082	2 J		7.31	3		**0.00075**	2		**0.0025**	2 U		**0.155**	3		**0.250**	2 U		**0.0155**			
0.64	2		0.081	2 J		7.44	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.557	3		0.081	2 J		6.29	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.524	3		0.048	2 J		7.32	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.334	3 J		**0.0155**			
0.573	3		0.082	2 J		6.95	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.559	3		**0.050**	1 U		7.22	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.607	3		0.088	2 J		7.8	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.476	3 J		**0.050**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3	37.2	3	J+	30.6	3	J+	0.159	3	J			R	4.75	3		4.9	2		1.54	3		1.57	3	
	3	19.5	3		8.22	3		0.206	3		0.202	3		5.61	3		4.89	3		1.34	3		1.54	3	
	3	8.56	3		5.18	3		0.302	3		0.285	3		5.69	3		5.22	3		0.884	3		0.823	3	
	3	12.8	3	J+	6.33	3	J+	0.243	3		0.26	2		4.29	3		4.06	3		0.859	3	J+	0.753	3	J+
	3	17.4	3	J+	5.9	2	J+	0.303	3		0.282	3		5.16	3		4.01	3		0.989	3	J+	1.2	2	J+
	3	7.69	3	J+	6.49	3	J+	0.214	3	J+	0.157	3	J+	3.7	2		4.17	3		0.886	3		0.74	2	
	3	25.2	3	J+	8.07	3	J+	0.223	3	J+	0.231	3	J+	3.97	3		3.98	3		1.44	3	J+	1.34	3	J+
	3	12	2	J+	4.98	3	J+	0.229	3	J			R	3.19	3		3.44	3		1.36	3		1.27	3	
	3	7.33	3	J+	3.87	3	J+	0.289	3		0.197	3		4.14	3		3.17	3		1.41	3	J+	1.42	3	J+
	3	5.68	3		3.55	3		0.263	3		0.269	3		4.34	3		4.52	3		1.06	3		1.03	3	
	3	6.97	3	J+	4.28	3	J+	0.283	3		0.261	3		4.64	3		3.94	3		0.734	3	J+	0.817	3	J+
	3	8.03	3		6.15	3		0.254	3	J			R	4.03	3		4.13	3		0.741	3		0.857	3	
	1	U	13	2	J+	4.76	3	J+	0.259	3		0.253	3		4.14	3		4.07	3		0.878	3		0.747	3	

| | | |

| | | |

										depends on Hardness		depends on Hardness																	
result > crit				result > crit						result > crit		result > crit																result > crit	
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N		MN_NSF	MN_NVF	MN_F		MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**							
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total				Dissolved			
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L				µg/L			
36.5	3	J		R			0.111	3	J+		**0.050**	1	U	1510	3		1670	3		8.67	3	J+		6.13	3	J+		
33.3	3		12.5	3	J		0.082	2	J		**0.0155**	3		1660	3		1650	3		5.01	3			2.24	3			
3.10	2		**3.10**	2			0.25	2			0.168	3		1730	3		1640	3		0.673	3			0.399	3	J+		
18.5	3	J	**3.10**	2			0.461	3			0.126	3		1420	3		1620	3		2.66	3	J+		0.298	3	J+		
21.4	3		7.58	3	J		0.0811	3	J		0.0418	3	J	1720	3		1490	3		2.98	3			0.577	3	J+		
7.73	3	J	**3.10**	2			0.353	3			0.237	3		1420	3		1590	3		0.462	3	J+		0.324	3	J+		
16.9	3	J	**10.0**	1	U		0.276	3			0.092	2	J	1580	3		1560	3		0.831	3	J+		0.293	3	J+		
15.6	3	J	9.62	3	J		0.085	2	J		0.0497	3	J	1470	3		1650	3		1.72	3			0.464	3			
20.4	3		**10.0**	1	U		0.716	3			0.0559	3	J	1480	3		1460	3		0.83	2			0.352	3			
8.21	3	J	**3.10**	2			0.768	3			0.581	3		1580	3		1650	3		0.3	1	J+		0.275	3	J+		
23.8	3		**10.0**	1	U		0.343	3			0.279	3		1690	3		1780	3		0.944	3	J+		0.573	3	J+		
11.9	3	J	9.38	3	J		0.208	3			0.0646	3	J	1610	3		1640	3		0.559	3	J+		0.296	3	J+		
20.9	3		7.89	3	J		0.289	3			0.106	3		1580	3		1580	3		0.705	3	J+		0.389	3	J+		

CALC revised 2013												2013: DWS = NA		2013: DWS = NA								
result > crit			result > crit									result > crit		result > crit								result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		**0.00075**	2		0.483	3		0.507	3		1.98	3	J+	1.78	3	J+	651	3		685	3		1.3	2
0.00075	2		**0.00075**	2		0.481	3		0.428	3		2.03	3		1.06	3		650	2		696	3		1.66	3
0.00075	2		**0.00075**	2		0.524	3		0.494	3		0.909	3		0.737	3		669	3		650	2		1.35	3
0.00075	2		**0.00075**	2		0.367	3		0.382	3		0.967	3		**0.310**	2	U	609	3		628	3		0.971	3
0.00075	2		**0.00075**	2		0.425	3		0.348	3		1.47	3		0.757	3		784	3	J			R	1.03	3
0.00075	2		**0.00075**	2		0.348	3		0.366	3		0.716	3		0.708	3		585	3		621	3		0.723	3
0.00075	2		**0.00075**	2		0.365	3		0.345	3		0.724	3		0.628	3		618	3		613	3		0.838	3
0.00075	2		**0.00075**	2		0.325	3		0.354	3		0.834	3		0.761	3		676	3		693	3		0.578	3
0.00075	2		**0.00075**	2		0.393	3		0.309	3		1.85	3		0.602	3	J	608	3		633	3		0.76	2
0.00075	2		**0.00075**	2		0.376	3		0.38	2		0.708	3		0.751	3		640	2		648	3		0.78	2
0.00075	2		**0.00075**	2		0.436	3		0.371	3		2	1	J+	1.4	2	J+	676	3		735	3		0.743	3
0.00075	2		**0.00075**	2		0.337	3		0.34	2		0.894	3		0.866	3		674	3		676	3		0.552	3
0.00075	2		**0.00075**	2		0.361	3		0.371	3		1.2	2	J+	1.18	3	J+	767	3		773	3		0.604	3

depends on Total Se

result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
		1.41	3	
		1.42	3	
		1.27	3	
J		0.96	2	J
		0.77	2	J
J		0.795	3	J
J		0.819	3	J
J		0.647	3	J
J		0.699	3	J
J		0.72	2	J
J		0.588	3	J
J		0.543	3	J
J		0.513	3	J

				depends on HARD; revised 2013				depends on Total Ag																							
				result > crit				result > crit																							
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon					**Silver[8]**						**Sodium**							**Thallium**													**Tir**
Dissolved			Total					Dissolved				Total			Dissolved			Total			Dissolved			Total							
µg/L			µg/L					µg/L				µg/L			µg/L			µg/L			µg/L			µg/L							
6290	3		**0.0031**		2		**0.0031**		2		2100		2		2340		3	**0.0050**		1	**0.0050**		1	**0.050**		1					
6280	3		**0.0031**		2		**0.0031**		2		2200		2		2410		3	**0.0050**		1	**0.0050**		1	1.72		3					
5790	3		**0.0031**		2		**0.0031**		2		2280		3		2170		3	**0.0050**		1	**0.0050**		1	2.37		3					
6270	3		**0.0031**		2		**0.0031**		2		2050		3		2490		3	**0.0050**		1	**0.0050**		1	0.481		3					
6210	3		**0.0031**		2		**0.0031**		2		2610		3	J+	3040		3	J+	**0.0050**		1	**0.0050**		1	4.79		3					
6270	3		**0.0031**		2		**0.0031**		2		2060		3		2240		3	**0.0050**		1	**0.0050**		1	1.52		3	J+				
6040	3		**0.0031**		2		**0.0031**		2		2250		3		2210		3	**0.0050**		1	**0.0050**		1	0.256		3					
6740	3		**0.0031**		2		**0.0031**		2		2220		3		2510		3	**0.0031**		2	**0.0031**		2	0.0791		3	J				
6240	3		**0.0031**		2		**0.0031**		2		2600		2		2190		3	**0.0031**		2	**0.0031**		2	0.105		3	J				
6380	3		**0.0031**		2		**0.0031**		2		2230		3		2300		2	**0.0031**		2	**0.0031**		2	0.323		3					
6980	3		**0.0031**		2		**0.0031**		2		2310		3		2580		3	**0.0031**		2	**0.0031**		2	**0.100**		1	U				
6530	3		**0.0031**		2		**0.0031**		2		2330		3		2360		3	**0.0031**		2	**0.0031**		2	0.0681		3	J				
6300	2		**0.0031**		2		**0.0031**		2		2550		3		2550		3	**0.0031**		2	**0.0031**		2	**0.100**		1	U				

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF				
						Vanadium						**Zinc[4]**						
	Dissolved			Total			Dissolved			Total			Dissolved					
	µg/L			µg/L			µg/L			µg/L			µg/L					
		R	3.94	3	4.17	3				**1.55**	3	U	**1.55**	3	U			
0.468	3		4.35	3	4.14	3				1.01	3	J	**1.55**	3	U			
2	1		4.16	3	3.77	3				**1.55**	3	U	**1.55**	3	U			
0.502	3		3.18	3	3.34	3				7.5	2	J+	**1.55**	3	U			
2.63	3	J+	3.66	3	2.92	3				5.03	3	J+	5.78	3	J+			
0.898	3	J+	2.66	3	2.99	3				**1.55**	3	U	**1.55**	3	U			
0.050	1		2.81	3	2.81	3				**1.55**	3	U	**1.55**	3	U			
0.0310	2		2.65	3	2.71	3				**1.55**	3	U	**1.55**	3	U			
0.0765	3	J	2.61	3	1.98	3				**1.55**	3	U	**1.55**	3	U			
0.257	3		3.15	3	3.26	3				**1.55**	3	U	**1.55**	3	U			
0.149	3	J	2.69	3	2.57	3				**1.55**	3	U	**1.55**	3	U			
0.128	3	J	2.89	3	2.78	3				**1.55**	3	U	**1.55**	3	U			
0.100	1	U	3.07	3	2.95	3				**1.55**	3	U	**1.55**	3	U			

		2	3	2	3	0	2	1	4	2	3	1	3		
Mean		7.31		5.71		94		91.7		3.67		35.8			
Median		7.27		4.97		87		126.0		3.64		35.5			
St. Deviation		0		2		15		98		1		3			
# of values		11		13		11		13		13		13			
Minimum		6.66		3.63		80		-126.5		2.53		31.9			
Maximum		8.21		11.68		122		204.6		4.88		40.3			
Lowest fifth percentile		7		4		82		-74		3		32			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		0%		0%		0%		0%		0%		0%			
% of DWS exceedences		0%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		3	3		2	3		1	3		3	2						
86.6			55.0			0.37			1.97			32			0.282			NA			NA	
86.5			56.0			0.30			1.57			33			0.094			NA			NA	
5			15			0			1			2			1			NA			NA	
13			13			13			13			13			13				0			0
75.6			29.0			0.07			1.57			28			0.050			NA			NA	
94.8			83.8			1.81			5.00			34			2.720			NA			NA	
80			32			0			2			29			0			NA			NA	
0			0			6			12			0			5							
						46%			92%						38%							
						5			1						3							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3							
0.0155		NA						
0.0151		NA						
0		NA						
13			0					
0.0050		NA						
0.0325		NA						
0		NA						
1								
8%								
2								
NA			NA					
NA			NA					
0%			NA					
0%			NA					
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF		
Total Phosphorus				**Orthophosphate**				
mg/L				mg/L				

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.608			0.068			7.31			0.0009			0.00097			0.17			0.770			0.0182
0.607			0.081			7.32			0.0008			0.00075			0.16			0.250			0.0155
0			0			0			0			0			0			2			0
13			13			13			13			13			13			13			13
0.524			0.034			6.29			0.0008			0.00075			0.16			0.075			0.0155
0.745			0.097			7.84			0.0025			0.00250			0.36			6.900			0.0500
1			0			7			0			0			0			0			0
0			1			0			13			12			12			8			13
			8%						100%			92%			92%			62%			100%
			12									1			1			4			
230			NA			NA			NA			0.0052			NA			NA			6.25
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3	2	3	3	3	4	3	4	3	2	3	2	3								
11600		1.7		0.7		0.05		0.035		3.550		2.850									
11600		1.4		0.5		0.04		0.027		1.830		1.350									
700		1		1		0		0		3		3									
13		13		13		13		13		13		13									
10400		0.6		0.3		0.03		0.019		0.663		0.250									
12600		3.2		2.4		0.14		0.111		9.310		8.020									
10640		1		0		0		0		1		0									
0		0		0		0		0		0		1									
												8%									
								1													
NA		10.98		10.56276		NA		NA		3.542		3.401									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		38%		31%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness			depends on Hardness						depends on Hardness										
		result > crit			result > crit						result > crit						result > crit				

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	2		3	3		4	3		-1	3		-1	3		3	3		3	3	
18.3			7.4			0.309			0.144			1570			1610			2.03			0.97		
18.5			8.6			0.276			0.092			1580			1640			0.83			0.39		
10			3			0			0			110			80			2			2		
13			12			13			13			13			13			13			13		
3.1			3.1			0.081			0.016			1420			1460			0.30			0.28		
36.5			12.5			0.768			0.581			1730			1780			8.67			6.13		
6			3			0			0			1420			1478			0			0		
1			7			0			2			0			0			0			0		
8%			58%						15%														
6			5			3			5														
1000			1000			0.752			0.719			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			8%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.00075		0.00075		0.402		0.384		1.25		0.89		662		671		0.9									
0.00075		0.00075		0.376		0.371		0.97		0.76		651		663		0.8									
0		0		0		0		1		0		58		49		0									
13		13		13		13		13		13		13		12		13									
0.00075		0.00075		0.325		0.309		0.71		0.31		585		613		0.6									
0.00075		0.00075		0.524		0.507		2.03		1.78		784		773		1.7									
0		0		0		0		1		0		599		617		1									
13		13		0		0		0		1		0		0		0									
100%		100%								8%															
										1						9									
0.77		0.77		NA		NA		20.00		19.94		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	
Mercury[7]				**Molybdenum**				**Nickel[4]**				**Potassium**													
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved										Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L										µg/L	

	3	3
	0.86	
	0.77	
	0	
	13	
	0.51	
	1.42	
	1	
	0	
	10	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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P-08-75D

Sample Date													
08/21/09			10.56	4	52	2		R	3.73	3	16.9	3
10/21/09	6.9	2	11.84	4	42	2	25.5	3	2.82	3	20.1	3
03/17/10	5.84	3	10.66	4	64	2	133.4	4	2.47	3	18.6	3
05/20/10	6.21	3	13.45	4	78	2	128	3	2.97	3	16.4	3
08/20/10	6.7	2	12.44	4 Q	70	1	66.9	3	3.54	3	28.1	3
10/20/10	5.06	3	11.35	4 Q	64	2	156.1	4	2.76	3	25.2	3
03/28/11	6.57	3	8.46	3	75	2 Q	183.2	4	2.67	3	40.5	3
05/24/11	6.34	3	9.92	3	137	3	151.6	4	2.67	3	29.5	3
08/28/11	5.89	3	11.43	4	37.5388	FALSE	154.1	4	2.81	3	17.1	3
10/25/11	6.07	3	12.49	4	43	2	215.5	4	2.43	3	16.6	3
03/19/12	6.19	3	10.05	4	55	2	210	2	2.03	3	20.9	3
05/17/12	5.81	3	11.21	4	47	2	-109.3	4	2.5	2	18.7	3
08/21/12	5.86	3	10.89	4	45	2	16.2	3	2.78	3	14.7	3
10/13/12	5.63	3	6.28	3	44	2	-184.8	4	2.32	3	16.4	3

54.5	3	42.5	3	3.06	3	4.2	2 J	23.2	3	0.226	3
56.1	3	41.3	3	0.202	3 J	3.82	3 J	24	2	0.124	3
55.5	3	58.8	3	**0.076**	2	**1.57**	3	22.2	3	0.239	3
56.1	3	48	2	0.208	3 J	11	2	23	2	0.279	3
70.4	3	41	2	**0.075**	2	3.57	3 J	34	2	0.157	3 J-
69.2	3	63	2	**0.0745**	3	4.07	3 J	31	2	0.138	3 J-
108	3	51	2	**0.0765**	3	13.9	3	49.4	3	0.126	3
86.1	3	53	2	**0.076**	2	5.34	3 J	37.5	3	0.146	3
48.2	3	60	1	**0.075**	2	10.6	3	18.5	3	0.14	2
47.4	3	64	2	**0.0745**	3	5.32	3 J	17.8	3	0.127	3
56.2	3	**1.55**	3	**0.150**	2	8.83	3 J	22.8	3	0.208	3
51.9	3	34	2	0.394	3 J	5.8	2 J	20.8	3	**0.050**	1 U
46.1	3	20	1	0.3	1 J	**5.0**	1 U	16.9	3	0.127	3
45	2	29	2	**0.0765**	3	**1.57**	3	22.4	3	0.0925	3 J

0.0193	3	
0.0088	2	J
0.0086	2	J
0.0201	3	
0.0173	3	
0.0128	3	
0.0255	3	
0.0289	3	
0.0144	3	
0.0117	3	
0.0106	3	
0.0151	3	
0.0149	3	
0.0152	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.543	3	**0.0155**	3	1.29	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	0.31	2 J	**0.0155**
0.558	3	**0.0155**	3	1.25	3	**0.00075**	2	0.0017	2 J	**0.155**	3	**0.250**	2 U	**0.0155**
0.553	3	**0.0155**	3	2.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.538	3	**0.0155**	3	1.49	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.679	3 J+	**0.0155**
0.849	3	0.071	2 J	1.56	3	**0.00075**	2	0.0016	2 J	**0.155**	3	**0.250**	2 U	**0.0155**
0.672	3	0.089	2 J	1.96	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.23	2 J	**0.0155**
0.846	3	0.086	2 J	3.81	3	**0.00075**	2	**0.00075**	2	**0.155**	3	17.4	3	**0.0155**
0.711	3	0.079	2 J	3.71	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.545	3	**0.0155**
0.56	2	0.051	2 J	1.69	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.501	3	**0.0155**
0.516	3	0.065	2 J	1.64	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.52	2	0.037	2 J	2.66	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.315	3 J	**0.0155**
0.485	3	0.073	2 J	1.93	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.496	3	**0.050**	1 U	1.87	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.473	3	**0.0155**	3	1.71	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.559	3	**0.0155**

3	20.1	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	6.98	3	6.66	3
3	8.12	3	2.91	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	11.3	3	11.7	3
3	12.5	3	3.14	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.87	3	2.89	3
3	16.4	3	**1.00**	1 U	1.28	3	**0.0075**	2	**0.155**	3	**0.155**	3	2.95	3 J+	2.62	3 J+
3	11.1	3 J+	3.75	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	19.8	3	20	1
3	6.78	3 J+	2.7	2 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	12.7	3	12.7	3
3	2.04	3 J+	3.77	3 J+	0.152	3 J+	0.0848	3 J+	**0.155**	3	**0.155**	3	12.9	3	13.5	3
3	2.98	3 J+	3.9	2 J+	**0.0250**	2 U	**0.0250**	2 U	0.46	2 J	0.512	3	5.49	3 J+	5.47	3 J+
3	6.04	3 J+	2.12	3 J+	**0.0075**	2	**0.0075**	2	**0.075**	2	0.323	3 J	3.21	3	3.06	3
3	5.22	3 J+	2.88	3 J+	**0.0075**	2	**0.0075**	2	0.243	3 J	**0.250**	2 U	3.8	2	3.87	3
3	4.19	3	3.84	3	0.0362	3 J	**0.0075**	2	0.167	3 J	0.216	3 J	3.67	3	3.51	3
3	6.71	3 J+	**1.00**	1 U	0.0399	3 J	0.0356	3 J	0.278	3 J	0.337	3 J	2.79	3 J+	2.64	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0187	3 J	**0.0075**	2	**0.075**	2	**0.250**	2 U	2.38	3	2.72	3
3	3.91	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.179	3 J	0.235	3 J	2.72	3	2.74	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5460	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	6710	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5710	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4910	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	9800	2
0.0125	3	**0.0125**	3	0.0236	3 J	0.0203	3 J	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8460	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	3.32	3 J	**0.0075**	2	**0.0075**	2	10100	3
0.0125	3	**0.0125**	3	**0.0250**	2 U	**0.0075**	2	4.34	3 J	4.79	3 J	**0.0075**	2	**0.0075**	2	8950	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.32	3 J	2.1	2 J	**0.0075**	2	**0.0075**	2	5270	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.59	3 J	1.52	3 J	**0.0075**	2	**0.0075**	2	5170	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.18	3 J	3.21	3 J	**0.0075**	2	**0.0075**	2	6280	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	5560	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.82	3 J	2.01	3 J	**0.0075**	2	**0.0075**	2	4480	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	1.52	3 J	**0.0075**	2	**0.0075**	2	5070	3

	5350	3	1.11	3	0.243	3	0.043	2	J+	0.0256	3	J+	**0.250**	2	U	**0.250**	2	U
	7230	3	0.701	3	0.286	3	0.0445	3		0.0382	3		**0.250**	2	U	**0.250**	2	U
	6020	3	0.709	3	0.356	3	0.0136	3	J	**0.0050**	1		0.195	3	J	**0.250**	2	U
J+	5190	3	J+	0.543	3	0.275	3	**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	10000	1	0.762	3	J+	0.41	2	J+	0.0678	3	J+	0.0588	3	J+	0.785	3	J+	**0.250**	2	U
	8260	3	0.216	3	**0.050**	1	0.035	2		0.0287	3		**0.250**	2	U	**0.250**	2	U
	9820	3	0.223	3	0.224	3	0.0244	3		0.0279	3		1.09	3		1.07	3	
	8700	2	0.346	3	J		R	0.0165	3	J	0.0181	3	J	0.163	3	J	0.154	3	J
	5230	3	1.38	3	0.74	2	0.0267	3		0.0283	3		**0.250**	2	U	0.588	3	
	5000	1	0.579	3	0.412	3	0.0166	3	J	0.0162	3	J	**0.250**	2	U	**0.250**	2	U
	6270	3	1.38	3	0.416	3	0.0289	3		0.03	1		**0.250**	2	U	0.676	3	J+
	5600	2	0.917	3	J+	0.477	3	J+	0.0258	3	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	5100	2	0.456	3	0.239	3	0.0179	3	J	0.0139	3	J	**0.250**	2	U	**0.250**	2	U
	5070	3	0.55	2	0.436	3	0.0206	3		**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U

29	2	**3.10**	2	0.412	3 J+	**0.0155**	3	792	3	832	3	1.64	3 J+	1.24	3 J+
13.5	3 J	7.37	3 J	**0.0155**	3	**0.0155**	3	815	3	852	3	0.945	3	0.856	3
7.09	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	1070	3	1130	3	0.919	3	0.825	3
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	1010	3 J+	1040	3 J+	1.16	3 J+	0.724	3 J+
14	2 J	**3.10**	2	**0.0155**	3	**0.0155**	3	873	3	881	3	0.75	2 J+	0.342	3 J+
8.96	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	995	3	981	3	0.576	3 J+	0.438	3 J+
3.10	2	**3.10**	2	0.0748	3 J	0.0947	3 J	3710	3	3740	3	1.09	3	1.2	2
11.1	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1740	3	1730	3	0.561	3 J		R
17.7	3 J	27.5	3	**0.0155**	3	0.0932	3 J	951	3	934	3	0.907	3	0.709	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	890	2	841	3	0.564	3	0.457	3
16.1	3 J	7.34	3 J	**0.0155**	3	0.0358	3 J	1270	3	1280	3	1.08	3 J+	0.941	3 J+
10.0	1 U	**10.0**	1 U	0.0315	3 J	**0.0155**	3	1170	3	1130	3	1.09	3 J+	0.535	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	862	3	959	3	0.407	3 J+	0.392	3 J+
8.74	3 J	7.29	3 J	**0.0155**	3	**0.0155**	3	917	3	910	2	0.586	3 J+	0.321	3 J+

0.00075	2	**0.00075**	2	0.0918	3	0.0739	3	0.681	3 J+	**0.310**	2 U	327	3	326	3	**0.155**	3
0.00075	2	**0.00075**	2	0.141	3	0.146	3	0.567	3 J	0.561	3 J	387	3	402	3	**0.155**	3
0.00075	2	**0.00075**	2	0.2	1	0.236	3	0.461	3 J	0.57	2 J	354	3	377	3	**0.155**	3
0.00075	2	**0.00250**	2 U	0.0884	3 J+	0.0823	3 J+	**0.310**	2 U	**0.310**	2 U	338	3 J+	339	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	0.217	3	0.235	3	**0.310**	2 U	**0.310**	2 U	450	2	457	3	**0.155**	3
0.00075	2	**0.00075**	2	0.137	3	0.132	3	0.396	3 J	**0.310**	2 U	412	3	393	3	**0.155**	3
0.00075	2	**0.00075**	2	1.15	3	1.19	3	0.377	3 J	0.376	3 J	185	3	194	3	**0.155**	3
0.00075	2	**0.00075**	2	0.235	3	0.22	2	0.427	3 J	0.426	3 J	433	3	407	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.083	2	0.105	3	0.855	3	0.836	3	324	3	312	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0835	3	0.0576	3	0.426	3 J	0.322	3 J	314	3	292	3	**0.155**	3
0.00075	2	**0.00075**	2	0.114	3	0.121	3	0.761	3	1.33	3	366	3	385	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0968	3	0.0928	3	**0.310**	2 U	**0.310**	2 U	329	3	331	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0594	3	0.0565	3	**0.310**	2 U	**0.310**	2 U	280	2	320	2	**0.155**	3
0.00075	2	**0.00075**	2	0.0662	3	0.0633	3	**0.310**	2 U	**0.310**	2 U	304	3	308	3	**0.155**	3

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Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

7410	3	**0.0031**	2	**0.0031**	2	2450	3	2570	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8340	3	**0.0031**	2	**0.0031**	2	2740	3	2890	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8210	3	**0.0031**	2	**0.0031**	2	3140	3	3350	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7980	3 J+	**0.0031**	2	**0.0031**	2	2950	3 J+	3040	3 J+	**0.0050**	1	**0.0050**	1	1.46	3
7810	3	**0.0031**	2	**0.0031**	2	2940	3	2970	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7880	3	**0.0031**	2	**0.0031**	2	2940	3 J+	2890	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
10300	3	**0.0031**	2	**0.0031**	2	4500	2	4440	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8500	2	**0.0031**	2	**0.0031**	2	5170	3	5200	2	**0.0050**	1	**0.0050**	1	**0.050**	1
8340	3	**0.0031**	2	**0.0031**	2	2610	3	2550	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7730	3	**0.0031**	2	**0.0031**	2	2570	3	2380	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
8820	3	0.0063	2 J	**0.0031**	2	3650	3	3710	3	**0.0031**	2	**0.0031**	2	0.0714	3 J
8170	3	**0.0031**	2	**0.0031**	2	3310	3	3230	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
8490	3	**0.0031**	2	**0.0031**	2	2450	3	2680	3	0.0216	3	**0.0031**	2	**0.0310**	2
8230	3	**0.0031**	2	**0.0031**	2	2630	3	2650	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

	R	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	0.858	3 J	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.236	3 J+	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.557	3 J	0.546	3 J	1.55	3 U	1.55	3 U
0.0310	2	0.485	3 J	0.471	3 J	1.55	3 U	1.55	3 U
0.0726	3 J	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0812	3 J	0.331	3 J	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.085	2 J	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.08		10.79		61		88.2		2.75		21.4	
Median	6.07		11.05		54		133.4		2.72		18.7	
St. Deviation	0		2		26		122		0		7	
# of values	13		14		14		13		14		14	
Minimum	5.06		6.28		38		-184.8		2.03		14.7	
Maximum	6.9		13.45		137		215.5		3.73		40.5	
Lowest fifth percentile	5		8		40		-140		2		16	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	77%		0%		0%		0%		0%		0%	
% of DWS exceedences	46%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	2	3	1	3	3	3								
60.8		43.0		0.35		6.0		26.0		0.156				NA				NA	
55.8		45.0		0.08		5.2		22.9		0.139				NA				NA	
18		18		1		4		9		0				NA				NA	
14		14		14		14		14		14					0				0
45.0		1.6		0.07		1.6		16.9		0.050				NA				NA	
108.0		64.0		3.06		13.9		49.4		0.279				NA				NA	
46		14		0		2		17		0				NA				NA	
0		1		9		3		0		1									
		7%		64%		21%				7%									
				4		8				1									
NA		NA		NA		NA		>=20		NA					NA				NA
NA		500		NA		NA		NA		10					NA				NA
0%		0%		0%		0%		21%		0%					NA				NA
0%		0%		0%		0%		0%		0%					NA				NA

4	3		
0.0159		NA	
0.0150		NA	
0		NA	
14			0
0.0086		NA	
0.0289		NA	
0		NA	
0			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.594		0.0480		2.05		0.0009		0.0010		0.155		1.57		0.0155
0.548		0.0510		1.79		0.0008		0.0008		0.155		0.28		0.0155
0		0		1		0		0		0		5		0
14		14		14		14		14		14		14		14
0.473		0.0155		1.25		0.0008		0.0008		0.155		0.23		0.0155
0.849		0.0890		3.81		0.0025		0.0025		0.155		17.40		0.0155
0		0		1		0		0		0		0		0
0		6		0		14		12		14		6		14
		43%				100%		86%		100%		43%		100%
		8						2				3		
230		NA		NA		NA		0.0052		NA		NA		7.05
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	2	4	2	3	3	3	3	2	3	2	3
	7.7		2.40		0.1151		0.0163		0.183		0.229		6.68		6.72	
	6.4		2.80		0.0075		0.0075		0.155		0.186		3.74		3.69	
	6		1		0		0		0		0		5		6	
	14		14		14		14		14		14		14		14	
	1.0		1.00		0.0075		0.0075		0.075		0.155		2.38		2.62	
	20.1		3.90		1.2800		0.0848		0.460		0.512		19.80		20.00	
	2		1		0		0		0		0		3		3	
	1		5		9		12		9		9		0		0	
	7%		36%		64%		86%		64%		64%					
					3		1		5		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0099		0.0084		1.80		2.03		0.0075		0.0075		6570	
0.0125		0.0125		0.0075		0.0075		1.25		1.52		0.0075		0.0075		5640	
0		0		0		0		1		1		0		0		1930	
14		14		14		14		14		14		14		14		14	
0.0125		0.0125		0.0075		0.0075		0.75		1.25		0.0075		0.0075		4480	
0.0125		0.0125		0.0250		0.0203		4.34		4.79		0.0075		0.0075		10100	
0		0		0		0		1		1		0		0		4760	
14		14		13		13		9		7		14		14		0	
100%		100%		93%		93%		64%		50%		100%		100%			
				1		1		5		7							
NA		NA		NA		NA		NA		NA		0.069		0.068		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	2	2	2	2
6630		0.71		0.351		0.028		0.0229		0.340		0.360	
5810		0.64		0.356		0.025		0.0219		0.250		0.250	
1830		0		0		0		0		0		0	
14		14		13		14		14		14		14	
5000		0.22		0.050		0.010		0.0050		0.163		0.154	
10000		1.38		0.740		0.068		0.0588		1.090		1.070	
5046		0		0		0		0		0		0	
0		0		1		1		4		10		10	
				8%		7%		29%		71%		71%	
						4		3		2		1	
NA		10.98		10.56276		NA		NA		1.928		1.851	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	2	4	3	4	3	0	3	0	3	3	3	3	3
12		7.20		0.049		0.0282		1219		1231		0.88		0.69	
10		5.20		0.016		0.0155		973		970		0.91		0.71	
7		7		0		0		758		760		0		0	
14		14		14		14		14		14		14		13	
3		3.10		0.016		0.0155		792		832		0.41		0.32	
29		27.50		0.412		0.0947		3710		3740		1.64		1.24	
3		3		0		0		807		838		1		0	
5		10		11		11		0		0		0		0	
36%		71%		79%		79%									
8		3		2		3									
1000		1000		0.304		0.322		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		7%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	4	3	3	3	3	3	2	2	0	3	0	3	3	3
0.00088		0.00088		0.1970		0.2010		0.464		0.470		343		346		0.155	
0.00075		0.00075		0.1050		0.1130		0.411		0.320		334		335		0.155	
0		0		0		0		0		0		67		64		0	
14		14		14		14		14		14		14		14		14	
0.00075		0.00075		0.0594		0.0565		0.310		0.310		185		194		0.155	
0.00250		0.00250		1.1500		1.1900		0.855		1.330		450		457		0.155	
0		0		0		0		0		0		247		258		0	
14		14		0		0		5		7		0		0		14	
100%		100%						36%		50%						100%	
								6		5							
0.77		0.77		NA		NA		10.95		10.92		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
14	
0.155	
0.155	
0	
14	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
8300		0.0033		0.0031		3150		3180		0.0055		0.0042		0.150	
8220		0.0031		0.0031		2940		2930		0.0050		0.0050		0.050	
680		0		0		800		790		0		0		0	
14		14		14		14		14		14		14		14	
7410		0.0031		0.0031		2450		2380		0.0031		0.0031		0.031	
10300		0.0063		0.0031		5170		5200		0.0216		0.0050		1.460	
7618		0		0		2450		2491		0		0		0	
0		13		14		0		0		13		14		12	
		93%		100%						93%		100%		86%	
		1												1	
NA		0.158462282		0.135		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.067		0.220		0.206		1.50		1.55	
0.05		0.155		0.155		1.55		1.55	
0		0		0		0		0	
13		14		14		14		14	
0.031		0.155		0.155		0.86		1.55	
0.236		0.557		0.546		1.55		1.55	
0		0		0		1		2	
9		11		12		13		14	
69%		79%		86%		93%		100%	
3		3		2		1			
NA		NA		NA		25.10		24.75	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-75M																
Sample Date																
08/20/09			7.47	3		111	3			R		5.4	2	29.6	3	
10/21/09	6.62	3	9.89	3		68	2		38.1	3		2.67	3	33.1	3	
03/17/10	6.92	3	10.01	4		58	2		162.9	4		2.71	3	33.4	3	
05/20/10	5.66	3	9.62	3		175	3		145.6	4		3.15	3	32.7	3	
08/20/10	6.07	3	11.1	3	Q	83	2		125.5	4		3.51	3	31	2	
10/20/10	5.61	3	9.38	3		82	2		134.6	4		2.96	3	32	2	
03/28/11	6.22	3	8.73	3		72	2	Q	209.5	4		2.58	3	49.6	3	
05/24/11	6.09	3	11.13	4		142	3		198.6	4		2.6	2	33.4	3	
08/28/11	6.03	3	11.23	4		66.5896	FALSE		149.5	4		2.62	3	31.1	3	
10/25/11	6.42	3	10.1	3		77	2		153.2	4		2.48	3	32.6	3	
03/19/12	5.68	3	10.21	4		700	1		170	2		2.09	3	33.7	3	
05/18/12	5.85	3				82	2		-14	2		2.23	3	35	2	
08/20/12			11.38	4		81	2		153.4	4		2.92	3	33.3	3	
10/13/12	5.98	3	5.85	3		75	2		-198.7	4		2.45	3	32.1	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
88.9	3		65	2		0.319	3	J	6.8	2	J	33.5	3		0.206	3						
86.2	3		56.3	3		**0.0755**	3		9.72	3	J	36.4	3		0.157	3						
82.5	3		77.5	3		**0.0775**	3		3.92	3	J	34.8	3		0.198	3						
90.8	3		61	2		**0.0815**	3		20.3	3		37.4	3		0.16	2						
78.7	3		43	2		**0.075**	2		11.3	3		36.7	3		0.152	3						
83.9	3		64	2		**0.0735**	3		6.96	3	J	36.9	3		0.155	3						
131	3		61	2		0.6	1		4.27	3	J	63.7	3		0.118	3						
85.6	3		91	2		**0.0745**	3		8.19	3	J	37.3	3		0.126	3						
84.4	3		77	2		**0.075**	2		12	2		35.5	3		0.145	3						
82.3	3		51	2		**0.0735**	3		5.65	3	J	34.1	3		0.151	3						
81.2	3		27	2		**0.075**	2		17.3	3		34.5	3		0.126	3						
82.9	3		52	2		**0.0735**	3		8.54	3	J	34.1	3		**0.050**	1	U					
86.5	3		43	2		**0.075**	2		**5.0**	1	U	34.5	3		0.12	2	J-					
82.1	3		41	2		0.5	1		**1.57**	3		38.1	3		0.118	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0383	3				
	0.0231	3				
	0.0237	3				
	0.0369	3				
	0.0345	3				
	0.0338	3				
	0.0431	3				
	0.0276	3				
	0.0329	3				
	0.0335	3				
	0.0252	3				
	0.0343	3				
	0.0286	3				
	0.0503	3	J-			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.657	3		0.04	1 J		9.73	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		0.233	3 J		**0.050**			
0.592	3		**0.0155**	3		3.03	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.574	3		0.031	2 J		3.06	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.604	3		0.033	2 J		3.15	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.631	3 J+		0.201			
0.64	2		0.088	2 J		3.16	3		0.0018	2 J		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.695	3		**0.050**	1 U		3.46	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.272	3 J		**0.0155**			
0.653	3		0.092	2 J		1.37	3		**0.00075**	2		**0.00075**	2		**0.155**	3		18.4	3		**0.0155**			
0.669	3		0.073	2 J		3.38	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.506	3		**0.0155**			
0.627	3		0.07	1 J		3.23	3		0.0028	2 J		**0.00075**	2		**0.155**	3		0.569	3		**0.0155**			
0.595	3		0.074	2 J		3.16	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.547	3		0.047	2 J		3.18	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.362	3 J		**0.0155**			
0.536	3		0.08	1 J		3.22	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.53	2		**0.050**	1 U		3.24	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.559	3		0.031	2 J		3.36	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.482	3 J		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
1	U	19	2	J+	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.91	3	4.85	3
3		4.69	3		3.08	3		**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5.1	2	5.35	3
3		2.7	2		2.23	3		**0.0075**	2	0.0151	3	J	**0.155**	3	**0.155**	3	4.95	3	4.85	3
3		**1.00**	1	U	2.82	3		**0.0075**	2	**0.0075**	2	0.346	3	J	**0.155**	3	5.21	3	J+	5.21	3	J+
3		2.74	3	J+	**1.00**	1	U	0.0166	3	J	0.0156	3	J	**0.155**	3	**0.155**	3	5.46	3	5.13	3
3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5.11	3	5.26	3
3		12.7	3	J+	**1.00**	1	U	**0.0250**	2	U	**0.0075**	2	**0.155**	3	**0.155**	3	4.54	3	4.51	3
3		4.86	3	J+	3.11	3	J+	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3	**0.155**	3	6.47	3	J+	6.24	3	J+
3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.075**	2	0.23	2	J	5.32	3	5.41	3
3		2.54	3	J+	2.69	3	J+	**0.0075**	2	0.0163	3	J	**0.075**	2	**0.250**	2	U	5.64	3	5.67	3
3		**1.00**	1	U	**1.00**	1	U	0.055	2	0.0224	3	J	0.246	3	J	0.172	3	J	5.49	3	5.84	3
3		**1.00**	1	U	**1.00**	1	U	0.0254	3	J	0.0358	3	J	0.177	3	J	0.256	3	J	5.49	3	J+	5	1	J+
3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2	0.0194	3	J	**0.250**	2	U	**0.250**	2	U	5.43	3	5.31	3
3		**0.310**	2			R		**0.0075**	2		R		0.216	3	J	**0.075**	2	5.24	3	J		R

| | | |

| | | |

| | | |

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		**0.00075**	2		0.172	3		0.174	3		1.18	3	J+	0.823	3	J+	526	3		537	3		**0.155**	3
0.00075	2		**0.00075**	2		0.207	3		0.182	3		1.12	3		0.864	3		571	3		599	3		**0.155**	3
0.00075	2		**0.00075**	2		0.231	3		0.209	3		0.738	3		0.693	3		572	3		565	3		**0.155**	3
0.00075	2		**0.00075**	2		0.131	3	J+			R	1.05	3	J+	0.691	3	J+	580	2	J+	591	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		0.164	3		0.147	3		0.726	3		**0.310**	2	U	566	3		545	3		**0.155**	3
0.00075	2		**0.00075**	2		0.158	3		0.128	3		0.548	3	J	**0.310**	2	U	554	3		534	3		**0.155**	3
0.00075	2		**0.00075**	2		0.139	3		0.146	3		1.55	3		1.52	3		497	3		530	2		**0.155**	3
0.00075	2		**0.00075**	2		0.137	3		0.138	3		0.634	3		0.455	3	J	574	3		546	3		**0.155**	3
0.00075	2		**0.00075**	2		0.13	2		0.127	3		0.554	3	J	0.51	2	J	538	3		561	3		**0.155**	3
0.00075	2		**0.00075**	2		0.133	3		0.112	3		0.534	3	J	0.506	3	J	568	3		569	3		**0.155**	3
0.00075	2		**0.00075**	2		0.16	2		0.161	3		**0.310**	2	U	**0.310**	2	U	579	3		586	3		**0.155**	3
0.00075	2		**0.00075**	2		0.106	3		0.111	3		**0.310**	2	U	**0.310**	2	U	575	3		547	3		**0.155**	3
0.00075	2		**0.00075**	2		0.114	3		0.116	3		**0.310**	2	U	**0.310**	2	U	562	3		569	3		**0.155**	3
0.00075	2		**0.00075**	2		0.117	3		0.121	3		**0.310**	2	U	**0.310**	2	U	542	3		538	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

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																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			4.78	3		**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	3.75	3	J+								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0927	3	J	**0.155**	3		**0.155**	3			1.18	3	J	0.797	3	J								
0.106	3	J	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.101	3	J	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.13	2	J	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	4.17	3									

		2	3	1	3	0	2	1	4	2	3	1	3		
Mean		6.1		9.70		134		109.9		2.9		33.8			
Median		6.05		10.00		82		149.5		2.7		32.9			
St. Deviation		0		2		166		111		1		5			
# of values		12		13		14		13		14		14			
Minimum		5.61		5.85		58		-198.7		2.1		29.6			
Maximum		6.92		11.38		700		209.5		5.4		49.6			
Lowest fifth percentile		6		7		64		-88		2		31			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		83%		0%		0%		0%		0%		0%			
% of DWS exceedences		42%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		4	3		2	3		1	3		3	3						
87.6			58			0.161			8.7			37.7			0.142			NA			NA	
84.2			59			0.075			7.6			36.0			0.148			NA			NA	
13			17			0			5			8			0			NA			NA	
14			14			14			14			14			14				0			0
78.7			27			0.074			1.6			33.5			0.050			NA			NA	
131.0			91			0.600			20.3			63.7			0.206			NA			NA	
80			36			0			3			34			0			NA			NA	
0			0			11			2			0			1							
						79%			14%						7%							
						1			8													
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3		
0.0333		NA	
0.0337		NA	
0		NA	
14			0
0.0231		NA	
0.0503		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

NO3N_NVF_P_N	P_NSF_P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
Total Phosphorus		**Orthophosphate**		
mg/L		mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		3	3		4
0.606			0.06			3.55			0.0012			0.0009			0.155			1.640			0.031
0.600			0.05			3.20			0.0008			0.0008			0.155			0.261			0.016
0			0			2			0			0			0			5			0
14			14			14			14			14			14			14			14
0.530			0.02			1.37			0.0008			0.0008			0.155			0.233			0.016
0.695			0.09			9.73			0.0028			0.0025			0.155			18.400			0.201
1			0			2			0			0			0			0			0
0			3			0			12			14			14			6			13
			21%						86%			100%			100%			43%			93%
			11						2									4			
230			NA			NA			NA			0.0052			NA			NA			7.03
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

3		1	2		1	2		4	2		3	2		3	3		3	3		2	3		2	3
		4			1.70			0.0153			0.0150			0.176			0.177			5.31			5.28	
		2			1.00			0.0075			0.0150			0.155			0.155			5.28			5.26	
		5			1			0			0			0			0			0			0	
		14			13			14			13			14			14			14			13	
		0			1.00			0.0075			0.0075			0.075			0.075			4.54			4.51	
		19			3.11			0.0550			0.0358			0.346			0.256			6.47			6.24	
		1			1			0			0			0			0			5			5	
		7			8			11			7			10			11			0			0	
		50%			62%			79%			54%			71%			79%							
								2			6			4			3							
		87			87			NA			NA			150			150			NA			NA	
		NA			NA			6			NA			10			NA			2,000			NA	
		0%			0%			0%			0%			0%			0%			0%			0%	
		0%			0%			0%			0%			0%			0%			0%			0%	
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit				
NH3N NSF	NH3N NVF	AL N		AL NSF	AL NVF	AL F		AL FSF	AL FVF	SB N		SB NSF	SB NVF	SB F		SB FSF	SB FVF	AS N		AS NSF	AS NVF	AS F		AS FSF	AS FVF	BA N		BA NSF	BA NVF	BA F		BA FSF	BA FVF
		Aluminum									**Antimony**							**Arsenic**								**Barium**							
		Total			Dissolved						Total			Dissolved				Total			Dissolved					Total			Dissolved			
		µg/L			µg/L						µg/L			µg/L				µg/L			µg/L					µg/L			µg/L			

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
-1	3			3	3			3	3		4	3		4	3		2	3		2	3
9140				1.09				0.46			0.0236			0.0196			1.570			1.400	
8770				0.80				0.43			0.0212			0.0192			1.830			1.600	
1800				1				0			0			0			1			1	
14				14				14			14			14			14			14	
8020				0.28				0.22			0.0100			0.0100			0.250			0.250	
15300				2.25				1.03			0.0618			0.0388			2.870			2.780	
8066				0				0			0			0			0			0	
0				0				0			1			2			3			3	
											7%			14%			21%			21%	
											5			6							
NA				10.98				10.56276			NA			NA			3.383			3.248	
NA				100				NA			NA			NA			NA			NA	
0%				0%				0%			0%			0%			0%			0%	
0%				0%				0%			0%			0%			0%			0%	
				depends on Hardness				depends on Hardness									depends on Hardness				
				result > crit				result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		0	2		4	3		4	3		-1	3		-1	3		3	3		3	3	
11.9			8.0			0.019			0.0171			2650			2650			0.71			0		
10.0			10.0			0.016			0.0155			2650			2620			0.42			0		
8			3			0			0			170			180			1			0		
14			14			14			14			14			14			14			14		
3.1			3.1			0.016			0.0155			2330			2400			0.17			0		
32.8			11.5			0.050			0.0375			2990			3120			3.59			1		
3			3			0			0			2408			2413			0			0		
5			9			13			13			0			0			0			0		
36%			64%			93%			93%														
7			5			1			1														
1000			1000			0.702			0.677			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.00075		0.00075		0.150		0.144		0.71		0.570		557		558		0.155									
0.00075		0.00075		0.138		0.138		0.59		0.480		567		554		0.155									
0		0		0		0		0		0		24		22		0									
14		14		14		13		14		14		14		14		14									
0.00075		0.00075		0.106		0.111		0.31		0.310		497		530		0.155									
0.00075		0.00075		0.231		0.209		1.55		1.520		580		599		0.155									
0		0		0		0		0		0		516		533		0									
14		14		0		0		4		6		0		0		14									
100%		100%						29%		43%						100%									
								3		3															
0.77		0.77		NA		NA		19.11		19.05		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	14	
	0.155	
	0.155	
	0	
	14	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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P-08-75S

Sample Date													
08/21/09			9.56	3	35	2			R	3.2	2	10.2	3
10/21/09	6.07	3	11.57	4	25	2		71.4	3	3.23	3	10.4	3
03/17/10	6.41	3	9.37	3			R	167.4	4	1.46	3	13.1	3
05/22/10	5.82	3	10.57	4	43	2		146.4	4	3.46	3	14.5	3
08/22/10	5.11	3	12.64	4 Q	360	2 Q		181.4	4	3.15	3	11.6	3
10/20/10	5.15	3	11.6	3 Q	31	2		125.4	4	3.55	3	10.4	3
03/28/11	5.75	3	9.47	3	32	2 Q		221.1	4	3.44	3	11.2	3
05/24/11	5.63	3	10.52	4	67	2		170.8	4	3.47	3	13.9	3
08/28/11	5.71	3	11.81	4	27.4702	FALSE		160.1	4	2.71	3	11	2
10/25/11	6.16	3	12.58	4	29	2		172.2	4	2.73	3	9.33	3
03/19/12	5.08	3	11.38	4	32	2		171.8	4	2.44	3	11.6	3
05/17/12	5.72	3	73.6	3	45	2		-96.3	3	2.87	3	16.6	3
08/20/12	5.67	3	13.97	4	31	2		139.8	4	2.93	3	10.1	3
10/13/12	5.54	3	7.56	3	29	2		-154	3	3.01	3	11.1	3

36.7	3	33.8	3	0.313	3 J	7.9	2 J	27.5	3	0.163	3
32.6	3	27.5	3	0.2	1 J	6.47	3 J	25.6	3	0.107	3
39.8	3	62.5	3	**0.078**	2	3.88	3 J	29.1	3	0.15	2
47.4	3	49	2	5.99	3 J	21	2	37	2	0.148	3
32.9	3	15	2	0.4	1 J	4.95	3 J	13	2	0.169	3
32.2	3	30	1	0.199	3 J	4.71	3 J	12.4	3	0.204	3
37.8	3	21	2	**0.0745**	3	9.52	3 J	14.8	3	0.207	3
40.6	3	61	2	**0.0745**	3	7.24	3 J	16	2	0.137	3
33.5	3	40	1	**0.076**	2	7.88	3 J	12.2	3	0.143	3
31.1	3	17	2	18.2	3	4.95	3 J	11	2	0.241	3
35.3	3	8	1 J	0.2	1 J	13.8	3	13.3	3	0.124	3 J-
45.7	3	31	2	0.396	3 J	7.71	3 J	17.4	3	0.128	3
32.4	3	21	2	**0.075**	2	**5.0**	1 U	10.5	3	0.115	3
31.9	3	26	2	**0.075**	2	**1.57**	3	12.1	3	0.082	2 J

0.0186	3	
0.0054	2	J
0.0061	2	J
0.021	2	
0.0171	3	
0.0125	3	
0.0125	3	
0.0137	3	
0.0138	3	
0.0153	3	
0.0134	3	
0.0209	3	
0.0143	3	
0.0146	3	

0.548	3	**0.0155**	3	0.94	2	**0.0025**	2 U	**0.00075**	2	0.43	2 J	0.364	3 J	**0.0155**
0.554	3	**0.0155**	3	0.924	3	**0.00075**	2	0.0025	2 J	**0.155**	3	**0.250**	2 U	**0.0155**
0.509	3	**0.0155**	3	1.11	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.561	3	**0.0155**	3	1.05	3	**0.00075**	2	**0.00075**	2	0.7	1 J	0.916	3 J+	**0.0155**
0.629	3	0.066	2 J	1.12	3	**0.00075**	2	**0.00075**	2	0.47	2 J	**0.250**	2 U	**0.0155**
0.594	3	**0.050**	1 U	1.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.313	3 J	**0.0155**
0.543	3	0.067	2 J	1.19	3	**0.00075**	2	**0.00075**	2	0.38	2 J	7.44	3	0.171
0.559	3	0.063	2 J	1.11	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.505	3	**0.0155**
0.458	3	0.054	2 J	1.27	3	0.0023	2 J	**0.00075**	2	**0.155**	3	**0.250**	2 U	0.129
0.453	3	0.063	2 J	1.09	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.433	3	0.037	2 J	1.13	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.404	3 J	**0.0155**
0.508	3	0.07	1 J	1.22	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.454	3	0.052	2 J	1.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.511	3	**0.0155**	3	1.24	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.576	3	**0.0155**

3	59.6	3 J+	20.8	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.89	3	2.06	3
3	5.92	3	2.48	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.77	3	1.72	3
3	8	1	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.03	3	2.01	3
3	256	3	15.7	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.73	3 J+	2.39	3 J+
3	8.15	3 J+	**1.00**	1 U	0.0218	3 J	0.0172	3 J	**0.155**	3	**0.155**	3	2.03	3 J+	2.05	3 J+
3	6.43	3 J+	2.04	3 J+	0.0191	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	2.19	3 J+	2.05	3 J+
3	4.58	3 J+	2.49	3 J+	0.0949	3 J+	**0.0075**	2	**0.155**	3	**0.155**	3	1.9	2	2.05	3
3	4.5	2 J+	2.33	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	0.315	3 J	3.24	3 J+	3	1 J+
3	4.19	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.198	3 J	0.288	3 J	2.08	3	1.96	3
3	5.45	3 J+	2.19	3 J+	**0.0075**	2	**0.0075**	2	**0.250**	2 U	**0.075**	2	1.95	3 J+	1.93	3 J+
3	3.13	3	**1.00**	1 U	0.0402	3 J	0.031	2 J	0.197	3 J	0.224	3 J	1.98	3	2.09	3
3	2.19	3 J+	**1.00**	1 U	0.0196	3 J	0.0285	3 J	0.262	3 J	0.175	3 J	2.61	3 J+	2.54	3 J+
3	3.3	2	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.075**	2	0.256	3 J	1.83	3	1.76	3
3	4.54	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.276	3 J	0.315	3 J	1.94	3	1.82	3

0.0125	3	**0.0125**	3	**0.0075**	2	0.0452	3 J	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3160	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3250	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4060	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4350	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3570	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3240	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3460	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.04	3 J	2.86	3 J	**0.0075**	2	**0.0075**	2	4290	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.08	3 J	2.17	3 J	**0.0075**	2	**0.0075**	2	3430	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0075**	2	**0.0075**	2	2920	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.85	3 J	1.99	3 J	**0.0075**	2	**0.0075**	2	3580	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	5090	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.5	2 J	1.7	2 J	**0.0075**	2	**0.0075**	2	3130	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.61	3 J	**0.75**	2	**0.0075**	2	**0.0075**	2	3430	3

	3230	3	1.1	2	0.578	3	0.0384	3 J+	0.0356	3 J+	0.934	3 J+	0.783	3 J+
	3380	3	2.03	3	0.335	3	0.0384	3	0.0255	3	0.871	3	0.69	2
	4030	3	1.18	3	0.272	3	0.0155	3 J	**0.0050**	1	0.186	3 J	**0.250**	2 U
J+	4270	3 J+	2.55	3	0.793	3	0.056	2 J+	0.0497	3 J+	**0.250**	2 U	**0.250**	2 U
	3430	3	1.14	3 J+	0.469	3 J+	0.0616	3 J+	0.0495	3 J+	0.762	3 J+	0.547	3 J+
	3030	3	0.65	2	**0.050**	1	0.0247	3	0.0212	3	0.947	3	0.867	3
	3620	3	0.978	3	0.322	3	0.0257	3	0.0196	3 J	3.43	3	1.91	3
	4130	3	0.374	3	0.208	3	0.0112	3 J	0.0121	3 J	1.36	3	1.77	3
	3330	3	0.563	3	0.302	3	0.0124	3 J	**0.0050**	1	1.9	2	2.09	3
	3020	3	0.632	3	0.343	3	0.0113	3 J	**0.0050**	1	1.76	3	1.98	3
	3610	3	0.494	3	0.448	3	0.0121	3 J	0.0141	3 J	3.27	3 J+	3.8	2 J+
	4770	3	0.287	3 J+	0.241	3 J+	**0.0050**	1	**0.0050**	1	2.18	3 J		R
	3090	3	0.241	3	0.428	3	**0.0050**	1	0.0106	3 J	0.802	3	0.951	3
	3230	3	0.447	3	0.351	3	**0.0100**	1 U	**0.0100**	1 U	0.967	3 J+	0.886	3 J+

45.6	3	21.7	3	**0.050**	1 U	0.109	3 J+	558	3	591	3	1.64	3 J+	1.23	3 J+
17.7	3 J	8.15	3 J	0.0323	3 J	**0.0155**	3	567	3	586	3	0.803	3	0.607	3
3.10	2	**3.10**	2	0.0628	3 J	**0.0155**	3	723	3	720	2	0.563	3	0.325	3 J+
84.2	3	**10.0**	1 U	0.0899	3 J	0.0509	3 J	874	3 J+	806	3 J+	1.96	3 J+	1.3	2 J+
12.3	3 J	6.45	3 J	0.0325	3 J	**0.0155**	3	660	2	651	3	0.681	3 J+	0.431	3 J+
11.5	3 J	**3.10**	2	0.0746	3 J	0.0485	3 J	568	3	564	3	0.472	3 J+	0.39	2 J+
8.74	3 J	**3.10**	2	0.19	2	0.0786	3 J	621	3	684	3	0.506	3 J		R
9.77	3 J	**10.0**	1 U	0.313	3	0.311	3	765	3	762	3	0.353	3 J		R
9.05	3 J	9.21	3 J	0.278	3	0.276	3	598	3	581	3	0.328	3	0.253	3
10.0	1 U	**10.0**	1 U	0.212	3	0.175	3	494	3	502	3	0.358	3	0.231	3
7.76	3 J	7.99	3 J	0.228	3	0.189	3	648	3	673	3	0.284	3 J+	0.271	3 J+
10.0	1 U	**3.10**	2	0.265	3	0.364	3	951	3	890	2	0.278	3 J+	0.256	3 J+
7.14	3 J	6.35	3 J	0.0796	3 J	0.0461	3 J	558	3	568	3	0.215	3 J+	0.241	3 J+
9.67	3 J	**3.10**	2	0.0953	3 J	0.104	3	608	3	554	3	0.256	3 J+	0.187	3 J+

0.00075	2	**0.00075**	2	0.0626	3	0.0403	3 J	**0.310**	2 U	**0.310**	2 U	253	3	260	2	**0.155**	3
0.00075	2	**0.00075**	2	0.13	2	0.109	3	1.2	2	0.9	1	275	3	280	2	**0.155**	3
0.00075	2	**0.00075**	2	0.279	3	0.15	2	0.678	3	0.357	3 J	296	3	293	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0909	3 J+	0.083	2 J+	1.35	3 J+	1.08	3 J+	338	3 J+	321	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	0.0837	3	0.0679	3	0.682	3	**0.310**	2 U	267	3	252	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0655	3	0.051	2	0.473	3 J	**0.310**	2 U	257	3	246	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0701	3	0.0547	3	0.66	2	0.405	3 J	260	2	276	3	**0.155**	3
0.00075	2	**0.00075**	2	**0.0250**	2 U	**0.0250**	2 U	0.22	2 J	0.22	2 J	295	3	275	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.0559	3	**0.0250**	2 U	0.335	3 J	0.441	3 J	248	3	242	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0427	3 J	0.0325	3 J	0.261	3 J	0.185	3 J	219	3	233	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0829	3	0.0798	3	**0.310**	2 U	**0.310**	2 U	264	3	270	2	**0.155**	3
0.00075	2	**0.00075**	2	0.0243	3 J	0.0171	3 J	**0.310**	2 U	**0.310**	2 U	309	3	288	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0367	3 J	0.0347	3 J	**0.310**	2 U	**0.310**	2 U	233	3	233	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0535	3	0.0443	3 J	**0.310**	2 U	**0.310**	2 U	255	3	240	2	**0.155**	3

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0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

6530	3	**0.0031**	2	**0.0031**	2	2000	1	2130	3	**0.0050**	1	**0.0050**	1	0.818	3 J
7090	3	**0.0031**	2	**0.0031**	2	2230	3	2350	3	**0.0050**	1	**0.0050**	1	1.07	3
7390	3	**0.0031**	2	**0.0031**	2	2390	3	2380	3	**0.0050**	1	**0.0050**	1	0.102	3 J
7840	3 J+	**0.0031**	2	**0.0031**	2	2640	3 J+	2590	3 J+	**0.0050**	1	**0.0050**	1	0.145	3 J
6930	3	**0.0031**	2	**0.0031**	2	2380	3	2340	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6720	3	**0.0031**	2	**0.0031**	2	2110	3 J+	2150	3 J+	**0.0050**	1	**0.0050**	1	0.112	3 J
7420	3	**0.0031**	2	**0.0031**	2	2200	2	2370	3	**0.0050**	1	**0.0050**	1	0.559	3 J+
7400	2	**0.0031**	2	**0.0031**	2	2530	3	2570	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6870	3	**0.0031**	2	**0.0031**	2	2110	3	2070	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
6210	3	**0.0031**	2	**0.0031**	2	1850	3	1850	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7620	3	0.0312	3	0.0225	3	2290	3	2350	3	0.007	1 J	0.0065	2 J	0.127	3 J
7490	3	**0.0031**	2	**0.0031**	2	2880	3	2680	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
6650	3	**0.0031**	2	**0.0031**	2	2020	3	2090	3	0.007	1 J	**0.0031**	2	**0.0310**	2
6670	3	**0.0031**	2	**0.0031**	2	2290	3	2130	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

	R	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.15	2 J	0.155	3	0.155	3	0.624	3 J	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.384	3 J	0.403	3 J	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0868	3 J	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	5.68		15.44		60		113.7		3.0		11.8	
Median	5.71		11.48		32		160.1		3.1		11.2	
St. Deviation	0		17		91		112		1		2	
# of values	13		14		13		13		14		14	
Minimum	5.08		7.56		25		-154		1.5		9.3	
Maximum	6.41		73.60		360		221.1		3.6		16.6	
Lowest fifth percentile	5		9		26		-119		2		10	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	100%		0%		0%		0%		0%		0%	
% of DWS exceedences	77%		0%		0%		0%		0%		0%	

1	3	0	2	3	3	2	3	1	3	3	3								
36.4		32.0		1.880		7.6		18.0		0.151				NA				NA	
34.4		29.0		0.200		6.9		14.1		0.146				NA				NA	
5		16		5		5		8		0				NA				NA	
14		14		14		14		14		14					0				0
31.1		8.0		0.075		1.6		10.5		0.082				NA				NA	
47.4		62.5		18.200		21.0		37.0		0.241				NA				NA	
32		13		0		3		11		0				NA				NA	
0		0		6		2		0		0									
				43%		14%													
		1		6		10				1									
NA		NA		NA		NA		>=20		NA					NA				NA
NA		500		NA		NA		NA		10					NA				NA
0%		0%		0%		0%		71%		0%					NA				NA
0%		0%		0%		0%		0%		0%					NA				NA

4	3		
0.0142		NA	
0.0141		NA	
0		NA	
14			0
0.0054		NA	
0.0210		NA	
0		NA	
0			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4
0.522		0.0430		1.13		0.0010		0.00088		0.25		0.880		0.0347
0.527		0.0510		1.12		0.0008		0.00075		0.16		0.280		0.0155
0		0		0		0		0		0		2		0
14		14		14		14		14		14		14		14
0.433		0.0155		0.92		0.0008		0.00075		0.16		0.250		0.0155
0.629		0.0700		1.27		0.0025		0.00250		0.70		7.440		0.1710
0		0		1		0		0		0		0		0
0		6		0		13		13		10		7		12
		43%				93%		93%		71%		50%		86%
		8				1		1		4		3		
230		NA		NA		NA		0.0052		NA		NA		7.07
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	2	4	2	3	3	3	3	2	3	2	3
	26.9		3.9		0.0188		0.0114		0.178		0.195		2.16		2.10	
	5.0		1.5		0.0075		0.0075		0.155		0.155		2.01		2.05	
	68		6		0		0		0		0		0		0	
	14		14		14		14		14		14		14		14	
	2.2		1.0		0.0075		0.0075		0.075		0.075		1.77		1.72	
	256.0		20.8		0.0949		0.0310		0.276		0.315		3.24		3.00	
	3		1		0		0		0		0		2		2	
	0		7		9		11		10		8		0		0	
			50%		64%		79%		71%		57%					
					4		3		4		6					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	7%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0075		0.0102		1.58		1.53		0.0075		0.0075		3640	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		3450	
0		0		0		0		1		1		0		0		600	
14		14		14		14		14		14		14		14		14	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		2920	
0.0125		0.0125		0.0075		0.0452		3.04		2.86		0.0075		0.0075		5090	
0		0		0		0		1		1		0		0		3057	
14		14		14		13		9		10		14		14		0	
100%		100%		100%		93%		64%		71%		100%		100%			
						1		5		4							
NA		NA		NA		NA		NA		NA		0.049		0.049		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	3	3	3	3	3
3580		0.9		0.367		0.0234		0.0191		1.401		1.290		
3410		0.6		0.339		0.0140		0.0131		0.957		0.886		
530		1		0		0		0		1		1		
14		14		14		14		14		14		13		
3020		0.2		0.050		0.0050		0.0050		0.186		0.250		
4770		2.6		0.793		0.0616		0.0497		3.430		3.800		
3027		0		0		0		0		0		0		
0		0		1		3		5		1		2		
				7%		21%		36%		7%		15%		
						5		4		1				
NA		10.98		10.56276		NA		NA		1.285		1.234		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		43%		38%		
0%		0%		0%		0%		0%		0%		0%		

2	3	1	2	4	3	4	3	0	3	0	3	3	3	3	3		
17.6		7.5		0.143		0.128		657		652		0.62		0.48			
9.9		7.2		0.093		0.091		615		621		0.42		0.30			
22		5		0		0		130		110		1		0			
14		14		14		14		14		14		14		12			
3.1		3.1		0.032		0.016		494		502		0.22		0.19			
84.2		21.7		0.313		0.364		951		890		1.96		1.30			
6		3		0		0		536		536		0		0			
3		8		1		3		0		0		0		0			
21%		57%		7%		21%											
9		5		7		4											
1000		1000		0.166		0.187		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		43%		29%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

5	2	5	2	4	3	4	3	2	2	2	2	0	3	0	3	3	3
0.00088		0.00075		0.0788		0.0582		0.530		0.410		269		265		0.155	
0.00075		0.00075		0.0641		0.0477		0.320		0.310		262		265		0.155	
0		0		0		0		0		0		31		26		0	
14		14		14		14		14		14		14		14		14	
0.00075		0.00075		0.0243		0.0171		0.220		0.185		219		233		0.155	
0.00250		0.00075		0.2790		0.1500		1.350		1.080		338		321		0.155	
0		0		0		0		0		0		228		233		0	
14		14		1		2		5		7		0		0		14	
100%		100%		7%		14%		36%		50%						100%	
				3		5		4		5							
0.77		0.77		NA		NA		7.33		7.31		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
14	
0.155	
0.155	
0	
14	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	3
7060		0.0051		0.0045		2280		2290		0.0047		0.0044		0.228	
7010		0.0031		0.0031		2260		2350		0.0050		0.0050		0.076	
480		0		0		270		230		0		0		0	
14		14		14		14		14		14		14		14	
6210		0.0031		0.0031		1850		1850		0.0031		0.0031		0.031	
7840		0.0312		0.0225		2880		2680		0.0070		0.0065		1.070	
6418		0		0		1948		1993		0		0		0	
0		13		13		0		0		12		13		7	
		93%		93%						86%		93%		50%	
										2		1		4	
NA		0.070021177		0.060		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.053		0.171		0.173		1.48		1.55	
0.05		0.155		0.155		1.55		1.55	
0		0		0		0		0	
13		14		14		14		14	
0.031		0.155		0.155		0.62		1.55	
0.15		0.384		0.403		1.55		1.55	
0		0		0		1		2	
11		13		13		13		14	
85%		93%		93%		93%		100%	
2		1		1		1			
NA		NA		NA		16.79		16.55	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-77D																
Sample Date																
08/25/09	6.67	3	3.93	3		83	2		89.2	3		3.47	3	14.2	3	
10/13/09	5.98	3	20.1	3	PE	48	2		73.1	3		4.11	3	13.1	3	
03/20/10	6.02	3	2.25	3		59	2		88.9	3		3.14	3	13.4	3	
05/18/10	6.5	2	2.81	3		63	2		203.8	4		3.24	3	12.1	3	
08/19/10	6.9	2	3.84	3	Q	50	1		179.2	4		3.59	3	11.7	3	
10/23/10	5.76	3	2.88	3		56	2		-29.2	3	Q	3.22	3	13.2	3	
03/29/11	5.84	3	2.35	3		110	2	Q	166.4	4		2.63	3	11.6	3	
05/24/11	5.9	2	2.73	3		59	2		181.2	4		2.79	3	12.3	3	
08/29/11	5.44	3	9.65	3		44.4478	FALSE		125	3		3.31	3	13.1	3	
10/26/11	6.36	3	2.71	3		66	2		132.5	4		2.63	3	12.4	3	
03/24/12	5.58	3	2.28	3		58	2		131.3	4		3.11	3	12.7	3	
05/22/12	5.41	3	2.52	3		59	2		38.4	3		2.74	3	12.3	3	
08/22/12	6.21	3	2.45	3		57	2		107.2	4		3.17	3	12.5	3	
10/08/12	6.14	3	1.64	3		57	2		87.1	3		3.83	3	12.7	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
64.7	3		61.3	3		**0.078**	2		7.5	2 J		20.5	3		0.0635	3 J						
61.9	3		57.5	3		0.207	3 J		9.3	2 J		28.5	3		0.06	1 J						
59.7	3		76.3	3		**0.076**	2		4.44	3 J		27.1	3		0.066	2 J						
64.1	3		77	2		1.14	3		18.3	3		26.6	3		0.176	3						
56.9	3		46	2		5.52	3		6.6	2 J		12.2	3		**0.050**	1 U						
60.6	3		70	1		**0.076**	2		7.26	3 J		12.1	3		**0.050**	1 U						
60.2	3		45	2		1.01	3		**1.57**	3		12.2	3		**0.050**	1 U						
60.1	3		92	2		0.6	1		5.54	3 J		12	2		0.161	3						
59.7	3		76	2		0.6	1		4.81	3 J		11.7	3		**0.050**	1 U						
59.7	3		56	2		**0.0745**	3		4.23	3 J		11.4	3		**0.050**	1 U						
58.9	3		66	2		0.6	1 J		5.88	3 J		11.6	3		**0.050**	1 U						
59.3	3		54	2		**0.0735**	3		5.48	3 J		11.3	3		0.0635	3 J						
74.3	3		59	2		**0.0735**	3		**5.0**	1 U		**1.55**	3		0.107	3						
59.1	3		52	2		0.2	1 J		4.02	3 J		11.8	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0050		1	U		
	0.00155		3			
	0.00155		3			
	0.0107		3			
	0.0076		2	J		
	0.00155		3			
	0.0055		2	J		
	0.0052		2	J		
	0.00155		3			
	0.00155		3			
	0.00155		3			
	0.00155		3			
	0.0066		2	J		
	0.0072		2	J		

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.479	3		0.202	3		11.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.611	3		0.134	3		10.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.641	3		0.126	3		11.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.651	3		0.127	3		11.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.687	3		0.164	3		12.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.745	3		0.182	3		12.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.703	3		0.161	3		12.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		4.86	3		**0.0155**			
0.75	2		0.173	3		12.4	3		**0.00075**	2		0.002	1	J	**0.155**	3		**0.250**	2	U	**0.0155**			
0.77	2		0.165	3		12.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.672	3		0.167	3		11.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.63	2		0.136	3		11.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.63	2		0.16	2		11.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.646	3		0.15	2		12	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.698	3		0.18	2		11.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.541	3		**0.050**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		3.58	3	J+	**1.00**	1	U	0.037	2	J	0.0318	3	J	5.39	3		4.35	3		**0.125**	3	U	**0.125**	3	U
3		8.94	3		2.25	3		0.0327	3	J	0.0337	3	J	5.27	3		5.01	3		**0.125**	3	U	**0.125**	3	U
3		12.4	3		2.81	3		**0.0075**	2		**0.0075**	2		5.18	3		5.14	3		**0.125**	3	U	**0.125**	3	U
3		11.7	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		5.14	3		4.85	3		**0.125**	3	U	**0.125**	3	U
3		5.21	3	J+	2.85	3	J+	**0.0075**	2		**0.0075**	2		4.82	3		4.78	3		**0.125**	3	U	**0.125**	3	U
3		2.37	3	J+	2.56	3	J+	0.0314	3	J	**0.0250**	2	U	5.35	3		5.43	3		0.37	2	J+	0.393	3	J+
3		44.6	3		4.03	3	J+	**0.0075**	2		**0.0075**	2		5.07	3		4.97	3		0.301	3		**0.125**	3	U
3		12	2	J+	5.32	3	J+	**0.0250**	2	U	**0.0250**	2	U	5.23	3		5.32	3		0.658	3	J+	0.731	3	J+
3		116	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		5.64	3		4.93	3		0.814	3		**0.125**	3	U
3		31	2		2.72	3	J+	0.0352	3	J	**0.0250**	2	U	5.43	3		5.1	2		0.494	3	J+	0.402	3	J+
3		10.9	3		**1.00**	1	U	0.0378	3	J	0.0361	3	J	5.44	3		5.28	3		0.453	3		**0.125**	3	U
3		4.99	3	J+	2.56	3	J+	0.0204	3	J	0.0207	3	J	5.17	3		4.75	3		0.607	3	J+	0.656	3	J+
3		2.33	3		**1.00**	1	U	0.0917	3		0.0308	3	J	5.21	3		5.17	3		0.559	3		**0.125**	3	U
1	U	2.35	3	J+	**0.310**	2		0.0306	3	J	0.0298	3	J	5.09	3		5.23	3		**0.125**	3	U	**0.125**	3	U

| | | |

| | | |

									depends on Hardness				depends on Hardness																		
result > crit				result > crit					result > crit				result > crit														result > crit				
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
10.0	1	U	**10.0**	1	U	**0.0155**	3		**0.0155**	3		786	3		657	3		0.625	3	J+	0.47	2	J+
26.7	3		**3.10**	2		0.0408	3	J	**0.0155**	3		807	3		754	3		1.23	3		0.348	3	
20.3	3		6.6	2	J	0.0395	3	J	**0.0155**	3		778	3		797	3		0.54	2		0.31	2	J+
10.0	1	U	**10.0**	1	U	0.115	3		**0.0155**	3		718	3	J+	719	3	J+	0.81	2	J+	0.412	3	J+
15.1	3	J	11.4	3	J	**0.0155**	3		**0.0155**	3		702	3		712	3		0.563	3	J+	0.522	3	J+
6.97	3	J	6.65	3	J	**0.0155**	3		**0.0155**	3		744	3		685	3		0.298	3	J+	0.333	3	J+
48.1	3		9.13	3	J	0.0772	3	J	**0.0155**	3		690	2		711	3		1.33	3		0.486	3	J+
18.9	3	J	**10.0**	1	U	0.0338	3	J	**0.0155**	3		711	3		796	3		0.99	2		0.837	3	J+
113	3		6.55	3	J	0.2	1		**0.0155**	3		827	3		742	3		2.78	3		0.347	3	
58.3	3		**10.0**	1	U	0.079	2	J	**0.0155**	3		704	3		642	3		1.15	3		0.355	3	
23.6	3		21.1	3		**0.0155**	3		**0.0155**	3		801	3		815	3		0.724	3	J+	0.486	3	J+
10.0	1	U	**10.0**	1	U	**0.0155**	3		**0.0155**	3		734	3		771	3		0.436	3	J+	0.38	2	J+
3.10	2		7.22	3	J	**0.0155**	3		**0.0155**	3		733	3		754	3		0.254	3	J+	0.257	3	J+
9.35	3	J	9.42	3	J	**0.0155**	3		**0.0155**	3		740	2		755	3		0.282	3	J+	0.281	3	J+

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		0.00266	3	J	0.297	3		0.233	3		0.994	3	J+	0.689	3	J+	877	3		700	1		**0.155**	3
0.00075	2		**0.00075**	2		0.289	3		0.268	3		1.6	2		0.42	2	J	765	3		786	3		**0.155**	3
0.00075	2		**0.00075**	2		0.255	3		0.212	3		1.01	3		0.627	3		837	3		845	3		**0.155**	3
0.00174	3	J	**0.00075**	2		0.244	3	J+	0.231	3	J+	0.685	3	J+	**0.310**	2	U	781	3	J+	759	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		0.153	3		0.153	3		1.07	3		1	1		755	3		755	3		**0.155**	3
0.00075	2		**0.00075**	2		0.262	3		0.244	3		0.602	3	J	**0.310**	2	U	829	3		815	3		**0.155**	3
0.00075	2		**0.00075**	2		0.263	3		0.241	3		1.04	3		0.625	3		789	3		784	3		**0.155**	3
0.00075	2		**0.00075**	2		0.278	3		0.26	2		1.01	3		0.787	3		780	2		796	3		**0.155**	3
0.00075	2		**0.00075**	2		0.264	3		0.248	3		0.909	3	J		R		877	3		782	3		**0.155**	3
0.00075	2		**0.00075**	2		0.283	3		0.279	3		1.31	3		0.645	3		803	3		799	3		**0.155**	3
0.00075	2		**0.00075**	2		0.314	3		0.306	3		1.4	2		0.793	3		811	3		820	2		**0.155**	3
0.00075	2		**0.00075**	2		0.231	3		0.214	3		**0.310**	2	U	**0.310**	2	U	760	2		799	3		**0.155**	3
0.00250	2	U	**0.00075**	2		0.23	2		0.226	3		**0.310**	2	U	**0.310**	2	U	787	3		794	3		**0.155**	3
0.00075	2		**0.00075**	2		0.27	2		0.257	3		**0.310**	2	U	**0.310**	2	U	801	3		822	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013								depends on Total Ag																				
			result > crit								result > crit																				result > crit
SI_F	SI_FSF	SI_FVF	AG_N			AG_NSF	AG_NVF	AG_F			AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**										**Sodium**								**Thallium**							**Tir**
	Dissolved				Total						Dissolved				Total				Dissolved				Total				Dissolved				Total	
	µg/L				µg/L						µg/L				µg/L				µg/L				µg/L				µg/L				µg/L	
12400	3				**0.0031**		2				**0.0031**		2		6170		3		5190		3		**0.0050**		1		**0.0050**		1		1.18	3 J+
14200	3				**0.0031**		2				**0.0031**		2		6190		3		5740		3		**0.0050**		1		**0.0050**		1		**0.050**	1
15300	3				**0.0031**		2				**0.0031**		2		6070		3		6250		3		**0.0050**		1		**0.0050**		1		0.206	3
14500	3 J+				**0.0031**		2				**0.0031**		2		5370		3 J+		5440		3 J+		**0.0050**		1		**0.0050**		1		**0.050**	1
13900	3				**0.0031**		2				**0.0031**		2		5440		3		5530		3		**0.0050**		1		**0.0050**		1		**0.050**	1
14200	3				**0.0031**		2				**0.0031**		2		5590		3		5090		3		**0.0050**		1		**0.0050**		1		**0.050**	1
14200	3				0.0069		2 J				**0.0031**		2		5220		3		5400		2		**0.0050**		1		**0.0050**		1		**0.050**	1
15500	3				**0.0031**		2				**0.0031**		2		5450		3		6090		3		**0.0050**		1		**0.0050**		1		**0.050**	1
14500	3				0.014		2 J				**0.0031**		2		6290		3		5660		3		**0.0031**		2		**0.0031**		2		0.0939	3 J
13800	3				**0.0031**		2				**0.0031**		2		5360		3		4720		3		**0.0031**		2		**0.0031**		2		**0.0310**	2
15800	3				0.0118		3 J				0.0173		3 J		6060		3		6210		3		**0.0031**		2		**0.0031**		2		**0.0310**	2
14400	3				**0.0031**		2				**0.0031**		2		5730		3		6010		3		**0.0031**		2		**0.0031**		2		**0.0310**	2
14400	3				**0.0031**		2				**0.0031**		2		5700		2		5910		3		**0.0031**		2		**0.0031**		2		**0.0310**	2
14800	3				**0.0031**		2				**0.0031**		2		5770		3		5900		2		0.0163		3 J		0.0153		3 J		**0.0310**	2

																		depends on Hardness				depends on Total Zn	
																		result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium															**Zinc[4]**	
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.466	3	J+	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.050	1		**0.155**	3	**0.155**	3	1.23	3	J	**1.55**	3	U											
0.105	3	J	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U	3.9	2												
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U	3.43	3	J+											
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.050	1		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.0310	2		**0.155**	3	**0.155**	3	3.68	3		2.34	3	J											
0.0310	2		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.0753	3	J	**0.155**	3	**0.155**	3	**1.55**	3	U	3.37	3												
0.0310	2		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.0310	2		**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U											
0.0310	2		**0.155**	3	**0.155**	3	2.55	3	J	**1.55**	3	U											

		2	3	2	3	0	2	1	4	2	3	1	3		
Mean		6.05		4.44		62		112.0		3.21		12.7			
Median		6.00		2.72		59		116.0		3.20		12.6			
St. Deviation		0		5		16		62		0		1			
# of values		14		14		14		14		14		14			
Minimum		5.41		1.64		44		-29.2		2.63		11.6			
Maximum		6.90		20.10		110		203.8		4.11		14.2			
Lowest fifth percentile		5		2		47		15		3		12			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		79%		0%		0%		0%		0%		0%			
% of DWS exceedences		50%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		3	3		2	3		1	3		3	2						
61.4			63.0			0.740			6.4			15.0			0.0700			NA			NA	
59.9			60.0			0.200			5.5			12.1			0.0600			NA			NA	
4			13			1			4			8			0			NA			NA	
14			14			14			14			14			14				0			0
56.9			45.0			0.074			1.6			1.6			0.0155			NA			NA	
74.3			92.0			5.520			18.3			28.5			0.1760			NA			NA	
58			46			0			3			8			0			NA			NA	
0			0			6			2			1			7							
						43%			14%			7%			50%							
						3			11						4							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			71%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

5	3						
0.0042		NA					
0.0033		NA					
0		NA					
14			0				
0.0016		NA					
0.0107		NA					
0		NA					
8							
57%							
5							
NA			NA				
NA			NA				
0%			NA				
0%			NA				
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
Total Phosphorus				**Orthophosphate**			
mg/L				mg/L			

| | | |

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3	2	3	2	3	4	3	3	2	2	3	2	3	3	3	3										
	19.20		2.17		0.027		0.0210		5.25		5.02		0.358		0.245										
	9.90		2.41		0.028		0.0250		5.22		5.06		0.336		0.125										
	30		1		0		0		0		0		0		0										
	14		14		14		14		14		14		14		14										
	2.33		0.31		0.008		0.0075		4.82		4.35		0.125		0.125										
	116.00		5.32		0.092		0.0361		5.64		5.43		0.814		0.731										
	2		1		0		0		5		5		0		0										
	0		6		6		8		0		0		6		10										
			43%		43%		57%						43%		71%										
					7		6																		
	87		87		NA		NA		150		150		NA		NA										
	NA		NA		6		NA		10		NA		2,000		NA										
	7%		0%		0%		0%		0%		0%		0%		0%										
	0%		0%		0%		0%		0%		0%		0%		0%										
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit												

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3	2	3	3	3	4	3	4	3	3	3	3	3								
3800		1.60		0.382		0.0209		0.0120		1.00		0.852									
3800		1.69		0.366		0.0210		0.0109		0.87		0.783									
190		1		0		0		0		1		1									
14		14		14		14		14		14		14									
3490		0.47		0.100		0.0100		0.0050		0.25		0.250									
4090		2.53		1.200		0.0368		0.0216		2.26		2.440									
3536		1		0		0		0		0		0									
0		0		2		4		6		2		2									
				14%		29%		43%		14%		14%									
				2		3		6													
NA		10.98		10.56276		NA		NA		1.488		1.428									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		14%		7%									
0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness										depends on Hardness					
				result > crit		result > crit										result > crit				result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	3		4	3		4	3		0	3		0	3		3	3		3	3	
26.7			9.4			0.0496			0.0155			748			736			0.858			0.42		
17.0			9.7			0.0247			0.0155			737			748			0.675			0.37		
29			4			0			0			44			52			1			0		
14			14			14			14			14			14			14			14		
3.1			3.1			0.0155			0.0155			690			642			0.254			0.26		
113.0			21.1			0.2000			0.0155			827			815			2.780			0.84		
6			5			0			0			698			652			0			0		
4			6			7			14			0			0			0			0		
29%			43%			50%			100%														
4			7			5																	
1000			1000			0.206			0.228			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	3	3	3	3	3	3	2	2	0	3	0	3	3	3								
0.00095		0.00089		0.260		0.241		0.900		0.550		804		790		0.155									
0.00075		0.00075		0.264		0.243		1.000		0.630		795		795		0.155									
0		0		0		0		0		0		39		35		0									
14		14		14		14		14		13		14		14		14									
0.00075		0.00075		0.153		0.153		0.310		0.310		755		700		0.155									
0.00250		0.00266		0.314		0.306		1.600		1.000		877		845		0.155									
0		0		0		0		0		0		758		736		0									
13		13		0		0		3		5		0		0		14									
93%		93%						21%		38%						100%									
1		1						1		1															
0.77		0.77		NA		NA		8.47		8.45		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	14	
	0.155	
	0.155	
	0	
	14	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-2	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2	
14400			0.0048			0.0041			5740			5650			0.0051			0.0051			0.14		
14400			0.0031			0.0031			5720			5700			0.0050			0.0050			0.05		
800			0			0			360			450			0			0			0		
14			14			14			14			14			14			14			14		
12400			0.0031			0.0031			5220			4720			0.0031			0.0031			0.03		
15800			0.0140			0.0173			6290			6250			0.0163			0.0153			1.18		
13310			0			0			5311			4961			0			0			0		
0			11			13			0			0			13			13			11		
			79%			93%									93%			93%			79%		
			3			1									1			1			1		
NA			0.09398123			0.080			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
			depends on HARD; revised 2013			depends on Total Ag																	
			result > crit			result > crit									result > crit								
SI F	SI FSF	SI FVF	AG N		AG NSF	AG NVF	AG F		AG FSF	AG FVF	NA N	NA NSF	NA NVF	NA F	NA FSF	NA FVF	TL N	TL NSF	TL NVF	TL F	TL FSF	TL FVF	SN N	SN NSF	SN NVF
Silicon					**Silver[8]**							**Sodium**						**Thallium**							**Tin**
Dissolved			Total		Dissolved				Total			Dissolved			Total			Dissolved			Total				
µg/L			µg/L		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L				

| | | |

P-08-77S

Sample Date												
08/25/09	6.77	3	15.97	4	67	2	86.9	3	3.63	3	16.5	3
10/13/09	6	1	12.6	3	42	2	102.9	4	3.74	3	18.8	3
05/18/10	6.7	2	15.24	4	59	2	217.7	4	1.84	3	18.6	3
08/19/10	7.02	3	14.82	4	46	2	98.7	3	2.6	2	17.6	3
10/23/10	6.24	3	14.39	4	66	2	-15.3	3 Q	4.06	3	18	2
05/24/11	6.34	3	13.83	4	53	2	179.4	4	1.66	3	18.2	3
08/29/11	5.94	3	13.64	4	34.656	FALSE	140.7	4	2.8	2	17.4	3
10/26/11	6.84	3	13.88	4	54	2	140.2	4	3.17	3	16.4	3
08/23/12	6.44	3	14.12	4	46	2	117.5	4	3.06	3	15.6	3
10/08/12	6.79	3	9.07	3	50	1	103.9	4	4.4	2	17.9	3

51	2	38.8	3	1.21	3	3.8	2 J	36	2	0.119	3
56.1	3	28.8	3	1.89	3	5.7	2 J	22.4	3	0.144	3
61.9	3	52	2	**0.0805**	3	15.2	3	22.5	3	0.132	3
51.8	3	40	1	0.515	3	3.32	3 J	21.3	3	0.127	3
53.4	3	29	2	**0.076**	2	4.16	3 J	20.5	3	0.115	3
54.8	3	71	2	0.3	1 J	3.96	3 J	21.5	3	0.102	3
49.5	3	41	2	**0.076**	2	**1.57**	3	17.9	3	0.284	3
49.5	3	27	2	**0.0735**	3	**1.57**	3	16.9	3	0.162	3
46.5	3	26	2	0.606	3	**5.0**	1 U	16.4	3	0.123	3
50	1	30	1	0.6	1	3.39	3 J	18.1	3	0.0985	3 J

0.0050	1	U
0.00155	3	
0.0184	3	
0.01	1	
0.004	1	J
0.0057	2	J
0.00155	3	
0.0073	2	J
0.0050	1	U
0.0116	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.58	2	0.06	1 J	2.89	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.232	3 J	**0.0155**
0.64	2	0.066	2 J	3.6	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.682	3	0.038	2 J	4.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.675	3	0.092	2 J	4.04	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.638	3	0.094	2 J	3.63	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.222	3 J	**0.0155**
0.718	3	0.082	2 J	3.83	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.55	2	0.063	2 J	0.64	2	**0.00075**	2	**0.00075**	2	**0.155**	3	0.545	3	**0.0155**
0.588	3	0.088	2 J	3.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.579	3	0.077	2 J	2.76	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.64	2	0.097	2 J	3.33	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.229	3 J	**0.050**

3	16.5	3 J+	**1.00**	1 U	0.0521	3	0.0388	3 J	0.312	3 J	0.409	3 J	3.33	3	1.61	3
3	12.7	3	**1.00**	1 U	0.0393	3 J	0.0366	3 J	0.48	2 J	0.57	2	1.86	3	1.73	3
3	4.79	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.358	3 J	**0.250**	2 U	2.01	3 J+	1.9	2 J+
3	14.4	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.77	3 J+	1.86	3 J+
3	2.47	3 J+	2.34	3 J+	0.033	2 J	**0.0250**	2 U	0.531	3	0.521	3	2.08	3 J+	2.15	3 J+
3	10.4	3 J+	3.96	3 J+	**0.0250**	2 U	**0.0250**	2 U	0.62	2	0.551	3	2.5	2 J+	2.29	3 J+
3	11.8	3 J+	4.37	3 J+	0.524	3	**0.0075**	2	0.494	3 J	0.475	3 J	2.52	3	1.85	3
3	**1.00**	1 U		R	0.031	2 J	0.0286	3 J	0.512	3	0.371	3 J	2	1 J+	2.14	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0267	3 J	0.0308	3 J	0.6	1	0.582	3	1.41	3	1.47	3
1 U	31.1	3	**1.00**	1 U	0.0185	3 J	0.0324	3 J	0.511	3	0.428	3 J	2.12	3	1.85	3

0.0125	3	**0.0125**	3	**0.0075**	2	0.0287	3 J	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4780	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5210	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5110	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4900	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5110	3
0.0125	3	**0.0125**	3	**0.0250**	2 U	0.0674	3	2.85	3 J	3.19	3 J	**0.0075**	2	**0.0075**	2	5100	2
0.0125	3	**0.0125**	3	**0.0075**	2		R	4.28	3 J	2.88	3 J	**0.0075**	2	**0.0075**	2	4770	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.7	2 J	1.61	3 J	**0.0075**	2	**0.0075**	2	4670	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.79	3 J	1.93	3 J	**0.0075**	2	**0.0075**	2	4360	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.95	3 J	1.63	3 J	**0.0075**	2	**0.0075**	2	4980	3

	4470	3	1.8	2	0.247	3	0.0451	3 J+	0.0277	3 J+	0.635	3 J+	**0.250**	2 U
	5130	3	1.77	3	**0.050**	1	0.0389	3	0.0183	3 J	**0.250**	2 U	**0.250**	2 U
J+	5360	3 J+	1.31	3	0.357	3	0.0235	3 J+	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
	4730	3	1.48	3 J+	0.278	3 J+	0.0212	3 J+	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
	5310	3	1.72	3	0.217	3	0.0249	3	0.027	2	**0.250**	2 U	**0.250**	2 U
	5080	3	1.36	3	0.36	2	0.0233	3	0.0218	3	0.352	3 J	0.496	3 J
	4730	3	4.19	3	0.464	3	0.0432	3	0.0313	3	1.72	3 J		R
	4630	3	0.641	3 J		R	0.0261	3	0.0326	3	0.622	3	0.722	3
	4420	3	**0.0310**	2	**0.0310**	2	**0.0050**	1	**0.0050**	1	**0.250**	2 U	0.591	3
	4680	3	2.82	3	0.543	3	0.0765	3	0.0452	3	0.558	3 J+	**0.250**	2 U

31	2	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	1110	3	1120	3	1.09	3 J+	0.398	3 J+
48.2	3	**3.10**	2	0.0315	3 J	**0.0155**	3	1410	3	1300	2	1.32	3	0.311	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1420	3 J+	1460	3 J+	0.646	3 J+	0.488	3 J+
23.5	3	**3.10**	2	**0.0155**	3	**0.0155**	3	1310	3	1250	3	0.841	3 J+	0.435	3 J+
11.1	3 J	7.15	3 J	**0.0155**	3	**0.0155**	3	1280	3	1230	3	0.255	3 J+	0.282	3 J+
22.2	3	**10.0**	1 U	0.0338	3 J	**0.0155**	3	1330	3	1380	3	1.13	3	0.417	3 J+
28.5	3	9.62	3 J	0.082	2 J	0.0362	3 J	1340	3	1270	3	0.912	3	0.431	3
10.0	1 U	26.9	3	**0.0155**	3	0.0479	3 J	1140	3	1160	3	0.353	3 J		R
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1130	3	1110	3	0.0637	3 J+	**0.0250**	2 U
61.3	3	**10.0**	1 U	0.0631	3 J	**0.0155**	3	1330	3	1240	3	1.94	3 J+	0.472	3 J+

0.00075	2	0.00273	3 J	0.34	2	0.337	3	1.2	2 J+	0.808	3 J+	526	3	539	3	**0.155**	3
0.00075	2	**0.00075**	2	0.329	3	0.316	3	17.6	3	0.723	3	563	3	555	3	**0.155**	3
0.00244	3 J	0.00191	3 J	0.266	3 J+	0.271	3 J+	0.809	3 J+	**0.310**	2 U	568	3 J+	565	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	0.155	3	0.17	2	0.911	3	0.729	3	543	3	528	3	**0.155**	3
0.00075	2	**0.00075**	2	0.326	3	0.361	3	1.13	3	1.39	3	589	3	605	3	**0.155**	3
0.00075	2	**0.00075**	2	0.272	3	0.307	3	0.842	3	1.05	3	536	3	521	3	**0.155**	3
0.00075	2	**0.00075**	2	0.367	3	0.337	3	2.37	3	2.07	3	550	2	540	2	**0.155**	3
0.00075	2	**0.00075**	2	0.353	3	0.329	3	1.26	3	1.78	3	547	3	550	2	**0.155**	3
0.00075	2	**0.00075**	2	0.297	3	0.313	3	**0.310**	2 U	**0.310**	2 U	519	3	529	3	**0.155**	3
0.00075	2	**0.00075**	2	0.338	3	0.334	3	1.73	3 J+	1.31	3 J+	574	3	546	3	**0.155**	3

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

6850	3	**0.0031**	2	**0.0031**	2	2530	3	2650	3	**0.0050**	1	**0.0050**	1	2.71	3 J+
7240	3	**0.0031**	2	**0.0031**	2	3170	3	2890	3	**0.0050**	1	**0.0050**	1	0.673	3 J
7600	2 J+	**0.0031**	2	**0.0031**	2	2860	3 J+	2910	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
6960	3	**0.0031**	2	**0.0031**	2	2850	3	2760	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7730	3	**0.0031**	2	**0.0031**	2	2830	3 J+	2750	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
7260	3	**0.0031**	2	**0.0031**	2	2820	3	2950	3	**0.0050**	1	**0.0050**	1	**0.050**	1
7550	3	**0.0031**	2	**0.0031**	2	3060	3	2830	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7440	3	**0.0031**	2	**0.0031**	2	2650	3	2640	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7530	3	**0.0031**	2	**0.0031**	2	2680	3	2610	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7470	3	**0.0031**	2	**0.0031**	2	3010	3	2820	3	**0.0031**	2	0.0073	2 J	**0.0310**	2

0.050	1	**0.155**	3	**0.155**	3	3.2	2	J+	**1.55**	3	U
	R	**0.155**	3	**0.155**	3	0.945	3	J	**1.55**	3	U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3	U			R
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U
0.0310	2	**0.155**	3	0.353	3	J	0.909	3	J	1.67	3 J
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3	U	**1.55**	3	U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3	U	2.37	3	J

	2	3	2	4	0	2	1	4	2	3	1	3					
Mean	6.51		13.76		52		117.3		3.10		17.5						
Median	6.57		14.00		52		110.7		3.12		17.8						
St. Deviation	0		2		10		62		1		1						
# of values	10		10		10		10		10		10						
Minimum	5.94		9.07		35		-15.3		1.66		15.6						
Maximum	7.02		15.97		67		217.7		4.40		18.8						
Lowest fifth percentile	6		11		38		31		2		16						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	50%		0%		0%		0%		0%		0%						
% of DWS exceedences	10%		0%		0%		0%		0%		0%						

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
1	3		0	2		3	3		2	3		1	3		3	3						
53			38.0			0.54			4.8			21			0.141			NA			NA	
51			34.0			0.41			3.9			21			0.125			NA			NA	
4			14			1			4			6			0			NA			NA	
10			10			10			10			10			10				0			0
47			26.0			0.07			1.6			16			0.099			NA			NA	
62			71.0			1.89			15.2			36			0.284			NA			NA	
48			26			0			2			17			0			NA			NA	
0			0			4			3			0			0							
						40%			30%													
						1			6						1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			40%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit						result <20			result > crit							

	4	2					
	0.0070		NA				
	0.0054		NA				
	0		NA				
	10			0			
	0.0016		NA				
	0.0184		NA				
	0		NA				
	4						
	40%						
	3						
	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF	
	Total Phosphorus				**Orthophosphate**		
		mg/L				mg/L	

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4										
0.63		0.08		3.19		0.00075		0.00075		0.155		0.270		0.0190										
0.64		0.08		3.47		0.00075		0.00075		0.155		0.250		0.0155										
0		0		1		0		0		0		0		0										
10		10		10		10		10		10		10		10										
0.55		0.04		0.64		0.00075		0.00075		0.155		0.222		0.0155										
0.72		0.10		4.10		0.00075		0.00075		0.155		0.545		0.0500										
1		0		2		0		0		0		0		0										
0		0		0		10		10		10		6		10										
						100%		100%		100%		60%		100%										
		10										3												
230		NA		NA		NA		0.0052		NA		NA		6.96										
250		4		250		NA		0.2		NA		NA		NA										
0%		0%		0%		0%		0%		0%		0%		0%										
0%		0%		0%		0%		0%		0%		0%		0%										
																								depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		

| | | |

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3										
0.0125		0.0125		0.0093		0.0165		1.88		1.75		0.0075		0.0075		4900											
0.0125		0.0125		0.0075		0.0075		1.48		1.43		0.0075		0.0075		4940											
0		0		0		0		1		1		0		0		260											
10		10		10		9		10		10		10		10		10											
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		4360											
0.0125		0.0125		0.0250		0.0674		4.28		3.19		0.0075		0.0075		5210											
0		0		0		0		1		1		0		0		4500											
10		10		10		7		5		5		10		10		0											
100%		100%		100%		78%		50%		50%		100%		100%													
						1		5		5																	
NA		NA		NA		NA		NA		NA		0.069		0.068		NA											
4		NA		NA		NA		NA		NA		5		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
												depends on Hardness		depends on Hardness													
result > crit												result > crit		result > crit													
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-1	3	2	3	3	3	4	3	4	3	3	3	2	2								
4850		1.7		0.283		0.0328		0.0229		0.510		0.370									
4730		1.6		0.278		0.0255		0.0244		0.300		0.250									
340		1		0		0		0		0		0									
10		10		9		10		10		10		9									
4420		0.0		0.031		0.0050		0.0050		0.250		0.250									
5360		4.2		0.543		0.0765		0.0452		1.720		0.722									
4443		0		0		0		0		0		0									
0		1		2		1		3		5		6									
		10%		22%		10%		30%		50%		67%									
								1		1		1									
NA		10.98		10.56276		NA		NA		1.945		1.867									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness		depends on Hardness						depends on Hardness											
		result > crit		result > crit						result > crit						result > crit					

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
1	3	1	2	4	3	4	3	-1	3	-1	3	3	3	3	3								
25		9.0		0.034		0.0208		1280		1250		0.86		0.362									
23		10.0		0.024		0.0155		1320		1250		0.88		0.417									
18		7		0		0		110		110		1		0									
10		10		10		10		10		10		10		9									
3		3.1		0.016		0.0155		1110		1110		0.06		0.025									
61		26.9		0.082		0.0479		1420		1460		1.94		0.488									
6		3		0		0		1119		1115		0		0									
3		7		6		8		0		0		0		1									
30%		70%		60%		80%								11%									
1		2		4		2																	
1000		1000		0.308		0.326		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit								result > crit									

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				
			µg/L						µg/L						µg/L						µg/L				
5	2	5	2	3	3	3	3	2	3	3	3	0	3	0	3	3	3								
0.00092		0.00106		0.30		0.308		2.8		1.050		552		548		0.155									
0.00075		0.00075		0.33		0.323		1.2		0.930		549		543		0.155									
0		0		0		0		5		1		22		24		0									
10		10		10		10		10		10		10		10		10									
0.00075		0.00075		0.16		0.170		0.3		0.310		519		521		0.155									
0.00244		0.00273		0.37		0.361		17.6		2.070		589		605		0.155									
0		0		0		0		1		0		522		524		0									
9		8		0		0		1		2		0		0		10									
90%		80%						10%		20%						100%									
1		2																							
0.77		0.77		NA		NA		11.04		11.01		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		10%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	10	
	0.155	
	0.155	
	0	
	10	
	100%	

	4.6
	NA
	0%
	0%

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2								
7360		0.0031		0.0031		2850		2780		0.0042		0.0047		0.37									
7460		0.0031		0.0031		2840		2790		0.0050		0.0050		0.05									
280		0		0		200		120		0		0		1									
10		10		10		10		10		10		10		10									
6850		0.0031		0.0031		2530		2610		0.0031		0.0031		0.03									
7730		0.0031		0.0031		3170		2950		0.0050		0.0073		2.71									
6900		0		0		2584		2624		0		0		0									
0		10		10		0		0		10		9		8									
		100%		100%						100%		90%		80%									
												1											
NA		0.161144664		0.137		NA		NA		NA		NA		NA									
NA		NA		NA		NA		NA		2		NA		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
		depends on HARD; revised 2013		depends on Total Ag																			
		result > crit		result > crit						result > crit													
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tin**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.042		0.155		0.175		1.6		1.65															
0.050		0.155		0.155		1.6		1.55															
0		0		0		1		0															
9		10		10		10		9															
0.031		0.155		0.155		0.9		1.55															
0.050		0.155		0.353		3.2		2.37															
0		0		0		1		2															
9		10		9		7		7															
100%		100%		90%		70%		78%															
				1		2		2															
NA		NA		NA		25.31		24.95															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
						depends on Hardness		depends on Total Zn															
						result > crit		result > crit															
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

P-08-79D

Sample Date												
08/27/09			5.84	3	403	3		R	6.96	3	66.9	3
10/13/09	6.72	3	8.13	3	321	3	28.3	3	4.99	3	90.2	3
08/19/10	8	1	7.22	3	162	3	55.1	3	6.06	3	85	2
10/20/10	7.56	3	7.56	3	145	3	143.4	4	4.21	3	92	2
08/28/11	7.29	3	5.84	3	120.0216	FALSE	130	2	5.22	3	75.3	3
10/27/11	7.86	3	4.86	3	137	3	154.1	4	4.07	3	51.6	3
08/22/12	8.04	3	3.72	3	131	3	136.8	4	4.74	3	50.4	3
10/07/12	7.94	3	2.83	3	135	3	221.6	4	5.09	3	48.6	3

339	3	221	3	62.6	3	4.1	2 J	92.9	3	0.192	3
326	3	231	3	1540	3 J	6.4	2 J	94.4	3	0.183	3
169	3	90	1	3620	3	**1.57**	3	66.1	3	0.124	3
159	3	90	1	1520	3	**1.57**	3	65	2	0.118	3
148	3	90	1	508	3	**1.57**	3	61.1	3	0.109	3
141	3	110	2	27	2	**1.57**	3	58.6	3	0.076	2 J
150	2	82	2	35.4	3	**5.0**	1 U	59.6	3	**0.050**	1 U
133	3	82	2	96.7	3	**1.57**	3	60.2	3	0.103	3

0.216	3
1.67	3
1.2	2
1.3	2
0.263	3
0.147	3
0.115	3
0.125	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

3.32	3	0.147	3	63.7	3	**0.0025**	2 U	**0.00075**	2	2.8	2 J+	1.85	3	**0.0155**
2.63	3	0.111	3	46.2	3	**0.00075**	2	**0.00075**	2	1.1	2 J+	2.08	3	**0.0155**
1.43	3	0.127	3	15.9	3	0.0015	2 J	**0.00075**	2	**0.155**	3	0.524	3	**0.0155**
1.21	3	0.142	3	12.5	3	**0.00075**	2	**0.00075**	2	0.48	2 J	0.293	3 J	**0.0155**
1	1	0.092	2 J	8.9	2	**0.00075**	2	**0.00075**	2	**0.155**	3	0.625	3	**0.0155**
0.916	3	0.119	3	7.51	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.827	3	0.097	2 J	6.28	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.868	3	0.122	3	5.94	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.273	3 J	0.102

3	564	3	116	3	**0.0300**	1	**0.0300**	1	2.56	3	2.58	3	23.5	3	19.5	3
3	2180	3	657	3	0.286	3	0.223	3	4.42	3	3.12	3	122	3	41.8	3
3		R		R		R		R		R		R		R		R
3	16100	3	4980	3	0.16	2 J	0.119	3	11.9	3	5.38	3	194	3	34	2
3	7420	3	3.32	3 J+	**0.0300**	1	0.0519	3	9.4	2	4.77	3	95	2	8.69	3
3	662	3	7.02	3 J+	0.106	3	0.0812	3	5.33	3	5	1	13.4	3	7.11	3
3	989	3	4.67	3	0.0794	3	0.0709	3	5.52	3	4.98	3	15	2	5.6	2
3	3170	3	2.16	3 J+	0.0932	3	0.0352	3 J	5.7	2	4.75	3	23.8	3	5.4	2

0.050	1	**0.050**	1	**0.0300**	1	**0.0300**	1	**5.0**	1	**5.0**	1	**0.0300**	1	**0.0300**	1	19400	3
0.783	3	0.104	3	0.119	3	0.124	3	8.69	3	8.29	3	0.184	3	0.038	2 J	26400	3
	R		R		R		R		R		R		R		R		
1.27	3	0.149	3	**0.150**	2	0.0405	3 J	**10.0**	1 U	7.1	2 J+	0.229	3	0.0269	3 J	23700	3
0.406	3	**0.0125**	3	0.213	3	**0.0075**	2	7.29	3 J	5.73	3	0.128	3 J	**0.0075**	2	20800	3
0.0408	3 J	**0.0125**	3	0.0342	3 J	**0.0075**	2	4.16	3 J	4	1 J	**0.0075**	2	**0.0075**	2	14900	3
0.0789	3	**0.0125**	3	0.023	2 J	**0.0075**	2	5.36	3	4.93	3 J	**0.0075**	2	**0.0075**	2	14400	3
0.0967	3	**0.0125**	3	0.0411	3 J	**0.0075**	2	5.38	3	3.99	3 J	0.0222	3 J	**0.0075**	2	13500	3

	20200	3		8.02	3		1	1	0.447	3	J+	0.126	3	J+	**1.00**	1	U	**1.00**	1	U
	19000	2		14.4	3		4.02	3	4.32	3		0.713	3		10.4	3		2.09	3	
R			R			R			R			R			R			R		
	14800	3		24.6	3		4.3	2	7.79	3		0.855	3		23.1	3		2.39	3	
	14200	3		10.9	3		0.746	3	3.84	3		0.0385	3		14.4	3		**0.250**	2	U
	14100	3		3.33	3		0.721	3	0.322	3		0.0463	3		1.5	2		**0.250**	2	U
	13200	3		3.34	3		0.548	3	0.475	3		0.0379	3		2.52	3		**0.250**	2	U
	13000	2		5.08	3		0.863	3	0.754	3		0.0486	3		3.79	3	J+	**0.250**	2	U

614	3	108	3	1.24	3 J+	**0.200**	1 U	4490	3	4620	3	81.4	3	32	2
4160	3	1110	3	16.4	3	2.51	3	5930	3	4070	3	624	3	109	3
	R		R		R		R		R		R		R		R
20700	3	2600	2	24	2	2.64	3	7950	3	3980	3	1080	3	112	3
8960	3	10.5	3 J	12.1	3	**0.0155**	3	5680	3	3590	3	620	2	5.37	3
723	3	20.1	3	0.927	3	0.0369	3 J	3480	3	3250	3	57.8	3	4.45	3
1060	3	13.7	3 J	1.41	3	**0.0155**	3	3490	3	3150	3	96	2	3.98	3
2440	3	**3.10**	2	2.21	3	0.303	3	3650	3	3180	3	146	3	1.51	3 J+

0.00341	3 J	0.00153	3 J	4.02	3	4.09	3	4.87	3 J+	**1.24**	3 U	1550	3	1520	3	**0.62**	2
0.0244	3	0.00293	3 J	2.09	3 J		R	17.9	3	6.08	3	1910	3	1510	3	0.575	3
0.0854	3	0.043	2		R		R		R		R		R		R		
0.033	2	0.00303	3 J	1.06	3 J		R	17.6	3	3.83	3	2850	3	1070	3	**0.62**	2
0.0169	3	**0.00075**	2	0.973	3 J		R	8.3	2	0.96	2	1860	3	607	3	**0.62**	2
0.00150	2 J	**0.00075**	2	1.12	3	1.16	3	1.92	3	1.16	3	687	3	571	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.961	3	1.03	3	2.12	3	0.948	3	669	3	481	3	**0.155**	3
0.00360	2 J	**0.00075**	2	1.12	3	0.989	3	2.94	3 J+	0.964	3 J+	822	3	456	3	**0.155**	3

	0.62	2	
J	0.471	3	J
R			R
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

9230	3		**0.0124**	3		**0.0124**	3		46900	3		46400	3		**0.0200**	1		**0.0200**	1		**0.200**	1	
10800	3		0.0094	2	J	0.0076	2	J	41100	3		41000	2		0.0438	3		0.0137	3	J	0.748	3	
		R			R			R			R			R			R			R			R
15800	3		0.118	3		0.0191	3	J	14700	3		13400	3		**0.100**	1		0.0241	3		4.12	3	
8970	3		**0.0124**	3		**0.0031**	2		11800	3		12100	3		0.0931	3		**0.0031**	2		2.37	3	
8420	3		**0.0031**	2		**0.0031**	2		9630	3		9530	3		0.01	1	J	**0.0031**	2		1.77	3	
8170	3		**0.0031**	2		**0.0031**	2		10000	1		9570	3		0.0103	3	J	**0.0031**	2		0.569	3	
8270	3		0.0191	3	J	**0.0031**	2		9090	3		9210	3		0.0212	3		**0.0031**	2		1.03	3	

0.200	1	2.61	3 J	1.95	3 J	**6.2**	2 U	**6.2**	2 U
0.357	3	10.3	3	2.94	3	34.7	3	6.03	3
	R		R		R		R		R
0.692	3 J+	28.5	3	5.22	3	65.4	3 J+	8.59	3 J+
0.0891	3 J	16.8	3	3.1	2	35	2	**1.55**	3 U
0.0709	3 J	3.96	3	2.88	3	4.3	2	**1.55**	3 U
0.0712	3 J	5	1	3.51	3	4.95	3	**1.55**	3 U
0.0310	2	7.29	3	3.19	3	7.22	3	**1.55**	3 U

	2	3	2	3	0	3	1	4	2	3	1	3
Mean	7.63		5.75		194		124.2		5.17		70.0	
Median	7.86		5.84		141		136.8		5.04		71.1	
St. Deviation	0		2		107		64		1		18	
# of values	7		8		8		7		8		8	
Minimum	6.72		2.83		120		28.3		4.07		48.6	
Maximum	8.04		8.13		403		221.6		6.96		92.0	
Lowest fifth percentile	7		3		124		36		4		49	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	3	0	2	1	3	2	3	1	3	3	3								
196		125		926.0		2.9		69.7		0.119		NA		NA					
155		90		302.0		1.6		63.1		0.114		NA		NA					
85		63		1265		2		15		0		NA		NA					
8		8		8		8		8		8			0		0				
133		82		27.0		1.6		58.6		0.050		NA		NA					
339		231		3620.0		6.4		94.4		0.192		NA		NA					
136		82		30		2		59		0		NA		NA					
0		0		0		6		0		1									
						75%				13%									
						2				1									
NA		NA		NA		NA		>=20		NA			NA			NA			
NA		500		NA		NA		NA		10			NA			NA			
0%		0%		0%		0%		0%		0%			NA			NA			
0%		0%		0%		0%		0%		0%			NA			NA			

3	3		
0.630		NA	
0.240		NA	
1		NA	
8			0
0.115		NA	
1.670		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

2	3	3	3	2	3	5	2	5	2	3	3	3	3	4
1.53		0.120		20.9		0.0011		0.00075		0.6		0.77		0.0263
1.11		0.121		10.7		0.0008		0.00075		0.2		0.41		0.0155
1		0		22		0		0		1		1		0
8		8		8		8		8		8		8		8
0.83		0.092		5.9		0.0008		0.00075		0.2		0.25		0.0155
3.32		0.147		63.7		0.0025		0.00075		2.8		2.08		0.1020
1		0		6		0		0		0		0		0
0		0		0		7		8		5		2		7
						88%		100%		63%		25%		88%
		2				1				1		2		
230		NA		NA		NA		0.0052		NA		NA		6.14
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	-1	3	2	3	4	3	4	3	2	3	2	3	1	3	2	3	
	4440		824		0.1121		0.0873		6.40		4.37		69.5		17.4		
	2180		7		0.0932		0.0709		5.52		4.77		23.8		8.7		
	5670		1848		0		0		3		1		70		15		
	7		7		7		7		7		7		7		7		
	564		2		0.0300		0.0300		2.56		2.58		13.4		5.4		
	16100		4980		0.2860		0.2230		11.90		5.38		194.0		41.8		
	593		3		0		0		3		3		14		5		
	0		0		2		1		0		0		0		0		
					29%		14%										
					1		1										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	100%		43%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		14%		0%		0%		0%		

4	3	4	3	4	3	4	2	2	3	2	3	4	3	4	2	-2	3
0.389		0.050		0.0872		0.0321		6.6		5.6		0.0869		0.0178		19000	
0.097		0.013		0.0411		0.0075		5.4		5.0		0.0300		0.0075		19400	
0		0		0		0		2		2		0		0		5000	
7		7		7		7		7		7		7		7		7	
0.041		0.013		0.0230		0.0075		4.2		4.0		0.0075		0.0075		13500	
1.270		0.149		0.2130		0.1240		10.0		8.3		0.2290		0.0380		26400	
0		0		0		0		4		4		0		0		13770	
1		5		2		5		2		1		3		5		0	
14%		71%		29%		71%		29%		14%		43%		71%			
1				3		1		2		3		2		2			
NA		NA		NA		NA		NA		NA		0.160		0.150		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		29%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	3	3	3	3	4	3	2	3	2	2
15500		9.95		2		2.564		0.267		8.10		0.93	
14200		8.02		1		0.754		0.049		3.79		0.25	
2900		8		2		3		0		8		1	
7		7		7		7		7		7		7	
13000		3.33		1		0.322		0.038		1.00		0.25	
20200		24.60		4		7.790		0.855		23.10		2.39	
13060		3		1		0		0		1		0	
0		0		0		0		0		1		5	
										14%		71%	
NA		10.98		10.56276		NA		NA		5.091		4.888	
NA		100		NA		NA		NA		NA		NA	
0%		29%		0%		0%		0%		43%		0%	
0%		0%		0%		0%		0%		0%		0%	

-1	3	1	3	2	3	3	3	-1	3	-1	3	0	3	2	3
5520		552		8.33		0.817		4950		3690		386.0		38	
2440		20		2.21		0.200		4490		3590		146.0		5	
7310		989		9		1		1670		560		395		50	
7		7		7		7		7		7		7		7	
614		3		0.93		0.016		3480		3150		57.8		2	
20700		2600		24.00		2.640		7950		4620		1080.0		112	
647		5		1		0		3483		3159		65		2	
0		1		0		3		0		0		0		0	
		14%				43%									
		2				1									
1000		1000		1.291		1.154		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
71%		29%		71%		29%		0%		0%		0%		0%	
0%		0%		29%		0%		0%		0%		100%		0%	

4	3	5	2	2	3	2	3	2	3	2	3	-1	3	0	3	3	3
0.02130		0.00670		1.62		1.82		7.95		2.17		1480		888		0.41	
0.01030		0.00110		1.12		1.10		4.87		1.16		1550		607		0.58	
0		0		1		2		7		2		810		475		0	
8		8		7		4		7		7		7		7		7	
0.00150		0.00075		0.96		0.99		1.92		0.95		669		456		0.16	
0.08540		0.04300		4.02		4.09		17.90		6.08		2850		1520		0.62	
0		0		1		1		2		1		674		464		0	
1		4		0		0		0		1		0		0		6	
13%		50%								14%						86%	
3		3														1	
0.77		0.77		NA		NA		28.64		28.56		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.27	
0.16	
0	
7	
0.16	
0.62	
0	
6	
86%	
1	
4.6	
NA	
0%	
0%	

-1	3	4	3	4	2	-2	3	-2	3	4	3	4	2	2	3
9950		0.0254		0.0074		20500		20200		0.0426		0.0100		1.540	
8970		0.0124		0.0031		11800		12100		0.0212		0.0031		1.030	
2730		0		0		16300		16200		0		0		1	
7		7		7		7		7		7		7		7	
8170		0.0031		0.0031		9090		9210		0.0100		0.0031		0.200	
15800		0.1180		0.0191		46900		46400		0.1000		0.0241		4.120	
8200		0		0		9252		9306		0		0		0	
0		4		5		0		0		2		5		1	
		57%		71%						29%		71%		14%	
		2		2						2		1			
NA		1.118496635		0.951		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	2	3	2	3	2	3	2	3
0.216		10.64		3.26		22.5		3.9	
0.089		7.29		3.10		7.2		1.6	
0		9		1		23		3	
7		7		7		7		7	
0.031		2.61		1.95		4.3		1.6	
0.692		28.50		5.22		65.4		8.6	
0		3		2		4		2	
2		0		0		1		5	
29%						14%		71%	
3		1		1					
NA		NA		NA		65.73		64.81	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-79M																
Sample Date																
08/27/09			5.53	3		90	1			R		5.01	3	27.4	3	
10/13/09	7.74	3	6.76	3		72	2		22.4	3		5.46	3	26	2	
05/18/10	7.06	3		R		104	3	Q	228.8	4		3.24	3	23.4	3	
08/19/10	7.62	3	6.95	3		65	2		61.7	3		4.18	3	24.9	3	
10/20/10	7.08	3	6.27	3		61	2		128.4	4		4.07	3	25.6	3	
08/29/11	6.88	3	9.13	3		61.146	FALSE		133.1	4		3.9	2	27.4	3	
10/27/11	7.31	3	6.76	3		77	2		144.1	4		3.98	3	25.7	3	
05/21/12	7.44	3	2.85	3		79	2		105.8	4		4.27	3	27.7	3	
08/22/12	7.36	3	5.51	3		76	2		140.5	4		4.58	3	25.4	3	
10/07/12	7.04	3	4.86	3		77	2		236	3		4.04	3	25.7	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
82.5	3		63.8	3		4.74	3		**1.57**	3		36	2		0.135	3						
82.1	3		51.3	3		5.05	3		6	1	J	37.2	3		0.126	3						
82.9	3		84	2		8.51	3		16.4	3		34.4	3		0.125	3						
74.2	3		60	1		3.3	2		**1.57**	3		34.8	3		0.112	3						
78.4	3		60	1		1.33	3		**1.57**	3		34.8	3		0.111	3						
76.7	3		77	2		10.5	3		**1.57**	3		32.8	3		**0.0155**	3						
76.9	3		57	2		1.37	3		3.16	3	J	32.3	3		0.143	3						
76.4	3		65	2		1.18	3		3.72	3	J	32.4	3		0.105	3	J-					
75.7	3		76	2		**0.0735**	3		**5.0**	1	U	33	2		0.116	3	J-					
76.3	3		53	2		0.5	1		**1.57**	3		34.2	3		0.125	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.191	3				
	0.199	3				
	0.195	3				
	0.17	2				
	0.182	3				
	0.182	3				
	0.18	2				
	0.17	2				
	0.167	3				
	0.178	3				

result > crit			result > crit			result > crit						result > crit												depends on field pH and field Temp result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**				
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L				
0.707	3		0.065	2	J	2.03	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		0.184	3	J	**0.0155**				
0.7	1		0.073	2	J	2.08	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.673	3		0.052	2	J	2.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.752	3		0.104	3		2.3	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.819	3		0.121	3		2.54	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**				
0.811	3		0.078	2	J	2.26	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**				
0.713	3		0.104	3		2.24	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.682	3		0.099	2	J	2.21	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.707	3		0.083	2	J	2.26	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.734	3		0.107	3		2.23	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.182	3	J	0.124				

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		245	3		16.7	3	J+	**0.0075**	2		**0.0075**	2		7.38	3		7.42	3		7.12	3		5.14	3	
3		64	2		5.36	3		0.0601	3		0.0577	3		7.08	3		7.06	3		5.39	3		4.64	3	
3		276	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		7.49	3		7.37	3		7.05	3	J+	4.4	2	J+
3		69.1	3		5.43	3	J+	**0.0075**	2		**0.0075**	2		7.59	3		7.3	2		5.51	3		4.44	3	
3		59.6	3		3.6	2	J+	0.0352	3	J	**0.0250**	2	U	7.62	3		7.63	3		5.33	3		4.82	3	
3		672	3		11.6	3	J+	0.103	3		0.0202	3	J	8.09	3		7.63	3		11.1	3		4.67	3	
3		47.6	3		2.17	3	J+	0.0889	3		0.0526	3		7.8	2		7.82	3		5.29	3		4.68	3	
3		45.8	3		**1.00**	1	U	0.0447	3	J	0.0408	3	J	8.21	3		7.65	3		5.7	2	J+	4.45	3	J+
3		18.1	3		2.12	3		0.0379	3	J	0.0404	3	J	7.42	3		7.29	3		4.32	3		4.29	3	
3		20.4	3	J+	2.08	3	J+	**0.0075**	2		0.0181	3	J	7.65	3		7.4	2		4.62	3		4.38	3	

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CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.00075	2		**0.00075**	2		0.838	3		0.828	3		1.75	3	J+	0.706	3	J+	1770	3		1680	3		**0.155**	3
0.00075	2		**0.00075**	2		0.875	3		0.864	3		2.15	3		1.38	3		1640	3		1610	3		**0.155**	3
0.00241	3	J	**0.00075**	2		0.764	3	J+	0.814	3	J+	1.31	3	J+	0.857	3	J+	1670	3	J+	1660	3	J+	**0.155**	3
0.00159	3	J	**0.00075**	2		0.659	3		0.707	3		1.38	3		0.877	3		1690	3		1630	3		**0.155**	3
0.00075	2		**0.00075**	2		0.823	3		0.869	3		1.39	3		1.1	2		1760	3		1770	3		**0.155**	3
0.00250	2	U	**0.00075**	2		1.51	3		0.924	3		20.4	3		1.62	3		1850	3		1760	3		**0.155**	3
0.00075	2		**0.00075**	2		0.879	3		0.854	3		1.87	3		1.35	3		1760	3		1740	3		**0.155**	3
0.00075	2		**0.00075**	2		0.892	3		0.858	3		1.35	3	J+	0.933	3	J+	1880	3		1740	3		**0.155**	3
0.00075	2		**0.00075**	2		0.791	3		0.768	3		0.744	3		0.624	3		1710	3		1690	3		**0.155**	3
0.00075	2		**0.00075**	2		0.786	3		0.785	3		0.702	3	J+	**0.310**	2	U	1710	3		1660	3		**0.155**	3

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

				depends on HARD; revised 2013						depends on Total Ag																					
				result > crit						result > crit																					
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon					**Silver[8]**							**Sodium**							**Thallium**												**Tir**
Dissolved			Total					Dissolved				Total			Dissolved			Total			Dissolved			Total							
µg/L			µg/L					µg/L				µg/L			µg/L			µg/L			µg/L			µg/L							
12400	3		**0.0031**		2		**0.0031**		2		5310	3	J			R	**0.0050**		1	**0.0050**		1	1.08	3	J+						
12600	3		**0.0031**		2		**0.0031**		2		5040	3		4780	3		**0.0050**		1	**0.0050**		1	**0.050**	1							
13600	3	J+	**0.0031**		2		**0.0031**		2		4290	3	J+	4520	3	J+	**0.0050**		1	**0.0050**		1	**0.050**	1							
12700	3		**0.0031**		2		**0.0031**		2		4890	3		4720	3		**0.0050**		1	**0.0050**		1	**0.050**	1							
13500	3		**0.0031**		2		**0.0031**		2		4870	3		4870	3		**0.0050**		1	**0.0050**		1	**0.050**	1							
13700	3		0.007		1	J	**0.0031**		2		5470	3		5210	3		**0.0031**		2	**0.0031**		2	0.608	3							
12900	3		0.0082		2	J	**0.0031**		2		4730	3		4670	3		**0.0031**		2	**0.0031**		2	0.118	3	J						
13500	3		**0.0031**		2		**0.0031**		2		5320	3		4990	3		**0.0031**		2	**0.0031**		2	**0.0310**	2							
12900	3		**0.0031**		2		**0.0031**		2		5010	3		4880	3		**0.0031**		2	**0.0031**		2	**0.0310**	2							
13000	2		**0.0031**		2		**0.0031**		2		4980	3		4930	3		**0.0031**		2	**0.0031**		2	**0.0310**	2							

														depends on Hardness result > crit				depends on Total Zn result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium												**Zinc[4]**	
	Dissolved µg/L			Total µg/L			Dissolved µg/L			Total µg/L							Dissolved µg/L		
1.05	3	J+	1.72	3		1.29	3			**1.55**	3	U					3.31	3	J+
0.050	1		1.7	2		1.57	3			0.597	3	J					**1.55**	3	U
0.050	1		1.76	3		1.4	2			**1.55**	3	U					**1.55**	3	U
0.050	1		1.61	3		1.47	3			3.35	3	J+					**1.55**	3	U
0.050	1		1.49	3		1.42	3			**1.55**	3	U					**1.55**	3	U
0.0863	3	J	2.38	3		1.59	3			2.76	3	J					1.15	3	J
0.108	3	J	1.24	3		1.15	3			**1.55**	3	U					**1.55**	3	U
0.0310	2		1.11	3		1.2	2			**1.55**	3	U					**1.55**	3	U
0.0310	2		1.59	3		1.47	3			**1.55**	3	U					**1.55**	3	U
0.100	1	U	1.53	3		1.41	3			**1.55**	3	U					3.6	2	

	2	3	2	3	0	2	1	4	2	3	1	3			
Mean	7.28		6.07		76		133.4		4.27		25.9				
Median	7.31		6.27		77		133.1		4.13		25.7				
St. Deviation	0		2		13		69		1		1				
# of values	9		9		10		9		10		10				
Minimum	6.88		2.85		61		22.4		3.24		23.4				
Maximum	7.74		9.13		104		236		5.46		27.7				
Lowest fifth percentile	7		4		61		38		4		24				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	0%		0%		0%		0%		0%		0%				
% of DWS exceedences	0%		0%		0%		0%		0%		0%				
HIDE this row - notes															
RED criteria	result is <6.5 OR >8.5		result < 7												
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		2	3		2	3		1	3		3	3						
78.2			65.0			3.66			4.21			34			0.111			NA			NA	
76.8			62.0			2.34			2.37			34			0.121			NA			NA	
3			11			4			5			2			0			NA			NA	
10			10			10			10			10			10				0			0
74.2			51.3			0.07			1.57			32			0.016			NA			NA	
82.9			84.0			10.50			16.40			37			0.143			NA			NA	
75			52			0			2			32			0			NA			NA	
0			0			1			6			0			1							
						10%			60%						10%							
									3													
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

3	3						
0.181		NA					
0.181		NA					
0		NA					
10			0				
0.167		NA					
0.199		NA					
0		NA					
0							

NA			NA				
NA			NA				
0%			NA				
0%			NA				

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
Total Phosphorus				**Orthophosphate**		
mg/L				mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD(5)**			**Thiocyanate**			**Carbon)**			**Ammonia(3)**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.730			0.089			2.22			0.00075			0.0011			0.155			0.220			0.0264
0.710			0.091			2.24			0.00075			0.0008			0.155			0.250			0.0155
0			0			0			0			0			0			0			0
10			10			10			10			10			10			10			10
0.673			0.052			2.03			0.00075			0.0008			0.155			0.075			0.0155
0.819			0.121			2.54			0.00075			0.0025			0.155			0.250			0.1240
1			0			2			0			0			0			0			0
0			0			0			10			10			10			8			9
									100%			100%			100%			80%			90%
			6															2			
230			NA			NA			NA			0.0052			NA			NA			6.03
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3	2	3	2	3	4	3	4	3	3	3	2	2								
6540		6.58		1.41		0.136		0.0275		1.208		0.520									
6580		3.00		1.27		0.068		0.0263		0.891		0.440									
230		11		1		0		0		1		0									
10		10		10		10		10		10		10									
6170		1.70		0.90		0.028		0.0100		0.250		0.250									
6820		39.20		2.70		0.658		0.0458		4.750		1.160									
6175		2		1		0		0		0		0									
0		0		0		0		1		2		5									
								10%		20%		50%									
NA		10.98		10.56276		NA		NA		2.763		2.652									
NA		100		NA		NA		NA		NA		NA									
0%		10%		0%		0%		0%		10%		0%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness		depends on Hardness						depends on Hardness											
		result > crit		result > crit						result > crit		result > crit									

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
1	3	0	2	4	3	4	3	-1	3	-1	3	2	3	3	3								
180		19.0		0.168		0.0155		2230		2140		7.55		0.617									
75		10.0		0.062		0.0155		2190		2120		4.38		0.493									
255		28		0		0		140		80		10		0									
10		10		10		10		10		10		10		10									
17		3.1		0.016		0.0155		2060		2050		0.39		0.197									
856		99.4		1.050		0.0155		2500		2280		34.80		1.520									
22		6		0		0		2087		2059		1		0									
0		5		2		10		0		0		0		0									
		50%		20%		100%																	
1		4		5																			
1000		1000		0.519		0.518		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		10%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit												result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	3	3	3	3	2	3	3	3	-1	3	-1	3	3	3								
0.00118		0.00075		0.882		0.827		3.30		0.976		1740		1690		0.155									
0.00075		0.00075		0.831		0.841		1.39		0.905		1740		1690		0.155									
0		0		0		0		6		0		80		60		0									
10		10		10		10		10		10		10		10		10									
0.00075		0.00075		0.659		0.707		0.70		0.310		1640		1610		0.155									
0.00250		0.00075		1.510		0.924		20.40		1.620		1880		1770		0.155									
0		0		1		1		1		0		1654		1619		0									
8		10		0		0		0		1		0		0		10									
80%		100%								10%						100%									
2																									
0.77		0.77		NA		NA		15.64		15.59		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		10%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.155	
	0.155	
	0	
	10	
	0.155	
	0.155	
	0	
	10	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

| | | |

| | | |

P-08-79S

Sample Date													
08/27/09			5	1	56	2			R	7.77	3	16.2	3
10/13/09	7.41	3	5.85	3	45	2		60.6	3	6.4	2	17.5	3
05/18/10	6.19	3	8.82	3	64	2	Q	225.4	4	1.03	3	15.8	3
08/19/10	7.14	3	6.05	3	37	2		55.7	3	6.18	3	15.7	3
10/20/10	6.05	3	6.44	3	35	2		136.5	4	5.36	3	15.8	3
08/29/11	6.02	3	7.55	3	38.8808	FALSE		108.7	4	5.57	3	16.2	3
10/27/11	6.24	3	7.03	3	50	1		157.5	4	4.88	3	17.1	3
08/22/12	6.36	3	4.25	3	44	2		106.8	4	6.65	3	16	2
10/07/12	6.1	2	2.75	3	45	2		146.2	4	6.34	3	15.8	3

50.4	3	40	1	**0.081**	2	4.4	2 J	21	2	0.133	3
50.2	3	28.8	3	**0.075**	2	8.5	2 J	23.3	3	0.191	3
54.2	3	46	2	0.203	3 J	16.6	3	21.2	3	0.101	3
42.3	3	29	2	**0.0765**	3	6.36	3 J	20.8	3	**0.050**	1 U
46.6	3	28	2	**0.0765**	3	4.91	3 J	20.3	3	**0.050**	1 U
47.6	3	40	1	**0.0765**	3	5.82	3 J	20.3	3	0.14	2
48	2	42	2	**0.076**	2	6.21	3 J	18.1	3	0.077	2 J
47.8	3	25	2	**0.0745**	3	**5.0**	1 U	17.3	3	0.111	3
44.7	3	27	2	0.2	1 J	7.88	3 J	17.7	3	0.0945	3 J

0.00155	3	
0.00155	3	
0.0059	2	J
0.0059	2	J
0.00155	3	
0.0058	2	J
0.00155	3	
0.0066	2	J
0.0083	2	J

0.397	3	**0.0155**	3	1.56	3					**0.155**	3	0.552	3	**0.0155**
0.547	3	**0.0155**	3	1.42	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.11	3	**0.0155**
0.652	3	**0.0155**	3	1.62	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.665	3 J+	**0.0155**
0.333	3	0.065	2 J	1.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.39	3	**0.0155**
0.622	3	**0.050**	1 U	1.99	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.526	3	0.0327
0.379	3	0.053	2 J	1.46	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	0.961	3	**0.0155**
0.622	3	0.065	2 J	1.57	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.77	2	**0.0155**
0.473	3	0.054	2 J	1.57	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.594	3	**0.0155**
0.826	3	0.075	2 J	1.26	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.73	2	**0.050**

3	13.1	3 J+	5.97	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.76	3	3.07	3
3	5.84	3	5.09	3	0.0474	3 J		R	**0.155**	3	**0.155**	3	2.84	3	2.84	3
3	4.46	3	4.78	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.5	2 J+	2.38	3 J+
3	13.4	3 J+	13	2 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.76	3 J+	2.59	3 J+
3 J	6	1 J+	6.25	3 J+	0.0283	3 J	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.85	3 J+	3.04	3 J+
3	5.11	3 J+	5.46	3 J+	0.0475	3 J		R	0.189	3 J	0.179	3 J	2.72	3 J		R
3	6.82	3 J+	5.5	2 J+	0.0188	3 J	0.029	2 J	0.231	3 J	0.22	2 J	3.15	3	3.17	3
3	5.29	3 J		R	0.0624	3	0.0347	3 J	0.343	3 J	0.297	3 J	3.03	3	2.77	3
1 U	29	2	6.47	3 J+	**0.0075**	2	0.0173	3 J	**0.075**	2	0.235	3 J	2.71	3	2.94	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4520	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4860	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4330	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4390	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4420	3
0.0125	3	**0.0125**	3	0.0214	3 J	**0.0075**	2	2.06	3 J	2.37	3 J	**0.0075**	2	**0.0075**	2	4590	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	1.59	3 J	**0.0075**	2	**0.0075**	2	4860	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.37	3 J	2.69	3 J	**0.0075**	2	**0.0075**	2	4500	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.5	2 J	**0.75**	2	**0.0075**	2	**0.0075**	2	4420	3

	4990	3	0.556	3	**0.050**	1	0.0318	3 J+	0.0272	3 J+	**0.250**	2 U	**0.250**	2 U
	4800	2	0.593	3	0.113	3 J	0.0289	3	0.0251	3	1.24	3 J		R
J+	4370	3 J+	0.31	2	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
	4290	3	0.283	3 J+	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	**0.250**	2 U	0.581	3 J+
	4570	3	0.33	2	0.133	3 J	0.0164	3 J	0.0136	3 J	0.991	3	1.4	2
	5040	3	0.277	3	0.229	3	0.0197	3 J	0.0176	3 J	0.819	3	0.935	3
	4830	3	0.287	3	**0.100**	1 U	0.0162	3 J	0.0186	3 J	**0.250**	2 U	0.518	3
	4560	3	0.206	3	0.146	3 J	0.0165	3 J	0.0148	3 J	0.724	3	0.715	3
	4520	3	**0.100**	1 U	0.244	3	**0.0100**	1 U	**0.0100**	1 U	0.832	3 J+	1.24	3 J+

27.7	3	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1180	3	1230	3	0.678	3 J+	0.228	3 J+
3.10	2	**3.10**	2	0.0329	3 J	0.0397	3 J	1300	2	1190	3	0.178	3	0.157	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1200	2 J+	1190	3 J+	0.165	3 J+	0.0819	3 J+
3.10	2	6.39	3 J	**0.0155**	3	**0.0155**	3	1150	3	1140	3	0.339	3 J+	0.325	3 J+
9.89	3 J	8.41	3 J	**0.0155**	3	**0.0155**	3	1160	3	1170	3	0.171	3 J+	0.095	2 J+
10.3	3 J	12.3	3 J	**0.0155**	3	**0.0155**	3	1160	3	1220	3	0.125	3	0.0992	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1200	2	1190	3	0.18	2	0.147	3
7.43	3 J	10.7	3 J	**0.0155**	3	**0.0155**	3	1150	3	1210	3	0.0886	3 J+	0.0712	3 J+
8.11	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1160	3	1210	3	0.131	3 J+	0.0882	3 J+

0.00075	2	**0.00075**	2	0.141	3	0.161	3	**0.310**	2 U	**0.310**	2 U	474	3	525	3	**0.155**	3
0.00075	2	**0.00075**	2	0.147	3	0.147	3	0.452	3 J	0.373	3 J	455	3	452	3	**0.155**	3
0.00163	3 J	0.00173	3 J	0.094	2 J+	0.0869	3 J+	**0.310**	2 U	**0.310**	2 U	384	3 J+	370	2 J+	**0.155**	3
0.00255	3 J	**0.00075**	2	**0.0075**	2	**0.0075**	2	**0.310**	2 U	**0.310**	2 U	450	2	444	3	**0.155**	3
0.00075	2	**0.00075**	2	0.135	3	0.12	2	0.257	3 J	**0.310**	2 U	437	3	453	3	**0.155**	3
0.00075	2	**0.00075**	2	0.144	3	0.165	3	0.274	3 J	0.291	3 J	454	3	466	3	**0.155**	3
0.00075	2	**0.00075**	2	0.102	3	0.109	3	0.19	2 J	0.159	3 J	464	3	471	3	**0.155**	3
0.00075	2	**0.00075**	2	0.118	3	0.128	3	**0.310**	2 U	**0.310**	2 U	461	3	474	3	**0.155**	3
0.00075	2	**0.00250**	2 U	0.0996	3 J		R	**0.310**	2 U	**0.310**	2 U	443	3	472	3	**0.155**	3

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4540	3	**0.0031**	2	**0.0031**	2	2740	3	2850	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5610	3	**0.0031**	2	**0.0031**	2	2810	3	2470	3	**0.0050**	1	**0.0050**	1	1.69	3 J
5480	3 J+	**0.0031**	2	**0.0031**	2	2300	2 J+	2250	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5600	2	**0.0031**	2	**0.0031**	2	2530	3	2500	2	**0.0050**	1	**0.0050**	1	**0.050**	1
6110	3	**0.0031**	2	**0.0031**	2	2460	3 J+	2450	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
6140	3	**0.0031**	2	**0.0031**	2	2490	3	2630	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5840	3	**0.0031**	2	**0.0031**	2	2450	3	2410	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
6120	3	**0.0031**	2	**0.0031**	2	2610	3	2710	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
6130	3	**0.0031**	2	**0.0031**	2	2520	3	2610	3	**0.0031**	2	**0.0031**	2	**0.100**	1 U

0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
	R	**0.155**	3	**0.155**	3	1.7	2 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.376	3 J	0.362	3 J	4.38	3	3.53	3
0.0708	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	6.08	3	2.22	3 J

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	6.44		6		46		124.7		5.58		16.2	
Median	6.22		6		45		122.6		6.18		16.0	
St. Deviation	1		2		9		55		2		1	
# of values	8		9		9		8		9		9	
Minimum	6.02		3		35		55.7		1.03		15.7	
Maximum	7.41		9		64		225.4		7.77		17.5	
Lowest fifth percentile	6		3		36		57		3		16	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	75%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	2	3	1	3	3	3								
48.0		34		0.104		7.3		20		0.105		NA		NA					
47.8		29		0.077		6.2		20		0.101		NA		NA					
3		8		0		4		2		0		NA		NA					
9		9		9		9		9		9		0		0					
42.3		25		0.075		4.4		17		0.050		NA		NA					
54.2		46		0.203		16.6		23		0.191		NA		NA					
43		26		0		5		17		0		NA		NA					
0		0		7		1		0		2									
				78%		11%				22%									
				2		7				2									
NA		NA		NA		NA		>=20		NA		NA		NA					
NA		500		NA		NA		NA		10		NA		NA					
0%		0%		0%		0%		33%		0%		NA		NA					
0%		0%		0%		0%		0%		0%		NA		NA					

4	2		
0.00430		NA	
0.00580		NA	
0		NA	
9			0
0.00155		NA	
0.00830		NA	
0		NA	
4			
44%			
5			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4
0.539		0.0450		1.52		0		0		0.155		0.811		0.0212
0.547		0.0530		1.56		0		0		0.155		0.730		0.0155
0		0		0		0		0		0		0		0
9		9		9		8		8		9		9		9
0.333		0.0155		1.26		0.00075		0.00075		0.155		0.526		0.0155
0.826		0.0750		1.99		0.00075		0.0025		0.155		1.390		0.0500
0		0		1		0		0		0		1		0
0		4		0		8		8		9		0		8
		44%				100%		100%		100%				89%
		5												1
230		NA		NA		NA		0.0052		NA		NA		6.94
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	3	2	3	3	3	3	2	3	2	3
	9.9		6.57		0.0260		0.0180		0.179		0.190		2.81		2.85	
	6.0		5.74		0.0188		0.0170		0.155		0.155		2.76		2.89	
	8		3		0		0		0		0		0		0	
	9		8		9		7		9		9		9		8	
	4.5		4.78		0.0075		0.0075		0.075		0.155		2.50		2.38	
	29.0		13.00		0.0624		0.0347		0.343		0.297		3.15		3.17	
	5		5		0		0		0		0		3		2	
	0		0		4		4		6		5		0		0	
					44%		57%		67%		56%					
					4		3		3		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0090		0.0075		1.44		1.52		0.0075		0.0075		4540	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		4500	
0		0		0		0		0		1		0		0		200	
9		9		9		9		9		9		9		9		9	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		4330	
0.0125		0.0125		0.0214		0.0075		2.37		2.69		0.0075		0.0075		4860	
0		0		0		0		1		1		0		0		4354	
9		9		8		9		6		6		9		9		0	
100%		100%		89%		100%		67%		67%		100%		100%			
				1				3		3							
NA		NA		NA		NA		NA		NA		0.069		0.068		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	3	3	3
4660		0.327		0.135		0.0177		0.0163		0.623		0.736
4570		0.287		0.113		0.0164		0.0148		0.724		0.648
260		0		0		0		0		0		0
9		9		9		9		9		9		8
4290		0.100		0.050		0.0100		0.0100		0.250		0.250
5040		0.593		0.244		0.0318		0.0272		1.240		1.400
4322		0		0		0		0		0		0
0		1		4		3		3		4		2
		11%		44%		33%		33%		44%		25%
				3		4		4				
NA		10.98		10.56276		NA		NA		1.922		1.845
NA		100		NA		NA		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%

2	3	0	2	4	3	4	3	-1	3	-1	3	3	3	4	3
10.0		9.0		0.0174		0.0182		1180		1190		0.228		0.144	
9.9		10.0		0.0155		0.0155		1160		1190		0.171		0.099	
7		3		0		0		50		30		0		0	
9		9		9		9		9		9		9		9	
3.1		3.1		0.0155		0.0155		1150		1140		0.089		0.071	
27.7		12.3		0.0329		0.0397		1300		1230		0.678		0.325	
3		4		0		0		1150		1152		0		0	
4		5		8		8		0		0		0		0	
44%		56%		89%		89%									
4		4		1		1									
1000		1000		0.302		0.321		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	2	2	2	0	3	0	3	3	3
0.00105		0.00105		0.110		0.116		0.300		0.300		447		459		0.155	
0.00075		0.00075		0.118		0.124		0.310		0.310		454		466		0.155	
0		0		0		0		0		0		26		41		0	
9		9		9		8		9		9		9		9		9	
0.00075		0.00075		0.008		0.008		0.190		0.159		384		370		0.155	
0.00255		0.00250		0.147		0.165		0.452		0.373		474		525		0.155	
0		0		0		0		0		0		405		400		0	
7		8		1		1		5		6		0		0		9	
78%		89%		11%		13%		56%		67%						100%	
2		1						4		3							
0.77		0.77		NA		NA		10.92		10.88		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
9	
0.155	
0.155	
0	
9	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5730		0.0031		0.0031		2550		2540		0.0042		0.0042		0.231	
5840		0.0031		0.0031		2520		2500		0.0050		0.0050		0.050	
520		0		0		160		180		0		0		1	
9		9		9		9		9		9		9		9	
4540		0.0031		0.0031		2300		2250		0.0031		0.0031		0.031	
6140		0.0031		0.0031		2810		2850		0.0050		0.0050		1.690	
4916		0		0		2360		2314		0		0		0	
0		9		9		0		0		9		9		8	
		100%		100%						100%		100%		89%	
NA		0.157343025		0.134		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.050		0.180		0.178		2.38		1.84	
0.050		0.155		0.155		1.55		1.55	
0		0		0		2		1	
8		9		9		9		9	
0.031		0.155		0.155		1.55		1.55	
0.071		0.376		0.362		6.08		3.53	
0		0		0		2		2	
7		8		8		6		7	
88%		89%		89%		67%		78%	
1		1		1		1		1	
NA		NA		NA		25.01		24.66	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-81D																
Sample Date																
08/25/09	5.99	3	9.47	3		60	1		123.5	4		3.88	3	16.1	3	
10/15/09	8.35	3	8.31	3		45	2		-138.1	4		4.03	3	16	2	
05/19/10	5.88	3	10.98	4		44	2	Q	136.4	4		2	1	14.3	3	
08/19/10	7.76	3	10.16	4		39	2		-12.7	3		3.2	2	14.1	3	
10/20/10	5.89	3	7.99	3		47	2	Q	132.6	4		3.55	3	16.6	3	
03/29/11	5.89	3	9.85	3		79	2	Q	211	3		1.3	2	14	2	
05/25/11	5.69	3	10.58	4		44	2		193.4	4		1.8	2	14.9	3	
08/29/11	5.4	2	13.24	4		61.4814	FALSE	Q	121.9	4		3.51	3	15.9	3	
10/27/11	6.61	3	10.86	4		42	2		46.7	3		3.96	3	15.2	3	
05/21/12	6.22	3	4.8	2		46	2		217.8	4		1.41	3	17.4	3	
08/22/12	6.23	3	8.37	3		44	2		94.5	3		3.31	3	16	2	
10/07/12	6.1	2	5.54	3		42	2		-36.1	3		3.37	3	15.1	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
50.3	3		33.8	3		**0.081**	2		7.3	2	J	33.5	3		0.16	2						
45.6	3		33.8	3		**0.076**	2		10	1		20.7	3		0.166	3						
46.1	3		54	2		**0.079**	2		16.1	3		28.1	3		0.16	2						
42.7	3		16	2		0.408	3	J	8.97	3	J	16.7	3		0.217	3						
46.4	3		59	2		**0.0765**	3		5.86	3	J	20.4	3		0.148	3	J-					
44	2		**1.55**	3		**0.076**	2		**1.57**	3		16	2		0.163	3						
44.5	3		37	2		**0.0745**	3		9.2	2	J	17.2	3		0.153	3						
44.1	3		46	2		**0.1485**	4		6	1	J	16.7	3		0.209	3						
43.7	3		47	2		0.4	1	J	6.31	3	J	16.1	3		0.222	3	J-					
45	2		30	1		**0.0735**	3		4.24	3	J	16.2	3		0.161	3						
47.6	3		35	2		**0.073**	2		**5.0**	1	U	15.8	3		0.193	3						
43	2		24	2		**0.075**	2		3.6	2	J	16.3	3		0.153	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0050	1	U			
	0.0504	3				
	0.0147	3				
	0.0118	3				
	0.0038	2	J			
	0.011	2				
	0.0168	3				
	0.00155	3				
	0.0038	2	J			
	0.00155	3				
	0.0084	2	J			
	0.0073	2	J			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.545	3		**0.0155**	3		1.66	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.255	3	J	0.0352			
0.571	3		**0.0155**	3		1.34	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		0.237			
0.674	3		**0.0155**	3		1.54	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.528	3	J+	**0.0155**			
0.696	3		0.066	2	J	1.21	3		0.0021	2	J	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.686	3		**0.050**	1	U	1.56	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.243	3	J	**0.0155**			
0.654	3		**0.050**	1	U	2.45	3		**0.00075**	2		**0.00075**	2		**0.155**	3		6.69	3		**0.0155**			
0.719	3		0.063	2	J	1.53	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.624	3		**0.0155**			
0.675	3		0.048	2	J	1.42	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.606	3		0.063	2	J	1.22	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.626	3		0.069	2	J	1.69	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.729	3		0.051	2	J	1.59	3		**0.00075**	2		0.0028	2	J	**0.155**	3		**0.250**	2	U	**0.0155**			
0.7	1		0.073	2	J	1.14	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.312	3	J	**0.050**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3 J	5.8	2 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2		**0.155**	3	**0.155**	3	2.9	2	2.26	3
	3	3.58	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2		**0.155**	3	**0.155**	3	2.81	3	2.84	3
	3	53.6	3	4.03	3	0.0535	3	**0.0075**	2		**0.155**	3	**0.155**	3	4.52	3 J+	2.46	3 J+
	3	3.02	3 J+	4.63	3 J+	**0.0075**	2		R		**0.155**	3	**0.155**	3	2.42	3 J+	2.5	2 J+
	3	2.61	3 J+	2.44	3 J+	**0.0075**	2	**0.0075**	2		**0.155**	3	**0.155**	3	3.23	3 J+	3.29	3 J+
	3	3.16	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2		**0.155**	3	**0.155**	3	2.42	3	2.35	3
	3	2.06	3 J+	2.98	3 J+	**0.0075**	2	**0.0075**	2		**0.155**	3	**0.155**	3	3.15	3 J+	3.03	3 J+
	3	2.03	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2		**0.075**	2	0.184	3 J	2.81	3	2.93	3
	3	2.29	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2		0.344	3 J	0.205	3 J	3.12	3	3.04	3
	3	2.28	3 J+	2.11	3 J+	**0.0075**	2	**0.0075**	2		**0.075**	2	0.15	2 J	3.42	3 J+	3.61	3 J+
	3	2.06	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2		**0.250**	2 U	0.221	3 J	2.86	3	2.59	3
	1 U	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2		0.234	3 J	0.154	3 J	2.74	3	1.98	3

| | | |

| | | |

| | | |

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

																		depends on Hardness				depends on Total Zn	
																		result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium																**Zinc[4]**	
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.050	1		**0.155**	3		**0.155**	3			4.43	3	J+	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			0.774	3	J	**1.55**	3	U								
0.162	3	J	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			1.77	3	J	0.753	3	J								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			0.831	3	J	**1.55**	3	U								

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	6.33		9.18		49		90.9		2.94		15.5	
Median	6.05		9.66		45		122.7		3.34		15.6	
St. Deviation	1		2		12		108		1		1	
# of values	12		12		12		12		12		12	
Minimum	5.40		4.80		39		-138.1		1.30		14.0	
Maximum	8.35		13.24		79		217.8		4.03		17.4	
Lowest fifth percentile	6		5		41		-82		1		14	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	75%		0%		0%		0%		0%		0%	
% of DWS exceedences	50%		0%		0%		0%		0%		0%	

1	3	0	2	3	2	2	3	1	3	3	3												
45.3		35.0		0.137		7.0		19.5		0.18				NA				NA					
44.8		34.0		0.076		6.2		16.7		0.16				NA				NA					
2		16		0		4		6		0				NA				NA					
12		12		12		12		12		12					0				0				
42.7		1.6		0.073		1.6		15.8		0.15				NA				NA					
50.3		59.0		0.408		16.1		33.5		0.22				NA				NA					
43		9		0		3		16		0				NA				NA					
0		1		10		2		0		0													
		8%		83%		17%																	
				2		8																	
NA		NA		NA		NA		>=20		NA					NA				NA				
NA		500		NA		NA		NA		10					NA				NA				
0%		0%		0%		0%		67%		0%					NA				NA				
0%		0%		0%		0%		0%		0%					NA				NA				

5	3		
0.0113		NA	
0.0079		NA	
0		NA	
12			0
0.0016		NA	
0.0504		NA	
0		NA	
3			
25%			
4			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4
0.657		0.0480		1.53		0.00086		0.00092		0.155		0.830		0.0385
0.675		0.0510		1.54		0.00075		0.00075		0.155		0.250		0.0155
0		0		0		0		0		0		2		0
12		12		12		12		12		12		12		12
0.545		0.0155		1.14		0.00075		0.00075		0.155		0.075		0.0155
0.729		0.0730		2.45		0.00210		0.00280		0.155		6.690		0.2370
1		0		1		0		0		0		0		0
0		5		0		11		11		12		6		10
		42%				92%		92%		100%		50%		83%
		7				1		1				3		1
230		NA		NA		NA		0.0052		NA		NA		7.04
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	2	4	2	3	3	3	3	2	3	2	3
	7.0		1.90		0.0113		0.0075		0.172		0.167		3.0		2.74	
	2.5		1.00		0.0075		0.0075		0.155		0.155		2.9		2.72	
	15		1		0		0		0		0		1		0	
	12		12		12		11		12		12		12		12	
	1.0		1.00		0.0075		0.0075		0.075		0.150		2.4		1.98	
	53.6		4.63		0.0535		0.0075		0.344		0.221		4.5		3.61	
	2		1		0		0		0		0		2		2	
	1		7		11		11		10		7		0		0	
	8%		58%		92%		100%		83%		58%					
									2		5					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0225		0.0090		1.61		1.56		0.0075		0.0075		4520	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		4530	
0		0		0		0		1		1		0		0		310	
12		12		12		12		12		12		12		12		12	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		4090	
0.0125		0.0125		0.1880		0.0250		2.77		2.56		0.0075		0.0075		5080	
0		0		0		0		1		1		0		0		4090	
12		12		11		12		8		9		12		12		0	
100%		100%		92%		100%		67%		75%		100%		100%			
								4		3							
NA		NA		NA		NA		NA		NA		0.063		0.063		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	2	2	2	2		
4360		0.74		0.225		0.0268		0.0196		0.340		0.300			
4370		0.68		0.266		0.0229		0.0191		0.250		0.250			
500		0		0		0		0		0		0			
12		12		11		12		12		12		11			
3270		0.10		0.050		0.0100		0.0100		0.250		0.250			
5220		1.29		0.387		0.0561		0.0377		0.609		0.613			
3661		0		0		0		0		0		0			
0		1		4		2		3		8		9			
		8%		36%		17%		25%		67%		82%			
						2		3		1		1			
NA		10.98		10.56276		NA		NA		1.744		1.675			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%			

1	2	1	2	4	3	4	3	-1	3	-1	3	3	3	3	3
10.0		7.00		0.0233		0.0155		1020		991		0.257		0.131	
9.0		7.50		0.0155		0.0155		1010		993		0.153		0.130	
8		3		0		0		70		116		0		0	
12		12		12		12		12		12		12		12	
3.1		3.10		0.0155		0.0155		925		719		0.082		0.063	
33.3		10.40		0.1090		0.0155		1150		1180		1.190		0.204	
3		3		0		0		926		804		0		0	
7		7		11		12		0		0		0		0	
58%		58%		92%		100%									
4		5													
1000		1000		0.262		0.282		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	2	2	0	3	0	3	3	3
0.00075		0.00075		0.604		0.590		0.51		0.340		317		301		0.155	
0.00075		0.00075		0.613		0.610		0.38		0.310		322		304		0.155	
0		0		0		0		0		0		18		33		0	
12		12		12		12		12		12		12		12		12	
0.00075		0.00075		0.472		0.426		0.30		0.274		289		234		0.155	
0.00075		0.00075		0.675		0.670		1.26		0.435		339		345		0.155	
0		0		1		0		0		0		290		251		0	
12		12		0		0		4		7		0		0		12	
100%		100%						33%		58%						100%	
								4		5							
0.77		0.77		NA		NA		9.92		9.89		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
12	
0.155	
0.155	
0	
12	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5820		0.0034		0.0031		2450		2430		0.0052		0.0049		2.16	
6020		0.0031		0.0031		2450		2460		0.0050		0.0050		0.05	
600		0		0		160		250		0		0		7	
12		12		12		12		12		12		12		12	
4570		0.0031		0.0031		2210		1830		0.0031		0.0031		0.03	
6670		0.0063		0.0031		2710		2750		0.0153		0.0119		23.30	
4823		0		0		2216		2012		0		0		0	
0		11		12		0		0		11		11		7	
		92%		100%						92%		92%		58%	
		1								1		1		2	
NA		0.1294996		0.110		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.050		0.155		0.155		1.68		1.48	
0.050		0.155		0.155		1.55		1.55	
0		0		0		1		0	
12		12		12		12		12	
0.031		0.155		0.155		0.77		0.75	
0.162		0.155		0.155		4.43		1.55	
0		0		0		1		1	
11		12		12		8		11	
92%		100%		100%		67%		92%	
1						3		1	
NA		NA		NA		22.72		22.41	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-81S																
Sample Date																
08/25/09	6.25	3	9.39	3		58	2		108	3		9.07	3	13.3	3	
10/15/09	11.04	4	9.05	3		43	2		-151.1	4		6.48	3	16.6	3	
03/20/10	6.15	3	11.47	4				R	294.7	4		0.26	2	20.1	3	
05/19/10	6.09	3	10.32	4		41	2	Q	155.9	4		0.85	2	14.7	3	
08/19/10	7.08	3	9.99	3		31	2		-52.8	3	Q	5.1	2	12.8	3	
10/20/10	6.33	3	10.21	4		46	2		135.3	4		5.46	3	16.1	3	
03/29/11	5.99	3	11.34	4		95	2	Q	197.9	4		0.48	2	17.4	3	
05/25/11	5.85	3	11.44	4		35	2		200	1		1.15	3	12.1	3	
08/29/11	5.6	2	10.71	4					104.3	4		6.44	3	16.1	3	
10/27/11	6.78	3	11.92	4		40	1		39.8	3		5.65	3	15.6	3	
05/21/12	6.42	3	5.46	3		43	2		204	3		1.37	3	14.5	3	
08/22/12	6.42	3	7.01	3		39	2		102.2	4		7.01	3	14	2	
10/07/12	6.23	3	4.87	3		38	2		39.2	3		6.74	3	13.5	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
45.7	3		32.5	3		0.562	3		4.5	2	J	34	2		0.085	2	J					
45.8	3		30	1		0.3	1	J	**1.57**	3		20.7	3		0.161	3						
54.4	3		50	1		0.316	3	J	4.23	3	J	21.9	3		0.098	2	J					
43.7	3		54	2		**0.0785**	3		**5.0**	1	U	26.5	3		0.225	3						
37.8	3		19	2		**0.0765**	3		6.24	3	J	15.7	3		0.114	3						
44.9	3		37	2		**0.0765**	3		4.07	3	J	16.9	3		**0.050**	1	U					
51.7	3		10	1		0.202	3	J	**1.57**	3		21	2		0.136	3						
35.3	3		40	1		**0.0745**	3		5.68	3	J	13.2	3		0.339	3						
44.9	3		30	1		**0.076**	2		5	1	J	18.4	3		0.164	3						
44.2	3		47	2		**0.0745**	3		4.42	3	J	16.4	3		0.253	3						
47.8	3		26	2		**0.0745**	3		7.44	3	J	16.7	3		0.447	3	J-					
40.4	3		36	2		**0.0735**	3		**5.0**	1	U	14	2		0.114	3						
38.4	3		21	2		**0.075**	2		5.32	3	J	15	2		0.146	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.0039	2	J			
	0.00155	3				
	0.0145	3				
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.0063	2	J			
	0.0045	2	J			

																													depends on field pH and field Temp
result > crit				result > crit				result > crit								result > crit													result > crit
CL_N	CL_NSF	CL_NVF	F_N		F_NSF	F_NVF	SO4_N		SO4_NSF	SO4_NVF	CN_N		CN_NSF	CN_NVF	CNWAD_N		CNWAD_NSF	CNWAD_NVF	SCN_N		SCN_NSF	SCN_NVF	DOC_F		DOC_FSF	DOC_FVF	NH3N_N		
	Chloride				**Fluoride**				**Sulfate**				**Total Cyanide**				**Cyanide WAD[5]**				**Thiocyanate**				**Carbon)**				**Ammonia[3]**
	mg/L				mg/L				mg/L				mg/L				mg/L				mg/L				mg/L				mg/L
0.468	3		**0.0155**		3		1.98		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.596		3				**0.0155**
0.568	3		**0.0155**		3		1.44		3		**0.00075**		2		0.0015		2 J		**0.155**		3		**0.250**		2 U				**0.0155**
0.591	3		**0.0155**		3		2.99		3		**0.00075**		2		**0.00075**		2		**0.155**		3		**0.250**		2 U				**0.0155**
0.631	3		**0.0155**		3		1.09		3		**0.00075**		2		**0.00075**		2		**0.155**		3		1.12		3 J+				**0.0155**
0.342	3		0.07		1 J		0.84		2		**0.00075**		2		**0.00075**		2		**0.155**		3		1.17		3				**0.0155**
0.694	3		**0.050**		1 U		2.56		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.573		3				**0.0155**
0.642	3		**0.050**		1 U		3.33		3		**0.00075**		2		**0.00075**		2		**0.155**		3		5.43		3				**0.0155**
0.738	3		0.063		2 J		0.875		3		**0.00075**		2		**0.0025**		2 U		**0.155**		3		1.04		3				**0.0155**
0.439	3		0.053		2 J		1.64		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.757		3				**0.0155**
0.705	3		0.063		2 J		0.991		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.818		3				**0.0155**
1.16	3		0.068		2 J		0.889		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.917		3				**0.0155**
0.543	3		0.052		2 J		1.78		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.69		2				**0.0155**
0.845	3		0.072		2 J		0.913		3		**0.00075**		2		**0.00075**		2		**0.155**		3		0.848		3				**0.050**

| | | |

| | | |

| | | |

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

										depends on Hardness				depends on Total Zn			
										result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF	
						Vanadium							**Zinc[4]**				
	Dissolved			Total			Dissolved				Total				Dissolved		
	µg/L			µg/L			µg/L				µg/L				µg/L		
		R	**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.050	1		0.315	3	J	**0.155**	3				**0.155**	3			**1.55**	3	U
0.133	3	J	**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U				R
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3				1.73	3	J		1.12	3	J
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.63		9.48		46		106		4.31		15.1	
Median	6.25		10.21		41		108		5.46		14.7	
St. Deviation	1		2		18		118		3		2	
# of values	13		13		11		13		13		13	
Minimum	5.60		4.87		31		-151		0.26		12.1	
Maximum	11.04		11.92		95		295		9.07		20.1	
Lowest fifth percentile	6		5		33		-92		0		13	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	85%		0%		0%		0%		0%		0%	
% of DWS exceedences	31%		0%		0%		0%		0%		0%	

1	3	0	2	4	3	2	3	1	3	3	3												
44.2		33.0		0.158		4.6		19		0.179				NA				NA					
44.9		33.0		0.077		5.0		17		0.146				NA				NA					
5		13		0		2		6		0				NA				NA					
13		13		13		13		13		13					0				0				
35.3		10.0		0.074		1.6		13		0.050				NA				NA					
54.4		54.0		0.562		7.4		34		0.447				NA				NA					
37		15		0		2		14		0				NA				NA					
0		0		9		4		0		1													
				69%		31%				8%													
				3		9				2													
NA		NA		NA		NA		>=20		NA					NA				NA				
NA		500		NA		NA		NA		10					NA				NA				
0%		0%		0%		0%		62%		0%					NA				NA				
0%		0%		0%		0%		0%		0%					NA				NA				

5	3		
0.00332		NA	
0.00155		NA	
0		NA	
13			0
0.00155		NA	
0.01450		NA	
0		NA	
9			
69%			
3			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	3	3	4
0.644		0.0460		1.64		0.00075		0.00094		0.155		1.112		0.0182
0.631		0.0520		1.44		0.00075		0.00075		0.155		0.818		0.0155
0		0		1		0		0		0		1		0
13		13		13		13		13		13		13		13
0.342		0.0155		0.84		0.00075		0.00075		0.155		0.250		0.0155
1.160		0.0720		3.33		0.00075		0.00250		0.155		5.430		0.0500
0		0		1		0		0		0		0		0
0		6		0		13		12		13		2		13
		46%				100%		92%		100%		15%		100%
		7						1						
230		NA		NA		NA		0.0052		NA		NA		7.01
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	4	2	4	2	3	3	3	3	2	3	2	3
	10.7		8.40		0.0234		0.0121		0.154		0.146		3.88		3.85	
	11.9		7.49		0.0075		0.0075		0.155		0.155		3.73		3.90	
	3		4		0		0		0		0		0		0	
	13		13		13		13		13		13		13		13	
	5.6		3.93		0.0075		0.0075		0.075		0.075		3.40		3.38	
	15.3		16.80		0.1780		0.0307		0.196		0.229		4.73		4.35	
	6		4		0		0		0		0		3		3	
	0		0		9		8		9		11		0		0	
					69%		62%		69%		85%					
					3		5		4		2					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0125		0.0125		0.0109		0.0094		1.66		1.62		0.0075		0.0075		4230	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		4110	
0		0		0		0		1		1		0		0		590	
13		13		13		13		13		13		13		13		13	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		3380	
0.0125		0.0125		0.0521		0.0250		2.81		2.89		0.0075		0.0075		5550	
0		0		0		0		1		1		0		0		3476	
13		13		12		12		9		9		13		13		0	
100%		100%		92%		92%		69%		69%		100%		100%			
						1		4		4							
NA		NA		NA		NA		NA		NA		0.058		0.058		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	2	3	2	3		
4220		1.62		0.683		0.0289		0.029		1.580		1.720			
4110		1.49		0.538		0.0270		0.026		1.450		1.560			
540		1		0		0		0		1		1			
13		13		12		13		13		13		12			
3320		0.26		0.298		0.0100		0.020		0.250		0.250			
5300		4.04		1.450		0.0568		0.052		4.300		4.290			
3560		1		0		0		0		0		0			
0		0		0		1		0		1		1			
						8%				8%		8%			
NA		10.98		10.56276		NA		NA		1.580		1.517			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		46%		58%			
0%		0%		0%		0%		0%		0%		0%			

1	3	1	3	4	3	4	3	-1	3	-1	3	3	3	3	3
14.6		10.7		0.083		0.070		1110		1110		0.394		0.318	
13.3		10.0		0.058		0.050		1070		1050		0.296		0.288	
6		3		0		0		170		160		0		0	
13		13		13		13		13		13		13		10	
7.1		6.4		0.016		0.016		901		901		0.190		0.149	
29.0		20.2		0.341		0.294		1520		1470		0.868		0.586	
7		7		0		0		930		943		0		0	
2		4		3		6		0		0		0		0	
15%		31%		23%		46%									
8		8		7		5									
1000		1000		0.226		0.247		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		8%		8%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.00102		0.00121		0.290		0.303		0.903		0.877		366		365		0.155	
0.00075		0.00075		0.324		0.313		0.802		0.849		386		372		0.155	
0		0		0		0		1		1		47		48		0	
13		13		13		12		13		13		13		13		13	
0.00075		0.00075		0.119		0.189		0.310		0.310		284		279		0.155	
0.00250		0.00322		0.365		0.408		2.100		1.910		425		437		0.155	
0		0		0		0		0		0		290		290		0	
13		12		0		0		2		3		0		0		13	
100%		92%						15%		23%						100%	
		1						1		1							
0.77		0.77		NA		NA		8.99		8.97		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
13	
0.155	
0.155	
0	
13	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4870		0.0031		0.0031		2340		2330		0.0046		0.0047		0.067	
4850		0.0031		0.0031		2300		2320		0.0050		0.0050		0.050	
550		0		0		270		250		0		0		0	
13		13		13		13		13		13		13		13	
3910		0.0031		0.0031		1960		1990		0.0031		0.0031		0.031	
5620		0.0031		0.0031		2960		2830		0.0079		0.0083		0.226	
4018		0		0		2044		2056		0		0		0	
0		13		13		0		0		12		12		11	
		100%		100%						92%		92%		85%	
										1		1		1	
NA		0.106139933		0.090		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.05		0.167		0.155		1.46		1.51	
0.05		0.155		0.155		1.55		1.55	
0		0		0		0		0	
12		13		13		13		12	
0.031		0.155		0.155		0.16		1.12	
0.133		0.315		0.155		1.73		1.55	
0		0		0		1		1	
11		12		13		12		11	
92%		92%		100%		92%		92%	
1		1				1		1	
NA		NA		NA		20.60		20.31	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-84D																
Sample Date																
08/26/09			2.47	3		1498	4			R		5.86	3	114	3	
10/16/09	11.96	4	0.42	2		1202	4		-277.7	4	Q	5.51	3	109	3	
03/18/10	11.46	4	0.93	2			R		-18.7	3		3.34	3	82.8	3	
05/19/10	10.8	3	1.34	3			R		57.5	3		3.2	2	55.4	3	
08/18/10	11.99	4	3.26	3	Q	720	2	Q	-50	1		3.69	3	115	3	
10/21/10	10.9	3	2.83	3	Q	258	3		-104	3	Q	4.09	3	73.4	3	
03/30/11	11.53	4	1.35	3		434	3	Q	45.2	3		2.73	3	96	2	
05/25/11	11.47	4	1.95	3		497	3	Q	116.5	4		3.75	3			
05/26/11														47.5	3	
08/30/11	11.55	4	10.29	4		390.7568	FALSE	Q	105.9	4		4.72	3	234	3	
05/20/12	11.94	4	0.89	2		765	3		7	1		4.25	3	111	3	
08/24/12			4.4	2		728	3		170.8	4		4.62	3	107	3	
10/09/12	11.07	4	2.4	2		407	3		-317.6	4		5.37	3	74.5	3	

			result > crit												result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF	
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate		
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
1100	2		308	3		14.3	3		**1.57**	3		270	2		0.162	3							
926	3		231	3		3.92	3		**1.57**	3		204	3										
161	3		111	3		24.3	3		**1.57**	3		54.2	3		0.153	3							
346	3		132	3		9.68	3		**1.57**	3		80.4	3		0.457	3							
691	3		175	3		17.6	3		**1.57**	3		151	3		0.403	3							
186	3		84	2		0.513	3		**1.57**	3		49.3	3		0.146	3	J-						
334	3		109	3		1.86	3		**1.57**	3		102	3		0.169	3							
122	3		76	2		4.95	3		**1.57**	3		48.1	3		0.0825	3	J						
324	3		118	3		4.18	3		**1.57**	3		90.5	3		0.398	3							
482	3		156	3		0.291	3	J	**1.57**	3		117	3		0.269	3							
528	3		131	3		1.11	3		**1.57**	3		120	2		0.327	3							
337	3		107	3		4.4	2		**1.57**	3		82.1	3		0.438	3							

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0285	3				
	0.004	1	J			
	0.0111	3				
	0.0083	2	J			
	0.0049	2	J			
	0.0164	3				
	0.0038	2	J			
	0.00155	3				
	0.0050	1	U			
	0.0050	1	U			
	0.0054	2	J			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

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								depends on Hardness				depends on Hardness																	
result > crit				result > crit				result > crit				result > crit																result > crit	
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
193	3		38.8	3			1.6	2 J+			1.36	3 J+			358	3		87.4	3		15.4	3 J+		1.41	3 J+	
78.2	3		22.4	3			0.865	3			0.181	3			114	3		116	3		3.76	3		0.499	3	
41.5	3		14.1	3 J			0.519	3			**0.050**	1 U			557	3		575	3		6.26	3		1.18	3	
20.6	3		**10.0**	1 U			0.362	3			0.0389	3 J			245	3 J+		169	3 J+		1.69	3 J+		0.147	3 J+	
32.5	3		12	2 J			0.365	3			**0.0155**	3			306	3		244	3 J+		3.56	3 J+		0.247	3 J+	
27.7	3		9.83	3 J			0.142	3			0.0357	3 J			720	2		695	3		6.45	3		3.96	3	
76.6	3		17.2	3 J			0.12	2			**0.0155**	3			307	3		305	3		2.92	3		0.36	2 J+	
102	3		20.4	3			0.312	3			**0.0155**	3			942	3		866	3		15.9	3		10.3	3	
1130	3		13.5	3 J			4.17	3			0.0404	3 J			1620	3		233	3		144	3		0.37	2	
60.6	3		38	2			0.517	3			0.0411	3 J			206	3		250	2		1.45	3 J+		0.679	3 J+	
58.8	3		25.1	3			0.083	2 J			0.0396	3 J			215	3		241	3		1.49	3 J+		0.391	3 J+	
42.7	3		24	2			0.112	3			0.0644	3 J			384	3		349	3		0.831	3 J+		0.255	3 J+	

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
J		0.352	3	J
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	

			depends on HARD; revised 2013					depends on Total Ag																					
			result > crit					result > crit																					
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon				**Silver[8]**						**Sodium**						**Thallium**								**Tir**					
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total								
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L								
8510	3		0.0138	3	J	**0.0031**	2		49000	2	J			R	**0.0050**	1		**0.0050**	1		2.71	3	J+						
7170	3		**0.0031**	2		**0.0031**	2		44300	3		35200	3		**0.0050**	1		**0.0050**	1		38.1	3							
5870	3		**0.0031**	2		**0.0031**	2		21700	3		18900	3		**0.0050**	1		**0.0050**	1		377	3							
5900	2	J+	**0.0031**	2		**0.0031**	2		21400	3	J+	22700	3	J+	**0.0050**	1		**0.0050**	1		1060	3							
5450	3		**0.0031**	2		**0.0031**	2		24300	3		24000	2		**0.0050**	1		**0.0050**	1		254	3							
5520	3	J+	**0.0031**	2		**0.0031**	2		12300	3		13900	3		**0.0050**	1		**0.0050**	1		35.4	3							
5210	3		**0.0031**	2		**0.0031**	2		15800	3		15500	3		**0.0050**	1		**0.0050**	1		37.5	3							
4810	3		**0.0031**	2		**0.0031**	2		5760	3		5590	3		**0.0050**	1		**0.0050**	1		27.6	3							
4510	3		0.0274	3		**0.0031**	2		12900	3	J			R	0.0329	3		0.0089	2	J	149	3							
5510	3		**0.0031**	2		**0.0031**	2		21500	3		22100	3		0.0083	2	J	0.0087	2	J	5.39	3							
5100	2		**0.0031**	2		**0.0031**	2		22600	3		23900	3		**0.0031**	2		**0.0031**	2		17.2	3							
4880	3		**0.0031**	2		**0.0031**	2		17900	3		17300	3		0.0093	2	J	0.0091	2	J	7.09	3							

										depends on Hardness						depends on Total Zn			
										result > crit						result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F				ZN_FSF	ZN_FVF	
					Vanadium								**Zinc[4]**						
	Dissolved			Total			Dissolved				Total						Dissolved		
	µg/L			µg/L			µg/L				µg/L						µg/L		
1.97	3	J+	12.3	3	J				R		5.76	3	J+				**1.55**	3	U
40.5	3		9.49	3		9.03	3				1.97	3	J				**1.55**	3	U
81.4	3		4.76	3		3.89	3				3.99	3					**1.55**	3	U
63.1	3		3.87	3		4.02	3				3.15	3					**1.55**	3	U
59.4	3		3.53	3		3.42	3				6.35	3	J+				**1.55**	3	U
26.8	3		1.47	3		1.66	3				**1.55**	3	U				**1.55**	3	U
22.7	3		3.11	3		2.69	3				**1.55**	3	U				**1.55**	3	U
2.07	3		0.952	3	J	0.868	3	J			3.46	3					**1.55**	3	U
14.5	3		3.71	3		2.91	3				67.6	3					2.19	3	J
5.96	3		4.26	3		4.72	3				**1.55**	3	U				**1.55**	3	U
12.5	3		3.87	3		3.87	3				**1.55**	3	U				**1.55**	3	U
8.16	3		3.26	3		3.24	3				3.77	3					1.34	3	J

	2	4	2	3	0	3	0	3	2	3	1	3			
Mean	11.47		2.71		690		-24		4.26		102				
Median	11.5		2.18		609		7		4.17		102				
St. Deviation	0		3		392		156		1		48				
# of values	10		12		10		11		12		12				
Minimum	10.8		0.42		258		-317.6		2.73		48				
Maximum	11.99		10.29		1498		170.8		5.86		234				
Lowest fifth percentile	11		1		318		-298		3		52				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	100%		0%		0%		0%		0%		0%				
% of DWS exceedences	100%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		2	3		2	3		1	3		3	3						
461			145			7.3			1.57			114			0.273			NA			NA	
342			125			4.3			1.57			96			0.269			NA			NA	
305			66			8			0			67			0			NA			NA	
12			12			12			12			12			11				0			0
122			76			0.3			1.57			48			0.083			NA			NA	
1100			308			24.3			1.57			270			0.457			NA			NA	
143			80			0			2			49			0			NA			NA	
0			0			0			12			0			0							
									100%													
						1									1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	2								
0.0085		NA							
0.0050		NA							
0		NA							
11			0						
0.0016		NA							
0.0285		NA							
0		NA							
3									
27%									
5									
NA			NA						
NA			NA						
0%			NA						
0%			NA						
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF			
Total Phosphorus				**Orthophosphate**					
mg/L				mg/L					

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
2	3		3	2		2	3		5	2		5	2		3	3		2	3		3
1.78			0.071			10.2			0.00090			0.00090			0.213			2.07			1.14
1.53			0.073			9.3			0.00075			0.00075			0.155			1.43			0.51
1			0			3			0			0			0			2			2
12			12			12			12			12			12			12			11
0.91			0.035			6.8			0.00075			0.00075			0.155			0.53			0.15
3.56			0.106			16.6			0.00250			0.00250			0.850			5.35			5.69
1			0			7			0			0			0			1			0
0			1			0			12			12			11			0			0
			8%						100%			100%			92%						
			10												1						
230			NA			NA			NA			0.0052			NA			NA			0.17
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			91%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
-2	3			2	3			3	3		3	3		3	3		2	3		2	3
35100				10.77				1.38			0.365			0.2			9.6			5.4	
36100				7.97				0.99			0.268			0.2			7.9			4.9	
10000				13				1			0			0			7			3	
12				12				12			12			12			12			12	
16500				1.03				0.17			0.136			0.1			2.0			0.8	
49300				48.00				4.54			1.250			0.4			20.2			11.8	
19800				2				0			0			0			3			2	
0				0				0			0			0			0			0	
								1													
NA				10.98				10.56276			NA			NA			5.322			5.109	
NA				100				NA			NA			NA			NA			NA	
0%				42%				0%			0%			0%			67%			42%	
0%				0%				0%			0%			0%			0%			0%	
					depends on Hardness			depends on Hardness									depends on Hardness				
					result > crit			result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
1	3	1	3	3	3	4	3	0	3	0	3	2	3	3	3								
155		20.4		0.8		0.16		498		344.0		17.0		1.65									
60		18.8		0.4		0.04		333		247.0		3.7		0.45									
310		10		1		0		425		241		40		3									
12		12		12		12		12		12		12		12									
21		9.8		0.1		0.02		114		87.4		0.8		0.15									
1130		38.8		4.2		1.36		1620		866.0		144.0		10.30									
25		10		0		0		165		103		1		0									
0		1		0		4		0		0		0		0									
		8%				33%																	
		5		1		6																	
1000		1000		1.379		1.223		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
8%		0%		17%		8%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		8%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit						result > crit											

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		Total
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		µg/L
5	2	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3								
0.00142		0.00090		3.6		4		6.5		1.92		5030		4920		0.170									
0.00075		0.00075		3.1		4		4.9		1.64		5040		4690		0.155									
0		0		3		3		6		1		1770		1970		0									
12		12		12		9		12		12		12		10		12									
0.00075		0.00075		0.5		1		2.0		1.18		1350		1270		0.155									
0.00355		0.00250		11.3		11		25.5		3.64		7370		7560		0.335									
0		0		1		1		2		1		2225		2148		0									
11		12		0		0		0		0		0		0		11									
92%		100%														92%									
1																1									
0.77		0.77		NA		NA		29.92		29.83		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.171	
	0.155	
	0	
	12	
	0.155	
	0.352	
	0	
	11	
	92%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-1	3	4	2	4	2	-2	3	-2	3	4	2	4	2	1	3								
5700		0.0060		0.0031		22500		19900		0.0078		0.0058		167.60									
5480		0.0031		0.0031		21500		20500		0.0050		0.0050		36.50									
1120		0		0		12500		7800		0		0		305									
12		12		12		12		10		12		12		12									
4510		0.0031		0.0031		5760		5590		0.0031		0.0031		2.71									
8510		0.0274		0.0031		49000		35200		0.0329		0.0091		1060.00									
4675		0		0		9357		9330		0		0		4									
0		10		12		0		0		9		9		0									
		83%		100%						75%		75%											
		1								2		3											
NA		1.222630416		1.039		NA		NA		NA		NA		NA									
NA		NA		NA		NA		NA		2		NA		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
		depends on HARD; revised 2013		depends on Total Ag																			
		result > crit		result > crit						result > crit													
SI F	SI FSF	SI FVF	AG N		AG NSF	AG NVF	AG F		AG FSF	AG FVF	NA N	NA NSF	NA NVF	NA F	NA FSF	NA FVF	TL N	TL NSF	TL NVF	TL F	TL FSF	TL FVF	SN N	SN NSF	SN NVF
Silicon					**Silver[8]**									**Sodium**						**Thallium**					**Tin**
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			

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P-08-84S

Sample Date														
08/26/09			8.56	3		44		2			R	5.57	3	10.3	3
10/16/09	7.25	3	6.79	3		45		2	-124.6	4	Q	7.2	2	10.8	3
03/18/10	6.52	3	10.66	4		47		2	70.9	3		1.62	3	11	2
05/19/10	6.1	2	13.79	4		28		2	153.7	4		2.04	3	11.1	3
08/18/10	5.9	2			R	31		2	126.7	4		3.87	3	10.4	3
10/21/10	5.4	2	7.24	3	Q	35		2	-10.1	3	Q	5.55	3	10.2	3
03/30/11	5.56	3	9.66	3		87		2	Q 172	3		1.46	3	10.9	3
05/25/11	5.63	3	12.88	4		34		2	186.3	4		2.85	3	10.9	3
08/30/11	5.12	3	5.69	3		296.268	FALSE		153.9	4		4.46	3	11.7	3
10/27/11	6.1	2	12.81	4		28		2	Q 72.7	3		5.35	3	9.58	3
05/20/12	6.05	3	8.75	3		37		2	216.1	4		1.74	3	13.7	3
08/23/12			7.42	3		31		2	-190	2		5.57	3	11	2
10/08/12	5.55	3	5.35	3		34		2	-315.9	4		5.89	3	11.3	3

36.3	3	27.5	3	**0.0835**	3	3.8	2 J	25.1	3	0.0905	3 J
34.9	3	22.5	3	**0.076**	2	**5.0**	1 U	23.7	3	0.0775	3 J
31.3	3	27.5	3	0.306	3 J	**1.57**	3	24	2	0.205	3
35.1	3	46	2	**0.078**	2	**5.0**	1 U	16.8	3	0.212	3
32.9	3	8	1 J	**0.0765**	3	7.5	2 J	11.2	3	**0.050**	1 U
34.2	3	39	2	**0.076**	2	8.16	3 J	11	2	**0.050**	1 U
33.7	3	4	1 J	**0.078**	2	3.51	3 J	11.3	3	0.266	3
34.2	3	25	2	**0.075**	2	9.56	3 J	10.5	3	0.42	2
36.2	3	28	2	**0.075**	2	5.3	2 J	11.6	3	0.151	3
30.7	3	36	2	**0.0745**	3	4.09	3 J	**7.44**	3 J	0.225	3
38	2	26	2	**0.0735**	3	4.64	3 J	**9.92**	3 J	0.466	3 J-
31.7	3	12	2	**0.075**	2	**5.0**	1 U	**8.94**	3 J	0.29	2
32.9	3	20	1	**0.0755**	3	7.84	3 J	10.4	3	0.159	3

0.0793	3	
0.00155	3	
0.00155	3	
0.0050	1	U
0.00155	3	
0.00155	3	
0.187	3	
0.0343	3	
0.00155	3	
0.00155	3	
0.0050	1	U
0.0053	2	J
0.005	1	J

0.327	3	0.067	2 J	2.06	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.446	3 J	**0.0155**
0.767	3	**0.0155**	3	2.23	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.592	3	**0.0155**	3	1.89	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.539	3	**0.0155**	3	1.87	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.569	3 J+	**0.0155**
0.414	3	0.062	2 J	2.26	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.745	3	0.075	2 J	2.68	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.578	3	**0.0155**
0.578	3	**0.050**	1 U	2.18	3	**0.00075**	2	**0.00075**	2	**0.155**	3	5.2	2	**0.0155**
0.66	2	0.058	2 J	1.85	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
0.433	3	0.046	2 J	2.13	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.503	3	**0.0155**
0.735	3	0.06	1 J	3.05	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
1.12	3	0.065	2 J	1.74	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.487	3	0.048	2 J	2.31	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.79	2	0.069	2 J	2.06	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.409	3 J	0.108

3	4.64	3 J+	3.82	3 J+	0.0169	3 J	0.0205	3 J	**0.155**	3	**0.155**	3	2.97	3	3.29	3
3	4.65	3	4.51	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.28	3	3.37	3
3	6.04	3	4.59	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.71	3	2.52	3
3	6.82	3	4.42	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.27	3 J+	2.94	3 J+
3	5.05	3 J+	4.11	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.04	3 J+	3.07	3 J+
3	5.72	3 J+	5.49	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.44	3 J+	3.65	3 J+
3	6.25	3 J+	6.02	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.83	3	2.98	3
3	6.86	3 J+	4.47	3 J+	0.132	3 J+	**0.0075**	2	**0.155**	3	**0.155**	3	3.21	3 J+	3.14	3 J+
3	7.49	3 J+	4.6	2 J+	0.122	3	**0.0075**	2	**0.075**	2	**0.075**	2	3.78	3	3.34	3
3	5.11	3 J		R	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	3.27	3	3.14	3
3	4.82	3 J+	4.7	2 J+	0.0172	3 J	0.0249	3 J	**0.075**	2	**0.075**	2	3.4	2 J+	3.59	3 J+
3	4.15	3	3.83	3	**0.0075**	2	0.0162	3 J	**0.075**	2	**0.075**	2	2.99	3	3.02	3
3	8.24	3 J+	4.38	3 J+	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	3.37	3	3.26	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0250**	2 U	**0.0250**	2 U	3320	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0226	3 J	0.0215	3 J	3480	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0261	3 J	0.0193	3 J	3510	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0250**	2 U	**0.0250**	2 U	3510	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3330	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0208	3 J	0.024	2 J	3230	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0229	3 J	0.0203	3 J	3500	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0245	3 J	0.0223	3 J	3510	3
0.0125	3	**0.0125**	3	0.0412	3 J	**0.0075**	2	2.09	3 J	1.89	3 J	0.0172	3 J	0.0176	3 J	3730	3
0.0125	3	**0.0125**	3	**0.0075**	2	0.0429	3 J	**0.75**	2	**0.75**	2	0.0212	3 J	0.0217	3 J	3110	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**2.50**	2 U	0.0202	3 J	0.0181	3 J	4390	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	0.0236	3 J	0.0196	3 J	3510	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	0.0225	3 J	0.0194	3 J	3600	2

	3610	3	1.96	3	0.641	3	0.0281	3	J+	0.0277	3	J+	**0.250**	2	U	**0.250**	2	U
	3620	3	1.27	3	0.373	3	0.0253	3		0.0184	3	J	**0.250**	2	U	**0.250**	2	U
	3230	3	0.312	3	0.12	2	J	**0.0050**	1		0.0109	3	J	0.226	3	J	**0.250**	2	U
J+	3510	3	J+	1.08	3	0.577	3	**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	3370	3	0.939	3	J+	0.467	3	J+	**0.0050**	1	**0.0050**	1		**0.250**	2	U	**0.250**	2	U
	3630	3	0.183	3	J		R		0.0114	3	J	0.0144	3	J	**0.250**	2	U	**0.250**	2	U
	3710	3	0.436	3	0.305	3		0.0132	3	J	0.0125	3	J	**0.250**	2	U	**0.250**	2	U
	3610	3	0.445	3	**0.100**	1	U	0.0149	3	J	0.0109	3	J	0.238	3	J	0.239	3	J
	3590	3	1.61	3	0.704	3		0.0213	3		0.0165	3	J	**0.250**	2	U	**0.250**	2	U
	3090	3	1.26	3	0.669	3		0.022	2		0.0169	3	J	**0.250**	2	U	0.701	3	
	4110	3	0.919	3	J+	0.482	3	J+	**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	3390	3	0.464	3	0.175	3	J	0.0157	3	J	0.0152	3	J	**0.250**	2	U	**0.250**	2	U
	3560	3	0.644	3	0.335	3		**0.0100**	1	U	**0.0100**	1	U	**0.250**	2	U	0.589	3	J+

10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	488	3	525	3	0.354	3 J		R
7	1 J	6.88	3 J	**0.0155**	3	**0.0155**	3	518	3	553	3	0.286	3	0.175	3
7.99	3 J	6.95	3 J	**0.0155**	3	**0.050**	1 U	534	3	495	3	0.14	2	0.137	3 J+
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	568	3 J+	531	3 J+	0.322	3 J+	0.174	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	495	3	513	3	0.16	2 J+	0.144	3 J+
3.10	2	6.98	3 J	**0.0155**	3	**0.0155**	3	516	3	559	3	0.122	3 J+	0.128	3 J+
3.10	2	6.63	3 J	**0.0155**	3	**0.0155**	3	527	3	566	3	0.123	3 J+	0.143	3 J+
3.10	2	**10.0**	1 U	**0.0155**	3	**0.0155**	3	530	2	534	3	0.191	3 J+	0.126	3 J+
20.1	3	14	2 J	**0.0155**	3	**0.0155**	3	574	3	557	3	0.275	3	0.195	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	0.0319	3 J	442	3	438	3	0.263	3	0.212	3
10.0	1 U	**3.10**	2	0.036	2 J	0.0361	3 J	664	3	647	3	0.214	3 J+	0.168	3 J+
3.10	2	9.32	3 J	0.0327	3 J	0.0367	3 J	548	3	515	3	0.164	3 J+	0.184	3 J+
8.73	3 J	7.15	3 J	**0.0155**	3	**0.0155**	3	554	3	543	3	0.179	3 J+	0.154	3 J+

0.00075	2	**0.00075**	2	0.208	3	0.206	3	0.982	3 J+	0.839	3 J+	124	3	130	2	**0.155**	3
0.00075	2	**0.00075**	2	0.191	3	0.181	3	0.727	3	0.384	3 J	137	3	143	3	**0.155**	3
0.00075	2	**0.00075**	2	0.192	3	0.182	3	0.19	2 J	0.173	3 J	120	2	110	2	**0.155**	3
0.00075	2	**0.00250**	2 U	0.167	3 J+	0.174	3 J+	0.637	3 J+	**0.310**	2 U	122	3 J+	121	3 J+	**0.155**	3
0.00250	2 U	**0.00250**	2 U	0.0385	3 J	0.0382	3 J	**0.310**	2 U	**0.310**	2 U	120	2	122	3	**0.155**	3
0.00075	2	**0.00075**	2	0.164	3	0.188	3	0.3	1 J	**0.310**	2 U	134	3	142	3	**0.155**	3
0.00075	2	**0.00075**	2	0.165	3	0.17	2	0.262	3 J	0.242	3 J	117	3	125	3	**0.155**	3
0.00075	2	**0.00075**	2	0.157	3	0.152	3	0.313	3 J	0.298	3 J	112	3	114	3	**0.155**	3
0.00075	2	**0.00075**	2	0.188	3	0.178	3	0.691	3	0.559	3 J	135	3	129	3	**0.155**	3
0.00075	2	**0.00075**	2	0.206	3	0.175	3	0.639	3	0.444	3 J	125	3	129	3	**0.155**	3
0.00075	2	**0.00075**	2	0.163	3	0.156	3	**0.310**	2 U	**0.310**	2 U	129	3	122	3	**0.155**	3
0.00075	2	**0.00075**	2	0.182	3	0.185	3	**0.310**	2 U		R	137	3	132	3	**0.155**	3
0.00075	2	**0.00075**	2	0.157	3	0.156	3	**0.310**	2 U	**0.310**	2 U	133	3	135	3	**0.155**	3

0.155	3
0.155	3
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0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4710	3	**0.0031**	2	**0.0031**	2	1740	3	1850	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
5130	3	**0.0031**	2	**0.0031**	2	1900	2	2050	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4290	3	**0.0031**	2	**0.0031**	2	1790	3	1670	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4740	3 J+	**0.0031**	2	**0.0031**	2	1890	3 J+	1790	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
4620	3	**0.0031**	2	**0.0031**	2	1690	3	1760	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5200	2 J+	**0.0031**	2	**0.0031**	2	1870	3 J+	1990	3 J+	**0.0050**	1	**0.0050**	1	0.117	3 J
4810	3	**0.0031**	2	**0.0031**	2	1670	3	1780	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
4490	3	**0.0031**	2	**0.0031**	2	1630	3 J+	1680	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
4810	3	**0.0031**	2	**0.0031**	2	1890	3	1830	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
4500	2	**0.0031**	2	**0.0031**	2	1580	3	1600	2	**0.0031**	2	**0.0031**	2	**0.0310**	2
4530	3	**0.0031**	2	**0.0031**	2	1920	3	1930	3	0.0064	2 J	**0.0031**	2	**0.0310**	2
4710	3	**0.0031**	2	**0.0031**	2	1900	2	1790	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
4810	3	**0.0031**	2	**0.0031**	2	1880	3	1840	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

	R	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	0.47	2 J	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.050	1	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.100	1 U	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.100	1 U	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.100	1 U	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.359	3 J	0.324	3 J	4.59	3	2.85	3 J
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U
0.0310	2	0.155	3	0.155	3	1.55	3 U	1.55	3 U

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	5.93		9.13		60		42.6		4.09		11.0	
Median	5.9		8.66		35		99.7		4.46		10.9	
St. Deviation	1		3		73		169		2		1	
# of values	11		12		13		12		13		13	
Minimum	5.12		5.35		28		-315.9		1.46		9.6	
Maximum	7.25		13.79		296		216.1		7.20		13.7	
Lowest fifth percentile	5		6		28		-247		2		10	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	82%		0%		0%		0%		0%		0%	
% of DWS exceedences	55%		0%		0%		0%		0%		0%	

1	3	0	2	3	2	2	3	1	3	3	3								
34.0		25.0		0.0940		5.5		14.0		0.2050				NA				NA	
34.2		26.0		0.0760		5.0		11.2		0.2050				NA				NA	
2		12		0		2		6		0				NA				NA	
13		13		13		13		13		13					0				0
30.7		4.0		0.0735		1.6		7.4		0.0500				NA				NA	
38.0		46.0		0.3060		9.6		25.1		0.4660				NA				NA	
31		6		0		3		8		0				NA				NA	
0		0		12		4		0		2									
				92%		31%				15%									
		2		1		9		3		2									
NA		NA		NA		NA		>=20		NA					NA				NA
NA		500		NA		NA		NA		10					NA				NA
0%		0%		0%		0%		77%		0%					NA				NA
0%		0%		0%		0%		0%		0%					NA				NA

5	3		
0.0254		NA	
0.0050		NA	
0		NA	
13			0
0.0016		NA	
0.1870		NA	
0		NA	
8			
62%			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.630		0.050		2.18		0.00088		0.00088		0.155		0.710		0.0226
0.592		0.058		2.13		0.00075		0.00075		0.155		0.250		0.0155
0		0		0		0		0		0		1		0
13		13		13		13		13		13		13		13
0.327		0.016		1.74		0.00075		0.00075		0.155		0.075		0.0155
1.120		0.075		3.05		0.00250		0.00250		0.155		5.200		0.1080
0		0		2		0		0		0		0		0
0		4		0		13		13		13		7		12
		31%				100%		100%		100%		54%		92%
		9										2		
230		NA		NA		NA		0.0052		NA		NA		7.06
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	2	4	2	3	3	3	3	2	3	2	3
	5.83		4.58		0.0274		0.0105		0.124		0.124		3.20		3.18	
	5.72		4.49		0.0075		0.0075		0.155		0.155		3.27		3.14	
	1		1		0		0		0		0		0		0	
	13		12		13		13		13		13		13		13	
	4.15		3.82		0.0075		0.0075		0.075		0.075		2.71		2.52	
	8.24		6.02		0.1320		0.0249		0.155		0.155		3.78		3.65	
	4		4		0		0		0		0		3		3	
	0		0		9		10		13		13		0		0	
					69%		77%		100%		100%					
					2		3									
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-1	3
0.0125		0.0125		0.0101		0.0102		1.16		1.28		0.0215		0.0201		3520	
0.0125		0.0125		0.0075		0.0075		1.25		1.25		0.0226		0.0203		3510	
0		0		0		0		0		0		0		0		310	
13		13		13		13		13		13		13		13		13	
0.0125		0.0125		0.0075		0.0075		0.75		0.75		0.0075		0.0075		3110	
0.0125		0.0125		0.0412		0.0429		2.09		2.50		0.0261		0.0250		4390	
0		0		0		0		1		1		0		0		3182	
13		13		12		12		12		12		3		3		0	
100%		100%		92%		92%		92%		92%		23%		23%			
				1		1		1		1		10		10			
NA		NA		NA		NA		NA		NA		0.049		0.049		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	2	2	2	2
3540		0.89		0.412		0.0148		0.0137		0.250		0.310	
3590		0.92		0.420		0.0132		0.0125		0.250		0.250	
250		1		0		0		0		0		0	
13		13		12		13		13		13		13	
3090		0.18		0.100		0.0050		0.0050		0.226		0.239	
4110		1.96		0.704		0.0281		0.0277		0.250		0.701	
3174		0		0		0		0		0		0	
0		0		1		5		4		11		10	
				8%		38%		31%		85%		77%	
		1		2		4		8		2		1	
NA		10.98		10.56276		NA		NA		1.299		1.247	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	2	1	2	4	3	4	3	0	3	0	3	3	3	3	3
7.6		8.0		0.0184		0.0226		535		537		0.215		0.162	
8.0		7.2		0.0155		0.0155		530		534		0.191		0.161	
5		3		0		0		52		47		0		0	
13		13		13		13		13		13		13		12	
3.1		3.1		0.0155		0.0155		442		438		0.122		0.126	
20.1		14.0		0.0360		0.0500		664		647		0.354		0.212	
3		3		0		0		470		472		0		0	
9		6		11		10		0		0		0		0	
69%		46%		85%		77%									
3		7		2		3									
1000		1000		0.169		0.190		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.00088		0.00102		0.168		0.165		0.460		0.374		127		127		0.155	
0.00075		0.00075		0.167		0.175		0.310		0.310		125		129		0.155	
0		0		0		0		0		0		8		10		0	
13		13		13		13		13		12		13		13		13	
0.00075		0.00075		0.039		0.038		0.190		0.173		112		110		0.155	
0.00250		0.00250		0.208		0.206		0.982		0.839		137		143		0.155	
0		0		0		0		0		0		115		112		0	
13		13		0		0		4		5		0		0		13	
100%		100%						31%		42%						100%	
				1		1		4		6							
0.77		0.77		NA		NA		7.41		7.38		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
13	
0.155	
0.155	
0	
13	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4720		0.0031		0.0031		1800		1810		0.0045		0.0043		0.056	
4710		0.0031		0.0031		1870		1790		0.0050		0.0050		0.050	
250		0		0		120		130		0		0		0	
13		13		13		13		13		13		13		13	
4290		0.0031		0.0031		1580		1600		0.0031		0.0031		0.031	
5200		0.0031		0.0031		1920		2050		0.0064		0.0050		0.117	
4410		0		0		1610		1642		0		0		0	
0		13		13		0		0		12		13		12	
		100%		100%						92%		100%		92%	
										1				1	
NA		0.071516326		0.061		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.055		0.171		0.168		1.70		1.65	
0.05		0.155		0.155		1.55		1.55	
0		0		0		1		0	
12		13		13		13		13	
0.031		0.155		0.155		0.47		1.55	
0.1		0.359		0.324		4.59		2.85	
0		0		0		1		2	
12		12		12		11		12	
100%		92%		92%		85%		92%	
		1		1		1		1	
NA		NA		NA		16.96		16.72	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-85D																
Sample Date																
08/24/09			0.5	1		441	3			R		3.25	3	122	3	
10/20/09	7.33	3	0.98	2		234	3		-13.9	3		2.77	3	127	3	
03/20/10	7.75	3	0.1	1		222	3		73.2	3		2.7	2	126	3	
05/21/10	7.67	3	0.41	2		539	3		-83.4	3		5.1	2	108	3	
08/23/10	8.67	3	0.48	2	Q	243	3	Q	144.8	4		2.97	3	99.8	3	
10/22/10	8.05	3	0.19	2		182	3		133	3		3.17	3	113	3	
05/24/11	7.83	3	0.18	2		137	3		77.1	3		3.16	3	107	3	
08/25/11	7.79	3	2.52	3		196.1392	FALSE		135	3		2.89	3	103	3	
05/20/12	7.98	3	0.09	1		254	3		157.9	4		2.9	2	116	3	
08/27/12	8.28	3	2.43	3		249	3		25.4	3		3.46	3	104	3	
10/10/12	7.8	2	0.05	1		217	3		-342.7	4		3.18	3	108	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
276	3		146	3		9.9	2		**1.57**	3		115	3		**0.050**	1 U						
288	3		144	3		23.4	3		**1.57**	3		138	3		**0.0155**	3						
258	3		155	3		25.2	3		**1.57**	3		111	3		0.0585	3 J						
270	2		151	3		0.808	3		**5.0**	1 U		112	3		**0.0155**	3						
246	3		136	3		0.8	1		**1.57**	3		108	3		**0.050**	1 U						
250	2		141	3		0.909	3		**1.57**	3		110	2		0.467	3						
254	3		126	3		**0.076**	2		**1.57**	3		112	3		**0.0155**	3						
256	3		136	3		0.309	3 J		**1.57**	3		111	3		**0.0155**	3						
257	3		153	3		**0.0735**	3		**1.57**	3		111	3		**0.0155**	3						
259	3		126	3		0.5	1		**5.0**	1 U		114	3		**0.050**	1 U						
236	3		116	3		0.962	3		6.06	3 J		111	3		**0.0155**	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0165	3				
	0.0301	3				
	0.0272	3				
	0.007	1	J			
	0.0148	3				
	0.00155	3				
	0.016	2				
	0.0057	2	J			
	0.0050	1	U			
	0.0050	1	U			
	0.0063	2	J			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
3.9	2		0.059	2 J		17.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.256	3 J		**0.0155**			
3.96	3		0.055	2 J		19	2		**0.00075**	2		0.0016	2 J		**0.155**	3		**0.075**	2		**0.0155**			
1.68	3		0.054	2 J		15.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
2.38	3		0.055	2 J		16.6	3		**0.00075**	2		**0.00075**	2		0.35	2 J		0.658	3 J+		**0.0155**			
1.48	3		0.098	2 J		15.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
1.69	3		0.114	3		16.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
1.74	3		0.1	1		15.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.996	3		**0.0155**			
1.91	3		0.104	3		16.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
1.54	3		0.099	2 J		15	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
1.52	3		0.084	2 J		15.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
1.2	2		0.108	3		15.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.323	3 J		**0.050**			

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| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	

| | | |

										depends on Hardness				depends on Total Zn					
										result > crit				result > crit					
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF			
						Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved				Total				Dissolved				
	µg/L			µg/L			µg/L				µg/L				µg/L				
0.050	1		0.422	3	J	**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		0.475	3	J	**0.155**	3				1.84	3	J		**1.55**	3	U		
0.050	1		2.04	3		**0.155**	3				3.24	3			**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.247	3		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		0.475	3	J		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				0.774	3	J		1.91	3	J		

	2	3	2	2	0	3	1	3	2	3	0	3			
Mean	7.92		0.7		265		31		3.23		112				
Median	7.82		0.4		234		75		3.16		108				
St. Deviation	0		1		118		152		1		9				
# of values	10		11		11		10		11		11				
Minimum	7.33		0.1		137		-342.7		2.70		100				
Maximum	8.67		2.5		539		157.9		5.10		127				
Lowest fifth percentile	7		0		160		-226		3		101				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	10%		0%		0%		0%		0%		0%				
% of DWS exceedences	10%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		3	3		2	3		0	3		4	3						
259			139			5.7			2.60			114			0.070			NA			NA	
257			141			0.8			1.57			111			0.016			NA			NA	
14			12			10			2			8			0			NA			NA	
11			11			11			11			11			11				0			0
236			116			0.1			1.57			108			0.016			NA			NA	
288			155			25.2			6.06			138			0.467			NA			NA	
241			121			0			2			109			0			NA			NA	
0			0			2			10			0			9							
						18%			91%						82%							
						1			1						1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	2								
0.0123		NA							
0.0070		NA							
0		NA							
11			0						
0.0016		NA							
0.0301		NA							
0		NA							
3									
27%									
3									
NA			NA						
NA			NA						
0%			NA						
0%			NA						
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF			
Total Phosphorus				**Orthophosphate**					
mg/L				mg/L					

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
2	3		3	2		1	3		5	2		5	2		3	3		2	2		4
2.1			0.085			16.2			0.00075			0.00083			0.173			0.310			0.0186
1.7			0.098			15.6			0.00075			0.00075			0.155			0.250			0.0155
1			0			1			0			0			0			0			0
11			11			11			11			11			11			11			11
1.2			0.054			15.0			0.00075			0.00075			0.155			0.075			0.0155
4.0			0.114			19.0			0.00075			0.00160			0.350			0.996			0.0500
1			0			15			0			0			0			0			0
0			0			0			11			10			10			7			11
									100%			91%			91%			64%			100%
			7									1			1			2			
230			NA			NA			NA			0.0052			NA			NA			4.43
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3	1	3	1	2	4	2	4	2	2	3	3	3	1	3	1	3									
	146		7.50		0.0239		0.0115		1.02		0.99		74.9		71.0										
	16		1.50		0.0075		0.0075		1.02		0.94		73.0		70.7										
	291		18		0		0		0		0		8		4										
	11		10		11		10		11		11		11		11										
	3		1.00		0.0075		0.0075		0.70		0.76		65.8		65.0										
	969		59.10		0.1340		0.0291		1.37		1.22		90.7		79.4										
	4		1		0		0		1		1		67		66										
	0		5		7		8		0		0		0		0										
			50%		64%		80%																		
					3		2																		
	87		87		NA		NA		150		150		NA		NA										
	NA		NA		6		NA		10		NA		2,000		NA										
	27%		0%		0%		0%		0%		0%		0%		0%										
	0%		0%		0%		0%		0%		0%		0%		0%										
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit												

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3			3	3			3	2	4	3	4	3			2	2			2	2
28500				2.332				0.302		0.160		0.0645				0.390				0.240	
27800				0.573				0.050		0.070		0.0623				0.250				0.250	
1600				6				1		0		0				0				0	
11				11				11		11		11				11				11	
26400				0.201				0.031		0.052		0.0513				0.209				0.113	
31300				20.600				2.510		0.620		0.0920				1.280				0.250	
26700				0				0		0		0				0				0	
0				0				9		0		0				7				10	
								82%								64%				91%	
																1				1	
NA				10.98				10.56276		NA		NA				9.440				9.063	
NA				100				NA		NA		NA				NA				NA	
0%				9%				0%		0%		0%				0%				0%	
0%				0%				0%		0%		0%				0%				0%	
					depends on Hardness			depends on Hardness									depends on Hardness				
					result > crit			result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	3		4	3		4	3		-1	3		-1	3		1	3		1	3	
266			40.1			0.103			0.0186			9540			9530			88.3			80.6		
59			30.1			0.016			0.0155			9380			9430			82.3			79.8		
461			29			0			0			950			530			16			5		
11			11			11			11			11			11			11			11		
33			24.8			0.016			0.0155			8050			8660			71.5			74.5		
1550			124.0			0.520			0.0500			11100			10600			124.0			89.1		
35			25			0			0			8160			8910			74			75		
0			0			7			11			0			0			0			0		
						64%			100%														
						1																	
1000			1000			3.238			2.555			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
9%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			100%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3								
0.00159		0.00075		3.09		3.05		1.676		0.707		922		873		0.155									
0.00075		0.00075		3.09		3.04		0.896		0.659		885		879		0.155									
0		0		0		0		3		0		110		37		0									
11		11		11		11		11		11		11		11		11									
0.00075		0.00075		2.81		2.86		0.651		0.310		822		806		0.155									
0.00474		0.00075		3.46		3.20		9.780		2.050		1220		936		0.155									
0		0		3		3		1		0		836		821		0									
8		11		0		0		0		3		0		0		11									
73%		100%								27%						100%									
3										1															
0.77		0.77		NA		NA		52.78		52.62		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.155	
	0.155	
	0	
	11	
	0.155	
	0.155	
	0	
	11	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

| | | |

| | | |

P-08-85S

Sample Date														
08/24/09			0.72	2	704	3			R	4.05	3	73.4	3
10/20/09	7.05	3	0.7	1	355	3		-13	2	2.93	3	75.7	3
05/21/10	7.88	3		R	717	3			R	3.24	3	82.9	3
08/23/10	9.35	3	1.9	2	365	3		52.2	3	5.05	3	71.6	3
10/21/10	8.78	3	0.81	2	355	3		130.7	4	2.41	3	68.3	3
05/24/11	8.31	3	0.11	2	205	3		25.9	3	3.06	3	79.9	3
08/25/11	8.28	3	3.97	3	304.0928	FALSE		124.4	4	3.28	3	90.8	3
10/24/11	8.88	3	0.42	2	345	3	Q	5.3	2	3	1		
08/28/12			3.34	3	380	2		-24.4	3	7.06	3	73.3	3
10/11/12	7.91	3	1.85	3	389	3		-155.1	4	3.74	3	83.4	3

386	3	234	3	7.2	2	**1.57**	3	84.2	3	**0.0155**	3
410	2	230	2	1.44	3	**1.57**	3	135	3	**0.0155**	3
414	3	238	3	7.15	3	**1.57**	3	174	3	**0.0155**	3
380	2	217	3	0.856	3	**1.57**	3	165	3	**0.050**	1 U
369	3	214	3	0.615	3	**1.57**	3	157	3	**0.050**	1 U
387	3	210	2	1.4	2	**1.57**	3	175	3	**0.0155**	3
410	2	241	3	8.44	3	**1.57**	3	179	3	**0.0155**	3
387	3	218	3	1.56	3	**5.0**	1 U	181	3	**0.050**	1 U
364	3	218	3	2.2	2	**1.57**	3	179	3	0.147	3

0.0316	3
0.0443	3
0.0467	3
0.0341	3
0.0249	3
0.034	2
0.0409	3
0.0306	3
0.0253	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4.93	3	0.402	3	83.5	3					**0.155**	3	8.14	3		0.161
2.92	3	0.409	3	62.4	3	**0.00075**	2	0.0015	2 J	**0.155**	3	5.59	3		**0.050**
1.55	3	0.352	3	32	2	**0.00075**	2	**0.00075**	2	0.48	2 J	2.6	2 J+		0.0655
1.52	3	0.394	3	27.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.95	3		0.0368
1.58	3	0.413	3	30.6	3	**0.0025**	2 U	**0.00075**	2	0.36	2 J	1.7	2		**0.0155**
1.42	3	0.395	3	26.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	3.29	3		0.06
1.86	3	0.378	3	31.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	2.34	3		0.0549
1.06	3	0.359	3	20.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.52	3		**0.0155**
0.982	3	0.357	3	18.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.959	3		0.204

3	270	2	33.3	3 J+	1.54	3	1.41	3	4.41	3	3.91	3	55.9	3	55	2
1 U	26.2	3	5.53	3	0.79	2	0.672	3	4.18	3	4.16	3	47.2	3	43.1	3
3 J	367	3	6.1	2	0.396	3	0.291	3	4.66	3	4.75	3	47.8	3	43.4	3
3 J	31	2 J+	4.7	2 J+	0.234	3	0.198	3	3.62	3	3.62	3	35.6	3	35	2
3	12.7	3 J+	5.26	3 J+	0.401	3	0.438	3	3.68	3	3.95	3	35.3	3	37.9	3
1 J	34.4	3 J+	6.34	3 J+	0.118	3 J		R	4.35	3	4.47	3	43.8	3	43.7	3
3 J	181	3	4.63	3 J+	0.345	3	0.211	3	5.17	3	4.32	3	57.9	3	46	2
3	36.3	3	2.62	3	0.188	3 J		R	4.11	3	4.05	3	46.6	3	45.9	3
3	157	3	2.25	3 J+	0.155	3	0.131	3	4.04	3	4.18	3	50.7	3	47.7	3

0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	28	2	23.7	3	0.105	3 J+	0.0913	3 J+	20900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	37	2	36.2	3	0.033	2 J	0.0189	3 J	18500	3
0.0125	3	**0.0125**	3	**0.0075**	2	0.0166	3 J	34.9	3	35.1	3	**0.0250**	2 U	**0.0250**	2 U	20400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	39.1	3	41.4	3	**0.0250**	2 U	**0.0250**	2 U	17700	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	35.4	3 J+	42.6	3 J+	0.0205	3 J	0.0162	3 J	16400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	40.3	3	42.7	3	0.0244	3 J	0.0265	3 J	19600	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	39.4	3	36.5	3	0.0398	3 J	0.0328	3 J	23900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	34.3	3	33.9	3	0.0296	3 J	0.0305	3 J	18300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	38.8	3	36.4	3	0.0334	3 J	0.0351	3 J	20600	3

	17400	3		3.31	3		2.17	3		0.487	3	J+	0.249	3	J+	5.56	3	J+	3.16	3	J+
	18200	3		0.693	3		**0.050**	1		0.116	3		0.0944	3		0.791	3		**0.250**	2	U
J+	20000	1	J+	1.87	3	J			R	0.398	3	J+	0.138	3	J+	1.16	3		0.697	3	
	17800	3		1.26	3	J+	**0.100**	1	U	0.11	2	J+	0.0884	3	J+	**0.250**	2	U	**0.250**	2	U
	18000	2		0.746	3		0.33	2		0.0958	3		0.0893	3		0.639	3		**0.250**	2	U
	20200	3		0.983	3		**0.100**	1	U	0.107	3		0.0817	3		0.31	2	J	0.107	3	J
	19400	3		2.06	3		0.264	3		0.253	3		0.103	3		0.975	3		**0.250**	2	U
	18000	2		4.3	2		**0.0310**	2		0.189	3		0.14	2		**0.250**	2	U	**0.250**	2	U
	20400	3		1.42	3		**0.0310**	2		0.235	3		0.133	3		0.532	3	J+	**0.250**	2	U

371	3	49.4	3	1.28	3 J+	0.349	3 J+	5130	3	4010	3	28.3	3	13.9	3 J+
41.6	3	13.1	3 J	0.177	3	**0.0155**	3	7150	3	7100	2	26.9	3	30.3	3
432	3	35.2	3	0.322	3	**0.0155**	3	7760	3 J+	7850	3 J+	106	3 J+	97.5	3 J+
64.7	3	25.9	3	0.107	3	**0.0155**	3	6640	3	7140	3	77.9	3	78.6	3
43.2	3	29.8	3	0.109	3	**0.0155**	3	6670	3	7440	3	64.8	3	69.3	3
75.5	3	47.2	3	0.0912	3 J	**0.0155**	3	7510	3	7870	3	94	2	92.6	3
261	3	37.4	3	0.29	2	0.0337	3 J	7540	3	6670	3	98.7	3	79.2	3
106	3	22.6	3	0.054	2 J	**0.0155**	3	6680	3	6570	3	88.2	3	81.5	3
214	3	31.1	3	0.109	3	0.0714	3 J	7770	3	7540	3	93.1	3	89.8	3

0.00857	3	0.00163	3 J	24.2	3	26.9	3	4.13	3 J+	3.86	3 J+	3010	3 J		R	0.312	3
0.00075	2	**0.00075**	2	19.6	3	18.7	3	1.62	3	1.46	3	2430	3	2340	3	**0.155**	3
0.00753	3	**0.00075**	2	15.3	3 J+	16.2	3 J+	2.13	3 J+	1.63	3 J+	2350	3 J+	2360	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	15.6	3	15.2	3	1.49	3	1.22	3	2080	3	2060	3	**0.155**	3
0.00075	2	**0.00075**	2	15.7	3	17.1	3	1.43	3	1.25	3	2140	3	2250	3	**0.155**	3
0.00075	2	**0.00075**	2	16	2	16	2	1.16	3	0.781	3	2190	3	2200	2	**0.155**	3
0.00174	3 J	**0.00075**	2	15.6	3	14.9	3	2.49	3	1.91	3	2350	3	2130	3	**0.155**	3
0.00989	3	**0.00075**	2	16.8	3	16.9	3	3.79	3	2.56	3	2120	3	2110	3	**0.155**	3
0.00075	2	**0.00075**	2	16.2	3	16.7	3	1.96	3 J+	1.65	3 J+	2230	3	2210	3	**0.155**	3

J	0.405	3	J
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

5340	3	0.0103	3 J	**0.0031**	2	52200	3	56100	3	**0.0050**	1	**0.0050**	1	4.14	3 J+
6050	3	**0.0031**	2	**0.0031**	2	61000	2	58300	3	**0.0050**	1	**0.0050**	1	0.893	3 J
5820	3 J+	0.0067	2 J	0.0125	3 J	54600	3 J+	56400	3 J+	**0.0050**	1	**0.0050**	1	2.54	3
5300	2	**0.0031**	2	**0.0031**	2	48900	3	49700	3	**0.0050**	1	**0.0050**	1	1.46	3
5900	2 J+	**0.0031**	2	**0.0031**	2	52600	3	54100	3	**0.0050**	1	**0.0050**	1	2.5	2 J
5530	3	**0.0031**	2	**0.0031**	2	50600	3	52900	3	**0.0050**	1	**0.0050**	1	2.62	3
5030	3	**0.0031**	2	**0.0031**	2	45300	3	42100	3	**0.0031**	2	**0.0031**	2	6.08	3
5240	3	**0.0031**	2	**0.0031**	2	45400	3	45200	3	**0.0031**	2	**0.0031**	2	0.396	3 J
5690	3	**0.0031**	2	**0.0031**	2	47000	2	47800	3	**0.0031**	2	**0.0031**	2	0.455	3

2.17	3 J+	3.56	3	2.39	3	9.04	3 J+	**1.55**	3 U
	R	0.841	3 J	0.951	3 J	3.16	3	**1.55**	3 U
0.207	3	1.63	3	0.825	3 J	3.59	3	3.61	3
0.943	3	**0.155**	3	**0.155**	3	4.69	3 J+	**1.55**	3 U
	R	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.513	3	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
1.03	3	0.679	3 J	**0.155**	3	3.55	3	**1.55**	3 U
	R	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.161	3 J	0.54	2 J	**0.155**	3	2.25	3 J	1.86	3 J

	2	3	2	2		0	3	1	3	2	3	1	3				
Mean	8.31		1.54			412		18.3		3.78		77.7					
Median	8.3		0.81			360		15.6		3.26		75.7					
St. Deviation	1		1			166		91		1		7					
# of values	8		9			10		8		10		9					
Minimum	7.05		0.11			205		-155.1		2.41		68.3					
Maximum	9.35		3.97			717		130.7		7.06		90.8					
Lowest fifth percentile	7		0			250		-109		3		70					
# of values undetected	0		0			0		0		0		0					
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7			NA		NA		NA		NA					
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4			NA		NA		NA		NA					
% of CALC exceedences	38%		0%			0%		0%		0%		0%					
% of DWS exceedences	38%		0%			0%		0%		0%		0%					

HIDE this row - notes
RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	3		0	3		2	3		2	3		0	3		4	3						
390			224			3.4			1.95			159.0			0.0416			NA			NA	
387			218			1.6			1.57			174.0			0.0155			NA			NA	
18			11			3			1			32			0			NA			NA	
9			9			9			9			9			9				0			0
364			210			0.6			1.57			84.2			0.0155			NA			NA	
414			241			8.4			5.00			181.0			0.1470			NA			NA	
366			212			1			2			105			0			NA			NA	
0			0			0			9			0			8							
									100%						89%							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
			result > crit									result <20			result > crit							

	4	3					
	0.0347		NA				
	0.0340		NA				
	0		NA				
	9			0			
	0.0249		NA				
	0.0467		NA				
	0		NA				
	0						

	NA			NA			
	NA			NA			
	0%			NA			
	0%			NA			

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

| | | |

3		1	3		2	3		3	3		3	3		2	3		2	3		1	3		1	3			
		124			7.9			0.46			0.48			4.25			4.16			46.8			44				
		36			5.3			0.35			0.29			4.18			4.16			47.2			44				
		128			10			0			0			0			0			8			6				
		9			9			9			7			9			9			9			9				
		13			2.3			0.12			0.13			3.62			3.62			35.3			35				
		367			33.3			1.54			1.41			5.17			4.75			57.9			55				
		18			2			0			0			4			4			35			36				
		0			0			0			0			0			0			0			0				
		87			87			NA			NA			150			150			NA			NA				
		NA			NA			6			NA			10			NA			2,000			NA				
		44%			0%			0%			0%			0%			0%			0%			0%				
		0%			0%			0%			0%			0%			0%			0%			0%				
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit							
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF		
			Aluminum						**Antimony**						**Arsenic**						**Barium**						
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			

4	3	4	3	4	2	4	2	1	3	1	3	4	3	4	3	-2	3						
0.0125		0.0125		0.0075		0.0085		36		36.5		0.037		0.0335		19600							
0.0125		0.0125		0.0075		0.0075		37		36.4		0.030		0.0265		19600							
0		0		0		0		4		6		0		0		2200							
9		9		9		9		9		9		9		9		9							
0.0125		0.0125		0.0075		0.0075		28		23.7		0.021		0.0162		16400							
0.0125		0.0125		0.0075		0.0166		40		42.7		0.105		0.0913		23900							
0		0		0		0		31		28		0		0		16920							
9		9		9		8		0		0		2		2		0							
100%		100%		100%		89%						22%		22%									
						1						6		6									
NA		NA		NA		NA		NA		NA		0.207		0.191		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			2	3			2	2	3	3			3	3	3	3			2	2
18800				1.85				0.38		0.221				0.124		1.16				0.61	
18200				1.42				0.10		0.189				0.103		0.64				0.25	
1200				1				1		0				0		2				1	
9				9				8		9				9		9				9	
17400				0.69				0.03		0.096				0.082		0.25				0.11	
20400				4.30				2.17		0.487				0.249		5.56				3.16	
17560				1				0		0				0		0				0	
0				0				5		0				0		2				6	
								63%								22%				67%	
																1				1	
NA				10.98				10.56276		NA				NA		6.846				6.572	
NA				100				NA		NA				NA		NA				NA	
0%				0%				0%		0%				0%		0%				0%	
0%				0%				0%		0%				0%		0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

| | | |

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				Total
			µg/L						µg/L						µg/L						µg/L				µg/L
5	2	5	2	1	3	1	3	2	3	2	3	-1	3	-1	3	3	3								
0.00350		0.00085		17.2		17.6		2.24		1.81		2320		2210		0.172									
0.00075		0.00075		16.0		16.7		1.96		1.63		2230		2210		0.155									
0		0		3		4		1		1		280		110		0									
9		9		9		9		9		9		9		8		9									
0.00075		0.00075		15.3		14.9		1.16		0.78		2080		2060		0.155									
0.00989		0.00163		24.2		26.9		4.13		3.86		3010		2360		0.312									
0		0		15		15		1		1		2096		2078		0									
5		8		0		0		0		0		0		0		8									
56%		89%														89%									
1		1														1									
0.77		0.77		NA		NA		38.40		38.28		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.183	
	0.155	
	0	
	9	
	0.155	
	0.405	
	0	
	8	
	89%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-1	3		4	2		4	2		-2	3		-2	3		4	2		4	2		2	3	
5540			0.0043			0.0041			50800			51400			0.0044			0.0044			2.34		
5530			0.0031			0.0031			50600			52900			0.0050			0.0050			2.50		
340			0			0			5000			5500			0			0			2		
9			9			9			9			9			9			9			9		
5030			0.0031			0.0031			45300			42100			0.0031			0.0031			0.40		
6050			0.0103			0.0125			61000			58300			0.0050			0.0050			6.08		
5114			0			0			45340			43340			0			0			0		
0			7			8			0			0			9			9			0		
			78%			89%									100%			100%					
			2			1																	
NA			2.030027293			1.726			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013				depends on Total Ag															
				result > crit				result > crit										result > crit					

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tin**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	3	3	3	3	3	2	3	2	3										
0.84		0.87		0.57		3.44		1.81											
0.73		0.54		0.16		3.16		1.55											
1		1		1		2		1											
6		9		9		9		9											
0.16		0.16		0.16		1.55		1.55											
2.17		3.56		2.39		9.04		3.61											
0		0		0		2		2											
0		4		6		3		7											
		44%		67%		33%		78%											
1		3		2		1		1											
NA		NA		NA		88.16		86.92											
NA		NA		NA		NA		NA											
0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%											
						depends on Hardness		depends on Total Zn											
						result > crit		result > crit											
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						

P-08-88D

Sample Date													
08/28/09	8.9	2	13	2	102	3		42.9	3		9.45	3	48	2
10/16/09	11.43	4	10.77	4	64	2		-222.1	4	Q	2.88	3	23	2
03/19/10	8.39	3	10.81	4			R	78.7	3		2.29	3	22.6	3
05/20/10	8.38	3	15.1	3	106	3		110.6	4		2.96	3	22.6	3
08/18/10	9.11	3	13.12	4	50	1		67.5	3		3.22	3	20.3	3
10/23/10	8.82	3	9.79	3	54	2		162.5	4		2.7	2	22	2
03/25/11	8.6	2	10.81	4	49	2	Q	198.2	4		2.68	3	19.7	3
05/26/11	7.42	3	11.63	4	45	2		36.6	3		3.46	3	20.6	3
08/30/11	8.22	3	9.54	3	44.485	FALSE		109.6	4		3.25	3	20.9	3
10/28/11	8.51	3	15.78	4	51	2		117.1	4		2.53	3	20.8	3
05/19/12	9.09	3	9.53	3	56	2		211.6	4		2.6	2	22.3	3
08/28/12	9	1	11.8	3	54	2		114.7	4		4.02	3	20	1
10/12/12	9.04	3	7.3	2	54	2		200.5	4		3.2	2	20.3	3

62.7	3	68.8	3	446	3	**1.57**	3	29.8	3	0.151	3
57.7	3	40	1	9.69	3	**1.57**	3	25.5	3	0.0585	3 J
56.4	3	57.5	3	1.4	2	**1.57**	3	23.4	3	0.0915	3 J
61.2	3	45	2	95.5	3	**1.57**	3	25.9	3	**0.050**	1 U
55.3	3	47	2	1.35	3	**1.57**	3	24.7	3	**0.050**	1 U
55.2	3	45	2	**0.0765**	3	**1.57**	3	24.8	3	**0.050**	1 U
54.1	3	32	2	3.72	3	**1.57**	3	25	2	0.135	3
52.5	3	53.3	3 J-	**0.076**	2	**1.57**	3	24.6	3	0.121	3
54.9	3	41	2	1.67	3	**1.57**	3	23.5	3	0.137	3
54.5	3	58	2	0.198	3 J	**1.57**	3	23.1	3	0.067	2 J
54.5	3	47	2	**0.0735**	3	**1.57**	3	23.2	3	**0.050**	1 U
55.6	3	53	2	**0.0735**	3	**1.57**	3	23.6	3	0.11	2
54.4	3	23	2	**0.075**	2	**1.57**	3	27.8	3	0.032	2 J

0.488	3	
0.0248	3	
0.0145	3	
0.145	3	
0.0169	3	
0.0092	2	J
0.0094	2	J
0.0085	2	J
0.00155	3	
0.0062	2	J
0.0108	3	
0.0112	3	
0.015	2	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

0.668	3	0.036	2 J	1.15	3					**0.155**	3	0.453	3 J	0.0644
0.62	2	**0.0155**	3	1.07	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.586	3	**0.0155**	3	1.04	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.664	3	**0.0155**	3	1.1	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.674	3	0.07	1 J	1.16	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.673	3	0.082	2 J	1.07	3	0.0031	2 J	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.708	3	0.069	2 J	1.14	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.735	3	0.065	2 J	1.19	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.250**	2 U	**0.0155**
0.683	3	0.055	2 J	1.17	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.646	3	0.067	2 J	1.13	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.59	2	0.071	2 J	1.12	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.608	3	0.057	2 J	1.17	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.608	3	**0.0155**	3	1.14	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.335	3 J	**0.0155**

3	J	9470	3	1920	3	0.137	3	0.0958	3	11.6	3	7.45	3	97.1	3	19.5	3
3		421	3	10.7	3	0.158	3	0.141	3	7	1	6.76	3	7.72	3	2.45	3
3		16	2	6.58	3	0.135	3	0.135	3	6.92	3	6.69	3	2.52	3	2.32	3
3		185	3	8.72	3	0.121	3	0.104	3	7.45	3	7.04	3	5.29	3	J+	2.32	3	J+
3		38.1	3	J+	7.61	3	J+	0.0697	3	0.0637	3	6.65	3	6.58	3	2.92	3	J+	2.52	3	J+
3		10	1	J+	6.14	3	J+	0.148	3	0.143	3	7.38	3	7.13	3	2.41	3	J+	2.45	3	J+
3		57.5	3	6.8	2	J+	0.0709	3	J+	0.0657	3	J+	6.92	3	6.81	3	3.21	3	2.22	3
3		13.2	3	J+	7.07	3	J+	0.216	3	J+	0.162	3	J+	7.13	3	6.93	3	2.65	3	J+	2.45	3	J+
3		56.9	3	6.85	3	J+	0.585	3	0.1	1	7.36	3	7.08	3	3.29	3	2.49	3
3		8.43	3	J+	6.66	3	J+	0.16	2	0.146	3	6.98	3	7.03	3	2.73	3	2.65	3	J+
3		7.54	3	J+	6.47	3	J+	0.147	3	0.165	3	7.2	2	7.71	3	3.03	3	J+	2.62	3	J+
3		6.27	3	5.94	3	0.162	3	0.141	3	7.03	3	7.12	3	2.68	3	2.44	3
3		6.17	3	J+	7.13	3	J+	0.131	3	0.0466	3	J	6.55	3	6.78	3	2.38	3	2.7	2

0.369	3	0.0577	3	0.0624	3	**0.0075**	2	3.15	3 J	**1.25**	3	0.0707	3 J+	**0.0075**	2	13300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8090	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7970	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7920	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7170	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7860	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	6920	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.5	2 J	**1.25**	3	**0.0075**	2	**0.0075**	2	7310	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.76	3 J	2.38	3 J	**0.0075**	2	**0.0075**	2	7410	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.55	3 J	1.67	3 J	**0.0075**	2	**0.0075**	2	7400	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	**0.0075**	2	**0.0075**	2	7900	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.76	3 J	1.63	3 J	**0.0075**	2	**0.0075**	2	7080	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	1.73	3 J	**0.0075**	2	**0.0075**	2	7170	3

	8510	3	6.14	3	1.56	3	3.63	3 J+	0.579	3 J+	10.6	3 J+	2.25	3 J+
	7810	3	3.42	3	0.905	3	0.161	3	0.0164	3 J	0.544	3	**0.250**	2 U
	7670	3	4.7	2	2.43	3	0.0294	3	0.017	2 J	0.179	3 J	**0.250**	2 U
J+	7190	3 J+	4.04	3	3.78	3	0.122	3 J+	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
	7110	3	2.67	3 J+	1.46	3 J+	**0.0100**	1 U	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
	7760	3	2.19	3	1.37	3	0.0199	3 J	0.0178	3 J	**0.250**	2 U	**0.250**	2 U
	6870	3	5.01	3	2.55	3	0.0435	3	0.0165	3 J	**0.250**	2 U	**0.250**	2 U
	7200	2	4.1	2	2.2	2	0.0213	3	0.0165	3 J	0.199	3 J	0.092	2 J
	7370	3	9.73	3	4.06	3	0.057	2	0.0221	3	**0.250**	2 U	**0.250**	2 U
	7240	3	4.93	3	2.92	3	0.0254	3	0.0176	3 J	**0.250**	2 U	**0.250**	2 U
	8500	2	5.88	3	3.69	3	0.0246	3	0.0219	3	**0.250**	2 U	**0.250**	2 U
	7020	3	3.5	2	1.82	3	0.0228	3	0.0187	3 J	**0.250**	2 U	**0.250**	2 U
	7420	3	3.49	3	2.28	3	0.0235	3	0.0226	3	**0.250**	2 U	**0.250**	2 U

8930	3	1450	3	7.21	3 J+	1.17	3 J+	3610	3	1130	3	254	3	36.1	3
335	3	9.86	3 J	0.471	3	**0.0155**	3	687	3	613	3	16.4	3	0.476	3
30	1	12.6	3 J	**0.0155**	3	**0.0155**	3	663	3	650	2	0.883	3	0.368	3 J+
195	3	**10.0**	1 U	0.287	3	**0.0155**	3	688	3 J+	633	3 J+	14.5	3 J+	0.708	3 J+
37.7	3	7.48	3 J	0.0583	3 J	**0.0155**	3	581	3	566	3	1.69	3 J+	0.401	3 J+
12.6	3 J	6.46	3 J	**0.0155**	3	**0.0155**	3	585	3	564	3	0.239	3 J+	0.14	2 J+
64.7	3	9.72	3 J	0.115	3	**0.0155**	3	579	3	562	3	3.28	3	0.318	3 J+
19.8	3 J	**10.0**	1 U	**0.0155**	3	**0.0155**	3	583	3	568	3	0.463	3 J+	0.255	3 J+
84.4	3	19.6	3 J	0.048	2 J	**0.0155**	3	574	3	604	3	2.52	3	0.475	3
27.5	3	**10.0**	1 U	**0.0155**	3	**0.0155**	3	562	3	553	3	0.595	3	0.321	3
27.7	3	20.4	3	**0.0155**	3	**0.0155**	3	631	3	675	3	0.536	3 J+	0.399	3 J+
18.2	3 J	8.23	3 J	**0.0155**	3	**0.0155**	3	562	3	553	3	0.356	3 J+	0.263	3 J+
19.1	3 J	15.9	3 J	**0.0155**	3	**0.0155**	3	581	3	586	3	0.37	2 J+	0.286	3 J+

0.0658	3	0.00265	3 J	0.203	3	0.202	3	5.81	3 J+	1.05	3 J+	1590	3	606	3	**0.155**	3
0.00198	3 J	**0.00075**	2	0.252	3	0.229	3	1.62	3	0.478	3 J	390	2	316	3	**0.155**	3
0.00075	2	**0.00075**	2	0.331	3	0.323	3	2.08	3	1.32	3	324	3	311	3	**0.155**	3
0.00250	2 U	**0.00075**	2	0.179	3 J+	0.221	3 J+	2.14	3 J+	0.922	3 J+	363	3 J+	319	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	0.0842	3	0.0792	3	1.09	3	**0.310**	2 U	299	3	295	3	**0.155**	3
0.00075	2	**0.00075**	2	0.209	3	0.21	2	0.937	3	0.696	3	319	3	316	3	**0.155**	3
0.00075	2	**0.00075**	2	0.223	3	0.206	3	2.31	3	1.19	3	299	3	285	3	**0.155**	3
0.00075	2	**0.00075**	2	0.229	3	0.232	3	1.63	3	1.18	3	298	3	292	3	**0.155**	3
0.00075	2	**0.00075**	2	0.254	3 J		R	4.48	3	1.84	3	326	3	306	3	**0.155**	3
0.00075	2	**0.00075**	2	0.218	3	0.204	3	2.07	3	1.31	3	306	3	304	3	**0.155**	3
0.00075	2	**0.00075**	2	0.247	3	0.268	3	2.49	3 J+	1.72	3 J+	323	3	340	2	**0.155**	3
0.00075	2	**0.00075**	2	0.22	2	0.237	3	1.62	3	1.06	3	304	3	304	3	**0.155**	3
0.00075	2	**0.00075**	2	0.209	3	0.207	3	1.51	3 J+	1.08	3 J+	293	3	300	1	**0.155**	3

0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3
0.155	3

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

7010	3	0.0692	3	0.012	2 J	4230	3	3470	3	0.0434	3	**0.0050**	1	0.208	3 J
4450	3	**0.0031**	2	**0.0031**	2	2350	3	2370	3	**0.0050**	1	**0.0050**	1	0.299	3
4520	3	**0.0031**	2	**0.0031**	2	2340	3	2300	2	**0.0050**	1	**0.0050**	1	**0.050**	1
4750	3 J+	**0.0031**	2	**0.0031**	2	2290	3 J+	2260	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
4350	3	**0.0031**	2	**0.0031**	2	2080	3	2070	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4380	3 J+	**0.0031**	2	**0.0031**	2	2050	3 J+	1980	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
4170	3	**0.0031**	2	**0.0031**	2	2030	3	1980	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4330	3	**0.0031**	2	**0.0031**	2	2090	3	2020	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4460	3	**0.0031**	2	**0.0031**	2	1950	3	2120	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
4080	3	0.0086	2 J	**0.0031**	2	1940	3	1890	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
4900	2	**0.0031**	2	**0.0031**	2	2180	3	2320	3	**0.0031**	2	0.0066	2 J	**0.0310**	2
4480	3	**0.0031**	2	**0.0031**	2	1940	3	1920	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
4260	3	**0.0031**	2	**0.0031**	2	1970	3	2040	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

		R	16.6	3	5.46	3	26.6	3	J+	4.98	3 J+
0.050	1		3.47	3	3.04	3	1.7	2	J	**1.55**	3 U
0.050	1		3.01	3	2.8	2	**1.55**	3	U	**1.55**	3 U
0.050	1		3.12	3	2.81	3	**1.55**	3	U	**1.55**	3 U
0.050	1		2.9	2	2.82	3	**1.55**	3	U	**1.55**	3 U
0.050	1		3.01	3	2.74	3	**1.55**	3	U	**1.55**	3 U
0.050	1		2.93	3	2.83	3	**1.55**	3	U	**1.55**	3 U
0.050	1		3	1	2.99	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		2.98	3	3.07	3	1.16	3	J	0.838	3 J
0.0310	2		2.55	3	2.61	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		2.43	3	2.95	3	**1.55**	3	U	**1.55**	3 U
0.0310	2		2.66	3	2.67	3	**1.55**	3	U	**1.55**	3 U
0.0823	3	J	2.76	3	2.79	3	5.3	2		**1.55**	3 U

	2	3	1	3	0	2	1	4	2	3	1	3
Mean	8.8		12		61		94.5		3.48		23	
Median	8.8		11		54		110.6		2.96		21	
St. Deviation	1		2		21		111		2		8	
# of values	13		13		12		13		13		13	
Minimum	7.4		7		44		-222.1		2.29		20	
Maximum	11.4		16		106		211.6		9.45		48	
Lowest fifth percentile	8		9		45		-67		2		20	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	69%		0%		0%		0%		0%		0%	
% of DWS exceedences	69%		0%		0%		0%		0%		0%	

1	3	0	2	2	3	2	3	1	3	3	2								
56.1		47.0		43		1.57		25.0		0.085		NA		NA					
55.2		47.0		1		1.57		24.7		0.067		NA		NA					
3		12		124		0		2		0		NA		NA					
13		13		13		13		13		13			0				0		
52.5		23.0		0		1.57		23.1		0.032		NA		NA					
62.7		68.8		446		1.57		29.8		0.151		NA		NA					
53		28		0		2		23		0		NA		NA					
0		0		5		13		0		4									
				38%		100%				31%									
				1						4									
NA		NA		NA		NA		>=20		NA			NA				NA		
NA		500		NA		NA		NA		10			NA				NA		
0%		0%		0%		0%		0%		0%			NA				NA		
0%		0%		0%		0%		0%		0%			NA				NA		

4	3		
0.059		NA	
0.011		NA	
0		NA	
13			0
0.002		NA	
0.488		NA	
0		NA	
1			
8%			
4			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.651		0.049		1.13		0		0		0.155		0.230		0.0193
0.664		0.057		1.14		0		0		0.155		0.250		0.0155
0		0		0		0		0		0		0		0
13		13		13		12		12		13		13		13
0.586		0.016		1.04		0.00075		0.00075		0.155		0.075		0.0155
0.735		0.082		1.19		0.0031		0.0025		0.155		0.453		0.0644
1		0		1		0		0		0		0		0
0		4		0		11		12		13		11		12
		31%				92%		100%		100%		85%		92%
		9				1						2		1
230		NA		NA		NA		0.0052		NA		NA		2.80
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	2	3	3	3	3	3	2	3	2	3	2	3	2	3			
	792		154		0.172		0.1160		7.4		7.01		10.6		3.8				
	16		7		0.147		0.1350		7.0		7.03		2.9		2.5				
	2610		531		0		0		1		0		26		5				
	13		13		13		13		13		13		13		13				
	6		6		0.070		0.0466		6.6		6.58		2.4		2.2				
	9470		1920		0.585		0.1650		11.6		7.71		97.1		19.5				
	6		6		0		0		7		7		2		2				
	0		0		0		0		0		0		0		0				
							1												
	87		87		NA		NA		150		150		NA		NA				
	NA		NA		6		NA		10		NA		2,000		NA				
	23%		8%		0%		0%		0%		0%		0%		0%				
	0%		0%		0%		0%		8%		0%		0%		0%				

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.040		0.0160		0.0117		0.0075		1.65		1.53		0.0124		0.0075		7960	
0.013		0.0125		0.0075		0.0075		1.25		1.25		0.0075		0.0075		7410	
0		0		0		0		1		0		0		0		1650	
13		13		13		13		13		13		13		13		13	
0.013		0.0125		0.0075		0.0075		0.75		1.25		0.0075		0.0075		6920	
0.369		0.0577		0.0624		0.0075		3.15		2.50		0.0707		0.0075		13300	
0		0		0		0		1		1		0		0		7016	
12		12		12		13		8		9		12		13		0	
92%		92%		92%		100%		62%		69%		92%		100%			
								5		4							
NA		NA		NA		NA		NA		NA		0.082		0.080		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	2	3	4	3	4	3	2	2	2	2
7510		4.60		2.39		0.32		0.060		1.1		0.39	
7370		4.10		2.28		0.03		0.018		0.3		0.25	
520		2		1		1		0		3		1	
13		13		13		13		13		13		13	
6870		2.19		0.91		0.01		0.005		0.2		0.09	
8510		9.73		4.06		3.63		0.579		10.6		2.25	
6960		2		1		0		0		0		0	
0		0		0		1		2		9		11	
						8%		15%		69%		85%	
						1		7		2		1	
NA		10.98		10.56276		NA		NA		2.346		2.252	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		8%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	3	4	3	4	3	0	3	0	3	3	3	3	3		
754		122		0.64		0.10		837		635		23		3.1			
30		10		0.02		0.02		583		586		1		0.4			
2458		399		2		0		834		154		70		10			
13		13		13		13		13		13		13		13			
13		6		0.02		0.02		562		553		0		0.1			
8930		1450		7.21		1.17		3610		1130		254		36.1			
16		7		0		0		562		553		0		0			
0		3		7		12		0		0		0		0			
		23%		54%		92%											
4		8		2													
1000		1000		0.407		0.418		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
8%		8%		15%		8%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		8%		0%			

5	2	5	2	3	3	3	3	2	3	2	3	0	3	0	3	3	3
0.0060		0.00090		0.220		0.218		2.29		1.09		418		330		0.155	
0.0008		0.00075		0.220		0.216		2.07		1.08		319		306		0.155	
0		0		0		0		1		0		353		84		0	
13		13		13		12		13		13		13		13		13	
0.0008		0.00075		0.084		0.079		0.94		0.31		293		285		0.155	
0.0658		0.00265		0.331		0.323		5.81		1.84		1590		606		0.155	
0		0		0		0		1		0		296		289		0	
11		12		0		0		0		1		0		0		13	
85%		92%								8%						100%	
1		1								1							
0.77		0.77		NA		NA		13.30		13.26		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.155	
0.155	
0	
13	
0.155	
0.155	
0	
13	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4630		0.0086		0.004		2260		2210		0.0072		0.0045		0.074	
4450		0.0031		0.003		2080		2070		0.0050		0.0050		0.050	
750		0		0		610		410		0		0		0	
13		13		13		13		13		13		13		13	
4080		0.0031		0.003		1940		1890		0.0031		0.0031		0.031	
7010		0.0692		0.012		4230		3470		0.0434		0.0066		0.299	
4134		0		0		1940		1908		0		0		0	
0		11		12		0		0		12		12		11	
		85%		92%						92%		92%		85%	
		1		1								1			
NA		0.235112402		0.200		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	2	3	2	3	2	3	2	3
1.05		4.0		3.04		3.8		1.76	
1.15		3.0		2.82		1.6		1.55	
0		4		1		7		1	
12		13		13		13		13	
1.05		2.4		2.61		1.2		0.84	
1.15		16.6		5.46		26.6		4.98	
0		3		3		1		1	
11		0		0		9		11	
92%						69%		85%	
1						2		1	
NA		NA		NA		30.48		30.06	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
P-08-88S																
Sample Date																
08/28/09	6.77	3	20.22	4		62	2		137.3	4		4.88	3	13.3	3	
10/16/09	10.79	4	11.87	4		30	1		-185.7	4 Q		3.08	3	11.3	3	
08/18/10	6.83	3	13.23	4		35	2		85.1	3		3.71	3	13.3	3	
10/23/10	6.42	3	10.7	3		36	2		149.9	4		2.67	3	14.2	3	
08/31/11	6.28	3	13.46	4		27.1966	FALSE		108.3	4		3.43	3	14.6	3	
10/28/11	6.13	3	17.18	4		33	2		146.2	4		2.57	3	13.4	3	
08/28/12	6.3	2	13.34	4		38	2		133.4	4		3.56	3	14.1	3	
10/12/12	6.62	3	7.84	3		37	2		214.2	4		3.08	3	13.6	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite				Nitrite			Nitrate
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L				mg/L			mg/L
38.3	3		28.8	3		33.6	3		**1.57**	3		28.3	3		**0.050**	1 U						
34.6	3		21.3	3		3.25	3		**1.57**	3		25	2		0.038	2 J						
38.7	3		42	2		1.15	3		**1.57**	3		15	2		0.138	3 J-						
36.5	3		36	2		**0.0765**	3		**1.57**	3		14	2		0.138	3						
39.3	3		39	2		0.4	1 J		**1.57**	3		14.5	3		0.126	3						
36.2	3		42	2		0.98	2		**1.57**	3		13.1	3		0.107	3						
38.6	3		39	2		1.57	3		**5.0**	1 U		13.3	3		0.124	3						
38.8	3		18	2		**0.075**	2		**1.57**	3		15.4	3		0.105	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
		mg/L			mg/L	
	0.0374	3				
	0.0050	1	U			
	0.0117	3				
	0.0115	3				
	0.00155	3				
	0.00155	3				
	0.012	2				
	0.0094	2	J			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp
result > crit			result > crit			result > crit							result > crit											result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
0.751	3		**0.0155**	3		1.63	3		0.0017	2	J	0.0015	2	J	**0.155**	3		0.318	3	J	0.0473		
0.672	3		**0.0155**	3		1.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**		
0.648	3		0.063	2	J	1.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**		
0.664	3		0.074	2	J	1.07	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**		
0.641	3		**0.050**	1	U	1.32	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**		
0.584	3		0.063	2	J	1.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**		
0.554	3		0.053	2	J	1.33	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**		
0.67	2		**0.0155**	3		1.03	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.39	2	J	**0.0155**		

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3 J	676	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	1.24	3	0.593	3	10.3	3	1.37	3
	3	39.3	3	4.85	3	0.0468	3 J	0.0451	3 J	0.837	3	0.86	2	1.87	3	1.32	3
	3	44.7	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.728	3	0.849	3	2.12	3 J+	1.31	3 J+
	3	24.8	3 J+	**1.00**	1 U	0.0658	3	**0.0250**	2 U	1.06	3	0.918	3	2.02	3 J+	1.78	3 J+
	3	40.5	3	3.68	3 J+	0.0503	3	0.0392	3 J	1.18	3	1.05	3	1.9	2	1.95	3
	3	60.1	3	2.47	3 J+	0.0626	3	0.0425	3 J	0.9	1	1.16	3	2.53	3 J+	1.61	3 J+
	3	44.1	3	**1.00**	1 U	0.0498	3 J	0.0648	3	0.979	3	1.05	3	2.04	3	1.47	3
	3	8.68	3 J+	**1.00**	1 U	0.0496	3 J	**0.0075**	2	1.11	3	1.04	3	1.43	3	1.4	2

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| | | |

								depends on Hardness		depends on Hardness																			
result > crit			result > crit					result > crit		result > crit															result > crit				
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
566	3		**10.0**	1 U		0.637	3 J+		**0.0155**	3		589	3		467	3		24.8	3 J+		0.336	3 J+	
51.3	3		8.58	3 J		0.0641	3 J		**0.0155**	3		396	3		398	3		2.11	3		0.5	1	
42.6	3		**3.10**	2		0.0412	3 J		**0.0155**	3		434	3		454	3		1.92	3 J+		0.325	3 J+	
27.7	3		6.57	3 J		0.0317	3 J		**0.0155**	3		489	3		442	3		0.837	3 J+		0.328	3 J+	
27.8	3		29.3	3		0.169	3		**0.0155**	3		482	3		487	3		0.822	3		0.302	3	
65.3	3		**10.0**	1 U		0.166	3		**0.0155**	3		444	3		431	3		1.9	2		0.319	3	
40.7	3		**3.10**	2		0.0441	3 J		**0.0155**	3		460	2		450	2		1.16	3 J+		0.326	3 J+	
11.2	3 J		6.65	3 J		**0.0155**	3		**0.0155**	3		425	3		456	3		0.363	3 J+		0.189	3 J+	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
					Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
0.100	1	U	0.942	3	J	**0.155**	3				3.54	3	J+		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				0.469	3	J		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				0.407	3	J		0.7	1	J	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	

	2	3	2	4	0	2	1	4	2	3	1	3			
Mean	7.02		13.48		37		98.6		3.37		13.5				
Median	6.52		13.29		36		135.4		3.26		13.5				
St. Deviation	2		4		11		121		1		1				
# of values	8		8		8		8		8		8				
Minimum	6.13		7.84		27		-185.7		2.57		11.3				
Maximum	10.79		20.22		62		214.2		4.88		14.6				
Lowest fifth percentile	6		9		28		-91		3		12				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	63%		0%		0%		0%		0%		0%				
% of DWS exceedences	13%		0%		0%		0%		0%		0%				
HIDE this row - notes															
RED criteria	result is <6.5 OR >8.5		result < 7												
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		0	2		3	3		2	3		1	3		3	3						
37.6			33.0			5.1			2.00			17.3			0.103			NA			NA	
38.5			38.0			1.1			1.57			14.8			0.116			NA			NA	
2			9			12			1			6			0			NA			NA	
8			8			8			8			8			8				0			0
34.6			18.0			0.1			1.57			13.1			0.038			NA			NA	
39.3			42.0			33.6			5.00			28.3			0.138			NA			NA	
35			19			0			2			13			0			NA			NA	
0			0			2			8			0			1							
						25%			100%						13%							
						1									1							
NA			NA			NA			NA			>=20			NA				NA			NA
NA			500			NA			NA			NA			10				NA			NA
0%			0%			0%			0%			75%			0%				NA			NA
0%			0%			0%			0%			0%			0%				NA			NA
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

5	3		
0.0113		NA	
0.0105		NA	
0		NA	
8			0
0.0016		NA	
0.0374		NA	
0		NA	
3			
38%			
1			
NA			NA
NA			NA
0%			NA
0%			NA

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.648			0.0440			1.23			0.0009			0.0008			0.155			0.230			0.0195
0.656			0.0520			1.17			0.0008			0.0008			0.155			0.250			0.0155
0			0			0			0			0			0			0			0
8			8			8			8			8			8			8			8
0.554			0.0155			1.03			0.0008			0.0008			0.155			0.075			0.0155
0.751			0.0740			1.63			0.0017			0.0015			0.155			0.390			0.0473
1			0			1			0			0			0			0			0
0			4			0			7			7			8			6			7
			50%						88%			88%			100%			75%			88%
			4						1			1						2			1
230			NA			NA			NA			0.0052			NA			NA			6.88
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3		1	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3								
		117		2.00		0.0425		0.0300		1.00		0.940		3.0		1.53									
		42		1.00		0.0497		0.0320		1.02		0.980		2.0		1.44									
		226		2		0		0		0		0		3		0									
		8		8		8		8		8		8		8		8									
		9		1.00		0.0075		0.0075		0.73		0.593		1.4		1.31									
		676		4.85		0.0658		0.0648		1.24		1.160		10.3		1.95									
		14		1		0		0		1		1		2		1									
		0		5		2		4		0		0		0		0									
				63%		25%		50%																	
						3		3																	
		87		87		NA		NA		150		150		NA		NA									
		NA		NA		6		NA		10		NA		2,000		NA									
		13%		0%		0%		0%		0%		0%		0%		0%									
		0%		0%		0%		0%		0%		0%		0%		0%									
		result > crit		result > crit		result > crit				result > crit		result > crit		result > crit											

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3	2	3	3	3	4	3	4	3	2	2	2	2								
4680		1.67		0.540		0.085		0.033		0.350		0.250									
4740		1.64		0.573		0.036		0.022		0.250		0.250									
400		1		0		0		0		0		0									
8		8		8		8		8		8		8									
3920		0.91		0.335		0.020		0.010		0.250		0.250									
5160		2.90		0.668		0.429		0.123		0.824		0.250									
4078		1		0		0		0		0		0									
0		0		0		0		1		6		8									
								13%		75%		100%									
								1													
NA		10.98		10.56276		NA		NA		1.524		1.463									
NA		100		NA		NA		NA		NA		NA									
0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%									
		depends on Hardness				depends on Hardness										depends on Hardness					
		result > crit				result > crit										result > crit				result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
1	3	2	3	4	3	4	3	0	3	0	3	2	3	3	3								
104		9.7		0.146		0.0155		465		448		4.2		0.328									
42		7.6		0.054		0.0155		452		452		1.5		0.326									
187		8		0		0		59		26		8		0									
8		8		8		8		8		8		8		8									
11		3.1		0.016		0.0155		396		398		0.4		0.189									
566		29.3		0.637		0.0155		589		487		24.8		0.500									
17		3		0		0		406		410		1		0									
0		4		1		8		0		0		0		0									
		50%		13%		100%																	
1		3		4																			
1000		1000		0.214		0.235		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		13%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
				depends on Hardness		depends on Hardness																	
result > crit		result > crit		result > crit		result > crit												result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.00134		0.00075		0.1080		0.1040		0.837		0.540		260		245		0.155									
0.00075		0.00075		0.1140		0.1110		0.865		0.614		256		244		0.155									
0		0		0		0		0		0		34		9		0									
8		8		8		8		8		8		8		8		8									
0.00075		0.00075		0.0075		0.0075		0.310		0.310		232		232		0.155									
0.00368		0.00075		0.2080		0.1630		1.570		0.749		337		261		0.155									
0		0		0		0		0		0		233		234		0									
7		8		1		1		1		2		0		0		8									
88%		100%		13%		13%		13%		25%						100%									
1								1		2															
0.77		0.77		NA		NA		8.68		8.65		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.155	
	0.155	
	0	
	8	
	0.155	
	0.155	
	0	
	8	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2								
4590		0.0037		0.0031		1430		1440		0.0050		0.0040		0.069									
4600		0.0031		0.0031		1400		1420		0.0050		0.0040		0.041									
210		0		0		110		90		0		0		0									
8		8		8		8		8		8		8		8									
4300		0.0031		0.0031		1290		1350		0.0031		0.0031		0.031									
4820		0.0075		0.0031		1600		1630		0.0114		0.0050		0.277									
4311		0		0		1315		1354		0		0		0									
0		7		8		0		0		7		8		7									
		88%		100%						88%		100%		88%									
		1								1													
NA		0.098671358		0.084		NA		NA		NA		NA		NA									
NA		NA		NA		NA		NA		2		NA		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
		depends on HARD; revised 2013		depends on Total Ag																			
		result > crit		result > crit						result > crit													
SI F	SI FSF	SI FVF	AG N		AG NSF	AG NVF	AG F		AG FSF	AG FVF	NA N	NA NSF	NA NVF	NA F	NA FSF	NA FVF	TL N	TL NSF	TL NVF	TL F	TL FSF	TL FVF	SN N	SN NSF	SN NVF
Silicon					**Silver[8]**							**Sodium**						**Thallium**							**Tin**
Dissolved			Total		Dissolved			Total				Dissolved			Total			Dissolved			Total				
µg/L			µg/L		µg/L			µg/L				µg/L			µg/L			µg/L			µg/L				

| | | |

MW-01D

Sample Date												
09/23/04	6.65	3	18.72	4	56	2	241	3	3.63	3	20.4	3
10/22/04	6.69	3	15.13	4	62	2	246	3	3.63	3	20.8	3
03/21/05	6.77	3	11.8	3	48	2			3.17	3	23.2	3
05/13/05	6.35	3	12.02	4	57	2	207	3	3.38	3	25.3	3
08/17/05	6.51	3	12.09	4	52	2	125	3	4.47	3	22.1	3
11/11/05	6.54	3	12.32	4	59	2	242	3	3.27	3	21.4	3
03/21/06	6.17	3	12.69	4	57	2	113	3	3.18	3	21.8	3
05/22/06	5.87	3	13	2	52	2	286.5	4	3.49	3	18.8	3
08/22/06	6.17	3	12.56	4	51	2	163.4	4	3.81	3	23.8	3
10/31/06	6.83	3	14.23	4	54	2	280.4	4	3.42	3	20.5	3
03/19/07	6.46	3	10.12	4	30	1	169.3	4	2.97	3	22.1	3
05/10/07	6.45	3	12.6	3	31	2	128.6	4	3.62	3	20.4	3
08/22/07	6.29	3	13.13	4	34	2	143.3	4	4.03	3	21.9	3
11/13/07	5.83	3	13.46	4	53	2	266.3	4	3.26	3	21.2	3
03/21/08	6.83	3	12.28	4	47	2	32.1	3	2.95	3	19.4	3
05/17/08	6.44	3	12.44	4	57	2	168.1	4	3.28	3	21.2	3
08/24/08	6.48	3	14.34	4	55	2	290.6	4	4.61	3	20.9	3
10/16/08	6.26	3	14.02	4	57	2	148.1	4	3.36	3	21.9	3
08/26/09			12.99	4	81	2		R	4.05	3	20.8	3
08/17/10	6.85	3	12.55	4	53	2	137.7	4	3.73	3	19.3	3
08/30/11	6.32	3	12.33	4	38.4642	FALSE	127.3	4	3.77	3	21.1	3
08/23/12	6.49	3	11.59	4	56	2	-265.2	4	3.92	3	21.5	3

60	1	82.5	3	1.68	3	3.5	2 J	18	2	**0.5**	1 UJ						
60	1	51.3	3	1.2	2	4.8	2 J	8	1 J	**0.155**	3						
60	1	60	1	**0.075**	2	7	1	18	2	0.12	2						
60	1	33.8	3	**0.075**	2	6.25	3	17	2	0.18	2						
60	1	56.3	3	0.8	1	3.75	3 J	20	1	0.0935	3 J						
60	1	47.5	3	**0.075**	2	3	1 J	17.5	3	0.159	3						
60.0	1	40.0	1	0.200	1 J	4.50	2 J	21.0	2	0.198	3						
65.0	2	40.0	1	**0.075**	2	4.25	3 J	20.0	1	0.240	2 J-						
55.0	2	61.2	3	**0.075**	2	4.50	2 J	17.0	2	0.319	3	**0.0155**	3	0.290	2		
50.0	1	51.3	3	**0.075**	2	4.75	3 J	16.0	2	0.181	3	**0.0155**	3	0.169	3		
50.0	1	22.5	3	**0.075**	2	**1.57**	3	21.0	2	0.114	3	**0.0155**	3	0.104	3		
50.0	1	30.0	1	0.200	1 J	**1.57**	3	17.0	2	0.125	3						
55.0	2	38.8	3	**0.075**	2	3.50	2 J	17.3	3	0.121	3						
50.0	1	57.5	3	**0.075**	2	4.00	1 J	17.6	3	0.132	3						
64.1	3	48.8	3	**0.0765**	3	5.44	3 J	20.4	3	0.164	3 J-						
55.9	3	47.5	3	0.4	1 J	**1.57**	3	20.4	3	0.345	3						
54.3	3	48.8	3	**0.079**	2	3.78	3 J	20.4	3	0.163	3						
60.3	3	36.3	3	**0.076**	2	3.52	3 J	20.1	3	0.137	3						
62.8	3	73.8	3	8.44	3	14.3	3	20	1	0.113	3 J-						
57.2	3	47	2	**0.0775**	3	3.64	3 J	16.6	3	0.133	3						
58.1	3	43	2	**0.150**	2	**1.57**	3	16.4	3	**0.050**	1 U						
56.5	3	24	2	**0.075**	2	**5.0**	1 U	16	2	0.105	3						

0.05	1	J		
0.0155	3			
0.0443	3			
0.278	3			
0.014	2	J		
0.018	2	J		
0.0080	1	J		
0.0127	3			
0.0130	2		**0.050**	1 UJ
0.0200	1		**0.050**	1 UJ
0.0140	2		**0.050**	1 UJ
0.0094	2	J		
0.0042	2	J		
0.0319	3			
0.0142	3			
0.0069	2	J		
0.0146	3			
0.0149	3			
0.00155	3			
0.0153	3			
0.00155	3			
0.0102	3			

0.769	3 J-	0.103	3 J-	6.34	3 J-	**0.00125**	3	**0.00125**	3	0.35	2 J				**0.0155**
1.11	3	**0.0155**	3	7.76	3	**0.00125**	3	**0.00125**	3	0.17	2 J				**0.0155**
0.885	3	0.043	2 J	7.82	3	**0.00125**	3	**0.00125**	3	0.12	2 J				**0.0155**
0.801	3	0.036	2 J	7.35	3	**0.00125**	3	**0.00125**	3	0.23	2 J				**0.0155**
0.769	3	0.036	2 J	7.06	3	**0.0025**	2 UJ	**0.0025**	2 UJ	0.25	2 J				0.033
0.784	3	**0.0155**	3	7.44	3	**0.00125**	3	**0.00125**	3	0.10	1 J				**0.0155**
0.777	3	**0.0155**	3	7.80	2	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.762	3	0.0460	2 J	7.34	3	**0.0025**	2 UJ	**0.0025**	2 UJ	**0.155**	3				**0.050**
0.767	3	0.0480	2 J	7.53	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.653	3	**0.0155**	3	6.99	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0626
0.670	2	**0.0155**	3	6.85	3	**0.0025**	2 UJ	**0.0025**	2 UJ	**0.155**	3				**0.0155**
0.818	3	0.0460	2 J	6.96	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.685	3	0.0370	2 J	6.84	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0415
0.701	3	0.0360	2 J	7.05	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.702	3	0.0410	2 J	6.78	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.636	3	0.037	2 J	6.99	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.577	3	0.036	2 J	7.11	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.776	3	0.07	1 J	6.48	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.534	3	0.089	2 J	8.82	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.226	3 J		0.0357
0.702	3	0.079	2 J	7.17	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.695	3	0.059	2 J	7.34	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.571	3	**0.050**	1 U	6.66	3 J+	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	187	3	**12.5**	3 U	**0.0385**	3	**0.0385**	3	0.264	3 J	0.279	3 J	2.36	3	1.39	3
3	**12.5**	3 U	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	1.41	3	1.58	3
3	2.85	3 J+	0.453	3 J+	0.0332	3	0.0264	3	0.193	3	0.192	3	1.3	2	1.55	3
3	9	1 J+	1.21	3 J+	**0.01**	1 U	**0.01**	1 U	0.183	3	0.212	3	1.33	3	1.46	3
2 J	95.1	3	2.13	3	0.0276	3 J+	0.0292	3 J+	**0.125**	3	**0.125**	3	2.62	3	1.47	3
3	2.89	3 J+	**1**	1 U	0.03	1 J+	0.0206	3 J+	**0.125**	3	**0.125**	3	1.41	3	1.44	3
3	3.40	2 J+	2.13	3 J+	0.0274	3 J	0.0272	3 J	**0.155**	3	**0.155**	3	1.50	2	1.45	3
1 U	2.01	3	**1.00**	1 U	0.0278	3 J	**0.0075**	2	0.365	3 J	**0.155**	3	1.24	3	1.25	3
3	3.85	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.57	3	1.29	3
3 J	2.26	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.30	2 J+	1.35	3 J+
3	18.6	3 J+	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	0.367	3 J	**0.155**	3	1.52	3 J+	1.34	3 J+
3	3.39	3 J+	**1.00**	1 U	0.0296	3 J	0.0222	3 J	**0.155**	3	**0.155**	3	1.30	2	1.09	3
3 J	4.61	3 J+	3.18	3 J+	0.0270	2 J	0.0322	3 J	**0.155**	3	**0.155**	3	1.46	3 J+	1.43	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0226	3 J	0.0234	3 J	**0.155**	3	**0.155**	3	1.40	2	1.44	3
3	21.7	3	1.00	1 J	0.0170	2 J	0.0188	3 J	**0.155**	3	**0.155**	3	1.40	2	1.24	3
3	**1.00**	1 U	3.37	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.32	3 J+	1.28	3 J+
3	**1.00**	1 U	**1.00**	1 U	0.0197	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	1.4	2	1.29	3
3	1.1	2 J	1.15	3 J	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.32	3	1.33	3
3 J	5.01	3 J+	**0.310**	2	0.0219	3 J	0.0196	3 J	**0.155**	3	**0.155**	3	1.42	3	1.2	2
3	4.76	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.24	3 J+	1.17	3 J+
3	4.32	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.233	3 J	0.238	3 J	1.43	3	1.34	3
3	**1.00**	1 U	**1.00**	1 U	0.0183	3 J	0.0189	3 J	**0.075**	2	**0.075**	2	1.42	3	1.39	3

0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	5.4	2 J	0.0155	3	0.0155	3	6460	3
0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	1.55	3	0.0155	3	0.0155	3	6540	3
0.001495	4	0.001495	4	0.003835	4	0.003835	4	1.71	3 J+	1.45	3 J+	0.003095	4	0.003095	4	7100	2
0.001495	4	0.001495	4	0.003835	4	0.003835	4	1.74	3 J		R	0.003095	4	0.003095	4	8020	3
0.0075	2	0.0075	2	0.015	2	0.00155	3	5	1 U	3.2	2 J	0.00775	3	0.00775	3	6880	3
0.0075	2	0.0075	2	0.0188	3 J+	0.011	2 J+	1.55	3	3.4	2 J	0.00775	3	0.00775	3	6710	3
0.0120	2	0.0120	2	0.0250	2 U	0.0250	2 U	0.75	2	0.75	2	0.0125	3	0.0125	3	7010	3
0.0120	2	0.0120	2	0.0075	2	0.0075	2	0.75	2	0.75	2	0.0125	3	0.0125	3	5790	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	7500	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	6430	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6960	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6330	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6920	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6750	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6170	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6720	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6560	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6830	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6520	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6070	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	2.23	3 J	0.75	2	0.0075	2	0.0075	2	6580	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.65	3 J	1.6	2 J	0.0075	2	0.0075	2	6680	3

6920	3	1.05	3	**0.1**	1	U	0.115	3	J		R	0.245	3	0.202	3
6550	3	0.508	3	**0.05**	1		**0.0155**	3		**0.0155**	3	**0.1**	1	U	0.308	3	J+
5800	2	1.3	2	0.325	3		0.0185	3	J	0.0153	3	J	0.22	2	0.102	3
6420	3	0.349	3	0.232	3		0.0133	3	J	**0.00476**	3	0.669	3	J+	0.0888	3	J+
7100	2	1.94	3	J+	0.811	3	J+	0.0746	3	J+	0.0496	3	J+	0.434	3	J+	0.34	2	J+
7240	3	0.437	3	0.506	3		0.0224	3	J+	0.024	2	J+	0.186	3	J+	0.215	3	J+
7500	2	0.827	3	J+	0.310	2	J+	0.0306	3		0.0274	3	0.268	3	J+	0.137	3	J+
5870	3	0.617	3	0.327	3		0.0310	2		0.0330	2	0.126	3	0.103	3
6890	3	0.320	2	J+	**0.050**	1		0.0240	2		0.0244	3	0.360	2	J+	0.176	3	J+
6570	3	**0.050**	1	**0.050**	1		**0.0065**	2		**0.0065**	2	0.242	3	J	R
6500	2	0.956	3	J+	0.360	2	J+	0.0234	3	J+	**0.0100**	1	U	0.217	3	J+	0.169	3	J+
5180	3	0.383	3	**0.050**	1		**0.0100**	1	U	**0.0100**	1	U	0.189	3	J+	0.106	3	J+
7150	3	0.430	2	0.497	3		0.0126	3	J	0.0140	2	J	0.313	3	J+	0.365	3	J+
6450	3	0.315	3	J+	0.219	3	J+	0.0100	1	J	0.0100	1	J	0.135	3	0.150	2
6330	3	0.868	3	0.309	3		0.0220	2		0.0138	3	J	0.208	3	0.149	3
6460	3	0.579	3	0.233	3		0.0134	3	J	**0.0050**	1	0.17	2	J+	0.126	3	J+
6880	3	1.03	3	**0.100**	1	U	0.0149	3	J	0.0104	3	J	0.628	3	J+	0.164	3	J+
6840	3	0.42	2	0.25	2		**0.0050**	1		0.0104	3	J	0.164	3	0.165	3
6120	3	0.979	3	0.222	3		**0.0100**	1	U	**0.0100**	1	U	2.62	3	J+	1.21	3	J+
5990	3	3.93	3	0.677	3	J+	0.0324	3	J+	**0.0050**	1	2.4	2	J+	1.23	3	J+
6440	3	3.43	3	0.326	3		0.0266	3		0.0141	3	J	1.3	2	1.17	3
6280	3	2.84	3	0.474	3		0.036	2		0.0219	3	1.99	3	1.64	3

88.6	3	**3.1**	2	**0.05**	1	**0.05**	1	1050	3	1110	3	2.34	3	1.15	3
10	1 U	**3.1**	2	**0.05**	1	**0.05**	1	1090	3	1040	3	1.41	3	1.2	2
6.67	3 J	3.11	3 J	**0.011**	2	0.0368	3 J	1340	3	1100	2	0.429	3	0.393	3
5.84	3 J	**1.325**	4	**0.035**	2 U	**0.035**	2 U	1290	3	1080	3	0.321	3 J+	0.243	3 J+
101	3	13.8	3 J	0.0596	3 J	0.0654	3 J	1180	3	1290	3	2.49	3	0.379	3
3.1	2	**3.1**	2	**0.05**	1 U	**0.05**	1 U	1140	3	1230	3	0.25	2	**0.1**	1 U
10.4	3 J	**3.10**	2	1.17	3 J+	**0.0130**	2	1040	3	1090	3	5.05	3	0.604	3 J+
3.10	2	**3.10**	2	**0.0130**	2	0.0352	3 J	1060	3	1070	3	0.215	3	0.161	3
12.2	3 J	**3.10**	2	0.275	3 J+	**0.050**	1 U	1220	3	1110	3	0.311	3 J+	0.175	3 J+
3.10	2	**3.10**	2	0.149	3 J+	**0.050**	1 U	1080	3	1080	3	0.161	3 J+	0.117	3 J+
30.5	3 J+	**3.10**	2	**0.050**	1 U	**0.0155**	3	1140	3	1060	3	0.570	2 J+	0.176	3 J+
3.10	2	**3.10**	2	**0.050**	1 U	**0.050**	1 U	1120	3	938	3	0.157	3 J+	0.131	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	0.115	3 J+	1130	3	1120	3	0.210	2 J+	0.211	3 J+
8.28	3 J	8.47	3 J	**0.0155**	3	**0.0155**	3	1050	3	1000	1	0.114	3	0.113	3
41.9	3	21.4	3	0.0502	3 J	**0.0155**	3	980	2	1010	3	0.717	3	0.158	3
19	2 J	16.6	3 J	**0.0155**	3	**0.0155**	3	1070	3	1060	3	0.136	3 J+	0.109	3 J+
24.1	3	15.8	3 J	**0.0155**	3	**0.0155**	3	1100	2	1100	2	0.16	2	0.114	3
16	2 J	15.9	3 J	**0.0155**	3	**0.0155**	3	1170	3	1180	3	0.108	3	0.125	3
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	1090	3	1030	3	0.307	3 J+	0.107	3 J+
26.3	3	**3.10**	2	**0.0155**	3	**0.0155**	3	1010	3	993	3	0.816	3 J+	0.213	3 J+
18	2 J	**3.10**	2	**0.0155**	3	**0.0155**	3	1130	3	1060	3	0.411	3	0.163	3
22.5	3	16.1	3 J	**0.0155**	3	**0.0155**	3	1170	3	1100	2	0.434	3 J+	0.263	3 J+

0.136	3	J			0.484	3	J	0.512	3	J	0.652	3	0.419	3	241	3	261	3	**0.155**	3
0.031	2		**0.031**	2	0.468	3	J	0.485	3	J	0.3	1	0.268	3	243	3	236	3	**0.155**	3
0.0315	3		**0.0315**	3	0.465	3	J+	0.496	3		0.682	3	J+	0.515	3	236	3	219	3	0.161	3
0.0315	3		**0.0315**	3	0.384	3		0.466	3		0.885	3	0.246	3	222	3	231	3	0.132	3
0.031	2		**0.031**	2	0.545	3	J			R	1.16	3	1.05	3	258	3	276	3	**0.0775**	3
0.031	2		**0.031**	2	0.47	2	J+	0.421	3	J+	0.457	3	0.487	3	240	2	260	2	0.162	3
0.000475	4		**0.000475**	4	0.353	3		0.344	3		0.483	3	0.386	3	252	3	260	2	**0.155**	3
0.00124	3	J	0.00111	3	J	0.428	3		0.390	2	0.313	3	0.282	3	212	3	219	3	**0.155**	3
0.000475	4		**0.000475**	4	0.448	3		0.414	3		0.540	2	0.475	3	286	3	253	3	**0.155**	3
0.000475	4		**0.000475**	4	0.425	3		0.428	3		0.315	3	0.252	3	226	3	226	3	**0.155**	3
0.000169	3		**0.000475**	4	0.463	3		0.457	3		0.606	3	J+	0.514	3	J+	232	3	219	3	**0.155**	3
0.000169	3		**0.000475**	4	0.451	3		0.361	3		0.399	3	J+	0.295	3	J+	228	3	184	3	**0.155**	3
0.000504	3	J	**0.000475**	4	0.462	3		0.464	3		0.266	3	J+	0.359	3	J+	242	3	246	3	**0.155**	3
0.000169	3		**0.000475**	4	0.476	3		0.445	3		0.273	3	0.260	2	246	3	236	3	**0.155**	3
0.00314	3	J	**0.00075**	2	0.453	3		0.457	3		0.536	3	0.475	3	212	3	213	3	**0.155**	3
0.00075	2		**0.00075**	2	0.453	3		0.438	3		0.307	3	0.308	3	234	3	215	3	**0.155**	3
0.00075	2		**0.00075**	2	0.472	3		0.457	3		0.567	3	0.364	3	226	3	228	3	**0.155**	3
0.00075	2		**0.00075**	2	0.455	3		0.45	2		0.342	3	0.354	3	229	3	228	3	**0.155**	3
0.00075	2		**0.00075**	2	0.456	3		0.449	3		0.69	2	J+	**0.310**	2	U	226	3	207	3	**0.155**	3
0.00250	2	U	**0.00075**	2	0.378	3		0.308	3		2.21	3	**0.310**	2	U	212	3	210	2	**0.155**	3
0.00075	2		**0.00075**	2	0.517	3		0.471	3		1.71	3	0.507	3	J	230	2	235	3	**0.155**	3
0.00075	2		**0.00075**	2	0.532	3		0.516	3		1.68	3	**0.310**	2	U	234	3	221	3	**0.155**	3

	0.155	3	
	0.155	3	
	0.137	3	
	0.13	2	
	0.312	3	J
J	**0.0775**	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.359	3	J
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

6540	3	**0.0031**	2	**0.0031**	2	2300	2	2420	3	**0.0125**	3	**0.0125**	3	**0.155**	3
5930	3 J+	**0.0031**	2	**0.0031**	2	2280	3 J+	2360	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
5450	3	0.00324	3 J	**0.001435**	4	2450	3	1960	3	0.0295	3 J+	**0.002125**	4	**0.0302**	3
6170	3	**0.001435**	4	**0.001435**	4	2440	3	1920	3	**0.002125**	4	**0.002125**	4	**0.0302**	3
5580	3	**0.0031**	2	**0.0031**	2	2470	3	2770	3	0.0066	2 J	**0.0031**	2	**0.031**	2
6760	3	**0.0031**	2	**0.0031**	2	2450	3	2670	3	0.0092	2 J	**0.0031**	2	**0.031**	2
5790	3	**0.0031**	2	**0.0031**	2	2210	3	2360	3	**0.0025**	2	**0.0025**	2	**0.050**	1 U
5770	3	**0.0031**	2	**0.0031**	2	2300	2	2330	3	0.0054	2 J	**0.0025**	2	**0.0155**	3
6550	3	0.0174	3 J	**0.0031**	2	2570	3	2360	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5590	3	**0.0031**	2	**0.0031**	2	2330	3	2310	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5800	2	**0.0031**	2	**0.0031**	2	2450	3	2310	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4940	3	**0.0031**	2	**0.0031**	2	2460	3	2050	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6090	3	**0.0031**	2	**0.0031**	2	2580	3	2460	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5960	3	**0.0031**	2	**0.0031**	2	2290	3	2180	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5680	3	**0.0031**	2	**0.0031**	2	2130	3	2200	2	**0.0050**	1	**0.0050**	1	**0.050**	1
5790	3	**0.0031**	2	**0.0031**	2	2340	3	2270	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5860	3	**0.0031**	2	**0.0031**	2	2360	3	2370	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6210	3	**0.0031**	2	**0.0031**	2	2500	2	2530	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5390	3	**0.0031**	2	**0.0031**	2	2360	3	2230	3	**0.0050**	1	**0.0050**	1	1.7	2 J+
5570	3	0.0095	2 J	**0.0031**	2	2250	3	2180	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6080	3	**0.0031**	2	**0.0031**	2	2450	3	2230	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5830	3	**0.0031**	2	**0.0031**	2	2550	3	2390	3	0.014	2 J	0.0191	3 J	**0.0310**	2

0.155	3	0.533	3	0.371	3 J	0.515	3 J	1.28	3 J
0.155	3	**0.125**	3	**0.2**	1 U	**0.75**	2 U	**0.75**	2 U
0.0302	3	0.35	2	0.291	3	**0.2345**	4		R
0.0302	3	0.275	3	0.251	3	**0.50**	1 U	**0.50**	1 U
0.0812	3 J	0.628	3	0.288	3 J	**0.75**	2 U	**0.75**	2 U
0.031	2	0.311	3 J	0.388	3 J	**0.75**	2 U	**0.75**	2 U
0.0155	3	**0.110**	2	**0.110**	2	2.67	3 J+	1.05	3 J+
0.0155	3	0.368	3 J	0.285	3 J	**0.250**	2 U	**0.250**	2 U
0.050	1	**0.250**	2	**0.250**	2	4.68	3 J+	1.41	3 J+
0.050	1	0.745	3 J	0.935	3 J	**0.50**	1 U	**0.155**	3
0.050	1	0.686	3 J	**0.155**	3	1.49	3 J+	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	2.13	3 J		R
0.050	1	**0.155**	3	**0.155**	3	1.12	3	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.155**	3	0.850	2 J
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	1.76	3 J+
0.641	3 J+	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.317	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.474	3 J	**0.155**	3	0.46	2 J	**0.200**	1
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.44		13.02		52		163		3.59		21.4	
Median	6.46		12.58		54		166		3.56		21.2	
St. Deviation	0		2		11		123		0		2	
# of values	21		22		22		20		22		22	
Minimum	5.83		10.12		30		-265		2.95		18.8	
Maximum	6.85		18.72		81		291		4.61		25.3	
Lowest fifth percentile	6		12		31		17		3		19	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	62%		0%		0%		0%		0%		0%	
% of DWS exceedences	10%		0%		0%		0%		0%		0%	

-1	2	1	3	3	2	2	3	0	2	3	3	4	3	3	3
57		47.4		0.64		4.4		18		0.2		0		0	
59		47.5		0.08		3.9		18		0.1		0		0	
5		15		2		3		3		0		0		0	
22		22		22		22		22		22		3		3	
50		22.5		0.08		1.6		8		0.1		0.0155		0.104	
65		82.5		8.44		14.3		21		0.5		0.0155		0.29	
50		24		0		2		16		0		0		0	
0		0		15		5		0		3		3		0	
				68%		23%				14%		100%			
				3		14		1		1					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		59%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	3	2
0.03		0	
0.01		0	
0		0	
22		3	
0.00		0.05	
0.28		0.05	
0		0	
3		3	
14%		100%	
7			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	4	2	5	2	3	3	2	2	4
0.734		0.044		7.20		0.00140		0.00113		0.17		0		0.0221
0.732		0.039		7.09		0.00130		0.00075		0.16		0		0.0155
0		0		1		0		0		0		0		0
22		22		22		22		22		22		7		22
0.534		0.016		6.34		0.00075		0.00075		0.10		0.075		0.0155
1.110		0.103		8.82		0.00250		0.00250		0.35		0.25		0.0626
1		0		6		0		0		0		0		0
0		6		0		22		22		16		6		18
		27%				100%		100%		73%		86%		82%
		15								6		1		4
230		NA		NA		NA		0.0052		NA		NA		6.98
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3
	18		2.3		0.0210		0.0187		0.178		0.161		1.49		1.35	
	4		1.0		0.0220		0.0193		0.155		0.155		1.41		1.35	
	43		3		0		0		0		0		0		0	
	22		22		22		22		22		22		22		22	
	1		0.3		0.0075		0.0075		0.075		0.075		1.24		1.09	
	187		12.5		0.0385		0.0385		0.367		0.279		2.62		1.58	
	1		0		0		0		0		0		1		1	
	5		14		10		12		16		18		0		0	
	23%		64%		45%		55%		73%		82%					
	1		2		9		7		4		2					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	9%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0105		0.0105		0.08		0.08		1.52		1.6		0.0093		0.0093		6710	
0.0125		0.0125		0.01		0.01		1.25		1.3		0.0075		0.0075		6700	
0		0		0		0		1		1		0		0		470	
22		22		22		22		22		21		22		22		22	
0.0015		0.0015		0.00		0.00		0.75		0.8		0.0031		0.0031		5790	
0.0125		0.0125		0.75		0.75		5.00		5.4		0.0185		0.0185		8020	
0		0		0		0		1		1		0		0		6075	
22		22		20		21		18		16		22		22		0	
100%		100%		91%		95%		82%		76%		100%		100%			
								2		4							
NA		NA		NA		NA		NA		NA		0.080		0.078		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	3	3	3	3	3
6520		1.07		0.3		0.026		0.016		0.599		0.396		
6480		0.72		0.3		0.020		0.0138		0.244		0.169		
540		1		0		0		0		1		0		
22		22		22		22		21		22		21		
5180		0.05		0.1		0.005		0.00476		0.100		0.089		
7500		3.93		0.8		0.115		0.0496		2.620		1.640		
5804		0		0		0		0		0		0		
0		1		6		5		8		1		0		
		5%		27%		23%		38%		5%				
						6		7						
NA		10.98		10.56276		NA		NA		2.288		2.196		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		9%		0%		
0%		0%		0%		0%		0%		0%		0%		

1	3	1	2	4	3	4	3	-1	3	-1	3	3	3	3	3
21.5		7.3		0.10		0.03		1120		1080		0.78		0.29	
11.3		3.1		0.04		0.03		1110		1080		0.32		0.17	
26		6		0		0		90		80		1		0	
22		22		22		22		22		22		22		22	
3.1		1.3		0.01		0.01		980		938		0.11		0.10	
101.0		21.4		1.17		0.12		1340		1290		5.05		1.20	
3		3		0		0		1012		993		0		0	
7		14		17		18		0		0		0		1	
32%		64%		77%		82%								5%	
8		7		2		3									
1000		1000		0.392		0.404		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		5%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

6	3	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.014		0		0.456		0.439		0.699		0.398		235		231		0.151	
0.001		0		0.459		0.450		0.538		0.357		233		228		0.155	
0		0		0		0		1		0		17		22		0	
22		21		22		21		22		22		22		22		22	
0.000		0.0004745		0.353		0.308		0.266		0.246		212		184		0.078	
0.136		0.0315		0.545		0.516		2.210		1.050		286		276		0.162	
0		0		0		0		0		0		212		207		0	
18		20		0		0		0		3		0		0		19	
82%		95%								14%						86%	
4		1		2		2				1						1	
0.77		0.77		NA		NA		12.97		12.93		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.166	
0.155	
0	
22	
0.078	
0.359	
0	
18	
82%	
2	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5880		0.0040		0.0029		2390		2310		0.0072		0.0056		0.128	
5820		0.0031		0.0031		2400		2320		0.0050		0.0050		0.050	
410		0		0		120		200		0		0		0	
22		22		22		22		22		22		22		22	
4940		0.0014		0.0014		2130		1920		0.0021		0.0021		0.016	
6760		0.0174		0.0031		2580		2770		0.0295		0.0191		1.700	
5393		0		0		2212		1965		0		0		0	
0		19		22		0		0		17		21		21	
		86%		100%						77%		95%		95%	
		3								4		1			
NA		0.223538036		0.190		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	3	3	2	2
0.080		0.299		0.238		1.070		0.84	
0.050		0.203		0.155		0.630		0.75	
0		0		0		1		1	
22		22		22		22		20	
0.016		0.110		0.110		0.155		0.16	
0.641		0.745		0.935		4.680		1.76	
0		0		0		0		0	
20		12		15		15		15	
91%		55%		68%		68%		75%	
1		6		5		2		2	
NA		NA		NA		29.73		29.32	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-01M																
Sample Date																
09/24/04	7.09	3	15.17	4		56	2		214	3		4.34	3	20.2	3	
10/29/04	6.7	2	11.24	4 C		57	2 C		200	1		3.23	3	20.1	3	
03/21/05			12.3	3		37	2					2.99	3	22.8	3	
05/13/05	5.95	3	12.99	4		54	2		242	3		3.19	3	23.8	3	
08/17/05	6.17	3	12.66	4		49	2		158	3		4.51	3	21.1	3	
11/11/05	6.14	3	12.25	4		52	2		250	2		3.27	3	20.2	3	
03/22/06	6.36	3	12.45	4		51	2		271	3		3.17	3	19.9	3	
05/22/06	6.19	3	13.36	4		46	2		270.1	4		3.18	3	19.2	3	
08/22/06	6.12	3	12.87	4		46	2		154.9	4		3.63	3	19.1	3	
10/31/06	6.61	3	15	2		51	2		279.7	4		3.42	3	19.3	3	
03/19/07	6.31	3	10.6	3		29	2		222.3	4		2.98	3	20.2	3	
05/10/07	6.23	3	13.54	4		29	2		204.6	4		3.44	3	20.3	3	
08/22/07	6.18	3	13.02	4		31	2		209.1	4		3.74	3	20.8	3	
11/12/07	7.26	3	11.96	4		47	2		170.9	4		3.24	3	19.4	3	
03/21/08	6.4	2	12.5	3		46	2		13.7	3		3.23	3	20.7	3	
05/17/08	6.35	3	13.39	4		53	2		200.8	4		3.15	3	19.7	3	
08/24/08	6.18	3	14.5	3		50	1		172.9	4		4.14	3	19.7	3	
10/15/08	6.26	3	14	2		49	2		141.6	4		3.44	3	19.9	3	
08/26/09			12.24	4		73	2			R		4.37	3	19.8	3	
08/21/10	6.29	3	12.07	4 Q		60	1		182.2	4		3.79	3	19.2	3	
08/30/11	6.33	3	11.85	4		35.6	3		95.8	3		3.8	2	18.9	3	
08/23/12	6.35	3	12.54	4		53	2		-200.6	4		3.67	3	19.6	3	

			result > crit										result <20			result > crit						
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
60	1		52.5	3		0.632	3		**1.57**	3		17.5	3		1.3	2	J-					
60	1		41.3	3		5	1		**1.57**	3		20	1		0.33	2	J					
55	2		55	2		**0.075**	2		9	1		17	2		0.09	1	J					
55	2		36.2	3		**0.075**	2		6.25	3		17	2		0.18	2						
60	1		50	1		0.2	1	J	5.25	3		17.5	3		0.0865	3	J					
60	1		51.3	3		**0.075**	2		5.13	3		16	2		0.147	3						
20.0	1		42.5	3		**0.075**	2		5.50	2		14.0	2		0.0640	2	J					
49.0	2		32.5	3		**0.075**	2		6.50	2		20.0	1		0.409	3						
46.0	2		48.8	3		**0.075**	2		3.75	3	J	20.0	1		0.166	3		**0.0155**	3		0.145	3
50.0	1		37.5	3		**0.075**	2		6.00	1	J	15.0	2		0.110	2		**0.0155**	3		0.103	3
50.0	1		36.3	3		**0.075**	2		**1.57**	3		14.0	2		0.138	3		**0.0155**	3		0.135	3
45.0	2		6.25	3	J	**0.075**	2		3.50	2	J	17.0	2		0.124	3						
50.0	1		37.5	3		0.300	1	J	3.50	2	J	17.5	3		0.102	3						
50.0	1		58.8	3		0.300	1	J	4.00	1	J	17.5	3		0.140	2						
59.4	3		38.8	3		0.505	3		6.16	3	J	18.3	3		0.109	3						
52.3	3		46.3	3		**0.0755**	3		150	2		20.6	3		0.129	3						
50.1	3		38.8	3		**0.0765**	3		4.86	3	J	20.3	3		0.148	3						
55.8	3		31.3	3		**0.076**	2		4.12	3	J	20.1	3		0.125	3						
57.4	3		40	1		0.829	3		4.7	2	J	20	1		0.106	3						
52.2	3		29	2	J	1.01	3		**1.57**	3		16.7	3		0.126	3						
53.4	3		45	2		0.404	3	J	3.4	2	J	16.7	3		**0.050**	1	U					
53.3	3		27	2		**0.0775**	3		**5.0**	1	U	16	2		0.387	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0155	3				
	0.05	1	J			
	0.0371	3				
	0.16	2				
	0.011	2	J			
	0.014	2	J			
	0.0060	1	J			
	0.0070	1	J			
	0.0060	1	J	**0.0155**	3	
	0.0130	2		**0.050**	1	UJ
	0.0200	1		**0.0155**	3	
	0.0072	2	J			
	0.00155	3				
	0.0670	2				
	0.0267	3				
	0.0071	2	J			
	0.0125	3				
	0.00155	3				
	0.00155	3				
	0.0166	3				
	0.00155	3				
	0.0157	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.867	3	J-	**0.05**	1	UJ	5.32	3	J-	0.0027	2	J	**0.00125**	3		0.14	2	J				**0.0155**			
0.922	3		**0.0155**	3		5.8	2		**0.00125**	3		0.0028	2	J	0.21	2	J				**0.0155**			
0.821	3		0.041	2	J	6.75	3		**0.00125**	3		**0.00125**	3		0.074	2	J				0.046			
0.77	2		0.036	2	J	6	1		**0.00125**	3		**0.00125**	3		0.16	2	J				**0.0155**			
0.754	3		**0.0155**	3		5.82	3		**0.00125**	3		**0.00125**	3		0.20	1	J				**0.0155**			
0.731	3		0.038	2	J	6.41	3		**0.00125**	3		**0.00125**	3		0.092	2	J				**0.0155**			
0.748	3		**0.0155**	3		7.02	3		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					**0.0155**			
0.737	3		0.0430	2	J	4.82	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.732	3		0.0990	2	J	4.87	3		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					0.0780			
0.685	3		**0.0155**	3		6.04	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0629			
0.698	3		**0.0155**	3		6.53	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.807	3		0.0470	2	J	6.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.646	3		0.0390	2	J	4.37	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0381			
0.680	2		0.0350	2	J	4.99	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.690	2		0.0370	2	J	6.25	3		**0.00075**	2		0.0028	2	J	**0.155**	3					**0.050**			
0.695	3		0.036	2	J	5.3	2		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.688	3		0.047	2	J	5.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.634	3		0.044	2	J	4.55	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.075**	2		**0.0155**			
0.681	3		0.037	2	J	5.8	2		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.23	2	J	**0.0155**			
0.682	3		0.083	2	J	4.95	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.644	3		**0.0155**	3		1.28	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.7	1		0.061	2	J	5.7	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	77.3	3	**3.9**	2		**0.0385**	3	**0.0385**	3		**0.125**	3	**0.125**	3	2.26	3	1.34	3					
		3	370	2	**3.9**	2		0.0951	3 J	**0.0385**	3		**0.25**	2 U	**0.125**	3	5.43	3	1.59	3					
		2 J	2.01	3 J+			R	0.0881	3 J			R	0.216	3	0.203	3	1.92	3	1.68	3					
		3	3.89	3 J			R	0.0585	3 J+	0.0436	3 J+		0.205	3	0.203	3	2.02	3	2.03	3					
		3	2	1	2.15	3		**0.00155**	3	0.013	2 J+		**0.25**	2 U	**0.125**	3	1.89	3	1.27	3					
		3	8.66	3 J+	**1**	1 U		0.0648	3 J+	0.0496	3 J+		0.309	3 J	0.294	3 J	1.76	3	1.61	3					
		3	3.10	2 J+	2.69	3 J+		0.0664	3	0.0524	3		**0.155**	3	**0.155**	3	1.90	2	1.99	3					
		1 U	2.69	3	**1.00**	1 U		0.0578	3	0.0516	3		**0.155**	3	**0.155**	3	1.66	3	1.72	3					
		2 J	2.14	3 J+	**1.00**	1 U		0.127	3	0.130	2		**0.155**	3	**0.155**	3	1.64	3	1.49	3					
		3 J	**1.00**	1 U	**1.00**	1 U		**0.0250**	2 U	**0.0250**	2 U		**0.155**	3	**0.155**	3	1.74	3 J+	1.69	3 J+					
		3	**1.00**	1 U	**1.00**	1 U		0.0706	3	0.0552	3		**0.155**	3	**0.155**	3	1.99	3 J+	1.74	3 J+					
		3	**1.00**	1 U	**1.00**	1 U		0.0490	2 J	0.0374	3 J		**0.155**	3	**0.155**	3	1.70	2	1.76	3					
		3 J	79.8	3	**1.00**	1 U		0.0648	3	0.0368	3 J		**0.155**	3	**0.155**	3	2.28	3	1.73	3 J+					
		3	10.3	3	**1.00**	1 U		0.0764	3	0.0646	3		**0.155**	3	**0.155**	3	1.89	3	1.84	3					
		1 U	23.1	3	1.89	3 J		0.0806	3	0.0617	3		**0.155**	3	**0.155**	3	1.93	3	1.86	3					
		3	**1.00**	1 U	**1.00**	1 U		0.027	2 J	0.024	2 J		**0.155**	3	**0.155**	3	1.57	3	1.65	3					
		1 U	**1.00**	1 U	**1.00**	1 U		0.035	2 J	0.0208	3 J		**0.155**	3	0.355	3 J	1.79	3	1.59	3					
		3	1.1	2 J	0.925	3 J		**0.0250**	2 U	**0.0250**	2 U		**0.155**	3	**0.155**	3	1.59	3	1.57	3					
		3	5.16	3 J+	**1.00**	1 U		0.0832	3	0.0598	3		**0.155**	3	**0.155**	3	1.82	3	1.61	3					
		3	13.1	3 J+	**1.00**	1 U		0.0348	3 J	0.023	2 J		**0.155**	3	**0.155**	3	1.89	3 J+	1.56	3 J+					
		3	2.13	3 J+	**1.00**	1 U		**0.0075**	2	**0.0075**	2		0.183	3 J	0.243	3 J	1.95	3	1.94	3					
		3	**1.00**	1 U	**1.00**	1 U		0.0352	3 J	0.0311	3 J		0.209	3 J	0.403	3 J	1.74	3	1.81	3					

| | | |

				depends on Hardness				depends on Hardness												depends on Hardness								
				result > crit				result > crit												result > crit								result > crit
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved					Total			Dissolved			Total			Dissolved			Total			Dissolved	
µg/L					µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
6780	3				1.25	3		0.421	3	0.108	3 J			R			0.571	3		0.129	3 J
6540	3				0.631	3		**0.05**	1	0.26	2 J+	0.105		3 J+			11.1	3		0.275	3 J+
5860	3				1.08	3		0.337	3	0.0944	3	0.11		2			17	2		3.28	3
6380	3				0.774	3		0.192	3 J	0.0564	3	0.0266		3 J			0.272	3 J+		0.127	3 J+
6580	3				1.22	3 J+		**0.031**	2	0.057	2 J+	0.0354		3 J+			0.302	3 J+		0.175	3 J+
6580	3				1.1	2		0.408	3	0.048	2 J+	0.0396		3 J+			0.469	3 J+		0.367	3 J+
6440	3				2.46	3 J+		0.351	3 J+	0.0608	3	0.0368		3			1.42	3		1.30	2
6430	3				1.85	3		0.259	3	0.0510	2	0.0344		3			1.13	3		0.861	3
5810	3				2.42	3 J+		0.370	2 J+	0.0466	3	0.0264		3			2.79	3		1.94	3
6460	3				3.76	3		**0.050**	1	0.0450	2	0.0226		3			4.36	3		3.26	3
6550	3				4.36	3		0.346	3 J+	0.0680	2 J+	0.0338		3 J+			19.6	3		15.7	3
7170	3				3.18	3		0.320	2	0.0422	3 J+	0.0246		3 J+			4.98	3		4.15	3
6860	3				2.25	3		0.544	3	0.0604	3	0.0240		2			22.6	3		7.35	3
6690	3				1.51	3 J+		0.324	3 J+	0.0386	3	0.0320		2			14.8	3		11.0	2
6690	3				0.680	2		0.411	3	0.0434	3	0.0346		3			31.0	2		23.0	2
6610	3				0.702	3		0.185	3 J	0.0166	3 J	0.0158		3 J			8.25	3		7.48	3
6630	3				0.641	3		**0.100**	1 U	0.309	3	0.0128		3 J			11.4	3		11.4	3
6520	3				1.78	3		0.205	3	0.0229	3	0.0167		3 J			6.92	3		6.19	3
6070	3				4.67	3		0.218	3	0.0583	3 J+	0.0255		3 J+			43.3	3		28.8	3 J+
6130	3				0.909	3 J+		0.284	3 J+	0.0549	3 J+	0.0417		3 J+			14.5	3 J+		8.25	3 J+
6190	3				0.525	3		0.257	3	0.0267	3	0.0264		3			6.13	3		6.18	3
6540	3				2.97	3		0.71	2	0.0377	3	0.0296		3			10.8	3		10.2	3

									depends on Hardness			depends on Hardness																
result > crit				result > crit					result > crit			result > crit																	result > crit
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N		MN_NSF	MN_NVF	MN_F		MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**							**Manganese**			
		Total		Dissolved				Total				Dissolved				Total			Dissolved			Total				Dissolved		
		µg/L		µg/L				µg/L				µg/L				µg/L			µg/L			µg/L				µg/L		
54.5	3		**3.1**	2			0.244	3			**0.05**	1			865	3		874	3		2.19	3			1.13	3		
1170	3		**3.1**	2			0.895	3			0.161	3 J			935	3		846	3		10.6	3			1.34	3		
14.6	3		6.64	3 J			0.0354	3 J			0.0834	3			1140	3		899	3		1.85	3			1.84	3		
6.72	3 J		**1.325**	4			0.0734	3 J+			0.114	3 J+			1020	3		884	3		1.2	2			1.21	3		
12.6	3 J		**3.1**	2			**0.0155**	3			**0.0155**	3			967	3		1120	3		1.13	3			0.244	3		
11.3	3 J		**3.1**	2			**0.05**	1 U			**0.0155**	3			925	3		941	3		0.775	3			0.836	3		
21.0	2		11.5	3 J			4.00	1			0.248	3 J+			892	3		851	3		1.31	3 J+			0.691	3 J+		
10.3	3 J		**3.10**	2			**0.0250**	2 U			**0.0250**	2 U			874	3		915	3		0.702	3			0.611	3		
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3			851	3		792	3		0.790	2			0.529	3 J+		
22.0	2		**3.10**	2			**0.0155**	3			**0.0155**	3			880	2		932	3		0.974	3 J+			0.549	3 J+		
35.3	3 J+		**3.10**	2			**0.0155**	3				R			928	3		934	3		1.08	3 J+			0.844	3 J+		
10.0	1 U		**10.0**	1 U			**0.050**	1 U			**0.0155**	3			967	3		1030	3		0.670	2 J+			0.524	3 J+		
110	2		**10.0**	1 U			0.257	3 J+			**0.050**	1 U			910	2		935	3		1.37	3 J+			0.421	3 J+		
44.5	3		10.5	3 J			0.171	3			**0.0155**	3			856	3		879	3		0.690	2			0.574	3		
113	3		24.4	3			0.355	3			0.110	2			933	3		906	3		1.08	3			0.547	3		
19.3	3 J		20.1	3			**0.0155**	3			**0.0155**	3			884	3		914	3		0.282	3 J+			0.295	3 J+		
23.8	3		15.4	3 J			**0.0155**	3			**0.0155**	3			908	3		902	3		0.282	3			0.261	3		
19.5	3 J		16.6	3 J			**0.0155**	3			**0.0155**	3			936	3		954	3		0.343	3			0.31	2		
38.5	3		**3.10**	2			0.101	3 J+			**0.0155**	3			912	3		860	2		0.884	3 J+			0.464	3 J+		
31.3	3		**3.10**	2			0.879	3			**0.0155**	3			942	3		950	2		0.821	3 J+			0.354	3 J+		
11.5	3 J		7.3	2 J			0.0692	3 J			**0.0155**	3			902	3		906	3		0.437	3			0.415	3		
17.5	3 J		8.62	3 J			0.0337	3 J			**0.0155**	3			949	3		965	3		0.724	3 J+			0.555	3 J+		

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
		0.155	3	
		0.155	3	
		0.122	3	
		0.115	3	
		0.0775	3	
J		0.167	3	J
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																		
			result > crit						result > crit																		result > crit
SI_F	SI_FSF	SI_FVF	AG_N			AG_NSF	AG_NVF	AG_F			AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**										**Sodium**								**Thallium**							**Tir**
	Dissolved				Total						Dissolved						Total				Dissolved				Total				Dissolved			Total
	µg/L				µg/L						µg/L						µg/L				µg/L				µg/L				µg/L			µg/L
5440	3				**0.0031**		2		**0.0031**		2		2020		3		2040		3		**0.0125**		3		**0.0125**		3		**0.155**		3	
5180	3	J+			0.018		2	J	**0.0031**		2		2120		3	J+	2100		2	J+	**0.0125**		3		**0.0125**		3		0.364		3	J
4650	3				**0.001435**		4		**0.001435**		4		2210		3		1710		3		0.018		2	J+	**0.002125**		4		0.542		3	
5310	3				0.00723		3	J	**0.001435**		4		2120		3		1620		3		**0.002125**		4		**0.002125**		4		0.168		3	J
6660	3				**0.0031**		2		**0.0031**		2		2180		3		2380		3		**0.0031**		2		**0.0031**		2		**0.031**		2	
5890	3				0.017		2	J	**0.0031**		2		2150		3		2220		3		0.0096		2	J	**0.0031**		2		**0.031**		2	
4790	3				**0.0031**		2		**0.0031**		2		2050		3		1880		3		0.0088		2	J	**0.0025**		2		0.147		3	
5380	3				**0.0031**		2		**0.0031**		2		2060		3		2170		3		**0.0025**		2		**0.0025**		2		**0.0155**		3	
4640	3				**0.0031**		2		**0.0031**		2		1970		3		1830		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5030	3				**0.0031**		2		**0.0031**		2		1980		3		2090		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5260	3				**0.0031**		2		**0.0031**		2		2070		3		2090		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5350	3				**0.0031**		2		**0.0031**		2		2180		3		2310		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5560	3				**0.0031**		2		**0.0031**		2		2150		3		2170		3		**0.0050**		1		**0.0050**		1		0.108		3	J
5590	3				**0.0031**		2		**0.0031**		2		1970		3		2010		3		**0.0050**		1		**0.0050**		1		0.183		3	J
5210	3				**0.0031**		2		**0.0031**		2		2080		3		2040		3		**0.0050**		1		**0.0050**		1		0.345		3	
5130	3				**0.0031**		2		**0.0031**		2		1980		3		2020		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5120	3				**0.0031**		2		**0.0031**		2		2060		3		2060		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
5350	3				**0.0031**		2		**0.0031**		2		2140		3		2150		3		**0.0050**		1		**0.0050**		1		**0.050**		1	
4830	3				**0.0031**		2		**0.0031**		2		2120		3		1980		3		**0.0050**		1		**0.0050**		1		0.64		2	J+
5310	3				**0.0031**		2		**0.0031**		2		2210		3		2190		3		**0.0050**		1		**0.0050**		1		0.132		3	J
5330	3				**0.0031**		2		**0.0031**		2		2050		3		2040		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	
5550	3				**0.0031**		2		**0.0031**		2		2150		3		2170		3		**0.0031**		2		**0.0031**		2		**0.0310**		2	

														depends on Hardness				depends on Total Zn			
														result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF							
						Vanadium								**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved								
	µg/L			µg/L			µg/L			µg/L			µg/L								
0.155	3		0.283	3	J	0.391	3	J		4.03	3		1.58	3							
0.155	3		0.971	3		**0.125**	3			254	3		54.1	3							
0.318	3		0.196	3		0.149	3			37.3	3		37.9	3							
0.0302	3		0.181	3		0.117	3			35.2	3		31.5	3							
0.031	2		**0.1**	1		0.583	3			30.4	3		**0.2325**	4							
0.031	2		0.243	3	J	**0.1**	1			20.4	3		18.5	3							
0.173	3		**0.110**	2		**0.110**	2			18.1	3		15.3	3							
0.0155	3		**0.110**	2		**0.110**	2			18.8	3		18.2	3							
0.050	1		**0.250**	2		**0.250**	2			17.4	3	J+	12.4	3	J+						
0.050	1		0.552	3	J	0.934	3	J		15.7	3	J+	14.0	2	J+						
0.050	1		0.323	3	J	**0.155**	3			18.0	2	J+	16.7	3	J+						
0.050	1		**0.155**	3		**0.155**	3			12.5	3		12.8	3							
0.050	1		**0.155**	3		**0.155**	3			19.1	3		11.0	2	J+						
0.050	1		**0.155**	3		**0.155**	3			17.3	3		13.4	3							
0.050	1		**0.155**	3		**0.155**	3			17.9	3		13.3	3							
0.050	1		**0.155**	3		**0.155**	3			9.31	3	J+	9.01	3	J+						
0.050	1		**0.155**	3		**0.155**	3			9.2	2	J+	7.16	3	J+						
0.050	1		**0.155**	3		**0.155**	3			9.5	2	J+	8.89	3	J+						
0.308	3	J+	**0.155**	3		**0.155**	3			14.6	3	J+	11.4	3	J+						
0.050	1		**0.155**	3		**0.155**	3			10.9	3	J+	5.6	2	J+						
0.0310	2		0.372	3	J	0.447	3	J		5.38	3		6.74	3							
0.0310	2		**0.155**	3		**0.155**	3			4.92	3		5.35	3							

		2	3	2	4	0	2	1	4	2	3	1	3		
Mean		6.37		12.84		48		173		3.54		20.2			
Median		6.30		12.60		50		200		3.43		19.9			
St. Deviation		0		1		11		108		0		1			
# of values		20		22		22		20		22		22			
Minimum		5.95		10.60		29		-201		2.98		18.9			
Maximum		7.26		15.17		73		280		4.51		23.8			
Lowest fifth percentile		6		11		29		3		3		19			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		80%		0%		0%		0%		0%		0%			
% of DWS exceedences		5%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	2		1	3		3	2		2	3		0	2		3	3		4	3		3	3
52			40.1			0.462			11.00			18.0			0.2			0			0	
53			39.4			0.076			4.80			18.0			0.1			0			0	
8			11			1			31			2			0			0			0	
22			22			22			22			22			22			3			3	
20			6.3			0.075			1.57			14.0			0.1			0.0155			0.103	
60			58.8			5.000			150.00			20.6			1.3			0.0155			0.145	
45			27			0			2			14			0			0			0	
0			0			13			5			0			1			3			0	
						59%			23%						5%			100%				
			1			4			10						4							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			68%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

3	2	4	3
0.0230		0	
0.0130		0	
0		0	
22		3	
0.0016		0.0155	
0.1600		0.05	
0		0	
5		3	
23%		100%	
8			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.728			0.04			5.44			0.0013			0.00130			0.15			0			0.0276
0.699			0.04			5.75			0.0010			0.00100			0.16			0			0.0155
0			0			1			0			0			0			0			0
22			22			22			22			22			22			7			22
0.634			0.02			1.28			0.0008			0.00075			0.07			0.075			0.0155
0.922			0.10			7.02			0.0027			0.00280			0.21			0.25			0.0780
1			0			4			0			0			0			0			0
0			7			0			21			20			16			6			18
			32%						95%			91%			73%			86%			82%
			15						1			2			6			1			4
230			NA			NA			NA			0.0052			NA			NA			6.91
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N NSF	NH3N NVF	AL N	AL NSF	AL NVF	AL F	AL FSF	AL FVF	SB N	SB NSF	SB NVF	SB F	SB FSF	SB FVF	AS N	AS NSF	AS NVF	AS F	AS FSF	AS FVF	BA N	BA NSF	BA NVF	BA F	BA FSF	BA FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
		µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
3	2	3	1	2	4	3	4	3	3	3	3	2	3	2	3										
	27.8		1.5		0.0551		0.0423		0.178		0.186		2.02		1.69										
	2.4		1.0		0.0582		0.0385		0.155		0.155		1.89		1.69										
	80		1		0		0		0		0		1		0										
	22		20		22		21		22		22		22		22										
	1.0		0.9		0.0016		0.0075		0.125		0.125		1.57		1.27										
	370.0		3.9		0.1270		0.1300		0.309		0.403		5.43		2.03										
	1		1		0		0		0		0		2		1										
	6		16		5		5		17		16		0		0										
	27%		80%		23%		24%		77%		73%														
	1		2		6		6		3		4														
	87		87		NA		NA		150		150		NA		NA										
	NA		NA		6		NA		10		NA		2,000		NA										
	5%		0%		0%		0%		0%		0%		0%		0%										
	0%		0%		0%		0%		0%		0%		0%		0%										
		result > crit		result > crit		result > crit				result > crit		result > crit		result > crit											

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
-1	3		2	3		3	3		4	3		4	3		2	3		2	3		
6480			1.85			0.290			0.073			0.0359			10.620			6.880			
6540			1.38			0.302			0.053			0.0296			7.590			5.170			
320			1			0			0			0			11			8			
22			22			22			22			21			22			22			
5810			0.53			0.031			0.017			0.0128			0.272			0.127			
7170			4.67			0.710			0.309			0.11			43.300			28.800			
5871			1			0			0			0			0			0			
0			0			4			0			0			0			0			
						18%															
						2			1			4						1			
NA			10.98			10.56276			NA			NA			2.268			2.177			
NA			100			NA			NA			NA			NA			NA			
0%			0%			0%			0%			0%			73%			64%			
0%			0%			0%			0%			0%			0%			0%			
			depends on Hardness			depends on Hardness									depends on Hardness						
			result > crit			result > crit									result > crit						result > crit
Calcium					**Chromium[4,6]**								**Cobalt**						**Copper[4]**		
		Dissolved		Total				Dissolved		Total				Dissolved			Total			Dissolved	
		µg/L		µg/L				µg/L		µg/L				µg/L			µg/L			µg/L	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	2		4	3		4	3		0	3		0	3		3	3		3	3	
81.8			7.9			0.334			0.05			926			918			1.37			0.66		
20.3			4.9			0.050			0.02			919			910			0.85			0.55		
245			6			1			0			63			67			2			0		
22			22			22			21			22			22			22			22		
3.1			1.3			0.016			0.02			851			792			0.28			0.24		
1170.0			24.4			4.000			0.25			1140			1120			10.60			1.84		
7			3			0			0			856			846			0			0		
2			13			10			16			0			0			0			0		
9%			59%			45%			76%														
8			7			3			1														
1000			1000			0.387			0.399			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
5%			0%			14%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.024		0		0.344		0.316		1.256		0.57		213		206		0.149									
0.001		0		0.328		0.308		0.911		0.56		209		207		0.155									
0		0		0		0		1		0		28		11		0									
22		21		22		21		22		22		22		22		22									
0.000		0.0004745		0.120		0.234		0.367		0.31		191		181		0.078									
0.300		0.1		0.670		0.457		3.110		0.98		332		226		0.156									
0		0		0		0		1		0		193		188		0									
20		20		0		0		0		2		0		0		19									
91%		95%								9%						86%									
1		1		2		2		1		1						1									
0.77		0.77		NA		NA		12.86		12.82		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	
Mercury[7]				**Molybdenum**				**Nickel[4]**				**Potassium**													
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved										Total	
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L										µg/L	

	3	3
	0.149	
	0.155	
	0	
	22	
	0.078	
	0.167	
	0	
	19	
	86%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

| | | |

SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF

MW-01S

Sample Date												
09/25/04	5.94	3	14.69	4	23	2	282	3	6.36	3	5.54	3
10/29/04	5.66	3	9.65	3	20	1	229	3	5.23	3	5.1	2
05/13/05	5.16	3	14.18	4	15	2	235	3	1.91	3	5.64	3
08/17/05	5.29	3	10.53	4	15	2	153	3	6.78	3	4.46	3
11/11/05	4.99	3	12.31	4	17	2	298	3	4.89	3	4.9	2
03/21/06	5.82	3	11.41	4	26	2	145	3	2.26	3	9.44	3
05/22/06	4.94	3	14.92	4	11	2	345.4	4	1.97	3	2.36	3
08/22/06	5.85	3	13.36	4	19	2	206.4	4	4.7	2	4.58	3
10/31/06	4.69	3	13.59	4	15	2	335.2	4	4.69	3	3.12	3
03/19/07	5.59	3	9.81	3	16	2	203.7	4	2.28	3	11.1	3
05/10/07	4.76	3	14.08	4	7	1	201.5	4	1.92	3	3.29	3
08/22/07	5.27	3	13	2	11	2	196.3	4	4.35	3	5.83	3
11/13/07	5.66	3	13.35	4	15	2	273.7	4	3.78	3	3.92	3
03/21/08	5.09	3	12.56	4	22	2	193.5	4	1.99	3	9.55	3
05/17/08	5.03	3	14.62	4	12	2	266.3	4	1.46	3	2.75	3
08/24/08	5.51	3	13.45	4	15	2	422.6	4	5.19	3	7	1
10/16/08	4.96	3	12.94	4	17	2	193.8	4	5.19	3	4.55	3
08/26/09			11.97	4	21	2		R	5.84	3	3.74	3
08/17/10	5.77	3	12.77	4	16	2	144	3	4.69	3	4.24	3
08/30/11	4.67	3	12.55	4	9.8462	FALSE	166.8	4	4.67	3	3.45	3
09/01/11												
08/23/12	4.65	3	11.5	3	14	2	-180.5	4	5.21	3	3.58	3

20	1	55	2	3.05	3	3.5	2 J	5.5	2 J	**0.155**	3				
17	2	20	1 J-	4.2	2	6	1 J	5	1 J	**0.155**	3				
17	2	15	2	35.9	3	11.6	3	3.5	2 J	0.22	2				
17	2	20	1	**0.075**	2	7	1	4	1 J	0.182	3				
17	2	22.5	3	8.9	2	9.5	2	4	1 J	0.2	1				
22.0	2	10.0	1	3.40	2	7.50	2	9.00	1 J	0.113	3				
12.5	3	8.80	2 J	1.10	2	7.50	2	1.55	3	0.306	3				
19.0	2	25.0	2	0.600	1	11.3	3	1.55	3	0.464	3	0.0340	2 J	0.430	2
14.0	2	11.3	3	0.400	1 J	9.50	2 J	1.55	3	0.281	3	**0.0155**	3	0.271	3
28.0	2	11.3	3	0.200	1 J	**1.57**	3	9.00	1 J	0.0985	3 J	**0.0155**	3	0.0910	2
12.0	2	**1.55**	3	**0.075**	2	3.25	3 J	1.55	3	0.143	3				
18.0	2	11.3	3	**0.075**	2	6.50	2 J	4.98	3 J	0.178	3				
15.0	2	15.0	2	**0.150**	2	7.50	2 J	3.66	3 J	0.180	2				
29.0	2	16.3	3	1.11	3	9.38	3 J	9.32	3 J	0.107	3				
10.9	3	22.5	3	**0.075**	2	**1.57**	3	1.55	3	0.151	3				
26.1	3	32.5	3	158	3	7.62	3 J	8.84	3 J	**0.0100**	1 U				
16.1	3	8.75	3 J	**0.0805**	3	6.44	3 J	5.16	3 J	0.147	3				
17	2	13.8	3	0.928	3	6.8	2 J	5	1 J	0.0575	3 J				
15.7	3	10	1	1.11	3	7.55	3 J	3.94	3 J	0.159	3				
13.6	3									**0.050**	1 U				
		14	2	79.2	3	**1.57**	3	1.55	3						
14.5	3	**1.55**	3	2.3	2	**5.0**	1 U	1.55	3	0.107	3				

	0.0155	3			
	0.07	1	J		
	0.246	3			
	0.013	2	J		
	0.026	2			
	0.0080	1	J		
	0.0050	1	U		
	0.0080	1	J	**0.0155**	3
	0.0070	1	J	**0.0155**	3
J	0.0120	2		**0.0155**	3
	0.0050	1	J		
	0.00155	3			
	0.0137	3			
	0.0207	3			
	0.02	1			
	0.136	3			
	0.00155	3			
	0.00155	3			
	0.0099	2	J		
	0.00155	3			
	0.0071	2	J		

0.89	2	**0.0155**	3	2.07	3	0.0026	2 J	**0.00125**	3	0.57	2 J				**0.0155**
0.441	3	**0.0155**	3	1.81	3	0.0045	2 J	**0.00125**	3	0.24	2 J				**0.0155**
0.805	3	**0.0155**	3	1.11	3	**0.00125**	3	**0.00125**	3	0.21	2 J				**0.0155**
0.871	3	**0.0155**	3	1.7	2	**0.00125**	3	**0.00125**	3	0.26	2 J				**0.0155**
0.831	3	**0.0155**	3	1.69	3	**0.00125**	3	**0.00125**	3	0.12	2 J				**0.0155**
0.755	3	**0.0155**	3	2.21	3	**0.00125**	3	**0.00125**	3	**0.155**	3				0.0430
1.09	3	**0.0155**	3	1.01	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
1.01	3	**0.0155**	3	1.29	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0370
0.836	3	**0.0155**	3	1.03	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.102
0.731	3	**0.0155**	3	2.12	3	**0.00075**	2	**0.0025**	2 UJ	**0.155**	3				**0.0155**
0.850	2	**0.0155**	3	1.28	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.625	3	**0.0155**	3	1.53	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0389
0.627	3	**0.0155**	3	1.37	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.618	3	**0.0155**	3	2.06	3	**0.00075**	2	0.0028	2 J	**0.155**	3				**0.0155**
0.734	3	0.068	2 J	1.26	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.588	3	**0.0155**	3	1.68	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.718	3		**0.0155**
0.487	3	**0.0155**	3	1.37	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.649	3	**0.0155**	3	1.38	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.279	3 J		**0.0155**
0.547	3	0.059	2 J	1.21	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.709	3		**0.0155**
0.693	3	0.057	2 J	5.2	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.819	3	0.042	2 J	1.2	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	120	2	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.4	2	2.1	2
3	779	3	**12.5**	3 U	**0.0385**	3	**0.0385**	3	0.606	3 J+	**0.125**	3	6.94	3	2.44	3
3	3300	2	54.1	3	0.0663	3 J+	**0.01**	1 U	1.93	3	0.0731	3	18.3	3	4.25	3
3	45.7	3	7.82	3	**0.00155**	3	**0.005**	1 U	**0.125**	3	**0.125**	3	2.88	3	2.45	3
3	423	3	12.7	3 J+	0.0288	3 J+	0.0114	3 J+	0.48	2 J	**0.125**	3	5.45	3	3.11	3
2 J	171	3	3.05	3 J+	0.0300	1 J	0.0228	3 J	**0.155**	3	**0.155**	3	4.50	2	3.54	3
1 U	125	3	20.0	1	0.0258	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	3.65	3	3.17	3
2 J	170	2	32.4	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	5.54	3	4.13	3
3	46.2	3	15.2	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.01	3 J+	4.02	3 J+
3	323	3 J+	2.93	3 J+	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	5.29	3 J+	3.48	3 J+
3	10.5	3 J+	2.41	3 J+	0.0154	3 J	0.0202	3 J	**0.155**	3	**0.155**	3	2.55	3	2.48	3
3 J	12.9	3 J+	4.24	3 J+	0.0560	2	0.0284	3 J	**0.155**	3	**0.155**	3	3.57	3	3.32	3
3	50.1	3	12.2	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.52	3	4.02	3
3	428	3	2.65	3	0.0292	3 J	0.0179	3 J	**0.155**	3	**0.155**	3	6.81	3	3.79	3
3	2.67	3 J+	4.41	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.6	2	2.57	3
3	3310	3	9.2	2	0.0273	3 J	**0.0075**	2	0.355	3 J	**0.155**	3	14.5	3	2.86	3
3	12.6	3	7.77	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.9	2	3.95	3
3	158	3	6.54	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.39	3	3.33	3
3	96.7	3	19.8	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.11	3	3.99	3
3	112	3	11.4	3 J+	**0.0075**	2	0.0351	3 J	**0.075**	2	**0.075**	2	5	1	3.77	3
3	160	2	11.6	3	0.066	2	0.035	2 J	0.269	3 J	**0.075**	2	6.08	3	4.9	2

0.0075	2	**0.0075**	2	**0.75**	2	**0.75**	2	**1.55**	3	3.5	2 J	**0.0423**	3 J	**0.0155**	3	1660	3
0.0075	2	0.0167	3 J	**0.75**	2	**0.75**	2	**1.55**	3	**1.55**	3	**0.0708**	3 J	0.136	3	1420	3
0.0519	3	0.00639	3 J	0.0197	3 J	**0.003835**	4	2.2	2 J		R	0.0487	3	0.0283	3	1490	3
0.0075	2	**0.0075**	2	**0.00155**	3	**0.00155**	3	**1.55**	3	**1.55**	3	**0.00775**	3	**0.00775**	3	1310	3
0.0214	3 J	**0.0075**	2	0.015	2 J		R	3.3	2 J	5.7	2 J	**0.00775**	3	**0.00775**	3	1400	2
0.0120	2	**0.0120**	2	**0.0250**	2 U	**0.0250**	2 U	**0.75**	2	**0.75**	2	**0.0125**	3	**0.0125**	3	2720	3
0.0120	2	**0.0120**	2	**0.0075**	2	**0.0075**	2	1.79	3 J	1.51	3 J	**0.0125**	3	**0.0125**	3	650	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	1390	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	925	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0252	3 J	0.0216	3 J	3260	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0214	3 J	0.0204	3 J	973	3
0.0125	3	**0.0125**	3	**0.0075**	2	0.0188	3 J	**1.25**	3	**1.25**	3	0.0308	3 J	0.0286	3 J	1800	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0308	3 J	0.0234	3 J	1210	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0307	3 J	0.0225	3 J	2830	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0185	3 J	0.0216	3 J	833	3
0.0533	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0506	3	**0.0075**	2	2280	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.027	2 J	0.0259	3 J	1360	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0250	2 U	0.0250	2 U	1120	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	1400	2
0.0125	3	**0.0125**	3	0.016	2 J	**0.0075**	2	5.4	2	4.59	3 J	0.0318	3 J	0.0246	3 J	1030	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.3	2 J	2.12	3 J	0.0487	3 J	0.0416	3 J	1070	3

	1700	2	0.79	2	0.546	3	0.0764	3	J		R	0.415	3	0.201	3
J+	1320	3	J+	0.404	3	**0.05**	1	0.485	3	J+	0.167	3	J+	1.64	3	J+	**0.1**	1	U
	1170	3	3.02	3	0.48	2	1.31	3	0.0699	3	4.5	2	0.586	3	J+
	1200	2	1.96	3	J+	**0.031**	2	0.0474	3	J+	0.0424	3	J+	0.428	3	J	R
	1430	3	1.37	3	0.416	3	0.246	3	J+	0.0394	3	J+	1.49	3	J+	0.431	3	J+
	2750	3	2.14	3	J+	0.473	3	J+	0.0628	3	0.0168	3	J	0.472	3	J+	0.194	3	J+
	699	3	0.747	3	**0.100**	1	U	0.0800	1	0.0402	3	0.751	3	0.455	3
	1380	3	2.29	3	J+	1.22	3	J+	0.119	3	0.0502	3	1.27	3	J+	0.772	3	J+
J+	948	3	J+	0.886	3	**0.050**	1	0.0474	3	0.0326	3	0.694	3	J+	0.624	3	J+
	3620	3	1.87	3	J+	0.369	3	J+	0.177	3	J+	**0.0100**	1	U	0.902	3	J+	0.323	3	J+
	952	3	1.50	2	0.253	3	0.0242	3	J+	**0.0100**	1	U	0.195	3	J+	0.144	3	J+
	1630	3	1.24	3	0.492	3	0.0250	2	0.0190	2	J	0.355	3	J+	0.260	2	J+
	1080	3	1.01	3	J+	0.262	3	J+	0.0382	3	0.0244	3	0.326	3	0.153	3
	2650	3	1.75	3	0.302	3	0.219	3	0.0109	3	J	1.01	3	0.105	3
	812	3	0.263	3	J	R	0.0133	3	J	0.0156	3	J	0.116	3	J+	0.103	3	J+
	2590	3	6.04	3	0.317	3	0.727	3	0.0433	3	3.67	3	0.29	2	J+
	1320	3	0.447	3	0.15	2	J	0.0199	3	J	0.0173	3	J	0.158	3	0.173	3
	1130	3	0.534	3	**0.100**	1	U	0.0757	3	J+	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	1420	3	0.654	3	J+	0.492	3	J+	0.0402	3	J+	**0.0100**	1	U	**0.250**	2	U	**0.250**	2	U
	991	3	0.973	3	0.248	3	0.0598	3	0.0191	3	J	**0.250**	2	U	**0.250**	2	U
	1060	3	0.395	3	**0.0310**	2	0.096	2	0.0273	3	0.792	3	0.895	3

89.2	3	**3.1**	2	**0.05**	1	**0.05**	1	337	3	324	3	15	2	10.6	3
597	3	**3.1**	2	0.542	3	**0.05**	1	376	3	268	3	52.7	3	8.95	3
2720	3	33.3	3	1.89	3 J+	**0.035**	2 U	465	3	158	3	138	3	12.4	3
129	3	6.75	3 J	**0.0644**	3 J		R	290	2	267	3	8.09	3	6.36	3
373	3	16.4	3 J	0.355	3 J+	0.183	3 J+	341	3	299	3	29.6	3	7.65	3
108	3	**10.0**	1 U	0.195	3 J+	**0.0130**	2	642	3	672	3	5.71	3	1.50	2
60.4	3	**3.10**	2	0.210	2	0.0820	2	178	3	177	3	9.62	3	6.31	3
135	3	20.9	3	0.160	2 J+	**0.050**	1 U	271	3	266	3	13.5	3	7.91	3
30.8	3	**3.10**	2	**0.0155**	3	**0.0155**	3	196	3 J+	196	3 J+	7.27	3	6.50	2
282	3 J+	**3.10**	2	0.257	3 J+	**0.0155**	3	727	3	715	3	19.0	2 J+	1.32	3 J+
10.0	1 U	**3.10**	2	**0.0155**	3	**0.050**	1 U	210	2	218	3	4.38	3 J+	4.74	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.050**	1 U	323	3	299	3	3.80	2	3.38	3
29.6	3	**3.10**	2	**0.050**	1 U	**0.0155**	3	218	3	198	3	5.67	3	4.17	3
340	2	8.78	3 J	0.337	3	**0.0155**	3	607	3	521	3	23.6	3	2.13	3
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	163	3	160	2	3.22	3	3.23	3
645	3	15.3	3 J	1.04	3	**0.0155**	3	318	3	183	3	73.2	3	7.56	3
7.76	3 J	**3.10**	2	**0.0155**	3	**0.050**	1 U	279	3	267	3	4.23	3	4.01	3
122	3	**10.0**	1 U	0.106	3 J+	**0.0155**	3	231	3	211	3	8.31	3 J+	3.47	3 J+
76.7	3	10.7	3 J	**0.0155**	3	**0.0155**	3	181	3	184	3 J+	7.12	3 J+	4.24	3 J+
84.8	3	6.25	3 J	**0.0706**	3 J	**0.0155**	3	210	2	185	3	9.29	3	5.58	3
129	3	6.6	2 J	0.144	3	**0.0155**	3	222	3	196	3	13.3	3	7.4	2

0.031	2			**0.155**	3	**0.155**	3	0.51	2	0.665	3	140	2	118	3	**0.155**	3
0.031	2	**0.1**	1 U	**0.155**	3	**0.155**	3	0.575	3	0.243	3	179	3	108	3	**0.155**	3
0.0315	3	**0.0315**	3	0.266	3	0.0787	3 J	1.94	3	0.719	3	536	3	362	3	0.113	3
0.031	2	**0.031**	2	**0.0031**	2		R	0.969	3	0.803	3	119	3	116	3	**0.0775**	3
0.031	2	**0.031**	2	0.112	3 J+	0.0322	3 J+	0.883	3	0.486	3	145	3	125	3	**0.0775**	3
0.000475	4	**0.000475**	4	0.124	3	0.159	3	1.02	3	0.647	3	126	3	112	3	**0.155**	3
0.00106	3 J	0.00115	3 J	0.124	3	**0.0075**	2	0.614	3	0.375	3	90.5	3	83.5	3	**0.155**	3
0.000475	4	0.000952	3 J	0.0774	3	0.0826	3	1.46	3	0.993	3	372	3	355	3	**0.155**	3
0.000475	4	**0.000475**	4	0.0392	3 J	0.0340	2 J	1.06	3	0.711	3	93.9	3	98.8	3	**0.155**	3
0.000169	3	**0.000475**	4	0.241	3	0.217	3	0.943	3 J+	0.582	3 J+	165	3	156	3	**0.155**	3
0.000169	3	**0.000475**	4	0.0632	3	0.0492	3 J	0.813	3 J+	0.472	3 J+	77.2	3	81.0	2	**0.155**	3
0.000966	3 J	**0.000475**	4	0.101	3	0.0952	3	0.791	3 J+	0.458	3 J+	114	3	102	3	**0.155**	3
0.000169	3	**0.000475**	4	0.0620	2	**0.0250**	2 U	0.628	3	0.399	3	99.4	3	89.9	3	**0.155**	3
0.00075	2	**0.00075**	2	0.186	3	0.147	3	1.00	1	0.605	3	153	3	112	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0375	3 J	0.0337	3 J	0.285	3	0.366	3	70.9	3	72.1	3	**0.155**	3
0.00075	2	**0.00075**	2	0.139	3 J		R	6.36	3	1.12	3	198	3 J		R	**0.155**	3
0.00075	2	**0.00075**	2	0.0356	3 J	0.0356	3 J	0.287	3	0.252	3	103	3	102	3	**0.155**	3
0.00193	3 J	**0.00075**	2	0.0913	3	0.0447	3 J	**0.310**	2 U	**0.310**	2 U	110	2	94.7	3	**0.155**	3
0.00250	2 U	**0.00250**	2 U	**0.0075**	2	**0.0075**	2	**0.310**	2 U	**0.310**	2 U	245	3	243	3	**0.155**	3
0.00075	2	**0.00075**	2	**0.0250**	2 U	**0.0250**	2 U	0.559	3 J	0.283	3 J	117	3	101	3	**0.155**	3
0.00075	2	0.00166	3 J	0.0477	3 J	0.0271	3 J	**0.310**	2 U	**0.310**	2 U	138	3	123	3	**0.155**	3

0.155	3	
0.155	3	
0.059	2	J
0.0775	3	
0.0775	3	
0.155	3	
0.155	3	
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Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

3300	2	**0.0031**	2	**0.0031**	2	1260	3	1310	3	0.0286	3 J	**0.0125**	3	**0.155**	3
2590	3 J+	0.0062	2 J	**0.0031**	2	1290	3 J+	1180	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
1060	3 U	0.0204	3	**0.001435**	4	1710	3	1190	3	0.0242	3	0.00656	3 J	0.143	3 J
2800	2	**0.0031**	2	**0.0031**	2	1540	3	1490	3	**0.0031**	2	**0.0031**	2	**0.031**	2
2900	2	**0.0031**	2	**0.0031**	2	1480	3	1540	3	0.008	1 J	**0.0031**	2	**0.031**	2
3910	3	**0.0031**	2	**0.0031**	2	1630	3	1700	2	**0.0025**	2	**0.0025**	2	**0.0155**	3
1830	3	**0.0031**	2	**0.0031**	2	1080	3	1050	3	0.0086	2 J	**0.0025**	2	**0.0155**	3
2520	3	**0.0031**	2	**0.0031**	2	2060	3	2110	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2130	3	**0.0031**	2	**0.0031**	2	1330	3	1410	3	**0.0050**	1	**0.0050**	1	**0.050**	1
3970	3	**0.0031**	2	**0.0031**	2	1570	3	1620	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2160	3	**0.0031**	2	**0.0031**	2	1110	3	1160	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2730	3	**0.0031**	2	**0.0031**	2	1410	3	1260	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2310	3	**0.0031**	2	**0.0031**	2	1300	2	1250	3	**0.0050**	1	**0.0050**	1	**0.050**	1
3150	3	0.0062	2 J	**0.0031**	2	1480	3	1370	3	**0.0050**	1	**0.0050**	1	**0.050**	1
1850	3	**0.0031**	2	**0.0031**	2	1120	3	1120	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2160	3	**0.0031**	2	**0.0031**	2	1170	3	1350	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2550	3	**0.0031**	2	**0.0031**	2	1360	3	1340	3	**0.0050**	1	**0.0050**	1	**0.050**	1
2070	3	**0.0031**	2	**0.0031**	2	1140	3	1100	2	**0.0050**	1	**0.0050**	1	0.307	3 J+
1930	3	**0.0031**	2	**0.0031**	2	986	3	1040	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
2110	3	**0.0031**	2	**0.0031**	2	1110	3	1060	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
2110	3	**0.0031**	2	**0.0031**	2	1120	3	1030	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	0.478	3	0.287	3 J	1.06	3 J	0.617	3 J
0.155	3	1.29	3	**0.125**	3	4.79	3	**0.75**	2 U
0.0302	3	5.31	3	0.0135	3 J	8.78	3	1.18	3
0.031	2	**0.1**	1	0.326	3 J	**0.75**	2 U	**0.75**	2 U
0.031	2	0.757	3	**0.1**	1	2.98	3	**0.75**	2 U
0.0155	3	**0.110**	2	**0.110**	2	3.73	3 J+	2.14	3 J+
0.0155	3	**0.110**	2	**0.110**	2	2.99	3 J+	1.67	3 J+
0.050	1	**0.250**	2	**0.250**	2	2.05	3 J+	1.75	3 J+
0.050	1	**0.250**	2	0.909	3 J	**0.50**	1 U	**0.50**	1 U
0.050	1	0.605	3 J	**0.155**	3	3.15	3 J+	1.13	3 J+
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	3.10	2 J+	1.71	3 J+
0.050	1	**0.155**	3	**0.155**	3	1.32	3	**0.50**	1 U
0.050	1	0.459	3 J	**0.155**	3	4.06	3	2.05	3
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	1.31	3	**0.155**	3	5.27	3 J+	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	1.14	3 J+	1.11	3 J+
0.243	3 J+	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.357	3 J	**0.155**	3	2.36	3 J	2	1 J
0.0310	2	**0.155**	3	**0.155**	3	9.28	3	6.12	3

	2	3	2	4	0	2	1	4	2	3	2	3					
Mean	5.27		12.73		16		216		4.06		5.15						
Median	5.22		12.94		15		205		4.69		4.55						
St. Deviation	0		2		5		119		2		2						
# of values	20		21		21		20		21		21						
Minimum	4.65		9.65		7		-181		1.46		2.36						
Maximum	5.94		14.92		26		423		6.78		11.10						
Lowest fifth percentile	5		10		10		128		2		3						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	100%		0%		0%		0%		0%		0%						
% of DWS exceedences	100%		0%		0%		0%		0%		0%						

HIDE this row - notes																	
RED criteria	result is <6.5 OR >8.5		result < 7														

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	2		1	3		1	2		1	2		2	3		3	3		4	3		2	2
18			17			14.30			6.6			4.4			0.165			0			0	
17			14			1.10			7.0			4.0			0.155			0			0	
5			12			38			3			3			0			0			0	
21			21			21			21			21			21			3			3	
11			2			0.08			1.6			1.6			0.010			0.0155			0.091	
29			55			158.00			11.6			9.3			0.464			0.034			0.43	
12			2			0			2			2			0			0			0	
0			2			6			4			7			4			2			0	
			10%			29%			19%			33%			19%			67%				
			2			2			11			14			2			1			1	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			100%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
			result > crit									result <20			result > crit							

4	2	4	3
0.0300		0	
0.0099		0	
0		0	
21		3	
0.0016		0.0155	
0.2460		0.0155	
0		0	
6		3	
29%		100%	
8			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L			mg/L	

3	3	4	3	2	3	5	2	5	2	3	3	2	2	4											
0.74		0.0233		1.69		0.0014		0.00110		0.19		0		0.0247											
0.73		0.0155		1.38		0.0008		0.00075		0.16		0		0.0155											
0		0		1		0		0		0		0		0											
21		21		21		21		21		21		7		21											
0.44		0.0155		1.01		0.0008		0.00075		0.12		0.075		0.0155											
1.09		0.0680		5.20		0.0045		0.00280		0.57		0.718		0.1020											
0		0		1		0		0		0		0		0											
0		17		0		19		20		16		4		17											
		81%				90%		95%		76%		57%		81%											
		4				2		1		5		1		3											
230		NA		NA		NA		0.0052		NA		NA		7.08											
250		4		250		NA		0.2		NA		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%											
																									depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																	result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			

3		0	3		1	3		3	2		3	2		3	3		3	3		2	3		2	3					
		469			12.6			0.0240			0.0170			0.285			0.138			5.6			3.4						
		125			11.4			0.0250			0.0100			0.155			0.155			4.5			3.5						
		961			12			0			0			0			0			4			1						
		21			21			21			21			21			21			21			21						
		3			2.4			0.0016			0.0050			0.075			0.073			2.6			2.1						
		3310			54.1			0.0663			0.0385			1.930			0.155			18.3			4.9						
		11			3			0			0			0			0			3			2						
		0			2			12			14			16			20			0			0						
					10%			57%			67%			76%			95%												
								5			6			3															
		87			87			NA			NA			150			150			NA			NA						
		NA			NA			6			NA			10			NA			2,000			NA						
		67%			0%			0%			0%			0%			0%			0%			0%						
		0%			0%			0%			0%			0%			0%			0%			0%						
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit									
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF				
			Aluminum						**Antimony**						**Arsenic**						**Barium**								
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved					
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					

| | | |

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-1	3			2	3			3	3	4	3			4	3					3	3
1520				1.44				0.319		0.1900				0.0338						0.949	
1320				1.01				0.282		0.0757				0.0218						0.472	
750				1				0		0				0						1	
21				21				20		21				20						21	
699				0.26				0.031		0.0133				0.01						0.116	
3620				6.04				1.220		1.3100				0.167						4.500	
812				0				0		0				0						0	
0				0				6		0				4						3	
								30%						20%						14%	
								1		3				6							
NA				4.541698889				3.905861044		NA				NA						0.433	
NA				100				NA		NA				NA						NA	
0%				5%				0%		0%				0%						52%	
0%				0%				0%		0%				0%						0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

| | | |

| | | |

	3	3
	0.143	
	0.155	
	0	
	21	
	0.059	
	0.155	
	0	
	20	
	95%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2								
2480		0.0042		0.0030		1350		1320		0.0073		0.0052		0.070									
2310		0.0031		0.0031		1300		1260		0.0050		0.0050		0.050									
700		0		0		260		270		0		0		0									
21		21		21		21		21		21		21		21									
1060		0.0031		0.0014		986		1030		0.0025		0.0025		0.016									
3970		0.0204		0.0031		2060		2110		0.0286		0.0125		0.307									
1830		0		0		1080		1040		0		0		0									
1		18		21		0		0		17		20		19									
5%		86%		100%						81%		95%		90%									
		2								3		1		1									
NA		0.007828014		0.007		NA		NA		NA		NA		NA									
NA		NA		NA		NA		NA		2		NA		NA									
0%		5%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
		depends on HARD; revised 2013		depends on Total Ag																			
		result > crit		result > crit						result > crit													
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
Silicon				**Silver[8]**						**Sodium**						**Thallium**							**Tin**
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	3	3	3	3	2	3	2	3														
0.061		0.601		0.195		2.92		1.400															
0.050		0.155		0.155		2.36		1.130															
0		1		0		2		1															
21		21		21		21		21															
0.016		0.100		0.014		0.50		0.500															
0.243		5.310		0.909		9.28		6.120															
0		0		0		1		1															
20		13		17		6		10															
95%		62%		81%		29%		48%															
		3		4		2		2															
NA		NA		NA		5.70		5.62															
NA		NA		NA		NA		NA															
0%		0%		0%		10%		5%															
0%		0%		0%		0%		0%															
						depends on Hardness		depends on Total Zn															
						result > crit		result > crit															
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium						**Zinc[4]**											
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										

MW-02D

Sample Date												
09/07/04	8.75	3	12.95	4	60	1	132	3	4.9	2	20.6	3
10/20/04	8.63	3	10.38	4	59	2	213	3	2.4	2		
10/29/04											222	3
10/30/04											21.9	3
03/22/05	8.83	3	13.12	4	46	2			3.1	2	24.9	3
05/16/05	8.78	3	13.23	4	54	2	130	2	3.6	2	26.7	3
08/17/05	8.98	3	7.53	3	52	2	102	3	4.03	3	23.9	3
11/12/05	8.57	3	12.36	4	53	2	156	3	2.72	3	23.2	3
03/23/06	7.11	3	13.54	4	54	2	183	3	3.09	3	23.3	3
05/21/06	6.55	3	14.38	4	52	2	211	3	3.18	3	23.0	2
08/23/06	7.39	3	12.64	4	49	2	153.4	4	3.66	3	23.6	3
11/02/06	7.79	3	12.16	4	64	2	207.8	4	3.05	3	25.4	3
03/22/07	8.83	3	13.12	4	27	2	141.6	4	2.87	3	24.5	3
05/11/07	8.71	3	12.79	4	31	2	98.7	3	3.86	3	23.9	3
08/22/07	8.54	3	13.49	4	32	2	119.3	4	4.13	3	22.5	3
11/12/07	8.57	3	12.7	3	48	2	114.8	4	3.8	2	22.9	3
03/21/08	7.95	3	11.27	4	45	2	86.8	3	3.4	2	21.8	3
05/19/08	8.57	3	14.5	3	54	2	124.1	4	3.48	3	23.5	3
08/24/08	9.04	3		R	30	1	243.8	4	4.04	3	22.5	3
10/23/08	7	1	13.03	4	55	2	252.8	4	2.08	3	22.8	3
08/25/09			10.54	4	96	2		R	4.24	3	21.8	3
08/18/10	8.26	3	11.95	4	102	3	112.7	4	3.95	3	21.6	3
08/31/11	8.63	3	11.51	4	49.413	FALSE	107.2	4	4.41	3	22.3	3
08/20/12	8.14	3	12.76	4	54	2	-48.2	3	3.39	3	21.7	3

60	1	58.8	3	0.2	1 J	**1.57**	3	20.5	3	0.77	2 J				
60	1	26.3	3	2.7	2	**1.57**	3	25	2	**0.155**	3				
55	2	43.8	3	0.4	1 J	**0.785**	3	25	2	0.04	1 J				
60	1	51.3	3	0.3	1 J	**0.785**	3	25	2	0.08	1 J				
55	2	48.8	3	0.6	1	**0.785**	3	26	2	0.0385	3 J				
50	1	42.5	3	**0.075**	2	**0.785**	3	26	2	**0.05**	1 U				
45.0	2	35.0	2	**0.150**	2	**0.785**	3	28.0	2	0.119	3				
60.0	1	48.8	3	**0.075**	2	**0.785**	3	28.0	2	1.24	3				
55.0	2	58.7	3	**0.075**	2	**1.57**	3	27.0	2	0.0975	3 J	**0.0155**	3	0.0975	3
55.0	2	11.2	3	**0.075**	2	**1.57**	3	28.0	2	**0.0155**	3	**0.0155**	3	**0.0155**	3
50.0	1	27.5	3	0.400	1 J	**1.57**	3	29.0	2	**0.050**	1 U	**0.0155**	3	0.0650	2
50.0	1	37.5	3	**0.075**	2	**1.57**	3	26.0	2	0.127	3				
50.0	1	23.8	3	**0.075**	2	**1.57**	3	25.1	3	0.0820	2 J				
50.0	1	40.0	1	0.505	3	**1.57**	3	26.7	3	0.0730	2 J				
59.1	3	37.5	3	0.408	3 J	**1.57**	3	28.4	3	0.0885	3 J				
56.5	3	46.3	3	**0.075**	2	**1.57**	3	26.8	3	0.115	3				
57.6	3	41.3	3	**0.077**	2	**1.57**	3	27.1	3	0.057	2				
59.5	3	35	2	0.215	3 J	**1.57**	3	27.2	3	0.0655	3 J				
60.7	3	40	1	0.313	3 J	3.2	2 J	25	2	0.108	3				
55.9	3	30	1	**0.075**	2	**1.57**	3	24.7	3	**0.050**	1 U				
54.2	3	43	2	**0.076**	2	**1.57**	3	23.9	3	0.106	3				
55.5	3	29	2	**0.075**	2	**1.57**	3	22.6	3	**0.050**	1 U				

	0.0155	3			
	0.07	1	J		
	0.209	3			
	0.0845	3			
	0.018	2	J		
	0.023	2			
	0.0130	2			
	0.0069	2	J		
J	0.0100	1		**0.0155**	3
	0.0260	2	J-		R
J	0.0210	2		**0.0155**	3
	0.0134	3			
	0.0057	2	J		
	0.0207	3			
	0.0191	3			
	0.0088	2	J		
	0.0219	3			
	0.0127	3			
	0.0139	3			
	0.0121	3			
	0.0043	2	J		
	0.0132	3			

0.833	3	0.047	2 J	1.51	3	**0.00125**	3	**0.00125**	3	0.63	2 J			**0.0155**
0.873	3	**0.0155**	3	1.64	3	**0.00125**	3	**0.00125**	3	0.21	2 J			0.031
0.774	3	0.037	2 J	1.51	3 J+	**0.00125**	3	**0.00125**	3	0.099	2 J			**0.0155**
0.755	3	0.034	2 J	1.48	3	**0.00125**	3	**0.00125**	3	0.13	2 J			**0.0155**
0.721	3	**0.0155**	3	1.43	3	**0.00125**	3	**0.00125**	3	0.22	2 J			0.031
0.712	3	**0.0155**	3	1.48	3	**0.00125**	3	**0.00125**	3	0.092	2 J			**0.0155**
0.732	3	**0.0155**	3	1.56	3	**0.00125**	3	**0.00125**	3	**0.155**	3			**0.050**
0.723	3	0.0390	2 J	1.50	2	**0.00125**	3	**0.00125**	3	**0.155**	3			**0.050**
0.717	3	0.0360	2 J	1.50	2	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.594	3	**0.0155**	3	1.28	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.050**
0.735	3	0.0400	1 J	1.42	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.732	3	0.0410	2 J	1.39	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.581	3	**0.0155**	3	1.16	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.605	3	0.0330	2 J	1.26	3	**0.00075**	2	**0.00075**	2	**0.155**	3			**0.0155**
0.603	3	0.0430	2 J	1.18	3	**0.00075**	2	**0.00075**	2	**0.155**	3			0.112
0.445	3	0.038	2 J	1.24	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	**0.075**	2	0.0973
0.576	3	0.042	2 J	1.28	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.050**
0.664	3	0.057	2 J	1.21	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.075**	2	**0.050**
0.635	3	0.034	2 J	1.32	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.668	3	0.074	2 J	1.37	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2	**0.0155**
0.638	3	0.06	1 J	1.32	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**
0.585	3	0.057	2 J	1.23	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U	**0.0155**

3	**12.5**	3 U	**12.5**	3 U	0.112	3 J	0.203	3	4.82	3	4.69	3	1.56	3 J+	1.47	3 J+
	45200	3			0.134	3 J			18.7	3			461	3		
2 J	80	1	**12.5**	3 U	0.115	3 J	0.119	3 J	4.53	3 J+	4.54	3 J+	2.37	3	1.44	3
3	17.8	3	5.96	3 J+	0.14	2 J		R	5.4	2	5.01	3	1.43	3	1.57	3
3	13.4	3 J+	6.68	3 J+	0.145	3 J+	0.142	3 J+	5.04	3	5.19	3	1.64	3	1.6	2
2 J	12.7	3	6.33	3	0.0332	3 J		R	5.06	3	4.45	3	1.54	3	1.31	3
3	8.21	3 J+	5.89	3 J+	0.111	3 J+	0.117	3 J+	4.96	3	5.28	3	1.35	3	1.45	3
1 U	6.89	3 J+	6.28	3 J+	0.131	3	0.124	3	4.49	3	4.45	3	1.54	3	1.41	3
1 UJ	6.10	2	5.83	3	0.122	3	0.135	3	4.70	2	5.29	3	1.36	3	1.43	3
3	11.1	3 J+	7.74	3 J+	0.137	3	0.130	2	5.30	2	4.99	3	1.40	2	1.44	3
1 U	19.8	3	19.2	3	0.118	3 J+	0.122	3 J+	4.67	3	4.57	3	1.53	3 J+	1.63	3 J+
3	10.4	3 J+	7.04	3 J+	0.151	3	0.144	3	5.21	3	4.99	3	1.52	3 J+	1.48	3 J+
3	8.60	2 J+	6.81	3 J+	0.143	3	0.133	3	5.01	3	4.86	3	1.76	3	1.38	3
3	11.8	3 J+	6.83	3 J+	0.112	3	0.142	3	4.86	3	4.90	2	1.49	3 J+	1.47	3 J+
3	13.5	3	4.57	3	0.133	3	0.106	3	4.78	3	4.16	3	1.49	3	1.21	3
3	6.81	3	5.18	3	0.114	3	0.105	3	4.78	3	4.75	3	1.29	3	1.25	3
3 J	6.93	3 J+	5.29	3 J+	0.108	3	0.108	3	5.22	3	5.14	3	1.56	3	1.37	3 J+
1 U	8.57	3	5.77	3	0.125	3	0.117	3	5.05	3	5.31	3	1.55	3	1.47	3
1 U	9.92	3	5.27	3	0.125	3	0.119	3	4.9	2	5.06	3	1.75	3	1.38	3
3	6.84	3 J+	4.96	3 J+	0.111	3	0.121	3	4.86	3	4.91	3	1.32	3	1.42	3
3	5.95	3 J+	5.01	3 J+	0.0398	3 J	0.0337	3 J	4.97	3	4.77	3	1.5	2 J+	1.41	3 J+
3	6.9	2 J+	6.59	3 J+	0.146	3	0.0944	3	5.28	3	5.21	3	1.83	3	1.64	3
3	5.52	3	5.3	2	0.11	2	0.111	3	5.05	3	5.2	2	1.47	3	1.34	3

0.0075	2	**0.0075**	2	**0.75**	2	**0.75**	2	**5**	1 U	**1.55**	3	**0.0155**	3	**0.0155**	3	7370	3
1.3	2			**0.75**	2			**1.55**	3			0.499	3			64000	2
0.0075	2	**0.0075**	2	**0.75**	2	**0.75**	2	**1.55**	3	**1.55**	3	**0.0155**	3	**0.0155**	3	7830	3
0.001495	4	**0.001495**	4	**0.003835**	4	**0.003835**	4	1.83	3 J+	1.44	3 J+	**0.003095**	4	**0.003095**	4	8930	3
0.001495	4	**0.001495**	4	**0.003835**	4	**0.003835**	4	1.99	3 J		R	0.00642	3 J	**0.003095**	4	9730	3
0.0075	2	**0.0075**	2	**0.00155**	3	**0.00155**	3	**1.55**	3	**1.55**	3	**0.00775**	3	**0.00775**	3	8490	3
0.0075	2	**0.0075**	2	0.0126	3 J+	0.0124	3 J+	**1.55**	3	**1.55**	3	**0.00775**	3	**0.00775**	3	8230	3
0.0120	2	**0.0120**	2	**0.0250**	2 U	**0.0250**	2 U	**0.75**	2	**0.75**	2	**0.0125**	3	**0.0125**	3	8310	3
0.0120	2	**0.0120**	2	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0125**	3	**0.0125**	3	8220	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	8380	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	9150	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8710	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8510	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8040	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8220	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7820	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8420	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8020	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8110	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7810	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	7640	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.25	3 J	2.44	3 J	**0.0075**	2	**0.0075**	2	7890	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.95	3 J	1.89	3 J	**0.0075**	2	**0.0075**	2	7700	2

6950	3	5.67	3	4.39	3	**0.05**	1 U	**0.05**	1 U	0.307	3 J+	**0.1**	1 U
		22.5	3			21.3	3			43.6	3		
7790	3	0.452	3	0.243	3	**0.05**	1 U	**0.05**	1 U	0.297	3 J+	0.224	3 J+
6810	3	3.1	2	1.42	3	0.081	2	0.075	2	0.824	3	0.152	3
7700	2	1.38	3	1.18	3	0.0307	3	0.0198	3 J	0.176	3 J+	0.102	3 J+
7630	3	2.18	3 J+	**0.1**	1 U	0.0324	3 J+	0.0316	3 J+	0.59	2 J+	0.203	3 J+
8850	3	1.63	3	1.26	3	0.0284	3 J+	0.0282	3 J+	0.318	3 J+	0.173	3 J+
7960	3	1.37	3 J+	1.31	3 J+	0.0350	2	0.0286	3	0.238	3 J+	0.149	3 J+
8630	3	1.71	3	1.41	3	0.0342	3	0.0286	3	0.216	3	0.138	3
8690	3	2.52	3 J+	1.98	3 J+	0.0296	3	0.0252	3	0.264	3 J+	0.228	3 J+
9740	3	1.74	3	1.62	3	0.0238	3	0.0220	2	0.334	3 J+	0.271	3 J+
8450	3	1.59	3 J+	1.01	3 J+	0.0234	3 J+	**0.0100**	1 U	0.359	3 J+	0.212	3 J+
8260	3	2.37	3	1.51	3	0.0236	3 J+	**0.0100**	1 U	0.249	3 J+	0.208	3 J+
8830	3	2.44	3	2.07	3	0.0258	3	0.0194	3 J	0.352	3 J+	0.229	3 J+
8010	3	3.76	3	1.58	3 J+	0.0374	3	0.0156	3 J	0.328	3	0.152	3
8060	3	2.43	3	2.36	3	0.0248	3	0.0202	3	0.187	3	0.115	3
8280	3	1.92	3	0.811	3	0.0188	3 J	0.012	2 J	0.192	3 J+	0.11	2 J+
8180	3	1.64	3	0.863	3	0.0206	3	0.0129	3 J	0.399	3 J+	0.216	3 J+
8160	3	2.13	3	1.37	3	0.0272	3	0.0181	3 J	0.313	3 J		R
8270	3	2.23	3	1.37	3	0.0267	3 J+	**0.0100**	1 U	0.543	3 J+	**0.250**	2 U
7180	3	1.86	3 J+	0.69	2 J+	**0.0100**	1 U	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
7900	2	2.05	3	1.49	3	0.019	2 J	0.0147	3 J	**0.250**	2 U	**0.250**	2 U
7700	2	0.639	3 J		R	0.0125	3 J	0.012	2 J	**0.250**	2 U	**0.250**	2 U

73.9	3 J+	**10**	1 U	**0.05**	1	**0.05**	1	527	3	507	3	**0.5**	1 U	**0.5**	1 U
35700	3			22.6	3			15200	3			1870	3		
69.5	3	**3.1**	2	0.121	3 J	**0.05**	1	567	3	568	3	3.99	3	**0.25**	2
16.9	3	4.37	3 J	0.0516	3 J	**0.011**	2	624	3	570	2	0.666	3	0.298	3
11.3	3	3.88	3 J	**0.035**	2 U	**0.035**	2 U	588	3	586	3	0.381	3 J+	0.189	3 J+
21.7	3	**3.1**	2	0.07	1 J	**0.0155**	3	647	3	598	3	0.436	3	**0.1**	1 U
7.79	3 J	**3.1**	2	**0.05**	1 U	**0.05**	1 U	631	3	662	3	0.413	3	**0.1**	1 U
3.10	2	**3.10**	2	0.0830	2 J+		R	606	3	604	3	0.247	3 J+	0.161	3 J+
8.11	3 J	**3.10**	2	0.0286	3 J		R	609	3	684	3	0.173	3	0.118	3
20.9	3	14.9	3 J	**0.050**	1 U	**0.050**	1 U	655	3	631	3	0.403	3 J+	0.201	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	0.108	3 J+	616	3	656	3	0.305	3 J+	0.215	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.050**	1 U	667	3	668	3	0.287	3 J+	0.159	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	639	3	632	3	0.304	3 J+	0.192	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	580	2	596	3	0.591	3 J+	0.237	3 J+
27.7	3	**3.10**	2	0.101	3	**0.0155**	3	589	3	532	3	0.838	3	0.174	3
43.7	3	32.6	3	**0.0155**	3	**0.0155**	3	551	3	582	3	0.485	3	0.260	2
28.4	3	23	2	**0.050**	1 U	**0.0155**	3	601	3	597	3	0.239	3 J+	0.0688	3 J+
33.4	3	26.9	3	0.0784	3 J	**0.0155**	3	599	3	620	2	0.338	3	0.118	3
27.5	3	19.1	3 J	**0.050**	1 U	**0.050**	1 U	619	3	628	3	0.43	2	0.162	3
26.2	3	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	559	3	616	3	0.66	2 J+	0.163	3 J+
8	1 J	**3.10**	2	**0.0155**	3	**0.0155**	3	602	3	562	3	0.17	2 J+	0.0703	3 J+
17.3	3 J	10.5	3 J	**0.0155**	3	**0.0155**	3	618	3	648	3	0.214	3	0.112	3
8.46	3 J	8.46	3 J	**0.0155**	3	**0.0155**	3	605	3	610	2	0.126	3 J+	0.126	3 J+

				0.155	3	**0.155**	3	2.6	2 J+	2.2	2 J+	314	3	301	3	**0.155**	3
0.706	3			0.438	3 J			35.9	3			4230	3			0.844	3
0.031	2	**0.031**	2	**0.155**	3	**0.155**	3	0.535	3	**0.1**	1 U	344	3	327	3	**0.155**	3
0.0315	3	**0.0315**	3	0.29	2 J+	0.231	3	1.42	3	0.768	3	359	3	310	2	0.0511	3
0.0315	3	**0.0315**	3	0.201	3	0.22	2	0.547	3	0.547	3	329	3	330	2	0.0338	3
0.031	2	**0.031**	2	**0.01**	1 U		R	0.976	3	0.71	2	373	3	334	3	**0.0775**	3
0.031	2	**0.031**	2	0.159	3 J		R	0.833	3	0.68	2	353	3	371	3	**0.0775**	3
0.000475	4	**0.000475**	4	0.154	3	0.152	3	0.752	3	0.644	3	343	3	327	3	**0.155**	3
0.000475	4	**0.000475**	4	0.0932	3 J		R	0.714	3	0.634	3	356	3	370	2	**0.155**	3
0.000475	4	**0.000475**	4	0.234	3	0.225	3	1.13	3	0.841	3	351	3	353	3	**0.155**	3
0.000475	4	**0.000475**	4	0.205	3	0.220	2	0.942	3	0.850	2	348	3	395	3	**0.155**	3
0.000169	3	0.00138	3 J	0.217	3	0.228	3	0.984	3 J+	0.755	3 J+	359	3	360	2	**0.155**	3
0.000169	3	**0.000475**	4	0.220	2	0.199	3	1.10	2 J+	0.803	3 J+	324	3	317	3	**0.155**	3
0.000169	3	**0.000475**	4	0.225	3	0.236	3	1.19	3 J+	0.973	3 J+	320	2	354	3	**0.155**	3
0.000169	3	**0.000475**	4	0.264	3	0.199	3	1.94	3	0.768	3	343	3	306	3	**0.155**	3
0.00075	2	**0.00075**	2	0.217	3	0.220	2	1.27	3	1.01	3	312	3	314	3	**0.155**	3
0.00075	2	**0.00075**	2	0.208	3	0.194	3	0.763	3	0.377	3	333	3	331	3	**0.155**	3
0.00075	2	0.00208	3 J	0.207	3	0.198	3	0.844	3	0.407	3	334	3	341	3	**0.155**	3
0.00179	3 J	**0.00075**	2	0.198	3	0.186	3	1.31	3	0.922	3	328	3	330	2	**0.155**	3
0.00075	2	**0.00075**	2	0.236	3	0.218	3	1.2	2 J+	**0.310**	2 U	347	3	337	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0733	3	0.0467	3 J	0.717	3	**0.310**	2 U	328	3	308	3	**0.155**	3
0.00075	2	**0.00075**	2	0.243	3	0.203	3	0.997	3	0.769	3	337	3	345	3	**0.155**	3
0.00075	2	**0.00075**	2	0.188	3	0.201	3	**0.310**	2 U	**0.310**	2 U	353	3	348	3	**0.155**	3

	0.155	3	
J			
	0.155	3	
J	0.0332	3	J
J	0.032	2	J
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
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	0.155	3	

5580	3	**0.0031**	2	**0.0031**	2	1460	3	1410	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
		0.353	3			9720	3 J+			0.118	3			2.11	3
4820	3 J+	**0.01**	1 U		R	1570	3 J+	1600	2 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
4360	3	**0.001435**	4	0.00657	3 J	1560	3	1240	3	0.0108	3 J+	**0.002125**	4	0.155	3 J
5160	3	**0.001435**	4	**0.001435**	4	1740	3	1200	2	**0.002125**	4	**0.002125**	4	0.134	3 J
5570	3	**0.0031**	2	**0.0031**	2	1710	3	1560	3	**0.0031**	2	**0.0031**	2	**0.031**	2
5610	3	**0.0031**	2	**0.0031**	2	1700	2	1730	3	**0.0031**	2	**0.0031**	2	**0.031**	2
5180	3	**0.0031**	2	**0.0031**	2	1640	3	1600	2	**0.0025**	2	**0.0025**	2	**0.050**	1 U
5480	3	**0.0031**	2	**0.0031**	2	1660	3	1890	3	0.0074	2 J	**0.0025**	2	**0.0155**	3
5100	2	**0.0031**	2	**0.0031**	2	1700	2	1640	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4460	3	**0.0031**	2	**0.0031**	2	1640	3	1750	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5160	3	**0.0031**	2	**0.0031**	2	1780	3	1760	3	**0.0050**	1	0.0122	3 J	**0.050**	1
4830	3	**0.0031**	2	**0.0031**	2	1650	3	1640	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5150	3	**0.0031**	2	**0.0031**	2	1550	3	1670	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4570	3	**0.0031**	2	**0.0031**	2	1580	3	1410	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4890	3	**0.0031**	2	**0.0031**	2	1460	3	1550	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5060	3	**0.0031**	2	**0.0031**	2	1570	3	1550	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5160	3	**0.0031**	2	**0.0031**	2	1580	3	1620	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5050	3	**0.0031**	2	**0.0031**	2	1620	3	1630	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4850	3	**0.0031**	2	**0.0031**	2	1460	3	1650	3	0.0211	3	**0.0050**	1	**0.100**	1 U
4760	3	**0.0031**	2	**0.0031**	2	1590	3	1510	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5140	3	**0.0031**	2	**0.0031**	2	1640	3	1740	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5150	3	**0.0031**	2	**0.0031**	2	1630	3	1620	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	1.89	3	1.62	3	**0.235**	3	**0.235**	3
		45.6	3			109	3		
0.155	3	2.02	3	1.87	3	**0.75**	2 U	**0.235**	3
0.0302	3	2.26	3	2.1	2	0.779	3 J	**0.2345**	4
0.0302	3	2.05	3	2.06	3	**0.2345**	4	**0.50**	1 U
0.031	2	1.93	3	2.06	3	**0.75**	2 U	**0.75**	2 U
0.031	2	1.99	3	2.19	3	**0.75**	2 U	**0.75**	2 U
0.110	2	1.87	3	1.73	3	1.45	3 J+	1.19	3 J+
0.0155	3	1.59	3 J		R	0.605	3 J+	0.653	3 J+
0.050	1	1.77	3	2.29	3	**0.50**	1 U	1.63	3 J+
0.050	1	2.83	3	2.87	3	**0.50**	1 U	1.65	3 J+
0.050	1	1.84	3	1.76	3	1.59	3 J+	1.11	3 J+
0.050	1	2.05	3	1.90	2	**0.50**	1 U	**0.50**	1 U
0.050	1	1.83	3	1.66	3	6.34	3 J+	1.96	3 J+
0.050	1	1.57	3	1.52	3	**0.50**	1 U	**0.50**	1 U
0.050	1	1.83	3	1.88	3	0.620	2 J	0.632	3 J
0.050	1	1.97	3	1.85	3	1.14	3 J+	**0.50**	1 U
0.050	1	1.96	3	1.87	3	4.32	3 J		R
0.050	1	1.86	3	1.86	3	2.37	3 J+	**0.50**	1 U
	R	1.84	3	1.86	3	**1.55**	3 U	**1.55**	3 U
0.050	1	2.03	3	1.98	3	**1.55**	3 U		R
0.0310	2	1.99	3	1.94	3	2.17	3 J	0.827	3 J
0.0310	2	2.17	3	2.16	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3					
Mean	8.27		12.38		53		142		3.5		31.8						
Median	8.57		12.76		53		131		3.5		23.0						
St. Deviation	1		2		18		67		1		42						
# of values	21		21		22		20		22		23						
Minimum	6.55		7.53		27		-48		2.1		20.6						
Maximum	9.04		14.50		102		253		4.9		222.0						
Lowest fifth percentile	7		10		30		80		2		22						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	62%		0%		0%		0%		0%		0%						
% of DWS exceedences	62%		0%		0%		0%		0%		0%						

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	2		1	3		3	2		2	3		0	2		4	3		4	3		4	3
55			38.9			0.3			1.43			26.0			0.16			0			0	
55			40.0			0.1			1.57			26.0			0.08			0			0	
4			11			1			1			2			0			0			0	
22			22			22			22			22			22			3			3	
45			11.2			0.1			0.79			20.5			0.02			0.0155			0.0155	
61			58.8			2.7			3.20			29.0			1.24			0.0155			0.0975	
50			24			0			1			23			0			0			0	
0			0			12			21			0			6			3			1	
						55%			95%						27%			100%			33%	
						7			1						9						2	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
			result > crit									result <20			result > crit							

4	3	4	3
0.0290		0	
0.0150		0	
0		0	
22		2	
0.0043		0.0155	
0.2090		0.0155	
0		0	
1		2	
5%		100%	
6			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				**Orthophosphate**	
		mg/L				mg/L

3	3	3	2	2	3	5	2	5	2	3	3	3	2	4									
0.677		0.037		1.38		0.00109		0.00109		0.18		0		0.0329									
0.690		0.038		1.38		0.00075		0.00075		0.16		0		0.0155									
0		0		0		0		0		0		0		0									
22		22		22		22		22		22		7		22									
0.445		0.016		1.16		0.00075		0.00075		0.09		0.075		0.0155									
0.873		0.074		1.64		0.00250		0.00250		0.63		0.25		0.1120									
1		0		1		0		0		0		0		0									
0		6		0		22		22		16		7		18									
		27%				100%		100%		73%		100%		82%									
		16								6				3									
230		NA		NA		NA		0.0052		NA		NA		5.91									
250		4		250		NA		0.2		NA		NA		NA									
0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%									
														depends on field pH and field Temp									
result > crit		result > crit		result > crit				result > crit						result > crit									
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N		
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		

3		2	3		2	3		3	3		3	3		2	3		2	3		2	3		2	3		2	3		
		1977.8			7.2			0.118			0.121			5.55			4.90			21.53			1.44					
		9.9			6.1			0.122			0.120			4.97			4.95			1.53			1.44					
		9422			3			0			0			3			0			96			0					
		23			22			23			20			23			22			23			22					
		5.5			4.6			0.033			0.034			4.49			4.16			1.29			1.21					
		45200.0			19.2			0.151			0.203			18.70			5.31			461.00			1.64					
		6			5			0			0			5			4			1			1					
		1			2			0			0			0			0			0			0					
		4%			9%																							
								4			2																	
		87			87			NA			NA			150			150			NA			NA					
		NA			NA			6			NA			10			NA			2,000			NA					
		4%			0%			0%			0%			0%			0%			0%			0%					
		0%			0%			0%			0%			4%			0%			0%			0%					
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit								
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF				
			Aluminum						**Antimony**						**Arsenic**						**Barium**								
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved					
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3										
0.0666		0.0105		0.10		0.08		2		1.36		0.0307		0.0093		10680											
0.0125		0.0125		0.01		0.01		1		1.25		0.0075		0.0075		8220											
0		0		0		0		1		0		0		0		11640											
23		22		23		22		23		21		23		22		23											
0.0015		0.0015		0.00		0.00		1		0.75		0.0031		0.0031		7370											
1.3000		0.0125		0.75		0.75		5		2.44		0.4990		0.0185		64000											
0		0		0		0		1		1		0		0		7646											
22		22		22		21		19		18		21		22		0											
96%		100%		96%		95%		83%		86%		91%		100%													
								2		2		1															
NA		NA		NA		NA		NA		NA		0.087		0.085		NA											
4		NA		NA		NA		NA		NA		5		NA		NA											
0%		0%		0%		0%		0%		0%		4%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
												depends on Hardness		depends on Hardness													
result > crit												result > crit		result > crit													
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
-1	3			2	3			2	3		4	3		4	3		3	3		3	3
8090				3.01				1.43			0.96			0.02			2.210			0.2	
8110				2.05				1.37			0.03			0.02			0.307			0.2	
660				4				1			4			0			9			0	
22				23				21			23			22			23			21	
6810				0.45				0.10			0.01			0.01			0.176			0.1	
9740				22.50				4.39			21.30			0.08			43.600			0.3	
6962				1				0			0			0			0			0	
0				0				1			3			6			3			5	
								5%			13%			27%			13%			24%	
											3			8							
NA				10.98				10.56276			NA			NA			2.519			2.419	
NA				100				NA			NA			NA			NA			NA	
0%				4%				0%			0%			0%			4%			0%	
0%				0%				0%			0%			0%			0%			0%	
				depends on Hardness				depends on Hardness									depends on Hardness				
				result > crit				result > crit									result > crit			result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
	Iron						**Lead[4]**						**Magnesium**						**Manganese**				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
1	3		0	2		3	2		4	3		0	3		0	3		3	3		3	3	
1573.6			10			1.03			0.03			1239			607			81.8			0.2		
17.3			10			0.05			0.02			606			607			0.4			0.2		
7439			8			5			0			3044			44			390			0		
23			22			23			20			23			22			23			22		
3.1			3			0.02			0.01			527			507			0.1			0.1		
35700.0			33			22.60			0.11			15200			684			1870.0			0.5		
8			3			0			0			552			534			0			0		
5			13			15			19			0			0			1			4		
22%			59%			65%			95%									4%			18%		
5			6			5																	
1000			1000			0.453			0.459			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
4%			0%			4%			0%			0%			0%			0%			0%		
0%			0%			4%			0%			0%			0%			4%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				
			µg/L						µg/L						µg/L						µg/L				
6	3	6	3	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0		0		0.200		0.194		2.6		0.7		509		337		0.168									
0		0		0.207		0.201		1.0		0.7		343		333		0.155									
0		0		0		0		7		0		811		24		0									
22		21		23		19		23		22		23		22		23									
0.000169		0.0004745		0.010		0.047		0.3		0.1		312		301		0.034									
0.706		0.0315		0.438		0.236		35.9		2.2		4230		395		0.844									
0		0		0		0		1		0		315		306		0									
20		19		3		2		1		4		0		0		20									
91%		90%		13%		11%		4%		18%						87%									
1		2		1		1										3									
0.77		0.77		NA		NA		14.27		14.23		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		4%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.137	
	0.155	
	0	
	22	
	0.032	
	0.155	
	0	
	20	
	91%	
	2	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2	
5050			0.0185			0.0032			1970			1590			0.0111			0.0050			0.154		
5120			0.0031			0.0031			1630			1620			0.0050			0.0050			0.050		
340			0			0			1690			160			0			0			0		
22			23			21			23			22			23			22			23		
4360			0.0014			0.0014			1460			1200			0.0021			0.0021			0.016		
5610			0.3530			0.0066			9720			1890			0.1180			0.0125			2.110		
4466			0			0			1460			1249			0			0			0		
0			22			20			0			0			19			21			20		
			96%			95%									83%			95%			87%		
						1									1			1			2		
NA			0.271397325			0.231			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			4%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								
	Silicon			**Silver[8]**						**Sodium**						**Thallium**							**Tir**
	Dissolved		Total				Dissolved			Total			Dissolved			Total			Dissolved			Total	
	µg/L		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	

3	2	2	3	2	3	3	3	3	3														
0.056		3.86		1.95		6.076		0.873															
0.050		1.96		1.88		0.779		0.702															
0		9		0		22		1															
21		23		21		23		20															
0.016		1.57		1.52		0.235		0.235															
0.155		45.60		2.87		109.000		1.960															
0		2		2		0		0															
20		0		0		12		12															
95%						52%		60%															
						3		2															
NA		NA		NA		32.72		32.26															
NA		NA		NA		NA		NA															
0%		0%		0%		4%		0%															
0%		0%		0%		0%		0%															
										depends on Hardness								depends on Total Zn					
										result > crit								result > crit					
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N							ZN_NSF	ZN_NVF	ZN_F				ZN_FSF	ZN_FVF
						Vanadium												**Zinc[4]**					
	Dissolved			Total			Dissolved							Total								Dissolved	
	µg/L			µg/L			µg/L							µg/L								µg/L	

MW-03D

Sample Date														
05/16/05	6.73	3	8.3	2		150		2	197	3		5.53	3	82.5	3
08/22/05	7.06	3	8.19	3		144		3	29	2		6.01	3	66.8	3
03/24/06	6.87	3	9.29	3		150		2	279	3		3.68	3	61.9	3
05/23/06	5.43	3	8.82	3		135		3	258.8	4		7.21	3	61.2	3
11/02/06	6.76	3	7.5	2		170		2	272.7	4		4.99	3	62.7	3
05/09/07	6.89	3	8.73	3		95		2	120.3	4		5.43	3		
05/10/07	7	1	9.47	3		90		1	61.8	3		5.91	3		
08/16/07	6.71	3	8.5	2		92		2	105.7	4		5.13	3		
08/17/07														58.4	3
11/11/07	6.75	3	8.95	3		144		3	207.8	4		5.65	3	60.2	3
03/22/08	6.25	3	11.21	4		128		3	103	3		4.54	3		
05/22/08	6.72	3	9.41	3		156		3	142.1	4		4.51	3	64.2	3
08/27/08	6.88	3	9.78	3		146		3	203.4	4		5.64	3	62.5	3
10/21/08	6.88	3	8.75	3		153		3	114.3	4		1.81	3	63.6	3
05/23/09	7.19	3	7.88	3		160		2	117.1	4		5.64	3	64	2
08/27/09	6.87	3	10.4	3		235		3	124.3	4		4.19	3	68.7	3
10/18/09	7.2	2	10.65	4		149		3	37.8	3		3.5	2	67.2	3
05/19/10	7.35	3			R	162		3	116.7	4		9.47	3		
08/19/10	6.93	3	8.68	3		144		3	172	3		5.25	3	60.3	3
10/22/10	7.23	3	11.52	4		128		3	Q -62.4	3	Q	4.67	3	51.3	3
05/26/11	6.73	3	8.78	3		113		3	119.7	4		4.44	3	62.8	3
09/01/11	6.66	3	9.5	2		130.1118	FALSE		127.5	4		3.51	3	64.3	3
10/28/11	7.01	3	10.04	4		161		3	220.3	4		2.19	3	62.7	3
05/21/12	6.53	3	8.26	3		154		3	50.5	3		3.15	3	69.2	3
08/21/12	6.74	3	6.07	3		155		3	-169	3		4.37	3	65.3	3
10/11/12	6.66	3	6.26	3		157		3	24.8	3		4.28	3	65.8	3

155	3	109	3	15.1	3	5.5	2	46.5	3	0.24	2				
145	3	87.5	3	**0.075**	2	3.63	3 J	43.5	3	0.197	3				
150	2	83.7	3	**0.147**	3	3.50	2 J	179	3	0.394	3				
150	2	92.5	3	2.20	2	5.75	3	7.00	1 J	0.172	3				
140	2	100	1	2.70	2	3.75	3 J	45.0	2	0.0630	2 J	**0.0155**	3	0.0500	1
150	2	98.8	3	**0.150**	2	7.75	3 J	45.2	3	0.240	2				
150	2	103	3	2.10	2	4.50	2 J	47.0	2	0.246	3				
152	3	121	3	43.4	3	3.3	2 J	45.8	3	0.315	3 J				
148	3	81.3	3	74.5	3	4.18	3 J	46.3	3	0.0504	3				
159	3	101	3	39.9	3	3.68	3 J	48.9	3	0.256	3				
153	3	96.2	3	21.3	3	**1.57**	3	46	2	0.309	3				
161	3	98.8	3	11.2	3	3.9	2 J	47	2	0.3	1				
157	3	98.8	3	21	2	**1.57**	3	45.1	3	0.263	3				
146	3	86	2	40.2	3	3.91	3 J	43.1	3	0.253	3				
149	3	89	2	15.6	3	3.6	2 J	41.2	3	0.218	3				
157	3	97	2	18.1	3	5.76	3 J	45	2	0.213	3				
157	3	103	3	2.41	3	3.72	3 J	45.6	3	0.266	3 J-				
159	3	98	2	1.18	3	**1.57**	3	45.6	3	0.195	3				
158	3	88	2	1.49	3	**1.57**	3	44.1	3	0.263	3 J-				
170	2	76	2	1	1	**5.0**	1 U	46.2	3	0.252	3				
150	2	97	2	1.63	3	**1.57**	3	47.8	3	0.289	3				

	0.098	2		
	0.023	2		
	0.0130	2		
	0.0280	2		
J	0.0340	2		R
	0.0181	3		
	0.0270	2		
	0.0703	3		
	0.0929	3		
	0.0507	3		
	0.0422	3		
	0.0163	3		
	0.0212	3		
	0.0515	3		
	0.028	2		
	0.0333	3		
	0.0073	2	J	
	0.0129	3		
	0.0121	3		
	0.0154	3		
	0.0123	3		

0.8	1	0.089	2 J	28.6	3	**0.00125**	3	**0.00125**	3	0.29	2 J				**0.0155**
0.746	3	0.071	2 J	28.3	3	**0.00125**	3	**0.00125**	3	0.27	2 J				**0.0155**
0.788	3	0.0630	2 J	30.5	3	**0.0025**	2 UJ	**0.0025**	2 UJ	**0.155**	3				0.107
0.769	3	0.113	3	28.7	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
0.654	3	0.0690	2 J	27.3	3	**0.00075**	2	0.0020	1 J	**0.155**	3				0.703
0.660	2	0.0830	2 J	27.0	2	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0631
0.685	3	0.0830	2 J	27.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.687	3	0.073	2 J	35.7	3	**0.0025**	2 U	0.0053	2	**0.155**	3	**0.075**	2		**0.0155**
0.76	2	0.183	3	28.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.663	3	0.075	2 J	25.7	3	**0.00075**	2	**0.00075**	2	0.35	2 J	**0.075**	2		**0.050**
0.669	3	0.065	2 J	27.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.394	3	0.079	2 J	24.2	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.234	3 J		**0.0155**
0.662	3	0.071	2 J	25.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.719	3	0.117	3	27.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.792	3	0.134	3	28.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.157	3 J		**0.0155**
0.76	2	0.116	3	29.1	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.759	3	0.1	1	27	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.681	3	0.117	3	25.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.627	3	0.111	3	27.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.662	3	**0.050**	1 U	25.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.688	3	0.072	2 J	26.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.248	3 J		**0.050**

3	8650	3	2.26	3 J+	0.308	3 J+	0.0766	3 J+	9.76	3	0.966	3	95.3	3	3.56	3
3	28.7	3	2.71	3	0.067	2 J+	0.0506	3 J+	1.4	2	1.04	3	3.01	3	2.47	3
3	12.7	3 J+		R	0.0596	3 J		R	0.567	3 J		R	3.00	1	2.90	2
1 U	112	3	**1.00**	1 U	0.0938	3	0.0542	3	0.849	3	0.727	3	4.11	3	2.73	3
3	85.4	3	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	0.444	3 J	3.56	3 J+	3.00	1 J+
3 J	17.1	3 J+	**1.00**	1 U	0.0690	2	0.0500	1	0.808	3	0.875	3	2.83	3	2.60	2
3	47.0	2	2.22	3	0.290	2	0.0420	2 J	0.558	3	0.738	3	3.27	3	2.85	3
3	555	3	**1.00**	1 U	0.0608	3	0.0554	3	1.52	3	1.05	3	10.3	3	3.43	3
1 U	1090	3	8.73	3	0.0846	3	0.0469	3 J	1.74	3	0.933	3	14.4	3	3.56	3
1 U	653	3	6.49	3	0.0717	3	0.0583	3	1.51	3	1.1	2	10.8	3	3.43	3
3	405	3	12.4	3	**0.0075**	2	**0.0075**	2	1.19	3	0.996	3	7.4	2	3.5	2
3	291	3	3.84	3 J+	**0.0075**	2	**0.0075**	2	1.06	3	0.832	3	6.03	3	3	1
3	266	3	2.02	3	0.0581	3	0.0444	3 J	1.37	3	1.11	3	6.11	3	3.43	3
3	517	3	18.4	3 J+	**0.0075**	2	0.0438	3 J	1.4	2	0.941	3	9.48	3	3.34	3 J+
3	247	3	3.36	3 J+	0.113	3	0.06	1	2.61	3	1.83	3	8.94	3	4.81	3
3	343	3	7.2	2 J+	2.35	3	**0.0250**	2 U	1.29	3	1.07	3	7.73	3 J+	3.53	3 J+
3	28.1	3 J+	**1.00**	1 U	0.0268	3 J	0.0206	3 J	1.07	3	0.833	3	3.7	2	3.11	3
3	51.6	3	4.62	3 J+	0.0823	3	0.0446	3 J	0.907	3	0.919	3	3.48	3	3.47	3
3	299	3	**1.00**	1 U	0.0547	3	0.0509	3	1.12	3	0.82	2	7.34	3 J+	3.21	3 J+
3	20.6	3	**1.00**	1 U	0.0454	3 J	0.0373	3 J	1.08	3	1.02	3	2.98	3	2.81	3
1 U	8.88	3 J+	9.43	3 J+	0.0421	3 J	0.0481	3 J	0.838	3	0.867	3	3.08	3	3.35	3

0.346	3	**0.001495**	4	0.0432	3	**0.003835**	4	3.22	3 J		R	0.159	3	**0.003095**	4	21000	2
0.0075	2	**0.0075**	2	0.0146	3	**0.00155**	3	**1.55**	3	**5**	1 U	**0.00775**	3	**0.00775**	3	18500	3
0.0120	2	**0.060**	1	**0.0075**	2	**0.0375**	3	**0.75**	2	**3.75**	3	**0.0125**	3	**0.0625**	3	16800	3
0.0120	2	**0.0120**	2	**0.0075**	2	**0.0075**	2	2.12	3 J	2.44	3 J	**0.0125**	3	**0.0125**	3	16700	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	17400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.51	3 J	**1.25**	3	0.0196	3 J	**0.0075**	2	15900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0166	3 J	**0.0075**	2	17000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0157	3 J	**0.0075**	2	17500	3
0.0274	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0168	3 J	**0.0075**	2	17000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	0.0176	3 J	**0.0075**	2	17400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	17400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	19300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	18400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	16200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**2.50**	2 U	**2.50**	2 U	0.0355	3 J	0.0186	3 J	12800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.43	3 J	3.32	3 J	**0.0075**	2	**0.0075**	2	17200	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	3.64	3 J	3.13	3 J	**0.0075**	2	**0.0075**	2	17600	3
0.0125	3	**0.0125**	3	0.0915	3	**0.0075**	2	1.71	3 J	2.01	3 J	**0.0075**	2	**0.0075**	2	17500	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	5.02	3	**2.50**	2 U	**0.0075**	2	**0.0075**	2	19000	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.57	3 J	2.28	3 J	**0.0075**	2	**0.0075**	2	17900	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.86	3 J	2	1 J	**0.0075**	2	**0.0075**	2	18000	2

18200	3	8.25	3	0.14	2	J	5.07	3	0.0164	3	J	16.1	3	0.0699	3	J+
16000	2	0.766	3	J+	0.34	2	J+	0.0484	3	J+	0.048	2	J+	0.253	3	J+	0.277	3	J+
17200	3	0.217	3	J+		R		0.0512	3	J		R		0.191	3	J+	0.207	3	J+
17400	3	0.378	3		0.296	3		0.0974	3		0.0364	3		0.427	3		0.264	3	
19700	3	**0.050**	1		**0.050**	1		0.0702	3		0.0290	2		0.362	3	J+	0.161	3	J+
16200	3	0.155	3	J	0.133	3	J	0.0554	3		0.0270	2		0.782	3	J+	0.257	3	J+
19500	3	0.207	3	J+	**0.100**	1	U	0.0358	3		0.0294	3		0.794	3		0.192	3	
17400	3	0.765	3		0.279	3		0.303	3		0.0217	3		1.58	3	J+	0.168	3	J+
16800	3	1.09	3		0.284	3		0.487	3		0.0263	3		1.99	3		0.179	3	J+
18200	3	0.793	3		0.291	3		0.31	2		0.0273	3		1.33	3		0.274	3	
17500	3	0.685	3	J+	0.424	3	J+	0.211	3		0.0531	3		1.05	3		**0.250**	2	U
19300	3	0.295	3		**0.100**	1	U	0.155	3	J+	0.0233	3	J+	0.794	3	J+	**0.250**	2	U
17900	3	0.467	3		0.219	3		0.153	3		0.0249	3		0.691	3		**0.250**	2	U
16400	3	0.742	3	J+	0.297	3	J+	0.326	3	J+	0.0337	3	J+	1.51	3	J+	**0.250**	2	U
14700	3	1.99	3		0.995	3		0.145	3		0.0255	3		1.94	3		**0.250**	2	U
17000	2	0.545	3		**0.100**	1	U	0.157	3		0.0244	3		0.821	3		0.178	3	J
17600	3	0.578	3		**0.100**	1	U	0.0393	3		0.0243	3		**0.250**	2	U	**0.250**	2	U
17700	3	0.361	3		**0.100**	1	U	0.0383	3		0.022	2		0.95	2		**0.250**	2	U
20200	3	0.362	3	J+	0.21	2	J+	0.169	3		0.0212	3		0.613	3		**0.250**	2	U
17700	3	0.194	3	J	0.174	3	J	0.035	2		0.03	1		**0.250**	2	U	**0.250**	2	U
18500	3	0.262	3		**0.0310**	2		0.053	2		0.0388	3		**0.250**	2	U	**0.250**	2	U

10000	1	**1.325**	4	7.33	3	0.161	3 J+	7310	3	4540	3	609	3	10.8	3
49.1	3	**3.1**	2	0.356	3	0.32	2	4980	3	4540	3	1.52	3	**0.1**	1 U
11.3	3 J	**15.5**	3	0.194	3 J+		R	4830	3	4710	3	2.67	3	0.176	3 J+
139	3	**3.10**	2	0.118	3	**0.0250**	2 U	4720	3	4680	3	8.58	3	0.124	3
96.9	3	**10.0**	1 U	0.186	3 J+	**0.0155**	3	4680	3	5010	3	5.34	3	0.0830	2 J+
10.0	1 U	**3.10**	2	0.678	3 J+	0.198	3 J+	4530	3	4520	3	1.14	3 J+	0.117	3 J+
79.8	3	27.3	3	0.179	3	**0.0155**	3	4310	3 J		R	2.01	3	0.110	2
574	3	26.2	3	0.511	3	**0.0155**	3	4970	3	4950	3	35.7	3	0.336	3 J+
1140	3	60.6	3	0.649	3	**0.0155**	3	4900	2	4780	3	38.9	3	1.12	3
705	3	54.9	3	0.404	3 J+	**0.0155**	3	4870	3	5260	3	26.2	3	0.5	1
467	3	108	3	0.256	3	**0.0155**	3	5020	3	5090	3	16.1	3	0.632	3
334	3	**10.0**	1 U	0.164	3 J+	**0.050**	1 U	4990	3	5340	3	14.2	3 J+	0.752	3 J+
267	3	**3.10**	2	0.195	3	**0.0155**	3	5170	3	5050	3	15.7	3	2.4	2
575	3	21.6	3	0.414	3	**0.0155**	3	4830	3	5130	3	32.7	3	5.11	3 J+
308	3	**3.10**	2	0.322	3	0.0831	3 J	4700	2	4760	3	17.3	3	1.41	3
319	3	**10.0**	1 U	0.205	3	**0.0155**	3	4820	3	4760	3	13.2	3	1	1
55.8	3	**3.10**	2	**0.0155**	3	**0.0155**	3	4940	3	5070	3	3.46	3	1.76	3
53.6	3	**3.10**	2	0.183	3	**0.0155**	3	4590	3	4770	3	3.69	3	1.4	2
302	3	**10.0**	1 U	0.2	1	**0.0155**	3	5290	3	5670	3	27.6	3	0.213	3 J+
16.9	3 J	10	1 J	**0.0155**	3	**0.0155**	3	4980	3	4900	2	1.1	2 J+	0.0864	3 J+
26.9	3	11.8	3 J	**0.0155**	3	**0.0155**	3	5080	3	5240	3	2.9	2 J+	0.172	3 J+

0.0315	3	**0.0315**	3	1.46	3 J		R	8.18	3	0.24	2	2150	3	899	3	0.789	3
0.031	2	0.116	3 J	1.94	3	1.75	3	0.615	3 J		R	955	3	866	3	1.11	3
0.000475	4	**0.000475**	4	1.79	3 J		R	0.438	3 J		R	863	3 J		R	0.451	3
0.000475	4	0.00110	2 J	1.56	3	1.71	3	0.456	3	0.356	3	867	3	892	3	0.568	3
0.000475	4	**0.000475**	4	1.71	3	1.95	3	0.445	3	0.407	3	862	3	962	3	0.384	3
0.000169	3	**0.000475**	4	1.71	3	1.79	3	1.09	3 J+	0.584	3 J+	802	3	776	3	0.653	3
0.000889	3 J	**0.000475**	4	1.68	3	1.88	3	0.442	3	0.447	3	831	3	962	3	0.672	3
0.00075	2	**0.00075**	2	1.55	3	1.67	3	0.928	3	0.275	3	980	2	935	3	0.887	3
0.00228	3 J	**0.00075**	2	1.65	3	1.71	3	1.16	3	0.465	3	1040	3	918	3	0.733	3
0.00196	3 J	**0.00075**	2	1.63	3	1.8	2	1.15	3	0.732	3	994	3	944	3	0.748	3
0.00075	2	**0.00075**	2	1.5	2	1.62	3	0.6	1 J	0.395	3 J	958	3	924	3	0.614	3
0.00075	2	**0.00075**	2	1.91	3	2.06	3	0.637	3 J+	**0.310**	2 U	1020	3	963	3	0.731	3
0.00158	3 J	**0.00075**	2	1.74	3	1.82	3	0.515	3 J	0.348	3 J	1000	1	949	3	0.814	3
0.00329	3 J	**0.00075**	2	1.34	3	1.61	3	1.54	3	**0.310**	2 U	958	3	893	3	0.68	2
0.00197	3 J	**0.00075**	2	0.897	3 J		R	0.733	3	**0.310**	2 U	1400	2	1150	3	0.731	3
0.00075	2	**0.00075**	2	1.66	3	1.72	3	0.822	3	0.421	3 J	950	2	899	3	0.664	3
0.00075	2	**0.00075**	2	1.89	3	1.93	3	0.792	3	0.64	2	897	3	897	3	0.824	3
0.00075	2	**0.00075**	2	1.79	3	1.86	3	0.609	3 J	0.402	3 J	902	3	911	3	0.627	3
0.00075	2	**0.00075**	2	1.73	3	1.96	3	0.632	3 J+	0.698	3 J+	1010	3	1000	1	0.75	2
0.00075	2	**0.00075**	2	1.77	3	1.8	2	0.648	3	0.655	3	919	3	903	3	0.695	3
0.00075	2	**0.00075**	2	1.84	3	1.9	2	0.688	3 J+	0.675	3 J+	923	3	948	3	0.657	3

	0.768	3	
	0.91	2	
J			R
J	0.721	3	J
J	0.708	3	J
J	0.634	3	J
J	0.746	3	J
J	0.803	3	J
J	0.635	3	J
J	0.788	3	J
J	0.699	3	J
J	0.792	3	J
J	0.79	2	J
J	0.662	3	J
J	0.708	3	J
J	0.758	3	J
J	0.735	3	J
J	0.758	3	J
J	0.8	1	J
J	0.602	3	J
J	0.706	3	J

8220	3	0.0788	3	**0.001435**	4	4560	3	3200	2	0.0624	3	**0.002125**	4	0.683	3
8300	2	**0.0031**	2	**0.0031**	2	3790	3	3410	3	0.0076	2 J	**0.0031**	2	**0.031**	2
42200	3	**0.0031**	2	**0.0155**	3	3540	3	3570	3	**0.0025**	2	**0.0125**	3	**0.050**	1 U
7700	2	**0.0031**	2	**0.0031**	2	3470	3	3480	3	**0.0025**	2	**0.0025**	2	**0.0155**	3
7990	3	**0.0031**	2	**0.0031**	2	3410	3	3700	2	**0.0050**	1	**0.0050**	1	**0.050**	1
8240	3	0.0074	2 J	**0.0031**	2	3360	3	3420	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8820	3	**0.0031**	2	**0.0031**	2	3160	3 J		R	**0.0050**	1	**0.0050**	1	**0.050**	1
8340	3	**0.0031**	2	**0.0031**	2	3660	3	3660	3	**0.0050**	1	**0.0050**	1	**0.050**	1
8220	3	**0.0031**	2	**0.0031**	2	3820	3	3750	3	**0.0050**	1	**0.0050**	1	0.258	3
8610	3	**0.0031**	2	**0.0031**	2	3730	3	4030	3	**0.0050**	1	**0.0050**	1	0.122	3 J
8410	3	**0.0031**	2	**0.0031**	2	3800	2	3880	3	**0.0050**	1	**0.0050**	1	0.16	2 J
8300	2	**0.0031**	2	**0.0031**	2	3730	3	4080	3	**0.0050**	1	**0.0050**	1	0.449	3 J+
8300	2	**0.0031**	2	**0.0031**	2	3910	3	3820	3	**0.0050**	1	**0.0050**	1	0.184	3 J
8160	3	**0.0031**	2	**0.0031**	2	3640	3	3920	3	**0.0050**	1	**0.0050**	1	**0.050**	1
9500	2	0.0167	3 J	**0.0031**	2	4440	3	4080	3	**0.0050**	1	**0.0050**	1	2	1
8090	3	**0.0031**	2	**0.0031**	2	3630	3	3580	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
8010	3	**0.0031**	2	**0.0031**	2	3650	3	3710	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
7720	3	**0.0031**	2	**0.0031**	2	3350	3	3490	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
8940	3	**0.0031**	2	**0.0031**	2	3870	3	4070	3	**0.0031**	2	**0.0031**	2	0.0869	3 J
8160	3	**0.0031**	2	**0.0031**	2	3720	3	3600	2	**0.0031**	2	**0.0031**	2	**0.0310**	2
8620	3	**0.0031**	2	**0.0031**	2	3770	3	3900	2	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.0302	3	16.1	3	0.181	3	41.7	3	1.25	3
0.031	2	0.24	2 J	0.249	3 J	**0.75**	2 U	**0.75**	2 U
	R	**0.110**	2		R	1.36	3 J+		R
0.0155	3	0.388	3 J	**0.110**	2	0.922	3 J+		R
0.050	1	0.945	3 J	**0.250**	2	1.82	3 J+	**0.50**	1 U
0.050	1	0.333	3 J	**0.155**	3	3.26	3 J+	1.07	3 J+
0.050	1	**0.155**	3	**0.155**	3	2.81	3	1.16	3
0.050	1	1.26	3	**0.155**	3	3.59	3 J+	**0.50**	1 U
0.050	1	2.51	3	**0.155**	3	3.89	3 J+	**0.50**	1 U
0.050	1	1.56	3	**0.155**	3	3.27	3 J+	2.38	3 J+
0.050	1	0.879	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	1.02	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.778	3 J	**0.155**	3	2.23	3 J	**1.55**	3 U
0.050	1	1.4	2	0.329	3 J	6.02	3 J+	**1.55**	3 U
0.100	1 U	1.81	3	0.835	3 J	39.3	3 J+	10.6	3 J+
0.050	1	1.07	3	0.352	3 J	3.62	3	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	1.11	3 J	0.599	3 J
0.0310	2	**0.155**	3	**0.155**	3	4.94	3	**1.55**	3 U
0.0310	2	0.542	3 J	**0.155**	3	5.3	2	3.21	3
0.0713	3 J	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	2.54	3 J	4	1

	2	3	2	3	0	3	1	4	2	3	1	3
Mean	6.80		9.0		144		119		4.83		64.1	
Median	6.87		8.8		149		120		4.67		63.6	
St. Deviation	0		1		29		102		2		6	
# of values	25		24		25		25		25		21	
Minimum	5.43		6.1		90		-169		1.81		51.3	
Maximum	7.35		11.5		235		279		9.47		82.5	
Lowest fifth percentile	6		6		93		-45		2		58	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	8%		0%		0%		0%		0%		0%	
% of DWS exceedences	4%		0%		0%		0%		0%		0%	

0	3	1	3	2	3	2	3	1	3	3	3	4	3	3	2
153		96		15.0		3.8		50.0		0.24		0		0	
152		97		2.7		3.7		45.6		0.25		0		0	
7		10		20		2		31		0		NA		NA	
21		21		21		21		21		21		1		1	
140		76		0.1		1.6		7.0		0.05		0.0155		0.05	
170		121		74.5		7.8		179.0		0.39		0.0155		0.05	
145		81		0		2		41		0		0		0	
0		0		3		6		0		0		1		0	
				14%		29%						100%			
						13		1		1				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		5%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3		
0.034		NA	
0.027		NA	
0		NA	
21			0
0.007		NA	
0.098		NA	
0		NA	
0			
1			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	1	3	5	2	5	2	3	3	2	2	4
0.7		0.092		27.7		0.00107		0.00118		0.18		0		0.0614
0.7		0.083		27.3		0.00075		0.00075		0.16		0		0.0155
0		0		2		0		0		0		0		0
21		21		21		21		21		21		14		21
0.4		0.050		24.2		0.00075		0.00075		0.16		0.075		0.0155
0.8		0.183		35.7		0.00250		0.00530		0.35		0.25		0.7030
1		0		26		0		0		0		0		0
0		1		0		21		19		18		11		18
		5%				100%		90%		86%		79%		86%
		12						1		3		3		1
230		NA		NA		NA		0.0052		NA		NA		6.81
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		5%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	0	3	2	3	4	3	4	3	2	3	3	3	2	3	2	3
	654		4.53		0.187		0.0424		1.56		0.956		10.3		3.24	
	247		2.49		0.061		0.0458		1.12		0.937		6.0		3.34	
	1853		5		1		0		2		0		20		0	
	21		20		21		20		21		20		21		21	
	9		1.00		0.008		0.0075		0.16		0.444		2.8		2.47	
	8650		18.40		2.350		0.0766		9.76		1.830		95.3		4.81	
	13		1		0		0		1		1		3		3	
	0		7		4		4		1		0		0		0	
			35%		19%		20%		5%							
					3		8				1					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	57%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	5	3	4	2	-2	3
0.029		0.014000		0.0135		0.008500		2.01		42.37		0.019		0.011200		17500	
0.013		0.012500		0.0075		0.007500		1.55		42.37		0.008		0.007500		17400	
0		0		0		0		1		1		0		0		1500	
21		21		21		21		21		20		21		21		21	
0.008		0.001495		0.0075		0.001550		0.75		41.37		0.008		0.003095		12800	
0.346		0.060000		0.0915		0.037500		5.02		45.37		0.159		0.062500		21000	
0		0		0		0		1		1		0		0		15900	
19		21		18		21		12		14		14		20		0	
90%		100%		86%		100%		57%		70%		67%		95%			
1								7		6		6		1			
NA		NA		NA		NA		NA		NA		0.182		0.169		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	3	3	4	3	3	3	3	3
17700		0.91		0.23		0.38		0.0291		1.6		0.2250	
17600		0.47		0.19		0.15		0.0267		0.8		0.2500	
1300		2		0		1		0		3		0	
21		21		20		21		20		21		21	
14700		0.05		0.03		0.04		0.0164		0.2		0.0699	
20200		8.25		1.00		5.07		0.0531		16.1		0.2770	
16000		0		0		0		0		0		0	
0		1		7		0		0		3		10	
		5%		35%						14%		48%	
		2		3				1				1	
NA		10.98		10.56276		NA		NA		5.892		5.656	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		5%		0%	
0%		0%		0%		0%		0%		0%		0%	

0	3	0	2	3	3	4	3	-1	3	-1	3	1	3	3	3
740		19.000		0.60		0.053		4980		4940		42		1.4	
267		10.000		0.20		0.016		4900		4930		13		0.5	
2141		26		2		0		580		300		131		2	
21		21		21		20		21		20		21		21	
10		1.325		0.02		0.016		4310		4520		1		0.1	
10000		108.000		7.33		0.320		7310		5670		609		10.8	
11		3		0		0		4530		4539		1		0	
1		13		3		16		0		0		0		1	
5%		62%		14%		80%								5%	
2		2				1									
1000		1000		1.604		1.395		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
10%		0%		5%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		5%		0%	

6	3	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3
0.0039		0.0077		1.65		21.86		1.10		0.46		1013		930		0.704	
0.0008		0.0008		1.71		21.86		0.65		0.41		955		921		0.695	
0		0		0		0		2		0		287		70		0	
21		21		21		18		21		19		21		20		21	
0.0002		0.0005		0.90		21.66		0.44		0.24		802		776		0.384	
0.0315		0.1160		1.94		22.16		8.18		0.73		2150		1150		1.110	
0		0		1		2		0		0		831		862		0	
15		19		0		0		0		3		0		0		0	
71%		90%								16%							
6		2						3		4						19	
0.77		0.77		NA		NA		33.09		32.99		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.736	
0.741	
0	
20	
0.602	
0.910	
1	
0	
18	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
9950		0.0076		0.003600		3710		3720		0.0072		0.004600		0.215	
8300		0.0031		0.003100		3720		3710		0.0050		0.005000		0.050	
7400		0		0		320		250		0		0		0	
21		21		21		21		20		21		21		21	
7700		0.0031		0.001435		3160		3200		0.0025		0.002125		0.016	
42200		0.0788		0.015500		4560		4080		0.0624		0.012500		2.000	
7720		0		0		3350		3400		0		0		0	
0		18		21		0		0		19		21		13	
		86%		100%						90%		100%		62%	
		2								1				4	
NA		1.50047741		1.275		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.0460		1.5		0.216		6.3		1.97	
0.0500		0.8		0.155		2.8		1.55	
0		3		0		11		2	
20		21		20		21		19	
0.0155		0.1		0.110		0.8		0.50	
0.1000		16.1		0.835		41.7		10.60	
0		0		0		1		1	
19		6		15		4		11	
95%		29%		75%		19%		58%	
1		7		4		3		1	
NA		NA		NA		75.96		74.90	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05-11SS																
Sample Date																
11/11/05	6.12	3	12.85	4		27	2		232	3		4.36	3	10.2	3	
08/22/06	6.19	3	13.17	4		21	2		182.2	4		4.42	3	8.82	3	
11/01/06	6.86	3	12.48	4		29	2		285.3	4		3.96	3	8.56	3	
08/21/07	6.12	3	13.91	4		12	2		136	3		4.4	2	7.68	3	
03/20/08	7.04	3	9.11	3		21	2		126	3		3.21	3	8.34	3	
05/18/08	6.29	3	12.99	4		20	1		168.7	4		4.09	3	7.08	3	
08/24/08	6.76	3	12.19	4		20	1		200.2	4		5.02	3	7.77	3	
10/22/08	5.87	3	11.43	4		23	2		142.2	4		3.2	2	8.63	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
27	2		32.5	3		10	1		2.63	3 J		11	2		**0.05**	1 U						
22.0	2		25.0	2		**0.250**	2 U		**1.57**	3		7.00	1 J		0.0640	2 J		**0.0155**	3		0.0465	3
24.0	2		21.3	3		0.400	1 J		**1.57**	3		11.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3
22.5	3		20.0	1		0.200	1 J		**1.57**	3		8.54	3 J		0.0525	3 J						
38.3	3		23.8	3		0.707	3		10.6	3		9.60	2 J		0.102	3						
17.5	3		20	1		**0.075**	2		**1.57**	3		7.66	3 J		0.205	3						
23.6	3		30	1		**0.0765**	3		**1.57**	3		8.64	3 J		0.13	2						
25.8	3		**1.55**	3		**0.0815**	3		**1.57**	3		9.82	3 J		0.0435	3 J						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.023	2				
J	0.0090	1	J	**0.0155**	3	
	0.0250	2		**0.050**	1	UJ
	0.00155	3				
	0.0142	3				
	0.0089	2	J			
	0.0159	3				
	0.0067	2	J			

																								depends on field pH and field Temp
result > crit			result > crit			result > crit							result > crit											result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
0.786	3		**0.0155**	3		1.18	3		**0.00125**	3		**0.00125**	3		0.39	2	J				**0.0155**		
0.623	3		0.0810	2	J	0.891	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0450		
0.605	3		**0.0155**	3		1.03	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0802		
0.565	3		**0.0155**	3		1.01	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.629	3		**0.0155**	3		0.860	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**		
0.571	3		**0.0155**	3		0.666	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.075**	2		0.0521		
0.487	3		0.034	2	J	0.979	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**		
0.615	3		**0.0155**	3		0.722	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**		

		result > crit			result > crit				result > crit																		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		1000	1		6.04	3	J+	0.0724	3	J+	0.0444	3	J+	0.98	2		**0.125**	3		14.9	3		3.62	3	
2	J	2.70	2	J+	2.50	2	J+	0.0312	3	J	0.0272	3	J	**0.155**	3		**0.155**	3		1.29	3		1.36	3	
3	J	16.0	2		2.33	3		**0.0250**	2	U	0.0582	3	J+	0.769	3		0.355	3	J	3.05	3	J+	2.94	3	J+
3		4.67	3	J+	**1.00**	1	U	0.0332	3	J	0.0290	2	J	**0.155**	3		**0.155**	3		1.25	3	J+	1.21	3	J+
3		2.41	3		0.873	3	J	0.0350	2	J	0.0510	2		0.311	3	J	**0.155**	3		1.13	3		1.05	3	
3	J	25.6	3	J+	2.03	3	J+	0.0486	3	J	0.0323	3	J	0.414	3	J	0.342	3	J	1.29	3	J+	1.11	3	J+
1	U	5.73	3		**1.00**	1	U	0.0624	3		0.0297	3	J	0.332	3	J	0.419	3	J	1.18	3		0.992	3	
1	U	4.55	3		**1.00**	1	U	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3		**0.155**	3		1.14	3		1.04	3	

| | | |

| | | |

								depends on Hardness				depends on Hardness																	
result > crit				result > crit				result > crit				result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
894	3		12	2 J			0.642	3 J+			**0.05**	1 U			713	3		553	3		52	2		22.2	3	
16.9	3 J		12.2	3 J			**0.050**	1 U				R			531	3		538	3		1.34	3		1.39	3	
29.8	3		**10.0**	1 U			**0.050**	1 U			**0.050**	1 U			528	3 J+		528	3 J+		12.2	3		11.8	3	
10.0	1 U		**10.0**	1 U			**0.050**	1 U			**0.0155**	3			450	2		448	3		0.435	3 J+		0.385	3 J+	
12.1	3 J		11.2	3 J			0.0460	2 J			**0.0155**	3			497	3		485	3		0.271	3		0.267	3	
44.7	3		12.9	3 J			0.136	3			**0.050**	1 U			433	3		406	3		1.59	3 J+		0.682	3 J+	
18.2	3 J		7.58	3 J			0.0788	3 J			**0.0155**	3			479	3		442	3		0.542	3		0.219	3	
12.3	3 J		8.26	3 J			**0.050**	1 U			**0.0155**	3			556	3		555	3		0.281	3		0.255	3	

| CALC revised 2013 | | |

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

| | | |

										depends on Hardness				depends on Total Zn					
										result > crit				result > crit					
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF			
					Vanadium								**Zinc[4]**						
	Dissolved			Total			Dissolved				Total				Dissolved				
	µg/L			µg/L			µg/L				µg/L				µg/L				
0.031	2		1.31	3		**0.1**	1				25.6	3			20.7	3			
0.050	1		**0.250**	2		**0.250**	2				1.56	3	J+			R			
0.050	1		1.06	3		**0.250**	2				7.54	3	J+		7.11	3	J+		
0.050	1		**0.155**	3		**0.155**	3				7.36	3	J+		2.22	3	J+		
0.050	1		**0.155**	3		**0.155**	3				1.75	3			1.77	3			
0.050	1		**0.155**	3		**0.155**	3				1.22	3	J+		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				2.04	3	J+		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				1.52	3	J+		1.58	3	J+		

	2	3	2	4	0	2	1	4	2	3	2	3
Mean	6.41		12.27		22		184		4.08		8.4	
Median	6.24		12.67		21		176		4.23		8.5	
St. Deviation	0		1		5		54		1		1	
# of values	8		8		8		8		8		8	
Minimum	5.87		9.11		12		126		3.20		7.1	
Maximum	7.04		13.91		29		285		5.02		10.2	
Lowest fifth percentile	6		10		15		130		3		7	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	63%		0%		0%		0%		0%		0%	
% of DWS exceedences	13%		0%		0%		0%		0%		0%	

1	3	1	3	2	2	2	3	2	3	4	3	4	3	4	3
25		22.0		1		2.83		9		0.08		0		0	
24		23.0		0		1.57		9		0.06		0		0	
6		9		3		3		2		0		0		0	
8		8		8		8		8		8		2		2	
18		1.6		0		1.57		7		0.02		0.0155		0.0155	
38		32.5		10		10.60		11		0.21		0.0155		0.0465	
19		8		0		2		7		0		0		0	
0		1		4		6		0		2		2		1	
		13%		50%		75%				25%		100%		50%	
				2		1		6		3				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		100%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	2	3	2
0.013		0	
0.012		0	
0		0	
8		2	
0.002		0.0155	
0.025		0.05	
0		0	
1		2	
13%		100%	
3			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	3	3	5	2	5	2	3	3	3	2	4
0.610		0.0260		0.92		0.00125		0.00081		0.18		0		0.0405
0.610		0.0155		0.94		0.00075		0.00075		0.16		0		0.0475
0		0		0		0		0		0		0		0
8		8		8		8		8		8		3		8
0.487		0.0155		0.67		0.00075		0.00075		0.16		0.075		0.0155
0.786		0.0810		1.18		0.00250		0.00125		0.39		0.25		0.0802
1		0		1		0		0		0		0		0
0		6		0		8		8		7		3		5
		75%				100%		100%		88%		100%		63%
		2								1				3
230		NA		NA		NA		0.0052		NA		NA		6.96
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	4	3	3	3	3	3	2	3	2	3
	133		2.10		0.0416		0.0371		0.41		0.233		3.2		1.67	
	5		1.50		0.0341		0.0310		0.32		0.155		1.3		1.16	
	351		2		0		0		0		0		5		1	
	8		8		8		8		8		8		8		8	
	2		0.87		0.0250		0.0250		0.16		0.125		1.1		0.99	
	1000		6.04		0.0724		0.0582		0.98		0.419		14.9		3.62	
	3		1		0		0		0		0		1		1	
	0		3		2		1		3		5		0		0	
			38%		25%		13%		38%		63%					
			1		4		4		3		3					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	13%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0162		0.0119		0.0087		0.009		1.5		1.29		0.0140		0.01030		2490	
0.0125		0.0125		0.0075		0.008		1.3		1.25		0.0130		0.00750		2500	
0		0		0		0		1		0		0		0		240	
8		8		8		8		8		8		8		8		8	
0.0125		0.0075		0.0075		0.008		1.3		1.25		0.0075		0.00750		2120	
0.0418		0.0125		0.0168		0.018		3.4		1.55		0.0280		0.01850		2890	
0		0		0		0		1		1		0		0		2190	
7		8		7		6		7		8		6		8		0	
88%		100%		88%		75%		88%		100%		75%		100%			
						1		1				2					
NA		NA		NA		NA		NA		NA		0.039		0.040		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	3	3	3	3	3	3
2470		2.02		0.72		0.077		0.027		0.59		0.187			
2420		1.76		0.72		0.021		0.015		0.38		0.194			
300		1		0		0		0		0		0			
8		8		8		8		8		8		8			
1990		0.88		0.41		0.012		0.013		0.24		0.137			
2860		4.32		0.95		0.456		0.102		1.46		0.220			
2088		1		0		0		0		0		0			
0		0		0		0		0		0		0			
						4		5							
NA		10.09203404		8.679149278		NA		NA		0.995		0.956			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		25%		0%			
0%		0%		0%		0%		0%		0%		0%			

1	3	1	3	3	2	4	3	0	3	0	3	3	3	3	3		
130		11		0.140		0.03		523		494		9		4.7			
18		11		0.050		0.02		513		507		1		0.5			
309		2		0		0		87		57		18		8			
8		8		8		7		8		8		8		8			
10		8		0.046		0.02		433		406		0		0.2			
894		13		0.642		0.05		713		555		52		22.2			
11		8		0		0		439		419		0		0			
1		2		4		7		0		0		0		0			
13%		25%		50%		100%											
4		6		2													
1000		1000		0.113		0.133		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		25%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		13%		0%			

6	3	5	2	3	3	4	3	3	3	3	3	0	3	0	3	3	3
0.005		0.004		0.14		0.122		1.20		0.78		228		193		0.1450	
0.001		0.001		0.11		0.107		1.04		0.73		173		167		0.1550	
0		0		0		0		1		0		134		55		0	
8		8		8		8		8		8		8		8		8	
0.000		0.000		0.09		0.090		0.53		0.57		163		150		0.0775	
0.031		0.031		0.26		0.227		2.37		1.17		555		309		0.1550	
0		0		0		0		1		1		164		151		0	
6		8		0		0		0		0		0		0		8	
75%		100%														100%	
2																	
0.77		0.77		NA		NA		5.69		5.67		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.1450	
0.1550	
0	
8	
0.0775	
0.1550	
0	
8	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5080		0.0046		0.0031		1480		1470		0.0070		0.0048		0.048	
4980		0.0031		0.0031		1430		1430		0.0050		0.0050		0.050	
410		0		0		170		190		0		0		0	
8		8		8		8		8		8		8		8	
4510		0.0031		0.0031		1300		1230		0.0050		0.0031		0.031	
5700		0.0152		0.0031		1840		1830		0.0154		0.0050		0.050	
4598		0		0		1328		1255		0		0		0	
0		7		8		0		0		6		8		8	
		88%		100%						75%		100%		100%	
		1								2					
NA		0.041868819		0.036		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.048		0.42		0.2		6.1		4.9	
0.050		0.16		0.2		1.9		1.8	
0		0		0		8		7	
8		8		8		8		7	
0.031		0.16		0.1		1.2		0.5	
0.050		1.31		0.3		25.6		20.7	
0		0		0		1		1	
8		6		8		0		2	
100%		75%		100%				29%	

NA	NA	NA	13.03	12.85
NA	NA	NA	NA	NA
0%	0%	0%	13%	14%
0%	0%	0%	0%	0%

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05-12D																
Sample Date																
08/19/05	5.89	3	4	1		135	3		110	2		3.92	3	53.9	3	
11/08/05	5.97	3	2.42	3		147	3		66	2		2.42	3	48.1	3	
03/24/06	6.82	3	2.21	3		145	3		250	2		2.82	3	50.2	3	
05/19/06	5.47	3	2.24	3		143	3		221.7	4		2.92	3	58.0	2	
08/18/06	6.13	3	2.48	3		135	3		125.6	4		3.24	3	52.9	3	
10/28/06	5.81	3	2.74	3		139	3		216.6	4		2.75	3	49.2	3	
03/13/07	6.06	3	2.06	3		78	2		229.8	4		1.88	3	50.9	3	
05/12/07	5.79	3	2.38	3		79	2		20.2	3		3.22	3	54.8	3	
08/17/07	5.8	2	2.53	3		82	2		34.4	3		3.24	3	46.8	3	
11/10/07	6.06	3	2.47	3		133	3		122.9	4		2.42	3	46.1	3	
03/26/08	5.97	3	2.99	3		130	2		75.8	3		2.67	3	47.0	2	
05/21/08	6.07	3	2.55	3		143	3		119.2	4		3.18	3	49.1	3	
08/28/08	5.92	3	3.29	3		135	3		94.9	3		3.12	3	49	2	
10/21/08	5.95	3	2.25	3		139	3		198.9	4		2.49	3	49	2	
03/26/09	5.8	2	1.98	3		141	3		125.1	4		2.28	3	52.4	3	
05/20/09	5.9	2	2.28	3		149	3		74.1	3		2.55	3	48.8	3	
08/24/09	7.04	3	2.38	3		142	3		-49.1	3		3.56	3	48.7	3	
10/16/09	6.81	3	3.72	3		134	3		47.9	3		2.38	3	50.7	3	
03/18/10	2.84	3	2.44	3		149	3		40.4	3		2.51	3	50	1	
05/20/10	6.3	2	3.16	3		273	3	Q	37.7	3		2.87	3	50.6	3	
08/22/10	6.59	3	2.5	2	Q	170	2		63	2		3.2	2	52.6	3	
10/23/10	6.16	3	1.96	3		141	3		115	3		2.86	3	52.1	3	
03/28/11	6.01	3	2.96	3		144	3	Q	165	3		1.32	3	46.2	3	
05/23/11	5.91	3	2.35	3		141	3		174.6	4		2.72	3	51.4	3	
08/27/11	6.06	3	6.06	3		111.9612	FALSE		109.3	4		3.23	3	53.1	3	
10/26/11	7.05	3	2.16	3		125	3		54	2		2.3	2	48.8	3	
05/19/12	6.25	3	1.58	3		142	3		214.1	4		2.73	3	55.2	3	
08/23/12	6.08	3	2.68	3		139	3		98.2	3		2.82	3	51.2	3	
10/10/12	6.23	3	1.2	2		140	2		177.8	4		2.57	3	54.2	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
145	3		115	3		0.5	1		22.3	3		32	2		0.102	3	J-					
140	2		87.5	3		**0.075**	2		30	1		33	2		0.137	3						
140	2		130	2		**0.075**	2		16.3	3		44.0	2		0.171	3						
140	2		119	3		**0.075**	2		14.0	2		36.0	2		0.386	3						
135	3		124	3		1.60	2		13.8	3		32.0	2		0.0885	3	J	**0.0155**	3		0.0810	2
130	2		111	3		**0.075**	2		23.5	3		35.0	2		0.122	3		**0.0155**	3		0.120	2
120	2		111	3		**0.075**	2		15.0	2		30.0	1		0.0930	2	J	**0.0155**	3		**0.050**	1
145	3		109	3		**0.150**	2		7.50	2	J	32.0	2		0.101	3						
140	2		104	3		**0.150**	2		32.8	3		31.8	3		0.108	3						
130	2		86.3	3		**0.150**	2		15.3	3		32.0	2		0.0900	1	J					
152	3		105	3		**0.077**	2		9.86	3	J	33.5	3		0.163	3						
141	3		124	3		**0.075**	2		10.7	3		33.1	3		0.189	3						
142	3		80	1		0.313	3	J	12	2		33.1	3		0.0386	3						
148	3		97.5	3		**0.079**	2		12.9	3		33.1	3		0.146	3						
159	3		92.5	3		**0.0805**	3		11.9	3		33.1	3		0.135	3						
149	3		106	3		**0.0825**	3		10	1		31.8	3		0.116	3						
152	3		108	3		**0.076**	2		15.1	3		31.5	3		0.11	2						
148	3		105	3		**0.0745**	3		**5.0**	1	U	31.3	3		0.115	3						
142	3		100	1		0.2	1	J	5.7	2	J	32.5	3		0.131	3						
157	3		109	3		**0.079**	2		16.8	3		31.9	3		**0.050**	1	U					
138	3		98	2		2.78	3		15.1	3		30.8	3		0.101	3						
144	3		100	1		**0.075**	2		14.4	3		30.9	3		0.11	2						
144	3		84	2		3.72	3		17	2		31.7	3		0.16	2						
145	3		76	2		**0.0745**	3		17.2	3		31.6	3		0.0465	3	J					
146	3		114	3		17.4	3		13.2	3		30.8	3		0.113	3						
144	3		92	2		**0.075**	2		7.56	3	J	29.8	3		0.146	3						
144	3		111	3		0.392	3	J	9.24	3	J	29.9	3		**0.050**	1	U					
140	2		90	1		**0.075**	2		12.6	3		29.7	3		0.318	3						
137	3		97	2		**0.075**	2		19.4	3		30.9	3		0.128	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.28	2				
	0.30	1				
	0.295	3				
	0.297	3				
J	0.304	3	J-	0.340	2	J+
	0.315	3	J-	0.370	2	J+
U	0.307	3	J-			R
	0.309	3				
	0.323	3				
	0.329	3				
	0.299	3				
	0.314	3				
	0.283	3				
	0.284	3				
	0.29	2				
	0.34	2				
	0.299	3				
	0.295	3				
	0.287	3				
	0.288	3				
	0.282	3				
	0.283	3				
	0.282	3				
	0.294	3				
	0.311	3				
	0.302	3				
	0.297	3				
	0.285	3				
	0.299	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.943	3		0.081	2	J	37.8	3		**0.00125**	3		**0.00125**	3		0.33	2	J				**0.0155**			
0.862	3		0.09	1	J	35	2		**0.00125**	3		**0.00125**	3		0.11	2	J				**0.0155**			
0.882	3		0.0690	2	J	36.7	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.875	3		0.128	3		33.9	3		0.0030	1	J	**0.00125**	3		**0.155**	3					**0.0155**			
0.839	3		0.0880	2	J	34.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.687	3		0.0820	2	J	33.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.732	3		0.0860	2	J	32.5	3		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					**0.0155**			
0.854	3		0.107	3		32.8	3		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					**0.0155**			
0.734	3		0.0880	2	J	33.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0706			
0.749	3		0.101	3		33.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.740	2		0.0900	1	J	32.4	3		**0.00075**	2		0.0023	2	J	**0.155**	3					0.0911			
0.79	2		0.117	3		33.4	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.075**	2		**0.0155**			
0.784	3		0.093	2	J	35.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.713	3		0.094	2	J	32.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.725	3		0.088	2	J	33.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.704	3		0.091	2	J	31.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.574	3		0.077	2	J	32.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.358	3	J	**0.0155**			
0.694	3		0.087	2	J	33.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.685	3		0.079	2	J	32.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.786	3		0.089	2	J	33.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.768	3		0.143	3		33	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.757	3		0.148	3		32.1	3	J-	0.0015	2	J	**0.00075**	2		**0.155**	3		0.194	3	J	**0.0155**			
0.797	3		0.121	3		32.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		12.3	3		**0.0155**			
0.791	3		0.119	3		32.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.838	3		0.106	3		32.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.724	3		0.126	3		32.3	3	J-	**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.668	3		0.123	3		31.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.69	2		0.108	3		33	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.748	3		0.129	3		32.4	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.228	3	J	**0.050**			

		result > crit			result > crit			result > crit									result > crit			result > crit			result > crit						
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	57.3	3	4.15	3	0.166	3	0.17	2	0.559	3	**0.25**	2 U	8.29	3	7.57	3							
		3	5.06	3 J+	2.9	2 J+	0.115	3 J+	0.137	3 J+	0.627	3	0.606	3	4.3	2	4.94	3							
		1 U	4.80	2 J+		R	0.157	3	0.172	3	0.447	3 J	0.530	2	3.38	3	3.68	3							
		3	4.36	3	5.41	3	0.145	3	0.143	3	**0.155**	3	0.588	3	2.80	2	3.12	3							
		3	22.7	3 J+	4.06	3 J+	0.158	3	0.155	3	0.739	3	0.747	3	2.57	3	2.38	3							
		1 U	3.04	3	2.41	3	0.141	3 J+	0.163	3 J+	0.784	3	0.511	3	1.96	3 J+	2.07	3 J+							
		3	13.0	2 J+	6.82	3 J+	0.171	3	0.162	3	0.584	3	0.581	3	2.03	3 J+	1.95	3 J+							
		3	4.06	3 J+	3.41	3 J+	0.165	3	0.166	3	0.619	3	0.642	3	1.80	2	2.06	3							
		3 J	9.11	3 J+	2.82	3 J+	0.150	2	0.143	3	0.592	3	0.449	3 J	1.54	3 J+	1.57	3 J+							
		3	**1.00**	1 U	**1.00**	1 U	0.123	3 J		R	**0.155**	3	0.644	3	1.46	3	1.49	3							
		3 J	3.16	3	2.35	3	0.143	3	0.157	3	0.428	3 J	0.534	3	1.26	3	1.35	3							
		3	3.64	3 J+	2.84	3 J+	0.124	3	0.149	3	0.562	3	0.565	3	1.23	3 J+	1.22	3 J+							
		3	3.44	3	2.33	3	0.198	3	0.165	3	0.447	3 J	0.442	3 J	1.14	3	1.09	3							
		1 U	4.43	3	2.85	3	0.131	3	0.179	3	0.517	3	0.6	1	1.03	3	1.1	2							
		3	2.74	3	**1.00**	1 U	0.146	3	0.132	3	0.584	3	0.489	3 J	0.996	3	0.944	3							
		1 U	3.04	3	2.94	3	0.17	2	0.157	3	0.463	3 J	0.496	3 J	0.906	3	0.961	3							
		3	2.68	3 J+	2.11	3 J+	0.149	3	0.138	3	0.341	3 J	0.473	3 J	1.11	3	0.835	3							
		3	4.08	3	2.3	2	0.14	2	0.148	3	0.568	3	0.556	3	0.883	3	0.86	2							
		3	13.7	3	2.48	3	0.13	2	0.142	3	0.651	3	0.662	3	0.837	3	0.809	3							
		3	6.37	3	3.66	3	0.115	3	0.111	3	0.537	3	0.601	3	0.835	3 J+	0.839	3 J+							
		3	5.8	2 J+	3.35	3 J+	0.156	3	0.149	3	0.472	3 J	0.492	3 J	1.06	3 J+	0.782	3 J+							
		3	2.88	3 J+	3.06	3 J+	0.154	3	0.17	2	0.609	3	0.732	3	0.848	3 J+	0.837	3 J+							
		3	8.24	3 J+	3.56	3 J+	0.143	3 J+	0.143	3 J+	0.445	3 J	0.604	3	0.741	3	0.723	3							
		3	5.7	2 J+	4.04	3 J+	0.138	3 J+	0.125	3 J+	0.68	2	0.733	3	1.05	3 J		R							
		3	361	3	42.3	3	0.156	3	0.134	3	0.678	3	0.641	3	3.12	3	1.25	3							
		3	5.77	3 J+	2.56	3 J+	0.156	3	0.156	3	0.635	3	0.403	3 J	0.932	3 J		R							
		3	3.64	3 J+	**1.00**	1 U	0.161	3	0.156	3	0.355	3 J	0.533	3	0.812	3 J+	0.721	3 J+							
		3	2.72	3	**1.00**	1 U	0.149	3	0.143	3	0.643	3	0.617	3	0.659	3	0.677	3							
		1 U	2.34	3 J+	**1.00**	1 U	0.152	3	0.156	3	0.639	3	0.652	3	0.814	3	0.892	3							

																								depends on Hardness				depends on Hardness		
result > crit																								result > crit				result > crit		
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
		Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**					
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.021	2	J	**0.0075**	2		**0.00155**	3		**0.00155**	3		4.8	2	J	11.3	3			**0.00775**	3		**0.00775**	3	14200	3
0.0075	2		**0.0075**	2		**0.00155**	3		0.0108	3	J+	4.2	2	J	**1.55**	3			**0.00775**	3		**0.00775**	3	12800	3
0.0120	2		**0.0120**	2		**0.0250**	2	U	**0.0250**	2	U	**0.75**	2		**0.75**	2			**0.0125**	3		0.0316	3	J	13400	3
0.0120	2		**0.0120**	2		**0.0075**	2		**0.0075**	2		1.70	2	J	**0.75**	2			**0.0125**	3		**0.0125**	3	15700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	14300	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	13000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			0.0228	3	J	0.0200	1	J	13400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0250**	2	U	**1.25**	3		**1.25**	3			0.0246	3	J	0.0234	3	J	14500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.78	3	J	2.55	3	J		0.0216	3	J	0.0210	2	J	12200	3
0.0448	3	J			R	**0.0075**	2		**0.0075**	2		**1.25**	3		2.60	2	J		0.0178	3	J	0.0342	3	J	12600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		2.63	3	J		0.0297	3	J	0.0307	3	J	12000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			0.0181	3	J	0.0202	3	J	12900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.79	3	J	2.7	2	J		0.043	2	J	0.0337	3	J	12800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		2.54	3	J		0.0225	3	J	0.0304	3	J	12600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0250**	2	U	**0.0250**	2	U	13700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.5	2	J	**1.25**	3			0.025	2	J	0.0182	3	J	12800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0250**	2	U	**0.0250**	2	U	12900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			0.0198	3	J	0.0182	3	J	13400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2		13000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0250**	2	U	**0.0250**	2	U	12900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		3.54	3	J	3.1	2	J		**0.0250**	2	U	**0.0250**	2	U	13200	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			0.0295	3	J	0.0275	3	J	13800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		2.95	3	J		0.0334	3	J	0.0241	3	J	12200	3
0.0125	3		**0.0125**	3		**0.0250**	2	U	**0.0075**	2		3.25	3	J	4.21	3	J		0.0209	3	J	0.0217	3	J	13300	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		3.86	3	J	4	1	J		0.0266	3	J	0.0267	3	J	13200	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.19	3	J	2.81	3	J		0.0233	3	J	0.0261	3	J	12900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**2.50**	2	U	**2.50**	2	U		0.0225	3	J	0.0231	3	J	14600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.67	3	J	2.43	3	J		0.029	2	J	0.0304	3	J	13200	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.19	3	J	1.85	3	J		0.0278	3	J	0.0282	3	J	13900	3

| | | |

								depends on Hardness				depends on Hardness																	
result > crit				result > crit				result > crit				result > crit																result > crit	
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**						**Manganese**		
	Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved	
	µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L	
68.5	3		28.5	3			0.0518	3	J		0.061	2	J	4520	3		4370	3		21.6	3		21.3	3	
3.1	2		8.91	3	J		**0.0155**	3			**0.05**	1	U	3890	3		4650	3		12	2		13.7	3	
3.10	2		7.92	3	J		**0.0130**	2			**0.0130**	2		4040	3		4590	3		16.2	3		17.6	3	
3.10	2		13.4	3	J		0.0380	2	J				R	4550	3		4740	3		18.4	3		18.2	3	
44.9	3		9.49	3	J		0.284	3	J+		0.128	3	J+	4200	2		4220	3		16.9	3		16.6	3	
3.10	2		**10.0**	1	U		0.209	3	J+		**0.0155**	3		4070	3		3630	3		12.7	3		12.9	3	
21.5	3	J+	**3.10**	2			0.149	3	J+		**0.050**	1	U	4230	3		4180	3		14.2	3	J+	12.9	3	J+
10.0	1	U			R		**0.050**	1	U		**0.050**	1	U	4150	3		4160	3		14.2	3		14.6	3	
25.9	3		**3.10**	2			**0.050**	1	U		**0.0155**	3		3980	3		3940	3		10.9	3		10.3	3	
31.5	3		12.5	3	J		**0.0155**	3			**0.0155**	3		3590	3		4270	3		8.58	3		8.49	3	
52.5	3		59.6	3			**0.0155**	3			**0.0155**	3		4140	3		4570	3		7.12	3		7.83	3	
40	1		21.2	3			**0.0155**	3			**0.0155**	3		4070	3		4120	3		7.36	3		7.29	3	
44.2	3		48.4	3			0.233	3			0.09	1	J	4140	3		3990	3		6.05	3		6.08	3	
34.5	3		37.2	3			**0.0155**	3			**0.0155**	3		4250	3		4600	2		5.79	3		6.18	3	
67.8	3		60.6	3			**0.0155**	3			**0.0155**	3		4410	3		4250	3		4.99	3	J+	4.7	2	J+
135	3	J			R		**0.0155**	3			**0.0155**	3		4090	3		4140	3		4.73	3		5.02	3	
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3		3980	3		3990	3		3.53	3	J+	3.62	3	J+
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3		4170	3		3940	3		3.74	3		3.61	3	
24.2	3		7.39	3	J		**0.0155**	3			**0.0155**	3		4270	3		4620	3		3.55	3		3.08	3	
10.0	1	U	**3.10**	2			**0.0155**	3			**0.0155**	3		4470	3	J+	4450	3	J+	3.73	3	J+	3.8	2	J+
6.9	2	J	**3.10**	2			**0.0155**	3			**0.0155**	3		4730	3		4610	3		3.22	3	J+	3.18	3	J+
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3		4310	3		4470	3		2.84	3		2.88	3	
27.4	3		14	2	J		0.104	3			0.0367	3	J	3810	3		4190	3		3.07	3		2.83	3	
9.26	3	J	**10.0**	1	U		**0.0155**	3			**0.0155**	3		4440	3		4390	3		2.76	3		2.68	3	
582	3		74.9	3			0.375	3			0.0499	3	J	4880	3		4670	3		9.46	3		3.39	3	
10.0	1	U	**10.0**	1	U		0.0463	3	J		**0.0155**	3		4000	1		4380	3		2.76	3		2.92	3	
10.0	1	U	**10.0**	1	U		**0.0155**	3			**0.0155**	3		4580	3		4460	3		2.91	3	J+	2.72	3	J+
11.3	3	J	12.2	3	J		**0.0155**	3			**0.0155**	3		4440	3		4230	3		2.37	3	J+	2.27	3	J+
20.5	3		8.07	3	J		**0.0155**	3			**0.0155**	3		4700	2		4490	3		2.45	3	J+	2.26	3	J+

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	1.66	3	
	1.58	3	
	1.43	3	
	1.51	3	
	1.39	3	
	1.36	3	
	1.43	3	
	1.60	2	
	1.26	3	
	2.06	3	
	1.51	3	
	1.33	3	
	1.5	2	
	1.51	3	
	1.32	3	
	1.42	3	
	1.45	3	
	1.6	2	
	1.61	3	
	1.47	3	
	1.44	3	
	1.51	3	
	1.33	3	
	1.41	3	
	1.6	2	
	1.8	2	
	1.63	3	
	1.47	3	
	1.75	3	

			depends on HARD; revised 2013				depends on Total Ag																		
			result > crit				result > crit																		result > crit
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF		
	Silicon					**Silver[8]**						**Sodium**						**Thallium**							**Tir**
	Dissolved		Total				Dissolved			Total			Dissolved			Total			Dissolved			Total			
	µg/L		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			
13900	3		**0.0031**	2			**0.0031**	2		7020	3		6800	2		**0.0031**	2		**0.0031**	2		**0.031**	2		
15200	3		**0.0031**	2			**0.0031**	2		5700	2		6670	3		**0.0031**	2		0.0072	2	J	**0.031**	2		
12600	3		**0.0031**	2			**0.0031**	2		5850	3		6550	3		**0.0025**	2		**0.0025**	2		**0.050**	1	U	
8280	3		**0.0031**	2			**0.0031**	2		6710	3		6930	3		**0.0025**	2		**0.0025**	2		**0.0155**	3		
12300	3		**0.0031**	2			**0.0031**	2		6020	3		6060	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
13400	3		**0.0031**	2			**0.0031**	2		5600	2		4970	3		0.0162	3	J	**0.0050**	1		**0.050**	1		
13400	3		**0.0031**	2			**0.0031**	2		6020	3		5900	2		**0.0050**	1		**0.0050**	1		**0.050**	1		
12500	3		0.0078	2	J		**0.0031**	2		5780	3		5800	2		**0.0050**	1		**0.0050**	1		**0.050**	1		
13400	3		**0.0031**	2			**0.0031**	2		5570	3		5610	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
13800	3		**0.0031**	2			0.0102	3	J	4910	3		5930	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
14200	3		**0.0031**	2			**0.0031**	2		5960	3		6580	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
13000	2		**0.0031**	2			**0.0031**	2		5710	3		5740	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
12500	3		**0.0031**	2			**0.0031**	2		5690	3		5540	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
14000	2		**0.0031**	2			**0.0031**	2		5820	3		6280	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
12800	3		0.0063	2	J		**0.0031**	2		5970	3		5640	3		**0.0050**	1		**0.0050**	1		0.102	3	J	
13000	2		**0.0031**	2			**0.0031**	2		5640	3		5640	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
12200	3		**0.0031**	2			**0.0031**	2		5340	3		5240	3		**0.0050**	1		**0.0050**	1		1.5	2	J+	
12500	3		**0.0031**	2			**0.0031**	2		5570	3		5250	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
13500	3		**0.0031**	2			**0.0031**	2		5660	3		5970	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
13400	3	J+	**0.0031**	2			**0.0031**	2		5970	3	J+	5890	3	J+	**0.0050**	1		**0.0050**	1		0.352	3		
13500	3		**0.0031**	2			**0.0031**	2		6380	3		6290	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
14000	2		**0.0031**	2			**0.0031**	2		5630	3		5750	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
12900	3		**0.0031**	2			**0.0031**	2		5100	2		5670	3		**0.0050**	1		**0.0050**	1		0.231	3	J+	
13100	3		**0.0031**	2			**0.0031**	2		5790	3		5740	3		**0.0050**	1		**0.0050**	1		**0.050**	1		
14200	3		0.0166	3	J		**0.0031**	2		6190	3		6280	3		0.0077	2	J	**0.0031**	2		0.102	3	J	
13400	3		**0.0031**	2			**0.0031**	2		5190	3		5720	3		**0.0031**	2		**0.0031**	2		**0.0310**	2		
13900	3		**0.0031**	2			**0.0031**	2		5900	2		5730	3		**0.0031**	2		**0.0031**	2		**0.0310**	2		
13500	3		**0.0031**	2			**0.0031**	2		5810	3		5550	3		**0.0031**	2		**0.0031**	2		**0.0310**	2		
14100	3		**0.0031**	2			**0.0031**	2		5990	3		5720	3		**0.0031**	2		**0.0031**	2		**0.0310**	2		

										depends on Hardness				depends on Total Zn				
										result > crit				result > crit				
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF		
						Vanadium								**Zinc[4]**				
	Dissolved			Total			Dissolved				Total				Dissolved			
	µg/L			µg/L			µg/L				µg/L				µg/L			
0.031	2		0.343	3	J	**0.1**	1				2.2	2			2.43	3		
0.031	2		0.464	3	J			R			**0.75**	2	U		1.81	3		
0.050	1	U	0.539	3		0.672	3				2.02	3	J+		1.39	3	J+	
0.0155	3		0.811	3		0.792	3				1.13	3	J+				R	
0.050	1		0.854	3	J	0.978	3	J			2.77	3	J+				R	
0.050	1		1.27	3		0.842	3	J			**0.50**	1	U		1.26	3	J+	
0.050	1		1.00	1		1.05	3				1.53	3	J+		1.06	3	J+	
0.050	1		0.455	3	J	0.454	3	J			1.10	2	J+		1.01	3	J+	
0.050	1		0.697	3	J	0.578	3	J			2.80	2	J+		**0.50**	1	U	
0.050	1		0.416	3	J	**0.155**	3				**0.50**	1	U		1.46	3		
0.050	1		0.653	3	J	0.575	3	J			1.71	3			1.42	3		
0.050	1		0.52	2	J	0.447	3	J			1.03	3	J+		**0.50**	1	U	
0.050	1		0.481	3	J	0.478	3	J			1.99	3	J+		**0.50**	1	U	
0.050	1		0.491	3	J	0.521	3	J			1.04	3	J+		**0.50**	1	U	
0.050	1		0.519	3	J	0.451	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.594	3	J	0.685	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.401	3	J	0.554	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.647	3	J	0.55	2	J			0.42	2	J		**1.55**	3	U	
0.050	1		0.676	3	J	0.66	2	J			**1.55**	3	U		**1.55**	3	U	
0.123	3	J	0.498	3	J	0.555	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.45	2	J	0.45	2	J			**1.55**	3	U		**1.55**	3	U	
0.100	1	U	0.59	2	J	0.536	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.479	3	J	0.426	3	J			**1.55**	3	U		**1.55**	3	U	
0.050	1		0.608	3	J	0.561	3	J			**1.55**	3	U		**1.55**	3	U	
0.0310	2		2.96	3		0.801	3	J			**1.55**	3	U		1.54	3	J	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U	
0.0669	3	J	0.565	3	J	0.439	3	J			**1.55**	3	U		**1.55**	3	U	
0.0310	2		0.774	3	J	0.712	3	J			1.78	3	J		2.9	2	J	

	2	3	2	3	0	3	0	3	2	3	1	3
Mean	6.03		3		138		115		2.77		50.7	
Median	6.06		2		140		110		2.75		50.6	
St. Deviation	1		1		33		74		1		3	
# of values	29		29		29		29		29		29	
Minimum	2.84		1		78		-49		1.32		46.1	
Maximum	7.05		6		273		250		3.92		58.0	
Lowest fifth percentile	6		2		80		26		2		46	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	83%		0%		0%		0%		0%		0%	
% of DWS exceedences	45%		0%		0%		0%		0%		0%	

0	3	0	3	3	2	1	3	1	3	3	3	4	3	3	2
143		103		1.0		14.7		32		0.130		0		0	
144		105		0.1		14.0		32		0.115		0		0	
8		13		3		6		3		0		0		0	
29		29		29		29		29		29		3		3	
120		76		0.1		5.0		30		0.039		0.0155		0.05	
159		130		17.4		32.8		44		0.386		0.0155		0.12	
130		82		0		6		30		0		0		0	
0		0		21		1		0		2		3		1	
				72%		3%				7%		100%		33%	
				3		5				4				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	3	2	2
0.30		0	
0.30		0	
0		0	
29		2	
0.28		0.34	
0.34		0.37	
0		0	
0		0	

NA	NA
NA	NA
0%	0%
0%	0%

3	3	3	2	1	3	5	2	5	2	3	3	2	2	4
0.763		0.102		33.3		0.00109		0.00105		0.16		1		0.0260
0.749		0.093		33.0		0.00075		0.00075		0.16		0		0.0155
0		0		1		0		0		0		3		0
29		29		29		29		29		29		18		29
0.574		0.069		31.8		0.00075		0.00075		0.11		0.075		0.0155
0.943		0.148		37.8		0.00300		0.00250		0.33		12.3		0.0911
1		0		32		0		0		0		0		0
0		0		0		27		28		27		14		27
						93%		97%		93%		78%		93%
		16				2		1		2		3		2
230		NA		NA		NA		0.0052		NA		NA		7.03
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	3	3	3	3	3	3	3	3	3	2	3	2	3
	19.7		4.28		0.148		0.15		0.535		0.57		1.74		1.73		
	4.4		2.85		0.149		0.15		0.568		0.58		1.11		1.10		
	66		8		0		0		0		0		2		2		
	29		28		29		28		29		29		29		27		
	1.0		1.00		0.115		0.11		0.155		0.25		0.66		0.68		
	361.0		42.30		0.198		0.18		0.784		0.75		8.29		7.57		
	2		1		0		0		0		0		1		1		
	1		5		0		0		2		1		0		0		
	3%		18%						7%		3%						
									8		7						
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	3%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-2	3
0.014		0.0121		0.00830		0.00860		2.0		2.3		0.02220		0.02280		13300	
0.013		0.0125		0.00750		0.00750		1.3		1.6		0.02280		0.02410		13200	
0		0		0		0		1		2		0		0		800	
29		28		29		29		29		29		29		29		29	
0.008		0.0075		0.00155		0.00155		0.8		0.8		0.00750		0.00750		12000	
0.045		0.0125		0.02500		0.02500		4.8		11.3		0.04300		0.03420		15700	
0		0		0		0		1		1		0		0		12200	
27		28		29		28		17		16		11		10		0	
93%		100%		100%		97%		59%		55%		38%		34%			
2								12		12		18		19			
NA		NA		NA		NA		NA		NA		0.153		0.144		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	4	3	4	3	2	3	2	3
13500		0.90		0.49		0.079		0.076		1.93		1.630	
13200		0.62		0.36		0.058		0.056		1.71		1.600	
800		1		0		0		0		1		0	
29		29		29		29		29		29		29	
11900		0.05		0.05		0.032		0.031		1.03		0.877	
15300		4.67		2.18		0.279		0.317		7.18		2.430	
12700		0		0		0		0		1		1	
0		3		3		0		0		0		0	
		10%		10%									
		1		2									
NA		10.98		10.56276		NA		NA		4.844		4.650	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		3%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	3	4	3	4	3	-1	3	-1	3	2	3	2	3
45.2		18.0		0.0644		0.029		4240		4320		7.9		7.7	
20.5		10.0		0.0155		0.016		4200		4370		5.8		5.0	
107		20		0		0		290		270		6		6	
29		27		29		28		29		29		29		29	
3.1		3.1		0.0130		0.013		3590		3630		2.4		2.3	
582.0		74.9		0.3750		0.128		4880		4740		21.6		21.3	
3		3		0		0		3842		3940		3		2	
11		11		20		23		0		0		0		0	
38%		41%		69%		82%									
3		9		3		4									
1000		1000		1.198		1.082		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	1	3	1	3	3	3	3	3	0	3	0	3	2	3
0.003		0.003		13.1		13		1.1		1.13		922		929		1.47	
0.001		0.001		13.1		13		0.9		1.01		903		925		1.48	
0		0		1		1		1		1		77		65		0	
29		29		29		29		29		28		29		28		29	
0.000		0.000		11.2		13		0.3		0.31		787		779		1.20	
0.031		0.031		14.2		15		3.1		3.17		1150		1040		1.66	
0		0		12		13		1		1		845		824		1	
25		27		0		0		1		1		0		0		0	
86%		93%						3%		4%							
4		2															
0.77		0.77		NA		NA		27.26		27.18		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

2	3
1.52	
1.50	
0	
29	
1.26	
2.06	
1	
0	

4.6
NA
0%
0%

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
13200		0.0038		0.0033		5810		5910		0.0049		0.0045		0.115			
13400		0.0031		0.0031		5790		5750		0.0050		0.0050		0.050			
1200		0		0		430		470		0		0		0			
29		29		29		29		29		29		29		29			
8280		0.0031		0.0031		4910		4970		0.0025		0.0025		0.016			
15200		0.0166		0.0102		7020		6930		0.0162		0.0072		1.500			
12240		0		0		5136		5244		0		0		0			
0		26		28		0		0		27		28		24			
		90%		97%						93%		97%		83%			
		3		1						2		1		2			
NA		1.011705165		0.860		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	2	3	2	3
0.050		0.657		0.5		1.5		1.42	
0.050		0.539		0.6		1.6		1.55	
0		0		0		1		1	
29		29		28		29		27	
0.016		0.155		0.1		0.4		0.50	
0.123		2.960		1.1		2.8		2.90	
0		0		0		1		1	
27		2		4		16		17	
93%		7%		14%		55%		63%	
2		21		21		2		2	
NA		NA		NA		62.56		61.68	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05-12S																
Sample Date																
08/19/05	7.31	3	0.92	2		662	3		15	2		4.95	3	349	3	
11/09/05	7.4	2	5.55	3		727	3		91	2		2.36	3	302	3	
03/24/06	6.98	3	0.44	2		677	3		97	2		2.56	3	368	3	
05/19/06	6.41	3	0.73	2		652	3		142.4	4		3.18	3	323	3	
08/18/06	6.63	3	0.44	2		637	3		100.3	4		3.52	3	332	3	
10/28/06	6.98	3	0.95	2		670	2		152.5	4		2.62	3	353	3	
03/12/07	7.25	3	3.52	3		341	3		-21	2		1.87	3	309	3	
05/12/07	7.22	3	0.87	2		323	3		-110.7	4		3.05	3	292	3	
08/17/07	7.14	3	0.46	2		360	2		17.15	4		3.29	3	306	3	
11/10/07	7.01	3	0.62	2		598	3		64.8	3		2.26	3	318	3	
03/26/08	7.09	3	0.98	2		627	3		16.5	3		2.1	2	337	3	
05/21/08	7.26	3	0.05	1		665	3		-82.7	3		2.94	3	340	2	
08/28/08	7.32	3	0.81	2		672	3		-159.9	4		3.06	3	307	3	
10/21/08	7.46	3	0.19	2		629	3		-26.6	3		2.09	3	332	3	
03/26/09	7.31	3	0.35	2		630	2		-32.7	3		1.86	3	329	3	
05/20/09	6.78	3	0.46	2		660	2		-37.6	3		2.15	3	321	3	
08/24/09			0.58	2		631	3				R	2.88	3	281	3	
10/15/09	7.19	3	0.64	2		605	3		-164.6	4		2.29	3	304	3	
03/19/10	7.3	2	1.68	3		531	3		143.6	4		2.42	3	333	3	
05/20/10	7.45	3			R	1218	4	Q	12.1	3		2.36	3	303	3	
08/22/10	7.51	3	0.16	2	Q	777	3		68.4	3		2.73	3	289	3	
10/23/10	7.34	3	0.56	2		637	3		171	3		2.29	3	314	3	
03/28/11	7.46	3	0.11	2		623	3	Q	82.5	3		2.21	3	276	3	
05/23/11	7.28	3	0.4	1		622	3		196.9	4		2.46	3	275	3	
08/27/11	7.21	3	5.12	3		486.7876	FALSE		119.9	4		2.99	3	297	3	
10/26/11	7.14	3	0.54	2		554	3		68.7	3		2.97	3	310	2	
03/22/12	7.07	3	0.27	2		609	3		175.5	4		1.21	3	281	3	
05/19/12	7.57	3	0.21	2		611	3		-13.1	3		2.29	3	315	3	
08/23/12	7.54	3	0.42	2		611	3		155.4	4		2.5	2	261	3	
10/10/12	7.34	3	0.09	1		583	3		85.6	3		2.24	3	269	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
750	2		498	3		2.4	2		8.25	3	J	178	3		0.0335	3	J					
700	1		499	3		41.8	3		9.38	3		182	3		**0.05**	1	U					
400	1		478	3		13.5	3		7.75	3		34.0	2		**0.0155**	3						
650	2		448	3		15.1	3		3.25	3	J	178	3		**0.050**	1	U					
600	1		451	3		10.7	3		8.00	1	J	185	3		**0.0155**	3		**0.0155**	3		**0.0155**	3
600	1		452	3		10.7	3		9.50	2	J	175	3		**0.0155**	3		**0.0155**	3		**0.0155**	3
450	2		411	3		10.7	3		7.50	2	J	166	3		0.0495	3	J	**0.0155**	3		0.0360	2
500	1		369	3		2.80	2		**1.57**	3		158	3		**0.050**	1	U					
600	1		409	3		3.70	2		15.8	3		175	3		0.0440	2	J					
600	1		428	3		2.70	2		7.50	2	J	171	3		**0.0155**	3						
712	3		444	3		1.17	3		4.40	2	J	183	3		0.0720	2	J					
693	3		449	3		0.4	1	J	5.13	3	J	189	3		**0.0155**	3						
676	3		419	3		1.27	3		7.26	3	J	194	3		**0.0100**	1	U					
650	2		414	3		0.619	3		6.28	3	J	192	3		**0.0155**	3						
677	3		393	3		0.808	3		7	1	J	188	3		**0.0155**	3						
646	3		404	3		0.659	3		4.48	3	J	183	3		**0.0155**	3						
662	3		425	3		1.55	3		4.6	2	J	189	3		**0.0155**	3						
685	3		434	3		**0.076**	2		12.4	3		186	3		0.734	3						
687	3		429	3		7.58	3		5.67	3	J	180	2		0.0495	3	J					
670	2		424	3		2.68	3		11.1	3		186	3		**0.0155**	3						
655	3		395	3		0.41	2	J	5.54	3	J	183	3		**0.0155**	3						
644	3		403	3		0.306	3	J	6.37	3	J	189	3		**0.050**	1	U					
617	3		369	3		0.612	3		5.96	3	J	183	3		**0.050**	1	U					
621	3		383	3		0.297	3	J	6.04	3	J	187	3		**0.0155**	3						
616	3		416	3		**0.150**	2		7.15	3	J	179	3		**0.0155**	3						
623	3		402	3		**0.0745**	3		3.73	3	J	180	2		**0.050**	1	U					
603	3		392	3		**0.150**	2		8.84	3	J	174	3		**0.050**	1	U					
601	3		393	3		0.392	3	J	5.07	3	J	179	3		**0.050**	1	U					
615	3		389	3		**0.075**	2		**5.0**	1	U	181	3		0.168	3						
556	3		359	3		**0.075**	2		3.72	3	J	166	3		0.034	2	J					

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.052	2				
	0.41	2				
	0.0710	2				
	0.0779	3				
	0.0900	1		**0.050**	1	UJ
	0.0800	1				R
J	0.0660	2	J-			R
	0.0452	3				
	0.0696	3				
	0.0734	3				
	0.0671	3				
	0.0647	3				
	0.135	3				
	0.0649	3				
	0.0819	3				
	0.063	2				
	0.0652	3				
	0.0526	3				
	0.0604	3				
	0.0701	3				
	0.0562	3				
	0.0677	3				
	0.0539	3				
	0.0576	3				
	0.061	2				
	0.0658	3				
	0.0471	3				
	0.0582	3				
	0.053	2				
	0.0419	3				

																									depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N					
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**				
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L				
0.878	3		0.188	3		214	3		**0.00125**	3		**0.00125**	3		0.19	2	J				**0.0155**				
0.833	3		0.228	3		216	3		**0.00125**	3		**0.00125**	3		0.18	2	J				**0.0155**				
0.757	3		0.123	3		204	3		**0.00125**	3		**0.00125**	3		0.38	2	J				0.125				
0.747	3		0.226	3		174	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0330				
0.733	3		0.193	3		186	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**				
2.28	3		0.705	3		197	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**				
0.588	3		0.194	3		127	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**				
0.716	3		0.213	3		139	3		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					**0.0155**				
0.573	3		0.206	3		155	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0745				
0.640	2		0.223	3		171	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0490				
0.628	3		0.205	3		183	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.118				
0.598	3		0.212	3		172	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.516	3		**0.0155**				
0.645	3		0.24	2		181	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.516	3		0.0369				
0.594	3		0.213	3		161	3		**0.00075**	2		**0.00075**	2		0.61	2	J	**0.075**	2		**0.050**				
0.606	3		0.245	3		152	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**				
0.606	3		0.211	3		138	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**				
0.545	3		0.209	3		163	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.395	3	J	0.0369				
0.602	3		0.211	3		167	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**				
0.62	2		0.197	3		160	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.682	3		0.187	3		152	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.578	3	J+	**0.0155**				
0.728	3		0.235	3		160	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**				
0.679	3		0.244	3		151	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.291	3	J	**0.050**				
0.691	3		0.236	3		145	3		**0.00075**	2		**0.00075**	2		**0.155**	3		35.3	3		**0.0155**				
0.676	3		0.25	2		141	3		**0.00075**	2		**0.00075**	2		0.379	3	J	0.632	3		**0.0155**				
0.737	3		0.239	3		153	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.926	3		**0.0155**				
0.652	3		0.246	3		148	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.572	3		**0.0155**				
0.607	3		0.202	3		140	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.521	3		**0.0155**				
0.59	2		0.229	3		136	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.546	3		**0.0155**				
0.596	3		0.229	3		54	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.509	3		**0.0155**				
0.6	1		0.209	3		145	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.359	3	J	0.126				

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		
3		201	3		3.05	3		0.0806	3	J+	0.0762	3	J+	1.26	3		1.08	3		41.5	3		40.1	3	
3		2180	3		3.9	2	J+	0.136	3	J+	0.0646	3	J+	3.25	3		1.31	3		61.2	3		40.1	3	
3		601	3		3.26	3	J+	0.0840	2		0.0482	3	J	1.04	3		0.649	3		43.8	3		42.8	3	
2	J	724	3		2.85	3		0.0962	3		0.0592	3		1.70	2		0.545	3		41.3	3		34.0	2	
3		680	2		2.13	3	J+	0.0718	3		0.0374	3	J	1.59	3		1.05	3		39.1	3		37.3	3	
1	U	1200	2		**1.00**	1	U	0.0960	2	J+	**0.0250**	2	U	1.33	3		**0.155**	3		51.0	2		35.9	3	
3		632	3	J+	6.43	3	J+	0.108	3		**0.050**	1	U	1.47	3		1.21	3		37.7	3		34.1	3	
3		176	3		**1.00**	1	U	0.0940	2		0.0738	3		1.01	3		0.891	3		38.0	2		32.9	3	
3	J	366	3		**1.00**	1	U	0.0680	2		0.0516	3		1.55	3		1.20	2		36.3	3		32.1	3	
2	J	166	3		2.14	3		0.0442	3	J	0.0452	3	J	1.38	3		1.13	3		36.3	3		35.8	3	
3		29.1	3		**1.24**	3		**0.0300**	1		**0.0300**	1		1.26	3	J	**0.62**	2		33.8	3		32.7	3	
3		13.5	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		1.17	3		1.19	3		35.3	3		37	2	
3	J	42.9	3		**1.00**	1	U	**0.0075**	2		0.026	2	J	0.831	3		0.851	3		31	2		33.3	3	
1	U	27.4	3		1.91	3	J	**0.0250**	2	U	**0.0250**	2	U	1.07	3		1.2	2		32.7	3		34.1	3	
1	U	14.2	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		1.18	3		1.13	3		33.9	3		33.8	3	
3		25.1	3		2.3	2		0.0491	3	J	0.045	2	J	0.995	3		0.967	3		34.2	3		31.8	3	
3	J	11.4	3	J+	**1.00**	1	U	0.0232	3	J	0.03	1	J	0.8	1		0.951	3		29.2	3		33.7	3	
3		4.34	3		**1.00**	1	U	0.0203	3	J	0.0169	3	J	1.15	3		1.15	3		34.1	3		34.5	3	
3		66	2		**1.00**	1	U	0.0295	3	J	**0.0075**	2		1.19	3		1.26	3		32.9	3		33.9	3	
3		23.1	3		2.49	3		6.06	3		**0.0075**	2		1.01	3		1.01	3		33.8	3		31.7	3	
3		3.64	3	J+	**1.00**	1	U	**0.0075**	2		0.0273	3	J	0.978	3		0.903	3		32.5	3		32.2	3	
1	U	4.25	3	J+	2.45	3	J+	0.0252	3	J	**0.0250**	2	U	1.34	3		1.32	3		33.2	3		34.3	3	
3		2.75	3	J+	**1.00**	1	U	0.0762	3	J+	0.0805	3	J+	0.912	3		0.696	3		29.8	3		29.7	3	
3		5.79	3	J+	2.23	3	J+	**0.0250**	2	U	**0.0250**	2	U	1.18	3		1.12	3		32.1	3		32.3	3	
3		5.64	3	J+	3.03	3	J+	**0.0075**	2			R		1.15	3		1.11	3		32.4	3		31.6	3	
3		2.89	3	J		R		0.048	2	J	0.0471	3	J	1.2	2		1.07	3		32.7	3		31.6	3	
3		3.63	3		**1.00**	1	U	0.0371	3	J	0.0525	3		0.767	3		0.922	3		30.4	3		31.5	3	
3		3.94	3	J+	**1.00**	1	U	0.0459	3	J	0.0499	3	J	1.24	3		1.24	3		33.7	3		32.9	3	
3		**1.00**	1	U	**1.00**	1	U	0.0333	3	J	0.0327	3	J	1.16	3		1.07	3		29.6	3		30.8	3	
3		**1.00**	1	U	**0.310**	2		0.0783	3		0.103	3		0.553	3		0.733	3		29.6	3		32.5	3	

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									depends on Hardness				depends on Hardness																
result > crit			result > crit						result > crit				result > crit																
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
282	3		58.8	3		0.118	3		0.082	2 J		33000	2		24800	3		404	3		415	3	
3100	2		52.4	3		1.27	3 J+		**0.05**	1 U		27700	3		32200	3		428	3		382	3	
892	3		108	3		0.235	3 J+		**0.0130**	2		35400	3		36200	3		322	3		335	3	
1170	3		145	3		0.426	3		**0.0130**	2		33100	3		31900	3		311	3		287	3	
1070	3		174	3		0.422	3 J+		**0.050**	1 U		31300	3		34800	3		316	3		321	3	
1810	3		101	3		0.826	3 J+		**0.0155**	3		32600	3		33000	2		283	3		231	3	
1220	3		128	3 J+		0.449	3 J+		**0.062**	2		28100	3		28900	3		254	3		256	3	
573	3		63.0	2		0.217	3		**0.0155**	3		27700	3		25200	3		217	3		185	3	
537	3		61.3	3		0.229	3 J+		**0.0155**	3		27300	3		26100	3		266	3		245	3	
394	3		191	3		0.111	3		**0.0155**	3		26800	3		29300	3		288	3		287	3	
293	3		264	3		**0.062**	2		**0.062**	2		30300	3		30100	3		280	2		263	3	
310	2		313	3		**0.0155**	3		**0.0155**	3		30200	3		30700	3		268	3		283	3	
332	3		344	3		0.0507	3 J		**0.0155**	3		27700	3		27900	3		247	3		253	3	
292	3		277	3		**0.0155**	3		**0.0155**	3		29300	3		29000	2		270	2		262	3	
456	3		417	3		**0.0155**	3		**0.0155**	3		27600	3		29400	3		265	3		270	2	
846	3		863	3		**0.0155**	3		**0.0155**	3		28500	3		27100	3		283	3		274	3	
74.9	3		45.3	3		**0.0155**	3		**0.0155**	3		23900	3		27500	3		233	3		259	3	
59.7	3		51.7	3		**0.0155**	3		**0.0155**	3		24300	3		26900	3		265	3		268	3	
179	3 J			R		0.0587	3 J		**0.0155**	3		31700	3		28100	3		260	2		251	3	
85.9	3		52.8	3		0.0316	3 J		**0.0155**	3		28100	3 J+		27900	3 J+		267	3 J+		249	3 J+	
49.6	3		47.8	3		**0.0155**	3		**0.0155**	3		22700	3 J			R		243	3		240	2	
58.6	3		53.3	3		**0.0155**	3		**0.0155**	3		27200	3		28800	3		302	3		307	3	
69.7	3 J			R		**0.0155**	3		**0.0155**	3		23900	3		25700	3		250	2		241	3	
61.7	3		56.2	3		**0.0155**	3		**0.0155**	3		22700	3		22100	3		278	3		276	3	
62.8	3		58.5	3		**0.0155**	3		**0.0155**	3		25400	3		24900	3		265	3		260	2	
64.5	3		52.7	3		**0.0155**	3		**0.0155**	3		27800	3		26400	3		280	2		265	3	
68.1	3		63.2	3		0.0433	3 J		0.0425	3 J		25900	3		27000	2		244	3		248	3	
64.9	3		62.8	3		**0.0155**	3		**0.0155**	3		28700	3		30100	3		292	3		288	3	
63.8	3		57	2		**0.0155**	3		**0.0155**	3		21400	3		21500	3		259	3		260	2	
37.5	3		29.8	3		**0.0155**	3		**0.0155**	3		25400	3		30300	3		185	3		196	3	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.031	2		**0.031**	2		12.3	3		12.3	3		5.17	3		5.29	3		2590	3		2620	3		**0.0775**	3
0.031	2		**0.031**	2		11.4	3		10.5	3		7.17	3		4.04	3		3090	3		2690	3		**0.0775**	3
0.00250	2	U	**0.000475**	4		9.66	3		9.44	3		3.66	3		2.50	2		2740	3		2540	3		0.343	3
0.00306	3	J	**0.000475**	4		9.47	3		9.12	3		3.49	3		2.28	3		2660	3		2640	3		0.923	3
0.00143	3	J	**0.000475**	4		9.41	3		10.2	3		2.71	3		2.24	3		2640	3		2780	3		0.719	3
0.00185	3	J	**0.000475**	4		8.35	3		8.23	3		4.52	3		2.78	3		2920	3		2700	2		1.05	3
0.000169	3		**0.000475**	4		8.31	3		8.71	3		3.56	3	J+	3.34	3	J+	2610	3		2650	3		1.98	3
0.000169	3		**0.000475**	4		8.87	3		8.49	3		3.55	3	J+	2.69	3	J+	2530	3		2470	3		4.04	3
0.00250	2	U	**0.000475**	4		9.94	3		9.84	3		2.78	3		2.57	3		2320	3		2070	3		1.63	3
0.000579	3	J	**0.000475**	4		9.57	3		9.78	3		2.91	3		2.07	3		2600	2		2830	3		1.28	3
0.00075	2		**0.00075**	2		8.88	3		8.46	3		1.67	3		1.64	3		2770	3		2660	3		**0.62**	2
0.00075	2		**0.00075**	2		9.32	3		9.95	3		1.79	3		1.83	3		2580	3		2710	3		**0.155**	3
0.00075	2		0.00196	3	J	8.29	3		9.22	3		1.69	3	J		R		2320	3		2430	3		**0.155**	3
0.00075	2		**0.00075**	2		9.73	3		9.74	3		2.6	2		3.05	3		2560	3		2650	3		**0.155**	3
0.00075	2		**0.00075**	2		9.96	3		9.92	3		1.37	3		1.39	3		2600	2		2620	3		**0.155**	3
0.00075	2		**0.00075**	2		9.55	3		9.3	2		1.93	3		1.68	3		2550	3		2450	3		0.638	3
0.00075	2		**0.00075**	2		8.26	3		9.7	2		1.25	3	J+	1.39	3	J+	2250	3		2600	2		**0.155**	3
0.00075	2		**0.00075**	2		9.81	3		9.67	3		1.26	3		1.32	3		2540	3		2510	3		**0.155**	3
0.00075	2		**0.00075**	2		9.29	3		9.3	2		1.61	3		1.1	2		2550	3		2670	3		**0.155**	3
0.00075	2		**0.00075**	2		9	1	J+	8.84	3	J+	1.51	3	J+	1.33	3	J+	2660	3	J+	2550	3	J+	0.768	3
0.00075	2		**0.00075**	2		8.21	3		7.94	3		1.28	3	J		R		2500	2		2480	3		**0.155**	3
0.00075	2		**0.00075**	2		10.3	3		10.3	3		2.04	3		2.02	3		2710	3		2730	3		**0.155**	3
0.00075	2		**0.00075**	2		8.68	3		8.49	3		2.13	3		2.1	2		2450	3		2430	3		1.15	3
0.00075	2		**0.00075**	2		9.52	3		9.61	3		1.89	3		1.72	3		2410	3		2450	3		1.04	3
0.00075	2		**0.00075**	2		9.39	3		9.16	3		2.38	3		2.23	3		2590	3		2550	3		1.02	3
0.00075	2		**0.00075**	2		9.52	3		9.16	3		1.51	3		1.57	3		2630	3		2590	3		**0.155**	3
0.00075	2		**0.00075**	2		9.71	3		9.93	3		1.79	3		2.04	3		2530	3		2620	3		1.14	3
0.00075	2		**0.00075**	2		9.62	3		9.86	3		1.83	3	J+	1.82	3	J+	2720	3		2710	3		1.19	3
0.00075	2		**0.00075**	2		9.23	3		9.49	3		2.46	3		2.56	3		2450	3		2500	2		0.543	3
0.00075	2		**0.00250**	2	U	8.33	3		8.75	3		2.06	3	J+	2.61	3	J+	2400	2		2630	3		2.36	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.0775	3	
	0.0775	3	
J	**0.155**	3	
J	0.822	3	J
J	0.758	3	J
	0.920	2	J
J	2.24	3	
	4.31	3	
	1.76	3	
	1.54	3	
	0.62	2	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
J	0.596	3	J
	0.155	3	
	0.155	3	
	0.155	3	
J	0.641	3	J
	0.336	3	J
	0.155	3	
	1.15	3	
	0.982	3	J
	0.916	3	J
	0.408	3	J
	1.23	3	
	1.28	3	
J	0.541	3	J
	2.43	3	

			depends on HARD; revised 2013						depends on Total Ag																		
			result > crit						result > crit																		
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon					Silver[8]						Sodium						Thallium						Tir			
	Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total					
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					
7350	3			**0.0031**	2		**0.0031**	2		17600	3		13500	3		**0.0031**	2		**0.0031**	2		**0.031**	2				
7620	3			0.016	2 J		**0.0031**	2		13900	3		15900	3		**0.0031**	2		**0.0031**	2		**0.031**	2				
7230	3			0.0106	3 J		**0.0031**	2		16100	3		16200	3		**0.0025**	2		**0.0025**	2		**0.050**	1 U				
6110	3			**0.0100**	1 U		**0.0031**	2		14900	3		14600	3		**0.0025**	2		**0.0025**	2		0.0572	3 J				
7180	3			0.0126	3 J		**0.0031**	2		13700	3		15400	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6930	3			0.0274	3		**0.0031**	2		13800	3		14000	2		0.0222	3		**0.0050**	1		**0.050**	1				
7270	3			**0.0062**	2		**0.0062**	2		12800	3		13300	3		**0.0100**	1		**0.0100**	1		**0.100**	1				
7180	3			0.0092	2 J		**0.0031**	2		12500	3		11500	3		0.0112	3 J		**0.0050**	1		**0.050**	1				
7370	3			0.0080	1 J		**0.0031**	2		12200	3		12000	2		**0.0050**	1		**0.0050**	1		**0.050**	1				
7660	3			**0.0031**	2		**0.0031**	2		12700	3		13800	3		0.0144	3 J		**0.0050**	1		**0.050**	1				
6610	3			**0.0124**	3		**0.0124**	3		13400	3		13100	3		**0.0200**	1		**0.0200**	1		**0.200**	1				
7340	3			**0.0031**	2		**0.0031**	2		13000	2		13700	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6720	3			**0.0031**	2		**0.0031**	2		11700	3		12300	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7030	3			**0.0031**	2		**0.0031**	2		13000	2		12900	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6810	3			**0.0031**	2		**0.0031**	2		12400	3		12800	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6830	3			**0.0031**	2		**0.0031**	2		13000	2		12200	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6370	3			**0.0031**	2		**0.0031**	2		10500	3		11600	3		**0.0050**	1		**0.0050**	1		0.571	3 J+				
6270	3			**0.0031**	2		**0.0031**	2		11400	3		11200	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6730	3			**0.0031**	2		**0.0031**	2		13100	3		12400	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6680	3	J+		**0.0031**	2		**0.0031**	2		12200	3	J+	12000	2	J+	**0.0050**	1		**0.0050**	1		3.66	3				
6780	3			0.0666	3		**0.0031**	2		11400	3		13300	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6980	3			**0.0031**	2		**0.0031**	2		12200	3		12400	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6550	3			**0.0031**	2		**0.0031**	2		11300	3		11800	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6260	3			**0.0031**	2		**0.0031**	2		10500	3		10700	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6790	3			**0.0031**	2		**0.0031**	2		11400	3		11300	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
6400	2			**0.0031**	2		**0.0031**	2		11600	3		11600	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
7320	3			0.0067	2 J		**0.0031**	2		11300	3		11700	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
7110	3			**0.0031**	2		**0.0031**	2		12300	3		12500	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
6670	3			**0.0031**	2		**0.0031**	2		11700	3		11400	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
7110	3			**0.0031**	2		**0.0031**	2		11700	3		12600	3		**0.0031**	2		0.0068	2 J		**0.0310**	2				

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.031	2		0.746	3		0.316	3	J		3.01	3		2.73	3									
0.031	2		6.53	3		**0.1**	1			6.7	2		1.65	3									
0.050	1	U	1.49	3		**0.110**	2			3.36	3	J+	1.75	3	J+								
0.0532	3	J	2.18	3		**0.110**	2			2.72	3	J+	1.02	3	J+								
0.050	1		2.32	3		**0.250**	2			3.19	3	J+	2.22	3	J+								
0.050	1		4.07	3		1.04	3			5.37	3	J+	1.65	3	J+								
0.100	1		1.87	3	J	**0.310**	2			2.81	3	J+	**1.00**	1	U								
0.050	1		0.680	2	J	**0.155**	3			2.49	3	J+	**0.50**	1	U								
0.050	1		0.996	3	J	**0.155**	3			1.80	2	J+	1.13	3	J+								
0.050	1		0.469	3	J	**0.155**	3			1.84	3		1.48	3									
0.200	1		1.32	3	J	**0.62**	2			1.34	3	J	**0.62**	2									
0.050	1		**0.155**	3		**0.155**	3			1.03	3	J+	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			2.8	2	J+	1.14	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.48	3	J+	1.61	3	J+								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			0.854	3	J	**1.55**	3	U								
0.050	1		0.344	3	J	**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			3.96	3	J+	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	3.54	3									
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			1.48	3	J	2.64	3	J								

	2	3	2	2	0	3	1	3	2	3	0	3			
Mean	7.21		0.97		621		46		2.59		311				
Median	7.26		0.54		628		68		2.44		310				
St. Deviation	0		1		153		99		1		26				
# of values	29		29		30		29		30		30				
Minimum	6.41		0.05		323		-165		1.21		261				
Maximum	7.57		5.55		1218		197		4.95		368				
Lowest fifth percentile	7		0		350		-140		2		272				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	3%		0%		0%		0%		0%		0%				
% of DWS exceedences	0%		0%		0%		0%		0%		0%				

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		3	3		2	3		0	3		4	3		4	3		4	3
625			419			4.5			6.81			176			0.0599			0			0	
634			415			1.0			6.33			182			0.0338			0			0	
74			35			8			3			28			0			0			0	
30			30			30			30			30			30			3			3	
400			359			0.1			1.57			34			0.0100			0.0155			0.0155	
750			499			41.8			15.80			194			0.7340			0.0155			0.036	
473			369			0			3			162			0			0			0	
0			0			6			2			0			22			3			2	
						20%			7%						73%			100%			67%	
						5			23						6						1	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3		3	2
0.077			0	
0.065			0	
0		NA		
30			1	
0.042			0.05	
0.410			0.05	
0			0	
0			1	
			100%	
NA			NA	
NA			NA	
0%			0%	
0%			0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	3		0	3		5	2		5	2		3	3		3	3		4
0.714			0.232			160			0.00088			0.00088			0.19			2			0.0359
0.643			0.213			158			0.00075			0.00075			0.16			1			0.0155
0			0			31			0			0			0			8			0
30			30			30			30			30			30			19			30
0.545			0.123			54			0.00075			0.00075			0.16			0.075			0.0155
2.280			0.705			216			0.00250			0.00250			0.61			35.3			0.1260
1			0			131			0			0			0			0			0
0			0			0			30			30			25			6			22
									100%			100%			83%			32%			73%
															5			3			5
230			NA			NA			NA			0.0052			NA			NA			6.46
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

3		1	3		1	2		4	3		4	3		2	3		2	3		1	3		1	3
		241			1.90			0.2507			0.0406			1.22			0.99			35.8			34.0	
		24			1.00			0.0451			0.0374			1.18			1.07			33.8			33.5	
		471			1			1			0			0			0			7			3	
		30			29			30			29			30			30			30			30	
		1			0.31			0.0075			0.0075			0.55			0.16			29.2			29.7	
		2180			6.43			6.0600			0.1030			3.25			1.32			61.2			42.8	
		2			1			0			0			1			1			30			31	
		2			16			8			10			0			2			0			0	
		7%			55%			27%			34%						7%							
					1			10			11			1										
		87			87			NA			NA			150			150			NA			NA	
		NA			NA			6			NA			10			NA			2,000			NA	
		33%			0%			0%			0%			0%			0%			0%			0%	
		0%			0%			3%			0%			0%			0%			0%			0%	
		result > crit			result > crit			result > crit						result > crit			result > crit			result > crit				
NH3N_NSF	NH3N_NVF	AL_N		AL_NSF	AL_NVF	AL_F		AL_FSF	AL_FVF	SB_N		SB_NSF	SB_NVF	SB_F		SB_FSF	SB_FVF	AS_N		AS_NSF	AS_NVF	AS_F		AS_FSF	AS_FVF	BA_N		BA_NSF	BA_NVF	BA_F		BA_FSF	BA_FVF
		Aluminum								**Antimony**								**Arsenic**								**Barium**							
		Total			Dissolved					Total			Dissolved					Total			Dissolved					Total			Dissolved			
		µg/L			µg/L					µg/L			µg/L					µg/L			µg/L					µg/L			µg/L			

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-2	3						
0.0171		0.0138		0.0219		0.009		9		9.0		0.01480		0.01510		78700							
0.0125		0.0125		0.0075		0.008		9		8.9		0.01580		0.01760		78300							
0		0		0		0		1		2		0		0		6000							
30		30		30		30		30		30		30		30		30							
0.0075		0.0075		0.0075		0.002		5		5.0		0.00750		0.00750		67100							
0.0626		0.0500		0.3450		0.030		12		13.8		0.03000		0.03000		89100							
0		0		0		0		6		7		0		0		69580							
27		30		25		29		2		1		17		19		0							
90%		100%		83%		97%		7%		3%		57%		63%									
2				2		1		2		2		13		11									
NA		NA		NA		NA		NA		NA		0.568		0.491		NA							
4		NA		NA		NA		NA		NA		5		NA		NA							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%		0%		0%							
												depends on Hardness		depends on Hardness									
result > crit												result > crit		result > crit									
BE N	BE NSF	BE NVF	BE F	BE FSF	BE FVF	BI N	BI NSF	BI NVF	BI F	BI FSF	BI FVF	B N	B NSF	B NVF	B F	B FSF	B FVF	CD N	CD NSF	CD NVF	CD F	CD FSF	CD FVF	CA N	CA NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved				Total	
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3		3	3		2	2	3	3	3	3		2	3		3	3				
79400			1.058			0.200		0.43		0.33			4.70			0.71					
80000			0.365			0.140		0.21		0.21			1.20			0.62					
6900			2			0		0		0			7			0					
30			30			29		30		30			30			29					
67000			0.031			0.031		0.15		0.16			0.25			0.22					
95000			8.950			0.714		1.84		1.68			32.00			2.19					
69805			0			0		0		0			1			0					
0			5			15		0		0			1			5					
			17%			52%							3%			17%					
			4			4		1								1					
NA			10.98			10.56276		NA		NA			21.916			21.039					
NA			100			NA		NA		NA			NA			NA					
0%			0%			0%		0%		0%			7%			0%					
0%			0%			0%		0%		0%			0%			0%					
			depends on Hardness			depends on Hardness							depends on Hardness								
			result > crit			result > crit							result > crit			result > crit					

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
0	3		1	3		4	3		4	3		-2	3		-2	3		0	3		0	3	
486			149.7			0.159			0.024			27900			28400			278			272		
287			62.9			0.024			0.016			27700			28100			268			263		
665			175			0			0			3400			3300			47			46		
30			28			30			30			30			29			30			30		
38			29.8			0.016			0.013			21400			21500			185			185		
3100			863.0			1.270			0.082			35400			36200			428			415		
54			46			0			0			22700			23180			224			212		
0			0			16			28			0			0			0			0		
						53%			93%														
						4			2														
1000			1000			11.356			7.329			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
17%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			100%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
5	2	5	2	2	3	2	3	2	3	2	3	-1	3	-1	3	3	3								
0.003		0.003		9.4		9.5		2.52		2.26		2580		2580		0.8050									
0.001		0.001		9.4		9.5		2.05		2.09		2590		2620		0.6290									
0		0		1		1		1		1		170		140		1									
30		30		30		30		30		28		30		30		30									
0.000		0.000		8.2		7.9		1.25		1.10		2250		2070		0.0775									
0.031		0.031		12.3		12.3		7.17		5.29		3090		2830		4.0400									
0		0		8		8		1		1		2320		2430		0									
26		29		0		0		0		0		0		0		13									
87%		97%														43%									
4		1														7									
0.77		0.77		NA		NA		121.51		121.14		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.8340	
	0.6080	
	1	
	30	
	0.0775	
	4.3100	
	0	
	12	
	40%	
	10	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF

Selenium

Dissolved

µg/L

-1	3		4	2		4	2		-2	3		-2	3		4	2		4	2		3	2	
6910			0.0082			0.0035			12600			12800			0.0061			0.0051			0.190		
6880			0.0031			0.0031			12400			12500			0.0050			0.0050			0.050		
410			0			0			1500			1400			0			0			1		
30			30			30			30			30			30			30			30		
6110			0.0031			0.0031			10500			10700			0.0025			0.0025			0.031		
7660			0.0666			0.0124			17600			16200			0.0222			0.0200			3.660		
6265			0			0			10860			11245			0			0			0		
0			22			30			0			0			27			29			27		
			73%			100%									90%			97%			90%		
			6												2			1			1		
NA			21.1170643			17.950			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
			depends on HARD; revised 2013			depends on Total Ag																	
			result > crit			result > crit									result > crit								
SI F	SI FSF	SI FVF	AG N		AG NSF	AG NVF	AG F		AG FSF	AG FVF	NA N	NA NSF	NA NVF	NA F	NA FSF	NA FVF	TL N	TL NSF	TL NVF	TL F	TL FSF	TL FVF	SN N	SN NSF	SN NVF
Silicon					**Silver[8]**							**Sodium**						**Thallium**							**Tin**
Dissolved			Total		Dissolved				Total			Dissolved			Total			Dissolved			Total				
µg/L			µg/L		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L				

| | | |

MW-05-13D

Sample Date														
08/22/05	7.92	3	6.86	3	102	3		-2.3	2		3.64	3	74.8	3
11/12/05	6.53	3	6.75	3	64	2		166	3		4.51	3	20.2	3
03/21/06	6.24	3	8.74	3	55	2		103	3		3.1	2	18.4	3
05/22/06	5.81	3	9.24	3	50	1		286	3		3.16	3	19.4	3
08/24/06	6.3	2	9.1	2	45	2		191.4	4		3.14	3	18.9	3
10/31/06	6.48	3	8.83	3	47	2		259.5	4		4.95	3	18.9	3
03/18/07	6.43	3	8.26	3	28	2		173.1	4		3.07	3	17.0	2
05/11/07	6.4	2	9.32	3	29	2		169.4	4		2.96	3	18.2	3
08/22/07	6.23	3	9.33	3	27	2		154.1	4		3.17	3	18.5	3
11/14/07	5.59	3	8.95	3	48	2		222.9	4		4.61	3	18.3	3
03/22/08	6.61	3	10.44	4	40	1		-203.1	4		2.88	3	18.0	2
05/17/08	6.73	3	9.29	3	53	2		136.6	4		2.85	3	19.6	3
08/24/08	6.4	2	10.63	4	45	2		188.4	4		3.59	3	16	2
10/15/08	6.19	3	8.98	3	45	2		113.9	4		3.4	2	17.5	3
03/31/09	6.96	3	10.48	4	44	2		-40	1		2.85	3	17.2	3
05/18/09	6.84	3	8.9	2			R	151.3	4		2.52	3	21.1	3
08/26/09			9.94	3	58	2				R	3.78	3	17.2	3
10/16/09	6.23	3	6.87	3	55	2		-12.9	3		4.09	3	17.8	3
03/18/10	6.2	2	8.95	3	41	2		128	3		3.36	3	18	2
05/20/10	6.13	3	11.24	4	95	2	Q	132	3		2.85	3	18	2
08/17/10	6.68	3	9.8	2	46	2		189.1	4		3	1	17.5	3
10/21/10	5.7	2	7.66	3	Q 39	2		92.3	3		3.85	3	17.2	3
03/30/11	5.62	3	9.47	3	46	2	Q	239.8	4		2.5	2	16	2
05/26/11	6.23	3	10.24	4	91	2		193.8	4		2.69	3	18.1	3
08/29/11	6.46	3	10.85	4	40.2416	FALSE		120.1	4		3.14	3	18.1	3
10/28/11	6	1	10.67	4	37	2		163.2	4		3.56	3	16.7	3
03/24/12	6.54	3	9.15	3	47	2		76.7	3		2.58	3	16	2
05/20/12	6.11	3	10.08	4	48	2		221.5	4		2.52	3	18.8	3
08/22/12	6.27	3	9.5	2	47	2		-236	3		2.95	3	18	2
10/08/12	6.29	3	5.13	3	47	2		-351.8	4		3.89	3	16.8	3

335	3	250	2	63	2	**0.785**	3	40	1	0.078	2 J				
55	2	51.3	3	13.8	3	3.88	3 J	26.7	3	0.158	3				
20.0	1	41.2	3	7.60	2	4.50	2 J	21.0	2	0.146	3				
60.0	1	37.5	3	45.5	3	7.75	3	23.0	2	0.204	3				
50.0	1	62.5	3	2.10	2	6.50	2 J	24.0	2	0.135	3	**0.0155**	3	0.135	3
47.0	2	32.5	3	0.800	1	5.75	3 J	22.0	2	0.170	2	**0.0155**	3	0.158	3
47.0	2	23.8	3	1.10	2	6.25	3 J	22.0	2	0.156	3	**0.0155**	3	0.159	3
49.0	2	35.0	2	0.300	1 J	**1.57**	3	22.0	2	0.164	3				
46.0	2	25.0	2	**0.075**	2	4.50	2 J	18.1	3	0.123	3				
485	3	48.8	3	0.700	1	5.50	2 J	21.3	3	0.156	3				
49.7	3	38.8	3	4.82	3	5.84	3 J	20.7	3	0.208	3				
49.9	3	40	1	1.8	2	**1.57**	3	21.9	3	0.175	3				
43.8	3	37.5	3	0.308	3 J	3.84	3 J	20.7	3	0.193	3				
50.7	3	26.3	3	**0.1665**	4	4.32	3 J	20.4	3	0.18	2				
50.9	3	25	2	0.4	1 J	3.66	3 J	17.3	3	0.204	3				
55.8	3	41.2	3 J-	**0.080**	1	3.48	3 J	22.8	3	0.265	3				
49.5	3	35	2	**0.077**	2	5.6	2 J	20	1	0.146	3				
49.9	3	30	1	**0.077**	2	**5.0**	1 U	20.1	3	0.144	3				
48.4	3	31.3	3	**0.076**	2	4	1 J	21	2	0.152	3				
55.2	3	47	2	2.28	3	12.4	3	21.4	3	0.159	3				
48.4	3	32	2	0.309	3 J	4.15	3 J	17.8	3	0.2	1				
47.7	3	28	2	**0.075**	2	3.6	2 J	17.8	3	0.133	3				
46.7	3	22	2	0.306	3 J	**1.57**	3	21	2	0.169	3				
50.3	3	33	2	5	1	5.69	3 J	20.8	3	0.195	3				
49.1	3	38	2	**0.0755**	3	**1.57**	3	17.7	3	0.184	3				
47.5	3	60	1	**0.147**	3	**1.57**	3	16.8	3	0.185	3				
47	2	35	2	3.86	3	3.19	3 J	16.3	3	0.207	3				
51.5	3	41	2	0.194	3 J	3.24	3 J	18	2	0.165	3				
46.3	3	33	2	18	2	**5.0**	1 U	16	2	0.182	3				
46.8	3	29	2	**0.075**	2	6.3	2 J	17.3	3	0.281	3				

0.0085	2	J		
0.018	2	J		
0.0160	2			
0.0106	3			
0.0067	2	J	**0.0155**	3
0.0240	2		**0.050**	1 UJ
0.0180	2		**0.0155**	3
0.0110	2			
0.0045	2	J		
0.0189	3			
0.0146	3			
0.0102	3			
0.0126	3			
0.006	1	J		
0.0157	3			
0.0329	3			
0.00155	3			
0.0050	1	U		
0.0074	2	J		
0.0135	3			
0.0152	3			
0.0068	2	J		
0.0182	3			
0.011	2			
0.0139	3			
0.0046	2	J		
0.00155	3			
0.0153	3			
0.0154	3			
0.0091	2	J		

0.792	3	0.057	2 J	8.19	3	**0.00125**	3	**0.00125**	3	0.38	2 J				**0.0155**
0.756	3	0.035	2 J	3.92	3	**0.00125**	3	**0.00125**	3	0.39	2 J				**0.0155**
0.745	3	**0.0155**	3	3.80	2	**0.00125**	3	**0.00125**	3	1.1	2				**0.0155**
0.760	2	0.0380	2 J	3.57	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.773	3	0.0680	2 J	3.32	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.637	3	**0.0155**	3	2.63	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0465
0.659	3	**0.0155**	3	2.76	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.808	3	0.0390	2 J	3.01	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.562	3	0.0310	2 J	2.50	2	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0393
0.646	3	**0.0155**	3	2.64	3	0.0015	2 J	**0.00075**	2	**0.155**	3				**0.0155**
0.644	3	**0.0155**	3	2.60	2	**0.00075**	2	**0.00075**	2	0.31	2 J				**0.0155**
0.652	3	**0.0155**	3	2.79	3	0.0051	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.413	3	**0.0155**	3	2.67	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.512	3	**0.0155**	3	2.39	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	0.154	3 J		**0.0155**
0.61	2	**0.0155**	3	2.55	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	**0.075**	2		**0.050**
0.609	3	**0.0155**	3	2.49	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.591	3	0.081	2 J	2.48	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.499	3 J		**0.0155**
0.513	3	**0.0155**	3	2.5	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.579	3	**0.0155**	3	2.51	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.614	3	**0.0155**	3	2.63	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.648	3 J+		**0.0155**
0.605	3	0.069	2 J	2.72	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.604	3	0.079	2 J	2.78	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	3.64	3		**0.0155**
0.635	3	**0.050**	1 U	2.73	3	**0.00075**	2	**0.00075**	2	**0.155**	3	4.59	3		0.049
0.71	2	0.064	2 J	2.96	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.548	3	0.052	2 J	2.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.519	3	0.067	2 J	2.43	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.586	3	0.033	2 J	2.61	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.266	3 J		**0.0155**
0.662	3	0.07	1 J	2.65	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.693	3	0.051	2 J	2.5	2	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.675	3	0.074	2 J	2.48	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.282	3 J		**0.050**

3	26700	3	818	3	0.185	3	0.0378	3 J+	1.87	3	0.619	3	28.3	3	3.86	3
3	1120	3	8.2	2 J+	0.0892	3 J+	0.0698	3 J+	**0.125**	3	**0.125**	3	4.94	3	4.57	3
3	639	3	**1.00**	1 U	0.0452	3 J	0.0372	3 J	**0.155**	3	**0.155**	3	4.85	3	4.74	3
3	148	3	2.90	2	0.0838	3	0.0308	3 J	**0.155**	3	**0.155**	3	4.18	3	3.83	3
3	95.4	3	**1.00**	1 U	0.0554	3	0.0318	3 J	**0.155**	3	**0.155**	3	4.07	3	4.29	3
3 J	32.0	2	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.395	3 J	**0.155**	3	3.76	3 J+	3.36	3 J+
3	15.5	3 J+	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.99	3 J+	3.00	1 J+
3	13.6	3 J+	2.49	3 J+	0.0266	3 J	0.0432	3 J	**0.155**	3	**0.155**	3	2.84	3	2.88	3
3 J	7.91	3 J+	**1.00**	1 U	0.0214	3 J	0.0150	2 J	**0.155**	3	**0.155**	3	2.61	3	2.51	3
3	18.3	3	**1.00**	1 U	0.0278	3 J	0.0282	3 J	**0.155**	3	**0.155**	3	3.02	3	3.10	2
3	156	3	2.42	3	0.0314	3 J	0.0222	3 J	**0.155**	3	**0.155**	3	3.74	3	2.39	3
3	82.6	3	2.04	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.54	3	2.28	3
1 U	3.29	3	**1.00**	1 U	0.0209	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	2.46	3	2.49	3
3	3.32	3	0.946	3 J	**0.0075**	2	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.13	3	1.92	3
1 U	5.83	3	**1.00**	1 U	**0.0075**	2	0.0241	3 J	**0.155**	3	**0.155**	3	2.16	3	2.07	3
1 U	8.51	3	2.23	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	9.19	3	8.24	3
3	3.23	3 J+	**1.00**	1 U	0.0215	3 J	0.0182	3 J	**0.155**	3	**0.155**	3	2.45	3	2.33	3
3	4.26	3	**1.00**	1 U	0.0158	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	1.98	3	1.97	3
3	5.99	3	2.12	3	0.0246	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	1.89	3	1.86	3
3	12.8	3	2.86	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.02	3 J+	1.83	3 J+
3	6.06	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.8	2 J+	1.6	2 J+
3	4.02	3 J+	**1.00**	1 U	**0.0075**	2	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.1	2 J+	2.01	3 J+
2 J	3.81	3 J+	**1.00**	1 U	**0.0250**	2 U	**0.0075**	2	**0.155**	3	**0.155**	3	1.66	3	1.71	3
1 U	281	3	3	1 J+	**0.0250**	2 U	**0.0250**	2 U	0.337	3 J	**0.155**	3	2.75	3 J+	2.21	3 J+
3	9.15	3 J+	**1.00**	1 U	0.016	2 J		R	**0.075**	2	0.182	3 J	4.94	3	5.21	3
3	3.31	3 J+	2.01	3 J+	0.0191	3 J	**0.0075**	2	**0.075**	2	**0.250**	2 U	3.84	3	4.03	3
3	6.83	3	**1.00**	1 U	**0.0250**	2 U	0.0221	3 J	**0.075**	2	**0.075**	2	2.32	3	2.27	3
3	6.1	2 J+	**1.00**	1 U	0.0499	3 J	0.0434	3 J	0.171	3 J	0.191	3 J	4.08	3 J+	3.7	2 J+
3	102	3	**1.00**	1 U	0.037	2 J	0.0189	3 J	0.225	3 J	**0.250**	2 U	2.99	3	2.24	3
1 U	15	2 J+	2.3	2 J+	**0.0075**	2	**0.0075**	2	0.199	3 J	0.237	3 J	1.88	3	1.94	3

2.19	3	0.045	2	0.333	3	0.005	1 J	16	2	11.3	3	0.917	3	0.00775	3	20200	3
0.0404	3	0.0075	2	0.0148	3 J+	0.005	1 U	5.4	2 J	6.8	2 J	0.00775	3	0.00775	3	6160	3
0.0354	3	0.0120	2	0.0250	2 U	0.0250	2 U	2.50	2 U	2.50	2 U	0.0125	3	0.0125	3	5670	3
0.0120	2	0.0120	2	0.0075	2	0.0075	2	3.18	3 J	1.79	3 J	0.0125	3	0.0125	3	6210	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	5960	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	6140	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5420	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5800	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5950	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5910	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5630	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6220	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5080	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5500	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5400	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	6920	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5460	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5620	3
0.0125	3	0.0125	3	0.04	1 J	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5740	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5570	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5530	3
0.0125	3	0.0125	3	0.0075	2	0.024	2 J	1.25	3	1.25	3	0.0075	2	0.0075	2	5420	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5080	3
0.0263	3 J	0.0125	3	0.0075	2	0.0075	2	3.21	3 J	3	1 J	0.0075	2	0.0075	2	5650	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	2.3	2 J	2.13	3 J	0.0075	2	0.0075	2	5710	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	0.75	2	1.59	3 J	0.0075	2	0.0075	2	5370	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.69	3 J	1.85	3 J	0.0075	2	0.0075	2	4960	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	2.50	2 U	2.50	2 U	0.0075	2	0.0075	2	5990	3
0.0606	3	0.0125	3	0.0075	2	0.0075	2	1.83	3 J	1.58	3 J	0.0075	2	0.0075	2	5700	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	0.75	2	0.75	2	0.0075	2	0.0075	2	5270	3

	6410	3	8.74	3	0.42	2 J+	3.87	3	0.146	3 J+	7.05	3	0.613	3 J+
	6320	3	1.05	3	0.582	3	0.0726	3 J+	0.0462	3 J+	0.569	3 J+	0.316	3 J+
	5970	3	5.51	3	0.739	3 J+	0.0888	3	0.0398	3	1.18	3	0.368	3 J+
	6280	3	1.19	3	0.469	3	0.0712	3	0.0266	3	0.831	3	0.416	3
	7150	3	1.70	2 J+	0.940	2 J+	0.0514	3	0.0332	3	0.763	3 J+	0.357	3 J+
	5540	3	1.53	3	**0.050**	1	0.0466	3	0.0152	3 J	0.906	3 J+	0.254	3 J+
	5680	3	0.753	3 J+	**0.050**	1	0.0284	3 J+	**0.0100**	1 U	1.17	3 J+	0.239	3 J+
	6020	3	1.30	2	0.353	3	0.0260	2 J+	**0.0100**	1 U	1.82	3 J+	0.302	3 J+
	5670	3	0.431	3	0.366	3	0.0296	3	0.0148	3 J	0.972	3 J+	0.304	3 J+
	6340	3	0.583	3 J+	0.217	3 J+	0.0218	3	0.0164	3 J	1.09	3	0.252	3
	5260	3	2.93	3	0.461	3	0.0817	3	0.0166	3 J	1.86	3	0.238	3
	5920	3	3.99	3	0.525	3	0.0398	3	0.0215	3	0.757	3 J+	0.29	2 J+
	5680	3	1.48	3	0.25	2	0.0209	3	0.0167	3 J	0.615	3 J+	0.512	3 J+
	5030	3	1.32	3	0.168	3 J	0.0181	3 J	0.0139	3 J	0.684	3	0.224	3
	5550	3	1.03	3	0.472	3	0.0287	3 J+	0.029	2 J+	2.3	2 J+	1.88	3 J+
	6770	3	0.555	3 J+	0.454	3 J+	0.0352	3	0.032	2	1.41	3	1.18	3
	5210	3	0.305	3	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	2.15	3 J+	1.64	3 J+
	5510	3	0.293	3	0.171	3 J	0.0131	3 J	0.0126	3 J	1.67	3	1.11	3
	5440	3	0.626	3	0.171	3 J	0.0145	3 J	0.011	2 J	3.5	2	3	1
J+	5280	3 J+	0.34	2	**0.100**	1 U	**0.0100**	1 U	**0.0050**	1	2.3	2	2.06	3
	5110	3	0.336	3 J+	0.233	3 J+	**0.0050**	1	**0.0050**	1	1.68	3 J+	1.25	3 J+
	5210	3	0.264	3	**0.050**	1	0.014	2 J	0.0142	3 J	2.24	3	1.92	3
	5380	3	0.32	2	0.217	3	0.0157	3 J	0.0125	3 J	1.51	3	1.49	3
	5570	3	1.06	3	**0.100**	1 U	0.0579	3	0.0149	3 J	2.25	3	1.07	3
	5850	3	1.58	3	0.537	3	0.0241	3	0.0158	3 J	1.2	2	0.948	3
	5610	3	0.91	2	0.306	3	0.0182	3 J	0.0139	3 J	1.29	3	1.06	3
	5160	3	0.713	3	0.282	3	0.018	2 J	0.0155	3 J	1.88	3 J+	1.56	3 J+
	5910	3	0.395	3 J+	0.324	3 J+	**0.0100**	1 U	**0.0100**	1 U	0.867	3	0.818	3
	5480	3	0.727	3	0.221	3	0.092	2	0.0244	3	5.2	2	1.49	3
	5430	3	0.948	3	0.234	3	**0.0100**	1 U	**0.0100**	1 U	2.02	3 J+	1.97	3 J+

7500	2	174	3	11.3	3	0.515	3	5940	3	821	3	64.5	3	2.93	3
302	3	**3.1**	2	0.33	2 J+	**0.05**	1 U	906	3	830	2	4.65	3	3.45	3
147	3	**10.0**	1 U	0.363	3 J+	**0.0130**	2	1030	3	1000	1	3.70	2	1.66	3
56.7	3	**3.10**	2	0.336	3	0.139	3	951	3	937	3	4.66	3	1.21	3
62.2	3	**3.10**	2	0.195	3 J+	**0.050**	1 U	978	3	1100	2	6.24	3	1.06	3
32.7	3	**3.10**	2	0.119	3 J+	**0.050**	1 U	859	3	851	3	4.74	3	0.793	3 J+
10.0	1 U	**3.10**	2	**0.050**	1 U	**0.0155**	3	844	3	883	3	2.27	3 J+	0.656	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U		R	903	3	989	3	1.04	3 J+	0.560	2 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	893	3	843	3	0.693	3 J+	0.420	2 J+
17.1	3 J	9.30	2 J	**0.050**	1 U	**0.0155**	3	864	3	919	3	1.16	3	0.403	3
106	3	18.2	3 J	0.319	3	**0.0155**	3	969	3	806	3	10.4	3	0.561	3
46.9	3	20.2	3	0.106	3	**0.0155**	3	985	3	918	3	1.08	3 J+	0.734	3 J+
22.5	3	17.3	3 J	**0.0155**	3	**0.0155**	3	805	3	872	3	0.468	3	0.406	3
18.1	3 J	11.9	3 J	**0.0155**	3	**0.0155**	3	903	3	809	3	0.428	3	0.286	3
39.6	3	35.6	3	**0.0155**	3	**0.0155**	3	909	3	903	3	0.747	3 J+	0.432	3 J+
50.2	3	52.2	3	**0.0155**	3	**0.0155**	3	922	3	933	3	0.57	2	0.209	3 J+
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	868	3	831	3	0.208	3 J+	0.146	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	922	3	891	3	0.352	3	0.145	3
3.10	2	7.49	3 J	0.0344	3 J	**0.0155**	3	895	3	913	3	0.431	3	0.164	3 J+
10.0	1 U	**3.10**	2	0.0708	3 J	**0.0155**	3	984	3 J+	951	3 J+	0.829	3 J+	0.171	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	898	3	833	3	0.53	2 J+	0.138	3 J+
6.66	3 J	**3.10**	2	**0.0155**	3	0.042	2 J	899	3	879	3	0.247	3 J+	0.141	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	804	3	895	3	0.53	2 J+	0.147	3 J+
89.3	3	**10.0**	1 U	0.294	3	**0.0155**	3	980	2	923	3	4.2	2	0.255	3 J+
27.8	3	17	2 J	0.0606	3 J	**0.0155**	3	939	3	913	3	0.809	3	0.312	3
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	795	3	824	3	0.337	3	0.25	2
8.94	3 J	17.5	3 J	0.0719	3 J	**0.0155**	3	872	3	793	3	0.84	2 J+	0.271	3 J+
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	927	3	926	3	0.536	3 J+	0.148	3 J+
41	2	11	2 J	0.671	3	**0.0155**	3	908	3	873	3	11.5	3	1.03	3 J+
10.3	3 J	7.91	3 J	**0.0155**	3	**0.0155**	3	881	3	906	3	0.349	3 J+	0.181	3 J+

0.031	2	0.1	1 J	3.07	3	2.79	3	7.62	3	1.19	3	1840	3	471	3	0.464	3
0.031	2	**0.031**	2	1.23	3 J+	1.18	3 J+	0.75	2 J		R	272	3	272	3	**0.0775**	3
0.000475	4	**0.000475**	4	1.72	3	2.07	3	2.66	3	1.75	3	265	3	254	3	**0.155**	3
0.000475	4	0.00130	2 J	1.95	3	1.72	3	1.63	3	0.594	3	253	3	248	3	**0.155**	3
0.000475	4	**0.000475**	4	1.54	3	1.76	3	0.948	3	0.988	3	226	3	269	3	**0.155**	3
0.000475	4	**0.000475**	4	1.27	3	1.36	3	1.11	3	0.481	3	227	3	197	3	**0.155**	3
0.000555	3 J	**0.000475**	4	1.65	3	1.79	3	0.656	3 J+	0.597	3 J+	220	2	233	3	**0.155**	3
0.000169	3	**0.000475**	4	1.47	3	1.56	3	0.777	3 J+	0.568	3 J+	213	3	230	2	**0.155**	3
0.000169	3	**0.000475**	4	1.36	3	1.35	3	0.646	3 J+	0.322	3 J+	214	3	202	3	**0.155**	3
0.000169	3	**0.000475**	4	1.25	3	1.40	2	0.493	3	0.416	3	231	3	247	3	**0.155**	3
0.00075	2	**0.00075**	2	1.45	3	1.32	3	1.56	3	0.669	3	257	3	211	3	**0.155**	3
0.00075	2	**0.00075**	2	1.39	3	1.29	3	1.93	3	1	1	248	3	229	3	**0.155**	3
0.00075	2	**0.00075**	2	1.25	3	1.31	3	0.853	3	0.671	3	200	1	208	3	**0.155**	3
0.00216	3 J	**0.00075**	2	1.2	2	1.07	3	0.753	3	0.468	3	202	3	183	3	**0.155**	3
0.00075	2	**0.00075**	2	1.33	3	1.32	3	**0.310**	2 U	**0.310**	2 U	221	3	219	3	**0.155**	3
0.00154	3 J	**0.00075**	2	1.38	3	1.41	3	0.406	3 J	0.301	3 J	224	3	223	3	**0.155**	3
0.00075	2	**0.00075**	2	1.09	3	1.07	3	**0.310**	2 U	**0.310**	2 U	205	3	192	3	**0.155**	3
0.00075	2	**0.00075**	2	1.14	3	1.1	2	0.262	3 J	0.176	3 J	204	3	203	3	**0.155**	3
0.00075	2	**0.00075**	2	1.27	3	1.25	3	0.351	3 J	0.236	3 J	217	3	216	3	**0.155**	3
0.00250	2 U	**0.00250**	2 U	1.28	3 J+	1.24	3 J+	**0.310**	2 U	**0.310**	2 U	255	3 J+	235	3 J+	**0.155**	3
0.00250	2 U	**0.00075**	2	1.2	2	1.08	3	**0.310**	2 U	**0.310**	2 U	212	3	203	3	**0.155**	3
0.00075	2	**0.00075**	2	1.16	3	1.14	3	0.233	3 J	**0.310**	2 U	209	3	202	3	**0.155**	3
0.00075	2	**0.00075**	2	1.13	3	1.19	3	0.255	3 J	0.258	3 J	222	3	218	3	**0.155**	3
0.00156	3 J	**0.00075**	2	1.4	2	1.43	3	1.2	2	0.452	3 J	235	3	218	3	**0.155**	3
0.00075	2	**0.00075**	2	1.25	3	1.21	3	0.766	3	0.499	3 J	214	3	215	3	**0.155**	3
0.00075	2	**0.00075**	2	1.12	3	1.1	2	0.535	3 J	0.469	3 J	200	1	212	3	**0.155**	3
0.00075	2	**0.00075**	2	1.27	3	1.15	3	**0.310**	2 U	**0.310**	2 U	210	2	215	3	**0.155**	3
0.00075	2	**0.00075**	2	1.22	3	1.21	3	**0.310**	2 U	**0.310**	2 U	210	2	215	3	**0.155**	3
0.00075	2	**0.00075**	2	0.887	3	1.06	3	0.791	3	**0.310**	2 U	212	3	206	3	**0.155**	3
0.00075	2	**0.00075**	2	1.04	3	1.07	3	**0.310**	2 U	**0.310**	2 U	193	3	207	3	**0.155**	3

J	0.0775	3
	0.0775	3
	0.155	3
	0.155	3
	0.155

6020	3	0.272	3	**0.0031**	2	15800	3	15100	3	0.108	3	**0.0031**	2	2.95	3
6020	3	0.0136	3 J	**0.0031**	2	4020	3	4070	3	**0.0031**	2	**0.0031**	2	**0.1**	1 U
6610	3	0.0072	2 J	**0.0031**	2	3910	3	4340	3	**0.0025**	2	**0.0025**	2	0.140	2
6200	2	**0.0031**	2	**0.0031**	2	3250	3	3300	2	0.0210	2	**0.0025**	2	0.171	3
6760	3	0.0184	3 J	**0.0031**	2	2890	3	3220	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4970	3	**0.0031**	2	**0.0031**	2	2550	3	2580	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6100	2	**0.0031**	2	**0.0031**	2	3080	3	3340	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5880	3	**0.0031**	2	**0.0031**	2	2830	3	3150	3	0.0674	3	**0.0050**	1	**0.050**	1
5490	3	**0.0031**	2	**0.0031**	2	2870	3	2640	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6390	3	**0.0031**	2	**0.0031**	2	2450	3	2650	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5490	3	0.0081	2 J	**0.0031**	2	3060	3	2700	2	**0.0050**	1	**0.0050**	1	**0.050**	1
6020	3	**0.0031**	2	**0.0031**	2	3340	3	3170	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5680	3	**0.0031**	2	**0.0031**	2	2500	2	2740	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5180	3	**0.0031**	2	**0.0031**	2	2750	3	2510	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5720	3	**0.0031**	2	**0.0031**	2	2940	3	2930	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5960	3	**0.0031**	2	**0.0031**	2	2820	3	2870	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5120	3	**0.0031**	2	**0.0031**	2	2540	3	2410	3	**0.0050**	1	**0.0050**	1	0.537	3 J
5560	3	**0.0031**	2	**0.0031**	2	2680	3	2630	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5890	3	**0.0031**	2	**0.0031**	2	2680	3	2720	3	**0.0050**	1	**0.0050**	1	**0.050**	1
6290	3 J+	**0.0031**	2	**0.0031**	2	2890	3 J+	2840	3 J+	**0.0050**	1	**0.0050**	1	0.234	3
5550	3	**0.0031**	2	**0.0031**	2	2710	3	2550	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5740	3 J+	**0.0031**	2	**0.0031**	2	2670	3 J+	2610	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
5970	3	**0.0031**	2	**0.0031**	2	2410	3	2720	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5950	3	**0.0031**	2	**0.0031**	2	2730	3	2840	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5980	3	**0.0031**	2	**0.0031**	2	2710	3	2660	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5550	3	**0.0031**	2	**0.0031**	2	2280	3	2430	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5560	3	**0.0031**	2	**0.0031**	2	2590	3	2300	2	**0.0031**	2	**0.0031**	2	**0.100**	1 U
5870	3	**0.0031**	2	**0.0031**	2	2650	3	2700	2	**0.0031**	2	**0.0031**	2	**0.0310**	2
5660	3	**0.0031**	2	**0.0031**	2	2500	2	2480	3	**0.0031**	2	**0.0031**	2	0.0814	3 J
5830	3	**0.0031**	2	**0.0031**	2	2470	3	2540	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.076	2 J	27.3	3	3.17	3	60.5	3	2.63	3
0.031	2	1.17	3	1.02	3	1.76	3	**0.75**	2 U
0.0155	3	0.572	3	**0.110**	2	3.06	3 J+	2.65	3 J+
0.0155	3	0.563	3	0.381	3 J	1.09	3 J+	1.47	3 J+
0.050	1	**0.250**	2	**0.250**	2	1.61	3 J+		R
0.050	1	0.953	3 J	0.557	3 J	**0.50**	1 U	**0.50**	1 U
0.050	1	0.547	3 J	0.508	3 J	2.14	3 J+	1.30	2 J+
0.050	1	**0.155**	3	0.326	3 J	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	2.01	3 J+	1.06	3 J+
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	1.47	3	1.98	3
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	1.54	3 J+	1.31	3 J+
0.050	1	**0.155**	3	0.37	2 J	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
	R	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	0.333	3 J	0.728	3 J	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.411	3 J	0.319	3 J	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.459	3 J	0.397	3 J	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.355	3 J	**0.155**	3	2.82	3 J	2.65	3 J
0.0678	3 J	**0.155**	3	**0.155**	3	3.12	3	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.382	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U		R

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	6.35		9.12		50		104.3		3.31		19.9	
Median	6.29		9.27		47		151.3		3.14		18.0	
St. Deviation	0		1		18		149		1		10	
# of values	29		30		29		29		30		30	
Minimum	5.59		5.13		27		-351.8		2.50		16.0	
Maximum	7.92		11.24		102		286.0		4.95		74.8	
Lowest fifth percentile	6		7		28		-223		3		16	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	72%		0%		0%		0%		0%		0%	
% of DWS exceedences	14%		0%		0%		0%		0%		0%	

1	3	0	2	2	2	2	3	1	3	3	3	4	3	3	3
73		44		6		4.420		21		0.174		0		0	
49		35		0		4.240		21		0.170		0		0	
94		40		14		2		4		0		0		0	
30		30		30		30		30		30		3		3	
20		22		0		0.785		16		0.078		0.0155		0.135	
485		250		63		12.400		40		0.281		0.0155		0.159	
45		24		0		2		17		0		0		0	
0		0		10		8		0		0		3		0	
				33%		27%						100%			
				6		20				1					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		33%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3
0.0120		0	
0.0120		0	
0		0	
30		3	
0.0016		0.0155	
0.0329		0.05	
0		0	
3		3	
10%		100%	
9			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.637		0.039		2.95		0.00116		0.00093		0.21		1		0.0242
0.636		0.034		2.64		0.00075		0.00075		0.16		0		0.0155
0		0		1		0		0		0		1		0
30		30		30		30		30		30		19		30
0.413		0.016		2.39		0.00075		0.00075		0.16		0.075		0.0155
0.808		0.081		8.19		0.00510		0.00250		1.10		4.59		0.0500
1		0		2		0		0		0		0		0
0		14		0		28		30		26		12		27
		47%				93%		100%		87%		63%		90%
		16				1				3		4		3
230		NA		NA		NA		0.0052		NA		NA		7.02
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	3	2	3	3	3	3	2	3	2	3
	984		29		0.031		0.0220		0.22		0.178		4.0		3.01	
	11		1		0.023		0.0220		0.16		0.155		2.8		2.44	
	4863		149		0		0		0		0		5		1	
	30		30		30		29		30		30		30		30	
	3		1		0.008		0.0075		0.08		0.075		1.7		1.60	
	26700		818		0.185		0.0698		1.87		0.619		28.3		8.24	
	3		1		0		0		0		0		2		2	
	0		17		13		15		24		26		0		0	
			57%		43%		52%		80%		87%					
			1		13		12		5		3					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	27%		3%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.09		0.013		0.020		0.009		2		2.0		0.039		0.00860		6170	
0.01		0.013		0.008		0.008		1		1.3		0.008		0.00750		5660	
0		0		0		0		3		2		0		0		2680	
30		30		30		30		30		30		30		30		30	
0.01		0.008		0.008		0.005		1		0.8		0.008		0.00750		4960	
2.19		0.045		0.333		0.025		16		11.3		0.917		0.01850		20200	
0		0		0		0		1		1		0		0		5080	
25		29		27		28		23		22		29		30		0	
83%		97%		90%		93%		77%		73%		97%		100%			
1				1		2		6		7							
NA		NA		NA		NA		NA		NA		0.070		0.069		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		3%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	2	3	3	3
5720		1.43		0.32		0.16		0.022		1.79		0.971	
5590		0.93		0.27		0.03		0.015		1.46		0.883	
510		2		0		1		0		1		1	
30		30		30		30		30		30		30	
5030		0.26		0.05		0.01		0.005		0.57		0.224	
7150		8.74		0.94		3.87		0.146		7.05		3.000	
5133		0		0		0		0		1		0	
0		0		6		5		7		0		0	
				20%		17%		23%					
				3		7		14					
NA		10.98		10.56276		NA		NA		1.949		1.871	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		30%		17%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	2	4	3	4	3	0	3	0	3	3	3	3	3		
289		16		0.5		0.041		1074		892		4.3		0.64			
18		10		0.1		0.016		905		893		0.8		0.36			
1363		32		2		0		921		66		12		1			
30		30		30		29		30		30		30		30			
3		3		0.0		0.013		795		793		0.2		0.14			
7500		174		11.3		0.515		5940		1100		64.5		3.45			
3		3		0		0		804		807		0		0			
11		17		16		26		0		0		0		0			
37%		57%		53%		90%											
5		9		4		1											
1000		1000		0.309		0.327		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
3%		0%		20%		3%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		3%		0%			

5	2	5	2	2	3	2	3	3	3	3	3	0	3	0	3	3	3
0.003		0.0		1.37		1.37		0.98		0.51		277		228		0.163	
0.001		0.0		1.27		1.27		0.65		0.42		219		216		0.155	
0		0		0		0		1		0		296		50		0	
30		30		30		30		30		29		30		30		30	
0.000		0.0		0.89		1.06		0.23		0.18		193		183		0.078	
0.031		0.1		3.07		2.79		7.62		1.75		1840		471		0.464	
0		0		1		1		0		0		200		194		0	
26		28		0		0		7		9		0		0		29	
87%		93%						23%		31%						97%	
4		2						6		7						1	
0.77		0.77		NA		NA		11.07		11.03		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.1500	
0.1550	
0	
30	
0.0775	
0.1550	
0	
30	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
5830		0.013		0.0031		3250		3260		0.011		0.0043		0.18	
5880		0.003		0.0031		2720		2710		0.005		0.0050		0.05	
400		0		0		2400		2280		0		0		1	
30		30		30		30		30		30		30		30	
4970		0.003		0.0031		2280		2300		0.003		0.0025		0.03	
6760		0.272		0.0031		15800		15100		0.108		0.0050		2.95	
5147		0		0		2428		2419		0		0		0	
0		25		30		0		0		27		30		24	
		83%		100%						90%		100%		80%	
		4												1	
NA		0.16183995		0.138		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		3%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.045		1.2		0.35		3.5		1.43	
0.050		0.2		0.16		1.6		1.55	
0		5		1		11		1	
29		30		30		30		28	
0.016		0.2		0.11		0.5		0.50	
0.076		27.3		3.17		60.5		2.65	
0		0		0		1		1	
27		20		20		18		20	
93%		67%		67%		60%		71%	
2		6		8		2		1	
NA		NA		NA		25.36		25.01	
NA		NA		NA		NA		NA	
0%		0%		0%		3%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05-13S																
Sample Date																
08/22/05	5.74	3	4.75	3		36	2		71	2		5.08	3	14.2	3	
11/11/05	5.86	3	8.67	3		38	2		223	3		8.03	3	13.4	3	
03/21/06	5.29	3	11.71	4		35	2		210	2		1.06	3	13.0	2	
05/22/06	5.42	3	12.52	4		35	2		312.1	4		2.07	3	13.0	2	
08/24/06	6	1	8.98	3		33	2		196.7	4		1.93	3	14.3	3	
10/31/06	6.73	3	8.66	3		36	2		283	3		6.25	3	12.8	3	
03/18/07	5.86	3	12.4	3		19	2		215.2	4		1.64	3	12.8	3	
05/11/07	5.59	3	12.7	3		19	2		193.6	4		1.12	3	13.0	2	
08/22/07	5.67	3	8.17	3		20	1		167.9	4		3.05	3	13.4	3	
11/14/07	6.17	3	8.85	3		38	2		205.2	4		6.81	3	13.1	3	
03/22/08	5.64	3				28	2		-26.2	3		2.03	3	11.6	3	
05/17/08	6.03	3	13.95	4		38	2		173.5	4		1.03	3	13.7	3	
08/24/08	5.81	3	9.97	3		34	2		180.9	4		3.2	2	12.5	3	
10/15/08	5.82	3	8.66	3		38	2		120.4	4		4.53	3	14.7	3	
04/01/09	6.97	3	13.43	4		31	2		-19.5	3		1.28	3	14.2	3	
05/19/09	6.38	3	13.55	4		41	2		143	3		1.6	2	15.1	3	
08/26/09			8.41	3		48	2				R	4.01	3	13.1	3	
10/16/09	6.03	3	5.73	3		49	2		-101.7	4		5.78	3	14.7	3	
03/18/10	5.92	3	11.03	4		19	2		133.6	4		2.82	3	13.1	3	
05/20/10	5.91	3	13.6	3		75	2	Q	152.8	4		1.55	3	13.7	3	
08/17/10	6.38	3	8.13	3		36	2		142.3	4		1.91	3	13.8	3	
10/21/10	5.38	3	6.43	3	Q	34	2		89	2		5.02	3	13.9	3	
03/30/11	5.5	2	10.49	4		33	2	Q	227	3		1.58	3	12.6	3	
05/26/11	5.87	3	13.25	4		71	2		189.5	4		1.35	3	13.5	3	
08/29/11	6.13	3	10.76	4		30.3072	FALSE		154.6	4		2.84	3	13.6	3	
10/28/11	5.8	2	8.84	3		32	2		140.9	4		5.01	3	14.5	3	
03/24/12	6.14	3	10.54	4		39	2		60.4	3		1.63	3	12.8	3	
05/20/12	5.92	3	10.38	4		35	2		157.7	4		1.09	3	15.4	3	
08/22/12	6.02	3	8.79	3		37	2		-240.6	4		2.42	3	13	2	
10/08/12	5.82	3	5.02	3		43	2		-328.1	4		5.44	3	14.3	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
35	2		28.8	3		**0.075**	2		10.5	3		13	2		**0.0155**	3						
37	2		35	2		**0.075**	2		8.25	3		13.5	3		0.226	3						
35.0	2		37.5	3		**0.075**	2		7.00	1		12.0	2		0.104	3						
37.5	3		27.5	3		**0.075**	2		7.75	3		12.0	2		0.444	3						
36.0	2		55.0	2		**0.075**	2		10.5	3		15.0	2		0.0805	3	J	**0.0155**	3		0.0805	3
37.0	2		26.2	3		**0.075**	2		8.00	1	J	14.0	2		0.280	2		**0.0155**	3		0.274	3
32.0	2		10.0	1		**0.075**	2		8.75	3	J	**6.00**	1	J	0.164	3		**0.0155**	3		0.168	3
33.5	3		33.8	3		**0.075**	2		4.00	1	J	12.5	3		0.172	3						
34.5	3		16.3	3		**0.075**	2		7.00	1	J	13.4	3		0.0615	3	J					
38.0	2		56.3	3		**0.0765**	3		8.00	1	J	14.7	3		0.125	3	J-					
40.6	3		27.5	3		0.816	3		7.72	3	J	12.9	3		0.179	3						
38.1	3		35	2		**0.150**	2		**1.57**	3		13.9	3		0.174	3						
34.4	3		28.8	3		0.515	3		6.28	3	J	14.3	3		**0.050**	1	U					
50.1	3		23.8	3		**0.1665**	4		6.68	3	J	16.3	3		0.128	3						
40.6	3		35	2		**0.078**	2		**1.57**	3		13	2		0.197	3						
42.2	3		21.2	3		**0.161**	3		5.12	3	J	14.8	3		0.282	3						
41.6	3		35	2		**0.080**	1		7.7	2	J	30.6	3		0.118	3						
44.1	3		28.8	3		**0.076**	2		**5.0**	1	U	33.9	3		0.096	2	J					
38.4	3		23.8	3		**0.076**	2		4.08	3	J	29.7	3		0.153	3						
44.6	3		37	2		**0.1565**	4		11.4	3		30.8	3		0.141	3						
38.5	3		30	1		**0.0765**	3		11.7	3		15.1	3		**0.050**	1	U					
42.2	3		28	2		**0.075**	2		5.52	3	J	15.4	3		**0.050**	1	U					
37	2		8	1	J	**0.075**	2		**1.57**	3		16.8	3		0.174	3						
39.7	3		40	1		**0.075**	2		7.88	3	J	13.6	3		0.173	3						
38.8	3		35	2		**0.0755**	3		4.1	2	J	13.9	3		0.116	3						
41.9	3		50	1		**0.0735**	3		3.77	3	J	14.6	3		0.0775	3	J					
38.5	3		27	2		**0.074**	2		4.16	3	J	12.3	3		0.212	3						
37.5	3		25	2		**0.0745**	3		5.2	2	J	11.6	3		0.139	3						
38	2		32	2		**0.0735**	3		**5.0**	1	U	12.3	3		0.144	3	J-					
40.2	3		19	2		**0.076**	2		6.03	3	J	14.6	3		0.066	2	J					

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.011	2	J			
	0.018	2	J			
	0.00155	3				
	0.0380	2				
J	0.0040	1	J	**0.0155**	3	
	0.0130	2		**0.050**	1	UJ
	0.0210	2		**0.0155**	3	
	0.00155	3				
	0.0036	2	J			
	0.0159	3				
	0.0083	2	J			
	0.0135	3				
	0.0050	1	U			
	0.0034	2	J			
	0.0050	1	U			
	0.0115	3				
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.0135	3				
	0.0048	2	J			
	0.0068	2	J			
	0.00155	3				
	0.00155	3				
	0.0078	2	J			
	0.00155	3				
	0.00155	3				
	0.00155	3				
	0.0075	2	J			
	0.0085	2	J			

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.385	3		**0.0155**	3		2.66	3		**0.00125**	3		**0.00125**	3		0.28	2	J				**0.0155**			
0.788	3		**0.0155**	3		2.78	3		**0.00125**	3		**0.00125**	3		0.092	2	J				**0.0155**			
0.664	3		**0.0155**	3		3.10	2		**0.0025**	2	UJ	**0.0025**	2	UJ	**0.155**	3					**0.0155**			
0.846	3		**0.0155**	3		2.77	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.0155**			
0.558	3		**0.0155**	3		2.77	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.751	3		**0.0155**	3		2.20	2		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0795			
0.624	3		**0.0155**	3		2.70	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.694	3		0.0310	2	J	2.24	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.326	3		**0.0155**	3		2.16	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0365			
0.676	3		**0.0155**	3		2.34	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.417			
0.605	3		**0.0155**	3		2.47	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.527	3		**0.0155**	3		2.35	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.213	3		**0.0155**	3		2.23	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.505	3		0.035	2	J	2.54	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		0.239	3	J	**0.0155**			
0.556	3		**0.0155**	3		2.44	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.711	3		**0.0155**	3		2.15	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.154	3	J	**0.0155**			
0.343	3		0.069	2	J	1.94	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.352	3	J	**0.0155**			
0.459	3		**0.0155**	3		2.26	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.638	3		**0.0155**	3		2.51	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.576	3		**0.0155**	3		2.3	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.534	3	J+	**0.0155**			
0.322	3		0.067	2	J	1.92	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.715	3		**0.0155**			
0.543	3		0.078	2	J	2.42	3		**0.0025**	2	U	0.0019	2	J	**0.155**	3		0.369	3	J	**0.0155**			
0.563	3		**0.050**	1	U	2.77	3		0.002	1	J	**0.00075**	2		**0.155**	3		4.47	3		**0.0155**			
0.826	3		0.062	2	J	2.51	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.458	3		0.063	2	J	2.19	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.636	3		**0.0155**			
0.506	3		0.061	2	J	2.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.562	3		0.031	2	J	2.61	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.315	3	J	**0.0155**			
1.26	3		0.066	2	J	1.68	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.612	3		**0.0155**			
0.502	3		0.049	2	J	2	1		**0.00075**	2		**0.00075**	2		**0.155**	3		1.45	3		**0.0155**			
0.686	3		0.072	2	J	2	1		**0.00075**	2		**0.00075**	2		**0.155**	3		0.422	3	J	0.118			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3	15.8	3	6.34	3	0.0266	3 J+	0.0254	3 J+	**0.125**	3	**0.125**	3	2.25	3	2.16	3								
	3	10.4	3 J+	2.75	3 J+	**0.00155**	3		R	**0.125**	3	**0.125**	3	1.73	3	1.71	3								
	3	5.51	3 J+	4.37	3 J+	0.0330	2 J	0.0416	3 J	0.453	3 J	**0.155**	3	1.59	3	1.61	3								
	3	3.64	3 J		R	0.0376	3 J	0.0268	3 J	**0.155**	3	**0.155**	3	1.38	3	1.50	2								
	3	3.47	3 J+	3.28	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.25	3	1.33	3								
	3 J	2.90	2	2.49	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.43	3 J+	1.45	3 J+								
	3	13.4	3 J+	4.00	1 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.46	3 J+	1.33	3 J+								
	3	6.62	3 J+	5.28	3 J+	**0.0075**	2		R	**0.155**	3	**0.155**	3	1.69	3	1.70	2								
	3 J	6.04	3 J+	5.76	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.89	3	1.83	3 J+								
	3	3.57	3	2.48	3	0.0164	3 J	0.0150	2 J	**0.155**	3	**0.155**	3	1.67	3	1.66	3								
	3	55.1	3	6.34	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.15	3	1.68	3								
	3	5.29	3 J+	5.02	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.79	3	1.8	2								
	1 U	63.5	3 J		R	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.42	3	1.27	3								
	3	5.76	3	2.86	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.51	3	1.55	3								
	3	11.2	3	3.35	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.55	3	1.49	3								
	3	2.74	3	2.52	3	0.0467	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	1.4	2	1.29	3								
	3	19.5	3 J+	3.2	2 J+	0.0153	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	1.71	3	1.23	3								
	3	21	2	3.18	3	0.0472	3 J	**0.0075**	2	**0.155**	3	**0.155**	3	2	1	1.59	3								
	3	5.14	3	3.96	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.4	2	1.33	3								
	3	3.9	2	3.06	3	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.39	3 J+	1.34	3 J+								
	3	5.94	3 J+	5.18	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.59	3 J+	1.5	2 J+								
	3	5.84	3 J+	3.23	3 J+	**0.0075**	2	**0.0250**	2 U	**0.155**	3	**0.155**	3	1.57	3 J+	1.81	3 J+								
	3	4.02	3 J+	2.68	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.51	3	1.16	3								
	3	3.37	3 J+	3.12	3 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.91	3 J+	1.76	3 J+								
	3	34.7	3	3.07	3 J+	**0.0075**	2	**0.0075**	2	0.171	3 J	**0.075**	2	1.88	3	1.55	3								
	3	3.84	3 J+	2.65	3 J+	**0.0075**	2	0.0211	3 J	**0.075**	2	**0.250**	2 U	1.77	3 J+	1.87	3 J+								
	3	4.45	3	**1.00**	1 U	**0.0250**	2 U	**0.0075**	2	**0.075**	2	**0.075**	2	1.57	3	1.55	3								
	3	7.6	2 J+	5.54	3 J+	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	2.62	3 J+	2.21	3 J+								
	3	3.74	3	3.35	3	**0.0075**	2	**0.0075**	2	0.174	3 J	**0.075**	2	1.27	3	1.27	3								
	3	4.37	3 J+	3.08	3 J+	**0.0075**	2	**0.0075**	2	0.229	3 J	**0.075**	2	1.53	3	1.49	3								

result > crit																								depends on Hardness result > crit						depends on Hardness result > crit					
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
		Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**					
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.0075	2		**0.0075**	2		0.013	2		**0.00155**	3		**1.55**	3		**5**	1	U		**0.00775**	3		**0.00775**	3	4530	3
0.0075	2		**0.0075**	2		**0.00155**	3		0.0102	3	J+	**1.55**	3		3.5	2	J		**0.00775**	3		**0.00775**	3	4250	3
0.0120	2		**0.0120**	2		**0.0250**	2	U	**0.0250**	2	U	2.15	3	J	**2.50**	2	U		**0.0125**	3		**0.0125**	3	4100	2
0.0120	2		**0.0120**	2		**0.0075**	2		**0.0075**	2		1.69	3	J	**0.75**	2			**0.0125**	3		**0.0125**	3	4110	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	4510	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0185**	3		**0.0185**	3	4040	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4050	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		0.0298	3	J	4140	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4320	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4260	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	3690	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4380	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	3990	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4680	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4500	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4850	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4180	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4710	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4150	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4270	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4400	2
0.0125	3		**0.0125**	3		**0.0075**	2		0.023	2	J	**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4370	3
0.0125	3		**0.0125**	3		0.0246	3	J	**0.0075**	2		**1.25**	3		**1.25**	3			**0.0075**	2		**0.0075**	2	4010	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.55	3	J	**1.25**	3			**0.0075**	2		**0.0075**	2	4280	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		1.57	3	J	1.86	3	J		**0.0075**	2		**0.0075**	2	4220	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**0.75**	2		**0.75**	2			**0.0075**	2		**0.0075**	2	4660	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**0.75**	2		**0.75**	2			**0.0075**	2		**0.0075**	2	3960	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**2.50**	2	U	**2.50**	2	U		**0.0075**	2		**0.0075**	2	4870	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		1.81	3	J	1.67	3	J		**0.0075**	2		**0.0075**	2	4140	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**0.75**	2		**0.75**	2			**0.0075**	2		**0.0075**	2	4520	3

| | | |

										depends on Hardness		depends on Hardness																	
result > crit				result > crit						result > crit		result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**						**Manganese**		
	Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved	
	µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L	
26.4	3		**3.1**	2			0.0518	3 J			0.0634	3 J			714	3		694	3		0.633	3		0.306	3	
14.5	3 J		**3.1**	2			**0.05**	1 U			**0.05**	1 U			679	3		669	3		0.527	3		0.266	3	
10.0	1 U		**10.0**	1 U			**0.0250**	2 U			**0.0250**	2 U			664	3		650	2		0.258	3 J+		0.212	3 J+	
3.10	2		**3.10**	2			0.552	3			0.0738	3			666	3		681	3		0.201	3 J			R	
6.65	3 J		**3.10**	2			0.107	3 J+			**0.050**	1 U			724	3		760	2		0.201	3 J+		0.156	3 J+	
10.0	1 U		**3.10**	2			**0.0155**	3			**0.050**	1 U			645	3		665	3		0.185	3 J+		0.150	2 J+	
22.5	3 J+		**3.10**	2			**0.050**	1 U			**0.050**	1 U			644	3		649	3		0.579	3 J+		0.259	3 J+	
10.0	1 U		**10.0**	1 U			0.117	3 J				R			640	2		669	3		0.174	3 J+		0.169	3 J+	
10.0	1 U		**10.0**	1 U			**0.050**	1 U			**0.050**	1 U			636	3		640	2		0.127	3 J+		0.131	3 J+	
10.5	3 J		7.29	3 J			**0.0155**	3			**0.0155**	3			593	3		627	3		0.235	3		0.153	3	
79.0	2		27.7	3			0.0601	3 J			**0.0155**	3			573	3		632	3		2.00	1		0.634	3	
16.9	3 J		14	2 J			**0.0155**	3			**0.0155**	3			663	3		657	3		0.162	3 J+		0.117	3 J+	
99.5	3		18.7	3 J			0.103	3			0.0584	3 J			618	3		633	3		3.99	3		0.555	3	
23.7	3		17.7	3 J			**0.0155**	3			**0.0155**	3			741	3		746	3		0.663	3		0.383	3	
46.6	3		34.7	3			**0.0155**	3			**0.0155**	3			709	3		743	3		0.723	3 J+		0.511	3 J+	
52.2	3		56.9	3			**0.0155**	3			**0.0155**	3			736	3		660	2		0.215	3 J+		0.254	3 J+	
30.3	3		**10.0**	1 U			**0.050**	1 U			**0.0155**	3			656	3		668	3		0.85	2 J+		0.137	3 J+	
30.6	3		8.24	3 J			0.0901	3 J			**0.0155**	3			723	3		796	3		1.27	3		0.154	3	
13.5	3 J		9.44	3 J			**0.0155**	3			**0.0155**	3			671	3		665	3		0.358	3		0.241	3 J+	
10.0	1 U		**10.0**	1 U			**0.0155**	3			**0.0155**	3			735	3 J+		753	3 J+		0.212	3 J+		0.138	3 J+	
6.42	3 J		**3.10**	2			**0.0155**	3			**0.0155**	3			685	3		662	3		0.138	3 J+		0.0888	3 J+	
13.9	3 J		6.33	3 J			**0.0155**	3			**0.0155**	3			739	3		777	3		0.338	3 J+		0.181	3 J+	
12.4	3 J		**3.10**	2			**0.0155**	3			**0.0155**	3			628	3		619	3		0.96	2		0.126	3 J+	
7.99	3 J		**10.0**	1 U			**0.0155**	3			**0.0155**	3			687	3		677	3		0.106	3 J+		0.0897	3 J+	
43	2		16.7	3 J			0.0418	3 J			**0.0155**	3			750	2		705	3		1.09	3		0.289	3	
10.0	1 U		**10.0**	1 U			**0.0155**	3			**0.0155**	3			693	3		667	3		0.457	3		0.365	3	
11	2 J		8.3	2 J			**0.0155**	3			**0.0155**	3			720	2		706	3		0.278	3 J+		0.273	3 J+	
10.0	1 U		**10.0**	1 U			**0.0155**	3			**0.0155**	3			793	3		798	3		0.231	3 J+		0.214	3 J+	
14	2 J		10.4	3 J			**0.0155**	3			**0.0155**	3			659	3		673	3		0.269	3 J+		0.249	3 J+	
13	2 J		15.6	3 J			0.212	3			**0.0155**	3			738	3		728	3		0.326	3 J+		0.228	3 J+	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						Molybdenum						Nickel[4]						Potassium				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.031	2		**0.031**	2		0.361	3		0.358	3			0.73	2		0.647	3		150	2		151	3		**0.0775**	3
0.031	2		**0.031**	2		0.343	3	J			R		0.801	3		0.839	3		202	3		209	3		**0.0775**	3
0.000475	4		**0.000475**	4		0.600	1		0.695	3			0.753	3		0.605	3		119	3		112	3		**0.155**	3
0.00127	3	J	0.00107	3	J	0.438	3		0.286	3			0.414	3		0.376	3		140	2		140	2		**0.155**	3
0.000475	4		**0.000475**	4		0.292	3		0.307	3			0.478	3		0.460	2		166	3		170	2		**0.155**	3
0.000475	4		**0.000475**	4		0.383	3		0.387	3			0.513	3		0.516	3		170	2		178	3		**0.155**	3
0.000169	3		**0.000475**	4		0.319	3		0.317	3			0.578	3	J+	0.611	3	J+	140	2		140	2		**0.155**	3
0.000400	1	J	**0.000475**	4		0.269	3		0.275	3			0.369	3	J+	0.439	3	J+	110	2		110	2		**0.155**	3
0.000169	3		**0.000475**	4		0.301	3		0.298	3			0.266	3	J+	0.316	3	J+	124	3		125	3		**0.155**	3
0.000169	3		**0.000475**	4		0.422	3		0.442	3			0.588	3		0.593	3		190	2		199	3		**0.155**	3
0.00075	2		**0.00075**	2		0.298	3		0.360	2			0.644	3	J			R	116	3		123	3		**0.155**	3
0.00075	2		**0.00075**	2		0.287	3		0.286	3			0.594	3		0.382	3		119	3		117	3		**0.155**	3
0.00075	2		**0.00075**	2		0.17	2		0.212	3			1.56	3		1.17	3		140	2		141	3		**0.155**	3
0.00075	2		**0.00075**	2		0.405	3		0.41	2			1.35	3		1.31	3		173	3		166	3		**0.155**	3
0.00075	2		**0.00075**	2		0.378	3		0.378	3			1.23	3		1.13	3		149	3		155	3		**0.155**	3
0.00075	2		**0.00075**	2		0.378	3		0.325	3			0.836	3		0.761	3		158	3		142	3		**0.155**	3
0.00075	2		**0.00075**	2		0.347	3		0.338	3			**0.310**	2	U	**0.310**	2	U	144	3		140	2		**0.155**	3
0.00075	2		**0.00075**	2		0.366	3		0.423	3			0.437	3	J	0.55	2	J	183	3		193	3		**0.155**	3
0.00075	2		**0.00075**	2		0.363	3		0.412	3			0.687	3		0.733	3		144	3		139	3		**0.155**	3
0.00075	2		**0.00250**	2	U	0.288	3	J+	0.308	3	J+		**0.310**	2	U	**0.310**	2	U	158	3	J+	163	3	J+	**0.155**	3
0.00075	2		**0.00075**	2		0.218	3		0.184	3			**0.310**	2	U	**0.310**	2	U	135	3		128	3		**0.155**	3
0.00075	2		**0.00075**	2		0.407	3		0.427	3			0.956	3		0.656	3		184	3		184	3		**0.155**	3
0.00075	2		**0.00075**	2		0.368	3		0.331	3			0.671	3		0.493	3	J	155	3		139	3		**0.155**	3
0.00154	3	J	**0.00075**	2		0.328	3		0.332	3			0.362	3	J	0.474	3	J	144	3		139	3		**0.155**	3
0.00075	2		**0.00075**	2		0.38	2		0.399	3			1.06	3		1.01	3		158	3		156	3		**0.155**	3
0.00075	2		**0.00075**	2		0.446	3		0.431	3			1.71	3		1.23	3		179	3		172	3		**0.155**	3
0.00075	2		**0.00075**	2		0.386	3		0.392	3			1.05	3		1.09	3		143	3		151	3		**0.155**	3
0.00075	2		**0.00075**	2		0.323	3		0.327	3			0.628	3	J+	0.632	3	J+	128	3		126	3		**0.155**	3
0.00075	2		**0.00075**	2		0.37	2		0.374	3			0.994	3		0.935	3		147	3		150	2		**0.155**	3
0.00075	2		**0.00075**	2		0.452	3		0.446	3			1.05	3	J+	0.839	3	J+	174	3		174	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	**0.155

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				result > crit
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**								**Sodium**								**Thallium**						**Tin**
	Dissolved						Total				Dissolved				Total				Dissolved				Total				Dissolved		Total
	µg/L						µg/L				µg/L				µg/L				µg/L				µg/L				µg/L		µg/L
5140		3					**0.0031**		2		**0.0031**		2		2230		3		2190		3		0.0158		3	J	**0.0031**		2	**0.031**	2
6100		2					**0.0031**		2		**0.0031**		2		2240		3		2250		3		**0.0031**		2		**0.0031**		2	**0.031**	2
5590		3					**0.0031**		2		**0.0031**		2		1920		3		1890		3		0.0164		3		**0.0025**		2	**0.0155**	3
4760		3					**0.0031**		2		**0.0031**		2		1880		3		1890		3		0.0086		2	J	**0.0025**		2	**0.0155**	3
5210		3					**0.0031**		2		**0.0031**		2		2030		3		2100		2		**0.0050**		1		**0.0050**		1	**0.050**	1
5050		3					**0.0031**		2		**0.0031**		2		2080		3		2150		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4750		3					**0.0031**		2		**0.0031**		2		1880		3		1910		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4040		3					**0.0031**		2		**0.0031**		2		1850		3		1900		2		**0.0050**		1		**0.0050**		1	**0.050**	1
4940		3					**0.0031**		2		**0.0031**		2		2070		3		2010		3		**0.0050**		1		**0.0050**		1	**0.050**	1
5580		3					**0.0031**		2		**0.0031**		2		1990		3		2080		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4630		3					**0.0031**		2		**0.0031**		2		1690		3		1890		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4440		3					**0.0031**		2		**0.0031**		2		1850		3		1830		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4640		3					**0.0031**		2		**0.0031**		2		1810		3		1880		3		**0.0050**		1		**0.0050**		1	**0.050**	1
5250		3					**0.0031**		2		**0.0031**		2		2260		3		2290		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4710		3					**0.0031**		2		**0.0031**		2		2050		3		2090		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4580		3					**0.0031**		2		**0.0031**		2		2100		2		1840		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4300		2					**0.0031**		2		**0.0031**		2		1900		2		1940		3		**0.0050**		1		**0.0050**		1	2.46	3 J+
5530		3					**0.0031**		2		**0.0031**		2		2230		3		2480		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4500		2					**0.0031**		2		**0.0031**		2		1960		3		1940		3		**0.0050**		1		**0.0050**		1	0.15	2 J
5000		1	J+				**0.0031**		2		**0.0031**		2		2090		3	J+	2130		3	J+	**0.0050**		1		**0.0050**		1	**0.050**	1
4380		3					0.0655		3		**0.0031**		2		1980		3		1920		3		**0.0050**		1		**0.0050**		1	**0.050**	1
5540		3	J+				**0.0031**		2		**0.0031**		2		2300		2	J+	2410		3	J+	**0.0050**		1		**0.0050**		1	**0.050**	1
4420		3					**0.0031**		2		**0.0031**		2		1830		3		1810		3		**0.0050**		1		**0.0050**		1	**0.050**	1
4560		3					**0.0031**		2		**0.0031**		2		1910		3		1920		3		**0.0050**		1		**0.0050**		1	**0.050**	1
5020		3					**0.0031**		2		**0.0031**		2		2120		3		2040		3		**0.0031**		2		**0.0031**		2	**0.0310**	2
4980		3					**0.0031**		2		**0.0031**		2		2100		2		2030		3		**0.0031**		2		**0.0031**		2	**0.0310**	2
4910		3					**0.0031**		2		**0.0031**		2		2070		3		1990		3		**0.0031**		2		**0.0031**		2	**0.0310**	2
4720		3					**0.0031**		2		**0.0031**		2		2160		3		2120		3		**0.0031**		2		**0.0031**		2	**0.0310**	2
4740		3					**0.0031**		2		**0.0031**		2		1940		3		1990		3		0.0202		3		0.0114		3 J	**0.0310**	2
5430		3					**0.0031**		2		**0.0031**		2		2260		3		2220		3		**0.0031**		2		**0.0031**		2	**0.0310**	2

										depends on Hardness				depends on Total Zn					
										result > crit				result > crit					
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N		ZN_NSF	ZN_NVF	ZN_F		ZN_FSF	ZN_FVF			
						Vanadium							**Zinc[4]**						
	Dissolved			Total			Dissolved				Total				Dissolved				
	µg/L			µg/L			µg/L				µg/L				µg/L				
0.031	2		0.339	3	J	0.355	3	J			**0.75**	2	U		**0.75**	2	U		
0.031	2		0.517	3		0.419	3				**0.75**	2	U		1.96	3			
0.0964	3	J	**0.250**	2	U	**0.110**	2				1.71	3	J+		1.99	3	J+		
0.0155	3		0.230	2	J	**0.110**	2				0.868	3	J+		1.21	3	J+		
0.050	1		**0.250**	2		**0.250**	2				2.28	3	J+				R		
0.050	1		1.25	3		1.01	3				**0.155**	3			**0.155**	3			
0.050	1		**0.155**	3		0.442	3	J			**0.50**	1	U		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U				R		
0.050	1		**0.155**	3		**0.155**	3				2.15	3	J+		2.53	3	J+		
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				0.660	2	J		0.906	3	J		
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U		1.02	3	J+		
0.050	1		**0.155**	3		**0.155**	3				**0.50**	1	U		**0.50**	1	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		0.32	2	J			**1.55**	3	U		**1.55**	3	U		
0.100	1	U	**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		0.345	3	J	0.444	3	J			0.698	3	J		**1.55**	3	U		
0.111	3	J	0.365	3	J	**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		0.319	3	J			3.51	3	J+		**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.050	1		**0.155**	3		0.346	3	J			**1.55**	3	U		**1.55**	3	U		
0.0310	2		0.385	3	J	0.39	2	J			1.08	3	J		1.1	2	J		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.087	2	J	**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		
0.0310	2		**0.155**	3		**0.155**	3				**1.55**	3	U		**1.55**	3	U		

	2	3	2	3	0	2	1	4	2	3	1	3
Mean	5.92		9.94		37		118		3.11		13.6	
Median	5.87		9.97		36		155		2.25		13.5	
St. Deviation	0		3		12		142		2		1	
# of values	29		29		30		29		30		30	
Minimum	5.29		4.75		19		-328		1.03		11.6	
Maximum	6.97		13.95		75		312		8.03		15.4	
Lowest fifth percentile	5		5		19		-185		1		13	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	93%		0%		0%		0%		0%		0%	
% of DWS exceedences	62%		0%		0%		0%		0%		0%	

1	3	0	2	3	2	2	3	1	3	3	3	4	3	3	3
39		31.0		0.126		6.4		16		0.1460		0		0	
38		29.0		0.075		6.5		14		0.1400		0		0	
4		11		0		3		6		0		0		0	
30		30		30		30		30		30		3		3	
32		8.0		0.074		1.6		6		0.0155		0.0155		0.0805	
50		56.3		0.816		11.7		34		0.4440		0.0155		0.274	
34		13		0		2		12		0		0		0	
0		0		28		5		0		4		3		0	
				93%		17%				13%		100%			
		1				18		1		5				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		87%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	2	4	3
0.008		0	
0.005		0	
0		0	
30		3	
0.002		0.0155	
0.038		0.05	
0		0	
12		3	
40%		100%	
11			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	2	3	5	2	5	2	3	3	3	3	4
0.589		0.0333		2.37		0.00113		0.00107		0.16		1		0.0363
0.563		0.0155		2.35		0.00075		0.00075		0.16		0		0.0155
0		0		0		0		0		0		1		0
30		30		30		30		30		30		19		30
0.213		0.0155		1.68		0.00075		0.00075		0.09		0.075		0.0155
1.260		0.0780		3.10		0.00250		0.00250		0.28		4.47		0.4170
0		0		2		0		0		0		0		0
0		18		0		29		29		28		7		26
		60%				97%		97%		93%		37%		87%
		12				1		1		2		6		2
230		NA		NA		NA		0.0052		NA		NA		7.05
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	2	4	2	3	3	3	3	2	3	2	3
	11.4		3.68		0.0136		0.0114		0.159		0.143		1.70		1.57	
	5.6		3.22		0.0075		0.0075		0.155		0.155		1.59		1.55	
	15		1		0		0		0		0		0		0	
	30		28		30		28		30		30		30		30	
	2.7		1.00		0.0016		0.0075		0.075		0.075		1.25		1.16	
	63.5		6.34		0.0472		0.0416		0.453		0.250		2.62		2.21	
	3		2		0		0		0		0		1		1	
	0		1		23		23		26		30		0		0	
			4%		77%		82%		87%		100%					
					6		4		4							
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0121		0.0121		0.009		0.00850		1.38		2		0.00860		0.00930		4300	
0.0125		0.0125		0.008		0.00750		1.25		1		0.00750		0.00750		4270	
0		0		0		0		0		1		0		0		280	
30		30		30		30		30		30		30		30		30	
0.0075		0.0075		0.002		0.00155		0.75		1		0.00750		0.00750		3690	
0.0125		0.0125		0.025		0.02500		2.55		5		0.01850		0.02980		4870	
0		0		0		0		1		1		0		0		3974	
30		30		28		28		25		27		30		29		0	
100%		100%		93%		93%		83%		90%		100%		97%			
				1		1		5		3				1			
NA		NA		NA		NA		NA		NA		0.058		0.058		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	3	3	3	3						
4320		1.46		0.825		0.0270		0.0211		0.417		0.361							
4320		1.33		0.677		0.0257		0.0227		0.305		0.261							
260		1		0		0		0		0		0							
30		30		29		30		30		30		28							
3840		0.23		0.050		0.0100		0.0100		0.204		0.194							
4930		3.69		1.920		0.0663		0.0468		0.976		0.899							
3921		1		0		0		0		0		0							
0		0		1		4		6		9		11							
				3%		13%		20%		30%		39%							
						5		8		1		1							
NA		10.98		10.56276		NA		NA		1.583		1.520							
NA		100		NA		NA		NA		NA		NA							
0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%							

1	3	0	2	4	3	4	3	0	3	0	3	3	3	3	3		
22.3		12.0		0.0603		0.0269		684		689		0.592		0.242			
13.3		10.0		0.0155		0.0155		682		669		0.302		0.214			
22		11		0		0		51		51		1		0			
30		30		30		29		30		30		30		29			
3.1		3.1		0.0155		0.0155		573		619		0.106		0.089			
99.5		56.9		0.5520		0.0738		793		798		3.990		0.634			
7		3		0		0		604		629		0		0			
8		16		21		26		0		0		0		0			
27%		53%		70%		90%											
12		11		4		2											
1000		1000		0.226		0.248		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		3%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.003		0.003		0.356		0.361		0.74		0.680		151		151		0.1500	
0.001		0.001		0.365		0.358		0.66		0.611		148		146		0.1550	
0		0		0		0		0		0		23		26		0	
30		30		30		29		30		29		30		30		30	
0.000		0.000		0.170		0.184		0.27		0.310		110		110		0.0775	
0.031		0.031		0.600		0.695		1.71		1.310		202		209		0.1550	
0		0		0		0		0		0		117		114		0	
27		29		0		0		3		3		0		0		30	
90%		97%						10%		10%						100%	
3		1						2		3							
0.77		0.77		NA		NA		9.01		8.98		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.1500	
0.1550	
0	
30	
0.0775	
0.1550	
0	
30	
100%	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4910		0.0052		0.0031		2030		2040		0.0060		0.0046		0.126	
4840		0.0031		0.0031		2040		2000		0.0050		0.0050		0.050	
460		0		0		160		170		0		0		0	
30		30		30		30		30		30		30		30	
4040		0.0031		0.0031		1690		1810		0.0031		0.0025		0.016	
6100		0.0655		0.0031		2300		2480		0.0202		0.0114		2.460	
4336		0		0		1819		1835		0		0		0	
0		29		30		0		0		26		29		28	
		97%		100%						87%		97%		93%	
										2		1		1	
NA		0.106504733		0.091		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.051		0.240		0.244		1.26		1.32	
0.050		0.155		0.155		1.55		1.55	
0		0		0		1		1	
30		30		30		30		28	
0.016		0.155		0.110		0.16		0.16	
0.111		1.250		1.010		3.51		2.53	
0		0		0		1		1	
27		23		21		22		21	
90%		77%		70%		73%		75%	
3		5		7		3		2	
NA		NA		NA		20.64		20.35	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05-14D																
Sample Date																
11/10/05	7.17	3	4.09	3		277	3		66	2		3.31	3	62.9	3	
03/23/06	7.83	3	6.06	3		324	3		69	2		3.85	3	74.4	3	
05/21/06	6.64	3	2.58	3		219	3		147.7	4		4.4	2	60.0	1	
08/23/06	7.21	3	1.24	3		225	3		102.7	4		5.06	3	85.3	3	
11/03/06	7.07	3	2.14	3		297	3		145.4	4		4.11	3	107	3	
03/20/07	7.74	3	1.53	3		205	3		-183.2	4		2.81	3	19.3	3	
05/09/07	7.92	3	1.17	3		279	3		-221.5	4		4.15	3	170	2	
08/20/07	7.34	3	1.21	3		201	3		89.2	3		3.93	3	114	3	
11/12/07	7.18	3	1.29	3		392	3		81	2		3.17	3	137	3	
03/19/08	8.08	3	1.01	3		435	3		-260.4	4		3.84	3	180	2	
05/22/08	7.52	3	1.34	3		469	3		-71.2	3		3.21	3			
05/23/08														131	3	
08/25/08	7.88	3	1.14	3		449	3		138.8	4		3.71	3			
08/26/08														140	2	
10/22/08	8.03	3	1.56	3		475	3		-144.1	4		2.05	3	126	3	
08/25/09			0.7	1		787	3			R		5.4	2	120	2	
08/17/10	7.39	3	0.29	2		728	3		-106.6	4		5.77	3	103	3	
08/31/11	7.52	3	3.27	3		312.8244	FALSE		-12.4	3		4.86	3	95	2	
08/21/12	8.25	3	0.2	1		330	2		-241.5	4		5.34	3	97.7	3	

			result > crit												result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF	
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate		
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
235	3		157	3		1.2	2		**0.785**	3		58.5	3		**0.05**	1	U						
260	2		175	3		5.70	2		2.50	2	J	66.0	2		**0.0155**	3							
215	3		148	3		0.800	1		**0.785**	3		66.0	2		0.248	3							
260	2		184	3		3.10	2		**1.57**	3		64.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3	
380	2		234	3		1.80	2		**1.57**	3		71.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3	
340	2		230	2		3.20	2		**1.57**	3		71.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3	
470	2		335	3		3.90	2		3.25	3	J	79.0	2		**0.050**	1	U						
385	3		244	3		0.600	1		**1.57**	3		71.2	3		0.0920	2	J						
46.0	2		315	3		0.303	3	J	**1.57**	3		74.1	3		0.0380	2	J						
551	3		346	3		1.53	3		8.46	3	J	84.6	3		**0.050**	1	U						
305	3		194	3		1.7	2		**1.57**	3		129	3		**0.0155**	3							
572	3		401	3		1.34	3		3.14	3	J	88.3	3		**0.050**	1	U						
553	3		341	3		0.87	2		**1.57**	3		87.5	3		**0.0155**	3							
460	2		289	3		0.303	3	J	5.5	2	J	81.2	3		196	3							
350	2		225	3		**0.079**	2		**1.57**	3		75.7	3		**0.050**	1	U						
347	3		237	3		1.01	3		3.57	3	J	75.8	3		**0.050**	1	U						
362	3		197	3		**0.076**	2		**5.0**	1	U	72.9	3		**0.050**	1	U						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		
	0.20	1				
	0.0098	2	J			
	0.0150	2				
	0.0046	2	J	**0.050**	1	UJ
	0.0200	1		**0.050**	1	UJ
	0.0400	1		**0.0155**	3	
	0.00155	3				
	0.0082	2	J			
	0.0050	1	U			
	0.0066	2	J			
	0.0049	2	J			
	0.0048	2	J			
	0.0061	2	J			
	0.0050	1	U			
	0.0157	3				
	0.00155	3				
	0.0062	2	J			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
6.67	3		0.07	1 J		45.8	3		**0.00125**	3		**0.00125**	3		0.11	2 J					0.284			
6.70	2		0.0480	2 J		57.8	3		**0.00125**	3		**0.00125**	3		0.35	2 J					0.293			
4.30	2		0.0710	2 J		42.5	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.211			
5.59	3		0.0480	2 J		59.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.106			
7.53	3		**0.155**	3		96.1	3		**0.00075**	2		**0.00075**	2		0.44	2 J					0.165			
8.79	3		0.0540	2 J		90.0	1		**0.00075**	2		**0.00075**	2		**0.155**	3					0.144			
13.0	2		0.0550	2 J		131	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.117			
9.25	3		0.0350	2 J		96.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.175			
11.9	3		0.0450	2 J		135	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.126			
13.3	3		0.0420	2 J		161	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0949			
0.721	3		0.203	3		30.2	3		**0.0025**	2 U		**0.0025**	2 U		0.54	2 J		0.667	3		0.0607			
12	2		0.053	2 J		174	3		**0.00075**	2		**0.00075**	2		**0.155**	3		11.6	3		0.122			
10.3	3		0.045	2 J		156	3		**0.00075**	2		**0.00075**	2		**0.155**	3		9.66	3		**0.050**			
8.45	3		0.043	2 J		108	3		**0.00075**	2		**0.00075**	2		**0.155**	3		6.61	3		0.0728			
6.15	3		0.078	2 J		83.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		5.01	3		**0.0155**			
6.26	3		0.061	2 J		80.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		3.59	3		**0.0155**			
5.12	3		**0.050**	1 U		71.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		3.22	3		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	252	3	6.06	3	J+	0.768	3	0.724	3	1.53	3	1.09	3	17.9	3	16.1	3						
		3	87.3	3	5.90	2	J+	0.479	3	J	R	1.70	2	1.74	3	18.6	3	J	R						
		3	19.7	3	4.94	3		0.312	3	0.282	3	1.63	3	1.51	3	12.9	3	12.3	3						
		3	50.7	3	4.51	3	J+	0.341	3	0.266	3	1.14	3	J	R	15.2	3	14.6	3						
		3	94.6	3	4.36	3		0.209	3	J+	0.206	3	J+	1.82	3	1.72	3	17.3	3	18.0	2				
		3	51.2	3	J+	3.65	3	J+	0.201	3	0.196	3	1.82	3	1.76	3	15.9	3	16.1	3					
		3	27.8	3	J+	3.44	3	J+	0.197	3	0.215	3	2.26	3	1.73	3	20.2	3	16.7	3					
		3	7.65	3	J+	3.73	3	J+	0.185	3	0.201	3	2.21	3	2.06	3	13.1	3	14.0	2					
		3	4.71	3		3.06	3		0.167	3	0.174	3	2.04	3	1.61	3	14.7	3	15.2	3					
		3	J	9.04	3	2.93	3		0.162	3	0.145	3	2.48	3	2.33	3	15.3	3	15.0	2					
		3	J	7.21	3	J+	8.46	3	J+	0.155	3	0.0283	3	J	2.48	3	2.35	3	13.4	3	14.2	3			
		3	7.46	3	3.17	3		0.228	3	0.223	3	2.62	3	2.3	2	13.9	3	12.4	3						
		1	U	8.35	3	3.71	3		0.181	3	0.166	3	2.93	3	2.74	3	12.5	3	12.1	3					
		3	J	2.59	3	J+	2.71	3	J+	0.119	3	0.141	3	1.93	3	1.95	3	12.6	3	12.2	3				
		3	2.92	3	J+	2.97	3	J+	0.023	2	J	0.0196	3	J	1.91	3	1.95	3	11.1	3	10.9	3			
		3	11.9	3	J+	3.36	3	J+	0.142	3	0.167	3	2.5	2	2	1	10.5	3	10.7	3					
		3	3.45	3	J		R		0.153	3	J	R	2.51	3	1.95	3	9.59	3	10.1	3					

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									depends on Hardness				depends on Hardness																
result > crit				result > crit					result > crit				result > crit														result > crit		
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
198	3		23.9	3			0.626	3 J+			**0.05**	1 U			2000	1		1810	3		87.9	3		77.8	3	
122	3		45.2	3			5.00	1			**0.0130**	2			1810	3 J				R	248	3 J				R
126	3		54.3	3			1.53	3			0.0468	3 J			1270	3		1340	3		186	3		170	2	
121	3		80.4	3			0.546	3 J+			**0.050**	1 U			1840	3		1700	2		225	3		257	3	
204	3		153	3			0.217	3 J+			**0.050**	1 U			1910	3		1950	3		295	3		325	3	
240	2 J+		167	3 J+			0.283	3 J+			**0.0155**	3			2200	2		2320	3		243	3		250	2	
239	3		155	3			0.186	3			**0.050**	1 U			2630	3		2290	3		350	2		294	3	
104	3		39.9	3			0.119	3 J+			**0.0155**	3			1920	3		2130	3		215	3		230	2	
150	2		104	3			**0.050**	1 U			**0.0155**	3			2270	3		1930	3		238	3		231	3	
277	3		252	3			0.110	2			**0.0155**	3			2730	3		2650	3		229	3		230	2	
119	3		141	3			**0.050**	1 U			**0.0155**	3			2090	3		2150	3		174	3		186	3	
231	3		173	3			0.0778	3 J			**0.0155**	3			2180	3		1970	3		169	3		153	3	
183	3		159	3			**0.050**	1 U			**0.0155**	3			1970	3		1880	3		162	3		150	2	
119	3		68.8	3			**0.0155**	3			**0.0155**	3			1990	3		2010	3		160	2		126	3	
119	3		103	3			**0.0155**	3			**0.0155**	3			1850	3		1800	2		140	2		137	3	
141	3		66.1	3			0.362	3			0.0433	3 J			1500	2		1540	3		143	3		107	3	
89.6	3		73.7	3			**0.0155**	3			**0.0155**	3			1540	3		1520	3		102	3		59.7	3	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit				result > crit								result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**		
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.031	2		**0.031**	2		5.18	3		4.76	3			8.23	3		4.53	3		3030	3		2920	3		**0.0775**	3
0.00250	2	U	**0.00250**	2	U	6.09	3	J			R		2.91	3	J			R	1330	3	J			R	**0.155**	3
0.00123	3	J	0.00147	3	J	4.37	3		3.93	3			2.71	3		2.15	3		921	3		911	3		**0.155**	3
0.00136	3	J	**0.000475**	4		4.35	3		4.03	3			3.21	3		2.43	3		987	3		953	3		**0.155**	3
0.000475	4		**0.000475**	4		3.09	3		3.04	3			2.63	3		2.44	3		894	3		878	3		**0.155**	3
0.000485	3	J	0.00125	3	J	3.00	1		3.22	3			3.45	3	J+	3.71	3	J+	928	3		928	3		**0.155**	3
0.000169	3		**0.000475**	4		3.06	3		2.52	3			4.24	3	J+	3.31	3	J+	953	3		800	1		0.483	3
0.000169	3		**0.000475**	4		2.42	3		2.54	3			2.35	3	J+	2.14	3	J+	708	3		783	3		**0.155**	3
0.00147	3	J	**0.000475**	4		2.34	3		2.40	2			2.08	3		2.04	3		745	3		726	3		**0.155**	3
0.00075	2		**0.00075**	2		2.24	3		2.16	3			2.36	3		2.02	3		749	3		740	2		**0.155**	3
0.00075	2		**0.00075**	2		1.97	3		1.53	3			1.41	3		1.02	3		627	3		615	3		**0.155**	3
0.00075	2		**0.00075**	2		1.96	3		1.79	3			2.28	3		1.97	3		663	3		607	3		**0.155**	3
0.0174	3		**0.00075**	2		2.07	3		1.89	3			2.74	3		2.23	3		589	3		564	3		**0.155**	3
0.00075	2		**0.00075**	2		2.03	3		1.85	3			1.37	3	J+	0.803	3	J+	675	3		673	3		**0.155**	3
0.00075	2		0.00159	3	J	2.06	3		2.07	3			0.85	2		0.861	3		608	3		598	3		**0.155**	3
0.00075	2		**0.00075**	2		2.24	3		2.12	3			2.64	3		1.39	3		522	3		539	3		**0.155**	3
0.00075	2		**0.00075**	2		2.19	3		2.03	3			1.65	3		1.53	3		475	3		487	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F		SE_FSF	SE_FVF
	Selenium			
		Dissolved		
		µg/L		
		0.0775	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
J		0.424	3	J
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	
		0.155	3	

			depends on HARD; revised 2013					depends on Total Ag																			
			result > crit					result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
Silicon				**Silver[8]**						**Sodium**						**Thallium**								**Tir**			
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total						
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L						
5030	3		**0.0031**	2		**0.0031**	2		20200	3		19000	2		**0.0031**	2		**0.0031**	2		7.65	3					
4380	3		**0.0031**	2		**0.0031**	2		22100	3	J		R		**0.0025**	2		**0.0025**	2		1.93	3					
5010	3		**0.0031**	2		**0.0031**	2		18600	3		18900	3		0.0064	2	J	**0.0025**	2		1.09	3					
5270	3		0.0080	1	J	**0.0031**	2		25200	3		24800	3		**0.0050**	1		0.0112	3	J	1.15	3					
4740	3		0.0112	3	J	0.0066	2	J	29900	3		31400	3		**0.0050**	1		**0.0050**	1		1.40	2					
5210	3		**0.0031**	2		**0.0031**	2		27100	3		30900	3		**0.0050**	1		**0.0050**	1		1.59	3					
4650	3		**0.0031**	2		**0.0031**	2		45900	3		41400	3		**0.0050**	1		**0.0050**	1		2.00	1					
5970	3		**0.0031**	2		**0.0031**	2		32900	3		36200	3		**0.0050**	1		**0.0050**	1		0.755	3					
5830	3		**0.0031**	2		**0.0031**	2		41400	3		38400	3		**0.0050**	1		**0.0050**	1		0.511	3					
5610	3		**0.0031**	2		**0.0031**	2		50600	3		48400	3		**0.0050**	1		**0.0050**	1		3.87	3					
5620	3		**0.0031**	2		**0.0031**	2		45100	3		50900	3		**0.0050**	1		**0.0050**	1		0.426	3					
5340	3		**0.0031**	2		**0.0031**	2		48300	3		44900	3		**0.0050**	1		**0.0050**	1		0.567	3					
5950	3		**0.0031**	2		**0.0031**	2		57200	3		55300	3		**0.0050**	1		**0.0050**	1		0.277	3					
5170	3		**0.0031**	2		**0.0031**	2		32000	2		36800	3		**0.0050**	1		**0.0050**	1		0.22	2	J				
5590	3		0.0428	3		0.0072	2	J	29000	2		32300	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5420	3		**0.0031**	2		**0.0031**	2		23700	3		24600	3		**0.0031**	2		**0.0031**	2		0.277	3					
5760	3		**0.0031**	2		**0.0031**	2		24300	3		24000	2		**0.0031**	2		**0.0031**	2		0.0637	3	J				

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
1.31	3		0.64	2		0.532	3			6.01	3		4.15	3									
0.308	3		0.533	3		0.395	3	J		2.56	3	J+	2.32	3	J+								
0.346	3		**0.110**	2		0.276	3	J		1.01	3	J+	0.957	3	J+								
1.33	3		**0.250**	2		0.793	3	J		1.18	3	J+		R									
0.600	1		**0.250**	2		**0.250**	2			**0.50**	1	U	1.10	2	J+								
0.598	3		**0.155**	3		**0.155**	3			1.66	3	J+	1.19	3	J+								
0.975	3		0.367	3	J	**0.155**	3			1.46	3	J+	**0.50**	1	U								
0.131	3	J	**0.155**	3		**0.155**	3			4.21	3	J+	2.55	3	J+								
0.050	1		**0.155**	3		0.320	2	J		**0.50**	1	U	1.16	3									
1.81	3		**0.155**	3		**0.155**	3			1.54	3		0.799	3	J								
0.117	3	J	**0.155**	3		0.319	3	J		1.18	3	J+	1.76	3	J+								
0.103	3	J	**0.155**	3		0.317	3	J		**0.50**	1	U	1.16	3	J+								
0.126	3	J	0.421	3	J	0.334	3	J		1.77	3	J+	1.44	3	J+								
	R		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0782	3	J	**0.155**	3		**0.155**	3			3.61	3		2.78	3	J								
0.209	3		**0.155**	3		**0.155**	3			**1.55**	3	U		R									

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

		2	3	2	3	0	3	1	4	2	3	0	3				
Mean		7.55		1.81		377		-25		4.06		107.0					
Median		7.52		1.29		324		27		3.93		107.0					
St. Deviation		0		1		170		149		1		40					
# of values		16		17		17		16		17		17					
Minimum		6.64		0.20		201		-260		2.05		19.3					
Maximum		8.25		6.06		787		148		5.77		180.0					
Lowest fifth percentile		7		0		204		-246		3		52					
# of values undetected		0		0		0		0		0		0					
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA					
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA					
% of CALC exceedences		0%		0%		0%		0%		0%		0%					
% of DWS exceedences		0%		0%		0%		0%		0%		0%					
HIDE this row - notes																	
RED criteria		result is <6.5 OR >8.5		result < 7													
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF	
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**			
Total/Dissolved																	
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L			

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	3		0	3		1	2		2	3		1	3		3	2		4	3		4	3
358			250			1.6			2.680			77.4			11.58			0			0	
350			234			1.2			1.570			74.1			0.05			0			0	
137			75			2			2			16			48			0			0	
17			17			17			17			17			17			3			3	
46			148			0.1			0.785			58.5			0.02			0.0155			0.0155	
572			401			5.7			8.460			129.0			196.00			0.0155			0.0155	
181			155			0			1			63			0			0			0	
0			0			2			11			0			13			3			3	
						12%			65%						76%			100%			100%	
						2			6						2							
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			6%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	2	3	2
0.02		0	
0.01		0	
0		0	
17		3	
0.00		0.0155	
0.20		0.05	
0		0	
4		3	
24%		100%	
8			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
2	3		3	2		1	3		5	2		5	2		3	3		2	3		3
8.00			0.07			95.3			0.00094			0.00094			0.20			6			0.122
7.53			0.05			90.0			0.00075			0.00075			0.16			5			0.117
3			0			44			0			0			0			4			0
17			17			17			17			17			17			7			17
0.72			0.04			30.2			0.00075			0.00075			0.11			0.667			0.016
13.30			0.20			174.0			0.00250			0.00250			0.54			11.6			0.293
4			0			40			0			0			0			1			0
0			2			0			17			17			13			0			4
			12%						100%			100%			76%						24%
			14												4						3
230			NA			NA			NA			0.0052			NA			NA			5.99
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3		2	3	2	3	3	3	3	3	3	3	2	3	2	3	1	3	1	3						
		38		4.19		0.237		0.210		2.09		1.92		14.4		13.8									
		9		3.68		0.185		0.196		2.04		1.95		13.9		14.1									
		62		2		0		0		0		0		3		2									
		17		16		17		15		17		16		17		16									
		3		2.71		0.023		0.020		1.14		1.09		9.6		10.1									
		252		8.46		0.768		0.724		2.93		2.74		20.2		18.0									
		3		3		0		0		1		1		10		11									
		0		0		0		0		0		0		0		0									
						1		2																	
		87		87		NA		NA		150		150		NA		NA									
		NA		NA		6		NA		10		NA		2,000		NA									
		18%		0%		0%		0%		0%		0%		0%		0%									
		0%		0%		0%		0%		0%		0%		0%		0%									
		result > crit		result > crit		result > crit				result > crit		result > crit		result > crit											

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-2	3			2	3			3	3		3	3		3	3		3	3		3	3
41300				3.1				0.362			0.209			0.189			1.45			0.496	
43500				2.0				0.298			0.153			0.141			0.69			0.462	
11000				3				0			0			0			2			0	
17				17				17			17			17			17			17	
21100				0.8				0.050			0.072			0.069			0.25			0.250	
65300				15.1				1.280			0.502			0.525			7.09			1.450	
21980				1				0			0			0			0			0	
0				0				3			0			0			3			4	
								18%									18%			24%	
								3													
NA				10.98				10.56276			NA			NA			5.323			5.110	
NA				100				NA			NA			NA			NA			NA	
0%				6%				0%			0%			0%			12%			0%	
0%				0%				0%			0%			0%			0%			0%	
					depends on Hardness			depends on Hardness									depends on Hardness				
					result > crit			result > crit									result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			
0	3	0	3			3	3			4	3	-1	3	-1	3			0	3	0	3		
164		109.0				0.544				0.03		1980		1940				198.0		186.0			
141		103.0				0.119				0.02		1970		1940				186.0		178.0			
57		61				1				0		370		330				67		77			
17		17				17				17		17		16				17		16			
90		23.9				0.016				0.01		1270		1340				87.9		59.7			
277		252.0				5.000				0.05		2730		2650				350.0		325.0			
101		37				0				0		1454		1475				99		73			
0		0				6				15		0		0				0		0			
						35%				88%													
						1				2													
1000		1000				1.379				1.223		NA		NA				NA		NA			
NA		NA				15				NA		NA		NA				50		NA			
0%		0%				12%				0%		0%		0%				0%		0%			
0%		0%				0%				0%		0%		0%				100%		0%			
						depends on Hardness				depends on Hardness													
result > crit		result > crit				result > crit				result > crit								result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		Total
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		µg/L
5	2	5	2	2	3	2	3	2	3	2	3	0	3	0	3	3	3								
0.004		0.003		2.98		2.62		2.77		2.16		906		858		0.1700									
0.001		0.001		2.34		2.28		2.63		2.09		745		733		0.1550									
0		0		1		1		2		1		586		569		0									
17		17		17		16		17		16		17		16		17									
0.000		0.000		1.96		1.53		0.85		0.80		475		487		0.0775									
0.031		0.031		6.09		4.76		8.23		4.53		3030		2920		0.4830									
0		0		2		2		1		1		513		526		0									
12		14		0		0		0		0		0		0		16									
71%		82%														94%									
4		3														1									
0.77		0.77		NA		NA		29.93		29.84		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.1660	
	0.1550	
	0	
	17	
	0.0775	
	0.4240	
	0	
	16	
	94%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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MW-05-14S

Sample Date													
11/10/05	5.99	3	11.05	4	80	1		243	3		2.52	3	33.6	3
03/23/06	7.12	3	10.42	4	79	2		193	3		3.89	3	30.3	3
05/21/06	6.43	3	12.41	4	83	2		210.2	4		4.27	3	35.0	2
08/23/06	6.27	3	9.25	3	68	2		158.8	4		4.22	3	32.3	3
11/02/06	6.3	2	9.73	3	88	2		291.9	4		3.22	3	33.6	3
03/20/07	5.86	3	11.19	4	48	2		170.7	4		3.09	3	34.9	3
05/09/07	6.14	3	11.71	4	48	2		145.3	4		3.52	3	37.0	2
08/19/07	6.14	3	14.02	4	44	2		124.5	4		4.71	3	33.4	3
11/12/07	6.17	3	10.52	4	71	2		227.2	4		3.07	3	31.9	3
03/20/08	5.91	3	11.07	4	72	2		139.7	4		3.62	3	32.3	3
05/22/08	6.46	3	13.47	4	82	2		150.2	4		4.32	3	32.8	3
08/25/08	6.18	3	10.67	4	71	2		201.3	4		3.77	3	31.1	3
10/21/08	6.45	3	10.82	4	78	2		125.4	4		2.84	3	29.5	3
08/25/09			8.08	3	133	3				R	3.34	3	29.9	3
08/17/10	5.6	2	9.99	3	134	3	Q	230	2		3.61	3	27.3	3
08/30/11	6.08	3	12.12	4	66.1388	FALSE		112.1	4		3.11	3	29.3	3
08/21/12	7.26	3	9.98	3	79	2		-214	3		3.3	2	31.1	3

80	1	60	1	1.9	2	9	1	28.5	3	0.258	3 J-				
90.0	1	52.5	3	**0.075**	2	15.0	2	30.0	1	0.266	3				
90.0	1	71.2	3	2.70	2	7.25	3	34.0	2	0.331	3				
75.0	2	67.5	3	0.300	1 J	20.8	3	28.0	2	0.206	3	**0.0155**	3	0.206	3
75.0	2	36.2	3	4.90	2	**1.57**	3	29.0	2	0.187	3	**0.0155**	3	0.166	3
70.0	1	46.3	3	0.500	1	8.00	1 J	31.0	2	0.233	3	**0.0155**	3	0.237	3
80.0	1	48.8	3	**0.075**	2	4.50	2 J	31.0	2	0.248	3				
80.0	1	48.8	3	6.40	2	9.75	3 J	28.6	3	0.278	3				
70.0	1	37.5	3	**0.078**	2	10.0	1	27.6	3	0.241	3 J-				
81.9	3	47.5	3	**0.075**	2	11.8	3	30.8	3	0.384	3				
79.9	3	71.3	3	0.5	1	5.03	3 J	29.3	3	0.316	3				
76.9	3	60	1	0.515	3	8.52	3 J	27.7	3	0.268	3				
81.2	3	50	1	1.41	3	6.28	3 J	28.5	3	0.278	3				
81.3	3	53.8	3	**0.0775**	3	9.5	2 J	23	2	0.266	3				
75.7	3	54	2	**0.076**	2	9.94	3 J	24.7	3	0.296	3				
78.1	3	61	2	0.5	1	5.7	2 J	24.4	3	0.214	3				
81.8	3	28	2	0.196	3 J	**5.0**	1 U	24.2	3	0.214	3				

0.38	2			
0.0048	2	J		
0.0150	2			
0.0040	1	J	**0.0155**	3
0.0170	2		**0.050**	1 UJ
0.0120	2		**0.0155**	3
0.0064	2	J		
0.0102	3			
0.0128	3			
0.0259	3			
0.0033	2	J		
0.0177	3			
0.0387	3			
0.00155	3			
0.0084	2	J		
0.0035	2	J		
0.0176	3			

0.742	3	0.04	1 J	9.81	3	**0.0025**	2 UJ	**0.0025**	2 UJ	0.092	2 J				**0.0155**
0.762	3	**0.0155**	3	8.05	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
1.05	3	0.0380	2 J	9.26	3	**0.00125**	3	**0.0025**	2 UJ	**0.155**	3				**0.050**
0.927	3	0.0470	2 J	9.54	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.639	3	**0.0155**	3	9.10	2	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.910	2	0.0440	2 J	7.65	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.940	2	0.0450	2 J	8.40	2	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.722	3	**0.0155**	3	7.53	3	**0.00075**	2	**0.00075**	2	0.35	2 J				0.112
0.635	3	0.0350	2 J	9.49	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.744	3	0.0330	2 J	7.58	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.799	3	0.041	2 J	9.05	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	0.549	3		**0.0155**
0.499	3	0.037	2 J	8.95	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.571	3	0.04	1 J	8.37	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.631	3	0.038	2 J	8.24	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.264	3 J		**0.0155**
0.642	3	0.069	2 J	9.37	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.664	3	0.054	2 J	9.27	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.84	2	**0.050**	1 U	9.33	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	23.7	3	2.56	3 J+	0.0396	3 J+	0.0242	3 J+	0.259	3 J	0.293	3 J	2.1	2	1.77	3
1 U	6.13	3 J+	2.28	3 J+	0.0382	3 J	0.0372	3 J	**0.155**	3	**0.155**	3	2.18	3	2.09	3
1 U	186	3	**1.00**	1 U	0.0434	3 J	0.0352	3 J	0.616	3	**0.155**	3	3.95	3	1.91	3
3	127	3	**1.00**	1 U	0.0226	3 J	0.0204	3 J	**0.155**	3	**0.155**	3	3.45	3	1.70	2
3	369	3	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	0.939	3	**0.155**	3	5.79	3 J+	1.88	3 J+
3	35.0	2 J+	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.34	3 J+	1.89	3 J+
3	5.82	3 J+	**1.00**	1 U	0.0494	3 J	0.0422	3 J	**0.155**	3	**0.155**	3	2.06	3	1.84	3
3	737	3	**1.00**	1 U	0.0646	3	0.0276	3 J	1.70	2	**0.155**	3	10.1	3	1.71	3 J+
3	53.7	3	**1.00**	1 U	0.0364	3 J	0.0302	3 J	**0.155**	3	**0.155**	3	2.38	3	1.66	3
3	179	3	2.15	3	0.0886	3	0.0548	3	0.527	3	**0.155**	3	3.44	3	1.78	3
3	6.42	3 J+	**1.00**	1 U	**0.0075**	2	0.0345	3 J	**0.155**	3	**0.155**	3	1.88	3	1.72	3
1 U	6.86	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.72	3	1.65	3
1 U	5.29	3	1.38	3 J	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	1.75	3	1.66	3
3	6.05	3 J+	**1.00**	1 U	0.0266	3 J	0.0318	3 J	**0.155**	3	**0.155**	3	1.63	3	1.54	3
3	24.1	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.96	3 J+	1.68	3 J+
3	9.85	3 J+	2.26	3 J+	**0.0075**	2	**0.0075**	2	0.443	3 J	0.222	3 J	1.84	3	1.65	3
3	2.58	3	**1.00**	1 U	0.0297	3 J	0.0321	3 J	**0.250**	2 U	**0.250**	2 U	1.7	2	1.72	3

0.0075	2	**0.0075**	2	**0.005**	1 U	**0.00155**	3	5.2	2 J	**1.55**	3	**0.00775**	3	**0.00775**	3	10500	3
0.0120	2	**0.0120**	2	**0.0250**	2 U	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0125**	3	**0.0125**	3	9480	3
0.0120	2	**0.0120**	2	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	**0.0125**	3	**0.0125**	3	11000	2
0.0125	3	**0.0125**	3	0.0158	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	9850	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	10400	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	10800	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	11600	3
0.0298	3 J	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	10300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	9950	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	10000	1
0.0125	3	**0.0125**	3	**0.0075**	2	0.015	2 J	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	10300	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	9680	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	9190	3
0.0125	3	**0.0125**	3	**0.0075**	2	0.0331	3 J	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	9380	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	8420	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.26	3 J	2.38	3 J	**0.0075**	2	**0.0075**	2	8990	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	1.91	3 J	2.05	3 J	**0.0075**	2	**0.0075**	2	9670	3

10900	3	0.843	3	0.642	3	0.111	3 J+	0.0982	3 J+	8.9	2 J+	9.22	3 J+
9430	3	0.884	3 J+	0.286	3 J+	0.0410	2	0.0390	2	18.6	3	15.9	3
10500	3	2.61	3	0.494	3	0.143	3	0.0524	3	7.37	3	2.91	3
10800	3	1.03	3 J+	0.579	3 J+	0.154	3	0.0278	3	1.99	3	0.834	3 J+
10400	3	2.89	3	**0.050**	1	0.275	3	0.0310	2	1.57	3 J+	0.432	3 J+
10400	3	1.33	3 J+	0.342	3 J+	0.0510	2 J+	0.0272	3 J+	1.26	3 J+	1.18	3 J+
10100	3	1.50	2	0.261	3	0.0364	3 J+	0.0256	3 J+	0.725	3 J+	0.506	3 J+
9730	3	6.85	3	0.595	3	0.502	3	0.0418	3	3.23	3 J+	0.943	3 J+
9530	3	2.41	3	0.274	3 J+	0.0558	3	0.0180	2 J	0.477	3	0.276	3
10100	3	3.85	3	0.709	3	0.132	3	0.0368	3	8.11	3	4.21	3
10300	3	1.27	3	0.355	3	0.0224	3	0.0189	3 J	1.71	3 J+	1.68	3 J+
9590	3	1.79	3	0.35	2	0.0264	3	0.0233	3	0.447	3 J		R
10100	3	0.889	3	0.319	3	0.022	2	0.0226	3	0.517	3	0.375	3
9130	3	0.415	3	0.261	3	0.0205	3 J+	**0.0100**	1 U	0.504	3 J+	**0.250**	2 U
8530	3	1.59	3 J+	0.422	3 J+	0.0335	3 J+	**0.0100**	1 U	**0.250**	2 U	**0.250**	2 U
9000	1	1.09	3	0.354	3	0.0228	3	0.0179	3 J	**0.250**	2 U	**0.250**	2 U
9810	3	1.2	2	0.399	3	0.0297	3	0.0301	3	**0.250**	2 U	0.531	3

51.8	3	8.91	3 J	**0.05**	1 U	**0.0155**	3	1780	3	1810	3	2.21	3	0.439	3
7.93	3 J	**3.10**	2	**0.0130**	2		R	1610	3	1710	3	0.746	3	0.501	3 J+
218	3	10.7	3 J	0.153	3	0.0276	3 J	1830	3	1660	3	30.5	3	14.3	3
202	3	13.4	3 J	0.244	3 J+	**0.050**	1 U	1880	3	1780	3	25.9	3	0.707	3 J+
530	2	**10.0**	1 U	0.347	3 J+	**0.0155**	3	1880	3	1810	3	39.2	3	1.71	3
56.1	3 J+	**10.0**	1 U	**0.050**	1 U	0.148	3 J+	1950	3	1890	3	4.57	3 J+	0.619	3 J+
24.1	3	**3.10**	2	**0.050**	1 U	**0.0155**	3	1960	3	1820	3	0.538	3 J+	0.187	3 J+
948	3	**10.0**	1 U	0.676	3 J+	**0.0155**	3	1850	3	1590	3	80.4	3	1.01	3 J+
75.4	3	11.3	3 J	**0.050**	1 U	**0.0155**	3	1710	3	1650	3	4.20	2	0.255	3
260	2	41.7	3	0.197	3	**0.0155**	3	1780	3	1730	3	15.0	2	0.655	3
38.9	3	19	2 J	**0.0155**	3	**0.0155**	3	1750	3	1800	2	0.634	3 J+	0.187	3 J+
42.6	3	35.2	3	**0.0155**	3	**0.0155**	3	1680	3	1660	3	0.812	3	0.186	3
31.7	3	27.7	3	**0.050**	1 U	**0.0155**	3	1600	2	1840	3	0.441	3	0.13	2
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	1580	3	1590	3	0.602	3 J+	0.104	3 J+
37	2	6.59	3 J	**0.0155**	3	**0.0155**	3	1510	3	1510	3	2.47	3 J+	0.157	3 J+
16.6	3 J	6.27	3 J	**0.0155**	3	**0.0155**	3	1660	3	1630	3	0.741	3	0.182	3
10.6	3 J	10.4	3 J	**0.0155**	3	**0.0155**	3	1680	3	1780	3	0.192	3 J+	0.158	3 J+

0.031	2	**0.031**	2	0.297	3 J+	0.256	3 J+	0.704	3	0.655	3	385	3	373	3	0.248	3
0.000475	4	**0.000475**	4	0.330	2	0.330	2	0.685	3	0.664	3	345	3	356	3	**0.155**	3
0.00170	2 J	**0.000475**	4	0.327	3	0.342	3	1.64	3	0.925	3	427	3	378	3	**0.155**	3
0.000475	4	**0.000475**	4	0.248	3 J		R	0.924	3	0.578	3	361	3	379	3	**0.155**	3
0.000475	4	**0.000475**	4	0.348	3	0.293	3	2.03	3	0.849	3	400	1	365	3	**0.155**	3
0.000169	3	**0.000475**	4	0.291	3	0.290	2	1.26	3 J+	1.03	3 J+	390	2	373	3	**0.155**	3
0.000169	3	**0.000475**	4	0.333	3	0.296	3	1.60	2 J+	0.887	3 J+	367	3	354	3	**0.155**	3
0.00250	2 U	**0.000475**	4	0.495	3	0.342	3	4.38	3	1.63	3 J+	465	3	338	3	**0.155**	3
0.000359	3 J	**0.000475**	4	0.333	3	0.291	3	1.43	3	0.561	3	370	2	353	3	**0.155**	3
0.00075	2	**0.00075**	2	0.337	3	0.336	3	2.27	3	1.26	3	384	3	355	3	**0.155**	3
0.153	3	**0.00075**	2	0.337	3	0.326	3	0.752	3	0.568	3	363	3	373	3	**0.155**	3
0.00075	2	**0.00075**	2	0.308	3	0.298	3	1	1	1.08	3	363	3	362	3	**0.155**	3
0.00075	2	**0.00075**	2	0.286	3	0.312	3	0.731	3	0.777	3	355	3	359	3	**0.155**	3
0.00075	2	**0.00075**	2	0.277	3	0.288	3	**0.310**	2 U	**0.310**	2 U	338	3	328	3	**0.155**	3
0.00075	2	**0.00075**	2	0.205	3	0.202	3	0.902	3	0.653	3	325	3	330	2	**0.155**	3
0.00075	2	**0.00075**	2	0.276	3	0.289	3	0.681	3	0.635	3	338	3	339	3	**0.155**	3
0.00075	2	**0.00075**	2	0.291	3	0.3	1	0.907	3	0.818	3	358	3	371	3	**0.155**	3

J	0.0775	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
	0.155	3
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	0.155	3
	0.155	3
	0.155	3
	0.155	3

5770	3	0.0064	2 J	**0.0031**	2	2880	3	2930	3	**0.0031**	2	**0.0031**	2	**0.031**	2
4980	3	**0.0031**	2	**0.0031**	2	2460	3	2620	3	**0.0025**	2	**0.0025**	2	**0.050**	1 U
4870	3	**0.0031**	2	**0.0031**	2	3120	3	2900	2	0.0058	2 J	**0.0025**	2	**0.0155**	3
5190	3	0.0122	3 J	**0.0031**	2	2700	2	2560	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5180	3	0.0122	3 J	**0.0031**	2	2620	3	2610	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5110	3	**0.0031**	2	**0.0031**	2	2730	3	2660	3	0.0136	3 J	**0.0050**	1	**0.050**	1
4990	3	**0.0031**	2	**0.0031**	2	2890	3	2670	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5210	3	0.0142	3 J	**0.0031**	2	2670	3	2490	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5150	3	**0.0031**	2	**0.0031**	2	2490	3	2390	3	0.0130	2 J	**0.0050**	1	**0.050**	1
5240	3	0.0070	1 J	**0.0031**	2	2450	3	2440	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5280	3	**0.0031**	2	**0.0031**	2	2530	3	2590	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5260	3	**0.0031**	2	**0.0031**	2	2480	3	2450	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5460	3	**0.0031**	2	**0.0031**	2	2430	3	2690	3	**0.0050**	1	**0.0050**	1	0.205	3
4830	3	**0.0031**	2	**0.0031**	2	2260	3	2340	3	**0.0050**	1	**0.0050**	1	**0.050**	1
4860	3	0.0066	2 J	**0.0031**	2	2270	3	2310	3	**0.0050**	1	**0.0050**	1	**0.050**	1
5120	3	**0.0031**	2	**0.0031**	2	2430	3	2380	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
5310	3	**0.0031**	2	**0.0031**	2	2440	3	2580	3	0.0201	3	0.0218	3	**0.0310**	2

0.031	2	0.227	3 J	0.289	3 J	**0.75**	2 U	**0.75**	2 U
0.0155	3	0.221	3 J	**0.110**	2	1.30	2 J+		R
0.0155	3	0.414	3 J	0.311	3 J	1.46	3 J+	0.990	2 J+
0.050	1	0.577	3 J	0.645	3 J	1.66	3 J+	**0.50**	1 U
0.050	1	1.80	2	0.766	3 J	5.01	3 J+	1.29	3 J+
0.050	1	**0.155**	3	**0.155**	3	1.37	3 J+	1.89	3 J+
0.050	1	**0.155**	3	**0.155**	3	1.31	3 J+	**0.50**	1 U
0.050	1	1.85	3	**0.155**	3	4.82	3 J+	1.22	3 J+
0.050	1	**0.155**	3	**0.155**	3	2.15	3	**0.50**	1 U
0.050	1	0.533	3 J	**0.155**	3	1.14	3	1.24	3
0.050	1	**0.155**	3	**0.155**	3	1.15	3 J		R
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U		R
0.050	1	**0.155**	3	**0.155**	3	2.54	3 J+	**0.50**	1 U
0.271	3 J+	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	0.351	3 J	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	0.421	3 J	0.476	3 J	0.609	3 J	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3					
Mean	6.27		10.97		78		157		3.55		32.1						
Median	6.18		10.82		78		165		3.52		32.3						
St. Deviation	0		1		25		111		1		2						
# of values	16		17		17		16		17		17						
Minimum	5.60		8.08		44		-214		2.52		27.3						
Maximum	7.26		14.02		134		292		4.71		37.0						
Lowest fifth percentile	6		9		47		31		3		29						
# of values undetected	0		0		0		0		0		0						
% of values undetected																	
# of values between MDL and PQL																	
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA						
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA						
% of CALC exceedences	88%		0%		0%		0%		0%		0%						
% of DWS exceedences	25%		0%		0%		0%		0%		0%						

HIDE this row - notes
RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
0	2		1	3		2	2		2	3		1	3		3	3		4	3		3	3
79			53			1.2			9			28.3			0.264			0			0	
80			53			0.5			9			28.5			0.266			0			0	
5			12			2			4			3			0			0			0	
17			17			17			17			17			17			3			3	
70			28			0.1			2			23.0			0.187			0.0155			0.166	
90			71			6.4			21			34.0			0.384			0.0155			0.237	
70			35			0			4			24			0			0			0	
0			0			6			2			0			0			3			0	
						35%			12%									100%				
						2			9													
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
				result > crit									result <20			result > crit						

	3	2	4	3		
	0.03		0			
	0.01		0			
	0		0			
	17		3			
	0.00		0.0155			
	0.38		0.05			
	0		0			
	1		3			
	6%		100%			
	6					
	NA		NA			
	NA		NA			
	0%		0%			
	0%		0%			
NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4										
0.748		0.04		8.76		0.0010		0.0011		0.163		0		0.0293										
0.742		0.04		9.05		0.0008		0.0008		0.155		0		0.0155										
0		0		1		0		0		0		0		0										
17		17		17		17		17		17		7		17										
0.499		0.02		7.53		0.0008		0.0008		0.092		0.075		0.0155										
1.050		0.07		9.81		0.0025		0.0025		0.350		0.549		0.1120										
1		0		8		0		0		0		0		0										
0		4		0		17		17		15		5		16										
		24%				100%		100%		88%		71%		94%										
		13								2		1												
230		NA		NA		NA		0.0052		NA		NA		7.00										
250		4		250		NA		0.2		NA		NA		NA										
0%		0%		0%		0%		0%		0%		0%		0%										
0%		0%		0%		0%		0%		0%		0%		0%										
																								depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit																result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N			
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**		
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		

| | | |

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3										
0.0132		0.0121		0.009		0.00910		1.5		1.32		0.00940		0.00940		9970											
0.0125		0.0125		0.008		0.00750		1.3		1.25		0.00750		0.00750		9950											
0		0		0		0		1		0		0		0		780											
17		17		17		17		17		17		17		17		17											
0.0075		0.0075		0.005		0.00155		0.8		0.75		0.00750		0.00750		8420											
0.0298		0.0125		0.025		0.03310		5.2		2.38		0.01850		0.01850		11600											
0		0		0		0		1		1		0		0		8876											
16		17		16		15		14		15		17		17		0											
94%		100%		94%		88%		82%		88%		100%		100%													
1				1		2		3		2																	
NA		NA		NA		NA		NA		NA		0.108		0.104		NA											
4		NA		NA		NA		NA		NA		5		NA		NA											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
0%		0%		0%		0%		0%		0%		0%		0%		0%											
												depends on Hardness		depends on Hardness													
result > crit												result > crit		result > crit													
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF		
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**									
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L		

CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium				**Chromium[4,6]**						**Cobalt**						**Copper[4]**					
Dissolved				Total				Dissolved		Total				Dissolved		Total				Dissolved	
µg/L				µg/L				µg/L		µg/L				µg/L		µg/L				µg/L	
-2	3			2	3			3	3	4	3			4	3	2	3			3	3
9900				1.910				0.394		0.099				0.0312		3.3				2.48	
10100				1.330				0.354		0.041				0.0272		1.3				0.68	
600				2				0		0				0		5				4	
17				17				17		17				17		17				16	
8530				0.415				0.050		0.021				0.0100		0.3				0.25	
10900				6.850				0.709		0.502				0.0982		18.6				15.90	
8906				1				0		0				0		0				0	
0				0				1		0				2		3				3	
								6%						12%		18%				19%	
														3							
NA				10.98				10.56276		NA				NA		3.230				3.101	
NA				100				NA		NA				NA		NA				NA	
0%				0%				0%		0%				0%		29%				19%	
0%				0%				0%		0%				0%		0%				0%	
				depends on Hardness				depends on Hardness								depends on Hardness					
				result > crit				result > crit								result > crit				result > crit	

FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron						**Lead[4]**						**Magnesium**						**Manganese**		
			Total						Total						Total						Total		
			µg/L						µg/L						µg/L						µg/L		
1	3	1	3	4	3	4	3	-1	3	-1	3	2	3	3	3								
150.6		14.00		0.12		0.0267		1750		1720		12.30		1.264									
42.6		10.00		0.05		0.0155		1750		1730		2.21		0.255									
246		11		0		0		130		110		21		3									
17		17		17		16		17		17		17		17									
7.9		3.10		0.01		0.0155		1510		1510		0.19		0.104									
948.0		41.70		0.68		0.1480		1960		1890		80.40		14.300									
10		3		0		0		1566		1574		0		0									
1		6		12		14		0		0		0		0									
6%		35%		71%		88%																	
3		8				1																	
1000		1000		0.655		0.637		NA		NA		NA		NA									
NA		NA		15		NA		NA		NA		50		NA									
0%		0%		6%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		6%		0%									
					depends on Hardness		depends on Hardness																
result > crit		result > crit			result > crit		result > crit							result > crit									

HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total						Dissolved						Total						Dissolved				
			µg/L						µg/L						µg/L						µg/L				
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.012		0.002		0.313		0.299		1.306		0.816		373		358		0.160									
0.001		0.001		0.308		0.297		0.924		0.777		363		359		0.155									
0		0		0		0		1		0		35		16		0									
17		17		17		16		17		17		17		17		17									
0.000		0.000		0.205		0.202		0.310		0.310		325		328		0.155									
0.153		0.031		0.495		0.342		4.380		1.630		465		379		0.248									
0		0		0		0		1		1		335		330		0									
14		17		0		0		1		1		0		0		16									
82%		100%						6%		6%						94%									
2																1									
0.77		0.77		NA		NA		18.25		18.20		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit			result > crit					result > crit		result > crit														result > crit	

	3	3
	0.1500	
	0.1550	
	0	
	17	
	0.0775	
	0.1550	
	0	
	17	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	

SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF
	Silicon			**Silver[8]**						**Sodium**						**Thallium**							**Tin**
	Dissolved			Total						Dissolved						Total						Dissolved	
	µg/L			µg/L						µg/L						µg/L						µg/L	
-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2	
5170			0.0055			0.0031			2580			2570			0.0065			0.0055			0.054		
5180			0.0031			0.0031			2490			2580			0.0050			0.0050			0.050		
230			0			0			230			180			0			0			0		
17			17			17			17			17			17			17			17		
4830			0.0031			0.0031			2260			2310			0.0025			0.0025			0.016		
5770			0.0142			0.0031			3120			2930			0.0201			0.0218			0.205		
4854			0			0			2268			2334			0			0			0		
0			11			17			0			0			13			16			16		
			65%			100%									76%			94%			94%		
			6												3								
NA			0.447449115			0.380			NA			NA			NA			NA			NA		
NA			NA			NA			NA			NA			2			NA			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
				depends on HARD; revised 2013			depends on Total Ag																
				result > crit			result > crit								result > crit								

3	2	3	3	3	3	2	3	2	3														
0.056		0.449		0.253		1.79		1.11															
0.050		0.221		0.155		1.46		1.23															
0		1		0		1		0															
17		17		17		17		14															
0.016		0.155		0.110		0.50		0.50															
0.271		1.850		0.766		5.01		1.89															
0		0		0		1		1															
16		8		12		5		9															
94%		47%		71%		29%		64%															
		7		5		1																	
NA		NA		NA		41.85		41.27															
NA		NA		NA		NA		NA															
0%		0%		0%		0%		0%															
0%		0%		0%		0%		0%															
																		depends on Hardness		depends on Total Zn			
																		result > crit		result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N									ZN_NSF	ZN_NVF	ZN_F			ZN_FSF	ZN_FVF

MW-05D

Sample Date												
09/24/04	10.01	4	0.58	2	271	3		-356	3	4.09	3	77.3	3
10/19/04	9.63	3	0.84	2	271	3		-369	3	3.67	3	79.9	3
03/18/05	7.89	3	0.218	3	218	3				3.74	3	98.2	3
05/11/05	8.95	3	0.13	2	218	3		-267	3	4.54	3	111	3
08/18/05	7.08	3	0.38	2	247	3		-68	2	5.25	3	98.3	3
11/09/05	7.03	3	0.21	2	264	3		-58	2	3.13	3	91.6	3
03/23/06	7.2	2	0.3	1	262	3		35	2	3.61	3	96.8	3
05/18/06	6.5	2	0.31	2	250	2		78	2	3.38	3	110	2
08/17/06	6.2	2	0.28	2	244	3		122.3	4	4.31	3	103	3
10/29/06	6.59	3	0.98	2	257	3		137.2	4	3.38	3	107	3
03/15/07	7.01	3	0.14	2	135	3		-45	2	2.18	3	106	3
05/24/08	6.77	3	0.18	2	255	3		-91.9	3	3.22	3	92.4	3
08/25/08	6.84	3	0.34	2	240	2		-16	2	3.74	3	88	2
10/22/08	6.97	3	5.58	3	216	3		-28	2	3	1	96.7	3
03/24/09	6.61	3	0.33	2	182	3		-13.2	3	2.41	3	96.8	3
05/19/09	6.62	3	0.46	2	269	3		-39.1	3	3.32	3	91.6	3
08/24/09	6.88	3	0.79	2	347	3		-76.1	3	3.45	3	94.3	3
10/15/09	6.67	3	0.29	2	234	3		-181.4	4	3.14	3	96.4	3
03/18/10	6.88	3	0.51	2	267	3		-72.8	3	2.94	3	92.9	3
05/17/10	6.27	3	0.31	2	227	3	Q	-116.1	4	3.58	3	88.5	3
08/18/10	7.13	3	0.52	2	249	3		-64.6	3	3.66	3	86.6	3
10/19/10	6.79	3	0.06	1	246	3		-91.6	3	3.23	3	91.2	3
03/27/11	6.87	3	0.01	1	290	2	Q	-34.6	3	2.85	3	85.9	3
05/23/11	6.71	3	0.37	2	247	3		44.6	3	3.07	3	87	2
08/27/11	6.72	3	3.2	2	195.1976	FALSE		-2	1	3.76	3	94.2	3
10/25/11	7.09	3	0.09	1	220	2		38.1	3	3.07	3	94.6	3
08/24/12	6.91	3	0.1	1	250	2		-23.7	3	3.21	3	93	2
10/10/12	6.99	3	0.05	1	236	3		-360.2	4	3.28	3	91.6	3

260	2	201	3	4.21	3	**1.57**	3	79.5	3	4.25	3 J-				
255	3	154	3	2.81	3	**1.57**	3	72	2	**0.155**	3				
255	3	155	3	2.5	2	4.25	3 J	74	2	**0.0155**	3				
265	3	195	3	1.8	2	**0.785**	3	78	2	**0.0155**	3				
250	2	176	3	4.4	2	4.25	3 J	71	2	**0.0155**	3				
250	2	181	3	3.8	2	3.75	3 J	72	2	**0.05**	1 U				
230	2	115	3	5.10	2	8.50	2	70.0	1	0.510	2				
250	2	185	3	0.400	1 J	5.00	1	70.0	1	0.0695	3 J				
250	2	183	3	2.30	2	5.50	2 J	67.0	2	**0.0155**	3	**0.0155**	3	**0.0155**	3
230	2	172	3	**0.075**	2	8.25	3 J	68.0	2	**0.050**	1 U	**0.0155**	3	**0.050**	1
230	2	226	3	1.50	2	9.50	2 J	68.0	2	**0.0155**	3	**0.0155**	3	**0.0155**	3
253	3	184	3	3.3	2	5.57	3 J	66.9	3	0.276	3				
259	3	178	3	1.24	3	6.46	3 J	66.6	3	**0.0100**	1 U				
266	3	146	3	2.3	2	7.2	2 J	66.6	3	**0.0155**	3				
273	3	240	2	1.67	3	5.74	3 J	64.2	3	**0.0155**	3				
266	3	169	3	1.89	3	5.72	3 J	64.6	3	**0.0155**	3				
273	3	174	3	1.81	3	7.6	2 J	63	2	0.083	2 J				
266	3	174	3	1.42	3	**5.0**	1 U	66.2	3	**0.0155**	3				
268	3	169	3	1.31	3	3.96	3 J	63.5	3	**0.0155**	3				
276	3	186	3	0.513	3	**5.0**	1 U	63.3	3	**0.0155**	3				
257	3	165	3	0.404	3 J	7.08	3 J	62.3	3	**0.050**	1 U				
258	3	155	3	0.606	3	10.1	3	62.9	3	**0.050**	1 U				
256	3	142	3	**0.080**	1	5.66	3 J	61.9	3	**0.050**	1 U				
255	3	125	3	1.09	3	7.96	3 J	61.9	3	**0.0155**	3				
254	3	183	3	1.22	3	6.14	3 J	59.3	3	**0.050**	1 U				
253	3	165	3	0.495	3	4.84	3 J	59.1	3	**0.0155**	3				
250	2	160	2	0.4	1 J	**5.0**	1 U	58	2	**0.050**	1 U				
242	3	156	3	**0.076**	2	12	2	61.4	3	0.0335	3 J				

	0.33	2		
	0.41	2		
	0.566	3		
	0.0105	3		
	0.61	2		
	0.68	2		
	0.590	2		
	0.535	3		
	0.521	3	J-	R
U	0.564	3		R
	2.32	3	J-	R
	2.58	3		
	0.618	3		
	0.377	3	J	
	0.606	3		
	0.464	3		
	0.539	3		
	0.668	3		
	0.621	3		
	0.72	2		
	0.69	2		
	0.982	3		
	0.62	2		
	0.628	3		
	0.635	3		
	0.971	3		
	1.15	3		
	0.61	2		

0.983	3	0.416	3	57.1	3 J-	0.0038	2 J	**0.00125**	3	0.21	2 J				**0.05**
0.99	2 J-	0.219	3 J-	59.7	3 J-	0.005	1	**0.00125**	3	0.37	2 J				**0.0155**
0.853	3	0.321	3	62	2	**0.00125**	3	**0.00125**	3	0.21	2 J				0.068
0.823	3	0.303	3	60.8	3	**0.00125**	3	**0.00125**	3	0.21	2 J				0.049
0.788	3	0.246	3	63.2	3	**0.0025**	2 UJ	**0.0025**	2 UJ	0.23	2 J				**0.0155**
0.792	3	0.27	2	59.6	3	**0.00125**	3	**0.00125**	3	0.10	1 J				0.049
0.803	3	0.166	3	61.3	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
0.792	3	0.305	3	57.1	3	**0.00125**	3	**0.00125**	3	**0.155**	3				0.0380
0.797	3	0.237	3	59.5	3	**0.00075**	2	0.0020	1 J	**0.155**	3				**0.050**
0.671	3	0.244	3	53.9	3	**0.00075**	2	0.0030	1 J	**0.155**	3				**0.0155**
0.676	3	0.244	3	60.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.752	3	0.297	3	52.8	3	**0.0025**	2 U	0.0051	2	**0.155**	3	0.516	3		**0.0155**
0.744	3	0.262	3	60.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.776	3	0.284	3	51.5	3	**0.00075**	2	**0.00075**	2	**0.155**	3	12.6	3		**0.050**
0.695	3	0.272	3	52.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.669	3	0.253	3	59.5	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.721	3	0.265	3	51.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.313	3 J		0.0422
0.673	3	0.246	3	58.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		0.0394
0.681	3	0.228	3	57.4	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.674	3	0.248	3	55.6	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.53	2 J+		**0.0155**
0.74	2	0.271	3	56.8	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.78	2 J+	0.297	3	60.3	3 J-	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.219	3 J		**0.0155**
0.784	3	0.262	3	58.3	3	**0.00075**	2	**0.00075**	2	**0.155**	3	11.8	3		**0.0155**
0.807	3	0.276	3	52.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.842	3	0.269	3	59.9	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.734	3	0.284	3	57.5	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.699	3	0.255	3	145	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.723	3	0.249	3	60.7	3	**0.00075**	2	**0.00075**	2	**0.155**	3	0.264	3 J		**0.050**

1	U	168	3	29.2	3	0.781	3	0.851	3	3.14	3	2.82	3	13.5	3	10.6	3
3		32.6	3	**12.5**	3	U	0.871	3	0.769	3	3.06	3	J+	2.66	3	J+	14	2	12.1	3
2	J	7.7	2	J+	3.14	3	J+	0.42	2	0.395	3	2.98	3	2.9	2	14.9	3	14.3	3
2	J	12.1	3	J+	2.69	3	J+	0.33	2	J+	0.334	3	J+	3.18	3	3.34	3	13.6	3	15.2	3
3		14.5	3	2.54	3	0.275	3	0.248	3	3.11	3	3.18	3	16.6	3	13.7	3
2	J	17.2	3	J+	2.26	3	J+	0.186	3	J+	0.152	3	J+	3.31	3	2.92	3	16.3	3	13.7	3
1	U	114	3	3.27	3	J+	0.252	3	0.177	3	2.90	2	2.66	3	20.1	3	19.0	2
2	J	9.55	3	2.25	3	0.149	3	0.155	3	2.87	3	3.34	3	16.7	3	18.0	2
1	U	52.3	3	2.13	3	J+	0.131	3	0.111	3	2.84	3	J	R	17.4	3	16.0	2
3		26.3	3	2.19	3	0.111	3	J+	0.0618	3	J+	3.01	3	2.91	3	17.1	3	16.1	3
3		11.2	3	J+	**2.00**	1	U	**0.050**	1	U	**0.050**	1	U	3.12	3	3.51	3	17.8	3	17.6	3
3		21.3	3	J+	2.19	3	J+	**0.0075**	2	**0.0075**	2	3.58	3	3.26	3	19.2	3	16.7	3
1	U	6.41	3	2.07	3	0.0509	3	**0.0075**	2	3.4	2	3.08	3	16.7	3	16.6	3
1	U	6.84	3	**1.00**	1	U	0.0685	3	0.0676	3	3.58	3	3.72	3	18.1	3	19	2
1	U	4.67	3	3.02	3	0.0575	3	0.0518	3	3.33	3	3.15	3	17.6	3	17	2
1	U	7.41	3	2.99	3	0.0752	3	0.0483	3	J	3.01	3	3.1	2	17.4	3	17.5	3
3	J	2.47	3	J+	**1.00**	1	U	0.0449	3	J	0.0486	3	J	2.95	3	2.97	3	17.5	3	16.7	3
3	J	5.61	3	2.46	3	0.041	2	J	0.0394	3	J	3.25	3	3.04	3	17.5	3	17.3	3
3		7.68	3	2.42	3	0.0362	3	J	0.0329	3	J	3.05	3	2.89	3	16.3	3	16.5	3
3		4.34	3	**1.00**	1	U	**0.0075**	2	**0.0075**	2	2.96	3	2.85	3	17.3	3	17.1	3
3		2.25	3	J+	3.07	3	J+	**0.0075**	2	**0.0075**	2	2.71	3	2.58	3	16.2	3	16.8	3
3		2.97	3	J+	2.54	3	J+	**0.0075**	2	**0.0250**	2	U	2.8	2	2.83	3	17.2	3	17.3	3
3		7.08	3	J+	3.3	2	J+	**0.0250**	2	U	0.0516	3	J+	2.64	3	2.72	3	17	2	17.4	3
3		4.18	3	J+	3.51	3	J+	**0.0250**	2	U	**0.0250**	2	U	2.79	3	2.77	3	18.1	3	17.8	3
3		7.48	3	J+	2.42	3	J+	0.027	2	J	0.0274	3	J	2.81	3	2.68	3	17.6	3	17.6	3
3		5.94	3	J+	3.2	2	J+	0.0514	3	0.0439	3	J	2.83	3	2.72	3	18.8	3	18.6	3
3		**1.00**	1	U	**1.00**	1	U	0.0444	3	J	0.0489	3	J	2.55	3	2.62	3	16.5	3	16.4	3
1	U	4.56	3	J+	**1.00**	1	U	0.029	2	J	0.0345	3	J	2.7	2	2.65	3	17.7	3	17.1	3

0.0075	2	0.0075	2	0.75	2	0.75	2	5.9	2 J	7.2	2 J	0.0668	3 J	0.0352	3 J	23100	3
0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	1.55	3	0.0155	3	0.0155	3	22300	3
0.001495	4	0.001495	4	0.003835	4	0.003835	4	5.75	3 J+	5.91	3 J+	0.0078	2 J	0.003095	4	26000	2
0.001495	4	0.001495	4	0.003835	4	0.003835	4	7.46	3 J+	6.5	2 J+	0.0126	3 J	0.003095	4	30400	3
0.0075	2	0.0075	2	0.00155	3	0.00155	3	5	1 U	3.4	2 J	0.00775	3	0.00775	3	24500	3
0.0075	2	0.0075	2	0.00155	3	0.00155	3	4.4	2 J	10.5	3	0.00775	3	0.00775	3	23500	3
0.0120	2	0.0120	2	0.0250	2 U	0.0075	2	2.80	2 J	3.71	3 J	0.0125	3	0.0125	3	23000	2
0.0120	2	0.0120	2	0.0075	2	0.0075	2	4.45	3 J	5.01	3	0.0125	3	0.0125	3	27100	3
0.0125	3	0.0125	3	0.0202	3 J	0.0075	2	5.23	3	4.37	3 J	0.0185	3	0.0185	3	24900	3
0.0125	3	0.0125	3	0.0156	3 J	0.0075	2	4.64	3 J	2.79	3 J	0.0185	3	0.0185	3	27100	3
0.0250	2	0.0250	2	0.0150	2	0.0150	2	2.50	2	2.50	2	0.0150	2	0.0150	2	26000	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	3.6	2 J	3.22	3 J	0.0075	2	0.0075	2	22000	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.72	3	3.95	3 J	0.0075	2	0.0075	2	21400	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.68	3	4.88	3 J	0.0075	2	0.0075	2	23100	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.33	3	5.09	3	0.0075	2	0.0075	2	23400	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.42	3	5.13	3	0.0075	2	0.0075	2	22300	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	4.41	3 J	5.14	3	0.0075	2	0.0075	2	23300	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.32	3	5.13	3	0.0075	2	0.0075	2	23100	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.2	2	5.08	3	0.0075	2	0.0075	2	21800	3
0.0125	3	0.0125	3	0.0161	3 J	0.0075	2	2.50	2 U	2.50	2 U	0.0250	2 U	0.0075	2	20300	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	4.68	3 J	4.71	3 J	0.0075	2	0.0075	2	20400	3
0.0125	3	0.0125	3	0.0264	3 J	0.0193	3 J	5.58	3 J+	5.99	3 J+	0.0075	2	0.0075	2	21400	3
0.0125	3	0.0125	3	0.0075	2	0.0183	3 J	4.68	3 J	5.88	3	0.0151	3 J	0.0075	2	20700	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.51	3	6.14	3	0.0075	2	0.0075	2	21100	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	6.4	2	6.6	2	0.0075	2	0.0075	2	21800	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.6	2	5.53	3	0.0075	2	0.0075	2	22400	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.79	3	5.71	3	0.0075	2	0.0075	2	22000	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	5.13	3	4.7	2 J	0.0075	2	0.0075	2	21600	3

	21600	3	1.72	3	0.265	3	0.724	3	0.522	3	1.19	3	0.608	3
	23100	3	0.616	3	**0.05**	1	0.735	3 J+	0.569	3 J+	1.01	3 J+	0.552	3 J+
	25400	3	0.58	2	**0.03565**	4	0.638	3	0.552	3	0.286	3	**0.03**	1 U
	25300	3	0.354	3	**0.03565**	4	0.398	3	0.386	3	0.521	3 J+	0.108	3 J+
	24200	3	**0.031**	2		R	0.879	3	0.822	3	0.964	3 J+	0.539	3 J+
	23400	3	0.592	3	0.217	3	0.731	3 J+	0.628	3 J+	0.816	3 J+	0.491	3 J+
	24600	3	1.20	2 J+	0.235	3 J+	0.961	3	0.883	3	1.14	3	0.316	3 J+
	29200	3	0.455	3	0.328	3	0.969	3	1.06	3	0.422	3	0.488	3
	24600	3	0.827	3 J+	0.274	3 J+	0.889	3	0.888	3	0.687	3 J+	0.577	3 J+
	24900	3	0.509	3	0.246	3	0.835	3	0.809	3	0.575	3 J+	0.509	3 J+
	25400	3	0.524	3 J+	0.586	3 J+	0.899	3	0.943	3	0.335	3 J+	0.347	3 J+
	20900	3	0.449	3	0.178	3 J	1.02	3	0.929	3	0.53	2 J+	0.221	3 J+
	23600	3	**0.050**	1	**0.100**	1 U	0.892	3	0.89	2	0.346	3 J+	0.258	3 J+
	23700	3	0.217	3	**0.050**	1	0.974	3	1.01	3	0.433	3	0.334	3
	22400	3	0.342	3	**0.100**	1 U	1	1	0.961	3	0.745	3 J+	0.677	3 J+
	22100	3	0.308	3 J+	**0.100**	1 U	0.937	3	0.952	3	1.12	3	1.22	3
	21900	3	**0.050**	1	**0.100**	1 U	0.93	2 J+	0.857	3 J+	**0.250**	2 U	**0.250**	2 U
	22900	3	0.293	3	0.146	3 J	0.932	3	0.908	3	**0.250**	2 U	**0.250**	2 U
	21300	3	0.27	2	**0.050**	1	0.996	3	0.962	3	0.327	3 J	**0.250**	2 U
J+	20400	3 J+	**0.050**	1	**0.050**	1	0.982	3 J+	0.878	3 J+	**0.250**	2 U	**0.250**	2 U
	20800	3	0.204	3 J+	**0.100**	1 U	0.864	3 J+	0.88	2 J+	**0.250**	2 U	**0.250**	2 U
	21300	3	0.194	3 J	**0.050**	1	0.938	3	0.933	3	**0.250**	2 U	**0.250**	2 U
	22200	3	0.186	3 J	0.204	3	0.883	3	0.942	3	**0.250**	2 U	**0.250**	2 U
	21300	3	0.228	3	**0.050**	1	0.954	3	0.955	3	0.113	3 J	0.0973	3 J
	21500	3	0.378	3	0.356	3	1.12	3	1.11	3	**0.250**	2 U	**0.250**	2 U
	21700	3	0.442	3	**0.100**	1 U	1.1	2	1.04	3	**0.250**	2 U	**0.250**	2 U
	21700	3	0.234	3	**0.100**	1 U	0.91	2	0.904	3	**0.250**	2 U	**0.250**	2 U
	20900	3	0.267	3	**0.0310**	2	0.993	3	0.975	3	**0.250**	2 U	**0.250**	2 U

711	3	121	3	0.138	3 J	0.185	3 J	4760	3	4650	3	419	3	357	3
845	3	416	3	0.307	3	0.115	3 J	5890	3	6120	3	491	3	457	3
1020	3	784	3	0.0276	3 J	0.0404	3 J	8080	3	7780	3	558	3	563	3
645	3	528	3	**0.011**	2	**0.035**	2 U	8550	3	7490	3	502	3	433	3
1580	3	1110	3	0.0626	3 J	**0.0155**	3	9000	1	8780	3	667	3	673	3
1200	2	958	3	**0.05**	1 U	**0.05**	1 U	7980	3	7680	3	668	3	608	3
1740	3	1310	3	0.266	3 J+		R	9580	3	8780	3	936	3	946	3
1390	3	1540	3	**0.0130**	2	**0.0130**	2	10200	3	11300	3	898	3	994	3
1740	3	1320	3	0.143	3 J+	**0.050**	1 U	9960	3	9640	3	906	3	957	3
1180	3	1130	3	**0.050**	1 U	**0.050**	1 U	9690	3	9130	3	875	3	847	3
1440	3	1460	3	**0.0310**	2	**0.0310**	2	9950	3	9850	3	991	3	996	3
1690	3	1450	3	0.322	3	**0.0155**	3	9130	3	8680	3	1000	1	964	3
1410	3	1420	3	**0.0155**	3	**0.0155**	3	8380	3	8240	3	963	3	953	3
1590	3	1620	3	**0.0155**	3	**0.0155**	3	9490	3	9520	3	1110	3	1120	3
1730	3	1640	3	**0.050**	1 U	**0.0155**	3	9320	3	8800	2	1100	2	1080	3
1540	3	1680	3	**0.0155**	3	**0.0155**	3	8750	3	8570	3	1040	3	1080	3
1430	3	1370	3	**0.0155**	3	**0.0155**	3	8790	3	8590	3	1020	3	983	3
1510	3	1440	3	**0.0155**	3	**0.0155**	3	9380	3	9020	3	1050	3	1020	3
1740	3	1610	3	0.0438	3 J	**0.0155**	3	9340	3	9280	3	1020	3	1020	3
1680	3	1450	3	**0.0155**	3	**0.0155**	3	9170	3 J+	9130	3 J+	1060	3 J+	1050	3 J+
1440	3	1440	3	**0.0155**	3	**0.0155**	3	8640	3	8650	3	1030	3	1020	3
1530	3	1540	3	**0.0155**	3	**0.0155**	3	9150	3	9190	3	1030	3	1080	3
1450	3	1530	3	**0.0155**	3	**0.0155**	3	8280	3	9080	3	994	3	1030	3
1550	3	1540	3	**0.0155**	3	**0.0155**	3	8310	3	8450	3	1020	3	1020	3
1740	3	1730	3	**0.0155**	3	**0.0155**	3	9670	3	9720	3	1070	3	1060	3
1790	3	1650	3	**0.0155**	3	**0.0155**	3	9410	3	8750	3	1100	2	1080	3
1520	3	1470	3	**0.0155**	3	**0.0155**	3	9260	3	8980	3	1060	3	1050	3
1780	3	1780	3	**0.0155**	3	**0.0155**	3	9160	3	8970	3	1110	3	1090	3

0.031	2			8.22	3	7.61	3	1.93	3	0.878	3	2200	2	2160	3	1.16	3
0.1	1 U	**0.031**	2	5.73	3	5.53	3	0.975	3	0.847	3	2310	3	2180	3	0.65	2
0.100	1 U	**0.0315**	3	3.84	3	4.02	3	0.588	3	0.545	3	2350	3	2160	3	0.159	3
0.0315	3	**0.0315**	3	4.37	3	5.03	3	0.55	2	0.544	3	2280	3	2030	3	0.15	2
0.031	2	**0.031**	2	3.05	3	3.06	3	1.73	3	1.76	3	2080	3	2120	3	**0.0775**	3
0.031	2	**0.031**	2	3.18	3 J+	2.89	3 J+	1.29	3	1.11	3	2180	3	2030	3	**0.0775**	3
0.000475	4	**0.000475**	4	2.64	3	2.50	2	1.53	3	1.09	3	2190	3	2160	3	**0.155**	3
0.000475	4	0.00196	3 J	2.91	3	3.26	3	1.14	3	1.21	3	2340	3	2720	3	**0.155**	3
0.000475	4	**0.000475**	4	2.75	3	2.82	3	1.22	3	0.984	3	2210	3	2170	3	**0.155**	3
0.000475	4	**0.00250**	2 U	2.83	3	2.81	3	1.62	3	1.58	3	2160	3	2070	3	**0.155**	3
0.000169	3	**0.000475**	4	2.86	3	2.71	3	1.16	3 J+	1.44	3 J+	2230	3	2220	3	**0.310**	2
0.00075	2	**0.00075**	2	2.3	2	2.16	3	0.757	3	0.603	3	2090	3	2000	1	**0.155**	3
0.00075	2	**0.00075**	2	2.48	3	2.33	3	0.689	3	0.749	3	1960	3	1930	3	**0.155**	3
0.00075	2	0.00251	3 J	2.82	3	2.81	3	1.28	3	1.21	3	2050	3	2200	2	**0.155**	3
0.00075	2	**0.00075**	2	2.79	3	2.69	3	0.738	3	0.685	3	2120	3	2010	3	**0.155**	3
0.00075	2	**0.00075**	2	2.82	3	2.93	3	0.732	3	0.692	3	1990	3	2000	1	**0.155**	3
0.00288	3 J	**0.00075**	2	2.83	3	2.55	3	**0.310**	2 U	**0.310**	2 U	2130	3	1990	3	**0.155**	3
0.00075	2	**0.00075**	2	2.63	3	2.66	3	0.663	3	0.56	2 J	2090	3	2070	3	**0.155**	3
0.00075	2	**0.00075**	2	2.45	3	2.41	3	0.747	3	0.627	3	2070	3	2040	3	**0.155**	3
0.00075	2	**0.00075**	2	2.55	3 J+	2.65	3 J+	0.711	3 J+	0.625	3 J+	2060	3 J+	2040	3 J+	**0.155**	3
0.00075	2	**0.00075**	2	2.33	3	2.41	3	**0.310**	2 U	**0.310**	2 U	1960	3	2010	3	**0.155**	3
0.00075	2	**0.00075**	2	2.59	3	2.6	2	0.765	3	0.773	3	2050	3	2070	3	**0.155**	3
0.00075	2	**0.00075**	2	2.53	3	2.62	3	0.823	3	0.854	3	2110	3	2110	3	**0.155**	3
0.00075	2	**0.00075**	2	2.62	3	2.61	3	0.813	3	0.795	3	2030	3	2040	3	**0.155**	3
0.00075	2	**0.00075**	2	2.46	3	2.41	3	0.981	3	0.995	3	2150	3	2140	3	**0.155**	3
0.00075	2	**0.00075**	2	2.66	3	2.46	3	0.839	3	0.679	3	2170	3	2090	3	**0.155**	3
0.00075	2	**0.00075**	2	2.61	3	2.61	3	1.05	3	1	1	2120	3	2080	3	**0.155**	3
0.00075	2	**0.00075**	2	2.6	2	2.63	3	0.948	3 J+	1.05	3 J+	2140	3	2080	3	**0.155**	3

	1.18	3	
J	0.757	3	J
	0.174	3	
	0.154	3	
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.310	2	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

10400	3	**0.0031**	2	**0.0031**	2	28600	3	26400	3	**0.0125**	3	**0.0125**	3	**0.155**	3
10700	3	**0.0031**	2	**0.0031**	2	20400	3 J+	20800	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
9440	3	**0.001435**	4	**0.001435**	4	13800	3	13400	3	**0.002125**	4	**0.002125**	4	0.32	2 J+
11000	2	**0.001435**	4	**0.001435**	4	17100	3	14800	3	**0.002125**	4	**0.002125**	4	**0.0302**	3
13400	3	**0.0031**	2	**0.0031**	2	12100	3	12200	3	**0.0031**	2	**0.0031**	2	**0.031**	2
13700	3	**0.0031**	2	**0.0031**	2	10400	3	9990	3	**0.0031**	2	**0.0031**	2	**0.031**	2
11900	3	**0.0031**	2	**0.0031**	2	9770	3 J		R	0.0072	2 J	**0.0025**	2	0.152	3
14600	3	**0.0031**	2	**0.0031**	2	11400	3	12600	3	0.0058	2 J	0.0074	2 J	**0.0155**	3
12500	3	0.0642	3	**0.0031**	2	11900	3	11700	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11200	3	**0.0031**	2	**0.0031**	2	9810	3	9290	3	**0.0050**	1	**0.0050**	1	**0.050**	1
13700	3	**0.0062**	2	**0.0062**	2	11800	3	11700	3	**0.0100**	1	**0.0100**	1	**0.100**	1
13100	3	**0.0031**	2	**0.0031**	2	10600	3	9970	3	**0.0050**	1	**0.0050**	1	**0.050**	1
12100	3	**0.0031**	2	**0.0031**	2	10100	3	9990	3	**0.0050**	1	**0.0050**	1	**0.050**	1
14300	3	**0.0031**	2	**0.0031**	2	11400	3	11300	3	**0.0050**	1	**0.0050**	1	**0.050**	1
12800	3	**0.0031**	2	**0.0031**	2	10900	3	10400	3	**0.0050**	1	**0.0050**	1	0.156	3 J
13200	3	**0.0031**	2	**0.0031**	2	10700	3	10300	3	**0.0050**	1	**0.0050**	1	**0.050**	1
12500	3	**0.0031**	2	**0.0031**	2	10300	3	10500	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
13100	3	**0.0031**	2	**0.0031**	2	11000	2	10600	3	**0.0050**	1	**0.0050**	1	**0.050**	1
12900	3	**0.0031**	2	**0.0031**	2	10800	3	10700	3	**0.0050**	1	**0.0050**	1	**0.050**	1
13600	3 J+	0.0074	2 J	**0.0031**	2	10700	3 J+	10700	3 J+	**0.0050**	1	**0.0050**	1	**0.050**	1
13100	3	**0.0031**	2	**0.0031**	2	10300	3	10300	3	**0.0050**	1	**0.0050**	1	**0.050**	1
13700	3	**0.0031**	2	**0.0031**	2	10900	3	10900	3	**0.0050**	1	**0.0050**	1	**0.050**	1
13900	3	**0.0031**	2	**0.0031**	2	9920	3	10900	3	**0.0050**	1	**0.0050**	1	**0.100**	1 U
13100	3	**0.0031**	2	**0.0031**	2	9840	3	9900	2	**0.0050**	1	**0.0050**	1	**0.050**	1
14100	3	**0.0031**	2	**0.0031**	2	11400	3	11400	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
13200	3	**0.0031**	2	**0.0031**	2	10900	3	10200	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
13700	3	**0.0031**	2	**0.0031**	2	11500	3	11000	2	**0.0031**	2	**0.0031**	2	**0.0310**	2
13500	3	**0.0031**	2	**0.0031**	2	11000	2	10500	3	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	7.85	3	5.96	3	3.56	3	0.54	2 J
0.155	3	3.15	3	2.53	3	3.44	3	**0.75**	2 U
0.1	1 U	0.676	3	0.583	3	2.70	2	2.10	2
0.0302	3	0.943	3	0.641	3	1.79	3	1.09	3
0.031	2	0.697	3	0.362	3 J	3.21	3	2.64	3
0.031	2	0.453	3	0.591	3	2.95	3	2.36	3
0.050	1 U	0.513	3	**0.110**	2	5.49	3 J+	5.16	3 J+
0.0155	3	0.535	3	0.260	2 J	2.45	3 J+		R
0.050	1	**0.250**	2	**0.250**	2	4.43	3 J+	3.40	2 J+
0.050	1	**0.250**	2	0.627	3 J	1.50	2 J+	1.68	3 J+
0.100	1	**0.310**	2	**0.310**	2	**1.00**	1 U	3.82	3 J+
0.050	1	**0.155**	3	**0.155**	3	3.49	3 J+	2.59	3 J+
0.050	1	**0.155**	3	**0.155**	3	3.15	3 J+	2.34	3 J+
0.050	1	**0.155**	3	**0.155**	3	2.39	3 J+	2.6	2 J+
0.118	3 J	**0.155**	3	**0.155**	3	4.15	3 J+	3.9	2 J+
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.100	1 U	**0.155**	3	**0.155**	3	7.08	3 J+	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	4.75	3	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	3.26	3
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	3.44	3 J+
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	4.18	3 J+
0.100	1 U	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	3.4	2	3.84	3
0.0808	3 J	**0.155**	3	**0.155**	3	3.49	3	3.11	3
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	2.27	3 J	2.75	3 J

	2	3	2	2	0	3	1	3	2	3	1	3
Mean	7.14		0.63		243		-71		3.44		94.3	
Median	6.88		0.31		247		-45		3.35		93.6	
St. Deviation	1		1		37		134		1		8	
# of values	28		28		28		27		28		28	
Minimum	6.20		0.01		135		-369		2.18		77.3	
Maximum	10.01		5.58		347		137		5.25		111.0	
Lowest fifth percentile	6		0		187		-359		3		82	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	18%		0%		0%		0%		0%		0%	
% of DWS exceedences	11%		0%		0%		0%		0%		0%	

0	3	0	3	2	3	2	3	1	3	4	3	4	3	4	3
255		172		1.70		5.86		66.5		0.21		0		0	
255		173		1.50		5.62		66.4		0.02		0		0	
12		26		1		3		5		1		0		0	
28		28		28		28		28		28		3		3	
230		115		0.08		0.79		58.0		0.01		0.0155		0.0155	
276		240		5.10		12.00		79.5		4.25		0.0155		0.05	
230		131		0		2		59		0		0		0	
0		0		3		6		0		22		3		3	
				11%		21%				79%		100%		100%	
				3		18				3					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	3		
0.74		NA	
0.61		NA	
1		NA	
28			0
0.01		NA	
2.58		NA	
0		NA	
0			

NA	NA
NA	NA
0%	NA
0%	NA

3	3	3	3	1	3	5	2	5	2	3	3	2	2	4
0.767		0.267		60.9		0.0013		0.00122		0.17		2		0.03
0.764		0.264		59.1		0.0008		0.00075		0.16		0		0.03
0		0		17		0		0		0		4		0
28		28		28		28		28		28		17		28
0.669		0.166		51.4		0.0008		0.00075		0.10		0.075		0.02
0.990		0.416		145.0		0.0050		0.00510		0.37		12.6		0.07
1		0		52		0		0		0		0		0
0		0		0		26		25		22		10		22
						93%		89%		79%		59%		79%
						1		2		6		3		6
230		NA		NA		NA		0.0052		NA		NA		6.78
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	4	3	2	3	2	3	1	3	1	3	
	20		3.7		0.149		0.139		3.02		2.96		17.0		16.4		
	7		2.4		0.051		0.050		3.00		2.90		17.3		16.9		
	37		5		0		0		0		0		2		2		
	28		28		28		28		28		27		28		28		
	1		1.0		0.008		0.008		2.55		2.58		13.5		10.6		
	168		29.2		0.871		0.851		3.58		3.72		20.1		19.0		
	2		1		0		0		3		3		14		13		
	1		7		7		7		0		0		0		0		
	4%		25%		25%		25%										
					6		8										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	7%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0114		0.0114		0.06		0.06		4.9		5.0		0.0124		0.0099		23200	
0.0125		0.0125		0.01		0.01		5.2		5.1		0.0075		0.0075		22700	
0		0		0		0		1		2		0		0		2300	
28		28		28		28		28		28		28		28		28	
0.0015		0.0015		0.00		0.00		1.6		1.6		0.0075		0.0031		20300	
0.0250		0.0250		0.75		0.75		7.5		10.5		0.0668		0.0352		30400	
0		0		0		0		3		3		0		0		20505	
28		28		24		26		4		3		24		27		0	
100%		100%		86%		93%		14%		11%		86%		96%			
				4		2		9		10		4		1			
NA		NA		NA		NA		NA		NA		0.234		0.214		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	2	2	3	3	3	3	3	3	3	3	3
22900		0.41		0.150		0.896		0.862		0.50		0.362		
22300		0.33		0.100		0.931		0.906		0.34		0.250		
2000		0		0		0		0		0		0		
28		28		27		28		28		28		28		
20400		0.03		0.031		0.398		0.386		0.11		0.030		
29200		1.72		0.586		1.120		1.110		1.19		1.220		
20835		0		0		1		1		0		0		
0		4		16		0		0		10		12		
		14%		59%						36%		43%		
		2		2						2		1		
NA		10.98		10.56276		NA		NA		7.874		7.559		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		0%		0%		
0%		0%		0%		0%		0%		0%		0%		

-1	3	-1	3	4	3	4	3	-1	3	-1	3	-1	3	-1	3
1450		1320		0.062		0.031		8830		8670		920		912	
1530		1450		0.016		0.016		9160		8790		1010		1008	
320		410		0		0		1150		1200		210		224	
28		28		28		27		28		28		28		28	
645		121		0.011		0.013		4760		4650		419		357	
1790		1780		0.322		0.185		10200		11300		1110		1120	
758		455		0		0		6622		6600		495		441	
0		0		20		24		0		0		0		0	
				71%		89%									
				4		3									
1000		1000		2.471		2.026		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
89%		82%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	-1	3	-1	3	3	3
0.012		0		3.09		3.06		0.96		0.875		2140		2100		0.21	
0.001		0		2.71		2.66		0.83		0.821		2130		2080		0.16	
0		0		1		1		0		0		100		140		0	
28		27		28		28		28		28		28		28		28	
0.000		0.0004745		2.30		2.16		0.31		0.310		1960		1930		0.08	
0.100		0.0315		8.22		7.61		1.93		1.760		2350		2720		1.16	
0		0		2		2		0		0		1971		1994		0	
27		25		0		0		2		2		0		0		24	
96%		93%						7%		7%						86%	
1		2								1						1	
0.77		0.77		NA		NA		44.10		43.97		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.21	
0.16	
0	
28	
0.08	
1.18	
0	
24	
86%	
1	
4.6	
NA	
0%	
0%	

-2	3	4	2	4	2	-2	3	-2	3	4	2	4	2	3	2
12800		0.0054		0.0031		12100		11900		0.0052		0.0051		0.074	
13100		0.0031		0.0031		10900		10700		0.0050		0.0050		0.050	
1300		0		0		3900		3600		0		0		0	
28		28		28		28		27		28		28		28	
9440		0.0014		0.0014		9770		9290		0.0021		0.0021		0.016	
14600		0.0642		0.0062		28600		26400		0.0125		0.0125		0.320	
10505		0		0		9821		9921		0		0		0	
0		26		28		0		0		26		27		25	
		93%		100%						93%		96%		89%	
		1								2		1		1	
NA		2.690042803		2.287		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.063		0.65		0.53		2.82		2.46	
0.050		0.16		0.16		2.58		2.36	
0		2		1		1		1	
28		28		28		28		27	
0.016		0.16		0.11		1.00		0.54	
0.155		7.85		5.96		7.08		5.16	
0		0		0		2		1	
26		20		20		9		8	
93%		71%		71%		32%		30%	
2				3		1		2	
NA		NA		NA		101.27		99.85	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05M																
Sample Date																
09/07/04	8.46	3	0.52	2		302	3		-16	2		3.89	3	112	3	
09/24/04	7.6	2	0.42	2	C	296	3		-58	2		3	1			
10/19/04	8.52	3	0.68	2		287	3		28	2		3.21	3	93.4	3	
03/23/05	7.92	3	3.01	3		235	3					3.27	3	123	3	
05/11/05	8.1	2	0.78	2		234	3		114.7	4		4.61	3	134	3	
08/18/05	7.95	3	0.54	2		273	3		-67	2		4.58	3	118	3	
11/09/05	7.72	3	6.28	3		296	3		-58	2		3	1	123	3	
03/23/06	7.28	3	0.25	2		297	3		84	2		3.11	3	137	3	
05/18/06	6.79	3	0.53	2		285	3		162	3		3.37	3	148	3	
08/17/06	6.4	2	0.37	2		282	3		167.7	4		4.17	3	129	3	
10/28/06	7.23	3	0.71	2		291	3		143.1	4		3.44	3	137	3	
03/15/07	7.91	3	0.14	2		156	3		-69.8	3		2.24	3	138	3	
05/13/07	7.66	3	0.2	1		158	3		-84.6	3		3.32	3	138	3	
08/19/07	7.59	3	0.26	2		161	3		-89.4	3		3.81	3	126	3	
11/10/07	7.37	3	0.29	2		274	3		95.5	3		3.05	3	126	3	
03/21/08	7.55	3	1.16	3		245	3		41.5	3		3.65	3	128	3	
05/23/08	7.72	3	0.11	2		292	3		-61.4	3		3.27	3	124	3	
08/25/08	7.94	3	0.39	2		275	3		2.7	2		3.82	3	130	2	
10/23/08	7.08	3	1.67	3		289	3		-296.8	4		2.68	3	127	3	
03/23/09	6.96	3	0.44	2				R	-47.8	3		2.35	3	129	3	
05/19/09	7.46	3	0.36	2		305	3		-136	3		3.28	3	127	3	
08/24/09	7.93	3	0.71	2		393	3		-57.9	3		3.75	3	124	3	
10/15/09	7.67	3	0.27	2		266	3		-248.6	4		3.22	3	134	3	
03/18/10	7.74	3	0.4	1		304	3		16.4	3		2.83	3	137	3	
05/17/10	7.7	2	0.41	2		262	3	Q	-170.4	4		3.18	3	120	2	
08/18/10	7.52	3	0.59	2		282	3		-18.4	3		3.53	3	122	3	
10/19/10	7.92	3	-0.01	1		280	2		-84.2	3		3.19	3	122	3	
03/27/11	7.5	2	0.73	2		332	3	Q	98.3	3		2.67	3	116	3	
05/23/11	7.73	3	0.45	2		286	3		195.6	4		3.05	3	116	3	
08/27/11	7.56	3	6.39	3		220.6512	FALSE		167.2	4		3.36	3	132	3	
10/25/11	8.06	3	0.18	2		252	3		59.7	3		2.91	3	126	3	
03/20/12	7.79	3	0.11	2		286	3		229	3		2.57	3	129	3	
05/18/12	8.05	3	0.02	1		294	3		51.3	3		3.18	3	131	3	
08/24/12	7.98	3	0.19	2		284	3		179.5	4		3.23	3	123	3	
10/10/12	7.3	2	0.08	1		272	3		-329.5	4		3.38	3	128	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
270	2		201	3		0.6	1 J		1.57	3		106	3		0.53	2 J						
270	2		170	2		0.075	2		1.57	3		110	2		0.155	3						
260	2		185	3		9.4	2		0.785	3		121	3		0.07	1 J						
280	2		179	3		0.075	2		3.13	3 J		122	3		0.05	1 J						
280	2		178	3		0.075	2		1.57	3		128	3		0.543	3						
275	3		196	3		0.2	1 J		0.785	3		129	3		0.05	1 U						
270	2		173	3		0.200	1 J		1.75	3 J		136	3		0.147	3						
290	2		185	3		0.306	3 J		0.785	3		134	3		0.0535	3 J						
300	1		184	3		0.075	2		1.57	3		131	3		0.0155	3		0.0155	3		0.0155	3
280	2		166	3		0.150	2		1.57	3		131	3		0.0155	3		0.0155	3		0.0155	3
250	2		173	3		0.200	1 J		1.57	3		130	2		0.0155	3		0.0155	3		0.0155	3
295	3		178	3		0.600	1		1.57	3		130	2		0.050	1 U						
285	3		168	3		0.075	2		1.57	3		128	3		0.0320	2 J						
280	2		184	3		0.075	2		1.57	3		127	3		0.050	1 UJ						
318	3		174	3		0.500	1		1.57	3		128	3		0.0155	3						
545	3		375	3		0.7	1		1.57	3		82.7	3		0.0635	3 J						
302	3		170	2		1.28	3		1.57	3		127	3		0.0100	1 U						
306	3		171	3		1.89	3		1.57	3		126	3		0.0155	3						
317	3		178	3		1.33	3		1.57	3		124	3		0.050	1 U						
302	3		162	3		0.1875	4		1.57	3		123	3		0.0155	3						
305	3		165	3		0.080	1		1.57	3		120	2		0.050	1 U						
302	3		174	3		0.642	3		1.57	3		120	2		0.0031	2						
305	3		179	3		1.46	3		1.57	3		119	3		0.249	3						
315	3		185	3		0.508	3		5.0	1 U		117	3		0.0155	3						
296	3		155	3		0.204	3 J		1.57	3		116	3		0.050	1 U						
296	3		352	3		0.0755	3		1.57	3		117	3		0.0155	3						
293	3		167	3		0.521	3		1.57	3		118	3		0.050	1 U						
296	3		147	3		0.198	3 J		1.57	3		117	3		0.0155	3						
296	3		174	3		1.41	3		1.57	3		115	3		0.050	1 U						
292	3		177	3		1.09	3		5.0	1 UJ		113	3		0.0155	3						
289	3		171	3		0.075	2		1.57	3		113	3		0.0155	3						
292	3		162	3		0.072	2		1.57	3		112	3		0.0155	3						
288	3		172	3		0.5	1		5.0	1 U		110	2		0.050	1 U						
277	3		159	3		1.1	2		7.46	3 J		112	3		0.0625	3 J						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.07	1	J			
	0.06	1	J			
	0.599	3				
	0.005	1	J			
	0.061	2				
	0.47	2				
	0.0555	3				
	0.0560	2				
	0.0180	2		**0.050**	1	UJ
	0.0740	2		**0.050**	1	UJ
	0.0680	2				R
	0.0445	3				
	0.0531	3				
	0.0608	3				
	0.0525	3				
	0.0519	3				
	0.0501	3				
	0.0787	3				
	0.0458	3				
	0.0467	3				
	0.0547	3				
	0.0419	3				
	0.0437	3				
	0.048	2				
	0.0482	3				
	0.0618	3				
	0.0429	3				
	0.0472	3				
	0.0525	3				
	0.0575	3				
	0.0418	3				
	0.0447	3				
	0.0499	3				
	0.0505	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.884	3		0.251	3		36.8	3		**0.00125**	3		**0.00125**	3		0.26	2	J				0.039			
1.02	3	J-	0.172	3	J-	35.3	3		**0.00125**	3		0.0035	2	J	**0.0295**	3					**0.0155**			
0.859	3		0.224	3		32.9	3		**0.00125**	3		**0.00125**	3		0.21	2	J				0.033			
0.837	3		0.202	3		30.1	3		**0.00125**	3		**0.00125**	3		0.16	2	J				**0.0155**			
0.811	3		0.181	3		29	2		**0.0025**	2	UJ	**0.0025**	2	UJ	0.16	2	J				**0.0155**			
0.818	3		0.204	3		28.5	3		**0.00125**	3		**0.00125**	3		0.12	2	J				0.063			
0.831	3		0.127	3		28.8	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.812	3		0.213	3		26.7	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0630			
0.842	3		0.181	3		27.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.703	3	J-	0.179	3	J-	28.8	3	J-	**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.695	3		0.186	3		27.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.842	3		0.206	3		28.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.688	3		0.188	3		27.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0890			
0.717	3		0.207	3		29.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0444			
0.716	3		0.186	3		29.8	3		**0.00075**	2		0.0023	2	J	**0.155**	3					0.106			
11.9	3		0.037	2	J	157	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		13.2	3		**0.0155**			
0.714	3		0.269	3		31.1	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.681	3		0.191	3		29.5	3		**0.00075**	2		**0.0025**	2	U	**0.155**	3		**0.075**	2		**0.050**			
0.691	3		0.2	1		31.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.679	3		0.189	3		30.4	3		0.0067	2		**0.00075**	2		**0.155**	3		0.181	3	J	**0.050**			
0.687	3		0.226	3		29.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.426	3	J	0.0431			
0.635	3		0.172	3		30.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		0.233			
0.678	3		0.195	3		31.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.714	3		0.194	3		32.3	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.576	3	J+	**0.0155**			
0.747	3		0.203	3		31.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.815	3		0.245	3		32.5	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.322	3	J	**0.0155**			
0.79	2		0.197	3		31.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		19.6	3		**0.0155**			
0.798	3		0.206	3		31.6	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.519	3		**0.0155**			
0.852	3		0.216	3		31.7	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.566	3		**0.0155**			
0.736	3		0.215	3		31.9	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.547	3		**0.0155**			
0.734	3		0.194	3		32.2	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.465	3	J	**0.0155**			
0.697	3		0.203	3		32.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.716	3		0.201	3		33.8	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.754	3		0.227	3		33.5	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.368	3	J	0.146			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	2 J		27.4	3 J+	**12.5**	3 U	**0.0385**		3	0.0832	3 J			2.61	3		2.61	3		40.8	3		41.7	3	
	3		32.9	3	**12.5**	3 U	0.11		2 J	**0.0385**	3			2.34	3 J+		2.44	3 J+		38.2	3		42	2	
	2 J		626	3	1.88	3 J+	0.0468		3	0.0452	3			2.35	3		2.26	3		47.1	3		46	2	
	3		5.69	3 J+	2.79	3 J+	0.0331		3 J+	0.0378	3 J+			2.66	3		2.88	3		42.2	3		45.2	3	
	3		10.5	3	3.64	3	0.0384		3 J+	0.0264	3 J+			2.39	3		1.97	3		44.5	3		41.3	3	
	2 J		18.4	3 J+	**1**	1 U	0.0248		3 J+	0.028	2 J+			2.3	2		2.2	2		43.4	3		41.5	3	
	1 U		4.20	2 J+	2.89	3 J+	0.0438		3 J	0.0290	2 J			1.68	3		1.72	3		49.9	3		50.8	3	
	2 J		29.9	3	**1.00**	1 U	0.0316		3 J	0.0298	3 J			1.66	3		1.67	3		45.0	2		43.2	3	
	3		**1.00**	1 U	**1.00**	1 U	0.0262		3 J	0.0250	2 J			2.22	3		1.98	3		40.5	3		44.9	3	
	1 U		3.12	3	2.09	3	**0.0075**		2	**0.0250**	2 U			1.62	3		1.67	3		42.7	3		45.2	3	
	3		41.6	3 J+	**2.00**	1 U	**0.050**		1 U	**0.050**	1 U			1.85	3		2.05	3		43.9	3		46.2	3	
	1 U		46.3	3 J+	**1.00**	1 U	0.0436		3 J	0.0296	3 J			1.88	3		1.92	3		48.5	3		45.4	3	
	2 J		3.89	3 J+	**1.00**	1 U	0.0262		3 J	0.0278	3 J			1.84	3		2.08	3		42.5	3		48.6	3	
	3 J		21.3	3	9.87	3	**0.0075**		2	0.0212	3 J			2.05	3		2.32	3		43.6	3		48.3	3	
	3		61.9	3	3.90	2	0.0242		3 J	0.0193	3 J			1.94	3		2.07	3		42.6	3		47.0	2	
	3		88	2	6.05	3 J+	0.0303		3 J	**0.0075**	2			2.05	3		2.13	3		44.4	3		45.1	3	
	1 U		55.2	3	**1.00**	1 U	**0.0075**		2	**0.0075**	2			1.92	3		2.19	3		44.6	3		45.9	3	
	1 U		54.9	3	**1.00**	1 U	**0.0250**		2 U	**0.0250**	2 U			2.11	3		2.07	3		43.5	3		44.7	3	
	1 U		71.9	3	3.88	3	**0.0075**		2	0.0335	3 J			2.18	3		2.16	3		45	2		43.3	3	
	1 U		2.78	3	**1.00**	1 U	**0.0075**		2	**0.0075**	2			1.98	3		2.12	3		44.3	3		45.3	3	
	3 J		**1.00**	1 U	**1.00**	1 U	0.022		2 J	0.0211	3 J			1.89	3		1.92	3		42.3	3		45.3	3	
	3		30.5	3	**1.00**	1 U	0.0253		3 J	0.0173	3 J			2.12	3		2.13	3		45.4	3		43.9	3	
	3		784	3	3.22	3	0.042		2 J	0.0159	3 J			2.28	3		2.05	3		51.4	3		41.3	3	
	3		2.12	3	**1.00**	1 U	**0.0075**		2	**0.0075**	2			2	1		2.02	3		43.4	3		42.9	3	
	3		6.03	3 J+	**1.00**	1 U	**0.0075**		2	**0.0075**	2			2	1		1.97	3		41.3	3		40.8	3	
	3		5.76	3 J+	**1.00**	1 U	**0.0075**		2	**0.0075**	2			2.03	3		2.17	3		41.8	3		44.1	3	
	3		8.65	3 J+	4.26	3 J+	**0.0250**		2 U		R			1.99	3		1.82	3		39.5	3		39.8	3	
	3		3.3	2 J+	2.33	3 J+	**0.0250**		2 U	**0.0250**	2 U			1.95	3		2	1		42.4	3		44.2	3	
	3		22	2 J+	**1.00**	1 U	**0.0075**		2	**0.0075**	2			2.19	3		2.05	3		44.8	3		42.4	3	
	3		23.7	3 J+	4.83	3 J+	0.0194		3 J	0.0185	3 J			2.1	2		2.12	3		44.3	3		44.3	3	
	3		3.14	3	**1.00**	1 U	0.0289		3 J	0.0293	3 J			2.24	3		1.93	3		44.3	3		42.3	3	
	3		**1.00**	1 U	**1.00**	1 U	0.0296		3 J	0.0342	3 J			2.13	3		2.09	3		42.8	3		42	2	
	3		**1.00**	1 U		R	0.0214		3 J	0.0216	3 J			2.14	3		1.91	3		41.5	3		40.3	3	
	3		22.3	3	4.89	3 J+	0.0167		3 J	0.0179	3 J			2.09	3		2.23	3		44.5	3		45	2	

																						depends on Hardness				depends on Hardness			
result > crit																						result > crit				result > crit			
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
		Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**					
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.0075	2		**0.0075**	2		**0.75**	2		**0.75**	2		3.1	2	J	**1.55**	3		**0.0155**	3		**0.0155**	3		29800	3
0.0075	2		**0.0075**	2		**0.75**	2		**0.75**	2		**1.55**	3		**1.55**	3		**0.0155**	3		**0.0155**	3		24700	3
0.018	2		**0.001495**	4		**0.003835**	4		**0.003835**	4		6.25	3	J+	6.41	3	J+	0.00794	3	J	**0.003095**	4		35000	2
0.001495	4		**0.001495**	4		**0.003835**	4		**0.003835**	4		6.29	3	J+	6.53	3	J+	0.00752	3	J	**0.003095**	4		36200	3
0.0075	2		**0.0075**	2		**0.00155**	3		**0.00155**	3		**5**	1	U	5.4	2	J	**0.00775**	3		**0.00775**	3		30600	3
0.0075	2		**0.0075**	2		**0.00155**	3		**0.00155**	3		4.9	2	J	7.1	2	J	**0.00775**	3		**0.00775**	3		32600	3
0.0120	2		**0.0120**	2		**0.0250**	2	U	**0.0250**	2	U	5.18	3		4.45	3	J	**0.0125**	3		**0.0125**	3		35000	2
0.0120	2		**0.0120**	2		**0.0075**	2		**0.0075**	2		5.19	3		4.95	3	J	**0.0125**	3		**0.0125**	3		39100	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.45	3		4.41	3	J	**0.0185**	3		**0.0185**	3		34000	2
0.0125	3		**0.0125**	3		0.0186	3	J	0.0176	3	J	4.18	3	J	4.32	3	J	**0.0185**	3		**0.0185**	3		36500	3
0.0250	2		**0.0250**	2		**0.0150**	2		**0.0150**	2		**2.50**	2		**2.50**	2		**0.0150**	2		**0.0150**	2		36800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.31	3		5.23	3		0.0238	3	J	**0.0075**	2		36500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		6.27	3		6.73	3		**0.0075**	2		**0.0075**	2		34300	3
0.0458	3	J	0.0708	3		**0.0075**	2		**0.0075**	2		4.34	3	J	6.10	2		**0.0075**	2		**0.0075**	2		34400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.34	3		5.79	3		**0.0075**	2		**0.0075**	2		34300	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.04	3		4.18	3	J	**0.0075**	2		**0.0075**	2		33000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.75	3		4.85	3	J	**0.0075**	2		**0.0075**	2		34500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.41	3		5.25	3		**0.0075**	2		**0.0075**	2		33700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.09	3		5.66	3		**0.0075**	2		**0.0075**	2		34000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.77	3		5.58	3		**0.0075**	2		**0.0075**	2		33700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		4.99	3	J	3.86	3	J	**0.0075**	2		**0.0075**	2		33700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.72	3		5.34	3		**0.0075**	2		**0.0075**	2		36000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		4.61	3	J	5.9	2		0.0154	3	J	**0.0075**	2		36500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**2.50**	2	U	**2.50**	2	U	**0.0075**	2		**0.0075**	2		30700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.53	3		5.52	3		**0.0075**	2		**0.0075**	2		32200	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.27	3	J+	5.58	3	J+	**0.0075**	2		**0.0075**	2		31700	3
0.0125	3		**0.0125**	3		0.0219	3	J	**0.0075**	2		5.97	3		5.62	3		**0.0075**	2		**0.0075**	2		30900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		6.46	3		6.08	3		**0.0075**	2		**0.0075**	2		31400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		7.09	3		6.99	3		**0.0075**	2		**0.0075**	2		35600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.89	3		5.77	3		**0.0075**	2		**0.0075**	2		33600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		6.65	3		6.77	3		**0.0075**	2		**0.0075**	2		34000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		6.56	3		6.09	3		**0.0075**	2		**0.0075**	2		34800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		6	1		5.57	3		**0.0075**	2		**0.0075**	2		32500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		5.47	3		5.09	3		0.0219	3	J	**0.0075**	2		33700	3

				depends on Hardness						depends on Hardness										depends on Hardness									
				result > crit						result > crit										result > crit									
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
	Calcium						**Chromium[4,6]**						**Cobalt**						**Copper[4]**		
		Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
		µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	30600	3		0.21	2	J+	**0.1**	1	U	0.123	3	J+	0.117	3	J+	0.472	3	J+	0.483	3	J+
J			R	0.282	3		0.115	3	J	**0.05**	1	U	**0.05**	1	U	0.491	3	J+	0.363	3	J+
	29700	3		10.1	3		0.0766	3	J	0.39	2		0.061	2		0.989	3		0.122	3	
	32600	3		0.278	3		**0.03565**	4		0.0678	3		0.0422	3		0.104	3	J+	0.129	3	J+
	33300	3		**0.1**	1	U	**0.1**	1	U	0.108	3	J+	0.113	3	J+	0.354	3	J+	0.404	3	J+
	32000	2		0.257	3		**0.1**	1	U	0.0992	3	J+	0.09	1	J+	0.408	3	J+	0.385	3	J+
	37100	3		0.208	3	J+	0.214	3	J+	0.118	3		0.121	3		0.284	3	J+	0.276	3	J+
	37600	3		0.273	3		**0.100**	1	U	0.110	2		0.101	3		0.425	3		0.314	3	
	37100	3		**0.100**	1	U	0.235	3	J+	0.0916	3		0.102	3		0.895	3	J+	0.365	3	J+
	38500	3		**0.050**	1		**0.050**	1		0.0816	3		0.0814	3		0.255	3	J+	0.316	3	J+
	38800	3		**0.100**	1		**0.100**	1		0.0520	2	J+	0.0566	3	J+	0.310	2	J+	**0.100**	1	U
	34900	3		0.288	3		**0.100**	1	U	0.108	3	J+	0.0626	3	J+	0.392	3	J+	0.207	3	J+
	38000	2		0.185	3	J	0.124	3	J	0.0686	3		0.0736	3		0.208	3	J+	0.270	2	J+
	38300	3		0.511	3	J+	0.476	3	J+	0.0578	3		0.0572	3		0.186	3		0.145	3	
	33100	3		0.325	3		0.194	3	J	0.0980	2		0.0628	3		0.545	3		0.528	3	
	34400	3		0.876	3		0.313	3		0.0934	3		0.0489	3		0.341	3	J+	0.215	3	J+
	35500	3		0.509	3		**0.050**	1		0.083	2		0.0537	3		0.394	3	J+	0.201	3	J+
	34700	3		0.681	3		**0.050**	1		0.0976	3		0.0643	3		0.413	3		0.228	3	
	35500	3		0.706	3		0.723	3		0.124	3	J+	0.108	3	J+	0.563	3	J+	**0.250**	2	U
	33900	3		0.474	3	J+	0.244	3	J+	0.128	3		0.129	3		0.624	3		0.628	3	
	34100	3		0.237	3		**0.100**	1	U	0.048	2	J+	0.0539	3	J+	**0.250**	2	U	**0.250**	2	U
	34800	3		0.547	3		0.139	3	J	0.0757	3		0.0503	3		**0.250**	2	U	**0.250**	2	U
	33700	3		1.68	3		**0.050**	1		0.49	2		0.0525	3		1.43	3		**0.250**	2	U
J+	29800	3	J+	0.461	3		**0.050**	1		0.0583	3	J+	0.0527	3	J+	**0.250**	2	U	**0.250**	2	U
	31500	3		0.378	3	J+	**0.100**	1	U	0.0468	3	J+	0.0458	3	J+	**0.250**	2	U	**0.250**	2	U
	33400	3		**0.050**	1		**0.050**	1		0.0561	3		0.0519	3		**0.250**	2	U	**0.250**	2	U
	30900	3		0.266	3		0.107	3	J	0.0766	3		0.0639	3		**0.250**	2	U	**0.250**	2	U
	32200	3		0.165	3	J	**0.050**	1		0.0538	3		0.0575	3		**0.0250**	2		**0.0250**	2	
	32900	3		0.645	3		0.261	3		0.0774	3		0.059	2		**0.250**	2	U	**0.250**	2	U
	33300	3		0.753	3		0.339	3		0.0564	3		0.053	2		**0.250**	2	U	**0.250**	2	U
	33300	3		0.346	3		0.16	2	J	0.0619	3		0.0574	3		**0.250**	2	U	**0.250**	2	U
	33700	3		0.227	3	J+	**0.0310**	2		0.0553	3		0.0512	3		**0.250**	2	U	**0.250**	2	U
	31000	2		**0.100**	1	U	**0.100**	1	U	0.0675	3		0.0653	3		**0.250**	2	U	**0.250**	2	U
	34100	3		0.293	3		**0.0310**	2		0.105	3		0.0757	3		**0.250**	2	U	**0.250**	2	U

										depends on Hardness		depends on Hardness																	
result > crit				result > crit						result > crit		result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N		MN_NSF	MN_NVF	MN_F		MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**							**Manganese**			
			Total		Dissolved						Total		Dissolved					Total		Dissolved					Total		Dissolved	
			µg/L		µg/L						µg/L		µg/L					µg/L		µg/L					µg/L		µg/L	
	26.4	3 J+		**10**	1 U			**0.05**	1			**0.05**	1		9170	3		9630	3		221	3		229	3			
	29.9	3		**3.1**	2			**0.05**	1			**0.05**	1		7700	2 J			R		242	3		235	3			
	588	3		3.20	2 J			0.364	3			0.0386	3 J		8650	3		10400	3		244	3		280	2			
	12.7	3		3.13	3 J			**0.011**	2			0.0813	3 J+		10700	3		9820	3		278	3		265	3			
	27.8	3		21.6	3			**0.0155**	3			0.0332	3 J		10000	1		11200	3		278	3		272	3			
	35.8	3		37.1	3			**0.0155**	3			**0.05**	1 U		10100	3		9920	3		269	3		259	3			
	9.61	3 J		6.65	3 J			**0.0130**	2			**0.0130**	2		12200	3		13500	3		306	3		293	3			
	43.6	3		**3.10**	2			0.0302	3 J			0.0562	3		12100	3		11800	3		290	2		287	3			
	3.10	2		**3.10**	2			**0.050**	1 U			**0.050**	1 U		10800	3		11800	3		282	3		313	3			
	10.0	1 U		**10.0**	1 U			**0.0155**	3			0.128	3 J+		11100	3		11600	3		274	3		269	3			
	41.8	3 J+		**20.0**	1 U			**0.100**	1 U			**0.100**	1 U		11200	3		11700	3		273	3		288	3			
	181	3		86.4	3			0.157	3			**0.0155**	3		11400	3		10900	3		306	3		291	3			
	10.0	1 U		**10.0**	1 U			**0.050**	1 U			**0.0155**	3		9930	3		11100	3		289	3		328	3			
	29.3	3		9.21	3 J			**0.0155**	3			**0.0155**	3		9790	3		11200	3		270	2		300	1			
	199	3		106	3			0.0342	3 J			**0.0155**	3		10300	3		10900	3		287	3		317	3			
	158	3		82	2			**0.050**	1 U				R		10200	3		10800	3		273	3		284	3			
	175	3		108	3			0.0619	3 J			**0.0155**	3		10600	3		11100	3		288	3		282	3			
	147	3		81.4	3			**0.050**	1 U			**0.0155**	3		10400	3		10800	3		280	2		282	3			
	271	3		227	3			**0.050**	1 U			**0.0155**	3		10700	3		10500	3		297	3		300	1			
	292	3		304	3			**0.0155**	3			**0.0155**	3		10500	3		10500	3		302	3		307	3			
	10.0	1 U		**10.0**	1 U			**0.0155**	3			**0.0155**	3		9820	3		8810	3		269	3		276	3			
	44	2		8.37	3 J			0.0332	3 J			**0.0155**	3		10800	3		10100	3		294	3		286	3			
	878	3		10.5	3 J			0.331	3			**0.0155**	3		11200	3		10700	3		334	3		280	2			
	10.0	1 U		**3.10**	2			0.0383	3 J			**0.0155**	3		10400	3 J+		10300	3 J+		293	3 J+		294	3 J+			
	9.16	3 J		**3.10**	2			**0.0155**	3			**0.0155**	3		10100	3		9980	3		282	3		283	3			
	11.4	3 J		**3.10**	2			**0.0155**	3			**0.0155**	3		10300	3		10600	3		291	3		300	1			
	41.4	3		7.13	3 J			0.0333	3 J			**0.0155**	3		9500	2		9390	3		262	3		262	3			
	7.25	3 J		**10.0**	1 U			**0.0155**	3			**0.0155**	3		9160	3		9530	3		263	3		273	3			
	40.4	3		7.94	3 J			0.0689	3 J			**0.0155**	3		10600	3		10100	3		289	3		275	3			
	40.6	3		**10.0**	1 U			0.0518	3 J			**0.0155**	3		10300	3		10100	3		284	3		291	3			
	11	2 J		7.94	3 J			**0.0155**	3			**0.0155**	3		10800	3		10600	3		301	3		299	3			
	10.0	1 U		**3.10**	2			**0.0155**	3			**0.0155**	3		10700	3		10500	3		291	3		278	3			
	10.8	3 J		15.3	3 J			**0.0155**	3			**0.0155**	3		10200	3		9620	3		281	3		277	3			
	67.4	3		10.2	3 J			**0.0155**	3			**0.0155**	3		10600	3		10400	3		298	3		300	1			

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
						4.65	3		4.8	2		0.737	3 J+		0.744	3 J+		1240	3		1260	3		**0.155**	3
0.031	2		**0.031**	2		4.75	3		5.22	3		0.758	3		0.714	3		1240	3		1430	3		**0.155**	3
0.0315	3		**0.0315**	3		5.18	3		4.92	3		5.1	2		0.778	3		1350	3		1300	2		**0.0143**	3
0.0315	3		**0.0315**	3		4.56	3		5.04	3		0.182	3		0.182	3		1340	3		1240	3		**0.0143**	3
0.031	2		**0.031**	2		4.88	3		4.87	3		1.59	3		1.73	3		1530	3		1440	3		**0.0775**	3
0.031	2		**0.031**	2		4.74	3		4.56	3		1.23	3		1.32	3		1420	3		1390	3		**0.0775**	3
0.000475	4		**0.000475**	4		4.65	3		4.78	3		0.874	3		0.905	3		1490	3		1490	3		**0.155**	3
0.000475	4		0.00282	3 J		5.01	3		4.78	3		0.991	3		1.06	3		1580	3		1580	3		**0.155**	3
0.000475	4		**0.000475**	4		4.36	3		4.85	3		0.876	3		0.847	3		1360	3		1480	3		**0.155**	3
0.000475	4		**0.000475**	4		4.91	3		5.28	3		1.08	3		1.17	3		1430	3		1580	3		**0.155**	3
0.000169	3		**0.000475**	4		4.34	3		4.60	2		0.934	3 J+		1.10	2 J+		1450	3		1530	3		**0.310**	2
0.000169	3		**0.000475**	4		5.08	3		4.85	3		1.27	3 J+		1.16	3 J+		1480	3		1410	3		**0.155**	3
0.00250	2 U		**0.000475**	4		4.72	3		5.38	3		1.04	3 J			R		1370	3		1500	2		**0.155**	3
0.000169	3		**0.000475**	4		4.52	3		5.21	3		0.446	3		0.444	3		1490	3		1600	2		**0.155**	3
0.00075	2		**0.00075**	2		4.68	3		4.86	3		0.911	3 J			R		1410	3		1420	3		**0.155**	3
0.00075	2		**0.00075**	2		4.81	3		4.54	3		0.875	3		0.653	3		1420	3		1450	3		**0.155**	3
0.00159	3 J		**0.00075**	2		4.87	3		5.04	3		0.869	3		0.803	3		1440	3		1510	3		**0.155**	3
0.00075	2		**0.00075**	2		4.81	3		4.91	3		1.96	3		1.8	2		1370	3		1420	3		**0.155**	3
0.00182	3 J		**0.00075**	2		4.96	3		5.04	3		0.66	2		0.821	3		1420	3		1410	3		**0.155**	3
0.00075	2		**0.00075**	2		4.9	2		5.03	3		0.763	3		0.801	3		1380	3		1390	3		**0.155**	3
0.00075	2		**0.00075**	2		4.72	3		5.16	3		**0.310**	2 U		**0.310**	2 U		1360	3		1390	3		**0.155**	3
0.00075	2		**0.00075**	2		5.03	3		4.91	3		0.586	3 J		0.512	3 J		1460	3		1400	2		**0.155**	3
0.00553	3		**0.00075**	2		4.91	3		4.72	3		1.66	3		0.544	3 J		1600	2		1420	3		**0.155**	3
0.00075	2		0.00168	3 J		4.85	3 J+		4.8	2 J+		0.794	3 J+		**0.310**	2 U		1390	3 J+		1370	3 J+		**0.155**	3
0.00075	2		**0.00075**	2		4.59	3		4.55	3		**0.310**	2 U		**0.310**	2 U		1370	3		1380	3		**0.155**	3
0.00075	2		**0.00075**	2		4.72	3		4.93	3		0.786	3		0.763	3		1390	3		1460	3		**0.155**	3
0.00075	2		**0.00075**	2		4.52	3		4.56	3		0.861	3		0.847	3		1320	3		1320	3		**0.155**	3
0.00075	2		**0.00075**	2		4.67	3		4.95	3		0.728	3		0.835	3		1290	3		1350	3		**0.155**	3
0.00075	2		**0.00075**	2		5.06	3		4.93	3		1.07	3		0.896	3		1490	3		1410	3		**0.155**	3
0.00075	2		**0.00075**	2		4.92	3		5.1	2		0.807	3		0.762	3		1430	3		1440	3		**0.155**	3
0.00075	2		**0.00075**	2		5.36	3		5.25	3		0.781	3		0.797	3		1490	3		1470	3		**0.155**	3
0.00075	2		**0.00075**	2		4.85	3		4.85	3		0.691	3 J+		0.712	3 J+		1440	3		1410	3		**0.155**	3
0.00075	2		**0.00075**	2		4.82	3		4.78	3		1.1	2		1.1	2		1390	3		1330	3		**0.155**	3
0.00075	2		**0.00075**	2		5.18	3		5.41	3		1.09	3 J+		1.04	3 J+		1460	3		1470	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
		0.155	3
		0.155	3
		0.0143	3
		0.0143	3
		0.0775	3
		0.0775	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.310	2
		0.155	3
		0.155	3
		0.155	3
		0.155	3

			depends on HARD; revised 2013					depends on Total Ag																			
			result > crit					result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon					**Silver[8]**						**Sodium**						**Thallium**									**Tir**
	Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total					
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					
7230	3			**0.0031**	2		**0.0031**	2		8090	3		8520	3		**0.0125**	3		**0.0125**	3		**0.155**	3				
6600	2			**0.0031**	2		**0.0031**	2		6750	3	J+	9430	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3				
6100	2			0.00569	3	J	0.00353	3	J	7770	3		9590	3		**0.002125**	4		**0.002125**	4		0.336	3				
6760	3			**0.001435**	4		**0.001435**	4		9530	3		8690	3		**0.002125**	4		**0.002125**	4		**0.0302**	3				
7500	2			**0.0031**	2		**0.0031**	2		9520	3		9080	3		**0.0031**	2		**0.0031**	2		**0.031**	2				
7780	3			**0.0031**	2		**0.0031**	2		9190	3		8650	3		**0.0031**	2		**0.0031**	2		**0.031**	2				
7390	3			**0.0031**	2		**0.0031**	2		9210	3		9470	3		**0.0025**	2		**0.0025**	2		0.104	3				
5310	3			**0.0031**	2		**0.0031**	2		9380	3		9860	3		0.0056	2	J	**0.0025**	2		**0.0155**	3				
6850	3			**0.0031**	2		**0.0031**	2		8550	3		9640	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7180	3			**0.0031**	2		**0.0031**	2		9320	3		9820	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7220	3			**0.0062**	2		**0.0062**	2		9650	3		10200	3		**0.0100**	1		**0.0100**	1		**0.100**	1				
6870	3			**0.0031**	2		**0.0031**	2		9920	3		9550	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7680	3			**0.0031**	2		**0.0031**	2		9210	3		10200	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7610	3			**0.0031**	2		**0.0031**	2		8830	3		9870	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7300	2			**0.0031**	2		**0.0031**	2		9020	3		9380	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7520	3			**0.0031**	2		**0.0031**	2		8780	3		9360	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
5680	3			**0.0031**	2		**0.0031**	2		9230	3		9310	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7250	3			**0.0031**	2		**0.0031**	2		9150	3		9570	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6790	3			**0.0031**	2		0.0063	2	J	9280	3		8940	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7160	3			**0.0031**	2		**0.0031**	2		9210	3		9190	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6420	3			**0.0031**	2		**0.0031**	2		8550	3	J		R		**0.0050**	1		**0.0050**	1		**0.100**	1	U			
6780	3			**0.0031**	2		**0.0031**	2		9380	3		8770	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6930	3			**0.0031**	2		**0.0031**	2		9780	3		9320	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7140	3	J+		**0.0031**	2		**0.0031**	2		8900	2	J+	8700	2	J+	**0.0050**	1		**0.0050**	1		**0.050**	1				
6940	3			**0.0031**	2		**0.0031**	2		9020	3		8880	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7170	3			**0.0031**	2		**0.0031**	2		9100	2		9510	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6480	3			**0.0031**	2		**0.0031**	2		8530	3		8370	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
6680	3			**0.0031**	2		**0.0031**	2		8010	3		8250	3		**0.0050**	1		**0.0050**	1		**0.050**	1				
7010	3			**0.0031**	2		**0.0031**	2		9390	3		9090	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
6940	3			**0.0031**	2		**0.0031**	2		9040	3		8930	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
7400	2			**0.0031**	2		**0.0031**	2		9450	3		9380	3		**0.0031**	2		**0.0031**	2		0.0657	3	J			
7090	3			**0.0031**	2		**0.0031**	2		9510	3		9260	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
6660	3			**0.0031**	2		**0.0031**	2		9290	3		8680	3		**0.0031**	2		**0.0031**	2		**0.0310**	2				
7400	2			**0.0031**	2		**0.0031**	2		9580	3		9220	3		**0.0031**	2		0.0239	3		0.107	3	J			

														depends on Hardness				depends on Total Zn	
														result > crit				result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		1.7	2		1.61	3			**0.75**	2	U	**0.75**	2	U				
0.155	3		1.23	3		1.41	3			**0.75**	2	U	**0.75**	2	U				
0.0302	3		2.01	3		0.785	3			4.51	3	J+	2.00	1					
0.0302	3		0.58	2		0.614	3			1.83	3		1.98	3					
0.031	2		0.213	3	J			R		2.3	2		2.81	3					
0.031	2		0.914	3		0.845	3			1.82	3		1.77	3					
0.050	1	U	0.319	3	J	0.393	3	J		2.87	3	J+	2.39	3	J+				
0.0155	3		0.721	3		0.446	3	J		1.58	3	J+	1.59	3	J+				
0.050	1		0.544	3	J	**0.250**	2			3.00	1	J+	2.01	3	J+				
0.050	1		1.11	3		0.802	3	J		1.74	3	J+	2.30	2	J+				
0.100	1		**0.310**	2		**0.310**	2			**0.310**	2		**0.310**	2					
0.050	1		**0.155**	3		**0.155**	3			2.88	3	J+	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			1.47	3	J+	1.71	3	J+				
0.050	1		**0.155**	3		**0.155**	3			1.55	3		1.52	3					
0.050	1		0.397	3	J	**0.155**	3			0.628	3	J	0.668	3	J				
0.050	1		0.376	3	J	**0.155**	3			1.12	3	J			R				
0.050	1		0.311	3	J	0.478	3	J		**0.50**	1	U	**0.50**	1	U				
0.050	1		0.377	3	J	**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.132	3	J	0.4	1	J	0.337	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
		R	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		0.36	2	J	**0.155**	3			0.802	3	J	**1.55**	3	U				
0.050	1		1.25	3		**0.155**	3			6.58	3		**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
		R	**0.155**	3		**0.155**	3			32	2		**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		0.473	3	J	**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U			R				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		**0.155**	3		**0.155**	3			1.28	3	J	1.21	3	J				

	2	3	2	2	0	3	1	3	2	3	0	3
Mean	7.65		0.85		272		-2		3.29		127	
Median	7.70		0.41		283		-7		3.23		127	
St. Deviation	0		1		46		138		1		10	
# of values	35		35		34		34		35		34	
Minimum	6.40		-0.01		156		-330		2.24		93	
Maximum	8.52		6.39		393		229		4.61		148	
Lowest fifth percentile	7		0		160		-265		3		115	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	6%		0%		0%		0%		0%		0%	
% of DWS exceedences	3%		0%		0%		0%		0%		0%	

0	3	0	3	2	2	2	3	0	3	4	3	4	3	4	3
298		185		0.8		2.03		120		0.08		0		0	
293		174		0.3		1.57		121		0.05		0		0	
46		47		2		1		10		0		0		0	
34		34		34		34		34		34		3		3	
250		147		0.1		0.79		83		0.00		0.0155		0.0155	
545		375		9.4		7.46		136		0.54		0.0155		0.0155	
267		158		0		1		109		0		0		0	
0		0		12		31		0		24		3		3	
				35%		91%				71%		100%		100%	
				6		3				7					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	3	2
0.08		0	
0.05		0	
0		0	
34		2	
0.01		0.05	
0.60		0.05	
0		0	
0		2	
		100%	
3			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	3	1	3	5	2	5	2	3	3	3	3	4
1.091		0.197		34.5		0.00118		0.00112		0.16		2		0.043
0.742		0.201		31.2		0.00075		0.00075		0.16		0		0.024
2		0		22		0		0		0		5		0
34		34		34		34		34		34		19		34
0.635		0.037		26.7		0.00075		0.00075		0.03		0.075		0.016
11.900		0.269		157.0		0.00670		0.00350		0.26		19.6		0.233
1		0		28		0		0		0		0		0
0		0		0		33		32		29		8		24
						97%		94%		85%		42%		71%
		1						2		5		5		7
230		NA		NA		NA		0.0052		NA		NA		6.10
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	1	2	4	3	4	3	2	3	2	3	1	3	1	3
	62.4		3.0		0.0269		0.0251		2.08		2.09		43.7		44.1	
	19.9		1.9		0.0250		0.0250		2.07		2.07		43.6		44.3	
	166		3		0		0		0		0		3		3	
	34		33		34		33		34		34		34		34	
	1.0		1.0		0.0075		0.0075		1.62		1.67		38.2		39.8	
	784.0		12.5		0.1100		0.0832		2.66		2.88		51.4		50.8	
	1		1		0		0		2		2		40		41	
	4		19		14		12		0		0		0		0	
	12%		58%		41%		36%									
					16		17									
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	9%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0131		0.0133		0.05		0.05		5.2		5.15		0.0103		0.0089		33700	
0.0125		0.0125		0.01		0.01		5.4		5.55		0.0075		0.0075		34000	
0		0		0		0		1		1		0		0		2600	
34		34		34		34		34		34		34		34		34	
0.0015		0.0015		0.00		0.00		1.6		1.55		0.0075		0.0031		24700	
0.0458		0.0708		0.75		0.75		7.1		7.10		0.0238		0.0185		39100	
0		0		0		0		3		2		0		0		30320	
32		33		32		33		4		4		29		34		0	
94%		97%		94%		97%		12%		12%		85%		100%			
1				2		1		6		9		5					
NA		NA		NA		NA		NA		NA		0.299		0.270		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	2	2	4	3	4	3	3	3	3	3	
34100		0.67		0.2		0.102		0.070		0.386		0.270		
33700		0.29		0.1		0.080		0.060		0.270		0.250		
2500		2		0		0		0		0		0		
33		34		34		34		34		34		34		
29700		0.05		0.0		0.047		0.042		0.025		0.025		
38800		10.10		0.7		0.490		0.129		1.430		0.628		
30280		0		0		0		0		0		0		
0		6		19		1		1		13		16		
		18%		56%		3%		3%		38%		47%		
		2		7										
NA		10.98		10.56276		NA		NA		10.481		10.062		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		0%		0%		
0%		0%		0%		0%		0%		0%		0%		

1	3	1	3	4	3	4	3	-2	3	-2	3	0	3	0	3
102.4		37		0.06		0.03		10400		10600		282		284	
32.9		10		0.03		0.02		10400		10500		283		284	
182		67		0		0		900		900		21		20	
34		34		34		33		34		33		34		34	
3.1		3		0.01		0.01		7700		8810		221		229	
878.0		304		0.36		0.13		12200		13500		334		328	
8		3		0		0		8982		9474		243		251	
6		14		23		28		0		0		0		0	
18%		41%		68%		85%									
6		11		8		2									
1000		1000		3.784		2.918		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		100%		0%	

5	2	5	2	2	3	2	3	3	3	3	3	-1	3	-1	3	3	3
0		0		4.81		4.9		1.021		0.837		1410		1430		0.147	
0		0		4.82		4.9		0.872		0.802		1420		1420		0.155	
0		0		0		0		1		0		80		80		0	
33		33		34		34		34		32		34		34		34	
0.000169		0.0004745		4.34		4.5		0.182		0.182		1240		1240		0.014	
0.0315		0.0315		5.36		5.4		5.100		1.800		1600		1600		0.310	
0		0		4		5		0		0		1273		1286		0	
30		31		0		0		2		3		0		0		34	
91%		94%						6%		9%						100%	
2		2						1		2							
0.77		0.77		NA		NA		58.54		58.36		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.147	
0.155	
0	
34	
0.014	
0.310	
0	
34	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
6970		0.0032		0.0032		9030		9230		0.0049		0.0054		0.066	
7050		0.0031		0.0031		9210		9310		0.0050		0.0050		0.050	
530		0		0		630		490		0		0		0	
34		34		34		34		33		34		34		34	
5310		0.0014		0.0014		6750		8250		0.0021		0.0021		0.016	
7780		0.0062		0.0063		9920		10200		0.0125		0.0239		0.336	
5953		0		0		7926		8460		0		0		0	
0		33		32		0		0		33		33		30	
		97%		94%						97%		97%		88%	
		1		2						1				2	
NA		4.784063181		4.066		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.054		0.5		0.35		2.63		1.47	
0.050		0.3		0.16		1.55		1.55	
0		0		0		5		1	
32		34		33		34		32	
0.016		0.2		0.16		0.31		0.31	
0.155		2.0		1.61		32.00		2.81	
0		0		0		1		1	
31		16		23		17		20	
97%		47%		70%		50%		63%	
1		10		5		3		2	
NA		NA		NA		134.48		132.60	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-05S																
Sample Date																
09/07/04	6.91	3	10.01	4		184	3		32	2		3.96	3	71.9	3	
10/19/04	7.24	3	15.19	4		129	3		113	3		3.62	3	57.3	3	
03/18/05	6.71	3	8.74	3		109	3					3.7	2	67.2	3	
05/11/05	6.81	3	9.8	2		77	2		77.2	3		5.01	3	49.4	3	
08/18/05	6.54	3	8.88	3		103	3		33	2		4.13	3	52.9	3	
11/09/05	6.69	3	9.29	3		84	2		32	2		2.79	3	36.7	3	
03/23/06	7.01	3	7.23	3		113	3		157	3		3.39	3	49.6	3	
05/18/06	6.34	3	10.28	4		112	3		185.4	4		3.33	3	59.6	3	
08/17/06	5.86	3	10.31	4		55	2		173.1	4		4.4	2	26.9	3	
10/29/06	6.18	3	12.4	3		62	2		240.2	4		3.53	3	27.3	3	
03/15/07	6.38	3	6.21	3		66	2		157.4	4		2.14	3	49.0	2	
05/13/07	6.5	2	7.35	3		66	2		103.3	4		3.24	3	55.0	2	
08/19/07	6.37	3	7.11	3		76	2		36.3	3		3.71	3	61.4	3	
11/11/07	5.81	3	10.78	4		52	2		178.5	4		2.56	3	23.8	3	
03/21/08	7.05	3	5.94	3		104	3		88.1	3		2.64	3	58.2	3	
05/24/08	5.36	3	11.17	4		66	2		192.1	4		2.91	3	27.5	3	
08/25/08	6.59	3	6.58	3		144	3		130	2		4.1	2	53.2	3	
10/22/08	6.24	3	9.01	3		48	2		203.9	4		3.02	3	24.8	3	
03/22/09	6.97	3	6.16	3		82	2		-33.5	3		2.46	3	62.1	3	
05/19/09	6.57	3	8.89	3		85	2		90.4	3		3	1	37.5	3	
08/24/09	6.45	3	7.97	3		137	3		82	2		3.58	3	46.2	3	
10/15/09	6.04	3	7.84	3		47	2		-121.9	4		2.88	3	27.7	3	
03/18/10	5.83	3	6.94	3		122	3		-50.8	3		2.56	3	64.9	3	
05/17/10	6.31	3	7.65	3		119	3	Q	20.5	3		3.08	3	58.2	3	
08/18/10	6.82	3	8.31	3		60	1		22.3	3		3.44	3	33.4	3	
10/19/10	6.34	3	4.83	3		116	3		9.1	2		2.9	2	64.2	3	
03/26/11	6.16	3	5.54	3		140	2	Q	126.5	4		2.45	3	59.6	3	
05/23/11	6.35	3	5.75	3		140	2		106.7	4		2.97	3	58	2	
08/27/11	6.37	3	7.52	3		76.002	FALSE		139.5	4		3.3	2	52.3	3	
10/25/11	6.73	3	4.7	2		102	3	Q	38.1	3		2.41	3	53.5	3	
05/18/12	6.5	2	4.41	3		68	2		110.1	4		3.27	3	37.9	3	
08/24/12	6.51	3	6.62	3		110	2		63.6	3		2.9	2	50.3	3	
10/10/12	6.3	2	4.73	3		58	2		-304.4	4		2.82	3	28.1	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
170	2		109	3		13.4	3 J		12.4	3		82	2		0.62	2 J						
125	3		61.3	3		17.6	3		10.8	3		65	2		**0.155**	3						
130	2		93.8	3		3.8	2		14.8	3		70	1		**0.0155**	3						
110	2		86.3	3		4.9	2		7.63	3		53.5	3		0.05	1 J						
115	3		87.5	3		5.7	2		8	1		59	2		**0.0155**	3						
85	2		68.7	3		9.6	2		10.5	3		45	2		**0.05**	1 U						
110	2		76.3	3		9.90	2		14.8	3		70.0	1		**0.0155**	3						
125	3		93.8	3		8.40	2		8.75	3		66.0	2		0.0760	2 J						
75.0	2		71.2	3		2.30	2		8.50	2 J		39.0	2		0.0375	3 J		**0.0155**	3		0.0375	3
70.0	1		62.5	3		1.10	2		15.3	3		39.0	2		**0.050**	1 U		**0.0155**	3		**0.050**	1
110	2		96.3	3		0.900	1		16.3	3		66.0	2		**0.0155**	3		**0.0155**	3		**0.0155**	3
120	2		82.5	3		2.30	2		8.50	2 J		68.0	2		**0.050**	1 U						
135	3		87.5	3		3.60	2		15.3	3		72.2	3		0.0920	2 J						
55.0	2		53.8	3		2.91	3		8.75	3 J		27.6	3		0.0885	3 J						
135	3		86.3	3		38.0	2		12.3	3		67.1	3		0.0375	3 J						
78.3	3		76.3	3		2.9	2		6.75	3 J		40	1		0.0705	3 J						
127	3		90	1		9.56	3 J		11.7	3		66	2		**0.050**	1 U						
72.2	3		33.8	3		2.83	3		7.82	3 J		34.3	3		0.0485	3 J						
140	2		81.3	3		15.6	3		9.38	3 J		68.6	3		0.109	3						
103	3		61.2	3		4.75	3		6.5	2 J		49	2		0.0395	3 J						
111	3		78.8	3		2.73	3		11	2		52.2	3		**0.050**	1 U						
80.6	3		47.5	3		9.11	3		9.3	2 J		38.3	3		0.0555	3 J						
118	3		81.3	3		228	3		4	1 J		60.7	3		**0.0155**	3						
149	3		97	2		487	3 J		20.2	3		61.8	3		**0.0155**	3						
95.6	3		54	2		169	3		9.19	3 J		45	2		**0.050**	1 U						
133	3		88	2		132	3		14.9	3		64.5	3		**0.050**	1 U						
144	3		81	2		86.1	3		7.88	3 J		72.4	3		**0.050**	1 U						
133	3		86	2		35.8	3		11.4	3		65	2		**0.0155**	3						
118	3		83	2		161	3		10.2	3		55.6	3		**0.050**	1 U						
126	3		79	2		152	3 J		10.3	3		59.1	3		**0.050**	1 U						
85.3	3		44	2		136	3		8.7	2 J		39	2		**0.0155**	3						
115	3		73	2		81.2	3		**5.0**	1 U		53.6	3		**0.0155**	3						
69	2		37	2		34.1	3		12.5	3		33.5	3		0.0705	3 J						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.0155	3				
	0.06	1	J			
	0.186	3				
	0.0011	2				
	0.038	2				
	0.43	2				
	0.0520	2				
	0.0360	2				
J	0.0180	2		**0.050**	1	UJ
U	0.0300	1	J-			R
	0.0340	2	J-			R
	0.0051	2	J			
	0.00155	3				
	0.0291	3				
	0.0356	3				
	0.0174	3				
	0.0465	3				
	0.0162	3				
	0.0305	3				
	0.024	2				
	0.489	3				
	0.0496	3				
	0.397	3				
	0.16	2				
	0.265	3				
	0.0727	3				
	0.141	3				
	0.0507	3				
	0.135	3				
	0.24	2				
	0.177	3				
	0.121	3				
	0.054	2				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
1.09	3		0.159	3		0.547	3		**0.00125**	3		**0.00125**	3		0.57	2	J				**0.0155**			
1.14	3	J-	0.043	2	J-	0.909	3		0.003	1	J	0.004	1	J	0.17	2	J				**0.0155**			
1.05	3		0.082	2	J	0.839	3		**0.00125**	3		**0.00125**	3		0.16	2	J				0.298			
0.938	3		0.073	2	J	0.844	3		**0.00125**	3		**0.00125**	3		0.19	2	J				**0.0155**			
0.895	3		0.065	2	J	0.662	3		**0.0025**	2	UJ	**0.0025**	2	UJ	0.20	1	J				**0.0155**			
0.863	3		0.055	2	J	1.32	3		**0.00125**	3		**0.00125**	3		0.10	1	J				0.032			
1.01	3		0.0480	2	J	0.517	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
1.06	3		0.0850	2	J	0.578	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0320			
0.937	3		0.0920	2	J	0.997	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.826	3		0.0470	2	J	1.31	3		**0.00075**	2		**0.0025**	2	UJ	**0.155**	3					**0.050**			
1.07	3		0.0570	2	J	0.449	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
1.25	3		0.0760	2	J	0.625	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
1.06	3		0.0590	2	J	0.470	2		**0.00075**	2		**0.00075**	2		**0.155**	3					0.100			
1.09	3		0.0620	2	J	1.14	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
1.01	3		0.0680	2	J	0.424	3		**0.00075**	2		0.0019	2	J	**0.155**	3					**0.0155**			
1.07	3		0.126	3		0.728	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		0.891	3		**0.0155**			
1.07	3		0.08	1	J	0.447	3		**0.00075**	2		**0.00075**	2		**0.155**	3		1.18	3		**0.050**			
0.924	3		0.074	2	J	0.852	3		**0.00075**	2		**0.00075**	2		**0.155**	3		24.2	3		**0.050**			
0.859	3		0.064	2	J	0.414	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.607	3		**0.0155**			
0.856	3		0.05	1	J	0.521	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.573	3		**0.0155**			
0.87	2		0.062	2	J	0.607	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.838	3		0.039			
0.791	3		0.051	2	J	0.76	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	0.0522			
0.873	3		0.055	2	J	0.386	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.996	3		**0.0155**			
0.926	3		0.06	1	J	0.371	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.506	3	J+	**0.0155**			
0.956	3		0.096	2	J	0.69	2		**0.00075**	2		**0.00075**	2		**0.155**	3		0.631	3		**0.0155**			
1.09	3		0.12	2		0.622	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.81	2		**0.0155**			
0.987	3		0.098	2	J	0.415	3		**0.00075**	2		**0.00075**	2		**0.155**	3		17.4	3		**0.0155**			
1.02	3		0.092	2	J	0.454	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.921	3		**0.0155**			
1.11	3		0.101	3		0.726	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.892	3		**0.0155**			
0.925	3		0.088	2	J	0.685	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.949	3		**0.0155**			
0.64	2		0.092	2	J	0.565	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.631	3		**0.0155**			
0.649	3		0.079	2	J	0.566	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.808	3		**0.0155**			
0.652	3		0.097	2	J	1.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.341	3	J	0.125			

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	122	3	J+	**12.5**	3	U	**0.0385**	3	**0.0385**	3	4.22	3	4.19	3	19.9	3	18	2					
		3	879	3		**12.5**	3	U	**0.0385**	3	**0.0385**	3	1.14	3	J+	0.988	3	J+	19.9	3	9.31	3			
		3	123	3		1.42	3	J+	0.0327	3	0.0335	3	1.83	3	1.76	3	16.6	3	15	2					
		3	139	3		2.09	3	J+	0.0277	3	J+	0.0351	3	J+	2	1	2.08	3	10.9	3	11.2	3			
		3	204	3		2.03	3		0.0292	3	J+	0.028	2	J+	3.04	3	2.97	3	14.5	3	11.4	3			
		2	J	281	3		3.34	3	J+	0.0198	3	J+	**0.00155**	3	0.531	3	0.78	2	10.6	3	7.84	3			
		1	U	240	2		2.17	3	J+	0.0414	3	J	0.0214	3	J	1.66	3	1.52	3	16.1	3	11.5	3			
		2	J	199	3		**1.00**	1	U	0.0254	3	J	0.0232	3	J	1.93	3	2.29	3	14.3	3	13.1	3			
		3	72.5	3		**1.00**	1	U	0.0890	2	0.0306	3	J	0.928	3	0.647	3	6.17	3	6.74	3			
		1	U	61.9	3		**1.00**	1	U	**0.0250**	2	U	**0.0075**	2	**0.155**	3	**0.155**	3	6.50	2	J+	5.61	3	J+	
		3	60.8	3	J+	8.12	3	J+	**0.0250**	2	U	**0.0250**	2	U	0.826	3	0.836	3	10.5	3	10.1	3			
		1	U	42.4	3	J+	2.03	3	J+	0.0244	3	J	0.0234	3	J	1.10	2	0.925	3	13.2	3	12.7	3			
		1	68.2	3		2.41	3	J+	0.0242	3	J	0.0176	3	J	1.67	3	1.65	3	14.8	3	13.5	3			
		3	260	2		3.24	3		0.0266	3	J	0.0202	3	J	**0.155**	3	**0.155**	3	7.04	3	4.14	3			
		3	67.9	3		1.11	3	J	0.0213	3	J	0.0182	3	J	0.757	3	0.541	3	11.6	3	9.64	3			
		3	110	2		2.03	3	J+	0.0281	3	J	0.0312	3	J	0.617	3	0.549	3	7.31	3	6.32	3			
		1	U	164	3		2.83	3		0.0249	3	J	**0.0075**	2	0.653	3	0.605	3	11.2	3	10.1	3			
		1	U	67.7	3		**1.00**	1	U	**0.0250**	2	U	**0.0250**	2	U	0.342	3	J	0.311	3	J	5	1	4.86	3	
		3	198	3		**1.00**	1	U	**0.0075**	2	**0.0075**	2	1.04	3	1.08	3	12.1	3	9.56	3					
		3	109	3		**1.00**	1	U	**0.0075**	2	**0.0075**	2	0.654	3	0.595	3	8.48	3	7.34	3					
		2	J	44.8	3	J+	**1.00**	1	U	**0.0075**	2	0.0181	3	J	0.443	3	J	0.347	3	J	8.57	3	7.7	2	
		3	J	31.8	3		2.69	3		0.0165	3	J	0.0186	3	J	0.319	3	J	0.34	2	J	5.12	3	5.26	3	
		3	2000	1		2.44	3		0.0329	3	J	**0.0075**	2	2.44	3	1.4	2	36.1	3	7.74	3				
		3	581	3		2.91	3		**0.0075**	2	**0.0075**	2	1.97	3	1.92	3	24.1	3	10.2	3	J+				
		3	705	3		7.7	2	J+	**0.0075**	2	**0.0075**	2	0.922	3	0.633	3	15.4	3	7.4	2					
		3	779	3		11.5	3	J+	**0.0075**	2	**0.0075**	2	2	1	1.48	3	27.6	3	12.1	3					
		3	1570	3		**1.00**	1	U	**0.0075**	2	**0.0075**	2	2.66	3	1.64	3	31	2	10.4	3					
		3	552	3		8.37	3	J+	**0.0250**	2	U	**0.0250**	2	U	2.44	3	2.1	2	19.9	3	12.6	3			
		3	2660	3		12	2	J+	0.0343	3	J	**0.0075**	2	2.1	2	0.602	3	43.1	3	7.98	3				
		3	1630	3		165	3		0.0371	3	J	0.0182	3	J	2.1	2	1.56	3	31	2	11.8	3			
		3	2060	3		60.1	3		0.0693	3	0.0436	3	J	1.76	3	0.635	3	32.6	3	7.42	3	J+			
		3	939	3		**1.00**	1	U	0.0694	3	0.0373	3	J	1.85	3	1.2	2	21	2	7.84	3				
		3	193	3		**1.00**	1	U	0.117	3	0.108	3	0.317	3	J	0.292	3	J	8.55	3	4.65	3			

| | | |

									depends on Hardness		depends on Hardness																		
result > crit				result > crit					result > crit		result > crit														result > crit				
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**						**Manganese**		
	Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved	
	µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L	
1180	3		1040	3				**0.05**	1		**0.05**	1			3510	3		3550	3		990	2		976	3	
914	3		40.4	3				0.35	2		**0.05**	1			2630	3		2490	3		368	3		353	3	
229	3		77.8	3				0.0594	3	J	0.0951	3			3220	3		2960	3		787	3		805	3	
325	3		104	3				0.076	2	J+	**0.035**	2	U		2470	3		2230	3		521	3		505	3	
461	3		227	3				0.0962	3	J	0.074	2	J		2710	3		2560	3		632	3		601	3	
440	2		14.9	3	J			0.183	3	J+	0.141	3	J+		1930	3		2040	3		130	2		124	3	
427	3		26.8	3				0.170	2	J+	**0.0130**	2			2460	3		2540	3		517	3		493	3	
318	3		71.2	3				0.102	3		0.0806	3			2980	3		3020	3		726	3		723	3	
142	3		37.7	3				**0.050**	1	U	**0.0155**	3			1480	3		1710	3		81.4	3	J			R
138	3		25.9	3				0.110	2	J+	**0.050**	1	U		1530	3		1550	3		8.97	3		5.23	3	
133	3	J+	53.6	3	J+			0.107	3	J+	**0.050**	1	U		2520	3		2590	3		344	3		324	3	
174	3		123	3				**0.050**	1	U	**0.050**	1	U		3120	3		3130	3		593	3		597	3	
370	2		278	3				0.127	3	J+	**0.050**	1	U		3310	3		3350	3		954	3		982	3	
345	3		22.5	3				0.281	3		**0.0155**	3			1380	3		1300	2		21.4	3		6.13	3	
204	3		89.6	3				0.0609	3	J	**0.0155**	3			3110	3		2900	2		297	3		230	2	
203	3		38	2				**0.050**	1	U	**0.0155**	3			1600	2		1740	3		92.2	3		96.9	3	
383	3		152	3				0.141	3		**0.0155**	3			2860	3		3290	3		435	3		472	3	
149	3		43	2				**0.050**	1	U	**0.0155**	3			1580	3		1770	3		19.1	3		15.9	3	
591	3		314	3				0.132	3		**0.0155**	3			3350	3		3380	3		678	3		675	3	
399	3		269	3				0.0513	3	J	**0.0155**	3			2180	3		2130	3		271	3		266	3	
197	3		126	3				**0.050**	1	U	**0.0155**	3			2520	3		2530	3		234	3		225	3	
90.9	3		38.3	3				0.054	2	J	**0.0155**	3			1680	3		1790	3		74.9	3	J			R
3640	3		321	3				0.97	2		**0.0155**	3			3980	3		3050	3		915	3		667	3	
1720	3		627	3				0.433	3		**0.0155**	3			3570	3	J+	3210	3	J+	1180	3	J+	1060	3	J+
1040	3		141	3				0.285	3		**0.0155**	3			2060	3		2040	3		321	3		335	3	
1580	3		528	3				0.297	3		**0.0155**	3			3820	3		3690	3		817	3		760	2	
2750	3		677	3				0.663	3		**0.0155**	3			3610	3		3070	3		1450	3		1260	3	
1570	3		777	3				0.272	3		**0.0155**	3			3290	3		3140	3		1470	3		1310	3	
3640	3		117	3				1.29	3		**0.0155**	3			3500	2		2770	3		418	3		218	3	
2300	2		475	3				0.734	3		0.0885	3	J		3240	3		3000	1		495	3		413	3	
2950	3		217	3				0.921	3		0.0359	3	J		2540	3		2070	3		321	3		187	3	
1680	3		282	3				0.495	3		**0.0155**	3			3150	3		2840	3		400	1		310	2	
394	3		**10.0**	1	U			0.168	3		**0.0155**	3			1830	3		1630	3		28.7	3		9.26	3	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit			result > crit									result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
						0.705	3 J	0.726	3 J			4.2	2		2.62	3 J+		493	3		479	3		**0.155**	3
0.031	2		**0.031**	2		0.889	3 J	0.831	3 J			15.3	3		4.72	3		542	3		418	3		**0.155**	3
0.0315	3		**0.0315**	3		1.97	3	2.02	3			7.24	3		4.56	3		471	3		461	3		**0.0143**	3
0.0315	3		**0.0315**	3		1.57	3	1.79	3			7.48	3		5.12	3		409	3		401	3		**0.0143**	3
0.031	2		**0.031**	2		2.46	3	2.44	3			7.15	3		4.55	3		477	3		430	2		**0.0775**	3
0.031	2		**0.031**	2		0.615	3 J				R	5.56	3		2.79	3		379	3		378	3		**0.0775**	3
0.00250	2 U		**0.00250**	2 U		2.15	3	2.20	2			6.57	3		3.19	3		437	3		424	3		**0.155**	3
0.00418	3 J		0.00355	3 J		2.23	3	2.14	3			6.88	3		4.22	3		528	3		523	3		**0.155**	3
0.00106	3 J		0.00145	3 J		0.462	3	0.564	3			4.20	2		2.93	3		324	3		356	3		**0.155**	3
0.00250	2 U		**0.00250**	2 U		0.240	2	0.222	3			4.95	3		3.55	3		329	3		327	3		**0.155**	3
0.00277	3 J		0.00341	3 J		1.12	3	1.19	3			3.62	3 J+		3.36	3 J+		363	3		351	3		**0.155**	3
0.00145	3 J		0.00209	3 J		1.47	3	1.54	3			3.65	3 J+		3.89	3 J+		417	3		416	3		**0.155**	3
0.00511	3		0.00302	3 J		1.51	3	1.59	3			4.34	3		4.19	3		444	3		441	3		**0.155**	3
0.000685	3 J		**0.000475**	4		0.192	3	0.186	3			3.57	3		2.29	3		345	3		331	3		**0.155**	3
0.00523	3		0.00383	3 J		1.46	3	1.20	2			3.95	3		2.44	3		441	3		408	3		**0.155**	3
0.00392	3 J		0.00156	3 J		0.441	3	0.454	3			3.51	3		1.79	3		358	3		362	3		**0.155**	3
0.00496	3 J		**0.00075**	2		1.3	2	1.46	3			3.89	3		2.2	2		415	3		463	3		**0.155**	3
0.00153	3 J		**0.00075**	2		0.253	3	0.309	3			3.98	3		3.32	3		327	3		320	2		**0.155**	3
0.00526	3		0.00349	3 J		1.75	3	1.77	3			4.62	3		3.4	2		460	2		437	3		**0.155**	3
0.00343	3 J		0.003	1 J		0.633	3	0.641	3			2.67	3		2.27	3		408	3		389	3		**0.155**	3
0.00429	3 J		0.00602	3		0.648	3	0.673	3			2.72	3 J+		2.41	3 J+		407	3		407	3		**0.155**	3
0.00250	2 U		**0.00250**	2 U		0.344	3 J				R	2.13	3		1.73	3		332	3		346	3		**0.155**	3
0.0398	3		0.00594	3		1.6	2	1.71	3			15.1	3		3.3	2		628	3		417	3		**0.155**	3
0.0116	3		0.00753	3		1.48	3 J+	1.74	3 J+			9.33	3 J+		3.37	3 J+		486	3 J+		439	3 J+		**0.155**	3
0.00653	3		0.00464	3 J		0.296	3 J				R	2.14	3		1.25	3		416	3		348	3		**0.155**	3
0.00932	3		0.00422	3 J		1.05	3	1.14	3			2.5	2		1.5	2		546	3		457	3		**0.155**	3
0.0220	2		0.00589	3		1.31	3	1.34	3			4.37	3		1.55	3		595	3		413	3		**0.155**	3
0.0175	3		0.00504	3		1.36	3	1.34	3			3.5	2		1.8	2		469	3		420	2		**0.155**	3
0.0168	3		0.00215	3 J		0.374	3 J				R	4.37	3		0.96	2		688	3		392	3		**0.155**	3
1.76	3		0.00436	3 J		0.661	3	0.763	3			3.31	3		1.37	3		552	3		435	3		**0.155**	3
0.0169	3		**0.00250**	2 U		0.256	3 J				R	3.65	3 J+		1.36	3 J+		702	3		455	3		**0.155**	3
0.0156	3		**0.00250**	2 U		0.572	3	0.639	3			2.78	3		1.37	3		528	3		425	3		**0.155**	3
0.0104	3		**0.00075**	2		0.0437	3 J	0.0816	3			1.46	3 J+		0.978	3 J+		405	3		375	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.0143	3	
	0.0143	3	
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	**0.155

			depends on HARD; revised 2013					depends on Total Ag																			
			result > crit					result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon					**Silver[8]**						**Sodium**						**Thallium**									**Tir**
	Dissolved		Total				Dissolved			Total			Dissolved			Total			Dissolved			Total					
	µg/L		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					
10000	1		**0.0031**	2		**0.0031**	2		2910	3		2890	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
7980	3		0.0072	2	J	**0.0031**	2		3030	3	J+	2760	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
7870	3		**0.001435**	4		**0.001435**	4		3020	3		2660	3		**0.002125**	4		**0.002125**	4		0.25	2	J+				
9540	3		**0.001435**	4		0.00337	3	J	2980	3		2590	3		**0.002125**	4		**0.002125**	4		**0.0302**	3					
10500	3		**0.0031**	2		**0.0031**	2		2970	3		2870	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
9570	3		**0.0031**	2		0.0092	2	J	2700	2		2830	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
9310	3		**0.0031**	2		**0.0031**	2		2660	3		2750	3		0.0060	1	J	**0.0025**	2		**0.050**	1	U				
11100	3		**0.0031**	2		**0.0031**	2		3210	3		3300	2		0.0062	2	J	**0.0025**	2		**0.0155**	3					
8900	2		**0.0031**	2		**0.0031**	2		2630	3		2710	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7820	3		**0.0031**	2		**0.0031**	2		2680	3		2600	2		**0.0050**	1		**0.0050**	1		**0.050**	1					
7660	3		**0.0031**	2		**0.0031**	2		2510	3		2530	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9480	3		**0.0031**	2		**0.0031**	2		3080	3		3050	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10400	3		**0.0031**	2		**0.0031**	2		3210	3		3360	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8580	3		**0.0031**	2		**0.0031**	2		2870	3		2660	3		0.0156	3	J	**0.0050**	1		**0.050**	1					
9160	3		**0.0031**	2		**0.0031**	2		3040	3		2870	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9100	2		**0.0031**	2		**0.0031**	2		2690	3		2770	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9720	3		**0.0031**	2		**0.0031**	2		2820	3		3150	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9940	3		**0.0031**	2		**0.0031**	2		3090	3		3230	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9590	3		**0.0031**	2		**0.0031**	2		3150	3		3200	2		**0.0050**	1		**0.0050**	1		**0.050**	1					
9160	3		**0.0031**	2		**0.0031**	2		2820	3		2730	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9200	2		**0.0031**	2		**0.0031**	2		2920	3		2990	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9410	3		**0.0031**	2		**0.0031**	2		2890	3		2920	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9170	3		**0.0031**	2		**0.0031**	2		3300	2		3030	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9280	3	J+	0.0064	2	J	**0.0031**	2		2980	3	J+	3020	3	J+	**0.0050**	1		**0.0050**	1		**0.050**	1					
9130	3		**0.0031**	2		**0.0031**	2		2830	3		2790	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9950	3		**0.0031**	2		**0.0031**	2		3450	3	J+	3350	3	J+	**0.0050**	1		**0.0050**	1		**0.050**	1					
9170	3		0.0127	3	J	**0.0031**	2		3120	3		2840	3		**0.0050**	1		**0.0050**	1		**0.100**	1	U				
9800	2		**0.0031**	2		**0.0031**	2		3050	3		3090	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10000	1		0.0121	3	J	**0.0031**	2		3680	3		3400	2		0.0142	3	J	**0.0031**	2		**0.0310**	2					
9670	3		0.0162	3	J	0.0084	2	J	3290	3		3130	3		0.011	2	J	**0.0031**	2		0.0701	3	J				
9440	3		0.0077	2	J	**0.0031**	2		3580	3		3300	2		0.0125	3	J	**0.0031**	2		**0.0310**	2					
9540	3		**0.0031**	2		**0.0031**	2		3440	3		3330	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
9070	3		**0.0031**	2		**0.0031**	2		3270	3		3130	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					

												depends on Hardness				depends on Total Zn			
												result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		**0.125**	3		**0.125**	3			**0.75**	2	U	**0.75**	2	U				
0.155	3		1.84	3		**0.125**	3			2.19	3		**0.75**	2	U				
0.1	1	U	0.543	3		0.272	3			1.62	3		1.36	3					
0.0755	3	J	0.544	3		0.253	3			1.02	3		**0.50**	1	U				
0.031	2		0.376	3	J	0.625	3			3.78	3		**0.75**	2	U				
0.031	2		1.04	3		0.425	3			1.66	3		**0.75**	2	U				
0.050	1	U	0.546	3		**0.110**	2			2.32	3	J+	1.84	3	J+				
0.0155	3		0.734	3		**0.110**	2			1.39	3	J+	1.33	3	J+				
0.050	1		**0.250**	2		**0.250**	2			1.78	3	J+	1.30	2	J+				
0.050	1		0.657	3	J	**0.250**	2			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.349	3	J	0.364	3	J		1.49	3	J+	1.84	3	J+				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U			R				
0.050	1		**0.155**	3		**0.155**	3			1.48	3	J+	1.99	3	J+				
0.050	1		0.453	3	J	**0.155**	3			2.37	3		1.41	3					
0.050	1		**0.155**	3		**0.155**	3			0.972	3	J	0.767	3	J				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.346	3	J	**0.155**	3			1.47	3	J+	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.338	3	J	**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			0.586	3	J	**1.55**	3	U				
0.050	1		4.18	3		**0.155**	3			6.86	3		**1.55**	3	U				
0.050	1		1.43	3		**0.155**	3			4.07	3		**1.55**	3	U				
0.050	1		1.38	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		1.54	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		2.97	3		**0.155**	3			4.45	3		**1.55**	3	U				
0.050	1		1.2	2		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0913	3	J	5.35	3		**0.155**	3			7.22	3		6.67	3					
0.0310	2		3.02	3		**0.155**	3			6.07	3		4.06	3					
0.106	3	J	3.75	3		**0.155**	3			6.64	3		**1.55**	3	U				
0.0310	2		2.02	3		**0.155**	3			3.68	3		**1.55**	3	U				
0.0310	2		0.777	3	J	**0.155**	3			1.92	3	J	1.87	3	J				

	2	3	2	3	0	2	0	3	2	3	1	3
Mean	6.45		8.00		94		76		3.22		48.0	
Median	6.45		7.65		85		89		3.08		52.3	
St. Deviation	0		2		34		106		1		14	
# of values	33		33		33		32		33		33	
Minimum	5.36		4.41		47		-304		2.14		23.8	
Maximum	7.24		15.19		184		240		5.01		71.9	
Lowest fifth percentile	6		5		50		-83		2		26	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	52%		0%		0%		0%		0%		0%	
% of DWS exceedences	12%		0%		0%		0%		0%		0%	

0	3	1	3	2	3	1	3	0	2	4	3	4	3	4	3
111		75		56.8		10.6		56		0.07		0		0	
115		81		9.6		10.2		59		0.05		0		0	
27		18		99		4		14		0		0		0	
33		33		33		33		33		33		3		3	
55		34		0.9		4.0		28		0.02		0.0155		0.0155	
170		109		487.0		20.2		82		0.62		0.0155		0.05	
70		41		2		6		34		0		0		0	
0		0		0		1		0		20		3		2	
						3%				61%		100%		67%	
						12				12				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	3	2
0.1048		0	
0.0496		0	
0	NA		
33		1	
0.0011		0.05	
0.4890		0.05	
0		0	
3		1	
9%		100%	
2			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	3	3	5	2	5	2	3	3	3	3	4
0.96		0.077		0.685		0.00107		0.00113		0.17		3		0.0380
0.96		0.074		0.622		0.00075		0.00075		0.16		1		0.0155
0		0		0		0		0		0		7		0
33		33		33		33		33		33		18		33
0.64		0.043		0.371		0.00075		0.00075		0.10		0.25		0.0155
1.25		0.159		1.320		0.00300		0.00400		0.57		24.2		0.2980
1		0		0		0		0		0		0		0
0		0		0		32		31		27		1		26
						97%		94%		82%		6%		79%
		29				1		2		6		1		4
230		NA		NA		NA		0.0052		NA		NA		6.99
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	0	3	2	3	4	3	4	3	2	3	3	3	1	3	2	3
	522		10.3		0.0309		0.0229		1.41		1.18		16.4		9	
	198		2.2		0.0250		0.0202		1.14		0.93		14.3		10	
	693		30		0		0		1		1		10		3	
	33		33		33		33		33		33		33		33	
	32		1.0		0.0075		0.0016		0.16		0.16		5.0		4	
	2660		165.0		0.1170		0.1080		4.22		4.19		43.1		18	
	44		1		0		0		0		0		6		5	
	0		12		13		16		2		2		0		0	
			36%		39%		48%		6%		6%					
			1		12		13		4		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	73%		3%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	3	4	3	-2	3
0.0246		0.0112		0.05		0.05		1.55		1.65		0.0225		0.0169		14800	
0.0125		0.0125		0.01		0.01		1.25		1.25		0.0214		0.0125		15800	
0		0		0		0		1		1		0		0		4500	
33		33		33		33		33		32		33		33		33	
0.0060		0.0015		0.00		0.00		0.75		0.75		0.0075		0.0075		7270	
0.1160		0.0125		0.75		0.75		3.11		4.00		0.0832		0.0387		23000	
0		0		0		0		1		1		0		0		7884	
21		33		31		31		26		24		16		21		0	
64%		100%		94%		94%		79%		75%		48%		64%			
7				2		2		5		7		14		10			
NA		NA		NA		NA		NA		NA		0.100		0.096		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	2	3	2	3	3	3	3	3	2	3	3	3
14600		7.63		1.25		0.589		0.165		1.460		0.670	
15600		6.18		1.08		0.338		0.143		1.220		0.683	
4300		5		1		1		0		1		0	
33		33		33		33		33		33		32	
6940		1.69		0.45		0.093		0.037		0.558		0.250	
23000		23.90		3.70		2.390		0.692		4.080		1.340	
8016		3		0		0		0		1		0	
0		0		0		0		0		0		1	
												3%	
NA		10.98		10.56276		NA		NA		2.957		2.838	
NA		100		NA		NA		NA		NA		NA	
0%		21%		0%		0%		0%		6%		0%	
0%		0%		0%		0%		0%		0%		0%	

0	3	0	3	3	3	4	3	-1	3	-1	3	0	3	0	3
942		224		0.27		0.04		2690		2580		503		484	
399		123		0.13		0.02		2710		2590		418		413	
1046		253		0		0		760		650		399		368	
33		33		33		33		33		33		33		31	
91		10		0.05		0.01		1380		1300		9		5	
3640		1040		1.29		0.14		3980		3690		1470		1310	
136		19		0		0		1510		1598		20		8	
0		1		6		27		0		0		0		0	
		3%		18%		82%									
		1		5		3									
1000		1000		0.574		0.567		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
33%		3%		15%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		88%		0%	

5	3	5	3	3	3	2	3	2	3	2	3	0	3	0	3	3	3
0		0		1.013		1.170		5.0		2.74		458		407		0.142	
0		0		0.889		1.200		4.0		2.62		441		416		0.155	
0		0		1		1		3		1		100		47		0	
32		32		33		28		33		33		33		33		33	
0.000685		0.0004745		0.044		0.082		1.5		0.96		324		320		0.014	
1.76		0.0315		2.460		2.440		15.3		5.12		702		523		0.155	
0		0		0		0		2		1		328		329		0	
8		14		0		0		0		0		0		0		33	
25%		44%														100%	
10		13		3		2											
0.77		0.77		NA		NA		16.72		16.67		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
3%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.142	
0.155	
0	
33	
0.014	
0.155	
0	
33	
100%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
9340		0.0043		0.0034		3030		2960		0.0061		0.0047		0.059	
9410		0.0031		0.0031		3020		2920		0.0050		0.0050		0.050	
750		0		0		280		260		0		0		0	
33		33		33		33		33		33		33		33	
7660		0.0014		0.0014		2510		2530		0.0021		0.0021		0.016	
11100		0.0162		0.0092		3680		3400		0.0156		0.0125		0.250	
7850		0		0		2648		2596		0		0		0	
0		27		30		0		0		27		33		31	
		82%		91%						82%		100%		94%	
		6		3						6				1	
NA		0.374520291		0.318		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	2	3
0.058		1.121		0.191		2.34		1.52	
0.050		0.544		0.155		1.55		1.55	
0		1		0		2		1	
33		33		33		33		32	
0.016		0.125		0.110		0.50		0.50	
0.155		5.350		0.625		7.22		6.67	
0		0		0		1		1	
30		10		28		11		21	
91%		30%		85%		33%		66%	
3		7		1		3		2	
NA		NA		NA		38.34		37.80	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-06D																
Sample Date																
09/07/04	6.4	2	13.06	4		57	2		235	3		3.62	3	16.1	3	
10/21/04	6.69	3	12.32	4		31	2		266	3		4.37	3	17.2	3	
03/20/05	6.46	3	11.78	4		40	1					2.38	3	21.6	3	
05/12/05	6.16	3	12.66	4		42	2		184.4	4		2.91	3	18.3	3	
08/20/05	6.11	3	10.83	4		37	2		59	2		5.95	3	16.9	3	
11/05/05	6.22	3	6.03	3		43	2		298	3		3.58	3	15.3	3	
03/10/06	6.45	3	12.19	4		43	2		329	3		2.33	3	17.5	3	
05/23/06	5.83	3	14	2		41	2		276.7	4		3.69	3	16.2	3	
08/20/06	6.06	3	8.96	3		42	2		196	3		6.01	3	18.0	2	
10/29/06	6.64	3	14.63	4		38	2		246.8	4		4.34	3	13.2	3	
03/17/07	6.05	3	11.51	4		24	2		208.4	4		2.75	3	14.4	3	
05/14/07	6.08	3	12.65	4		26	2		162.3	4		3.15	3	17.9	3	
08/21/07	5.93	3	12.18	4		26	2		162.8	4		5	1	16.6	3	
11/14/07	6.05	3	10.54	4		35	2		253.1	4		3.05	3			
11/15/07														13.8	3	
03/23/08	6.64	3	11.26	4		36	2		118.8	4		2.62	3	15.5	3	
05/19/08	6.37	3	16.49	4		43	2		376.6	4		2.85	3	15.9	3	
08/25/08	5.54	3	11.78	4		40	1		125.6	4		5.39	3	15.8	3	
10/18/08	6.11	3	9.58	3		39	2		156.3	4		4.89	3	13.7	3	
08/24/09	6.24	3	7.64	3		56	2		110.1	4		6.78	3	15.8	3	
08/20/10	6.7	2	7.45	3		39	2		101.4	4		6.75	3	12.5	3	
08/28/11	6.12	3	6.72	3		31.464	FALSE		108.1	4		6.6	2	13.5	3	
08/21/12	6.2	2	6.49	3		40	1		118.4	4		5.99	3	14.4	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
55	2		38.8	3		1.4	2 J		4.2	2 J		18	2		**0.155**	3						
50	1		46.3	3		**0.075**	2		**1.57**	3		20	1		**0.5**	1 UJ						
46	2		48.8	3		**0.075**	2		10	1		20	1		1.17	3						
42	2		41.3	3		**0.15**	2		7.38	3		15.5	3		0.12	2						
42.5	3		33.8	3		**0.075**	2		5.38	3		18	2		0.0385	3 J						
40.5	3		30	1		**0.075**	2		6.38	3		16	2		0.102	3						
45.0	2		3.80	2 J		**0.075**	2		6.00	1		22.0	2		0.0675	3 J						
45.0	2		28.7	3		**0.139**	3		7.25	3		16.0	2		**0.0155**	3						
43.0	2		51.3	3		**0.075**	2		9.25	3 J		14.0	2		0.656	3		0.0885	3 J		0.568	3
36.0	2		30.0	1		**0.075**	2		9.25	3 J		16.0	2		0.155	3		**0.0155**	3		0.147	3
42.0	2		32.5	3		**0.075**	2		11.8	3		20.0	1		0.225	3		**0.0155**	3		0.210	2
46.5	3		37.5	3		**0.075**	2		5.50	2 J		21.0	2		0.109	3						
44.5	3		27.5	3		**0.075**	2		7.50	2 J		17.4	3		0.0630	2 J						
38.0	2		41.3	3		**0.150**	2		5.50	2 J		14.0	2		**0.0155**	3						
47.7	3		60.0	1		0.700	1		6.20	2 J		16.3	3		0.106	3						
44.2	3		31.3	3		**0.075**	2		3.56	3 J		16.1	3		0.199	3						
44.2	3		35	2		0.444	3 J		6	1 J		17.4	3		**0.050**	1 U						
48.1	3		21.3	3		**0.0785**	3		3.44	3 J		15.3	3		0.065	2 J						
45.5	3		35	2		**0.082**	2		5	1 J		33	2		**0.050**	1 U						
38.2	3		34	2		**0.076**	2		4.46	3 J		13.8	3		**0.050**	1 U						
39.1	3		32	2		0.302	3 J		5.48	3 J		13.2	3		0.125	3 J-						
39.2	3		31	2		**0.073**	2		**5.0**	1 U		12.6	3		0.172	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		
	0.0155	3				
	0.0155	3				
	0.015	2				
	0.126	3				
	0.021	2				
	0.018	2	J			
	0.0100	1				
	0.0197	3				
	0.0200	1		**0.050**	1	UJ
	0.0190	2		**0.0155**	3	
	0.0290	2		**0.050**	1	UJ
	0.0144	3				
	0.0091	2	J			
	0.0205	3				
	0.0122	3				
	0.0151	3				
	0.022	2				
	0.0123	3				
	0.0188	3				
	0.0112	3				
	0.0105	3				
	0.0117	3				

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.665	3		0.13	2		2.87	3		0.0027	2 J		**0.00125**	3		0.61	2 J					**0.0155**			
0.865	3		**0.0155**	3		3.08	3		**0.00125**	3		**0.00125**	3		0.15	2 J					**0.0155**			
0.717	3		**0.0155**	3		3.22	3		**0.00125**	3		**0.00125**	3		0.23	2 J					**0.0155**			
0.677	3		0.033	2 J		2.79	3		**0.00125**	3		**0.00125**	3		0.31	2 J					**0.0155**			
0.581	3		**0.0155**	3		3.1	2		**0.00125**	3		**0.00125**	3		0.77	2 J					**0.0155**			
0.676	3		0.033	2 J		3.09	3		**0.00125**	3		**0.00125**	3		0.083	2 J					**0.0155**			
0.647	3		**0.0155**	3		3.47	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.897	3		0.0420	2 J		3.86	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.0155**			
0.532	3		0.0440	2 J		3.55	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.594	3		**0.0155**	3		2.49	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.584	3		**0.0155**	3		3.47	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.722	3		0.0410	2 J		2.18	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.456	3		**0.0155**	3		2.63	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0672			
0.599	3		0.0310	2 J		3.15	3		**0.00075**	2		**0.0025**	2 UJ		**0.155**	3					0.0460			
0.561	3		0.0400	1 J		3.31	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0363			
0.469	3		0.036	2 J		3.27	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		**0.250**	2 U		**0.0155**			
0.313	3		0.034	2 J		3.1	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.050**			
0.626	3		**0.0155**	3		2.88	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.2	1 J		**0.0155**			
0.268	3		0.085	2 J		3.01	3		**0.0025**	2 UJ		**0.00075**	2		**0.155**	3		0.488	3 J		**0.0155**			
0.389	3		0.066	2 J		2.87	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.561	3		**0.0155**			
0.49	2		0.068	2 J		3.02	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.701	3		**0.0155**			
0.528	3		0.052	2 J		2.8	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit			
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		43	2 J+	**12.5**	3 U	**0.0385**	3	**0.0385**	3	0.59	2	0.533	3	2.33	3 J+	2.35	3 J+
3		**12.5**	3 U	**3.9**	2	**0.0385**	3	**0.0385**	3	0.58	2 J+	0.532	3 J+	2.15	3	1.94	3
3		5.18	3 J+	2.75	3 J+	0.0486	3	0.0295	3	0.628	3	0.512	3	2.34	3	2.67	3
3		3.65	3 J+	1.39	3 J+	0.0288	3 J+	0.0297	3 J+	0.574	3	0.58	2	2.36	3	2.03	3
3		8.56	3	2.28	3	0.623	3	0.0344	3 J+	0.847	3	0.657	3	2.38	3	1.98	3
3		**1**	1 U	**1**	1 U	0.0174	3 J+	0.016	2 J+	0.517	3	0.851	3	1.85	3	1.89	3
1 U		3.92	3 J+	**1.00**	1 U	0.0656	3	0.0276	3 J	**0.155**	3	**0.155**	3	2.19	3	2.11	3
3		**1.00**	1 U	**1.00**	1 U	0.0324	3 J	0.0414	3 J	0.444	3 J	0.387	3 J	2.06	3	2.04	3
3		**1.00**	1 U	**1.00**	1 U	0.0382	3 J	0.0368	3 J	0.840	2	0.573	3	2.32	3	2.37	3
1 U		**1.00**	1 U	**1.00**	1 U	**0.0250**	2 U	**0.0075**	2	**0.155**	3	0.718	3	1.82	3 J+	1.89	3 J+
3		3.27	3 J+	2.22	3 J+	**0.0250**	2 U	**0.0250**	2 U	0.426	3 J	0.401	3 J	1.81	3 J+	1.93	3 J+
3		11.7	3 J+	**1.00**	1 U	0.369	3	0.0412	3 J	**0.155**	3	**0.155**	3	3.51	3	2.21	3
3 J		2.48	3 J+	**1.00**	1 U	0.0312	3 J	0.0256	3 J	0.342	3 J	0.320	2 J	2.10	2	1.96	3
2 J		2.21	3	2.09	3	0.0324	3 J	0.0238	3 J	**0.155**	3	0.380	2 J	1.94	3	1.94	3
3 J		2.24	3	1.78	3 J	0.0241	3 J	0.0242	3 J	0.346	3 J	0.361	3 J	1.97	3	1.92	3
3		2.25	3 J+	**1.00**	1 U	0.0216	3 J	0.018	2 J	0.433	3 J	0.345	3 J	1.94	3	1.98	3
1 U		2.05	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.389	3 J	0.316	3 J	2	1	2.02	3
3		1.65	3 J	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	0.374	3 J	0.482	3 J	1.73	3	1.87	3
3		**1.00**	1 U		R	0.0337	3 J	0.0382	3 J	0.473	3 J	0.494	3 J	2.07	3	1.98	3
3		**1.00**	1 U	2.94	3 J+	0.0275	3 J	0.0278	3 J	0.425	3 J	0.645	3	1.81	3 J+	1.93	3 J+
3		2.66	3 J+	2.05	3 J+	**0.0075**	2	**0.0075**	2	0.477	3 J	0.546	3	2.1	2	2.02	3
3		2.67	3	2.14	3	0.0265	3 J	0.0258	3 J	0.658	3	0.532	3	2.01	3	1.88	3

| | | |

				depends on Hardness				depends on Hardness												depends on Hardness					
				result > crit				result > crit												result > crit				result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
4960	3			0.464	3 J+			0.329	3 J+		**0.0155**	3		**0.05**	1 U		0.372	3 J+		0.374	3 J+
5110	3			0.87	2			**0.05**	1		**0.0155**	3		**0.0155**	3		0.413	3 J+		0.354	3 J+
4780	3			1.03	3			0.684	3		0.0294	3 J		0.0252	3 J		0.658	3		0.743	3
4530	3			0.383	3			0.239	3		0.0148	3 J		**0.00476**	3		0.245	3 J+		0.202	3 J+
4730	3			1.28	3 J+			0.413	3 J+		0.0312	3 J+		0.0252	3 J+		0.351	3 J+		0.287	3 J+
4660	3			0.414	3			0.489	3		0.0206	3 J+		0.024	2 J+		0.321	3 J+		0.334	3 J+
4690	3			0.809	3 J+			0.707	3 J+		**0.0100**	1 U		0.0138	3 J		0.388	3 J+		0.249	3 J+
5130	3			0.377	3			0.290	2		**0.0100**	1 U		**0.0100**	1 U		0.354	3		0.267	3
5250	3			0.737	3 J+			0.613	3 J+		0.0252	3		0.0284	3		0.532	3 J+		0.505	3 J+
4210	3			**0.050**	1			**0.050**	1		**0.0065**	2		0.0152	3 J		0.320	2 J+		0.343	3 J+
4930	3			0.360	2 J+			0.391	3 J+		**0.0100**	1 U		**0.0100**	1 U		0.269	3 J+		0.270	2 J+
5260	3			0.526	3			0.497	3		**0.0100**	1 U		**0.0100**	1 U		0.397	3 J+		0.300	1 J+
4660	3			0.420	2			0.313	3		0.0138	3 J		0.0140	2 J		1.02	3 J+		0.298	3 J+
4680	3			0.247	3 J+			0.303	3 J+		0.0122	3 J		**0.0050**	1		0.441	3		0.428	3
4740	3			0.426	3			0.360	2		**0.0050**	1		**0.0100**	1 U		0.272	3		0.369	3
4420	3			0.338	3			0.378	3		0.0118	3 J		0.0126	3 J		1.06	3 J+		0.275	3 J+
4770	3			0.262	3			0.218	3		**0.0050**	1		**0.0050**	1		0.257	3 J+		0.234	3 J+
4290	3			0.267	3 J				R		0.0122	3 J		0.0134	3 J		0.336	3		0.396	3
4380	3			0.402	3			0.298	3		**0.0100**	1 U		**0.0100**	1 U		0.558	3 J+		0.723	3 J+
3690	3			0.355	3 J+			**0.100**	1 U		**0.0100**	1 U		**0.0100**	1 U		1.99	3 J+		0.653	3 J+
3920	3			0.816	3			0.624	3		0.0148	3 J		0.0142	3 J		0.503	3		0.577	3
4160	3			0.497	3			0.428	3		0.015	2 J		0.0137	3 J		**0.250**	2 U		0.534	3

								depends on Hardness				depends on Hardness															
result > crit				result > crit				result > crit				result > crit														result > crit	
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
10	1	U	**3.1**	2		**0.05**	1		**0.05**	1		1020	3		1030	3		**0.5**	1	U	**0.5**	1	U
10	1	U	**3.1**	2		**0.05**	1		**0.05**	1		1080	3		993	3		**0.25**	2		**0.25**	2	
8.78	3		5.76	3	J	0.0236	3	J	0.0677	3	J	1460	3		1120	3		0.7	1		0.285	3	
5.05	3	J	**1.325**	4		0.0922	3	J+	**0.035**	2	U	1040	3		1010	3		0.16	2	J+	0.0807	3	J+
7.54	3	J	**3.1**	2		**0.0155**	3		0.077	2	J	1040	3		1050	3		0.237	3		**0.1**	1	U
3.1	2		**3.1**	2		**0.0155**	3			R		933	3		957	3		**0.1**	1	U	**0.1**	1	U
10.0	1	U	**10.0**	1	U	**0.0250**	2	U	**0.0130**	2		1200	2		1140	3		0.100	1	J+	0.0834	3	J+
3.10	2		**3.10**	2		0.0738	3		0.112	3		1010	3		1080	3		0.0960	2		0.0932	3	
3.10	2		**3.10**	2		**0.050**	1	U	**0.050**	1	U	1140	3		1110	3		0.144	3	J+	0.151	3	J+
3.10	2		**10.0**	1	U	**0.0155**	3		**0.050**	1	U	753	3		803	3		0.0692	3	J+	0.0532	3	J+
3.10	2		**3.10**	2		**0.050**	1	U	**0.0155**	3		871	3		910	2		0.115	3	J+	0.106	3	J+
10.0	1	U	**10.0**	1	U	**0.050**	1	U	**0.0155**	3		1180	3		1190	3		0.218	3	J+	0.0562	3	J+
3.10	2		**10.0**	1	U	**0.050**	1	U	**0.050**	1	U	998	3		928	3		0.0894	3	J+	0.0558	3	J+
7.19	3	J	**3.10**	2		**0.0155**	3		**0.0155**	3		800	1		956	3		0.0924	3		0.0654	3	
14.9	3	J	16.8	3	J	**0.0155**	3		**0.0155**	3		941	3		995	3		0.0765	3		0.0544	3	
16	2	J	20	1		**0.0155**	3		**0.0155**	3		976	3		900	1		0.0741	3	J+	**0.0250**	2	U
17.1	3	J	16.5	3	J	**0.0155**	3		**0.0155**	3		976	3		977	3		0.085	2		0.0576	3	
10.6	3	J	17	2	J	**0.0155**	3		**0.0155**	3		848	3		909	3		0.0639	3	J		R	
10.0	1	U	**10.0**	1	U	**0.0155**	3		**0.0155**	3		947	3		875	3		0.109	3	J+	0.123	3	J+
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		807	3		787	3		0.0965	3	J+	0.0541	3	J+
22.2	3		8.15	3	J	**0.0155**	3		**0.0155**	3		848	3		833	3		0.352	3		0.111	3	
9.67	3	J	8.38	3	J	**0.0155**	3		**0.0155**	3		915	3		880	2		0.129	3	J+	0.0894	3	J+

CALC revised 2013																										
result > crit				result > crit										2013: DWS = NA				2013: DWS = NA								
														result > crit				result > crit								result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						Molybdenum						Nickel[4]						Potassium				
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
						0.155	3	**0.155**	3			0.318	3 J+		0.268	3 J+		338	3	348	3		**0.155**	3
0.1	1 U		**0.031**	2		**0.155**	3	**0.155**	3			0.463	3		0.3	1		381	3	378	3		**0.155**	3
0.100	1 U		**0.0315**	3		0.286	3 J+	0.286	3			0.602	3 J+		0.613	3		387	3	339	3		0.193	3
0.0315	3		**0.0315**	3		0.229	3	0.256	3			0.193	3		0.164	3		324	3	329	3		0.103	3
0.031	2		0.07	1 J		0.196	3	0.21	2			0.73	2		0.69	2		421	3	371	3		0.17	2
0.031	2		**0.031**	2		0.17	2 J+	0.088	2 J+			0.321	3 J			R		351	3	359	3		**0.0775**	3
0.000475	4		**0.000475**	4		0.117	3	0.0844	3			0.287	3		0.240	2		357	3	341	3		**0.155**	3
0.000475	4		**0.000475**	4		0.165	3	0.187	3			0.181	3 J		0.188	3 J		357	3	368	3		**0.155**	3
0.000475	4		**0.000475**	4		0.143	3	0.126	3			0.387	3		0.466	3		405	3	400	1		**0.155**	3
0.000475	4		**0.00250**	2 U		0.158	3	0.134	3			**0.100**	1 U		0.265	3		316	3	334	3		**0.155**	3
0.000169	3		**0.000475**	4		0.142	3	0.151	3			0.271	3 J+		0.222	3 J+		286	3	330	2		**0.155**	3
0.000169	3		**0.000475**	4		0.187	3	0.203	3			0.216	3 J+		0.224	3 J+		361	3	360	2		**0.155**	3
0.000169	3		**0.000475**	4		0.184	3	0.159	3			0.245	3 J+		0.238	3 J+		363	3	341	3		**0.155**	3
0.000169	3		**0.000475**	4		0.171	3	0.181	3			0.213	3		0.173	3 J		337	3	373	3		**0.155**	3
0.00075	2		**0.00075**	2		0.160	2	0.167	3			0.434	3		0.241	3		318	3	323	3		**0.155**	3
0.00075	2		**0.00075**	2		0.174	3	0.18	2			**0.100**	1 U		**0.100**	1 U		325	3	306	3		**0.155**	3
0.00075	2		**0.00075**	2		0.168	3	0.167	3			0.156	3 J		0.178	3 J		364	3	372	3		**0.155**	3
0.00075	2		**0.00075**	2		0.0921	3 J			R		0.223	3		0.23	2		328	3	343	3		**0.155**	3
0.00075	2		0.00308	3 J		0.188	3	0.179	3			**0.310**	2 U		**0.310**	2 U		408	3	358	3		**0.155**	3
0.00075	2		**0.00075**	2		0.159	3	0.156	3			**0.310**	2 U		0.738	3		336	3	325	3		**0.155**	3
0.00250	2 U		**0.00075**	2		0.162	3	0.161	3			0.516	3 J		0.4	1 J		356	3	349	3		**0.155**	3
0.00075	2		**0.00075**	2		0.16	2	0.162	3			**0.310**	2 U		**0.310**	2 U		361	3	346	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.116	3	
	0.11	2	
J	**0.0775**	3	
	0.221	3	J
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

		depends on HARD; revised 2013						depends on Total Ag																			
		result > crit						result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
	Silicon			**Silver[8]**						**Sodium**						**Thallium**							**Tin**				
	Dissolved		Total			Dissolved			Total			Dissolved			Total			Dissolved			Total						
	µg/L		µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L						
7030	3		**0.0031**	2		**0.0031**	2		1990	3		2060	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
6170	3	J+	**0.0031**	2		**0.0031**	2		2110	3	J+	2020	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
5300	2		0.00326	3	J	**0.001435**	4		2360	3		1810	3		0.105	3	J+	**0.002125**	4		0.14	2	J				
6050	3		**0.001435**	4		**0.001435**	4		1920	3		1700	2		**0.002125**	4		**0.002125**	4		0.158	3	J				
6790	3		**0.0031**	2		**0.0031**	2		2160	3		2210	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
6760	3		**0.0031**	2		**0.0031**	2		2000	1		2130	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
6270	3		**0.0031**	2		**0.0031**	2		2420	3		2320	3		**0.0025**	2		**0.0025**	2		0.0658	3	J				
6190	3		**0.0031**	2		**0.0031**	2		2040	3		2180	3		**0.0025**	2		**0.0025**	2		**0.0155**	3					
6360	3		**0.0031**	2		**0.0031**	2		2440	3		2390	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5120	3		**0.0031**	2		**0.0031**	2		1700	2		1800	2		**0.0050**	1		**0.0050**	1		**0.050**	1					
5130	3		**0.0031**	2		**0.0031**	2		1820	3		1880	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6370	3		**0.0031**	2		**0.0031**	2		2380	3		2360	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5780	3		**0.0031**	2		**0.0031**	2		2240	3		2110	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6440	3		**0.0031**	2		**0.0031**	2		1840	3	J			R	**0.0050**	1		**0.0050**	1		**0.050**	1					
5780	3		**0.0031**	2		**0.0031**	2		2010	3		2110	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5470	3		**0.0031**	2		**0.0031**	2		2060	3		1870	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6250	3		**0.0031**	2		**0.0031**	2		2200	2		2220	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5840	3		**0.0031**	2		**0.0031**	2		2020	3		2150	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5700	2		**0.0031**	2		**0.0031**	2		2230	3		2070	3		**0.0050**	1		**0.0050**	1		0.555	3	J				
5650	3		**0.0031**	2		**0.0031**	2		2060	3		1990	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
5960	3		**0.0031**	2		**0.0031**	2		2130	3		2070	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
5680	3		**0.0031**	2		**0.0031**	2		2230	3		2230	3		**0.0031**	2		**0.0031**	2		0.103	3	J				

														depends on Hardness result > crit				depends on Total Zn result > crit	
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved µg/L			Total µg/L			Dissolved µg/L			Total µg/L			Dissolved µg/L						
0.155	3		**0.125**	3		**0.125**	3			**0.235**	3		**0.235**	3					
0.155	3		0.453	3		0.419	3			**0.75**	2	U	**0.235**	3					
0.0888	3	J	0.37	2		0.312	3			0.607	3	J	1.08	3					
0.0302	3		0.36	2		0.303	3			**0.2345**	4		**0.50**	1	U				
0.031	2		0.664	3		0.426	3			1.53	3		**0.75**	2	U				
0.031	2		0.57	2		0.576	3			**0.75**	2	U	2.09	3					
0.0155	3		**0.110**	2		**0.110**	2			2.57	3	J+	2.33	3	J+				
0.0155	3		0.282	3	J	0.355	3	J		0.580	2	J+			R				
0.050	1		**0.250**	2		**0.250**	2			**0.50**	1	U			R				
0.050	1		**0.250**	2		0.792	3	J		**0.50**	1	U	**0.155**	3					
0.050	1		0.413	3	J	0.371	3	J		2.72	3	J+	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			7.64	3	J+	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			1.84	3	J+	1.60	2	J+				
0.050	1		**0.155**	3		**0.155**	3			1.19	3		1.77	3					
0.050	1		**0.155**	3		**0.155**	3			0.648	3	J	0.826	3	J				
0.050	1		**0.155**	3		**0.155**	3			1.35	3	J+	**0.155**	3					
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
		R	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.0310	2		0.561	3	J	0.628	3	J		8.74	3		**1.55**	3	U				
0.0310	2		**0.155**	3		0.317	3	J		**1.55**	3	U	**1.55**	3	U				

	2	3	2	4	0	2	1	4	2	3	1	3			
Mean	6.2		10.94		39		195		4.32		15.9				
Median	6.2		11.65		40		184		4.02		15.9				
St. Deviation	0		3		8		85		2		2				
# of values	22		22		22		21		22		22				
Minimum	5.5		6.03		24		59		2.33		12.5				
Maximum	6.7		16.49		57		377		6.78		21.6				
Lowest fifth percentile	6		7		26		101		2		13				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	82%		0%		0%		0%		0%		0%				
% of DWS exceedences	14%		0%		0%		0%		0%		0%				
HIDE this row - notes															
RED criteria	result is <6.5 OR >8.5		result < 7												
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
1	3		1	3		3	2		2	3		0	2		3	3		4	3		3	3
44			35.1			0.2			6.2			18			0.191			0			0	
44			33.9			0.1			5.8			16			0.108			0			0	
4			11			0			2			4			0			0			0	
22			22			22			22			22			22			3			3	
36			3.8			0.1			1.6			13			0.016			0.0155			0.147	
55			60.0			1.4			11.8			33			1.170			0.0885			0.568	
38			22			0			3			13			0			0			0	
0			0			18			2			0			7			2			0	
						82%			9%						32%			67%				
			1			2			13						4			1				
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			73%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3	3	2
0.0212		0	
0.0155		0	
0		0	
22		3	
0.0091		0.0155	
0.1260		0.05	
0		0	
2		3	
9%		100%	
2			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		3	2		2	3		5	2		5	2		3	3		2	2		4
0.584			0.04			3.06			0.0012			0.00109			0.21			0			0.0249
0.589			0.03			3.09			0.0008			0.00075			0.16			0			0.0155
0			0			0			0			0			0			0			0
22			22			22			22			22			22			7			22
0.268			0.02			2.18			0.0008			0.00075			0.08			0.2			0.0155
0.897			0.13			3.86			0.0027			0.00250			0.77			0.701			0.0672
0			0			2			0			0			0			0			0
0			8			0			21			22			16			3			19
			36%						95%			100%			73%			43%			86%
			13						1						6			2			3
230			NA			NA			NA			0.0052			NA			NA			6.99
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3							
	5		2.2		0.0721		0.0268		0.45		0.476		2.13		2.04								
	2		1.4		0.0300		0.0267		0.44		0.503		2.07		1.98								
	9		3		0		0		0		0		0		0								
	22		21		22		22		22		22		22		22								
	1		1.0		0.0075		0.0075		0.16		0.155		1.73		1.87								
	43		12.5		0.6230		0.0414		0.85		0.851		3.51		2.67								
	1		1		0		0		0		0		2		2								
	7		12		7		7		4		2		0		0								
	32%		57%		32%		32%		18%		9%												
	1		1		9		11		10		9												
	87		87		NA		NA		150		150		NA		NA								
	NA		NA		6		NA		10		NA		2,000		NA								
	0%		0%		0%		0%		0%		0%		0%		0%								
	0%		0%		0%		0%		0%		0%		0%		0%								
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit										
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved			
		µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L			

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3			3	3			3	3		4	3		4	3		3	3		3	3
4630				0.515				0.370			0.0140			0.02			0.514			0.396	
4690				0.417				0.360			0.0122			0.01			0.380			0.349	
410				0				0			0			0			0			0	
22				22				21			22			22			22			22	
3690				0.050				0.050			0.0050			0.00			0.245			0.202	
5260				1.280				0.707			0.0312			0.05			1.990			0.743	
3932				0				0			0			0			0			0	
0				1				3			11			11			1			0	
				5%				14%			50%			50%			5%				
											8			8							
NA				10.98				10.56276			NA			NA			1.655			1.589	
NA				100				NA			NA			NA			NA			NA	
0%				0%				0%			0%			0%			5%			0%	
0%				0%				0%			0%			0%			0%			0%	
					depends on Hardness				depends on Hardness									depends on Hardness			
					result > crit				result > crit									result > crit			result > crit

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	2		1	2		4	3		4	3		0	3		0	3		3	3		4	3	
9			7.8			0.03			0.03			990			974			0.2			0.1		
9			7.0			0.02			0.02			976			967			0.1			0.1		
5			6			0			0			159			110			0			0		
22			22			22			21			22			22			22			21		
3			1.3			0.02			0.01			753			787			0.1			0.0		
22			20.0			0.09			0.11			1460			1190			0.7			0.5		
3			3			0			0			800			805			0			0		
12			15			19			18			0			0			3			5		
55%			68%			86%			86%									14%			24%		
8			6			1			2														
1000			1000			0.242			0.263			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		Total
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		µg/L
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0		0		0.169		0.169		0.313		0.312		354		350		0.152									
0		0		0.164		0.162		0.299		0.241		357		347		0.155									
0		0		0		0		0		0		33		22		0									
21		21		22		21		22		21		22		22		22									
0.000169		0.0004745		0.092		0.084		0.100		0.100		286		306		0.078									
0.1		0.07		0.286		0.286		0.730		0.738		421		400		0.193									
0		0		0		0		0		0		316		323		0									
21		19		2		2		5		3		0		0		19									
100%		90%		9%		10%		23%		14%						86%									
		2						3		4						1									
0.77		0.77		NA		NA		9.41		9.39		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.151	
	0.155	
	0	
	22	
	0.078	
	0.221	
	0	
	19	
	86%	
	1	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF

Selenium

Dissolved

µg/L

| | | |

| | | |

MW-07D

Sample Date												
09/06/04	5.89	3	17.08	4	51	2	308	3	3.23	3	13.8	3
10/20/04	6.64	3	15.35	4	50	1	281	3	2.62	3	13.9	3
03/17/05	6.65	3	12.54	4	38	2			2.51	3	15.1	3
05/15/05	5.87	3	12.08	4	42	2	140	2	3.93	3	15.4	3
08/21/05	5.9	2	13.6	3	40	1	104	3	4.17	3	13.9	3
11/12/05	6.15	3	11.88	4	39	2	237	3	2.67	3	14.5	3
03/12/06	6.76	3	12.79	4	40	1	328	3	2.62	3	14.9	3
05/23/06	5.35	3	13.05	4	36	2	299.3	4	3.88	3	13.7	3
08/21/06	6.07	3	12.36	4	37	2	178.2	4	3.35	3	14.7	3
10/30/06	6.52	3	13.5	3	41	2	272.9	4	3.13	3	15.0	2
03/18/07	6.17	3	10.25	4	22	2	187.8	4	2.88	3	13.2	3
05/11/07	6.18	3	12.27	4	23	2	163.2	4	3.44	3	14.2	3
08/23/07	6.18	3	13.1	3	22	2	139.3	4	3.27	3	13.5	3
11/14/07	6.41	3	13.74	4	36	2	206.5	4	2.56	3	13.3	3
03/23/08	6.05	3	11.55	4	37	2	106.8	4	2.52	3	13.3	3
05/19/08	6.97	3	13.72	4	40	1	127	3	3.28	3	14.3	3
08/25/08	6.8	2	13.65	4	39	2 C	169.3	4	3.14	3	13.4	3
10/16/08	5.96	3	14.54	4	42	2	141.8	4	2.68	3	15	2
08/26/09	6.54	3	12.73	4	75	2	159.8	4	3.18	3	14.7	3
08/20/10	7.26	3	12.82	4	35	2	100.2	4	2.9	2	14.4	3
08/29/11	6.33	3	13.64	4	33.0234	FALSE	125.9	4	3.21	3	15.2	3
08/24/12	6.28	3	12.7	3	40	1	120.9	4	2.39	3	14	2

42	2	50	1	6.9	2	3.8	2 J	20	1	**0.155**	3				
43	2	50	1	**0.075**	2	7	1 J	20	1	**0.155**	3				
41	2	41.3	3	**0.075**	2	7	1 J	17	2	0.08	1 J				
40	1	56.3	3	0.2	1 J	7	1	20	1	0.05	1 J				
39.5	3	43.8	3	**0.075**	2	2.5	2 J	17	2	**0.0155**	3				
38	2	41.3	3	**0.075**	2	5.88	3	17.5	3	0.113	3 J-				
38.0	2	31.2	3	**0.075**	2	5.50	2	10.0	1	0.158	3				
39.0	2	38.8	3	**0.075**	2	7.00	1	20.0	1	0.0650	2 J				
39.5	3	58.7	3	**0.250**	2 U	5.50	2 J	16.0	2	0.0985	3 J	**0.0155**	3	0.0985	3
41.0	2	57.5	3	**0.075**	2	7.50	2 J	21.0	2	0.0660	2 J	**0.0155**	3	0.0645	3
36.0	2	48.8	3	**0.075**	2	7.00	1 J	20.0	1	0.0840	2 J	**0.0155**	3	**0.050**	1
38.0	2	36.3	3	**0.075**	2	4.25	3 J	20.0	1	0.133	3 J-				
39.0	2	43.8	3	**0.075**	2	5.00	1 J	17.5	3	0.101	3				
40.0	1	45.0	2	**0.075**	2	6.25	3 J	17.9	3	0.0985	3 J				
41.7	3	42.5	3	**0.150**	2	5.94	3 J	18.4	3	0.133	3				
44.4	3	41.3	3	**0.075**	2	**1.57**	3	21.1	3	0.0935	3 J				
41.1	3	45	2	**0.0775**	3	5.06	3 J	20.7	3	0.124	3				
44.1	3	33.8	3	**0.076**	2	5.14	3 J	21.3	3	0.117	3				
43.9	3	42.5	3	**0.150**	2	5.7	2 J	20	1	0.151	3				
43.2	3	45	2	**0.076**	2	5.04	3 J	18.1	3	**0.050**	1 U				
42.3	3	55	2	**0.0755**	3	4.32	3 J	17.5	3	0.187	3				
41.2	3	31	2	**0.075**	2	**5.0**	1 U	16.3	3	0.351	3				

	0.11	2		
	0.09	1	J	
	0.166	3		
	0.102	3		
	0.088	2		
	0.092	2		
	0.0840	2		
	0.154	3		
J	0.0840	2	J-	R
J	0.101	3	J-	R
U	0.0970	2	J-	R
	0.0843	3		
	0.0848	3		
	0.103	3		
	0.0913	3		
	0.0905	3		
	0.0911	3		
	0.091	2		
	0.0926	3		
	0.0854	3		
	0.0943	3		
	0.0918	3		

0.805	3	0.104	3	1.94	3	**0.00125**	3	0.0027	2 J	**0.065**	2				**0.0155**
0.849	3	**0.0155**	3	1.27	3	**0.00125**	3	**0.00125**	3	**0.0295**	3				**0.0155**
0.785	3	0.048	2 J	2.67	3	**0.00125**	3	**0.00125**	3	0.16	2 J				**0.05**
0.697	3	0.043	2 J	0.997	3	**0.00125**	3	**0.00125**	3	0.16	2 J				**0.0155**
0.639	3	0.039	2 J	1.09	3	**0.00125**	3	**0.00125**	3	0.24	2 J				**0.0155**
0.633	3	0.031	2 J	0.86	2	**0.00125**	3	**0.00125**	3	0.10	1 J				**0.05**
0.670	2	**0.0155**	3	1.22	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.050**
0.679	3	0.0570	2 J	0.794	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.653	3	0.0770	2 J	0.819	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.530	2	**0.0155**	3	0.618	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.050**
0.548	3	**0.0155**	3	0.687	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.717	3	0.0490	2 J	0.762	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.555	3	0.0320	2 J	0.673	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.569	3	0.0440	2 J	0.643	3	0.0020	1 J	**0.00075**	2	**0.155**	3				**0.0155**
0.582	3	0.0420	2 J	0.664	3	0.0019	2 J+	**0.00075**	2	**0.155**	3				0.0602
0.407	3	0.069	2 J	0.569	3	**0.0025**	2 U	**0.0025**	2 U	**0.155**	3	**0.075**	2		**0.0155**
0.593	3	0.052	2 J	0.619	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.634	3	0.072	2 J	0.593	3	**0.00075**	2	**0.00075**	2	**0.155**	3	1.42	3		**0.0155**
0.578	3	0.035	2 J	0.63	2	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.256	3 J		0.0313
0.58	2	0.088	2 J	0.641	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.536	3	0.06	1 J	0.633	3	**0.00075**	2	**0.0025**	2 U	**0.155**	3	0.617	3		**0.0155**
0.497	3	0.062	2 J	0.623	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	404	3 J+	37.3	3 J+	**0.0385**	3	**0.0385**	3	0.481	3 J	0.4	1 J	3.2	2 J+	2.45	3 J+
3	**12.5**	3 U	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.25**	2 U	**0.25**	2 U	1.06	3	1.03	3
1 U	9.94	3	0.98	2 J+	0.0211	3	0.0219	3	0.348	3	0.298	3	1.12	3	1.01	3
3	14.9	3 J+	1.63	3 J+	0.025	2 J+	0.0268	3 J+	0.328	3	0.372	3	0.849	3	0.74	2
3	6.76	3	**1**	1 U	0.0258	3 J+	0.0216	3 J+	**0.25**	2 U	**0.25**	2 U	0.605	3	0.608	3
1 U	3.86	3 J+	2.3	2 J+	**0.00155**	3		R	0.276	3 J	**0.125**	3	0.44	2	0.472	3
1 U	7.33	3 J+	**1.00**	1 U	0.0832	3	0.0388	3 J	**0.155**	3	**0.155**	3	0.723	3	0.568	3
3	4.82	3 J		R	0.0272	3 J		R	**0.155**	3	**0.155**	3	0.630	2	0.739	3
3	6.00	1 J+	2.22	3 J+	0.0252	3 J	0.0244	3 J	**0.155**	3	0.647	3	0.572	3	0.661	3
1 U	2.86	3	4.51	3	**0.0075**	2	**0.0075**	2	0.328	3 J	0.443	3 J	0.419	3 J		R
3	6.49	3 J+	2.71	3 J+	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	0.367	3 J	0.492	3 J+	0.468	3 J+
3	5.05	3 J+	**1.00**	1 U	0.0262	3 J	0.0304	3 J	0.376	3 J	0.367	3 J	0.566	3 J+	0.495	3 J+
3	2.90	2 J+	**1.00**	1 U	0.0244	3 J	0.0256	3 J	**0.155**	3	**0.155**	3	0.536	3 J+	0.619	3 J+
3	2.11	3	**1.00**	1 U	0.0220	2 J	0.0280	2 J	**0.155**	3	**0.155**	3	0.401	3 J+	0.421	3 J+
3 J	3.33	3	1.52	3 J	0.0230	2 J	0.0231	3 J	**0.155**	3	0.316	3 J	0.454	3	0.451	3
3	2.78	3 J+	**1.00**	1 U	**0.0075**	2	0.0251	3 J	**0.155**	3	0.393	3 J	0.433	3 J+	0.427	3 J+
1 U	**1.00**	1 U	**0.310**	2	0.0206	3 J	**0.0075**	2	0.326	3 J	**0.155**	3	0.416	3	0.407	3
3	2.03	3	0.69	2 J	**0.0075**	2		R	0.395	3 J	0.353	3 J	0.384	3	0.403	3
3 J	2.69	3 J+	**1.00**	1 U	0.0304	3 J	0.02	1 J	**0.155**	3	**0.155**	3	0.56	2	0.511	3
3	3.18	3 J+	**1.00**	1 U	0.0227	3 J		R	**0.155**	3	0.331	3 J	0.685	3 J+	0.686	3 J+
3	2.38	3 J+	**1.00**	1 U	0.331	3	0.0544	3	0.341	3 J	0.451	3 J	0.969	3	0.781	3
3	**1.00**	1 U	**1.00**	1 U	0.211	3	0.0473	3 J	0.372	3 J	0.365	3 J	0.736	3	0.551	3

0.0246	3 J	0.0075	2					5	1 U	1.55	3	0.0155	3	0.0155	3	4050	3
0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	1.55	3	0.0155	3	0.0155	3	4170	3
0.00467	3 J	0.00466	3 J	0.003835	4	0.003835	4	1.32	3 J+	1.51	3 J+	0.003095	4	0.003095	4	4260	3
0.00503	3 J	0.00496	3 J	0.003835	4	0.003835	4	1.82	3 J+	2.18	3 J+	0.003095	4	0.003095	4	4550	3
0.0204	3 J	0.0075	2	0.0084	2 J	0.00155	3	4.4	2 J	1.55	3	0.0488	3 J	0.00775	3	3990	3
0.0075	2	0.0075	2	0.00155	3	0.0116	3 J+	1.55	3	1.55	3	0.00775	3	0.00775	3	4150	3
0.0120	2	0.0120	2	0.0936	3	0.0526	3	3.02	3 J	0.75	2	0.0125	3	0.0125	3	4220	3
0.0120	2	0.0120	2	0.0075	2	0.0075	2	0.75	2	1.95	3 J	0.0125	3	0.0125	3	3960	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	4290	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	4460	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	3760	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4050	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4000	1
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	3930	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	3860	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4120	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	3890	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4240	3
0.0125	3	0.0125	3	0.0292	3 J	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4230	3
0.0125	3	0.0125	3	0.0257	3 J	0.057	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4080	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.79	3 J	1.88	3 J	0.0075	2	0.0075	2	4240	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	0.75	2	1.57	3 J	0.0075	2	0.0075	2	3930	3

	3890	3	0.319	3 J+	0.252	3 J+	0.114	3 J		R	0.369	3 J		R
J+	4280	3 J+	**0.05**	1	0.158	3 J	**0.0155**	3	**0.0155**	3	**0.1**	1 U	**0.1**	1 U
	3990	3	0.386	3	0.303	3	0.0178	3 J	0.0104	3 J	0.11	2	**0.03**	1 U
	4790	3	0.459	3	0.19	2 J	0.0136	3 J		R	0.121	3 J+	0.0864	3 J+
	4810	3	0.239	3 J+	**0.031**	2	0.036	2 J+	0.0254	3 J+	0.224	3 J+	0.209	3 J+
	4430	3	0.228	3	**0.1**	1 U	0.0124	3 J+	0.0216	3 J+	0.208	3 J+	0.215	3 J+
	3600	2	0.672	3 J+	0.373	3 J+	**0.0100**	1 U	0.0064	2 J	0.465	3 J+	0.178	3 J+
	4130	3	0.388	3	**0.100**	1 U	0.0214	3	0.0212	3	0.209	3	0.159	3
	4470	3	0.447	3 J+	0.486	3 J+	0.0224	3	0.0198	3 J	0.339	3 J+		R
	5010	3	**0.050**	1	**0.050**	1	0.0146	3 J	0.0156	3 J	0.301	3 J+	0.349	3 J+
	3820	3	**0.100**	1 U	**0.050**	1	**0.0100**	1 U	**0.0050**	1	0.290	2 J+	0.217	3 J+
	4160	3	0.452	3	0.384	3	**0.0100**	1 U	**0.0100**	1 U	0.318	3 J+	0.287	3 J+
	4210	3	0.260	2	0.233	3	0.0102	3 J	0.0114	3 J	0.340	2 J+	0.244	3 J+
	4230	3	**0.100**	1 U	**0.050**	1	0.0100	1 J	**0.0050**	1	0.160	2	0.180	2
	3750	3	0.414	3	0.374	3	**0.0050**	1	**0.0050**	1	0.520	2	0.232	3
	4080	3	0.312	3	0.284	3	**0.0050**	1	**0.0050**	1	0.115	3 J+	0.115	3 J+
	3830	3	0.279	3	**0.100**	1 U	**0.0050**	1	**0.0050**	1	0.574	3 J+	0.197	3 J+
	4440	3	0.274	3	0.271	3	**0.0050**	1	**0.0050**	1	0.159	3	0.117	3
	3720	3	0.316	3	0.204	3	**0.0100**	1 U	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
	4200	2	0.363	3 J+	0.337	3 J+	**0.0050**	1	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
	4210	3	0.444	3	0.465	3	0.0119	3 J	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
	4060	3	0.305	3	0.223	3	**0.0050**	1	**0.0050**	1	**0.250**	2 U	**0.250**	2 U

137	3 J+	37.8	3 J+	0.219	3 J+	**0.05**	1	886	3	913	3	5.75	3 J+	6.05	3 J+
3.1	2	**3.1**	2	**0.05**	1	**0.05**	1	856	3	962	3	**0.5**	1 U	**0.5**	1 U
6.81	3 J	**1.325**	4	0.0255	3 J	0.0261	3 J	1090	3	964	3	1	1	0.838	3
7.32	3 J	**1.325**	4	**0.035**	2 U	**0.035**	2 U	989	3	1080	3	1.03	3	0.404	3 J+
3.1	2	**3.1**	2	0.05	1 J	**0.0155**	3	948	3	1070	3	0.48	2	0.395	3
3.1	2	**3.1**	2	0.279	3 J+	**0.05**	1 U	1010	3	1030	3	0.234	3	0.225	3
10.0	1 U	**3.10**	2	0.0722	3 J+		R	1050	3	965	3	0.404	3 J+	0.207	3 J+
3.10	2	**3.10**	2	**0.0250**	2 U	**0.0130**	2	939	3	972	3	0.493	3	0.284	3
3.10	2	**3.10**	2	0.433	3 J+	0.202	3 J+	969	3	1020	3	0.419	3 J+	0.230	2 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.050**	1 U	944	3	961	3	0.201	3 J		R
3.10	2	**3.10**	2	**0.050**	1 U	**0.050**	1 U	917	3	936	3	0.389	3 J+	0.249	3 J+
10.0	1 U	**10.0**	1 U	**0.050**	1 U	**0.0155**	3	987	3	1020	3	0.270	2 J+	0.247	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.050**	1 U	861	3	948	3	0.198	3 J+	0.182	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.050**	1 U	843	3	933	3	0.102	3	0.0724	3
13.5	3 J	13.3	3 J	0.0353	3 J		R	886	3	900	1	0.131	3	0.146	3
12.7	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	978	3	960	2	0.231	3 J+	0.0962	3 J+
15.3	3 J	13.7	3 J	**0.0155**	3	**0.0155**	3	893	3	913	3	0.113	3	0.085	2
11.1	3 J	8.48	3 J	**0.0155**	3		R	1060	3	1110	3	0.105	3	0.0564	3
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	1010	3	911	3	0.172	3 J+	0.0683	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1020	3	1080	3	0.0832	3 J+	**0.0250**	2 U
7.47	3 J	11.9	3 J	**0.0155**	3	**0.0155**	3	1110	3	1110	3	0.25	2	0.0774	3
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	1000	1	1040	3	0.0785	3 J+	0.118	3 J+

0.031	2			**0.155**	3	**0.155**	3	**0.1**	1 U		R	410	2	417	3	**0.155**	3
0.1	1 U	**0.1**	1 U	**0.155**	3	**0.155**	3	**0.1**	1 U	**0.1**	1 U	392	3	407	3	**0.155**	3
0.0315	3	**0.0315**	3	0.0866	3 J	0.15	2	0.143	3	0.146	3	399	3	393	3	0.0342	3
0.0315	3	**0.0315**	3	0.141	3	0.159	3	0.201	3	0.0755	3 J	374	3	381	3	0.0362	3
0.031	2	0.066	2 J	0.144	3	0.148	3	0.235	3	0.243	3	372	3	441	3	**0.0775**	3
0.031	2	**0.031**	2	0.067	2 J		R	0.173	3	0.223	3	403	3	416	3	**0.0775**	3
0.000475	4	**0.000475**	4	0.403	3	0.0518	3	0.135	3 J	0.0960	2 J	409	3	347	3	**0.155**	3
0.000475	4	**0.000475**	4	0.111	3 J		R	0.114	3 J	0.117	3 J	391	3	395	3	**0.155**	3
0.000475	4	0.000955	3 J	0.0918	3	0.0952	3	**0.100**	1 U	0.250	2	401	3	406	3	**0.155**	3
0.000475	4	**0.000475**	4	0.118	3 J		R	0.275	3	0.392	3	397	3	400	1	**0.155**	3
0.000169	3	**0.000475**	4	0.138	3	0.146	3	**0.100**	1 U	**0.100**	1 U	375	3	379	3	**0.155**	3
0.000169	3	**0.000475**	4	0.139	3	0.138	3	0.226	3 J+	0.242	3 J+	366	3	367	3	**0.155**	3
0.000169	3	0.00104	3 J	0.143	3	0.146	3	**0.100**	1 U	**0.100**	1 U	375	3	405	3	**0.155**	3
0.000169	3	**0.000475**	4	0.152	3	0.152	3	0.166	3 J	0.164	3 J	375	3	409	3	**0.155**	3
0.00075	2	**0.00075**	2	0.140	2	0.134	3	0.143	3 J	0.232	3	372	3	362	3	**0.155**	3
0.00075	2	**0.00075**	2	**0.0075**	2		R	**0.100**	1 U	**0.100**	1 U	376	3	375	3	**0.155**	3
0.00075	2	**0.00075**	2	0.136	3	0.119	3	0.111	3 J	0.1	1 J	355	3	364	3	**0.155**	3
0.00075	2	**0.00075**	2	0.115	3	0.118	3	0.183	3 J	0.166	3 J	372	3	395	3	**0.155**	3
0.00075	2	**0.00075**	2	0.158	3	0.124	3	**0.310**	2 U	**0.310**	2 U	398	3	346	3	**0.155**	3
0.00075	2	**0.00075**	2	0.159	3	0.165	3	**0.310**	2 U	**0.310**	2 U	379	3	387	3	**0.155**	3
0.00075	2	**0.00075**	2	0.137	3	0.14	2	0.283	3 J	0.198	3 J	405	3	406	3	**0.155**	3
0.00075	2	**0.00075**	2	0.134	3	0.127	3	**0.310**	2 U	**0.310**	2 U	374	3	389	3	**0.155**	3

	0.155	3	
	0.155	3	
J	0.0302	3	J
J	0.046	2	J
	0.0775	3	
	0.0775	3	
	0.155	3	
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	0.155	3	

12400	3	**0.0031**	2	**0.0031**	2	2250	3	2700	2	**0.0125**	3	**0.0125**	3	**0.155**	3
11000	2	**0.0031**	2	**0.0031**	2	2370	3 J+	2460	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
8750	3	**0.001435**	4	**0.001435**	4	2510	3	2320	3	**0.002125**	4	**0.002125**	4	0.27	2 J+
11100	3	**0.001435**	4	0.00311	3 J	2290	3	2370	3	**0.002125**	4	0.00789	3 J	0.106	3 J
12000	2	**0.0031**	2	**0.0031**	2	2360	3	2800	2	0.0088	2 J	**0.0031**	2	**0.031**	2
11900	3	**0.0031**	2	**0.0031**	2	2500	2	2570	3	**0.0031**	2	**0.0031**	2	**0.031**	2
10000	1	**0.0031**	2	**0.0031**	2	2640	3	2420	3	0.0092	2 J	**0.0025**	2	0.171	3
11000	2	**0.0031**	2	**0.0031**	2	2420	3	2430	3	**0.0025**	2	**0.0025**	2	**0.0155**	3
11100	3	**0.0031**	2	**0.0031**	2	2450	3	2580	3	**0.0050**	1	**0.0050**	1	**0.050**	1
10000	1	**0.0031**	2	**0.0031**	2	2270	3	2350	3	**0.0050**	1	**0.0050**	1	**0.050**	1
10900	3	**0.0031**	2	**0.0031**	2	2370	3	2400	2	**0.0050**	1	**0.0050**	1	**0.050**	1
10500	3	**0.0031**	2	**0.0031**	2	2450	3	2550	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11100	3	**0.0031**	2	**0.0031**	2	2390	3	2650	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11600	3	**0.0031**	2	**0.0031**	2	2110	3	2350	3	**0.0050**	1	**0.0050**	1	**0.050**	1
10200	3	**0.0031**	2	**0.0031**	2	2290	3	2330	3	**0.0050**	1	**0.0050**	1	**0.050**	1
10200	3	**0.0031**	2	**0.0031**	2	2410	3	2340	3	**0.0050**	1	**0.0050**	1	**0.050**	1
10400	3	**0.0031**	2	**0.0031**	2	2250	3	2270	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11500	3	**0.0031**	2	**0.0031**	2	2580	3	2680	3	**0.0050**	1	**0.0050**	1	**0.050**	1
9550	3	**0.0031**	2	**0.0031**	2	2510	3	2280	3	**0.0050**	1	**0.0050**	1	1.48	3 J+
11400	3	0.0086	2 J	0.0178	3 J	2550	3	2700	2	**0.0050**	1	**0.0050**	1	**0.050**	1
11900	3	**0.0031**	2	**0.0031**	2	2690	3	2720	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
11400	3	**0.0031**	2	**0.0031**	2	2550	3	2600	2	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	1.06	3	1.15	3	**0.75**	2 U	**0.75**	2 U
0.155	3	0.915	3	0.877	3	**0.75**	2 U	**0.235**	3
0.0302	3	1.03	3	0.97	2	0.482	3 J	**0.2345**	4
0.0774	3 J	1.03	3	0.966	3	**0.2345**	4	**0.2345**	4
0.031	2	0.907	3 J		R	**0.75**	2 U	**0.75**	2 U
0.031	2	1.21	3	1.08	3	**0.75**	2 U	**0.75**	2 U
0.0155	3	0.764	3	0.659	3	4.31	3 J+	2.36	3 J+
0.0155	3	0.817	3	0.941	3	**0.250**	2 U		R
0.050	1	0.902	3 J	1.05	3	1.98	3 J+	2.32	3 J+
0.050	1	1.54	3	2.02	3	**0.50**	1 U	**0.155**	3
0.050	1	1.19	3	1.24	3	1.61	3 J+	2.10	2 J+
0.050	1	1.01	3	1.00	1	**0.50**	1 U	**0.50**	1 U
0.050	1	0.585	3 J	0.515	3 J	1.96	3 J+	1.82	3 J+
0.050	1	1.10	2	1.22	3	**0.50**	1 U	**0.50**	1 U
0.050	1	0.719	3 J	0.915	3 J	2.32	3	1.75	3
0.050	1	0.965	3 J	0.947	3 J	**0.155**	3	**0.155**	3
0.050	1	0.919	3 J	0.933	3 J	2.33	3 J+	**0.155**	3
0.050	1	1.02	3	1.02	3	1.22	3 J+	**0.50**	1 U
1.06	3 J+	0.912	3 J	0.808	3 J	**1.55**	3 U	**1.55**	3 U
0.050	1	0.982	3 J	0.985	3 J	**1.55**	3 U	3.26	3 J+
0.0310	2	1.06	3	1.16	3	1.08	3 J	1.83	3 J
0.0310	2	0.929	3 J	0.908	3 J	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.32		13.13		39		186		3.07		14.2	
Median	6.23		12.94		39		163		3.14		14.3	
St. Deviation	0		1		11		73		0		1	
# of values	22		22		22		21		22		22	
Minimum	5.35		10.25		22		100		2.39		13.2	
Maximum	7.26		17.08		75		328		4.17		15.4	
Lowest fifth percentile	6		12		22		104		3		13	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	64%		0%		0%		0%		0%		0%	
% of DWS exceedences	23%		0%		0%		0%		0%		0%	

0	2	1	3	3	2	1	2	0	2	3	3	4	3	4	3
41		45		0.4		5.4		19		0.117		0		0	
41		44		0.1		5.5		19		0.107		0		0	
2		8		1		2		3		0		0		0	
22		22		22		22		22		22		3		3	
36		31		0.1		1.6		10		0.016		0.0155		0.05	
44		59		6.9		7.5		21		0.351		0.0155		0.0985	
38		31		0		3		16		0		0		0	
0		0		20		2		0		4		3		1	
				91%		9%				18%		100%		33%	
				1		15				8				2	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		50%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3		
0.10		NA	
0.09		NA	
0		NA	
22			0
0.08		NA	
0.17		NA	
0		NA	
0			
1			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	3	3	4	2	5	2	3	3	2	2	4
0.624		0.048		0.91		0.00120		0.0012		0.147		0		0.0261
0.613		0.046		0.68		0.00130		0.0008		0.155		0		0.0155
0		0		1		0		0		0		0		0
22		22		22		22		22		22		7		22
0.407		0.016		0.57		0.00075		0.0008		0.030		0.075		0.0155
0.849		0.104		2.67		0.00250		0.0027		0.240		1.42		0.0602
0		0		1		0		0		0		0		0
0		4		0		20		21		18		4		20
		18%				91%		95%		82%		57%		91%
		17				2		1		4		1		2
230		NA		NA		NA		0.0052		NA		NA		6.98
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	3	3	3	3	3	3	3
	23		3.7		0.0475		0.0280		0.256		0.3		0.7		0.69				
	4		1.0		0.0250		0.0254		0.250		0.3		0.6		0.57				
	85		8		0		0		0		0		1		0				
	22		21		22		18		22		22		22		21				
	1		0.3		0.0016		0.0075		0.155		0.1		0.4		0.40				
	404		37.3		0.3310		0.0544		0.481		0.6		3.2		2.45				
	1		1		0		0		0		0		0		0				
	3		12		7		5		12		9		0		0				
	14%		57%		32%		28%		55%		41%								
			2		9		9		8		10								
	87		87		NA		NA		150		150		NA		NA				
	NA		NA		6		NA		10		NA		2,000		NA				
	5%		0%		0%		0%		0%		0%		0%		0%				
	0%		0%		0%		0%		0%		0%		0%		0%				

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0122		0.0108		0		0		2		1.41		0.0112		0.0093		4110	
0.0125		0.0125		0		0		1		1.25		0.0075		0.0075		4100	
0		0		0		0		1		0		0		0		190	
22		22		21		21		22		22		22		22		22	
0.0047		0.0047		0.00155		0.00155		1		0.75		0.0031		0.0031		3760	
0.0246		0.0125		0.75		0.75		5		2.18		0.0488		0.0185		4550	
0		0		0		0		1		1		0		0		3862	
18		20		17		18		17		17		21		22		0	
82%		91%		81%		86%		77%		77%		95%		100%			
4		2		3				3		3		1					
NA		NA		NA		NA		NA		NA		0.061		0.060		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	3	2	4	2	3	3	3	3
4190		0.312		0.228		0.020		0.0104		0.269		0.196	
4180		0.314		0.228		0.010		0.0057		0.250		0.212	
370		0		0		0		0		0		0	
22		22		22		22		20		22		20	
3600		0.050		0.031		0.005		0.005		0.100		0.03	
5010		0.672		0.486		0.114		0.0254		0.574		0.349	
3722		0		0		0		0		0		0	
0		4		7		11		12		5		6	
		18%		32%		50%		60%		23%		30%	
				2		6		5					
NA		10.98		10.56276		NA		NA		1.664		1.597	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	2	1	2	4	3	4	3	0	3	0	3	3	3	3	3
13		6.7		0.069		0.04		966		991		0.57		0.50	
7		3.1		0.030		0.03		974		965		0.24		0.21	
28		8		0		0		76		67		1		1	
22		22		22		19		22		22		22		21	
3		1.3		0.016		0.01		843		900		0.08		0.03	
137		37.8		0.433		0.20		1110		1110		5.75		6.05	
3		1		0		0		856		911		0		0	
14		17		15		17		0		0		1		2	
64%		77%		68%		89%						5%		10%	
7		4		3		1									
1000		1000		0.244		0.265		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		9%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.012		0		0.138		0.135		0.2		0.189		385		390		0.137	
0.001		0		0.139		0.143		0.2		0.166		378		394		0.155	
0		0		0		0		0		0		16		24		0	
22		21		22		18		22		21		22		22		22	
0.000		0.0004745		0.008		0.052		0.1		0.0755		355		346		0.034	
0.100		0.1		0.403		0.165		0.3		0.392		410		441		0.155	
0		0		0		0		0		0		366		348		0	
22		18		3		2		9		7		0		0		20	
100%		86%		14%		11%		41%		33%						91%	
		3		1				7		7						2	
0.77		0.77		NA		NA		9.47		9.44		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.137	
0.155	
0	
22	
0.030	
0.155	
0	
20	
91%	
2	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
10900		0.0032		0.0037		2420		2490		0.0054		0.0051		0.140	
11100		0.0031		0.0031		2420		2450		0.0050		0.0050		0.050	
900		0		0		140		160		0		0		0	
22		22		22		22		22		22		22		22	
8750		0.0014		0.0014		2110		2270		0.0021		0.0021		0.016	
12400		0.0086		0.0178		2690		2800		0.0125		0.0125		1.480	
9573		0		0		2250		2282		0		0		0	
0		21		20		0		0		20		21		18	
		95%		91%						91%		95%		82%	
		1		2						2		1		1	
NA		0.117767156		0.100		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	3	3	3	3
0.100		0.98		1.02		1.23		1.12	
0.050		0.97		0.97		0.92		0.75	
0		0		0		1		1	
22		22		21		22		21	
0.016		0.59		0.52		0.16		0.16	
1.060		1.54		2.02		4.31		3.26	
0		1		1		0		0	
20		0		0		13		14	
91%						59%		67%	
1		8		7		2		1	
NA		NA		NA		21.68		21.38	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-07S																
Sample Date																
09/24/04	6.39	3	14.97	4		44	2		271	3		2.38	3	13.8	3	
10/20/04	6.66	3	14.62	4		38	2		272	3		3.11	3	11.7	3	
03/17/05	6.43	3	12.39	4		34	2					3.12	3	14.5	3	
05/15/05	5.73	3	13.38	4		27	2		164	3		3.42	3	9.25	3	
08/21/05	6.14	3	12.79	4		35	2		28	2		4.51	3	13.1	3	
11/12/05	5.76	3	11.39	4		32	2		234	3		3.66	3	10.6	3	
03/12/06	6.74	3	12.84	4		41	2		316	3		2.97	3	13.6	3	
08/21/06	6.12	3	11.92	4		32	2		173.4	4		3.23	3	12.2	3	
10/30/06	6.49	3	12.76	4		26	2		299.9	4		3.9	2	9.31	3	
08/23/07	6.15	3	13.02	4		22	2		142.2	4		3.08	3	14.8	3	
11/12/07	6.34	3	13.65	4		32	2		205.1	4		2.78	3			
11/14/07														12.6	3	
08/25/08	6.22	3	14.01	4		38	2		182.2	4		3.05	3	13	2	
10/16/08	5.7	2	14.54	4		27	2		156.7	4		2.9	2	8.86	3	
08/26/09	6.39	3	12.05	4		72	2		162	3		3.74	3	13.6	3	
08/20/10	6.91	3	13.37	4		28	2		110.9	4		2.57	3	9.09	3	
08/29/11	6.35	3	12.99	4		31.6096	FALSE		128	3		3.16	3	13.6	3	
08/24/12	6.22	3	12.23	4		38	2		116	3		2.35	3	13.4	3	

result > crit | result <20 | result > crit

SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
40	1		63.8	3		3.89	3		**1.57**	3		18	2		0.61	2	J-					
36	2		40	1		0.4	1	J	6.8	2	J	16	2		0.86	2	J					
38	2		36.3	3		0.2	1	J	6	1	J	18	2		0.06	1	J					
28.5	3		53.8	3		0.3	1	J	7	1		10.5	3		0.11	2						
33.5	3		32.5	3		**0.075**	2		3.5	2	J	15.5	3		0.09	1	J					
31	2		35	2		**0.075**	2		7	1		13.5	3		**0.05**	1	U					
39.0	2		25.0	2		0.300	1	J	7.25	3		22.0	2		0.0665	3	J					
34.0	2		42.5	3		**0.250**	2	U	5.50	2	J	15.0	2		0.102	3		**0.0155**	3		0.0785	3
25.0	2		36.3	3		**0.075**	2		9.00	1	J	12.0	2		0.0680	2	J	**0.0155**	3		0.0660	2
40.0	1		42.5	3		**0.150**	2		4.50	2	J	17.9	3		0.0805	3	J					
36.0	2		42.5	3		**0.076**	2		7.00	1	J	16.4	3		0.115	3						
42.3	3		50	1		0.308	3	J	5.04	3	J	20.1	3		0.11	2						
28.3	3		8.75	3	J	0.212	3	J	5.06	3	J	12	2		0.119	3						
43.2	3		43.8	3		0.211	3	J	6.3	2	J	31.8	3		0.098	2	J					
27.1	3		16	2		4.59	3		4.33	3	J	14.1	3		0.106	3						
38.7	3		52	2		0.603	3		4	1	J	15.9	3		**0.050**	1	U					
38.8	3		41	2		0.9	1		**5.0**	1	U	14.9	3		0.114	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.06	1	J			
	0.05	1	J			
	0.15	2				
	0.0785	3				
	0.050	1				
	0.040	1				
	0.0530	2				
J	0.0520	2	J-			R
J	0.0420	2				R
	0.0631	3				
	0.0618	3				
	0.066	2				
	0.0271	3				
	0.0542	3				
	0.0371	3				
	0.0627	3				
	0.0581	3				

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

result > crit			result > crit			result > crit						result > crit												depends on field pH and field Temp result > crit
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
1.05	3		0.072	2 J		4.6	2		0.003	1 J		**0.00125**	3		0.28	2 J					**0.0155**
0.778	3		**0.0155**	3		0.853	3		**0.00125**	3		**0.00125**	3		0.21	2 J					**0.0155**
0.717	3		0.047	2 J		0.847	3 J+		**0.00125**	3		**0.00125**	3		0.14	2 J					**0.05**
0.575	3		**0.0155**	3		0.622	3		**0.00125**	3		**0.00125**	3		0.14	2 J					**0.0155**
0.633	3		**0.0155**	3		0.728	3		**0.00125**	3		**0.00125**	3		0.20	1 J					**0.0155**
0.64	2		**0.0155**	3		0.677	3		**0.00125**	3		**0.00125**	3		0.092	2 J					**0.0155**
0.680	2		**0.0155**	3		0.788	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**
0.651	3		0.0670	2 J		0.696	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**
0.537	3		**0.0155**	3		0.520	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**
0.644	3		0.424	3		19.0	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**
0.576	3		0.0350	2 J		0.625	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**
0.586	3		0.046	2 J		0.637	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.050**
0.474	3		0.037	2 J		0.482	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.229	3 J		**0.0155**
0.54	2		0.081	2 J		0.558	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.273	3 J		**0.0155**
0.393	3		0.076	2 J		0.558	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.571	3		**0.0155**
0.516	3		0.058	2 J		0.608	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**
0.459	3		0.061	2 J		0.633	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**

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									depends on Hardness		depends on Hardness																		
result > crit				result > crit					result > crit		result > crit														result > crit				
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total				Dissolved	
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L				µg/L	
92.4	3		8.34	3 J			**0.05**	1			**0.05**	1			866	3		833	3		3.02	3		1.69	3	
30.9	3		**3.1**	2			**0.05**	1			**0.05**	1			769	3		706	3		1.2	2		**0.25**	2	
326	3		6.56	3 J			0.372	3			0.0335	3 J			1070	3		881	3		7.74	3		0.405	3	
41.8	3		5.85	3 J			**0.035**	2 U			**0.035**	2 U			602	3		560	2		1.5	2		0.579	3	
38.1	3		**3.1**	2			0.092	2 J			0.0416	3 J			915	3		829	3		1.06	3		0.466	3	
7.7	2 J		13.2	3 J			**0.05**	1 U				R			675	3		738	3		0.51	2		0.422	3	
23.1	3		**10.0**	1 U			2.42	3 J+			**0.0250**	2 U			982	3		993	3		0.591	3 J+		0.375	3 J+	
3.10	2		**3.10**	2			**0.050**	1 U				R			831	3		875	3		0.486	3 J+		0.374	3 J+	
10.0	1 U		**10.0**	1 U			**0.0155**	3			**0.0155**	3			549	3 J+		532	3 J+		0.330	2 J+		0.304	3 J+	
23.7	3		**10.0**	1 U			**0.050**	1 U			**0.0155**	3			969	3		1030	3		0.621	3 J+		0.476	3 J+	
12.7	3 J		9.60	2 J			**0.0155**	3			**0.0155**	3			806	3		827	3		0.295	3		0.322	3	
24.7	3		18.1	3 J			**0.0155**	3			**0.0155**	3			879	3		946	3		0.352	3		0.29	2	
11.2	3 J		7.37	3 J			**0.0155**	3			**0.0155**	3			591	3		579	3		0.212	3		0.18	2	
25.3	3		**10.0**	1 U			**0.0155**	3			**0.0155**	3			956	3		927	3		0.495	3 J+		0.196	3 J+	
124	3		21.4	3			0.984	3			0.0337	3 J			632	3		611	3		5.38	3 J+		0.741	3 J+	
67.5	3		54.2	3			0.053	2 J			**0.0155**	3			1020	3		1010	3		0.878	3		0.461	3	
14.9	3 J		12.6	3 J			**0.0155**	3			**0.0155**	3			994	3		994	3		0.339	3 J+			R	

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
J	**0.0143**	3	
J	**0.0143**	3	
J	**0.294**	3	J
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

			depends on HARD; revised 2013						depends on Total Ag																		
			result > crit						result > crit																		
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tir**						
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total						
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L						
11600	3		**0.0031**	2		**0.0031**	2		2310	3		2310	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
9380	3		**0.0031**	2		**0.0031**	2		2220	3	J+	2130	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
8920	3		0.00867	3	J	**0.001435**	4		2380	3		2170	3		**0.002125**	4		**0.002125**	4		0.309	3	J+				
8220	3		**0.001435**	4		**0.001435**	4		1700	2		1560	3		**0.002125**	4		**0.002125**	4		**0.1**	1	U				
10700	3		**0.0031**	2		**0.0031**	2		2550	3		2310	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
10400	3		**0.0031**	2		**0.0031**	2		2120	3		2310	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
11000	2		**0.0031**	2		**0.0031**	2		2560	3		2570	3		0.0050	1	J	**0.0025**	2		0.0488	3	J				
10100	3		**0.0031**	2		0.0100	1	J	2380	3		2540	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6480	3		**0.0031**	2		**0.0031**	2		1710	3		1740	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
12300	3		**0.0031**	2		**0.0031**	2		2720	3		2990	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10400	3		**0.0031**	2		**0.0031**	2		2190	3		2240	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10700	3		**0.0031**	2		**0.0031**	2		2300	2		2460	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
6780	3		**0.0031**	2		**0.0031**	2		1950	3		1900	2		**0.0050**	1		**0.0050**	1		**0.050**	1					
10100	3		**0.0031**	2		**0.0031**	2		2570	3		2460	3		**0.0050**	1		**0.0050**	1		0.246	3	J+				
6870	3		**0.0031**	2		**0.0031**	2		1870	3		1920	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10900	3		**0.0031**	2		**0.0031**	2		2720	3		2690	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
10800	3		**0.0031**	2		**0.0031**	2		2640	3		2610	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					

														depends on Hardness		depends on Total Zn			
														result > crit		result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium								**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		1.37	3		1.08	3			0.541	3	J	0.694	3	J				
0.155	3		1.01	3		1.11	3			**0.235**	3		**0.235**	3					
0.1	1	U	1.94	3		1.12	3			1.65	3		0.569	3	J				
0.0302	3		0.837	3		0.747	3			**0.50**	1	U	**0.50**	1	U				
0.031	2		1.03	3		0.91	2			**0.75**	2	U	**0.75**	2	U				
0.1	1	U	0.63	2	J			R		**0.75**	2	U			R				
0.0155	3		0.979	3		0.663	3			2.52	3	J+	2.37	3	J+				
0.050	1		1.24	3		1.20	2			1.15	3	J+	1.99	3	J+				
0.050	1		1.38	3		1.45	3			**0.155**	3		**0.50**	1	U				
0.050	1		0.774	3	J	0.768	3	J		1.42	3	J+	1.92	3	J+				
0.050	1		0.997	3	J	0.931	3	J		**0.50**	1	U	**0.50**	1	U				
0.050	1		0.979	3	J	0.986	3	J		**0.50**	1	U	**0.155**	3					
0.050	1		0.606	3	J	0.583	3	J		**0.50**	1	U	**0.50**	1	U				
0.050	1		1.08	3		1.03	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		0.615	3	J	0.732	3	J		**1.55**	3	U	**1.55**	3	U				
		R	1.18	3		1.18	3			**0.200**	1		1.01	3	J				
0.0310	2		1.03	3		1.04	3			**1.55**	3	U	**1.55**	3	U				

	2	3	2	4	0	2	0	3	2	3	1	3
Mean	6.28		13.11		35		185		3.17		12.2	
Median	6.34		12.99		32		169		3.11		13.0	
St. Deviation	0		1		11		77		1		2	
# of values	17		17		17		16		17		17	
Minimum	5.70		11.39		22		28		2.35		8.9	
Maximum	6.91		14.97		72		316		4.51		14.8	
Lowest fifth percentile	6		12		25		90		2		9	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	82%		0%		0%		0%		0%		0%	
% of DWS exceedences	18%		0%		0%		0%		0%		0%	

0	2	1	3	2	2	1	2	1	3	2	2	4	3	4	3
35		38.9		0.74		5.60		17		0.17		0		0	
36		41.0		0.25		5.50		16		0.10		0		0	
6		14		1		2		5		0		0		0	
17		17		17		17		17		17		2		2	
25		8.8		0.08		1.57		11		0.05		0.0155		0.066	
43		63.8		4.59		9.00		32		0.86		0.0155		0.0785	
27		15		0		3		12		0		0		0	
0		0		6		2		0		2		2		0	
				35%		12%				12%		100%			
		1		7		11				8				2	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		82%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2		
0.06		NA	
0.05		NA	
0		NA	
17			0
0.03		NA	
0.15		NA	
0		NA	
0			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	3	3	5	2	5	2	3	3	3	3	4
0.62		0.065		2.0		0.001		0.00096		0.16		0		0.0236
0.59		0.046		0.6		0.001		0.00075		0.16		0		0.0155
0		0		4		0		0		0		0		0
17		17		17		17		17		17		6		17
0.39		0.016		0.5		0.001		0.00075		0.09		0.229		0.0155
1.05		0.424		19.0		0.003		0.00125		0.28		0.571		0.0500
0		0		1		0		0		0		0		0
0		6		0		16		17		11		3		17
		35%				94%		100%		65%		50%		100%
		10				1				6		2		
230		NA		NA		NA		0.0052		NA		NA		7.01
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	3	3
	54		3.1		0.0245		0.0220		0.201		0.214		1.37		0.927	
	8		1.0		0.0212		0.0202		0.155		0.155		1.07		0.893	
	120		4		0		0		0		0		1		0	
	17		17		17		17		17		17		17		16	
	1		0.3		0.0050		0.0075		0.125		0.125		0.78		0.687	
	493		12.5		0.0573		0.0568		0.440		0.535		4.90		1.340	
	1		1		0		0		0		0		1		1	
	2		12		6		7		11		10		0		0	
	12%		71%		35%		41%		65%		59%					
			1		8		5		4		4					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	18%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	5	3	5	3	-1	3
0.0105		0.0100		0.10		0.10		1.69		1.7		0.0102		0.0098		3510	
0.0125		0.0125		0.01		0.01		1.25		1.3		0.0078		0.0075		3720	
0		0		0		0		1		1		0		0		540	
17		17		17		17		17		16		17		17		17	
0.0015		0.0015		0.00		0.00		0.75		0.8		0.0075		0.0031		2570	
0.0125		0.0125		0.75		0.75		7.02		5.0		0.0185		0.0185		4310	
0		0		0		0		1		1		0		0		2594	
16		17		15		16		14		13		15		16		0	
94%		100%		88%		94%		82%		81%		88%		94%			
1						1		1		2		2		1			
NA		NA		NA		NA		NA		NA		0.046		0.046		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	2	3	3	3	4	3	4	3	3	3	3	3	3	3	3	3	3	3
3470		2.92		0.744		0.0491		0.0249		0.348		0.246							
3680		2.88		0.704		0.0338		0.0246		0.250		0.212							
520		1		0		0		0		0		0							
17		17		17		17		16		17		17							
2570		1.21		0.050		0.0164		0.01		0.100		0.100							
4450		5.91		1.600		0.1870		0.039		0.876		0.597							
2570		1		0		0		0		0		0							
0		0		2		1		2		5		4							
				12%		6%		13%		29%		24%							
						2		3				1							
NA		10.98		10.56276		NA		NA		1.197		1.149							
NA		100		NA		NA		NA		NA		NA							
0%		0%		0%		0%		0%		0%		0%							
0%		0%		0%		0%		0%		0%		0%							

1	3	1	3	4	3	4	3	0	3	0	3	3	3	3	3
51.6		12.10		0.25		0.03		830		816		1.47		0.47	
24.7		10.00		0.05		0.02		866		833		0.59		0.39	
78		12		1		0		167		167		2		0	
17		17		17		15		17		17		17		16	
3.1		3.10		0.02		0.02		549		532		0.21		0.18	
326.0		54.20		2.42		0.05		1070		1030		7.74		1.69	
7		3		0		0		583		554		0		0	
2		7		12		12		0		0		0		1	
12%		41%		71%		80%								6%	
4		8		2		3									
1000		1000		0.149		0.170		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		18%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	2	3	2	3	0	3	0	3	3	3
0.015		0		0.190		0.190		1.53		1.14		334		331		0.140	
0.001		0		0.194		0.198		1.54		1.24		349		352		0.155	
0		0		0		0		1		0		50		48		0	
17		16		17		16		17		17		17		17		17	
0.000		0.0004745		0.084		0.083		0.57		0.56		241		245		0.032	
0.100		0.1		0.342		0.304		2.73		1.54		427		407		0.214	
0		0		0		0		1		1		256		255		0	
17		15		2		2		0		0		0		0		14	
100%		94%		12%		13%										82%	
		1														3	
0.77		0.77		NA		NA		6.83		6.81		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.142	
0.155	
0	
17	
0.014	
0.294	
0	
16	
94%	
1	
4.6	
NA	
0%	
0%	

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
9700		0.0033		0.0033		2290		2290		0.0051		0.0050		0.088	
10400		0.0031		0.0031		2310		2310		0.0050		0.0050		0.050	
1700		0		0		330		360		0		0		0	
17		17		17		17		17		17		17		17	
6480		0.0014		0.0014		1700		1560		0.0021		0.0021		0.031	
12300		0.0087		0.0100		2720		2990		0.0125		0.0125		0.309	
6720		0		0		1708		1704		0		0		0	
0		16		16		0		0		16		17		14	
		94%		94%						94%		100%		82%	
		1		1						1				1	
NA		0.060665184		0.052		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	2	3	3	3	3	3	3	3	3	3
0.064		1.04		0.97		0.942		1.021			
0.050		1.01		1.01		0.750		0.722			
0		0		0		1		1			
16		17		16		17		16			
0.016		0.61		0.58		0.155		0.155			
0.155		1.94		1.45		2.520		2.370			
0		1		1		0		0			
16		0		0		12		10			
100%						71%		63%			
		5		5		1		3			
NA		NA		NA		15.64		15.42			
NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%			

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH			Field Diss. Oxygen		Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units			mg/L		µmhos/cm			mV			°C		mg/L		
MW-08D																
Sample Date																
09/06/04	7.95	3	13.07	4		117	3		188	3		3.47	3	37.9	3	
10/19/04	8.19	3	11.86	4		107	3		238	3		3.19	3	40.8	3	
03/15/05	7.86	3	11.11	4		83	2					2.9	2	43.1	3	
05/12/05	7.64	3	11.08	4		102	3		179.4	4		3.15	3	48.3	3	
08/20/05	7.58	3	11.06	4		81	2		73	2		4.05	3	44.7	3	
11/06/05	7.71	3	5.97	3		99	2		257	3		2.71	3	43.9	3	
03/10/06	7	1	11.3	3		95	2		257	3		2.99	3	44.5	3	
05/20/06	6.56	3	12.11	4		93	2		192.9	4		3.01	3	45.4	3	
08/20/06	6.86	3	11	2		92	2		164.5	4		3.51	3	45.9	3	
10/25/06	7.17	3	12.39	4		94	2		188.7	4		2.98	3	42.1	3	
03/17/07	7.82	3	11.1	3		54	2		145.6	4		2.4	2	46.1	3	
05/14/07	7.56	3	10.82	4		56	2		109.9	4		3.17	3	45.3	3	
08/21/07	7.19	3	12.17	4		56	2		101.4	4		3.45	3	44.4	3	
11/15/07	6.92	3	11.63	4		91	2		198.1	4		2.64	3	44.9	3	
03/23/08	6.53	3	11.63	4		94	2		66.1	3		3.09	3			
03/24/08														42.2	3	
05/20/08	7.21	3	11.68	4		100	1		116.4	4		2.98	3	41.7	3	
08/26/08	7.7	2	12.3	3		97	2		230.3	4		3.6	2	43.2	3	
10/18/08	7.63	3	11.62	4		99	2		90.8	3		3.05	3	42.8	3	
08/21/09			9.94	3		118	3				R	3.58	3	42.5	3	
08/19/10	7.58	3	11.11	4		99	2		130.5	4		3.25	3	40.3	3	
08/28/11	7.46	3	9.97	3		78.705	FALSE		112.2	4		3.45	3	43.8	3	
08/20/12	7.93	3	11.45	4		98	2		154	3		3.32	3	39.9	3	

			result > crit											result <20			result > crit						
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF	
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate		
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L		
100	1		78.8	3		0.722	3		**1.57**	3		52	2		**0.155**	3							
120	2		67.5	3		**0.075**	2		**1.57**	3		51	2		2.43	3							
100	1		85	2		**0.15**	2		**0.785**	3		49	2		0.06	1	J						
100	1		81.3	3		**0.075**	2		4.13	3	J	50.5	3		0.09	1	J						
100	1		63.8	3		**0.075**	2		**0.785**	3		51	2		0.048	2	J						
95	2		58.8	3		**0.075**	2		**0.785**	3		53	2		0.0785	3	J						
80.0	1		25.0	2		**0.075**	2		**0.785**	3		52.0	2		0.0725	3	J						
100	1		70.0	1		**0.075**	2		**0.785**	3		50.0	1		0.119	3							
80.0	1		86.3	3		**0.075**	2		**1.57**	3		53.0	2		0.107	3		**0.0155**	3		0.107	3	
80.0	1		68.8	3		**0.075**	2		**1.57**	3		53.0	2		0.129	3		**0.0155**	3		0.129	3	
90.0	1		56.3	3		0.200	1	J	**1.57**	3		54.0	2		0.0805	3	J	**0.0155**	3		0.0645	3	
90.0	1		67.5	3		**0.075**	2		**1.57**	3		50.0	1		**0.050**	1	U						
100	1		62.5	3		**0.075**	2		**1.57**	3		50.3	3		0.0780	2	J						
100	1		78.8	3		**0.075**	2		**1.57**	3		51.5	3		0.0320	2	J						
110	2		71.3	3		0.909	3		**1.57**	3		52.8	3		0.111	3							
99.2	3		65	2		**0.075**	2		**1.57**	3		70.3	3		0.147	3							
101	3		88.8	3		0.319	3	J	**1.57**	3		52.3	3		**0.0100**	1	U						
106	3		58.8	3		**0.0765**	3		**1.57**	3		52.3	3		0.128	3							
110	2		71.3	3		**0.076**	2		**1.57**	3		51	2		0.119	3							
104	3		46	2		**0.076**	2		**1.57**	3		49.7	3		**0.050**	1	U						
103	3		82	2		**0.075**	2		**1.57**	3		47.8	3		**0.050**	1	U						
101	3		66	2		**0.075**	2		**5.0**	1	U	45.9	3		0.104	3							

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus				Orthophosphate	
	mg/L				mg/L	
	0.0155	3				
	0.07	1	J			
	0.133	3				
	0.0011	2				
	0.033	2				
	0.035	2				
	0.0260	2				
	0.0280	2				
	0.0390	2				R
	0.0470	2		**0.050**	1	UJ
J	0.0390	2				R
	0.0279	3				
	0.0236	3				
	0.0340	2				
	0.0311	3				
	0.017	2				
	0.0283	3				
	0.0229	3				
	0.0344	3				
	0.0286	3				
	0.0315	3				
	0.0267	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit							result > crit											result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.722	3		0.05	1 J		1.81	3		**0.00125**	3		**0.00125**	3		**0.065**	2					**0.0155**			
0.689	3		**0.0155**	3		1.95	3		0.0028	2 J		**0.00125**	3		0.060	1 J					**0.0155**			
0.696	3		0.047	2 J		1.9	2 J+		**0.0025**	2 U		0.006	1		0.18	2 J					**0.0155**			
0.663	3		0.042	2 J		1.83	3		**0.00125**	3		**0.00125**	3		0.18	2 J					**0.0155**			
0.621	3		0.036	2 J		1.74	3		**0.00125**	3		**0.00125**	3		0.17	2 J					**0.0155**			
0.621	3		0.04	1 J		1.83	3		**0.00125**	3		**0.00125**	3		0.12	2 J					**0.0155**			
0.631	3		**0.0155**	3		1.83	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.628	3		0.0550	2 J		1.69	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0330			
0.637	3		0.0650	2 J		1.75	3		**0.0025**	2 UJ		**0.0025**	2 UJ		**0.155**	3					**0.0155**			
0.636	3		0.0790	2 J		1.74	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.633	3		**0.0155**	3		0.686	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.692	3		0.0520	2 J		1.64	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0388			
0.536	3		0.0360	2 J		1.41	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0768			
0.578	3		0.0420	2 J		1.58	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.564	3		0.0530	2 J		1.44	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0399			
0.579	3		0.041	2 J		1.63	3		**0.0025**	2 U		**0.0025**	2 U		**0.155**	3		**0.075**	2		**0.0155**			
0.647	3		0.082	2 J		1.64	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.050**			
0.6	1		0.07	1 J		1.39	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.749	3		**0.0155**			
0.581	3		0.036	2 J		1.45	3		**0.0025**	2 U		**0.00075**	2		**0.155**	3		0.178	3 J		**0.050**			
0.577	3		0.074	2 J		1.62	3		**0.00075**	2		0.004	1 J		**0.155**	3		**0.250**	2 U		**0.0155**			
0.551	3		0.062	2 J		1.56	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			
0.471	3		0.064	2 J		1.42	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2 U		**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	**12.5**	3 U	**12.5**	3 U	0.0812	3 J	0.116	3 J	1.2	2	1.21	3	2.85	3 J+	2.77	3 J+							
		3	**12.5**	3 U	**12.5**	3 U	0.0895	3 J	0.0797	3 J	1.07	3 J+	1.23	3 J+	2.53	3	2.54	3							
		3	2.26	3 J+	1.63	3 J+	0.0423	3	0.0379	3	1.24	3	1.35	3	2.67	3	2.59	3							
		3	1.9	2 J		R	0.0551	3 J+	0.062	2 J+	1.39	3	1.38	3	2.37	3	2.72	3							
		3	3.25	3	3.94	3	0.0442	3 J+	0.0448	3 J+	1.29	3	1.37	3	9.25	3	2.41	3							
		3	2.75	3 J+	2.46	3 J+	0.0246	3 J+	0.0186	3 J+	1.12	3	1.35	3	2.31	3	2.38	3							
		1 U	2.35	3 J+	**1.00**	1 U	0.0636	3	0.0500	1	1.16	3	1.11	3	2.73	3	2.51	3							
		2 J	25.1	3	2.73	3	0.0510	2	0.0486	3 J	1.06	3	0.673	3	3.61	3	2.50	2							
		3	2.26	3 J+	2.02	3 J+	0.0420	2 J	0.0436	3 J	1.26	3	1.33	3	2.70	2	2.59	3							
		1 U	**1.00**	1 U	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	0.947	3	0.884	3	2.39	3 J+	2.58	3 J+							
		3	**2.00**	1 U	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	1.17	3	1.16	3	2.15	3 J+	2.11	3 J+							
		3 J	2.16	3 J+	**1.00**	1 U	0.0472	3 J	0.0470	2 J	1.06	3	0.957	3	2.53	3	2.55	3							
		3 J	2.81	3 J+	**1.00**	1 U	0.0398	3 J	0.0414	3 J	1.07	3	1.21	3	2.31	3	2.40	2							
		3	2.36	3	**1.00**	1 U	0.0388	3 J	0.0406	3 J	1.13	3	1.24	3	2.49	3	2.46	3							
		3 J	4.15	3	1.74	3 J	0.0408	3 J	0.0372	3 J	1.20	2	1.08	3	2.45	3	2.30	2							
		3	**1.00**	1 U	**1.00**	1 U	0.0345	3 J	0.0326	3 J	1.22	3	1.25	3	2.34	3	2.4	2							
		1 U	95.9	3	2.45	3	0.0384	3 J	0.0348	3 J	1.07	3	1.13	3	2.4	2	2.33	3							
		3	1.86	3 J	1.55	3 J	**0.0250**	2 U	**0.0250**	2 U	1.16	3	1.06	3	2.32	3	2.1	2							
		1 U	2.82	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	1.06	3	0.985	3	2.41	3	2.27	3							
		3	2.34	3 J+	2.89	3 J+	**0.0075**	2	0.0376	3 J	1.08	3	1.16	3	2.4	2 J+	2.4	2 J+							
		3	2.33	3 J		R	0.0188	3 J	**0.0075**	2	1.42	3	1.21	3	2.58	3	2.69	3							
		3	**1.00**	1 U	**1.00**	1 U	0.0315	3 J	0.0285	3 J	1.18	3	1.19	3	2.27	3	2.4	2							

result > crit																								depends on Hardness result > crit				depends on Hardness result > crit					
BE_N	BE_NSF	BE_NVF	BE_F	BE_FSF	BE_FVF	BI_N	BI_NSF	BI_NVF	BI_F	BI_FSF	BI_FVF	B_N	B_NSF	B_NVF	B_F	B_FSF	B_FVF	CD_N	CD_NSF	CD_NVF	CD_F	CD_FSF	CD_FVF	CA_N	CA_NSF
Beryllium						**Bismuth**						**Boron**						**Cadmium[4]**							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved				Total
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L				µg/L
0.0075	2		**0.0075**	2								**5**	1	U	**1.55**	3		**0.0155**	3		**0.0155**	3		11200	3
0.0075	2		**0.0075**	2		**0.75**	2		**0.75**	2		**1.55**	3		**1.55**	3		**0.0155**	3		**0.0155**	3		12300	3
0.001495	4		**0.001495**	4		**0.003835**	4		**0.003835**	4		2.34	3	J+	2.67	3	J+	**0.003095**	4		**0.003095**	4		13000	2
0.001495	4		**0.001495**	4		**0.003835**	4		**0.003835**	4		2.7	2	J+	3.22	3	J+	**0.003095**	4		**0.003095**	4		14700	3
0.0075	2		**0.0075**	2		**0.00155**	3		**0.00155**	3		**1.55**	3		10.2	3		**0.00775**	3		**0.00775**	3		13500	3
0.0075	2		**0.0075**	2		**0.00155**	3		**0.00155**	3		**1.55**	3		**1.55**	3		**0.00775**	3		**0.00775**	3		13200	3
0.0120	2		**0.0120**	2		0.0528	3		**0.0250**	2	U	2.55	3	J	**2.50**	2	U	**0.0125**	3		**0.0125**	3		12900	3
0.0120	2		**0.0120**	2		**0.0075**	2		**0.0075**	2		**0.75**	2		**0.75**	2		**0.0125**	3		**0.0125**	3		13300	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0185**	3		**0.0185**	3		13700	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.84	3	J	**1.25**	3		**0.0185**	3		**0.0185**	3		12400	3
0.0250	2		**0.0125**	3		**0.0075**	2		**0.0075**	2		**2.50**	2		**1.25**	3		**0.0075**	2		**0.0075**	2		13600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		13300	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		2.74	3	J	**0.0075**	2		**0.0075**	2		13400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		13400	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		12500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		12500	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.53	3	J	**1.25**	3		**0.0075**	2		**0.0075**	2		13000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		12800	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		**1.25**	3		**0.0075**	2		**0.0075**	2		12600	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		**1.25**	3		3.03	3	J	**0.0075**	2		**0.0075**	2		11900	3
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.86	3	J	3.23	3	J	**0.0075**	2		**0.0075**	2		13000	2
0.0125	3		**0.0125**	3		**0.0075**	2		**0.0075**	2		2.57	3	J	2.51	3	J	**0.0075**	2		**0.0075**	2		11800	3

				depends on Hardness				depends on Hardness												depends on Hardness									
				result > crit				result > crit												result > crit								result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
11500	3			0.696	3 J+			0.631	3 J+	**0.05**	1 U			R			0.503	3 J+		0.448	3 J+
13600	3			0.357	3			0.379	3	**0.05**	1 U		**0.05**	1 U			0.295	3 J+		**0.1**	1 U
13200	3			1.28	3			0.564	3	0.0316	3		0.0229	3 J			0.246	3		0.0627	3
12200	3			1.12	3			0.353	3	0.0264	3 J		0.0186	3 J			0.155	3 J+		0.114	3 J+
12900	3			1.39	3 J+			0.671	3 J+	0.0524	3 J+		0.0518	3 J+			0.522	3 J+		0.343	3 J+
13000	2			1.19	3			0.684	3	0.0358	3 J+		0.043	2 J+			0.243	3 J+		0.248	3 J+
11900	3			1.14	3 J+				R	0.0246	3		0.0188	3 J			0.797	3 J+		0.183	3 J+
13500	3			1.11	3			1.08	3	0.0514	3		0.0364	3			0.250	2		0.227	3
12900	3			1.14	3 J+			0.779	3 J+	0.0382	3		0.0394	3			0.243	3 J+		0.194	3 J+
13000	2			1.34	3			0.906	3	0.0256	3		0.0240	2			0.170	2 J+		0.124	3 J+
11400	3			0.904	3 J+			0.562	3 J+	0.0276	3 J+		0.0258	3 J+			0.304	3 J+		0.166	3 J+
13200	3			0.977	3			0.623	3	0.0224	3 J+		0.0242	3 J+			0.210	2 J+		0.273	3 J+
14000	2			0.850	2			0.589	3	0.0208	3		0.0228	3			0.186	3 J+		0.161	3 J+
13500	3			0.675	3 J+			0.473	3 J+	0.0220	2		0.0262	3			0.167	3		0.169	3
12200	3			0.890	2			0.490	2	0.0297	3		0.0234	3			0.166	3		0.134	3
12300	3			0.666	3			0.572	3	0.0158	3 J		0.024	2			**0.050**	1 U		0.121	3 J+
12500	3			0.875	3			0.407	3	0.0197	3 J		0.0203	3			0.43	2 J+		0.157	3 J+
11900	3			0.762	3			0.412	3	0.022	2		0.0186	3 J			0.138	3		0.122	3
12100	3			0.683	3			0.323	3	**0.0100**	1 U		**0.0100**	1 U			**0.250**	2 U		**0.250**	2 U
12500	3			0.628	3 J+			0.506	3 J+	**0.0100**	1 U		**0.0100**	1 U			**0.250**	2 U		**0.250**	2 U
13000	2			0.716	3			0.501	3	0.0192	3 J		0.0182	3 J			**0.250**	2 U		**0.250**	2 U
11900	3			0.639	3			0.369	3	0.0166	3 J		0.0215	3			**0.250**	2 U		**0.250**	2 U

								depends on Hardness		depends on Hardness																	
result > crit			result > crit					result > crit		result > crit															result > crit		
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
105	3	J+	81.3	3	J+	**0.05**	1		**0.05**	1		2410	3		2310	3		1.14	3	J+	1.47	3	J+
10	1	U	**3.1**	2		**0.05**	1		**0.05**	1		2440	3		2560	3		**0.5**	1	U	**0.25**	2	
4.95	3	J	**1.325**	4		**0.011**	2		0.0353	3	J	2590	3		2560	3		0.372	3		0.338	3	
3.95	3	J	2.67	3	J	**0.011**	2		**0.035**	2	U	2820	3		2520	3		0.502	3		0.58	2	
12.9	3	J	**3.1**	2		**0.0155**	3				R	2670	3		2660	3		0.412	3		0.351	3	
3.1	2		**3.1**	2		**0.0155**	3				R	2660	3		2640	3		0.644	3		0.593	3	
10.0	1	U	**10.0**	1	U	**0.0130**	2				R	3000	1		2950	3		0.151	3	J+	0.132	3	J+
42.1	3		11.9	3	J	0.0482	3	J			R	2950	3		2740	3		0.441	3		0.171	3	
3.10	2		**3.10**	2		0.363	3	J+			R	2800	2		2720	3		0.412	3	J+	0.403	3	J+
10.0	1	U	**10.0**	1	U	**0.0155**	3		**0.0155**	3		2690	3		2870	3		0.278	3	J+	0.262	3	J+
10.0	1	U	**3.10**	2		**0.050**	1	U	**0.0155**	3		2910	3		2290	3		0.138	3	J+	0.0986	3	J+
33.1	3		32.6	3		**0.0155**	3		**0.0155**	3		2950	3		2890	3		0.115	3	J+	0.134	3	J+
10.0	1	U	**10.0**	1	U	**0.050**	1	U	**0.0155**	3		2670	3		2700	2		0.146	3	J+	0.0868	3	J+
25.1	3		24.8	3		**0.050**	1	U	**0.0155**	3		2750	3		2730	3		0.0984	3		0.0624	3	
47.2	3		42.0	2		**0.0155**	3		**0.0155**	3		2650	3		2600	2		0.252	3		0.0986	3	
38.1	3		53.3	3		**0.0155**	3		**0.0155**	3		2560	3		2510	3		0.0764	3	J+	0.0651	3	J+
47.5	3		46.4	3		**0.0155**	3		**0.0155**	3		2640	3		2570	3		0.184	3		0.091	2	
36.9	3		29.5	3		**0.0155**	3		**0.0155**	3		2640	3		2510	3		0.0849	3		0.0739	3	
10.0	1	U	**3.10**	2		**0.050**	1	U	**0.0155**	3		2680	3		2660	3		0.213	3	J+	**0.0250**	2	U
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		2570	3		2870	3		0.0999	3	J+	**0.0250**	2	U
8.34	3	J	9.26	3	J	**0.0155**	3		**0.0155**	3		2760	3		2770	3		0.119	3		0.099	2	
10	1	J	6.96	3	J	**0.0155**	3		**0.0155**	3		2550	3		2620	3		0.0885	3	J+			R

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
J	0.0507	3	J
J	0.0579	3	J
J	**0.0775**	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

		depends on HARD; revised 2013						depends on Total Ag																			
		result > crit						result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
Silicon			**Silver[8]**						**Sodium**						**Thallium**						**Tin**						
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total					
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					
9670	3		**0.0031**	2		**0.0031**	2		3070	3		2910	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
8410	3		**0.0031**	2		**0.0031**	2		3120	3	J+	3230	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
6870	3		**0.001435**	4		**0.001435**	4		3300	2		3120	3		**0.002125**	4		**0.002125**	4		0.296	3	J+				
8160	3		**0.001435**	4		**0.001435**	4		3580	3		3070	3		**0.002125**	4		**0.002125**	4		**0.0302**	3					
9380	3		0.073	2		**0.0031**	2		3380	3		3510	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
9920	3		**0.0031**	2		0.0086	2	J	3290	3		3320	3		**0.0031**	2		**0.0031**	2		**0.031**	2					
8570	3		**0.0031**	2		**0.0031**	2		3630	3		3660	3		**0.0025**	2		**0.0025**	2		**0.0155**	3					
7850	3		**0.0031**	2		**0.0031**	2		3730	3		3530	3		**0.0025**	2		0.0102	3		**0.0155**	3					
8370	3		**0.0031**	2		**0.0031**	2		3480	3		3380	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8760	3		**0.0031**	2				R	3360	3		3650	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7130	3		**0.0031**	2		**0.0031**	2		3660	3		2870	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8890	3		**0.0031**	2		**0.0031**	2		3680	3		3590	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8930	3		**0.0031**	2		**0.0031**	2		3240	3		3570	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8840	3		**0.0031**	2		**0.0031**	2		3420	3		3490	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8250	3		**0.0031**	2		**0.0031**	2		3410	3		3320	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8410	3		**0.0031**	2		**0.0031**	2		3190	3		3080	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8250	3		**0.0031**	2		**0.0031**	2		3350	3		3240	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
7910	3		**0.0031**	2		**0.0031**	2		3360	3		3210	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8200	2		**0.0031**	2		**0.0031**	2		3400	2		3380	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8710	3		**0.0031**	2		**0.0031**	2		3310	3		3690	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9060	3		**0.0031**	2		**0.0031**	2		3440	3		3460	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
8630	3		**0.0031**	2		**0.0031**	2		3320	3		3350	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					

										depends on Hardness				depends on Total Zn			
										result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF			
						Vanadium						**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved				
	µg/L			µg/L			µg/L			µg/L			µg/L				
0.155	3		1.42	3		1.11	3			2	1	J+	**0.75**	2	U		
0.155	3		1.07	3		1.14	3			**0.75**	2	U	**0.75**	2	U		
0.1	1	U	1.25	3		1.18	3			**0.2345**	4		**0.2345**	4			
0.0302	3		1.17	3		1.22	3			**0.2345**	4		**0.2345**	4			
0.031	2		1.3	2		1.27	3			**0.75**	2	U	**0.75**	2	U		
0.031	2		1.06	3		1.18	3			**0.75**	2	U	**0.75**	2	U		
0.0155	3		0.640	2		0.660	2			2.36	3	J+	2.38	3	J+		
0.0155	3		1.41	3		1.00	1			0.864	3	J+	1.36	3	J+		
0.050	1		1.12	3		1.10	2			1.61	3	J+	1.09	3	J+		
0.050	1		0.984	3	J	0.744	3	J		**0.155**	3		**0.155**	3			
0.050	1		1.29	3		1.37	3			1.68	3	J+	**0.50**	1	U		
0.050	1		0.814	3	J	0.829	3	J		1.12	3	J+	**0.50**	1	U		
0.050	1		1.12	3		1.05	3			2.84	3	J+	1.95	3	J+		
0.050	1		1.05	3		1.13	3			**0.50**	1	U	**0.50**	1	U		
0.050	1		1.11	3		1.11	3			0.414	3	J	0.588	3	J		
0.050	1		1.11	3		1.23	3			**0.50**	1	U	**0.155**	3			
0.050	1		1.08	3		1.11	3			**0.50**	1	U	**0.155**	3			
0.050	1		1.13	3		1.09	3			**0.50**	1	U	**0.50**	1	U		
0.050	1		1.13	3		1.09	3			**1.55**	3	U	**1.55**	3	U		
0.050	1		1.18	3		1.12	3			**1.55**	3	U	**1.55**	3	U		
0.0310	2		1.45	3		1.52	3			**1.55**	3	U	**1.55**	3	U		
0.0310	2		1.19	3		1.18	3			**1.55**	3	U	**1.55**	3	U		

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	7.43		11.20		91		160		3.18		43.4	
Median	7.58		11.38		95		159		3.16		43.5	
St. Deviation	0		1		17		59		0		2	
# of values	21		22		22		20		22		22	
Minimum	6.53		5.97		54		66		2.40		37.9	
Maximum	8.19		13.07		118		257		4.05		48.3	
Lowest fifth percentile	7		10		56		73		3		40	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	0%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

-1	2	1	3	3	2	2	3	0	2	4	3	4	3	3	3
100		68.2		0.163		1.66		52		0.193		0		0	
100		68.2		0.075		1.57		51		0.085		0		0	
10		15		0		1		5		1		0		0	
22		22		22		22		22		22		3		3	
80		25.0		0.075		0.79		46		0.010		0.0155		0.0645	
120		88.8		0.909		5.00		70		2.430		0.0155		0.129	
80		47		0		1		48		0		0		0	
0		0		18		21		0		5		3		0	
				82%		95%				23%		100%			
				2		1				8				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	3	2
0.0350		0	
0.0300		0	
0	NA		
22		1	
0.0011		0.05	
0.1330		0.05	
0		0	
2		1	
9%		100%	
1			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.616		0.05		1.62		0.00130		0.00150		0.148		0		0.0275
0.625		0.05		1.64		0.00100		0.00100		0.155		0		0.0155
0		0		0		0		0		0		0		0
22		22		22		22		22		22		7		22
0.471		0.02		0.69		0.00075		0.00075		0.060		0.075		0.0155
0.722		0.08		1.95		0.00280		0.00600		0.180		0.749		0.0768
1		0		1		0		0		0		0		0
0		3		0		21		20		17		5		18
		14%				95%		91%		77%		71%		82%
		19				1		1		5		1		4
230		NA		NA		NA		0.0052		NA		NA		6.61
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		5%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	2	3	4	3	4	3	2	3	2	3	2	3	2	3	
	8.5		2.8		0.0397		0.041		1.2		1.16		2.82		2.45		
	2.4		1.6		0.0393		0.038		1.2		1.20		2.43		2.44		
	20		3		0		0		0		0		1		0		
	22		20		22		22		22		22		22		22		
	1.0		1.0		0.0075		0.008		0.9		0.67		2.15		2.10		
	95.9		12.5		0.0895		0.116		1.4		1.38		9.25		2.77		
	1		1		0		0		1		1		2		2		
	6		11		5		5		0		0		0		0		
	27%		55%		23%		23%										
	1		2		11		12										
	87		87		NA		NA		150		150		NA		NA		
	NA		NA		6		NA		10		NA		2,000		NA		
	5%		0%		0%		0%		0%		0%		0%		0%		
	0%		0%		0%		0%		0%		0%		0%		0%		

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-2	3
0.0111		0.0105		0		0		2		2.18		0.0093		0.0093		12900	
0.0125		0.0125		0		0		2		1.40		0.0075		0.0075		13000	
0		0		0		0		1		2		0		0		700	
22		22		21		21		22		22		22		22		22	
0.0015		0.0015		0.00155		0.00155		1		0.75		0.0031		0.0031		11200	
0.0250		0.0125		0.75		0.75		5		10.20		0.0185		0.0185		14700	
0		0		0		0		1		1		0		0		11805	
22		22		20		21		15		15		22		22		0	
100%		100%		95%		100%		68%		68%		100%		100%			
								5		4							
NA		NA		NA		NA		NA		NA		0.137		0.130		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-2	3	3	3	3	3	4	3	4	3	3	3	3	3	3	3
12600		0.910		0.565		0.03		0.0262		0.276		0.198			
12700		0.883		0.562		0.03		0.0234		0.248		0.176			
700		0		0		0		0		0		0			
22		22		21		22		21		22		22			
11400		0.357		0.323		0.01		0.01		0.050		0.063			
14000		1.390		1.080		0.05		0.0518		0.797		0.448			
11520		1		0		0		0		0		0			
0		0		0		4		3		5		5			
						18%		14%		23%		23%			
						5		5							
NA		10.98		10.56276		NA		NA		4.256		4.086			
NA		100		NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%			

1	3	1	3	4	3	4	3	-1	3	-1	3	3	3	3	3
22		17.9		0.04		0.02		2700		2650		0.29		0.26	
10		9.6		0.02		0.02		2670		2650		0.20		0.13	
24		21		0		0		160		170		0		0	
22		22		22		17		22		22		22		21	
3		1.3		0.01		0.02		2410		2290		0.08		0.03	
105		81.3		0.36		0.05		3000		2950		1.14		1.47	
3		3		0		0		2446		2320		0		0	
9		11		20		16		0		0		1		3	
41%		50%		91%		94%						5%		14%	
5		4		1		1									
1000		1000		0.988		0.914		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.009		0		0.416		0.365		0.560		0.552		346		339		0.145	
0.001		0		0.334		0.317		0.565		0.519		341		338		0.155	
0		0		0		0		0		0		18		23		0	
22		21		22		20		22		20		22		22		22	
0.000		0.0004745		0.244		0.185		0.310		0.310		326		284		0.048	
0.032		0.0315		1.020		0.709		1.090		1.290		399		398		0.227	
0		0		0		0		0		0		328		311		0	
22		21		0		0		3		3		0		0		19	
100%		100%						14%		15%						86%	
				2		2		1		1						3	
0.77		0.77		NA		NA		23.99		23.91		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.139	
0.155	
0	
22	
0.051	
0.155	
0	
20	
91%	
2	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
8510		0.0061		0.0032		3400		3350		0.0048		0.0052		0.063	
8490		0.0031		0.0031		3370		3370		0.0050		0.0050		0.050	
710		0		0		180		240		0		0		0	
22		22		21		22		22		22		22		22	
6870		0.0014		0.0014		3070		2870		0.0021		0.0021		0.016	
9920		0.0730		0.0086		3730		3690		0.0125		0.0125		0.296	
7166		0		0		3124		2918		0		0		0	
0		21		20		0		0		22		21		21	
		95%		95%						100%		95%		95%	
				1											
NA		0.779914654		0.663		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	2	3	2	3	3	3	3	3		
0.054		1.14		1.11		1		0.89			
0.050		1.13		1.12		1		0.75			
0		0		0		1		1			
22		22		22		22		22			
0.016		0.64		0.66		0		0.16			
0.155		1.45		1.52		3		2.38			
0		1		1		0		0			
22		0		0		14		17			
100%						64%		77%			
		2		2		1		1			
NA		NA		NA		55.03		54.26			
NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%			

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-08M																
Sample Date																
09/06/04														22.2	3	
10/19/04	6.5	2	15.88	4		66	2		271	3		2.93	3	20.5	3	
03/15/05	6.29	3	12.79	4		51	2					3.01	3	25.1	3	
05/12/05	6.2	2	12.38	4		61	2		224.7	4		3.55	3	26.3	3	
08/20/05	6.29	3	12.36	4		46	2		109	3		3.99	3	24.2	3	
11/06/05	6.39	3	6.8	2		59	2		285	3		2.97	3	22.1	3	
03/10/06	6.83	3	11.51	4		59	2		311	3		2.55	3	24.6	3	
05/20/06	6.04	3	12.87	4		57	2		249.5	4		3.18	3	25.5	3	
08/20/06	6.35	3	11.92	4		58	2		209	3		3.33	3	26.3	3	
10/25/06														23.1	3	
10/26/06	6.47	3	13.35	4		58	2		217.2	4		2.99	3			
03/17/07	6.22	3	10.79	4		34	2		189.8	4		2.48	3	22.6	3	
05/14/07	6.24	3	11.17	4		34	2		163.9	4		3.26	3	25.8	3	
08/20/07	6.33	3	11.86	4		32	2		94.2	3		3.7	2	24.6	3	
11/15/07	6.55	3	12.55	4		56	2		225.1	4		2.57	3	28.2	3	
03/22/08	6.22	3	11.33	4		60	1		119.4	4		2.64	3			
03/24/08														25.8	3	
05/20/08	6.25	3	11.34	4		64	2		245.3	4		3.28	3	25.3	3	
08/26/08	6.32	3	13.33	4		59	2		337.6	4		3.53	3	22.9	3	
10/18/08	6.38	3	12.91	4		59	2		122.6	4		2.65	3	23.4	3	
08/21/09			10.17	4		68	2				R	3.51	3	22.2	3	
08/18/10	6.21	3	10.64	4		118	3		170.8	4		3.6	2	23.1	3	
08/28/11	6.31	3	10.06	4		51.3	3		113.2	4		3.75	3	25.2	3	
08/20/12	6.62	3	12.26	4		60	1		187.4	4		3.47	3	24.1	3	

			result > crit										result <20			result > crit						
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
60	1		52.5	3		**0.075**	2		5.6	2	J	32	2		**0.155**	3						
65	2		18.8	3		**0.075**	2		11.2	3		29.5	3		**0.155**	3						
70	1		50	1		**0.075**	2		7	1	J	29	2		0.05	1	J					
65	2		61.2	3		**0.075**	2		8.75	3		30	1		0.08	1	J					
65	2		47.5	3		**0.075**	2		5	1		30.5	3		0.056	2	J					
60	1		35	2		**0.075**	2		8.5	2		30.5	3		0.038	2	J					
50.0	1		22.5	3		**0.150**	2		8.00	1		34.0	2		0.0500	1	J					
65.0	2		48.8	3		0.200	1	J	6.25	3		33.0	2		0.366	3						
55.0	2		67.5	3		0.300	1	J	10.3	3		32.0	2		0.0990	2	J	**0.0155**	3		0.0990	2
50.0	1		46.3	3		**0.075**	2		7.75	3	J	30.0	1		0.105	3		**0.0155**	3		0.105	3
50.0	1		37.5	3		**0.150**	2		8.25	3	J	34.0	2		0.0700	1	J	**0.0155**	3		0.0555	3
60.0	1		51.3	3		**0.075**	2		6.50	2	J	31.0	2		**0.050**	1	U					
60.0	1		45.0	2		**0.075**	2		10.0	1		30.6	3		0.0740	2	J					
60.0	1		60.0	1		**0.075**	2		8.00	1	J	30.8	3		**0.0155**	3						
69.7	3		53.8	3		**0.075**	2		12.7	3		34.3	3		0.0950	2	J					
64.8	3		45	2		0.207	3	J	6.69	3	J	33.5	3		0.353	3						
62.9	3		45	2	J	0.421	3	J	5.84	3	J	32.1	3	J	**0.050**	1	U					
60.8	3		31.3	3		**0.076**	2		6.4	2	J	30.4	3		0.0835	3	J					
65.6	3		48.8	3		0.612	3		4.7	2	J	29	2		0.107	3						
63.8	3		27	2		**0.075**	2		6	1	J	30.1	3		**0.050**	1	U					
66.2	3		65	2		**0.0755**	3		6.97	3	J	30.1	3		**0.050**	1	U					
64.4	3		29	2		**0.075**	2		**5.0**	1	U	27.8	3		**0.050**	1	U					

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.07	1	J			
	0.0155	3				
	0.0921	3				
	0.142	3				
	0.018	2	J			
	0.018	2	J			
	0.0110	2				
	0.0310	2				
J	0.0120	2		**0.050**	1	UJ
	0.0340	2		**0.050**	1	UJ
J	0.0220	2	J-			R
	0.0175	3				
	0.0142	3				
	0.0188	3				
	0.0150	2				
	0.0089	2	J			
	0.0129	3				
	0.0092	2	J			
	0.0107	3				
	0.0152	3				
	0.0169	3				
	0.0127	3				

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.794	3		0.144	3		1.12	3		**0.00125**	3		**0.00125**	3		0.20	1	J				**0.0155**			
0.759	3	J-	**0.05**	1	UJ	2.63	3		**0.00125**	3		0.003	1	J	**0.0295**	3					**0.0155**			
0.672	3		0.043	2	J	1.28	3		**0.0025**	2	U	**0.0025**	2	U	0.18	2	J				**0.05**			
0.635	3		0.039	2	J	1.18	3		**0.00125**	3		**0.00125**	3		0.20	1	J				**0.0155**			
0.617	3		0.032	2	J	1.11	3		**0.0025**	2	UJ	**0.0025**	2	UJ	0.79	2	J				**0.0155**			
0.616	3		**0.0155**	3		1.16	3		**0.00125**	3		**0.00125**	3		0.13	2	J				**0.0155**			
0.650	2		**0.0155**	3		1.18	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.654	3		0.0510	2	J	1.45	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.150			
0.657	3		0.0630	2	J	1.14	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.711	3		0.0690	2	J	1.16	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.591	3		**0.0155**	3		0.933	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.716	3		0.0460	2	J	1.12	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.570	2		0.0330	2	J	0.854	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.583	3		0.0390	2	J	1.03	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.557	3		0.0350	2	J	0.938	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.618	3		0.036	2	J	0.92	2		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.075**	2		**0.0155**			
0.562	3		0.047	2	J	0.951	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.514	3		0.04	1	J	0.886	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.935	3		**0.0155**			
0.504	3		**0.0155**	3		0.871	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		0.28	2	J	**0.0155**			
0.584	3		0.074	2	J	0.994	3		0.0018	2	J	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.644	3		0.073	2	J	1.09	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.521	3		0.06	1	J	0.999	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
		3	**3.9**	2	**3.9**	2	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.96	3 J+	4.07	3 J+							
		3	**3.9**	2	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.53	3	3.9	2							
		1 U	2.6	2 J+	0.745	3 J+	0.0104	3 J	0.00994	3 J	0.0983	3	0.0617	3	4.17	3	4.09	3							
		3	2.21	3 J+	1.08	3 J+	**0.01**	1 U	**0.01**	1 U	0.0728	3	0.0727	3	3.6	2	4.33	3							
		3	3.07	3	2.51	3	0.0178	3 J+	0.0112	3 J+	**0.125**	3	**0.25**	2 U	3.78	3	3.44	3							
		3	2.3	2 J+	**1**	1 U	**0.00155**	3	**0.00155**	3	**0.25**	2 U	**0.125**	3	3.29	3	3.21	3							
		1 U	2.83	3 J+	3.95	3 J+	0.0218	3 J	0.0178	3 J	**0.155**	3	**0.155**	3	4.04	3	3.96	3							
		2	61.9	3	**1.00**	1 U	0.0214	3 J	0.0228	3 J	**0.155**	3	**0.155**	3	3.72	3	3.96	3							
		3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.13	3	4.24	3							
		1 U	11.2	3	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.62	3 J+	3.69	3 J+							
		3	13.5	3 J		R	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	3.84	3 J+	4.13	3 J+							
		3	**1.00**	1 U	2.27	3 J+	0.0432	3 J	0.0626	3	**0.155**	3	**0.155**	3	4.11	3	4.32	3							
		3	3.37	3 J+	**1.00**	1 U	0.0314	3 J	0.0164	3 J	**0.155**	3	**0.155**	3	4.24	3	4.14	3							
		3	3.23	3	**1.00**	1 U	**0.0075**	2	0.0170	2 J	**0.155**	3	**0.155**	3	4.24	3	4.44	3							
		3	6.79	3	1.87	3 J	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	4.07	3	3.92	3							
		3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.99	3	4.04	3							
		1 U	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.58	3	3.8	2							
		3	2.59	3	0.915	3 J	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.5	2	3.52	3							
		3	**1.00**	1 U	**0.310**	2	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.32	3	3.72	3							
		3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	3.76	3 J+	3.53	3 J+							
		3	4.53	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	3.95	3	4.15	3							
		3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	3.85	3	3.9	2							

| | | |

				depends on Hardness				depends on Hardness												depends on Hardness									
				result > crit				result > crit												result > crit								result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L				µg/L	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
6470	3			0.222	3 J+	0.254	3 J+	**0.05**	1 U			R		**0.1**	1 U	0.304	3 J+
6980	3			0.336	3	0.184	3 J	**0.0155**	3	**0.0155**	3			**0.1**	1 U	**0.1**	1 U
6780	3			0.31	2	0.207	3	0.0115	3 J	0.0155	3 J			0.0862	3	**0.03**	1 U
6240	3			0.397	3	**0.03565**	4	0.0123	3 J	0.0124	3 J			0.0692	3 J+	**0.03**	1 U
6550	3			0.654	3 J+	0.32	2 J+	0.0354	3 J+	0.0336	3 J+			0.398	3 J+	0.351	3 J+
6180	3			0.337	3	0.254	3	0.0294	3 J+	0.0186	3 J+			0.183	3 J+	0.177	3 J+
6620	3			0.754	3 J+	0.574	3 J+	**0.0100**	1 U	0.0108	3 J			0.285	3 J+	0.170	2 J+
7530	3			0.364	3 J		R	0.0296	3	0.0228	3			0.241	3	0.206	3
7690	3			0.447	3 J+	0.491	3 J+	0.0280	2	0.0270	2			0.230	2 J+	0.204	3 J+
6790	3			0.563	3 J		R	**0.0065**	2	0.0144	3 J			0.156	3 J+	0.183	3 J+
7280	3			0.343	3 J+	0.436	3 J+	0.0214	3 J+	0.0278	3 J+			0.158	3 J		R
7570	3			0.483	3	0.479	3	**0.0100**	1 U	**0.0100**	1 U			0.201	3 J+	0.296	3 J+
7460	3			0.600	1	0.472	3	0.0194	3 J	0.0130	2 J			0.351	3 J+	0.198	3 J+
8560	3			0.529	3 J+	0.491	3 J+	**0.0050**	1	**0.0050**	1			0.154	3	0.164	3
7010	3			0.493	3	0.362	3	**0.0100**	1 U	**0.0100**	1 U			0.152	3	0.169	3
7170	3			0.265	3	0.323	3	0.0101	3 J	0.0157	3 J			**0.050**	1 U	0.138	3 J+
6890	3			0.365	3	0.436	3	0.0119	3 J	0.0129	3 J			0.155	3 J+	0.188	3 J+
6920	3			0.489	3	0.361	3	0.013	2 J	0.0135	3 J			0.16	2	0.138	3
6660	3			0.324	3	0.265	3	**0.0050**	1	**0.0050**	1			**0.250**	2 U	**0.250**	2 U
6300	2			0.39	2 J+	0.296	3 J+	**0.0050**	1	**0.0050**	1			**0.250**	2 U	**0.250**	2 U
7300	2			0.751	3	0.441	3	0.0181	3 J	0.0115	3 J			**0.250**	2 U	**0.250**	2 U
6740	3			0.511	3	0.285	3	0.0112	3 J	0.012	2 J			**0.250**	2 U	**0.250**	2 U

									depends on Hardness				depends on Hardness																
result > crit				result > crit					result > crit				result > crit												result > crit				
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
43.9	3	J+	46.5	3	J+		**0.05**	1			**0.05**	1			1450	3		1500	2		1.21	3	J+	1.57	3	J+
3.1	2		**3.1**	2			**0.05**	1			**0.05**	1			1460	3		1700	2		**0.5**	1	U	**0.25**	2	
3.74	3	J	4.04	3	J		**0.011**	2			**0.011**	2			1910	3		1650	3		0.33	2		0.243	3	
2.93	3	J	**1.325**	4			**0.011**	2			**0.035**	2	U		1770	3		1570	3		0.196	3	J+	0.139	3	J+
17.3	3	J	**3.1**	2			**0.0155**	3			0.0852	3	J		1680	3		1670	3		0.293	3		**0.1**	1	U
3.1	2		**3.1**	2			**0.05**	1	U		**0.05**	1	U		1570	3		1570	3		**0.1**	1	U	**0.1**	1	U
10.0	1	U	**10.0**	1	U		0.0930	2	J+			R			1910	3		1980	3		0.166	3	J+		R	
3.10	2		7.19	3	J		0.230	2			0.0944	3			1840	3		1750	3		0.220	2		0.143	3	
3.10	2		**3.10**	2			**0.0155**	3				R			1870	3		1920	3		0.172	3	J+	0.177	3	J+
10.0	1	U	**10.0**	1	U		**0.0155**	3			**0.050**	1	U		1730	3		1830	3		0.112	3	J+	0.112	3	J+
10.0	1	U	37.9	3	J+		**0.050**	1	U		**0.050**	1	U		1560	3		1860	3		0.417	3	J		R	
10.0	1	U	**10.0**	1	U		0.123	3			0.136	3			1930	3		2010	3		0.137	3	J+	0.158	3	J+
10.0	1	U	**10.0**	1	U		0.113	3	J+		**0.0155**	3			1700	2		1810	3		0.301	3	J+	0.0938	3	J+
11.1	3	J	9.93	3	J		**0.0155**	3			**0.0155**	3			1970	3		2080	3		0.128	3		0.0950	2	
35.2	3		26.0	2			**0.0155**	3			**0.0155**	3			1870	3		1850	3		0.654	3		0.141	3	
21.2	3		29.2	3			**0.0155**	3			**0.0155**	3			1780	3		1770	3		0.0901	3	J+	0.0904	3	J+
23.9	3		27.6	3			**0.0155**	3			**0.0155**	3			1600	2		1700	2		0.101	3		0.111	3	
22	2		17.1	3	J		**0.0155**	3			**0.0155**	3			1690	3		1780	3		0.12	2		0.0842	3	
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3			1610	3		1800	2		0.0878	3	J+	0.0599	3	J+
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3			1710	3		1690	3		0.0838	3	J+	0.0937	3	J+
14.1	3	J	7.87	3	J		0.039	2	J		**0.0155**	3			1830	3		1900	2		1.15	3		0.119	3	
7.28	3	J	8.4	2	J		**0.0155**	3			**0.0155**	3			1800	2		1800	2		0.0936	3	J+	0.0901	3	J+

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
		0.155	3
		0.155	3
J		**0.0143**	3
		0.032	2 J
		0.165	3 J
		0.0775	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3

		depends on HARD; revised 2013						depends on Total Ag																			
		result > crit						result > crit																			
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF				
Silicon				**Silver[8]**						**Sodium**						**Thallium**								**Tir**			
Dissolved			Total				Dissolved			Total			Dissolved			Total			Dissolved			Total					
µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L					
9210	3		**0.0031**	2		**0.0031**	2		2260	3		2420	3		**0.0125**	3		**0.0125**	3		**0.155**	3					
8470	3		**0.0031**	2		**0.0031**	2		2380	3	J+	2690	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3					
6820	3		**0.001435**	4		**0.001435**	4		2680	3		2350	3		**0.002125**	4		**0.002125**	4		0.266	3	J+				
8020	3		**0.001435**	4		**0.001435**	4		2870	3		2400	2		**0.002125**	4		**0.002125**	4		**0.0302**	3					
9090	3		**0.0031**	2		**0.0031**	2		2670	3		2700	2		**0.0031**	2		**0.0031**	2		**0.031**	2					
9330	3		**0.0031**	2		**0.0031**	2		2480	3		2500	2		**0.0031**	2		**0.0031**	2		**0.031**	2					
9030	3		**0.0031**	2		**0.0031**	2		2940	3		3070	3		**0.0025**	2		**0.0025**	2		**0.0155**	3					
8880	3		0.0614	3		**0.0031**	2		3070	3		2920	3		**0.0025**	2		0.0072	2	J	**0.0155**	3					
8860	3		**0.0031**	2		**0.0031**	2		2840	3		2930	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8360	3		**0.0031**	2		**0.0031**	2		2720	3		2930	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9130	3		**0.0031**	2		**0.0031**	2		2410	3		2870	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9310	3		**0.0031**	2		**0.0031**	2		3010	3		3150	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9430	3		**0.0031**	2		**0.0031**	2		2860	3		3010	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
10400	3		**0.0031**	2		**0.0031**	2		3200	2		3400	2		**0.0050**	1		**0.0050**	1		**0.050**	1					
8460	3		**0.0031**	2		**0.0031**	2		2880	3		2830	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8260	3		**0.0031**	2		**0.0031**	2		2700	2		2680	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8260	3		**0.0031**	2		**0.0031**	2		2520	3		2670	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8540	3		**0.0031**	2		**0.0031**	2		2690	3		2850	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8610	3		**0.0031**	2		**0.0031**	2		2570	3		2910	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
8040	3		**0.0031**	2		**0.0031**	2		2680	3		2640	3		**0.0050**	1		**0.0050**	1		**0.050**	1					
9000	1		**0.0031**	2		**0.0031**	2		2750	3		2860	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					
8690	3		**0.0031**	2		**0.0031**	2		2750	3		2750	3		**0.0031**	2		**0.0031**	2		**0.0310**	2					

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium															**Zinc[4]**		
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.155	3		**0.125**	3		**0.125**	3			**0.75**	2	U	1.66	3	J+								
0.155	3		**0.125**	3		**0.125**	3			**0.235**	3		**0.75**	2	U								
0.0302	3		0.154	3		0.137	3			0.510	2	J	**0.2345**	4									
0.079	2	J	0.133	3		0.156	3			**0.2345**	4		**0.50**	1	U								
0.031	2		**0.1**	1		**0.1**	1			**0.75**	2	U	**0.75**	2	U								
0.031	2		**0.1**	1		**0.1**	1			**0.75**	2	U	**0.75**	2	U								
0.0155	3		**0.110**	2		**0.110**	2			2.68	3	J+			R								
0.0155	3		0.543	3		**0.110**	2			1.91	3	J+	1.61	3	J+								
0.050	1		**0.250**	2		**0.250**	2			**0.50**	1	U			R								
0.050	1		**0.250**	2		**0.250**	2			**0.155**	3		**0.50**	1	U								
0.050	1		0.432	3	J	**0.155**	3			2.04	3	J+	1.27	3	J+								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	1.40	2	J+								
0.050	1		**0.155**	3		**0.155**	3			6.68	3	J+	2.76	3	J+								
0.050	1		**0.155**	3		**0.155**	3			2.15	3		2.06	3									
0.050	1		**0.155**	3		**0.155**	3			0.750	2	J	0.967	3	J								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			1.02	3	J+	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			2.05	3	J+	**0.50**	1	U								
	R		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		0.364	3	J	0.332	3	J		**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6		12		58		202		3		24.2	
Median	6		12		59		209		3		24.4	
St. Deviation	0		2		17		71		0		2	
# of values	20		21		21		19		21		22	
Minimum	6.04		6.8		32		94.2		2.48		20.5	
Maximum	6.83		15.88		118		337.6		3.99		28.2	
Lowest fifth percentile	6		10		34		108		3		22	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	80%		0%		0%		0%		0%		0%	
% of DWS exceedences	0%		0%		0%		0%		0%		0%	

0	2	1	3	3	2	1	2	1	3	3	2	4	3	4	3
62		44.9		0.144		7.5		31		0.100		0		0	
63		46.9		0.075		7.0		31		0.072		0		0	
6		13		0		2		2		0		0		0	
22		22		22		22		22		22		3		3	
50		18.8		0.075		4.7		28		0.016		0.0155		0.0555	
70		67.5		0.612		12.7		34		0.366		0.0155		0.105	
50		23		0		5		29		0		0		0	
0		0		17		1		0		8		3		0	
				77%		5%				36%		100%			
				4		11				10				2	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

4	3	3	2
0.03		0	
0.02		0	
0		0	
22		2	
0.01		0.05	
0.14		0.05	
0		0	
1		2	
5%		100%	
5			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	3	2	2	3	5	2	5	2	3	3	2	2	4
0.624		0.047		1.14		0.00130		0.00128		0.18		0		0.0279
0.618		0.042		1.10		0.00100		0.00075		0.16		0		0.0155
0		0		0		0		0		0		0		0
22		22		22		22		22		22		7		22
0.504		0.016		0.85		0.00075		0.00075		0.03		0.075		0.0155
0.794		0.144		2.63		0.00250		0.00300		0.79		0.935		0.1500
1		0		1		0		0		0		0		0
0		5		0		21		21		17		5		21
		23%				95%		95%		77%		71%		95%
		16				1		1		5		1		
230		NA		NA		NA		0.0052		NA		NA		6.87
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	2	4	2	3	3	3	3	2	3	2	3
	6.1		2.0		0.0155		0.0157		0.142		0.140		3.83		3.93	
	2.7		1.0		0.0075		0.0087		0.155		0.155		3.85		3.96	
	13		3		0		0		0		0		0		0	
	22		21		22		22		22		22		22		22	
	1.0		0.3		0.0016		0.0016		0.073		0.062		3.29		3.21	
	61.9		12.5		0.0432		0.0626		0.250		0.250		4.24		4.44	
	1		1		0		0		0		0		3		3	
	9		14		16		15		20		20		0		0	
	41%		67%		73%		68%		91%		91%					
			2		5		5									
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0105		0.0105		0		0		2		2		0.0093		0.0093		6840	
0.0125		0.0125		0		0		1		1		0.0075		0.0075		6800	
0		0		0		0		1		1		0		0		520	
22		22		21		21		22		22		22		22		22	
0.0015		0.0015		0.00155		0.00155		1		1		0.0031		0.0031		5810	
0.0125		0.0125		0.75		0.75		5		5		0.0185		0.0185		8060	
0		0		0		0		1		1		0		0		6232	
22		22		19		21		17		18		22		22		0	
100%		100%		90%		100%		77%		82%		100%		100%			
				1				3		2							
NA		NA		NA		NA		NA		NA		0.088		0.086		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	3	3	3	3	3
6990		0.451		0.348		0.02		0.0149		0.2		0.193		
6910		0.422		0.342		0.01		0.013		0.2		0.188		
560		0		0		0		0		0		0		
22		22		20		22		21		22		21		
6180		0.222		0.036		0.01		0.005		0.1		0.030		
8560		0.754		0.574		0.05		0.0336		0.4		0.351		
6243		0		0		0		0		0		0		
0		0		1		9		6		7		7		
				5%		41%		29%		32%		33%		
				1		8		10						
NA		10.98		10.56276		NA		NA		2.569		2.466		
NA		100		NA		NA		NA		NA		NA		
0%		0%		0%		0%		0%		0%		0%		
0%		0%		0%		0%		0%		0%		0%		

0	2	1	2	4	3	4	3	-1	3	-1	3	3	3	3	3		
12.0		12.8		0.05		0.04		1740		1780		0.30		0.20			
10.0		9.2		0.02		0.02		1750		1790		0.17		0.11			
11		13		0		0		150		150		0		0			
22		22		22		20		22		22		22		20			
2.9		1.3		0.01		0.01		1450		1500		0.08		0.06			
43.9		46.5		0.23		0.14		1970		2080		1.21		1.57			
3		3		0		0		1465		1570		0		0			
11		11		17		17		0		0		2		3			
50%		50%		77%		85%						9%		15%			
6		6		1		1											
1000		1000		0.466		0.471		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

5	2	5	2	4	3	4	3	3	3	3	3	0	3	0	3	3	3
0.009		0		0.082		0.083		0.314		0.338		309		322		0.136	
0.001		0		0.088		0.094		0.304		0.33		312		316		0.155	
0		0		0		0		0		0		23		23		0	
22		21		22		22		22		20		22		21		22	
0.000		0.0004745		0.008		0.008		0.160		0.131		272		281		0.014	
0.032		0.0315		0.155		0.155		0.510		0.578		363		383		0.155	
0		0		0		0		0		0		278		294		0	
21		20		3		6		3		3		0		0		21	
95%		95%		14%		27%		14%		15%						95%	
1		1		3		2		1		1						1	
0.77		0.77		NA		NA		14.55		14.50		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.140	
0.155	
0	
22	
0.014	
0.165	
0	
20	
91%	
2	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
8740		0.0056		0.0029		2720		2800		0.0048		0.0051		0.062	
8780		0.0031		0.0031		2710		2840		0.0050		0.0050		0.050	
690		0		0		230		250		0		0		0	
22		22		22		22		22		22		22		22	
6820		0.0014		0.0014		2260		2350		0.0021		0.0021		0.016	
10400		0.0614		0.0031		3200		3400		0.0125		0.0125		0.266	
8021		0		0		2382		2401		0		0		0	
0		21		22		0		0		22		21		21	
		95%		100%						100%		95%		95%	
												1			
NA		0.282177939		0.240		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	3	3	3	3
0.054		0.193		0.159		1.38		1.15	
0.050		0.155		0.155		0.89		1.12	
0		0		0		1		1	
21		22		22		22		20	
0.016		0.100		0.100		0.16		0.23	
0.155		0.543		0.332		6.68		2.76	
0		0		0		0		0	
20		17		19		13		13	
95%		77%		86%		59%		65%	
1		2		1		2		1	
NA		NA		NA		33.35		32.88	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-08S																
Sample Date																
09/06/04	6.33	3	13.83	4		46	2		257	3		3.83	3	14.5	3	
10/19/04	6.56	3	12.26	4		48	2		268	3		3.69	3	15.3	3	
03/15/05	6.2	2	11.31	4		43	2					3.48	3	16.5	3	
05/12/05	6.09	3	12.99	4		42	2		195.6	4		3.66	3	17.5	3	
08/20/05	6.55	3	11.48	4		33	2		75	2		5.16	3	14.8	3	
11/06/05	6.18	3	6.79	3		44	2		242	3		3.26	3	17.3	3	
03/10/06	6.99	3	11.65	4		42	2		310	2		2.65	3	17.5	3	
05/20/06	6.08	3	11.73	4		42	2		239.9	4		3.27	3	18.2	3	
08/20/06	6.35	3	12.9	3		47	2		192.8	4		3.54	3	19.0	2	
10/25/06	6.34	3	13.22	4		47	2		235.8	4		3.51	3	17.8	3	
03/17/07	6.25	3	11.3	3		24	2		202.2	4		2.5	2	14.8	3	
05/14/07	6.13	3	11.11	4		24	2		160.3	4		3.37	3	16.5	3	
08/20/07	6.19	3	13	2		22	2		138.5	4		3.34	3	16.1	3	
11/14/07	6.32	3	15.49	4		42	2		235.2	4		2.89	3			
11/15/07														20.0	1	
03/23/08	6.73	3	10.79	4		36	2		108.1	4		3.1	2	17.0	2	
05/20/08	6.22	3	12.64	4		49	2		203	3		2.78	3	18.8	3	
08/26/08	6.19	3	13.47	4		36	2		305.1	4		3.88	3	13.4	3	
10/18/08	6.23	3	12.97	4		41	2		132.9	4		3.59	3	17.4	3	
08/21/09			11.02	4		47	2				R	3.61	3	15	2	
08/18/10	6.01	3	12.42	4		80	1		190.6	4		3.49	3	15.3	3	

			result > crit										result <20			result > crit						
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			Total Dissolved Solids			Total Suspended Solids			Acidity			Alkalinity			Nitrate/ Nitrite			Nitrite			Nitrate	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
38	2		42.5	3		**0.075**	2		3.4	2 J		20	1		**0.155**	3						
50	1		25	2		0.3	1 J		6	1 J		22	2		**0.155**	3						
42	2		32.5	3		**0.075**	2		5.5	2 J		20	1		0.05	1 J						
41	2		45	2		**0.075**	2		6.88	3		20.5	3		0.07	1 J						
38.5	3		32.5	3		**0.075**	2		3.75	3 J		17	2		0.205	3						
46.5	3		20	1		0.4	1 J		6.5	2		22.5	3		0.0355	3 J						
48.0	2		28.7	3		**0.075**	2		6.75	3		24.0	2		0.0565	3 J						
43.0	2		38.8	3		**0.150**	2		7.25	3		23.0	2		0.0900	1 J						
47.0	2		58.7	3		0.300	1 J		7.00	1 J		20.0	1		0.0735	3 J		**0.0155**	3		0.0735	3
48.0	2		45.0	2		**0.075**	2		8.00	1 J		24.0	2		0.0705	3 J		**0.0155**	3		0.0705	3
43.0	2		25.0	2		0.200	1 J		8.50	2 J		24.0	2		0.0840	2 J		**0.0155**	3		0.0670	2
44.0	2		30.0	1		**0.0775**	3		6.00	1 J		23.0	2		**0.050**	1 U						
43.0	2		21.3	3		**0.075**	2		8.50	2 J		18.1	3		0.0910	2 J						
48.0	2		51.3	3		**0.0765**	3		7.50	2 J		22.1	3		**0.0155**	3						
48.3	3		35.0	2		**0.075**	2		7.70	2 J		23.0	2		0.0870	2 J						
50.5	3		21.3	3		**0.075**	2		5.03	3 J		93.3	3		0.0655	3 J						
39.5	3		47.5	3		0.321	3 J		4.64	3 J		17.8	3		**0.050**	1 U						
43.6	3		23.8	3		**0.080**	1		4.8	2 J		20.4	3		0.177	3						
43.7	3		35	2		31.1	3		3.8	2 J		20	1		**0.050**	1 U						
45.5	3		10	1		**0.075**	2		5	1 J		20.8	3		**0.050**	1 U						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0155	3				
	0.0155	3				
	0.075	2				
	0.0335	3				
	0.016	2	J			
	0.014	2	J			
	0.0098	2	J			
	0.0260	2				
J	0.0160	2		**0.050**	1	UJ
J	0.0300	1		**0.0155**	3	
J	0.0180	2		**0.050**	1	UJ
	0.0108	3				
	0.0108	3				
	0.0213	3				
	0.0185	3				
	0.0078	2	J			
	0.0121	3				
	0.0063	2	J			
	0.0532	3				
	0.0272	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.687	3		0.127	3		0.865	3		0.0027	2	J	**0.00125**	3		**0.065**	2					**0.0155**			
0.7	1	J-	**0.0155**	3		1.34	3		**0.00125**	3		0.0027	2	J	**0.0295**	3					**0.0155**			
0.714	3		0.037	2	J	0.995	3		**0.0025**	2	U	**0.0025**	2	U	0.16	2	J				**0.0155**			
0.627	3		**0.0155**	3		1.23	3		**0.00125**	3		**0.00125**	3		0.14	2	J				**0.0155**			
0.792	3		**0.0155**	3		0.948	3		**0.00125**	3		**0.00125**	3		0.21	2	J				**0.0155**			
0.687	3		**0.0155**	3		1.78	3		**0.00125**	3		**0.00125**	3		0.13	2	J				**0.0155**			
0.669	3		**0.0155**	3		0.980	2		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.638	3		0.0350	2	J	0.926	3		**0.00125**	3		**0.00125**	3		**0.155**	3					0.0420			
0.780	2		0.0490	2	J	4.88	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0320			
0.700	1		0.0610	2	J	2.55	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.542	3		0.0310	2	J	1.45	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.729	3		0.0370	2	J	0.874	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.580	2		**0.0155**	3		1.46	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.561	3		**0.0155**	3		1.49	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.553	3		**0.0155**	3		0.674	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0414			
0.557	3		**0.0155**	3		1.1	2		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.505	3		0.043	2	J	0.865	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.569	3		0.032	2	J	1.38	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.476	3		0.076	2	J	0.617	3								**0.155**	3		0.332	3	J	**0.0155**			
0.517	3		0.067	2	J	1.08	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit		
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3	**12.5**	3	U	**12.5**	3	U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	2.78	3	J+	2.56	3	J+
	3	**12.5**	3	U	**12.5**	3	U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.32	3		3.28	3	
	3	13.7	3		1.18	3	J+	0.0235	3	0.0219	3	0.0757	3	0.0662	3	3.36	3		3.13	3	
	3	17.4	3	J+	1.75	3	J+	0.0214	3	J+	**0.01**	1	U	0.0518	3	0.048	2		3.97	3		4.45	3	
	3	16.9	3		5.52	3		0.018	2	J		R		**0.125**	3	**0.125**	3		2.69	3		2.59	3	
	3	24	2		5.75	3	J+	**0.00155**	3	**0.00155**	3	**0.125**	3	**0.125**	3	3.96	3		3.56	3	
	1	U	6.92	3	J+	**1.00**	1	U	0.0228	3	J	0.0152	3	J	**0.155**	3	**0.155**	3		3.07	3		2.68	3	
	2	J	6.94	3		**1.00**	1	U	0.0268	3	J	0.0266	3	J	**0.155**	3	**0.155**	3		2.77	3		2.95	3	
	2	J	16.5	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		4.65	3		4.70	2	
	1	U	21.1	3		2.07	3		**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		4.39	3	J+	4.33	3	J+
	3		5.64	3	J+	2.68	3	J+	**0.0250**	2	U	**0.0250**	2	U	**0.155**	3	**0.155**	3		2.60	2	J+	2.49	3	J+
	1	U	4.65	3	J+	2.39	3	J+	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		2.91	3		3.00	1	
	3		7.91	3	J+	**1.00**	1	U	0.0168	3	J	**0.0075**	2		**0.155**	3	**0.155**	3		2.58	3		2.38	3	
	3		10.5	3		**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		3.58	3		3.44	3	
	3	J	4.41	3		1.35	3	J	0.115	3		0.0740	2		**0.155**	3	**0.155**	3		2.79	3		2.59	3	
	3		20.7	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		3.29	3		2.96	3	
	1	U	10.3	3	J		R		**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		2.12	3		2.09	3	
	3		16.3	3		1.32	3	J	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		3.18	3		3.14	3	
	3		45.9	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		2.84	3		2.53	3	
	3		4.14	3	J+	**1.00**	1	U	**0.0075**	2		**0.0075**	2		**0.155**	3	**0.155**	3		2.65	3	J+	2.53	3	J+

| | | |

					depends on Hardness				depends on Hardness												depends on Hardness								
					result > crit				result > crit												result > crit								result > crit
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N		CR_NSF	CR_NVF	CR_F		CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F		CO_FSF	CO_FVF	CU_N		CU_NSF	CU_NVF	CU_F		CU_FSF	CU_FVF
Calcium						**Chromium[4,6]**							**Cobalt**								**Copper[4]**					
		Dissolved				Total				Dissolved				Total			Dissolved				Total				Dissolved	
		µg/L				µg/L				µg/L				µg/L			µg/L				µg/L				µg/L	
3650	3				**0.1**	1	U		**0.1**	1	U		**0.05**	1	U	0.111	3	J+			**0.1**	1	U			R
5210	3				0.532	3			0.517	3			**0.05**	1	U	**0.05**	1	U			**0.1**	1	U		**0.1**	1	U
4860	3				0.476	3			0.157	3	J		0.0228	3	J	0.0145	3	J			0.181	3			0.0982	3	
4560	3				0.452	3			0.151	3	J		0.0301	3		0.0214	3	J			0.275	3	J+		0.174	3	J+
4470	3				0.966	3	J+		**0.1**	1	U		0.0368	3	J+	0.0198	3	J+			0.665	3	J+		0.375	3	J+
5090	3				0.513	3			**0.1**	1	U		0.0414	3	J+	0.0184	3	J+			0.307	3	J+		0.281	3	J+
4640	3				0.879	3	J+		0.541	3	J+		**0.0100**	1	U	0.0102	3	J			0.606	3	J+		0.464	3	J+
5410	3				0.597	3			0.586	3			0.0302	3		0.0268	3				0.859	3			0.797	3	
6340	3				0.465	3	J+		0.456	3	J+		0.0320	2		0.0258	3				0.938	3	J+		0.629	3	J+
5640	3				0.470	2			0.463	3			0.0300	1		**0.0065**	2				0.746	3	J+		0.567	3	J+
4510	3				0.332	3	J+		0.234	3	J+		**0.0100**	1	U	**0.0100**	1	U			1.41	3	J+		1.28	3	J+
5070	3				0.364	3			0.325	3			**0.0100**	1	U	**0.0050**	1				1.41	3	J+		1.22	3	J+
4760	3				0.491	3			0.289	3			0.0200	1		0.0118	3	J			1.03	3	J+		1.05	3	J+
6100	2				0.432	3	J+		0.323	3	J+		0.0184	3	J	**0.0050**	1				0.744	3			0.553	3	
4910	3				0.370	2			0.264	3			**0.0050**	1		**0.0050**	1				2.02	3			1.46	3	
5570	3				0.347	3			0.249	3			0.0233	3		0.0116	3	J			1.34	3	J+		1.12	3	J+
4010	3				0.267	3			0.207	3			0.0107	3	J	**0.0050**	1				0.802	3	J+		0.828	3	J+
5370	3				0.392	3			0.215	3			0.0194	3	J	0.0138	3	J			0.783	3			0.615	3	
4390	3				0.847	3			**0.100**	1	U		0.0274	3	J+	**0.0050**	1				1.88	3	J+		1.32	3	J+
4700	2				0.348	3	J+		0.259	3	J+		**0.0050**	1		**0.0050**	1				5.25	3	J+		5.65	3	J+

									depends on Hardness				depends on Hardness																
result > crit				result > crit					result > crit				result > crit														result > crit		
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron							**Lead[4]**								**Magnesium**						**Manganese**					
Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved		
µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L		
33.3	3	J+	27.6	3	J+		**0.05**	1			**0.05**	1			796	3		852	3		1.78	3	J+	1.56	3	J+
10	1	U	25.9	3			**0.05**	1			**0.05**	1			932	3		1040	3		4.46	3		3.68	3	
15.8	3		**1.325**	4			**0.011**	2					R		1100	2		950	2		1.92	3		1.49	3	
20.1	3		**1.325**	4			0.0734	3	J+		**0.011**	2			981	3		918	3		6.74	3		5.81	3	
20.9	3		**3.1**	2			0.037	2	J				R		901	3		941	3		1.19	3		0.777	3	
28.5	3		**3.1**	2			**0.05**	1	U		**0.05**	1	U		942	3		922	3		2.6	2		0.768	3	
10.0	1	U	**10.0**	1	U		0.0806	3	J+				R		1260	3		1200	2		0.767	3		0.247	3	J+
7.13	3	J	8.93	3	J		0.0538	3	J				R		1270	3		1180	3		0.549	3		0.312	3	
11.6	3	J	**3.10**	2			0.165	3	J+		**0.050**	1	U		1040	3		1130	3		1.64	3		0.914	3	
32.1	3		**10.0**	1	U		**0.050**	1	U		**0.0155**	3			1050	3		1090	3		1.99	3		0.675	3	J+
10.0	1	U	**3.10**	2			**0.050**	1	U		**0.050**	1	U		954	3		991	3		0.489	3	J+	0.210	2	J+
10.0	1	U	**10.0**	1	U		**0.0155**	3			**0.050**	1	U		1140	3		1180	3		0.298	3	J+	0.207	3	J+
10.0	1	U	**10.0**	1	U		**0.050**	1	U		**0.050**	1	U		956	3		945	3		0.412	3	J+	0.180	2	J+
15.9	3	J	6.93	3	J		**0.0155**	3			**0.0155**	3			1170	3		1200	2		0.502	3		0.243	3	
16.5	3	J	15.6	3	J		**0.0155**	3			**0.0155**	3			1180	3		1110	3		0.261	3		0.155	3	
38	2		23	2			**0.050**	1	U		**0.050**	1	U		1150	3		1120	3		1.3	2	J+	0.27	2	J+
21.9	3		20.6	3			**0.0155**	3			**0.0155**	3			811	3		819	3		0.324	3		0.366	3	
29.4	3		14.6	3	J		**0.050**	1	U		**0.0155**	3			1010	3		981	3		1.1	2		0.25	2	
46.9	3		**3.10**	2			**0.050**	1	U		**0.0155**	3			990	2		1020	3		1.7	2	J+	0.12	2	J+
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3			1010	3		1080	3		0.204	3	J+	0.124	3	J+

| CALC revised 2013 | | |

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
	0.155	3	
	0.0143	3	
	0.0143	3	
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

	depends on HARD; revised 2013				depends on Total Ag																			
	result > crit				result > crit																			
																	result > crit							
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF	
	Silicon				**Silver[8]**							**Sodium**						**Thallium**						**Tir**
	Dissolved				Total			Dissolved				Total			Dissolved			Total			Dissolved			Total
	µg/L				µg/L			µg/L				µg/L			µg/L			µg/L			µg/L			µg/L
7280	3				**0.0031**	2		**0.0031**	2		1740	3		1910	3		**0.0125**	3		**0.0125**	3		**0.155**	3
7110	3				**0.0031**	2		**0.0031**	2		2020	3	J+	2220	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3
5620	3				**0.001435**	4		**0.001435**	4		2000	1		1690	3		**0.002125**	4		**0.002125**	4		0.303	3 J+
6260	3				0.00355	3	J	**0.001435**	4		2160	3		1980	3		**0.002125**	4		0.0118	3		0.103	3 J
7320	3				**0.0031**	2		**0.0031**	2		1950	3		2210	3		**0.0031**	2		**0.0031**	2		**0.031**	2
7800	2				**0.0031**	2		**0.0031**	2		2160	3		2080	3		**0.0031**	2		**0.0031**	2		**0.031**	2
7430	3				**0.0031**	2		**0.0031**	2		2500	2		2400	2		**0.0025**	2		**0.0025**	2		0.0522	3 J
6940	3				**0.0031**	2		**0.0031**	2		2370	3		2200	2		**0.0025**	2		0.0096	2	J	**0.0155**	3
7060	3				**0.0031**	2		**0.0031**	2		2180	3		2390	3		**0.0050**	1		**0.0050**	1		**0.050**	1
7240	3				**0.0031**	2		**0.0031**	2		2570	3		2660	3		**0.0050**	1		**0.0050**	1		**0.050**	1
5660	3				**0.0031**	2		**0.0031**	2		1800	2		1880	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6780	3				**0.0031**	2		**0.0031**	2		2130	3		2210	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6670	3				**0.0031**	2		**0.0031**	2		2120	3		2010	3		**0.0050**	1		**0.0050**	1		**0.050**	1
8220	3				**0.0031**	2		**0.0031**	2		2600	2		2640	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6520	3				**0.0031**	2		**0.0031**	2		2240	3		2120	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6930	3				**0.0031**	2		**0.0031**	2		2170	3		2070	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6190	3				**0.0031**	2		**0.0031**	2		1800	2		1820	3		**0.0050**	1		**0.0050**	1		**0.050**	1
7380	3				**0.0031**	2		**0.0031**	2		2490	3		2390	3		**0.0050**	1		**0.0050**	1		**0.050**	1
6820	3				**0.0031**	2		**0.0031**	2		2030	3		2160	3		**0.0050**	1		**0.0050**	1		0.324	3 J+
6890	3				**0.0031**	2		**0.0031**	2		1980	3		2100	2		**0.0050**	1		**0.0050**	1		**0.050**	1

												depends on Hardness				depends on Total Zn			
												result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		**0.125**	3		0.314	3	J		2.01	3	J		R					
0.155	3		**0.125**	3		**0.125**	3			**0.75**	2	U	**0.75**	2	U				
0.1	1	U	0.155	3		0.121	3			3.67	3		4.35	3					
0.105	3	J	0.117	3		0.0869	3			2.23	3		1.68	3					
0.031	2		0.249	3	J	0.219	3	J		4.67	3		5.73	3					
0.031	2		**0.1**	1		**0.2**	1	U		2.42	3		3.49	3					
0.0155	3		**0.110**	2		**0.110**	2			4.93	3	J+	5.43	3	J+				
0.0155	3		**0.250**	2	U	**0.110**	2			2.69	3	J+		R					
0.050	1		**0.250**	2		**0.250**	2			1.63	3	J+	1.64	3	J+				
0.050	1		**0.250**	2		**0.250**	2			**0.50**	1	U	**0.50**	1	U				
0.050	1		**0.155**	3		0.322	3	J		5.73	3	J+	4.21	3	J+				
0.050	1		**0.155**	3		**0.155**	3			2.11	3	J+	2.31	3	J+				
0.050	1		**0.155**	3		**0.155**	3			10.3	3	J+	6.89	3	J+				
0.050	1		**0.155**	3		**0.155**	3			3.18	3		2.47	3					
0.050	1		**0.155**	3		**0.155**	3			3.54	3		2.87	3					
0.050	1		**0.155**	3		**0.155**	3			1.97	3	J+	2.02	3	J+				
0.050	1		**0.155**	3		**0.155**	3			2.61	3	J+	2.56	3	J+				
0.050	1		**0.155**	3		**0.155**	3			1.87	3	J+	1.64	3	J+				
0.326	3	J+	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U				

	2	3	2	4	0	2	1	4	2	3	1	3			
Mean	6.31		12.12		42		205		3.43		16.6				
Median	6.23		12.34		42		203		3.49		16.8				
St. Deviation	0		2		12		64		1		2				
# of values	19		20		20		18		20		20				
Minimum	6.01		6.79		22		75		2.50		13.4				
Maximum	6.99		15.49		80		310		5.16		20.0				
Lowest fifth percentile	6		11		24		103		3		14				
# of values undetected	0		0		0		0		0		0				
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA				
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA				
% of CALC exceedences	79%		0%		0%		0%		0%		0%				
% of DWS exceedences	0%		0%		0%		0%		0%		0%				
HIDE this row - notes															
RED criteria	result is <6.5 OR >8.5		result < 7												
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**			**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved																
Units	pH Units			mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	2		1	3		3	2		1	2		0	2		4	3		4	3		4	3
45			33.4			1.688			6.1			25			0.084			0			0	
44			32.5			0.076			6.3			21			0.070			0			0	
4			12			7			2			16			0			0			0	
20			20			20			20			20			20			3			3	
38			10.0			0.075			3.4			17			0.016			0.0155			0.067	
51			58.7			31.100			8.5			93			0.205			0.0155			0.0735	
38			20			0			4			18			0			0			0	
0			0			14			0			0			7			3			0	
						70%									35%			100%				
						5			15						11						3	
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			15%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit						result <20			result > crit							
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3	3	2
0.0220		0	
0.0160		0	
0		0	
20		3	
0.0063		0.0155	
0.0750		0.05	
0		0	
2		3	
10%		100%	
5			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

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CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
-1	3			3	3		3	3		4	3		4	3			3	3		3	3
4960				0.5			0.3			0.02			0.019				1.1			21.06	
4890				0.5			0.3			0.02			0.012				0.8			2.66	
660				0			0			0			0				1			1	
20				20			20			20			20				20			19	
3650				0.1			0.1			0.01			0.005				0.1			2.16	
6340				1.0			0.6			0.05			0.111				5.3			25.76	
3992				0			0			0			0				0			0	
0				1			4			7			9				2			1	
				5%			20%			35%			45%				10%			5%	
							2			4			6								
NA				10.98			10.56276			NA			NA				1.786			1.714	
NA				100			NA			NA			NA				NA			NA	
0%				0%			0%			0%			0%				15%			5%	
0%				0%			0%			0%			0%				0%			0%	
				depends on Hardness			depends on Hardness										depends on Hardness				
				result > crit			result > crit										result > crit			result > crit	
Calcium					**Chromium[4,6]**								**Cobalt**						**Copper[4]**		
		Dissolved				Total			Dissolved			Total			Dissolved			Total			Dissolved
		µg/L				µg/L			µg/L			µg/L			µg/L			µg/L			µg/L

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	3		1	2		3	2		3	2		-1	3		-1	3		2	3		3	3	
19.6			10.0			0.05			0.03			1030			1030			1.51			0.92		
16.2			9.0			0.05			0.03			1010			1030			1.15			0.29		
12			8			0			0			130			120			2			1		
20			20			20			16			20			20			20			20		
3.1			1.3			0.01			0.01			796			819			0.20			0.12		
46.9			27.6			0.17			0.05			1270			1200			6.74			5.81		
7			1			0			0			810			850			0			0		
6			12			15			16			0			0			0			0		
30%			60%			75%			100%														
4			4			1																	
1000			1000			0.271			0.291			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**							
Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total					
µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
6	3	6	3	4	3	4	3	3	3	3	3	0	3	0	3	3	3								
0.010		0		0.048		0.050		0.3		0.297		243		245		0.133									
0.001		0		0.046		0.046		0.3		0.261		248		244		0.155									
0		0		0		0		0		0		22		25		0									
20		19		20		19		20		19		20		20		20									
0.000		0.0004745		0.003		0.003		0.1		0.149		196		199		0.014									
0.032		0.0315		0.155		0.155		0.5		0.433		282		287		0.155									
0		0		0		0		0		0		197		204		0									
19		19		8		7		3		2		0		0		20									
95%		100%		40%		37%		15%		11%						100%									
1				9		8		1		1															
0.77		0.77		NA		NA		10.15		10.12		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit						result > crit									

	3	3
	0.133	
	0.155	
	0	
	20	
	0.014	
	0.155	
	0	
	20	
	100%	
	4.6	
	NA	
	0%	
	0%	
	depends on Total Se	
	result > crit	
SE_NVF	SE_F	SE_FSF	SE_FVF
Selenium			
	Dissolved		
	µg/L		

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MW-09D

Sample Date													
09/06/04	5.55	3	13.39	4		52	2	298	3		3.1	2	14	2
10/20/04	6.31	3	14.41	4		48	2	272	3		2.8	2	12.5	3
03/17/05	5.95	3	10.02	4		41	2				2.6	2	17.0	2
05/15/05	5.91	3	11.34	4		39	2	164	3		3.94	3	13.7	3
08/21/05	6.07	3	11.64	4		42	2	16	2		4.86	3	14.6	3
08/21/06	5.99	3	11.35	4		39	2	180.7	4		3.24	3	16.2	3
08/23/07	5.92	3	11.28	4		27	2	117.8	4		3.5	2	17.6	3
08/28/09			14.02	4		81	2			R	5.62	3	16.2	3
08/21/10	6.02	3	13.02	4	Q	42	2	114.7	4		3.58	3	13.6	3
08/29/11	6.17	3	13.39	4		34.4784	FALSE	107.7	4		3.17	3	15.6	3
08/25/12			12.2	3		43	2	149.6	4		2.45	3	14.9	3

42	2	55	2	**0.075**	2	5.8	2 J	22.5	3	**0.155**	3				
39	2	53.8	3	0.2	1 J	9.8	2 J	16	2	**0.155**	3				
45.5	3	46.3	3	**0.075**	2	16.3	3	23.5	3	0.06	1 J				
38.5	3	56.3	3	1	1	7.75	3	17.5	3	0.25	2				
40.5	3	41.3	3	**0.075**	2	8.25	3	20.5	3	**0.0155**	3				
42.0	2	65.0	2	1.00	1	8.75	3 J	22.0	2	0.0930	2 J	**0.0155**	3	0.0695	3
50.0	1	42.5	3	2.10	2	9.25	3 J	23.4	3	0.0730	2 J				
51.2	3	37.5	3	5.51	3	6.4	2 J	22.5	3	0.115	3				
40.6	3	43	2	1.98	3	3.55	3 J	17.1	3	0.129	3				
43.7	3	57	2	8.84	3	5.96	3 J	16.9	3	0.103	3				
43.6	3	**1.55**	3	1.39	3	7.76	3 J	17.3	3	**0.050**	1 U				

	0.06	1	J	
	0.05	1	J	
	0.147	3		
	0.088	2		
	0.068	2		
J	0.0898	3	J-	R
	0.0641	3		
	0.076	2		
	0.069	2		
	0.0796	3		
	0.0698	3		

0.722	3	**0.031**	2	0.637	3	**0.00125**	3	**0.00125**	3	**0.065**	2				**0.0155**
0.781	3	**0.0155**	3	0.725	3	**0.00125**	3	0.0027	2 J	0.12	2 J				**0.0155**
0.754	3	0.046	2 J	0.643	3	**0.00125**	3	**0.00125**	3	0.21	2 J				**0.05**
0.705	3	0.045	2 J	0.698	3	**0.00125**	3	**0.00125**	3	0.49	2 J				**0.0155**
0.664	3	0.037	2 J	0.627	3	**0.00125**	3	**0.00125**	3	0.30	1 J				**0.0155**
0.690	2	0.0740	2 J	0.658	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.222
0.579	3	**0.0155**	3	0.472	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.593	3	0.085	2 J	0.524	3	0.0024	2 J	0.0016	2 J	**0.155**	3	0.297	3 J		0.0569
0.572	3	0.087	2 J	0.583	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
1.11	3	0.075	2 J	0.675	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.563	3	0.064	2 J	0.561	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	**12.5**	3 U	**3.9**	2	**0.0385**	3	**0.0385**	3	0.327	3 J	0.375	3 J	0.596	3 J+	0.497	3 J+
3	**12.5**	3 U	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.25**	2 U	**0.125**	3	0.582	3	0.511	3
1 U	3.94	3 J+	0.84	2 J+	0.0263	3	0.0254	3	0.301	3	0.299	3	0.301	3	0.298	3
3	6	1 J+	1.75	3 J+	0.0265	3 J+	0.0271	3 J+	0.298	3	0.329	3	0.639	3	0.57	2
3	3.36	3	**1**	1 U	0.0268	3 J+	0.0248	3 J+	**0.25**	2 U	**0.25**	2 U	0.264	3	0.273	3
3	52.8	3	**1.00**	1 U	0.0390	2 J	0.0300	1 J	0.683	3	**0.155**	3	1.29	3	0.571	3
3	50.5	3	**1.00**	1 U	0.0216	3 J	0.0338	3 J	**0.155**	3	**0.155**	3	1.00	1 J+	0.448	3 J+
3 J	258	3	4.5	2 J+	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.63	3	0.428	3
3	33	2 J+	3.43	3 J+	**0.0075**	2	0.0156	3 J	**0.155**	3	**0.155**	3	0.867	3 J+	0.474	3 J+
3	352	3	2.36	3 J+	**0.0075**	2	0.0621	3	0.27	2 J	0.361	3 J	3.7	2	0.817	3
3	25.4	3	**1.00**	1 U	0.017	2 J	0.0193	3 J	0.343	3 J	0.344	3 J	0.808	3	0.505	3

0.0075	2	**0.0075**	2					**5**	1 U	**5**	1 U	**0.0155**	3	**0.0155**	3	4090	3
0.0075	2	**0.0075**	2	**0.75**	2	**0.75**	2	**1.55**	3	**1.55**	3	**0.0155**	3	**0.0155**	3	3730	3
0.001495	4	**0.001495**	4	**0.003835**	4	**0.003835**	4	1.84	3 J+	1.66	3 J+	**0.003095**	4	**0.003095**	4	4790	3
0.001495	4	**0.001495**	4	**0.003835**	4	**0.003835**	4	1.86	3 J+	2.29	3 J+	**0.003095**	4	**0.003095**	4	3940	3
0.0075	2	**0.0075**	2	**0.00155**	3	**0.00155**	3	12.7	3	**5**	1 U	**0.00775**	3	**0.00775**	3	4200	2
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0185**	3	**0.0185**	3	4710	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	5140	3
0.0125	3	**0.0125**	3	0.0383	3 J	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	4530	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**1.25**	3	**1.25**	3	**0.0075**	2	**0.0075**	2	3810	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	2.31	3 J	2.13	3 J	**0.0075**	2	**0.0075**	2	4270	3
0.0125	3	**0.0125**	3	**0.0075**	2	**0.0075**	2	**0.75**	2	**0.75**	2	0.131	3	0.131	3	4240	3

	3900	2	0.305	3	J+	0.307	3	J+	**0.05**	1	U	R	**0.1**	1	U	**0.1**	1	U
J+	3680	3	J+	**0.05**	1	**0.05**	1	**0.0155**	3	**0.0155**	3	**0.1**	1	U	**0.1**	1	U
	4320	3	1.16	3	0.404	3	0.194	3	0.171	3	1.2	2	0.904	3	
	4220	3	0.423	3	0.233	3	0.0587	3	0.0504	3	0.0921	3	J+	0.0989	3	J+
	3940	3	0.623	3	J+	0.303	3	J+	0.0408	3	J+	0.0266	3	J+	0.257	3	J+	0.188	3	J+
	4670	3	1.61	3	J+	0.625	3	J+	0.0650	2	0.0280	2	0.790	2	J+	0.169	3	J+
	5310	3	2.67	3	0.596	3	0.0686	3	0.0272	3	0.323	3	J+	0.316	3	J+
	4450	3	0.479	3	0.321	3	0.114	3	J+	**0.0050**	1	0.592	3	J+	0.77	2	J+
	3660	3	0.362	3	J+	0.288	3	J+	**0.0100**	1	U	**0.0050**	1	**0.250**	2	U	**0.250**	2	U
	4160	3	3.56	3	0.854	3	0.191	3	0.0371	3	0.736	3	**0.250**	2	U
	4020	3	1.52	3	0.298	3	0.0446	3	0.0213	3	**0.250**	2	U	**0.250**	2	U

35.4	3 J+	27.9	3 J+	**0.05**	1	**0.05**	1	921	3	995	3	**0.25**	2	1.18	3 J+
3.1	2	**3.1**	2	**0.05**	1	**0.05**	1	766	3	758	3	**0.25**	2	**0.25**	2
4.80	2 J	**1.325**	4	0.0634	3 J	0.102	3	1220	3	1070	3	0.283	3	0.248	3
6.12	3 J	2.80	2 J	**0.035**	2 U	**0.035**	2 U	932	3	876	3	0.23	2 J+	0.153	3 J+
3.1	2	**3.1**	2	0.0396	3 J	0.0584	3 J	996	3	960	2	**0.1**	1 U	**0.1**	1 U
59.6	3	**3.10**	2	0.317	3 J+	**0.050**	1 U	1090	3	1070	3	1.76	3	0.239	3 J+
98.0	2	24.0	2	**0.050**	1 U	**0.050**	1 U	1150	3	1180	3	2.99	3	0.700	1 J+
376	3	**10.0**	1 U	0.208	3 J+	0.137	3 J+	1180	3	1130	3	6.86	3 J+	0.474	3 J+
36.8	3	6.29	3 J	**0.0155**	3	**0.0155**	3	992	3	928	3	0.891	3 J+	0.435	3 J+
314	3	14.6	3 J	0.193	3	**0.0155**	3	1200	2	1090	3	10.3	3	0.503	3
70.5	3	7.18	3 J	0.0361	3 J	**0.0155**	3	1060	3	993	3	1.68	3 J+	0.684	3 J+

0.031	2			**0.155**	3	**0.155**	3	**0.1**	1	U		R	354	3	382	3	**0.155**	3
0.1	1	U	**0.031**	2	**0.155**	3	**0.155**	3	**0.1**	1	U	**0.1**	1	U	346	3	344	3	**0.155**	3
0.0315	3		**0.0315**	3	0.0938	3	J	R	0.536	3		0.418	3		394	3	389	3	**0.0143**	3
0.0315	3		**0.0315**	3	0.149	3	0.152	3	0.143	3		0.221	3		348	3	340	2	0.0366	3
0.031	2		0.088	2	J	0.227	3	0.117	3	0.421	3		0.434	3		372	3	346	3	**0.0775**	3
0.000475	4		**0.000475**	4		0.103	3	0.101	3	1.10	2		0.482	3		402	3	388	3	**0.155**	3
0.000169	3		**0.000475**	4		0.153	3	0.170	2	1.60	2	J+	0.960	2	J+	399	3	419	3	**0.155**	3
0.00075	2		**0.00075**	2		0.115	3	0.109	3	**0.310**	2	U	**0.310**	2	U	400	1	359	3	**0.155**	3
0.00075	2		**0.00075**	2		0.112	3	0.124	3	**0.310**	2	U	**0.310**	2	U	344	3	326	3	**0.155**	3
0.00075	2		**0.00075**	2		0.163	3	0.17	2	1.63	3		0.834	3		453	3	373	3	**0.155**	3
0.00075	2		**0.00075**	2		0.142	3	0.141	3	1.08	3		0.71	2		371	3	357	3	**0.155**	3

	0.155	3	
	0.155	3	
	0.0143	3	
J	0.0347	3	J
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

12100	3	**0.0031**	2	**0.0031**	2	2460	3	2710	3	**0.0125**	3	**0.0125**	3	**0.155**	3
10400	3	**0.0031**	2	**0.0031**	2	2450	3 J+	2350	3 J+	**0.0125**	3	**0.0125**	3	**0.155**	3
8980	3	**0.001435**	4	**0.001435**	4	2850	3	2550	3	**0.002125**	4	**0.002125**	4	0.271	3 J+
10600	3	**0.001435**	4	**0.001435**	4	2370	3	2460	3	0.00463	3 J	0.00555	3 J	**0.1**	1 U
11900	3	**0.0031**	2	**0.0031**	2	2870	3	2720	3	**0.0031**	2	**0.0031**	2	**0.031**	2
11000	2	**0.0031**	2	**0.0031**	2	2850	3	2920	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11700	3	**0.0031**	2	**0.0031**	2	2940	3	3270	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11000	2	**0.0031**	2	**0.0031**	2	3070	3	3090	3	**0.0050**	1	**0.0050**	1	1.18	3 J+
10400	3	**0.0031**	2	**0.0031**	2	2880	3	2720	3	**0.0050**	1	**0.0050**	1	**0.050**	1
11700	3	**0.0031**	2	**0.0031**	2	3100	2	3010	3	**0.0031**	2	**0.0031**	2	**0.0310**	2
11000	2	**0.0100**	1 U	**0.0031**	2	2840	3	2700	2	**0.0031**	2	**0.0031**	2	**0.0310**	2

0.155	3	0.809	3	1.03	3	**0.235**	3	**0.75**	2 U
0.155	3	0.932	3	0.816	3	**0.235**	3	**0.235**	3
0.1	1 U	0.912	3	0.852	3	0.564	3 J	0.568	3 J
0.07	1 J	0.9	1	0.857	3	**0.50**	1 U	**0.50**	1 U
0.031	2	0.963	3	1.06	3	**0.75**	2 U	**0.75**	2 U
0.050	1	0.989	3 J	0.801	3 J	3.96	3 J+	1.35	3 J+
0.050	1	0.876	3 J	0.349	3 J	18.2	3 J+	9.10	2 J+
0.100	1 U	1.27	3	0.791	3 J	5.9	2 J+	**1.55**	3 U
0.050	1	0.887	3 J	0.774	3 J	**1.55**	3 U	**1.55**	3 U
0.0310	2	1.49	3	0.893	3 J	1.7	2 J	1.65	3 J
0.0310	2	0.88	2 J	0.771	3 J	5.04	3	3.65	3

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	5.99		12.37		44		158		3.5		15	
Median	5.99		12.20		42		150		3.2		15	
St. Deviation	0		1		14		86		1		2	
# of values	9		11		11		9		11		11	
Minimum	5.55		10.02		27		16		2.5		13	
Maximum	6.31		14.41		81		298		5.6		18	
Lowest fifth percentile	6		11		31		53		3		13	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	100%		0%		0%		0%		0%		0%	
% of DWS exceedences	56%		0%		0%		0%		0%		0%	

1	3	1	3	1	2	2	3	1	3	3	3	4	3	4	3
43		45		2.000		8.1		19.9		0.109		0		0	
42		46		1.000		7.8		20.5		0.103		0		0	
4		17		3		3		3		0		NA		NA	
11		11		11		11		11		11		1		1	
39		2		0.075		3.6		16.0		0.016		0.0155		0.0695	
51		65		8.840		16.3		23.5		0.250		0.0155		0.0695	
39		20		0		5		16		0		0		0	
0		1		3		0		0		4		1		0	
		9%		27%						36%		100%			
				1		8				3				1	
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		45%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2		
0.08		NA	
0.07		NA	
0		NA	
11			0
0.05		NA	
0.15		NA	
0		NA	
0			
2			
NA			NA
NA			NA
0%			NA
0%			NA

3	3	3	2	3	3	4	2	4	2	3	3	2	2	4
0.703		0.052		0.618		0.00110		0.00120		0.192		0		0.0412
0.690		0.046		0.637		0.00130		0.00130		0.155		0		0.0155
0		0		0		0		0		0		0		0
11		11		11		11		11		11		4		11
0.563		0.016		0.472		0.00075		0.00075		0.065		0.25		0.0155
1.110		0.087		0.725		0.00240		0.00270		0.490		0.297		0.2220
1		0		0		0		0		0		0		0
0		3		0		10		9		7		3		9
		27%				91%		82%		64%		75%		82%
		8				1		2		4		1		1
230		NA		NA		NA		0.0052		NA		NA		7.02
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	1	3	1	2	4	3	4	3	3	3	3	3	3	3
	73.6		3.0		0.0233		0.0293		0.290		0.246		1.152		0.490
	25.4		1.8		0.0263		0.0271		0.270		0.250		0.808		0.497
	118		3		0		0		0		0		1		0
	11		11		11		11		11		11		11		11
	3.4		0.8		0.0075		0.0075		0.155		0.125		0.264		0.273
	352.0		12.5		0.0390		0.0621		0.683		0.375		3.700		0.817
	4		1		0		0		0		0		0		0
	2		6		5		3		5		6		0		0
	18%		55%		45%		27%		45%		55%				
					3		4		3		3				
	87		87		NA		NA		150		150		NA		NA
	NA		NA		6		NA		10		NA		2,000		NA
	18%		0%		0%		0%		0%		0%		0%		0%
	0%		0%		0%		0%		0%		0%		0%		0%

4	3	4	3	4	2	4	2	2	3	2	3	5	3	5	3	-1	3
0.0091		0.0091		0		0		3		2		0.0204		0.0204		4310	
0.0125		0.0125		0		0		2		2		0.0075		0.0075		4240	
0		0		0		0		3		1		0		0		440	
11		11		10		10		11		11		11		11		11	
0.0015		0.0015		0.00155		0.00155		1		1		0.0031		0.0031		3730	
0.0125		0.0125		0.75		0.75		13		5		0.1310		0.1310		5140	
0		0		0		0		1		1		0		0		3770	
11		11		9		10		7		8		10		10		0	
100%		100%		90%		100%		64%		73%		91%		91%			
				1				1		1							
NA		NA		NA		NA		NA		NA		0.060		0.059		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		9%		9%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	4	3	2	2	2	2
4210		1.160		0.389		0.08		0.0387		0.4		0.3	
4160		0.623		0.307		0.06		0.0269		0.3		0.3	
480		1		0		0		0		0		0	
11		11		11		11		10		11		11	
3660		0.050		0.050		0.01		0.005		0.1		0.1	
5310		3.560		0.854		0.19		0.171		1.2		0.9	
3670		0		0		0		0		0		0	
0		1		1		3		3		4		5	
		9%		9%		27%		30%		36%		45%	
NA		10.98		10.56276		NA		NA		1.637		1.572	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

1	3	1	2	4	3	4	3	-1	3	0	3	3	3	3	3		
91.6		9.4		0.10		0.05		1050		1005		2.33		0.45			
36.8		6.3		0.05		0.05		1060		995		0.89		0.44			
130		9		0		0		140		122		3		0			
11		11		11		11		11		11		11		11			
3.1		1.3		0.02		0.02		766		758		0.10		0.10			
376.0		27.9		0.32		0.14		1220		1180		10.30		1.18			
3		2		0		0		844		817		0		0			
2		5		5		8		0		0		3		2			
18%		45%		45%		73%						27%		18%			
2		4		3		1											
1000		1000		0.238		0.259		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		9%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

5	2	5	2	3	3	3	3	2	2	3	3	0	3	0	3	3	3
0.021		0		0.143		0.139		0.7		0.48		380		366		0.124	
0.001		0		0.149		0.147		0.4		0.43		372		359		0.155	
0		0		0		0		1		0		33		27		0	
11		10		11		10		11		10		11		11		11	
0.000		0.0004745		0.094		0.101		0.1		0.1		344		326		0.014	
0.100		0.088		0.227		0.170		1.6		0.96		453		419		0.155	
0		0		0		0		0		0		345		333		0	
11		9		2		2		4		3		0		0		10	
100%		90%		18%		20%		36%		30%						91%	
		1		1												1	
0.77		0.77		NA		NA		9.31		9.29		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.124	
0.155	
0	
11	
0.014	
0.155	
0	
10	
91%	
1	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-2	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2		
11000		0.0034		0.0028		2790		2770		0.0056		0.0056		0.191			
11000		0.0031		0.0031		2850		2720		0.0050		0.0050		0.050			
900		0		0		250		280		0		0		0			
11		11		11		11		11		11		11		11			
8980		0.0014		0.0014		2370		2350		0.0021		0.0021		0.031			
12100		0.0100		0.0031		3100		3270		0.0125		0.0125		1.180			
9690		0		0		2410		2405		0		0		0			
0		11		11		0		0		10		10		9			
		100%		100%						91%		91%		82%			
										1		1					
NA		0.113985457		0.097		NA		NA		NA		NA		NA			
NA		NA		NA		NA		NA		2		NA		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

3	2	3	3	3	3	2	3	2	3
0.075		0.992		0.82		3.510		1.97	
0.050		0.912		0.82		1.550		1.35	
0		0		0		5		3	
11		11		11		11		11	
0.031		0.809		0.35		0.235		0.24	
0.155		1.490		1.06		18.200		9.10	
0		1		1		0		0	
10		0		0		5		6	
91%						45%		55%	
1		4		6		2		2	
NA		NA		NA		21.34		21.04	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-10																
Sample Date																
10/21/04	6.28	3	10.64	4		53	2		283	3		3.69	3	17.1	3	
03/20/05	6.11	3	10.44	4		40	1					2.53	3	20.1	3	
05/12/05	6.02	3	11.22	4		47	2		194.5	4		2.98	3	19.1	3	
08/20/05	6.19	3	9.61	3		39	2		34	2		4.8	2	19.1	3	
11/06/05	6.11	3	5.54	3		49	2		293	3		3.14	3	16.9	3	
03/12/06														19.6	3	
05/23/06	5.37	3	11.48	4		46	2		295.9	4		3.35	3	18.2	3	
08/20/06	6.12	3	9.96	3		45	2		196.9	4		3.95	3	19.0	2	
10/29/06	6.76	3	13.85	4		47	2		240.6	4		3.3	2	16.5	3	
03/18/07	6.08	3	8.99	3		27	2		211.3	4		1.88	3	18.0	2	
05/14/07	6.15	3	10.19	4		28	2		163	3		2.64	3	18.4	3	
08/23/07	6.2	2	10.01	4		28	2		136.5	4		3.51	3	19.0	2	
11/15/07	6.08	3	11.27	4		45	2		271	3		2.63	3	18.0	2	
03/22/08	6.15	3	9.61	3		49	2		104.8	4		2.38	3			
03/23/08														18.8	3	
05/19/08	6.43	3	12.41	4		48	2		181.9	4		2.71	3	18.2	3	
08/25/08			11.16	4		47	2			R		3.34	3	17.8	3	
10/17/08	5.62	3	9.05	3		50	1		166.8	4		2.88	3	19.5	3	
08/21/09	6.6	2	12.8	3		62	2		12.6	3		3.41	3	17.8	3	
08/22/10	6.27	3	10.96	4	Q	58	2		113	3		3.31	3	17.3	3	
08/28/11	5.91	3	11.68	4		43.032	FALSE		145.2	4		3.28	3	19.7	3	
08/21/12	6.06	3	8.74	3		51	2		163.6	4		3.98	3	19.9	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
60	1		42.5	3		0.2	1 J		7	1 J		20	1		**0.155**	3						
45	2		55	2		**0.075**	2		8.75	3		21	2		0.12	2						
44.5	3		53.8	3		**0.075**	2		7.63	3		17	2		0.15	2						
65	2		31.3	3		**0.075**	2		5.13	3		20	1		0.097	2 J						
55	2		32.5	3		**0.15**	2		5.75	3		21.5	3		0.135	3						
48.0	2		27.5	3		**0.075**	2		6.50	2		22.0	2		0.185	3						
48.0	2		40.0	1		**0.075**	2		7.75	3		20.0	1		0.526	3						
45.5	3		56.3	3		**0.075**	2		9.00	1 J		16.0	2		0.134	3		**0.0155**	3		0.134	3
43.0	2		46.3	3		**0.075**	2		9.50	2 J		21.0	2		0.198	3		**0.0155**	3		0.189	3
45.0	2		30.0	1		**0.075**	2		8.00	1 J		20.0	1		0.119	3		**0.0155**	3		0.121	3
50.0	1		38.8	3		**0.075**	2		**1.57**	3		21.5	3		0.213	3						
50.0	1		35.0	2		**0.075**	2		6.25	3 J		17.8	3		0.121	3						
50.0	1		27.5	3		**0.150**	2		7.50	2 J		18.2	3		0.101	3 J-						
55.0	2		40.0	1		**0.075**	2		6.02	3 J		20.8	3		0.155	3						
49	2		38.8	3		**0.075**	2		3.68	3 J		20.5	3		0.223	3						
50	1		38.8	3		0.211	3 J		4.78	3 J		20.5	3		0.151	3						
51.7	3		27.5	3		**0.076**	2		3.64	3 J		20.6	3		0.218	3						
54	2		48.8	3		**0.0815**	3		3.6	2 J		37.2	3		0.153	3						
47.5	3		22	2		**0.077**	2		3.88	3 J		17.8	3		0.122	3						
54	2		61	2		0.404	3 J		5.55	3 J		18.2	3		0.14	2						
52.6	3		39	2		**0.073**	2		**5.0**	1 U		16.7	3		0.592	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.0155	3				
	0.0514	3				
	0.0125	3				
	0.014	2	J			
	0.016	2	J			
	0.0060	1	J			
	0.0120	2				
	0.0050	1	J	**0.050**	1	UJ
	0.0150	2		**0.050**	1	UJ
	0.0140	2		**0.0155**	3	
	0.0097	2	J			
	0.0037	2	J			
	0.0186	3				
	0.0770	2				
	0.0048	2	J			
	0.0136	3				
	0.0061	2	J			
	0.0104	3				
	0.0102	3				
	0.0107	3				
	0.0091	2	J			

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.841	3		**0.0155**	3		4.22	3		**0.00125**	3		**0.00125**	3		**0.0295**	3					**0.0155**			
0.713	3		**0.0155**	3		4.91	3		**0.00125**	3		**0.00125**	3		0.13	2	J				**0.0155**			
0.691	3		**0.0155**	3		3.53	3		**0.00125**	3		**0.00125**	3		0.17	2	J				**0.0155**			
0.571	3		**0.0155**	3		3.9	2		**0.00125**	3		0.0056	2		0.68	2	J				**0.0155**			
0.625	3		0.034	2	J	3.83	3		**0.00125**	3		**0.00125**	3		0.10	1	J				**0.0155**			
0.634	3		**0.0155**	3		4.79	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.720	2		0.0370	2	J	4.09	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.050**			
0.605	3		0.0430	2	J	3.70	2		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.546	3		**0.0155**	3		3.63	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.117			
0.598	3		**0.0155**	3		4.12	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.725	3		0.0350	2	J	4.04	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.050**			
0.485	3		**0.0155**	3		3.66	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.566	3		**0.0155**	3		3.86	3		**0.0025**	2	UJ	**0.00075**	2		**0.155**	3					0.113			
0.560	2		**0.0155**	3		4.25	3		0.0030	1	J+	**0.00075**	2		**0.155**	3					0.0986			
0.489	3		**0.0155**	3		3.02	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		**0.250**	2	U	**0.0155**			
0.331	3		**0.0155**	3		3.91	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.52	2		**0.0155**	3		3.2	2		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.0155**			
0.463	3		0.073	2	J	3.19	3		**0.0025**	2	U	**0.0025**	2	U	**0.155**	3		0.354	3	J	**0.0155**			
0.514	3		0.074	2	J	3.28	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.525	3		0.065	2	J	4.17	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.607	3		**0.0155**			
0.611	3		**0.050**	1	U	3.82	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	0.226			

			result > crit				result > crit				result > crit								result > crit				result > crit				result > crit				
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum								**Antimony**						**Arsenic**						**Barium**		
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
3		**12.5**	3	U	**12.5**	3	U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.25**	2	U	1.24	3	1.36	3
3		1.96	3	J+	0.817	3	J+	0.0216	3	0.0208	3	0.395	3	0.359	3		1.55	3	1.48	3
3		12.3	3	J+	2.28	3	J+	**0.01**	1	U	0.0279	3	J+	0.325	3	0.384	3	1.21	3	1.37	3
3		7.85	3		**1**	1	U	1.04	3	0.0262	3	J+	0.899	3	0.633	3	1.83	3	1.24	3
3		4.08	3	J+	**1**	1	U	0.013	2	J+	**0.005**	1	U	**0.25**	2	U	**0.125**	3	1.45	3	1.2	2
1	U	4.53	3	J+	**1.00**	1	U	0.108	3	0.0278	3	J	0.439	3	J	0.352	3	J	1.47	3	1.49	3
1	U	2.20	2		**1.00**	1	U	0.0228	3	J	0.0262	3	J	**0.155**	3	**0.155**	3	1.28	3	1.29	3
3		**1.00**	1	U	**1.00**	1	U	0.0262	3	J	0.0208	3	J	0.348	3	J	0.552	3	1.33	3	1.37	3
3		2.56	3		**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	0.450	2	J	1.23	3	J+	1.26	3	J+
3		3.45	3	J+	**1.00**	1	U	**0.0250**	2	U	**0.0250**	2	U	0.318	3	J	0.346	3	J	1.23	3	J+	1.21	3	J+
1	U	2.03	3	J+	**1.00**	1	U	0.0348	3	J	0.0224	3	J	**0.155**	3	**0.155**	3	1.32	3	1.23	3
3		2.11	3	J+	**1.00**	1	U	0.0174	3	J	0.0234	3	J	**0.155**	3	**0.155**	3	1.33	3	J+	1.42	3	J+
3		**1.00**	1	U	**1.00**	1	U	0.0604	3	0.0222	3	J	**0.155**	3	**0.155**	3	1.41	3	1.41	3
3	J	3.10	2		1.25	3	J	0.0188	3	J	0.0221	3	J	0.323	3	J	0.333	3	J	1.35	3	1.25	3
3		3.84	3	J+	**1.00**	1	U	0.0157	3	J	0.0153	3	J	0.425	3	J	0.467	3	J	1.26	3	J+	1.21	3	J+
1	U	**1.00**	1	U	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.21	3	1.21	3
3		2.28	3		1.3	2	J	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.31	3	1.22	3
3		**1.00**	1	U	**1.00**	1	U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.27	3	1.35	3
3		2.86	3	J+	**1.00**	1	U	0.0199	3	J	0.0175	3	J	0.31	2	J	0.318	3	J	1.37	3	J+	1.26	3	J+
3		2.97	3	J+	2.03	3	J+	**0.0075**	2	**0.0075**	2	0.34	2	J	0.273	3	J	1.69	3	1.61	3
3		**1.00**	1	U	2.29	3		0.0244	3	J	0.0219	3	J	0.564	3	0.649	3	1.34	3	1.45	3

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				depends on Hardness				depends on Hardness												depends on Hardness									
				result > crit				result > crit												result > crit								result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
5720	3			0.335	3			0.401	3	**0.05**	1 U	**0.05**	1 U			0.46	2 J+		0.607	3 J+	
5020	3			0.263	3			0.17	2 J	0.0136	3 J	0.0142	3 J			6.02	3		0.353	3	
4890	3			0.282	3			**0.03565**	4	0.0101	3 J	0.0134	3 J			0.716	3 J+		0.292	3 J+	
5830	3			1.4	2 J+			0.283	3 J+	0.329	3	0.0392	3 J+			11	2		1.32	3 J+	
5760	3			0.504	3			0.317	3	0.0288	3 J+	0.0184	3 J+			0.533	3 J+		0.443	3 J+	
6060	3			1.08	3 J+			0.833	3 J+	0.0336	3	0.0156	3 J			0.490	2 J+		0.489	3 J+	
5690	3			0.459	3			0.360	2	0.0230	2	0.0218	3			0.406	3		0.406	3	
5800	2			0.545	3 J+			0.356	3 J+	0.0280	2	0.0310	2			1.06	3 J+		0.501	3 J+	
6050	3			**0.050**	1			**0.050**	1	0.0158	3 J	0.0198	3 J			0.484	3 J+		0.479	3 J+	
5720	3			0.303	3 J+			**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U			0.394	3 J+		0.377	3 J+	
5560	3			0.412	3			0.311	3	**0.0100**	1 U	**0.0100**	1 U			0.407	3 J+		0.393	3 J+	
6370	3			0.570	2			0.269	3	0.0144	3 J	0.0144	3 J			0.422	3 J+		0.489	3 J+	
6390	3			0.358	3 J+			0.408	3 J+	0.0144	3 J	**0.0050**	1			0.392	3		0.382	3	
5750	3			0.431	3			0.352	3	0.0115	3 J	0.0140	2 J			0.396	3		0.387	3	
5660	3			0.537	3			0.308	3	0.0131	3 J	0.012	2 J			0.36	2 J+		0.345	3 J+	
5620	3			0.306	3			0.224	3	**0.0050**	1	0.0103	3 J			0.346	3 J+		0.359	3 J+	
5780	3			0.437	3			0.308	3	0.0151	3 J	0.0143	3 J			0.42	2		0.411	3	
5580	3			0.261	3			0.206	3	**0.0100**	1 U	**0.0050**	1			**0.250**	2 U		**0.250**	2 U	
5710	3			0.444	3 J+			0.321	3 J+	**0.0050**	1	**0.0100**	1 U			**0.250**	2 U		**0.250**	2 U	
5890	3			0.539	3			0.618	3	0.015	2 J	0.0126	3 J			**0.250**	2 U		**0.250**	2 U	
5780	3			0.256	3 J				R	0.0151	3 J	0.0155	3 J			**0.250**	2 U		**0.250**	2 U	

							depends on Hardness		depends on Hardness																
result > crit			result > crit				result > crit		result > crit														result > crit		
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
3.1	2		**3.1**	2		**0.05**	1		0.137	3 J		821	3		919	3		**0.5**	1 U		**0.5**	1 U	
1.325	4		**1.325**	4		**0.011**	2		0.0344	3 J		1110	3		890	2		0.138	3		0.117	3	
7.68	3 J		**1.325**	4		0.106	3 J+		**0.035**	2 U		816	3		878	3		0.204	3 J+		0.129	3 J+	
10.5	3 J		**3.1**	2		0.908	3		0.122	3		962	3		965	3		3.51	3		**0.1**	1 U	
3.1	2		**3.1**	2		**0.05**	1 U		0.119	3 J+		858	3		915	3		**0.1**	1 U		**0.1**	1 U	
10.0	1 U		**10.0**	1 U		0.125	3 J+			R		1060	3		1100	2		0.272	3 J+		0.105	3 J+	
3.10	2		**3.10**	2		**0.0130**	2			R		937	3		940	2		0.331	3		0.101	3	
3.10	2		**3.10**	2		0.205	3 J+		0.105	3 J+		982	3		968	3		0.108	3 J+		0.0992	3 J+	
10.0	1 U		**10.0**	1 U		**0.0155**	3		**0.050**	1 U		761	3		856	3		0.135	3 J+		0.0726	3 J+	
3.10	2		**3.10**	2		**0.050**	1 U		**0.050**	1 U		930	2		940	2		0.152	3 J+		0.0622	3 J+	
10.0	1 U		**10.0**	1 U		**0.0155**	3		**0.050**	1 U		971	3		950	2		0.0792	3 J+		0.0946	3 J+	
10.0	1 U		**3.10**	2		**0.050**	1 U		**0.050**	1 U		920	2		945	3		0.0892	3 J+		0.100	1 J+	
17.0	2 J		7.18	3 J		**0.0155**	3		**0.0155**	3		877	3		994	3		0.135	3		**0.0250**	2 U	
21.0	2		19.3	3 J		**0.0155**	3		**0.0155**	3		1030	3		944	3		0.0954	3		0.0483	3 J	
20.5	3		17.3	3 J		**0.0155**	3		**0.0155**	3		920	2		902	3		0.132	3 J+		0.0641	3 J+	
19.9	3 J		21.4	3		**0.0155**	3		**0.0155**	3		912	3		908	3		0.0703	3		0.08	1	
17	2 J		15.7	3 J		**0.0155**	3		**0.0155**	3		996	3		928	3		0.0711	3		0.0559	3	
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		940	2		984	3		0.174	3 J+		**0.0250**	2 U	
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		955	3		1010	3		**0.0250**	2 U		**0.0075**	2	
11.8	3 J		11.1	3 J		**0.0155**	3		**0.0155**	3		1040	3		1080	3		0.0996	3		0.0989	3	
3.10	2		13	2 J		**0.0155**	3		**0.0155**	3		1040	3		960	2		**0.0250**	2 U		0.0919	3 J+	

CALC revised 2013												2013: DWS = NA		2013: DWS = NA							
result > crit			result > crit									result > crit		result > crit							result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.1	1	U	**0.1**	1	U	**0.155**	3		**0.155**	3		0.394	3		0.509	3		569	3		610	2		**0.155**	3
0.0315	3		**0.0315**	3		0.614	3	J+	0.256	3		0.295	3	J+	0.16	2		573	3		545	3		0.13	2
0.0315	3		**0.0315**	3		0.135	3		0.179	3		0.112	3		0.201	3		507	3		547	3		0.112	3
0.031	2		**0.031**	2		0.859	3		0.223	3		1.14	3		1.11	3		722	3		585	3		0.286	3
0.031	2		**0.031**	2		0.187	3	J+	0.0788	3	J+	0.475	3		0.443	3		533	3		575	3		**0.0775**	3
0.000475	4		**0.000475**	4		0.684	3		0.133	3		0.366	3		0.354	3		595	3		612	3		0.329	3
0.000475	4		**0.000475**	4		0.128	3		0.104	3		0.298	3		0.353	3		568	3		565	3		**0.155**	3
0.000475	4		**0.000475**	4		0.116	3		0.148	3		0.296	3		0.356	3		568	3		577	3		**0.155**	3
0.000475	4		**0.000475**	4		0.180	2		0.159	3		0.294	3		0.420	2		513	3		587	3		**0.155**	3
0.00215	3	J	**0.000475**	4		0.165	3		0.173	3		0.314	3	J+	0.247	3	J+	561	3		554	3		**0.155**	3
0.000169	3		**0.000475**	4		0.173	3		0.152	3		0.391	3	J+	0.285	3	J+	554	3		523	3		**0.155**	3
0.000169	3		**0.000475**	4		0.159	3		0.182	3		0.224	3	J+	0.232	3	J+	581	3		613	3		**0.155**	3
0.000169	3		0.000971	3	J	0.173	3		0.184	3		0.342	3		0.269	3		581	3		641	3		**0.155**	3
0.00075	2		**0.00075**	2		0.159	3		0.158	3		0.318	3		0.297	3		560	2		544	3		**0.155**	3
0.00075	2		**0.00075**	2		0.168	3		0.164	3		0.336	3		0.256	3		543	3		530	2		**0.155**	3
0.00075	2		**0.00075**	2		0.16	2		0.163	3		0.212	3	J		R		568	3		562	3		0.36	2
0.00075	2		0.00159	3	J	0.156	3		0.126	3		0.305	3		0.354	3		596	3		564	3		**0.155**	3
0.00075	2		**0.00075**	2		0.151	3		0.157	3		**0.310**	2	U	**0.310**	2	U	559	3		564	3		**0.155**	3
0.00075	2		**0.00075**	2		0.153	3		0.161	3		**0.310**	2	U	**0.310**	2	U	540	2		571	3		**0.155**	3
0.00075	2		**0.00075**	2		0.174	3		0.193	3		0.336	3	J	0.305	3	J	606	3		585	3		**0.155**	3
0.00075	2		**0.00075**	2		0.167	3		0.157	3		**0.310**	2	U	**0.310**	2	U	610	2		574	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
		Dissolved	
		µg/L	
		0.155	3
		0.126	3
		0.109	3
J		**0.0775**	3
		0.0775	3
J		**0.155**	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3
J		**0.155**	3
		0.155	3
		0.155	3
		0.155	3
		0.155	3

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**								**Sodium**								**Thallium**							**Tin**
	Dissolved			Total					Dissolved			Total					Dissolved			Total				Dissolved			Total		
	µg/L			µg/L					µg/L			µg/L					µg/L			µg/L				µg/L			µg/L		
6110	3	J+		**0.0031**	2		**0.0031**	2			2100	2	J+		2250	3	J+		**0.0125**	3			**0.0125**	3			**0.155**	3		
5300	2			**0.001435**	4		**0.001435**	4			2180	3			1710	3			**0.005**	1	U		**0.002125**	4			**0.0302**	3		
5890	3			**0.001435**	4		**0.001435**	4			2180	3			1750	3			**0.002125**	4			**0.002125**	4			**0.0302**	3		
6440	3			0.0274	3		**0.0031**	2			2270	3			2250	3			0.0844	3			0.0066	2	J		0.681	3		
7020	3			**0.0031**	2		**0.0031**	2			1980	3			2170	3			**0.0031**	2			**0.0031**	2			**0.031**	2		
6780	3			**0.0031**	2		**0.0031**	2			2370	3			2470	3			0.0202	3			**0.0025**	2			0.240	2		
6190	3			**0.0031**	2		**0.0031**	2			2150	3			2210	3			**0.0025**	2			**0.0025**	2			**0.0155**	3		
6140	3			**0.0031**	2		**0.0031**	2			2200	2			2170	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
5530	3			**0.0031**	2		**0.0031**	2			1760	3			1980	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6060	3			**0.0031**	2		**0.0031**	2			2110	3			2120	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
5720	3			**0.0031**	2		**0.0031**	2			2160	3			2120	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6350	3			**0.0031**	2		**0.0031**	2			2130	3			2340	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
7030	3			**0.0031**	2		**0.0031**	2			2020	3	J				R		**0.0050**	1			**0.0050**	1			**0.050**	1		
5950	3			**0.0031**	2		**0.0031**	2			2310	3			2180	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6250	3			**0.0031**	2		**0.0031**	2			2110	3			2020	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6100	2			**0.0031**	2		**0.0031**	2			2110	3			2100	2			**0.0050**	1			**0.0050**	1			**0.050**	1		
6160	3			**0.0031**	2		**0.0031**	2			2300	2			2170	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6250	3			**0.0031**	2		**0.0031**	2			2200	2			2300	2			**0.0050**	1			**0.0050**	1			**0.050**	1		
6350	3			**0.0031**	2		**0.0031**	2			2230	3			2340	3			**0.0050**	1			**0.0050**	1			**0.050**	1		
6420	3			**0.0031**	2		**0.0031**	2			2290	3			2410	3			**0.0031**	2			**0.0031**	2			**0.0310**	2		
6040	3			**0.0031**	2		**0.0031**	2			2300	2			2110	3			**0.0031**	2			**0.0031**	2			**0.0310**	2		

												depends on Hardness				depends on Total Zn			
												result > crit				result > crit			
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF					
						Vanadium						**Zinc[4]**							
	Dissolved			Total			Dissolved			Total			Dissolved						
	µg/L			µg/L			µg/L			µg/L			µg/L						
0.155	3		0.431	3		0.548	3			**0.235**	3		1.88	3					
0.0302	3		0.566	3		0.522	3			2.06	3		**0.2345**	4					
0.0302	3		0.498	3		0.476	3			**0.2345**	4		**0.2345**	4					
0.031	2		1.27	3		0.469	3			4.38	3		**0.75**	2	U				
0.031	2		**0.2**	1	U	0.679	3			**0.75**	2	U	1.67	3					
0.0155	3		**0.250**	2	U	0.336	3	J		2.69	3	J+	3.12	3	J+				
0.0155	3		0.608	3		0.482	3	J		0.564	3	J+		R					
0.050	1		0.538	3	J	**0.250**	2			**0.50**	1	U	1.69	3	J+				
0.050	1		0.679	3	J	1.05	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.595	3	J	0.697	3	J		1.61	3	J+	1.22	3	J+				
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U				
0.050	1		0.410	2	J	**0.155**	3			1.39	3	J+	1.04	3	J+				
0.050	1		0.563	3	J	0.441	3	J		**0.50**	1	U		R					
0.050	1		0.357	3	J	0.483	3	J		0.758	3	J	0.529	3	J				
0.050	1		0.391	3	J	0.368	3	J		**0.50**	1	U	**0.50**	1	U				
0.050	1		0.386	3	J	0.466	3	J		**0.50**	1	U	**0.50**	1	U				
0.050	1		0.458	3	J	0.453	3	J		1.28	3	J+	1.96	3	J+				
		R	0.452	3	J	0.432	3	J		**1.55**	3	U	**1.55**	3	U				
0.050	1		0.476	3	J	0.498	3	J		**1.55**	3	U	**1.55**	3	U				
0.0310	2		0.758	3	J	0.546	3	J		**1.55**	3	U	**1.55**	3	U				
0.111	3	J	0.447	3	J	0.416	3	J		**1.55**	3	U	**1.55**	3	U				

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.13		10.48		45		178		3.18		18.5	
Median	6.12		10.54		47		174		3.29		18.4	
St. Deviation	0		2		9		82		1		1	
# of values	19		20		20		18		20		21	
Minimum	5.37		5.54		27		13		1.88		16.5	
Maximum	6.76		13.85		62		296		4.80		20.1	
Lowest fifth percentile	6		9		28		31		2		17	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	89%		0%		0%		0%		0%		0%	
% of DWS exceedences	16%		0%		0%		0%		0%		0%	

0	2	1	3	3	2	2	3	1	3	3	3	4	3	3	3
51		39.6		0.1		6		20		0.191		0		0	
50		38.8		0.1		6		20		0.151		0		0	
5		11		0		2		4		0		0		0	
21		21		21		21		21		21		3		3	
43		22.0		0.1		2		16		0.097		0.0155		0.121	
65		61.0		0.4		10		37		0.592		0.0155		0.189	
45		28		0		4		17		0		0		0	
0		0		18		2		0		1		3		0	
				86%		10%				5%		100%			
				3		13				1					
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		33%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	2
0.0160		0	
0.0120		0	
0		0	
21		3	
0.0037		0.0155	
0.0770		0.05	
0		0	
1		3	
5%		100%	
9			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	2	3	4	2	5	2	3	3	2	2	4
0.587		0.0292		3.86		0.00130		0.00129		0.1710		0		0.0455
0.571		0.0155		3.86		0.00130		0.00075		0.1550		0		0.0155
0		0		0		0		0		0		0		0
21		21		21		21		21		21		7		21
0.331		0.0155		3.02		0.00075		0.00075		0.0295		0.075		0.0155
0.841		0.0740		4.91		0.00300		0.00560		0.6800		0.607		0.2260
0		0		3		0		0		0		0		0
0		14		0		20		20		17		5		17
		67%				95%		95%		81%		71%		81%
		7				1				4		1		1
230		NA		NA		NA		0.0052		NA		NA		7.03
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		5%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3
	3.6		1.7		0.0730		0.0191		0.300		0.31		1.37		1.33	
	2.6		1.0		0.0199		0.0219		0.310		0.32		1.33		1.29	
	3		3		0		0		0		0		0		0	
	21		21		21		21		21		21		21		21	
	1.0		0.8		0.0075		0.0050		0.125		0.13		1.21		1.20	
	12.5		12.5		1.0400		0.0385		0.899		0.65		1.83		1.61	
	1		1		0		0		0		0		1		1	
	6		15		8		8		10		9		0		0	
	29%		71%		38%		38%		48%		43%					
			2		8		10		7		7					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0331		0.0107		0.08		0.05		1.60		1.69		0.0184		0.0090		5840	
0.0125		0.0125		0.01		0.01		1.25		1.25		0.0075		0.0075		5780	
0		0		0		0		1		1		0		0		310	
21		21		21		21		21		21		21		21		21	
0.0015		0.0015		0.00		0.00		0.75		1.25		0.0031		0.0031		5350	
0.4790		0.0125		0.75		0.75		4.13		5.00		0.2040		0.0185		6320	
0		0		0		0		1		1		0		0		5350	
20		21		19		20		16		16		20		21		0	
95%		100%		90%		95%		76%		76%		95%		100%			
								3		3							
NA		NA		NA		NA		NA		NA		0.072		0.071		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		5%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	3	4	3	4	3	3	3	3	3	3	3	3	3	3
5740		0.465		0.312		0.03		0.02		1.21		0.430							
5750		0.431		0.310		0.01		0.01		0.41		0.387							
340		0		0		0		0		3		0							
21		21		20		21		21		21		21							
4890		0.050		0.036		0.01		0.01		0.25		0.250							
6390		1.400		0.833		0.33		0.05		11.00		1.320							
5020		0		0		0		0		0		0							
0		1		3		6		6		4		4							
		5%		15%		29%		29%		19%		19%							
				1		10		11											
NA		10.98		10.56276		NA		NA		2.042		1.960							
NA		100		NA		NA		NA		NA		NA							
0%		0%		0%		0%		0%		10%		0%							
0%		0%		0%		0%		0%		0%		0%							

0	2	1	2	4	3	4	3	0	3	0	3	3	3	4	3
9.0		7.9		0.08		0.047		945		951		0.3		0.1	
10.0		3.1		0.02		0.034		940		944		0.1		0.1	
7		6		0		0		87		60		1		0	
21		21		21		19		21		21		21		21	
1.3		1.3		0.01		0.016		761		856		0.0		0.0	
21.0		21.4		0.91		0.137		1110		1100		3.5		0.5	
3		1		0		0		816		878		0		0	
13		14		17		14		0		0		4		6	
62%		67%		81%		74%						19%		29%	
6		6				2								1	
1000		1000		0.331		0.348		NA		NA		NA		NA	
NA		NA		15		NA		NA		NA		50		NA	
0%		0%		5%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

5	2	6	3	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.0		0.0		0.239		0.162		0.351		0.354		572		573		0.172	
0.0		0.0		0.165		0.159		0.310		0.310		568		571		0.155	
0		0		0		0		0		0		44		29		0	
21		21		21		21		21		20		21		21		21	
0.0		0.0		0.116		0.079		0.112		0.160		507		523		0.078	
0.1		0.1		0.859		0.256		1.140		1.110		722		641		0.360	
0		0		0		0		0		0		513		530		0	
20		19		1		1		3		3		0		0		16	
95%		90%		5%		5%		14%		15%						76%	
1		2						1		1						3	
0.77		0.77		NA		NA		11.59		11.56		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.144	
0.155	
0	
21	
0.078	
0.155	
0	
19	
90%	
4.6	
NA	
0%	
0%	

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
6190		0.0041		0.0029		2160		2160		0.0093		0.0047		0.088	
6160		0.0031		0.0031		2180		2170		0.0050		0.0050		0.050	
420		0		0		140		190		0		0		0	
21		21		21		21		20		21		21		21	
5300		0.0014		0.0014		1760		1710		0.0021		0.0021		0.016	
7030		0.0274		0.0031		2370		2470		0.0844		0.0125		0.681	
5530		0		0		1980		1748		0		0		0	
0		20		21		0		0		19		20		19	
		95%		100%						90%		95%		90%	
												1			
NA		0.177813404		0.151		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	3	3	2	3
0.050		0.499		0.472		1.198		1.19	
0.050		0.458		0.469		0.758		1.22	
0		0		0		1		1	
20		21		21		21		19	
0.016		0.155		0.155		0.235		0.23	
0.155		1.270		1.050		4.380		3.12	
0		0		0		0		0	
19		3		3		13		11	
95%		14%		14%		62%		58%	
1		13		12		1		1	
NA		NA		NA		26.56		26.19	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-11D																
Sample Date																
10/21/04	6.46	3	8.61	3		55	2		244	3		4.65	3	18.8	3	
03/21/05	6.18	3	9.04	3		44	2					4.95	3	21.2	3	
05/13/05	5.94	3	7.67	3		54	2		180	2		5.33	3	22.8	3	
08/16/05	5.86	3	8.77	3		56	2		173	3		5.61	3	20.5	3	
11/10/05	5.96	3	8.87	3		53	2		254	3		4.14	3	19.5	3	
03/22/06	6.53	3	8.2	2		52	2		247	3		4.32	3	19.9	3	
05/21/06	6.09	3	7.55	3		56	2		256	3		4.82	3	21.7	3	
08/21/06	6.15	3	7.11	3		50	1		174.7	4		5.36	3	21.1	3	
11/01/06	6.52	3	9.27	3		62	2		309.4	4		4.5	2	18.9	3	
03/22/07	6	1	8.33	3		28	2		203.2	4		4.22	3	20.7	3	
05/10/07	6.1	2	8.1	2		33	2		91.7	3		4.84	3	21.4	3	
08/21/07	5.96	3	8.87	3		34	2		174.5	4		5.4	2	19.6	3	
11/11/07	6.22	3	10.8	3		44	2		250.7	4		4.55	3	20.8	3	
03/20/08	6.65	3	6.44	3		46	2		150.6	4		4.39	3	7.37	3	
05/18/08	6.01	3	9.12	3		52	2		200.2	4		4.53	3	19.1	3	
08/24/08	6.3	2	8.36	3		29	2		218.5	4		5.34	3	18.2	3	
10/22/08	6.09	3	11.28	4		50	1		134.3	4		3.88	3	19.6	3	
08/25/09			8.24	3		88	2				R	4.66	3	17.7	3	
08/18/10	5.71	3	8.5	2		98	2	Q	198.1	4		4.37	3	17.2	3	
08/30/11	6.04	3	10.9	3		46.4244	FALSE		101.7	4		4.66	3	17.3	3	
08/20/12	9.23	3	10.23	4		49	2		-72.6	3		4.33	3	16.9	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
60	1		32.5	3 J-		0.316	3 J		9.5	2 J		16.5	3		**0.155**	3						
60	1		53.8	3		**0.075**	2		16.5	3		17	2		0.25	2						
60	1		35	2		**0.075**	2		13.4	3		16	2		0.27	2						
60	1		40	1		**0.147**	3		7.13	3		16.5	3		0.225	3						
50	1		56.3	3		**0.075**	2		10.6	3		16	2		0.257	3						
60.0	1		23.7	3		**0.075**	2		11.5	3		20.0	1		0.214	3						
60.0	1		58.7	3		**0.075**	2		5.50	2		22.0	2		0.861	3						
50.0	1		55.0	2		**0.250**	2 U		12.3	3		16.0	2		0.271	3		**0.0155**	3		0.243	3
50.0	1		42.5	3		**0.075**	2		13.5	3		16.0	2		0.300	1		**0.0155**	3		0.293	3
50.0	1		51.3	3		**0.075**	2		7.00	1 J		20.0	1		0.210	2		**0.0155**	3		0.192	3
55.0	2		37.5	3		**0.075**	2		**1.57**	3		22.5	3		0.284	3						
55.0	2		41.3	3		**0.075**	2		12.5	3		20.0	1		0.235	3						
50.0	1		**1.55**	3		**0.076**	2		8.00	1 J		15.8	3		0.244	3						
54.1	3		36.3	3		1.96	3		9.56	3 J		17.3	3		0.220	2 J-						
51.6	3		32.5	3		0.8	1 J		4.02	3 J		16.6	3		0.215	3						
52.6	3		43.8	3		**0.076**	2		8.86	3 J		16.8	3		0.0528	3						
55	2		33.8	3		**0.0775**	3		6.2	2 J		16.6	3		0.221	3						
55.7	3		28.8	3		**0.150**	2		6.7	2 J		31.5	3		0.177	3						
53.1	3		15	2		**0.147**	3		6.7	2 J		15.4	3		0.19	2						
51.8	3		55	2		1.31	3		4.96	3 J		14.5	3		0.178	3						
50.1	3		30	1		**0.144**	3		**1.57**	3		13	2		0.139	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.04	1	J			
	0.0971	3				
	0.029	2				
	0.016	2	J			
	0.020	1				
	0.0130	2				
	0.0115	3				
	0.0220	2		**0.050**	1	UJ
	0.0160	2	J-			R
	0.0460	2		**0.0155**	3	
	0.0127	3				
	0.0101	3				
	0.0204	3				
	0.0289	3				
	0.0214	3				
	0.0179	3				
	0.0089	2	J			
	0.0152	3				
	0.0166	3				
	0.0049	2	J			
	0.0115	3				

																								depends on field pH and field Temp	
result > crit			result > crit			result > crit								result > crit										result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**						**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L						mg/L
1.04	3		**0.0155**	3		6.97	3		**0.00125**	3		**0.00125**	3		0.14	2	J							**0.0155**
0.758	3	J+	**0.0155**	3		7.69	3	J+	**0.00125**	3		**0.00125**	3		0.12	2	J							**0.0155**
0.731	3		**0.0155**	3		6.6	2		**0.00125**	3		**0.00125**	3		0.21	2	J							**0.0155**
0.724	3		**0.0155**	3		6.6	2		**0.00125**	3		**0.00125**	3		0.29	2	J							**0.0155**
0.726	3		**0.0155**	3		6.81	3		**0.00125**	3		**0.00125**	3		0.11	2	J							0.061
0.694	3		**0.0155**	3		7.07	3		**0.00125**	3		**0.00125**	3		**0.155**	3								**0.0155**
0.697	3		**0.0155**	3		6.61	3		0.0027	2	J	**0.00125**	3		**0.155**	3								**0.050**
0.720	2		0.0520	2	J	6.55	3		**0.00075**	2		**0.00075**	2		**0.155**	3								**0.0155**
0.761	3		**0.0155**	3		6.08	3		**0.00075**	2		**0.00075**	2		**0.155**	3								0.0766
0.752	3		0.0340	2	J	6.21	3		**0.00075**	2		**0.00075**	2		**0.155**	3								**0.0155**
0.765	3		0.0370	2	J	6.07	3		**0.00075**	2		**0.00075**	2		**0.155**	3								**0.0155**
0.648	3		**0.0155**	3		5.73	3		**0.00075**	2		**0.00075**	2		**0.155**	3								0.0635
0.608	3		**0.0155**	3		5.93	3		**0.00075**	2		**0.00075**	2		**0.155**	3								**0.0155**
0.607	3		**0.0155**	3		6.03	3		**0.00075**	2		0.0029	2	J	**0.155**	3								**0.0155**
0.617	3		**0.0155**	3		6.06	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.075**	2					**0.0155**
0.484	3		0.033	2	J	7.02	3		**0.0025**	2	U	**0.0025**	2	UJ	**0.155**	3		**0.250**	2	U				**0.050**
0.722	3		0.048	2	J	5.39	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2					**0.050**
0.686	3		**0.0155**	3		5.51	3		**0.00075**	2		**0.00075**	2		**0.155**	3		0.204	3	J				0.0352
0.705	3		0.061	2	J	5.93	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U				**0.0155**
0.712	3		0.051	2	J	5.96	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U				**0.0155**
0.596	3		0.051	2	J	5.88	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U				**0.0155**

		result > crit			result > crit			result > crit									result > crit			result > crit			result > crit						
NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved	
			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
	3		**12.5**	3 U	**12.5**	3 U		**0.0385**	3	**0.0385**	3			**0.25**	2 U	**0.25**	2 U			1.97	3	1.96	3		
	3		1.91	3 J+	0.85	2 J+		0.027	2	0.0272	3			0.282	3	0.27	2			2.23	3	2.21	3		
	3		10.4	3 J+	1.9	2 J+		0.0222	3 J+	0.0335	3 J+			0.272	3	0.294	3			1.9	2	2.18	3		
	3		6.63	3	3.08	3		**0.00155**	3		R			**0.25**	2 U	**0.125**	3			2.09	3	1.87	3		
	2 J		2.83	3 J+	**1**	1 U		0.031	2 J+	0.022	2 J+			**0.125**	3	**0.125**	3			1.99	3	1.88	3		
	3		**1.00**	1 U	**1.00**	1 U		0.0278	3 J	0.0274	3 J			**0.155**	3	**0.155**	3			2.22	3	2.32	3		
	1 U		**1.00**	1 U	**1.00**	1 U		0.0358	3 J	0.0338	3 J			**0.155**	3	0.434	3 J			2.05	3	2.15	3		
	3		5.14	3 J+	3.48	3 J+		0.0692	3	0.0350	2 J			0.359	3 J	**0.155**	3			2.12	3	2.19	3		
	3 J		5.84	3	**1.00**	1 U		**0.0075**	2	**0.0075**	2			**0.155**	3	**0.155**	3			1.88	3 J+	1.85	3 J+		
	3		2.83	3 J		R		**0.0250**	2 U	**0.0250**	2 U			**0.155**	3	**0.155**	3			2.07	3 J+	2.12	3 J+		
	3		**1.00**	1 U	**1.00**	1 U		0.0350	2 J	0.0316	3 J			0.326	3 J	0.356	3 J			2.10	2	1.97	3		
	3 J		2.43	3 J+	**1.00**	1 U		0.0300	1 J	0.0312	3 J			**0.155**	3	0.342	3 J			1.96	3	1.97	3		
	3		7.71	3	**0.310**	2		0.0272	3 J	0.0358	3 J			**0.155**	3	**0.155**	3			2.07	3	1.88	3		
	3		8.83	3	0.981	3 J		0.0280	2 J	0.0278	3 J			**0.155**	3	**0.155**	3			1.84	3	1.80	2		
	3		**1.00**	1 U	**1.00**	1 U		0.0186	3 J	0.0208	3 J			**0.155**	3	**0.155**	3			1.84	3	1.83	3		
	1 U		4.66	3	**1.00**	1 U		0.0303	3 J	0.0306	3 J			**0.155**	3	**0.155**	3			1.86	3	1.94	3		
	1 U		3.28	3	**1.00**	1 U		**0.0250**	2 U	**0.0250**	2 U			**0.155**	3	**0.155**	3			2.2	2	1.92	3		
	3 J		3.02	3 J+	**0.310**	2		0.0279	3 J	0.0239	3 J			**0.155**	3	**0.155**	3			1.74	3	1.61	3		
	3		3.62	3 J+	**1.00**	1 U		**0.0075**	2	**0.0075**	2			**0.155**	3	**0.155**	3			1.89	3 J+	1.83	3 J+		
	3		**1.00**	1 U	**1.00**	1 U		**0.0075**	2	**0.0075**	2			0.291	3 J	0.374	3 J			1.92	3	2.06	3		
	3		**1.00**	1 U	**1.00**	1 U		0.0222	3 J	0.0221	3 J			**0.075**	2	**0.250**	2 U			1.77	3	1.84	3		

| | | |

				depends on Hardness				depends on Hardness												depends on Hardness									
				result > crit				result > crit												result > crit								result > crit	
CA_NVF	CA_F	CA_FSF	CA_FVF	CR_N	CR_NSF	CR_NVF	CR_F	CR_FSF	CR_FVF	CO_N	CO_NSF	CO_NVF	CO_F	CO_FSF	CO_FVF	CU_N	CU_NSF	CU_NVF	CU_F	CU_FSF	CU_FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total				Dissolved			Total			Dissolved			Total			Dissolved	
µg/L				µg/L				µg/L			µg/L			µg/L			µg/L			µg/L	
5490	3			0.544	3			0.157	3 J	**0.05**	1 U	**0.05**	1 U				**0.1**	1 U	**0.1**	1 U	
5090	3			1.06	3			0.255	3	0.0156	3 J	0.0178	3 J				0.181	3	0.115	3	
5270	3			0.798	3			**0.03565**	4	**0.00476**	3	0.0102	3 J				0.342	3 J+	0.0822	3 J+	
5760	3			1.51	3 J+			**0.031**	2	0.0262	3 J+	0.0354	3 J+				0.323	3 J+	0.209	3 J+	
5810	3			0.908	3			0.452	3	0.0356	3 J+	0.0246	3 J+				0.224	3 J+	0.227	3 J+	
5610	3			0.923	3 J+			0.431	3 J+	0.0230	2	0.0222	3				0.221	3 J+	0.297	3 J+	
6610	3			1.13	3			0.668	3	0.0302	3	0.0336	3				0.221	3	0.193	3	
6220	3			0.630	2 J+			0.375	3 J+	0.0246	3	0.0248	3				1.39	3	0.377	3 J+	
5540	3			**0.050**	1			**0.050**	1	**0.0065**	2	**0.0065**	2				0.179	3 J+	0.163	3 J+	
6030	3			0.340	2 J+			**0.100**	1 U	**0.0100**	1 U	0.0218	3 J+				0.194	3 J		R	
5800	2			0.565	3			0.210	2	**0.0100**	1 U	**0.0100**	1 U				0.158	3 J+	0.135	3 J+	
6120	3			0.467	3			0.384	3	0.0126	3 J	0.0114	3 J				0.156	3 J+	0.140	2 J+	
5500	2			0.749	3 J+			0.590	2 J+	0.0290	2	0.0158	3 J				0.198	3	0.239	3	
5690	3			0.608	3			0.324	3	0.0188	3 J	0.0130	2 J				3.05	3	0.312	3	
5630	3			0.58	2			0.445	3	0.0107	3 J	0.0102	3 J				**0.050**	1 U	0.11	2 J+	
5500	2			0.791	3			0.638	3	0.0139	3 J	0.016	2 J				0.213	3 J+	0.263	3 J+	
5680	3			0.721	3			0.416	3	0.0132	3 J	0.0133	3 J				0.161	3	0.24	2	
4950	3			0.68	2			0.268	3	**0.0100**	1 U	**0.0100**	1 U				**0.250**	2 U	**0.250**	2 U	
5080	3			0.584	3 J+			0.312	3 J+	**0.0050**	1	**0.0050**	1				**0.250**	2 U	**0.250**	2 U	
5260	3			0.681	3			0.384	3	0.0108	3 J	0.0103	3 J				**0.250**	2 U	**0.250**	2 U	
4990	3			0.932	3			0.265	3	0.0123	3 J	0.0117	3 J				**0.250**	2 U	**0.250**	2 U	

									depends on Hardness			depends on Hardness																
result > crit			result > crit						result > crit			result > crit																
FE_N	FE_NSF	FE_NVF	FE_F	FE_FSF	FE_FVF	PB_N	PB_NSF	PB_NVF	PB_F	PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
10	1	U	**3.1**	2		**0.05**	1		**0.05**	1		1160	3		1170	3		**0.5**	1	U	**0.25**	2	
4.39	3	J	2.73	3	J	0.0228	3	J	0.0466	3	J	1410	3		1140	3		0.299	3		0.296	3	
7.83	3	J	3.15	3	J	0.156	3	J+	**0.035**	2	U	1370	3		1200	2		0.271	3	J+	0.227	3	J+
32	2		7.31	3	J	0.059	2	J	0.109	3		1270	3		1260	3		0.448	3		0.282	3	
6.64	3	J		R		**0.05**	1	U	**0.05**	1	U	1200	2		1200	2		0.292	3		0.319	3	
3.10	2		**3.10**	2		**0.0130**	2		**0.0130**	2		1140	3		1060	3		3.36	3		0.227	3	J+
3.10	2		**3.10**	2		**0.0130**	2		0.0642	3		1360	3		1390	3		0.217	3		0.258	3	
3.10	2		**3.10**	2		0.162	3	J+		R		1310	3		1300	2		0.284	3	J+	0.277	3	J+
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		1190	3		1160	3		0.0888	3	J+	0.0920	2	J+
3.10	2		**10.0**	1	U	**0.0155**	3		**0.050**	1	U	1320	3		1300	2		0.167	3	J		R	
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		1400	2		1290	3		0.196	3	J+	0.148	3	J+
10.0	1	U	**3.10**	2		**0.050**	1	U	**0.0155**	3		1190	3		1220	3		0.189	3	J+	0.173	3	J+
11.4	3	J	7.49	3	J	**0.050**	1	U	**0.0155**	3		1230	3		1070	3		0.168	3		0.144	3	
37.3	3		21.1	3		0.0624	3	J	0.0454	3	J	1140	3		1130	3		0.317	3		0.140	2	
14.5	3	J	15.7	3	J	**0.0155**	3		**0.0155**	3		1140	3		1130	3		0.0876	3	J		R	
24.1	3		20.3	3		0.0973	3	J	0.0523	3	J	1130	3		1140	3		0.232	3		0.212	3	
17	2	J	18.2	3	J	**0.0155**	3		**0.0155**	3		1270	3		1280	3		0.14	2		0.188	3	
10.0	1	U	**10.0**	1	U	**0.0155**	3		**0.0155**	3		1060	3		1040	3		0.184	3	J+	0.118	3	J+
3.10	2		**3.10**	2		**0.0155**	3		**0.0155**	3		1100	2		1120	3		0.149	3	J+	0.116	3	J+
7.74	3	J	**3.10**	2		0.033	2	J	0.0335	3	J	1110	3		1140	3		0.109	3		0.119	3	
8.51	3	J	6.95	3	J	0.0532	3	J	0.0421	3	J	1080	3		1110	3		0.149	3	J+	0.115	3	J+

CALC revised 2013												2013: DWS = NA		2013: DWS = NA								
result > crit				result > crit								result > crit		result > crit								result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
Mercury[7]						Molybdenum						Nickel[4]						Potassium							
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total	
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L	
0.031	2		**0.031**	2		**0.155**	3		**0.155**	3		0.297	3		**0.1**	1	U	317	3		305	3		**0.155**	3
0.0315	3		**0.0315**	3		0.306	3	J+	0.3	1		0.529	3	J+	0.422	3		300	1		288	3		0.0313	3
0.0315	3		**0.0315**	3		0.189	3		0.242	3		0.394	3		0.377	3		310	2		308	3		0.0394	3
0.031	2		**0.031**	2		0.0292	3	J			R	0.702	3	J			R	346	3		312	3		**0.0775**	3
0.031	2		**0.031**	2		0.212	3	J+	0.158	3	J+	0.562	3		0.495	3		326	3		328	3		**0.0775**	3
0.000475	4		**0.000475**	4		0.156	3		0.135	3		0.482	3		0.424	3		326	3		298	3		**0.155**	3
0.000475	4		0.00130	2	J	0.166	3	J			R	0.529	3		0.501	3		343	3		352	3		**0.155**	3
0.000475	4		**0.000475**	4		0.181	3		0.160	2		0.318	3		0.381	3		339	3		339	3		**0.155**	3
0.000475	4		**0.000475**	4		0.168	3		0.184	3		**0.100**	1	U	**0.100**	1	U	291	3		292	3		**0.155**	3
0.000169	3		**0.000475**	4		0.227	3		0.227	3		0.384	3	J			R	330	2		336	3		**0.155**	3
0.000169	3		**0.000475**	4		0.309	3		0.272	3		0.471	3	J+	0.392	3	J+	332	3		314	3		**0.155**	3
0.000169	3		**0.000475**	4		0.276	3		0.276	3		0.375	3	J+	0.326	3	J+	320	2		326	3		**0.155**	3
0.000169	3		**0.000475**	4		0.279	3		0.232	3		0.356	3		0.211	3		346	3		310	2		**0.155**	3
0.00075	2		**0.00075**	2		0.212	3		0.214	3		0.345	3		0.346	3		298	3		311	3		**0.155**	3
0.00075	2		**0.00075**	2		0.225	3		0.231	3		0.228	3		0.263	3		306	3		304	3		**0.155**	3
0.00075	2		**0.00075**	2		0.222	3		0.242	3		0.317	3	J			R	305	3		303	3		**0.155**	3
0.00075	2		**0.00075**	2		0.228	3		0.23	2		0.461	3		0.517	3		319	3		310	2		**0.155**	3
0.00075	2		**0.00075**	2		0.213	3		0.187	3		**0.310**	2	U	**0.310**	2	U	294	3		268	3		**0.155**	3
0.00075	2		**0.00075**	2		0.088	2		0.0735	3		**0.310**	2	U	**0.310**	2	U	285	3		290	2		**0.155**	3
0.00075	2		**0.00075**	2		0.214	3		0.208	3		0.35	2	J	0.32	2	J	295	3		307	3		**0.155**	3
0.00075	2		**0.00075**	2		0.211	3		0.213	3		**0.310**	2	U	**0.310**	2	U	299	3		306	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
J	0.0312	3	J
J	0.0401	3	J
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N	AG_NSF	AG_NVF	AG_F	AG_FSF	AG_FVF	NA_N	NA_NSF	NA_NVF	NA_F	NA_FSF	NA_FVF	TL_N	TL_NSF	TL_NVF	TL_F	TL_FSF	TL_FVF	SN_N	SN_ NSF	SN_NVF						
Silicon				**Silver[8]**						**Sodium**						**Thallium**								**Tir**					
Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total								
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L								
5180	3	J+	**0.0031**	2		**0.0031**	2		2360	3	J+	2410	3	J+	**0.0125**	3		**0.0125**	3		**0.155**	3							
4700	2		**0.001435**	4		**0.001435**	4		2480	3		2000	1		**0.005**	1	U	**0.002125**	4		0.215	3							
5190	3		**0.001435**	4		**0.001435**	4		2530	3		2040	3		**0.002125**	4		**0.002125**	4		**0.0302**	3							
6100	2		**0.0031**	2		**0.0031**	2		2640	3		2530	3		**0.0031**	2		**0.0031**	2		**0.031**	2							
5780	3		**0.0031**	2		**0.0031**	2		2560	3		2580	3		**0.0031**	2		**0.0031**	2		**0.031**	2							
4820	3		**0.0031**	2		**0.0031**	2		2400	2		2180	3		**0.0025**	2		**0.0025**	2		**0.050**	1	U						
5790	3		**0.0031**	2		**0.0031**	2		2850	3		3010	3		0.0066	2	J	**0.0025**	2		**0.0155**	3							
5640	3		**0.0031**	2		**0.0031**	2		2690	3		2690	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
4960	3		**0.0031**	2		**0.0031**	2		2430	3		2380	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5410	3		**0.0031**	2		**0.0031**	2		2760	3		2730	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5290	3		**0.0031**	2		**0.0031**	2		2900	2		2710	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5850	3		**0.0031**	2		**0.0031**	2		2700	2		2750	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5350	3		**0.0031**	2		**0.0031**	2		2810	3		2340	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5480	3		**0.0031**	2		**0.0031**	2		2460	3		2460	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5540	3		**0.0031**	2		**0.0031**	2		2480	3		2410	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5730	3		**0.0031**	2		**0.0031**	2		2430	3		2460	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
6080	3		**0.0031**	2		**0.0031**	2		2740	3		2780	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
4760	3		**0.0031**	2		**0.0031**	2		2220	3		2230	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5430	3		**0.0031**	2		**0.0031**	2		2360	3		2440	3		**0.0050**	1		**0.0050**	1		**0.050**	1							
5570	3		**0.0031**	2		**0.0031**	2		2440	3		2500	2		**0.0031**	2		**0.0031**	2		**0.0310**	2							
5520	3		**0.0031**	2		**0.0031**	2		2430	3		2490	3		**0.0031**	2		**0.0031**	2		**0.0310**	2							

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
						Vanadium															**Zinc[4]**		
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.155	3		**0.125**	3		**0.2**	1	U		**0.235**	3		**0.235**	3									
0.0302	3		0.277	3		0.225	3			**0.2345**	4		0.584	3	J								
0.0302	3		0.236	3		0.243	3			**0.50**	1	U	**0.2345**	4									
0.031	2		0.233	3	J	0.326	3	J		**0.75**	2	U	**0.75**	2	U								
0.031	2		**0.1**	1		**0.1**	1			**0.75**	2	U	**0.75**	2	U								
0.050	1	U	**0.110**	2		**0.110**	2			0.859	3	J+	1.09	3	J+								
0.0155	3		**0.110**	2		0.278	3	J		**0.250**	2	U		R									
0.050	1		**0.250**	2		**0.250**	2			2.05	3	J+		R									
0.050	1		0.821	3	J	1.05	3			**0.155**	3		**0.155**	3									
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	1.85	3	J+								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			13.4	3	J+	1.57	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.15	3		**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			0.746	3	J	0.949	3	J								
0.050	1		**0.155**	3		**0.155**	3			**0.155**	3		**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
		R	**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		0.42	2	J	0.436	3	J		1.11	3	J	3.49	3									
0.0310	2		0.372	3	J	0.338	3	J		**1.55**	3	U	**1.55**	3	U								

		2	3	2	3	0	2	1	4	2	3	1	3		
Mean		6.30		8.77		51		184		4.71		19.1			
Median		6.10		8.61		50		198		4.65		19.6			
St. Deviation		1		1		17		83		0		3			
# of values		20		21		21		19		21		21			
Minimum		5.71		6.44		28		-73		3.88		7.4			
Maximum		9.23		11.28		98		309		5.61		22.8			
Lowest fifth percentile		6		7		29		75		4		17			
# of values undetected		0		0		0		0		0		0			
% of values undetected															
# of values between MDL and PQL															
ronic Aquatic Life Criteria (CALC)[1]		>6.5 and <8.5		>=7		NA		NA		NA		NA			
Drinking Water Standards (DWS)[2]		>6.0 and <8.5		>=4		NA		NA		NA		NA			
% of CALC exceedences		85%		0%		0%		0%		0%		0%			
% of DWS exceedences		30%		0%		0%		0%		0%		0%			
HIDE this row - notes															
RED criteria		result is <6.5 OR >8.5		result < 7											
	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	**Field pH**		**Field Diss. Oxygen**			**Field Specific Conductivity**			**Field Oxidation Reduction Potential**			**Field Water Temperature**		**Hardness**	
Total/Dissolved															
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L	

SC N	SC NSF	SC NVF	TDS N	TDS NSF	TDS NVF	TSS N	TSS NSF	TSS NVF	ACID N	ACID NSF	ACID NVF	ALK N	ALK NSF	ALK NVF	NO3NO2N N	NO3NO2N NSF	NO3NO2N NVF	NO2N N	NO2N NSF	NO2N NVF	NO3N N	NO3N NSF
0	2		1	3		3	2		2	3		1	3		3	3		4	3		3	3
54			38.3			0.292			8.5			17.9			0.246			0			0	
54			37.5			0.076			8.0			16.6			0.221			0			0	
4			14			0			4			4			0			0			0	
21			21			21			21			21			21			3			3	
50			1.6			0.075			1.6			13.0			0.053			0.0155			0.192	
60			58.7			1.960			16.5			31.5			0.861			0.0155			0.293	
50			15			0			2			15			0			0			0	
0			1			17			2			0			1			3			0	
			5%			81%			10%						5%			100%				
						2			10													
NA			NA			NA			NA			>=20			NA			NA			NA	
NA			500			NA			NA			NA			10			NA			NA	
0%			0%			0%			0%			71%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
						result > crit									result <20			result > crit				
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	

4	3	3	2
0.02		0	
0.02		0	
0		0	
21		2	
0.00		0.0155	
0.10		0.05	
0		0	
0		2	
		100%	
4			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			**Orthophosphate**		
	mg/L			mg/L		

CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L
3	3		4	3		2	3		5	2		5	2		3	3		2	2		4
0.70			0.0271			6.32			0.00115			0.00110			0.16			0			0.0287
0.71			0.0155			6.08			0.00075			0.00075			0.16			0			0.0155
0			0			1			0			0			0			0			0
21			21			21			21			21			21			7			21
0.48			0.0155			5.39			0.00075			0.00075			0.11			0.075			0.0155
1.04			0.0610			7.69			0.00270			0.00290			0.29			0.25			0.0766
1			0			6			0			0			0			0			0
0			13			0			20			20			16			6			17
			62%						95%			95%			76%			86%			81%
			8						1			1			5			1			4
230			NA			NA			NA			0.0052			NA			NA			6.99
250			4			250			NA			0.2			NA			NA			NA
0%			0%			0%			0%			0%			0%			0%			0%
0%			0%			0%			0%			0%			0%			0%			0%
																					depends on field pH and field Temp
result > crit			result > crit			result > crit						result > crit									result > crit

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
		Aluminum						**Antimony**						**Arsenic**						**Barium**					
		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved		Total		Dissolved					
		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L					
3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3									
	4.2		1.8		0.0259		0.0257		0.20		0.22		1.99		1.97										
	3.0		1.0		0.0272		0.0273		0.16		0.16		1.97		1.94										
	3		3		0		0		0		0		0		0										
	21		20		21		20		21		21		21		21										
	1.0		0.3		0.0016		0.0075		0.08		0.13		1.74		1.61										
	12.5		12.5		0.0692		0.0385		0.36		0.43		2.23		2.32										
	1		0		0		0		0		0		2		2										
	7		15		7		6		16		15		0		0										
	33%		75%		33%		30%		76%		71%														
			1		10		11		3		4														
	87		87		NA		NA		150		150		NA		NA										
	NA		NA		6		NA		10		NA		2,000		NA										
	0%		0%		0%		0%		0%		0%		0%		0%										
	0%		0%		0%		0%		0%		0%		0%		0%										
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit												

| | | |

CA NVF	CA F	CA FSF	CA FVF	CR N	CR NSF	CR NVF	CR F	CR FSF	CR FVF	CO N	CO NSF	CO NVF	CO F	CO FSF	CO FVF	CU N	CU NSF	CU NVF	CU F	CU FSF	CU FVF
Calcium					**Chromium[4,6]**						**Cobalt**						**Copper[4]**				
Dissolved				Total	Dissolved				Total		Dissolved				Total		Dissolved				
µg/L				µg/L	µg/L				µg/L		µg/L				µg/L		µg/L				
-1	3			3	3		3	3		4	3		4	3			3	3		3	3
5600				0.726			0.323			0.02			0.02				0.4			0.2	
5610				0.681			0.324			0.01			0.01				0.2			0.2	
420				0			0			0			0				1			0	
21				21			21			21			21				21			20	
4950				0.050			0.031			0.00			0.01				0.1			0.1	
6610				1.510			0.668			0.05			0.05				3.1			0.4	
4990				0			0			0			0				0			0	
0				1			4			7			5				6			5	
				5%			19%			33%			24%				29%			25%	
							1			8			10								
NA				10.98			10.56276			NA			NA				2.042			1.960	
NA				100			NA			NA			NA				NA			NA	
0%				0%			0%			0%			0%				5%			0%	
0%				0%			0%			0%			0%				0%			0%	
				depends on Hardness			depends on Hardness										depends on Hardness				
				result > crit			result > crit										result > crit			result > crit	

FE N	FE NSF	FE NVF	FE F	FE FSF	FE FVF	PB N	PB NSF	PB NVF	PB F	PB FSF	PB FVF	MG N	MG NSF	MG NVF	MG F	MG FSF	MG FVF	MN N	MN NSF	MN NVF	MN F	MN FSF	MN FVF
Iron						**Lead[4]**						**Magnesium**						**Manganese**					
Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved		
µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L		
1	2		1	2		4	3		4	3		-1	3		-1	3		3	3		3	3	
11			7.5			0.05			0.04			1220			1180			0.4			0.20		
8			3.1			0.03			0.03			1190			1160			0.2			0.19		
10			6			0			0			110			90			1			0		
21			20			21			20			21			21			21			19		
3			2.7			0.01			0.01			1060			1040			0.1			0.09		
37			21.1			0.16			0.11			1410			1390			3.4			0.32		
3			3			0			0			1080			1060			0			0		
10			11			13			13			0			0			1			1		
48%			55%			62%			65%									5%			5%		
8			7			6			5														
1000			1000			0.331			0.348			NA			NA			NA			NA		
NA			NA			15			NA			NA			NA			50			NA		
0%			0%			0%			0%			0%			0%			0%			0%		
0%			0%			0%			0%			0%			0%			0%			0%		
						depends on Hardness			depends on Hardness														
result > crit			result > crit			result > crit			result > crit									result > crit					

HG N	HG NSF	HG NVF	HG F	HG FSF	HG FVF	MO N	MO NSF	MO NVF	MO F	MO FSF	MO FVF	NI N	NI NSF	NI NVF	NI F	NI FSF	NI FVF	K N	K NSF	K NVF	K F	K FSF	K FVF	SE N	SE NSF
			Mercury[7]						**Molybdenum**						**Nickel[4]**						**Potassium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		Total
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		µg/L
5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3								
0.008		0.008		0.203		0.207		0.387		0.3		316		310		0.136									
0.001		0.001		0.212		0.214		0.356		0.3		317		308		0.155									
0		0		0		0		0		0		19		19		0									
21		21		21		19		21		18		21		21		21									
0.000		0.000		0.029		0.074		0.100		0.1		285		268		0.031									
0.032		0.032		0.309		0.300		0.702		0.5		346		352		0.155									
0		0		0		0		0		0		291		288		0									
21		20		1		1		4		5		0		0		19									
100%		95%		5%		5%		19%		28%						90%									
		1						1		1						2									
0.77		0.77		NA		NA		11.59		11.56		NA		NA		5									
2		2		NA		NA		NA		NA		NA		NA		50									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
0%		0%		0%		0%		0%		0%		0%		0%		0%									
CALC revised 2013								2013: DWS = NA		2013: DWS = NA															
result > crit		result > crit						result > crit		result > crit														result > crit	

	3	3
	0.136	
	0.155	
	0	
	21	
	0.031	
	0.155	
	0	
	19	
	90%	
	2	
	4.6	
	NA	
	0%	
	0%	

depends on Total Se

result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF

Selenium

Dissolved

µg/L

| | | |

| | | |

MW-11M

Sample Date												
10/21/04	6.34	3	14.42	4	49	2	250	2	4.47	3	15.5	3
03/21/05	5.88	3	9.05	3	40	1			4.44	3	18.3	3
05/13/05	5.76	3	9.35	3	47	2	176	3	5.18	3	20.1	3
08/16/05	5.78	3	10.56	4	46	2	149	3	5.77	3	16.5	3
11/11/05	5.84	3	11.06	4	44	2	230	2	3.82	3	14.6	3
03/22/06	6.52	3	8.58	3	44	2	271	3	4.2	2	16.7	3
05/21/06	5.81	3	8.51	3	46	2	262.6	4	4.8	2	17.9	3
08/21/06	6.1	2	9.95	3	44	2	198.1	4	5.72	3	17.2	3
11/01/06	6.54	3	11.25	4	51	2	312.8	4	4.43	3	15.1	3
03/22/07	5.87	3	10.52	4	23	2	192.5	4	3.57	3	15.9	3
05/10/07	5.85	3	10.8	3	25	2	129.1	4	4.73	3	15.2	3
08/21/07	5.82	3	11.02	4	27	2	156.6	4	5.39	3	15.5	3
11/11/07	6.19	3	13.76	4	37	2	230.4	4	4.26	3	17.2	3
03/19/08	6.99	3	12.23	4	39	2	182.1	4	3.91	3	15.9	3
05/18/08	5.82	3	10.01	4	45	2	215.7	4	4.31	3	15.7	3
08/24/08	6.1	2	10.59	4	39	2	180.5	4	5.08	3	14.2	3
10/22/08	5.69	3	10.67	4	40	1	158	3	3.27	3	14	2
08/25/09			10.75	4	73	2		R	4.29	3	14.5	3
08/18/10	5.65	3	10.19	4	88	2	216.6	4	3.88	3	14.9	3
08/30/11	5.83	3	11.84	4	40.9944	FALSE	104.5	4	4.32	3	15.4	3
08/20/12	8.06	3	11.26	4	42	2	-40.3	3	3.94	3	14	2

44	2	37.5	3	**0.075**	2	12	2	5	1 J	**0.155**	3				
44	2	37.5	3	**0.075**	2	6.5	2 J	15	2	0.15	2				
48	2	35	2	**0.075**	2	14	2	14	2	0.34	2				
43	2	38.8	3	**0.15**	2	7.75	3	13.5	3	0.286	3				
44	2	40	1	**0.075**	2	8.13	3	12.5	3	0.239	3 J-				
20.0	1	36.2	3	**0.075**	2	11.5	3	13.0	2	0.131	3				
46.0	2	45.0	2	**0.075**	2	7.75	3	14.0	2	0.829	3				
46.0	2	47.5	3	**0.075**	2	7.50	2 J	13.0	2	0.253	3	**0.050**	1 U	0.212	3
42.5	3	26.3	3	**0.075**	2	12.3	3	12.0	2	0.204	3	**0.0155**	3	0.200	1
41.0	2	40.0	1	0.400	1 J	6.00	1 J	14.0	2	0.167	3	**0.0155**	3	0.150	2
44.0	2	28.7	3	**0.075**	2	6.00	1 J	13.0	2	0.187	3				
46.0	2	36.3	3	**0.075**	2	6.00	1 J	**1.55**	3	0.244	3				
43.5	3	38.8	3	**0.076**	2	8.75	3 J	13.1	3	0.213	3				
44.5	3	30.0	1	**0.0765**	3	5.42	3 J	14.1	3	0.208	3				
44.2	3	35	2	**0.075**	2	4.52	3 J	13.9	3	0.252	3				
43.1	3	37.5	3	**0.0765**	3	8.64	3 J	13.2	3	0.244	3				
44	2	30	1	**0.1875**	4	5.36	3 J	13.2	3	0.217	3				
46.1	3	28.8	3	**0.080**	1	6.5	2 J	24.5	3	0.178	3				
47.1	3	6	1 J	**0.075**	2	6.9	2 J	13.5	3	0.163	3				
47.2	3	46	2	0.3	1 J	5.48	3 J	12.5	3	0.162	3				
43.4	3	26	2	0.2	1 J	**1.57**	3	10.8	3	0.137	3 J-				

0.0155	3				
0.0471	3				
0.197	3				
0.013	2	J			
0.014	2	J			
0.0080	1	J			
0.0065	2	J			
0.0050	1	J	**0.050**	1	UJ
0.0170	2	J-			R
0.0170	2		**0.050**	1	UJ
0.0086	2	J			
0.0042	2	J			
0.0182	3				
0.0104	3				
0.0107	3				
0.0129	3				
0.0093	2	J			
0.0050	1	U			
0.0073	2	J			
0.00155	3				
0.0092	2	J			

0.84	2	**0.0155**	3	6.28	3	0.003	1 J	**0.00125**	3	0.15	2 J				**0.0155**
0.779	3	**0.0155**	3	6.29	3	**0.00125**	3	**0.00125**	3	0.082	2 J				**0.0155**
0.804	3	**0.0155**	3	5.88	3	**0.00125**	3	**0.00125**	3	0.22	2 J				**0.0155**
0.732	3	**0.0155**	3	5.71	3	**0.00125**	3	0.003	1 J	0.24	2 J				0.043
0.65	2	**0.0155**	3	5.76	3	**0.00125**	3	**0.00125**	3	0.13	2 J				**0.0155**
0.675	3	**0.0155**	3	5.74	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.666	3	**0.0155**	3	5.56	3	**0.00125**	3	**0.00125**	3	**0.155**	3				**0.0155**
0.898	3	0.0380	2 J	6.03	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.745	3	**0.0155**	3	5.08	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0560
0.808	3	0.0340	2 J	4.80	2	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.788	3	0.0350	2 J	4.74	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.656	3	**0.0155**	3	4.89	3	**0.00075**	2	**0.00075**	2	**0.155**	3				0.0698
0.579	3	**0.0155**	3	5.19	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.673	3	**0.0155**	3	4.83	3	**0.00075**	2	**0.00075**	2	**0.155**	3				**0.0155**
0.694	3	**0.0155**	3	4.93	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.075**	2		**0.0155**
0.677	3	**0.0155**	3	5.13	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.050**
0.646	3	0.037	2 J	4.47	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.075**	2		**0.050**
0.742	3	0.079	2 J	4.62	3	**0.0025**	2 U	**0.00075**	2	**0.155**	3	0.212	3 J		**0.0155**
0.674	3	0.064	2 J	5.12	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.771	3	0.05	1 J	5.41	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**
0.727	3	0.052	2 J	4.59	3	**0.00075**	2	**0.00075**	2	**0.155**	3	**0.250**	2 U		**0.0155**

3	**12.5**	3 U	**12.5**	3 U	0.0811	3 J	**0.0385**	3	**0.125**	3	**0.125**	3	2.2	2	2.28	3
3	2.34	3 J+	1.13	3 J+	0.0292	3	0.0251	3	0.211	3	0.189	3	3	1	2.85	3
3	2.25	3 J+	1.64	3 J+	**0.01**	1 U	0.0202	3 J+	0.202	3	0.201	3	2.47	3	2.8	2
2 J	2.69	3	2.76	3	**0.00155**	3		R	**0.25**	2 U	**0.125**	3	2.5	2	2.54	3
3	**1**	1 U	2.09	3 J+	**0.005**	1 U	0.0182	3 J+	**0.125**	3	**0.125**	3	2.1	2	2.39	3
3	3.22	3 J+	3.06	3 J+	0.0298	3 J	0.0280	2 J	**0.155**	3	**0.155**	3	2.80	2	2.69	3
3	**1.00**	1 U	**1.00**	1 U	0.0302	3 J	0.0266	3 J	0.427	3 J	**0.155**	3	2.72	3	2.63	3
3	3.35	3 J+	3.04	3 J+	0.0270	2 J	0.0260	2 J	**0.155**	3	0.311	3 J	2.81	3	2.81	3
2 J	7.50	2	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.708	3	0.437	3 J	2.44	3 J+	2.18	3 J+
3	24.9	3 J+	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.87	3 J+	2.40	2 J+
3	**1.00**	1 U	**1.00**	1 U	0.0320	2 J	0.0312	3 J	**0.155**	3	**0.155**	3	2.33	3	2.38	3
3 J	**1.00**	1 U	**1.00**	1 U	0.0260	2 J	0.0204	3 J	**0.155**	3	**0.155**	3	2.57	3	2.40	2
3	**1.00**	1 U	**0.310**	2	0.0184	3 J	0.0268	3 J	**0.155**	3	**0.155**	3	2.51	3	2.50	2
3	1.92	3 J	0.836	3 J	0.0294	3 J	0.0224	3 J	**0.155**	3	**0.155**	3	2.47	3	2.23	3
3	**1.00**	1 U	**1.00**	1 U	0.0176	3 J	0.0155	3 J	**0.155**	3	**0.155**	3	2.38	3	2.3	2
1 U	**1.00**	1 U	**1.00**	1 U	0.023	2 J	0.0244	3 J	**0.155**	3	**0.155**	3	2.24	3	2.41	3
1 U	1.57	3 J	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.16	3	2.2	2
3	3.06	3 J+	**1.00**	1 U	0.0189	3 J	0.0192	3 J	**0.155**	3	**0.155**	3	2.15	3	2.04	3
3	**1.00**	1 U	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	2.21	3 J+	2.25	3 J+
3	2.4	2 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	0.242	3 J	**0.075**	2	2.41	3	2.32	3
3	2.02	3	**1.00**	1 U	0.0208	3 J	0.0182	3 J	**0.075**	2	**0.250**	2 U	2.29	3	2.34	3

0.0075	2	0.0075	2	0.75	2	0.75	2	1.55	3	1.55	3	0.0155	3	0.0155	3	4630	3
0.00301	3 J	0.001495	4	0.003835	4	0.003835	4	1.53	3 J+	1.32	3 J+	0.003095	4	0.003095	4	5370	3
0.001495	4	0.001495	4	0.003835	4	0.003835	4	1.37	3 J		R	0.003095	4	0.003095	4	6190	3
0.0075	2	0.0075	2	0.0046	2 J	0.00155	3	1.55	3	1.55	3	0.00775	3	0.00775	3	4910	3
0.0075	2	0.0075	2	0.005	1 U	0.00155	3	1.55	3	4.5	2 J	0.00775	3	0.00775	3	4390	3
0.0120	2	0.0120	2	0.0250	2 U	0.0250	2 U	0.75	2	0.75	2	0.0125	3	0.0125	3	5100	2
0.0120	2	0.0120	2	0.0075	2	0.0075	2	0.75	2	0.75	2	0.0125	3	0.0125	3	5390	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	5160	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0185	3	0.0185	3	4480	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4720	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4510	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4780	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	5240	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4900	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4750	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4280	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4210	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4400	2
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.25	3	1.25	3	0.0075	2	0.0075	2	4440	3
0.0125	3	0.0125	3	0.0250	2 U	0.0075	2	2.01	3 J	0.75	2	0.0075	2	0.0075	2	4590	3
0.0125	3	0.0125	3	0.0075	2	0.0075	2	1.62	3 J	1.87	3 J	0.0075	2	0.0075	2	4150	3

4710	3	0.343	3	0.109	3 J	**0.05**	1 U	**0.05**	1 U	**0.1**	1 U	**0.1**	1 U
4250	3	2.1	2	0.375	3	0.209	3	0.226	3	0.226	3	0.215	3
4760	3	1.4	2	0.374	3	0.013	2 J	0.0111	3 J	0.104	3 J+	0.102	3 J+
4680	3	1.76	3 J+	**0.031**	2	0.0294	3 J+	0.036	2 J+	0.293	3 J+	0.233	3 J+
4500	2	0.656	3	0.211	3	0.0204	3 J+	0.0196	3 J+	0.196	3 J+	0.183	3 J+
5280	3	0.757	3 J+	0.282	3 J+	0.0216	3	0.0202	3	0.221	3 J+	0.212	3 J+
5300	2	1.57	3	0.672	3	0.0368	3	0.0290	2	0.246	3	0.162	3
5560	3	0.851	3 J+	0.447	3 J+	0.0290	2	0.0234	3	0.162	3 J+	0.173	3 J+
4430	3	0.139	3 J	**0.050**	1	0.0198	3 J	**0.0065**	2	0.184	3 J+	0.115	3 J+
4750	3	0.676	3 J+	0.352	3 J+	0.0248	3 J+	**0.0100**	1 U	0.231	3 J+	0.204	3 J+
4590	3	0.554	3	**0.100**	1 U	**0.0100**	1 U	**0.0100**	1 U	0.218	3 J+	0.139	3 J+
4790	3	**0.050**	1	0.274	3	0.0416	3	0.0120	2 J	0.201	3 J+	0.221	3 J+
4950	3	0.318	3 J+	0.479	3 J+	0.0308	3	0.0138	3 J	0.159	3	0.109	3
4540	3	0.771	3	0.209	3	0.0138	3 J	0.0100	1 J	0.426	3	0.129	3
4710	3	0.532	3	0.3	1	**0.0050**	1	0.0244	3	0.115	3 J+	0.116	3 J+
4450	3	0.33	2	0.37	2	**0.0050**	1	**0.0050**	1	0.263	3 J+	0.208	3 J+
4530	3	0.277	3	0.2	1	**0.0050**	1	0.0101	3 J	0.128	3	0.121	3
4290	3	0.276	3	**0.100**	1 U	**0.0100**	1 U	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
4500	2	0.247	3 J+	0.22	2 J+	**0.0050**	1	**0.0050**	1	**0.250**	2 U	**0.250**	2 U
4560	3	2.21	3	0.609	3	0.0224	3	0.0214	3	**0.250**	2 U	**0.250**	2 U
4380	3	2.8	2	0.786	3	0.0229	3	0.0278	3	**0.250**	2 U	**0.250**	2 U

3.1	2	**3.1**	2	**0.05**	1	**0.05**	1	949	3	974	3	**0.25**	2	**0.25**	2
11.0	2	5.64	3 J	0.0385	3 J	0.0592	3 J	1190	3	953	3	0.595	3	0.523	3
13.1	3	4.08	3 J	**0.011**	2	**0.011**	2	1130	3	1010	3	0.259	3 J+	0.278	3 J+
12.8	3 J	**3.1**	2	**0.0155**	3	0.0756	3 J	1020	3	1010	3	0.289	3	0.247	3
3.1	2	**3.1**	2	**0.0155**	3	**0.05**	1 U	879	3	938	3	**0.1**	1 U	0.254	3
7.08	3 J	**3.10**	2	0.229	3 J+	**0.0250**	2 U	954	3	967	3	0.413	3 J+	0.161	3 J+
10.5	3 J	**3.10**	2	**0.0130**	2	0.0348	3 J	1070	3	991	3	0.221	3	0.166	3
3.10	2	**3.10**	2	0.101	3 J+		R	1060	3	1120	3	0.227	3 J+	0.150	2 J+
10.0	1 U	**3.10**	2	**0.0155**	3	**0.0155**	3	942	3	913	3	0.282	3 J+	0.0996	3 J+
39.5	3 J+	**3.10**	2	**0.050**	1 U	**0.0155**	3	1000	1	995	3	0.850	2 J+	0.237	3 J+
3.10	2	**3.10**	2	**0.050**	1 U	**0.050**	1 U	959	3	1010	3	0.135	3 J+	0.121	3 J+
3.10	2	**3.10**	2	**0.050**	1 U	**0.050**	1 U	871	3	908	3	0.250	2 J+	0.131	3 J+
3.10	2	7.82	3 J	**0.0155**	3	**0.0155**	3	996	3	923	3	0.0638	3	0.109	3
19.4	3 J	15.3	3 J	0.0536	3 J	**0.0155**	3	950	2	908	3	0.231	3	0.106	3
13.3	3 J	13.6	3 J	0.191	3	**0.0155**	3	923	3	920	2	0.0997	3 J+	0.101	3 J+
15.5	3 J	15.9	3 J	**0.0155**	3	**0.0155**	3	864	3	893	3	0.0862	3	0.0804	3
11	2 J	12.5	3 J	**0.0155**	3	**0.0155**	3	850	2	979	3	0.0841	3	0.0948	3
10.0	1 U	**10.0**	1 U	**0.0155**	3	**0.0155**	3	856	3	879	3	0.176	3 J+	0.0746	3 J+
3.10	2	**3.10**	2	**0.0155**	3	**0.0155**	3	925	3	953	3	0.129	3 J+	0.134	3 J+
11.3	3 J	**3.10**	2	**0.0155**	3	**0.0155**	3	948	3	955	3	0.324	3	0.313	3
17.6	3 J	17.4	3 J	**0.0155**	3	**0.0155**	3	889	3	929	3	0.368	3 J+	0.446	3 J+

0.031	2	**0.031**	2	**0.155**	3	**0.155**	3	0.219	3	**0.1**	1 U	318	3	323	3	**0.155**	3
0.100	1 U	**0.0315**	3	0.306	3 J+	0.323	3	1.11	3	0.761	3	313	3	299	3	0.054	2
0.0315	3	**0.0315**	3	0.177	3	0.207	3	0.681	3	0.562	3	322	3	328	3	0.0647	3
0.031	2	**0.031**	2	**0.01**	1 U		R	0.792	3	0.733	3	341	3	332	3	**0.0775**	3
0.031	2	**0.031**	2	0.0438	3 J		R	0.275	3	0.314	3	298	3	305	3	**0.0775**	3
0.000475	4	**0.00250**	2 U	0.163	3	0.126	3	0.364	3	0.330	2	338	3	345	3	**0.155**	3
0.000475	4	0.00144	3 J	0.0776	3 J		R	0.682	3	0.443	3	370	2	358	3	**0.155**	3
0.000475	4	**0.000475**	4	0.120	2	0.146	3	0.406	3	0.353	3	337	3	353	3	**0.155**	3
0.00232	3 J	**0.000475**	4	0.197	3	0.163	3	0.372	3	0.270	2	306	3	299	3	**0.155**	3
0.000169	3	**0.000475**	4	0.192	3	0.215	3	0.536	3 J+	0.685	3 J+	334	3	323	3	**0.155**	3
0.000169	3	**0.000475**	4	0.188	3	0.188	3	0.415	3 J+	0.389	3 J+	312	3	320	2	**0.155**	3
0.000169	3	**0.000475**	4	0.176	3	0.161	3	0.336	3 J+	0.340	2 J+	322	3	317	3	**0.155**	3
0.000169	3	**0.000475**	4	0.197	3	0.207	3	0.195	3 J	0.143	3 J	347	3	342	3	**0.155**	3
0.00075	2	**0.00075**	2	0.182	3	0.171	3	0.424	3	0.199	3 J	331	3	302	3	**0.155**	3
0.00075	2	**0.00075**	2	0.172	3	0.164	3	0.215	3	0.226	3	313	3	311	3	**0.155**	3
0.00075	2	**0.00075**	2	0.172	3	0.182	3	0.18	2 J	0.174	3 J	300	1	311	3	**0.155**	3
0.00075	2	**0.00075**	2	0.17	2	0.187	3	0.218	3	0.24	2	293	3	304	3	**0.155**	3
0.00075	2	**0.00075**	2	0.181	3	0.181	3	**0.310**	2 U	**0.310**	2 U	296	3	296	3	**0.155**	3
0.00075	2	**0.00075**	2	0.0391	3 J	0.0443	3 J	**0.310**	2 U	**0.310**	2 U	296	3	306	3	**0.155**	3
0.00075	2	**0.00075**	2	0.206	3	0.205	3	1.15	3	0.973	3	315	3	313	3	**0.155**	3
0.00075	2	**0.00075**	2	0.237	3	0.241	3	1.39	3	1.39	3	305	3	322	3	**0.155**	3

	0.155	3	
J	0.0505	3	J
J	0.0551	3	J
	0.0775	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.383	3	J
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

4500	2	J+	**0.0031**	2	**0.0031**	2	2080	3	J+	2150	3	J+	**0.0125**	3	**0.0125**	3	**0.155**	3
4160	3		**0.001435**	4	**0.001435**	4	2150	3		1740	3		**0.005**	1	U	**0.002125**	4	**0.0302**	3
4770	3		**0.001435**	4	**0.001435**	4	2250	3		1780	3		**0.002125**	4		0.00747	3	J	**0.0302**	3
5240	3		**0.0031**	2	**0.0031**	2	2240	3		2230	3		**0.0031**	2		**0.0031**	2	**0.031**	2
4900	2		**0.0031**	2	**0.0031**	2	1870	3		2100	2		**0.0031**	2		**0.0031**	2	**0.031**	2
3780	3		**0.0031**	2	**0.0031**	2	2120	3		2080	3		**0.0025**	2		**0.0025**	2	0.131	3
4640	3		**0.0031**	2	**0.0031**	2	2340	3		2160	3		0.0120	2		**0.0025**	2	**0.0155**	3
5090	3		**0.0031**	2	**0.0031**	2	2270	3		2370	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4370	3		**0.0031**	2	**0.0031**	2	2080	3		2030	3		0.0160	2	J	**0.0050**	1	**0.050**	1
4670	3		**0.0031**	2	**0.0031**	2	2250	3		2250	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4860	3		**0.0031**	2	**0.0031**	2	2140	3		2220	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4820	3		**0.0031**	2	**0.0031**	2	2030	3		2120	3		**0.0050**	1		**0.0050**	1	**0.050**	1
5030	3		**0.0031**	2	**0.0031**	2	2330	3		2140	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4700	2		**0.0031**	2	**0.0031**	2	2220	3		2040	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4720	3		**0.0031**	2	**0.0031**	2	2060	3		2050	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4970	3		**0.0031**	2	**0.0031**	2	1990	3		2040	3		**0.0050**	1		**0.0050**	1	**0.050**	1
5210	3		**0.0031**	2	**0.0031**	2	1960	3		2290	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4490	3		**0.0031**	2	**0.0031**	2	1950	3		2000	1		**0.0050**	1		**0.0050**	1	0.316	3	J+
4730	3		**0.0031**	2	**0.0031**	2	2070	3		2130	3		**0.0050**	1		**0.0050**	1	**0.050**	1
4750	3		**0.0031**	2	**0.0031**	2	2130	3		2140	3		**0.0031**	2		**0.0031**	2	**0.0310**	2
5040	3		**0.0031**	2	**0.0031**	2	2080	3		2170	3		**0.0031**	2		**0.0031**	2	**0.0310**	2

0.155	3	**0.125**	3	**0.125**	3	**0.235**	3	**0.235**	3
0.0802	3 J	0.103	3	0.0571	3	0.708	3 J	0.965	3 J
0.0302	3	0.0804	3	0.03	1	**0.2345**	4	**0.50**	1 U
0.031	2	**0.1**	1	0.335	3 J	**0.75**	2 U	**0.2325**	4
0.031	2	**0.2**	1 U	0.319	3 J	**0.75**	2 U	**0.75**	2 U
0.050	1 U	**0.110**	2	**0.110**	2	1.92	3 J+	1.80	2 J+
0.0155	3	**0.110**	2	**0.110**	2	0.740	2 J+	0.558	3 J+
0.050	1	**0.250**	2	**0.250**	2	1.58	3 J+	1.25	3 J+
0.050	1	0.959	3 J	1.06	3	**0.155**	3	**0.155**	3
0.050	1	**0.155**	3	**0.155**	3	1.54	3 J+	1.01	3 J+
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	1.95	3 J+	2.48	3 J+
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	1.06	3
0.050	1	**0.155**	3	**0.155**	3	4.18	3	1.55	3
0.050	1	**0.155**	3	**0.155**	3	**0.50**	1 U	**0.50**	1 U
0.050	1	**0.155**	3	**0.155**	3	6.31	3 J+	2.23	3 J+
0.050	1	**0.155**	3	**0.155**	3	1.26	3 J+	**0.50**	1 U
0.25	2 J+	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.050	1	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**0.200**	1
0.0310	2	**0.155**	3	**0.155**	3	**1.55**	3 U	**1.55**	3 U

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.12		10.78		44		188		4.47		15.9	
Median	5.86		10.67		44		193		4.32		15.5	
St. Deviation	1		1		14		76		1		2	
# of values	20		21		21		19		21		21	
Minimum	5.65		8.51		23		-40		3.27		14.0	
Maximum	8.06		14.42		88		313		5.77		20.1	
Lowest fifth percentile	6		9		25		90		4		14	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	80%		0%		0%		0%		0%		0%	
% of DWS exceedences	60%		0%		0%		0%		0%		0%	

0	2	1	3	3	2	2	3	1	3	3	3	4	3	2	2
43		34.6		0.117		8		13		0.236		0		0	
44		36.3		0.075		7		13		0.208		0		0	
6		9		0		3		4		0		0		0	
21		21		21		21		21		21		3		3	
20		6.0		0.075		2		2		0.131		0.0155		0.15	
48		47.5		0.400		14		25		0.829		0.05		0.212	
41		26		0		5		5		0		0		0	
0		0		18		1		1		1		3		0	
				86%		5%		5%		5%		100%			
		1		3		12		1							
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		95%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	2
0.0210		0	
0.0100		0	
0		0	
21		2	
0.0016		0.05	
0.1970		0.05	
0		0	
3		2	
14%		100%	
10			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	2	3	5	2	5	2	3	3	2	2	4
0.73		0.0281		5.29		0.001		0.00100		0.16		0		0.0246
0.73		0.0155		5.13		0.001		0.00075		0.16		0		0.0155
0		0		1		0		0		0		0		0
21		21		21		21		21		21		7		21
0.58		0.0155		4.47		0.001		0.00075		0.08		0.075		0.0155
0.90		0.0790		6.29		0.003		0.00300		0.24		0.25		0.0698
1		0		5		0		0		0		0		0
0		13		0		20		20		16		6		18
		62%				95%		95%		76%		86%		86%
		8				1		1		5		1		3
230		NA		NA		NA		0.0052		NA		NA		7.02
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%

3	2	3	1	2	3	2	4	3	3	3	3	3	2	3	2	3
	3.7		1.9		0.0220		0.0217		0.201		0.176		2.5		2.43	
	2.0		1.0		0.0230		0.0234		0.155		0.155		2.4		2.39	
	6		3		0		0		0		0		0		0	
	21		21		21		20		21		21		21		21	
	1.0		0.3		0.0016		0.0075		0.075		0.075		2.1		2.04	
	24.9		12.5		0.0811		0.0385		0.708		0.437		3.0		2.85	
	1		1		0		0		0		0		2		2	
	9		14		8		6		16		17		0		0	
	43%		67%		38%		30%		76%		81%					
	2		1		12		11		2		2					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	0%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0108		0.0107		0.04		0.04		1.32		1.40		0.0090		0.0090		4790	
0.0125		0.0125		0.01		0.01		1.25		1.25		0.0075		0.0075		4720	
0		0		0		0		0		1		0		0		490	
21		21		21		21		21		20		21		21		21	
0.0015		0.0015		0.00		0.00		0.75		0.75		0.0031		0.0031		4150	
0.0125		0.0125		0.75		0.75		2.01		4.50		0.0185		0.0185		6190	
0		0		0		0		1		1		0		0		4210	
20		21		20		21		17		17		21		21		0	
95%		100%		95%		100%		81%		85%		100%		100%			
1				1				2		2							
NA		NA		NA		NA		NA		NA		0.063		0.062		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

-1	3	3	3	3	3	4	3	3	2	3	3	3	3
4690		0.887		0.312		0.03		0.03		0.2		0.2	
4590		0.656		0.282		0.02		0.01		0.2		0.2	
340		1		0		0		0		0		0	
21		21		21		21		21		21		21	
4250		0.050		0.031		0.01		0.01		0.1		0.1	
5560		2.800		0.786		0.21		0.23		0.4		0.3	
4290		0		0		0		0		0		0	
0		1		4		7		7		5		5	
		5%		19%		33%		33%		24%		24%	
		1		1		3		5					
NA		10.98		10.56276		NA		NA		1.739		1.669	
NA		100		NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%	

0	2	1	2	4	3	4	3	0	3	0	3	3	3	3	3		
11.0		6.6		0.05		0.03		963		958		0.26		0.19			
11.0		3.1		0.02		0.02		949		953		0.23		0.15			
8		5		0		0		91		54		0		0			
21		21		21		20		21		21		21		21			
3.1		3.1		0.01		0.01		850		879		0.06		0.07			
39.5		17.4		0.23		0.08		1190		1120		0.85		0.52			
3		3		0		0		856		893		0		0			
9		13		16		17		0		0		2		1			
43%		62%		76%		85%						10%		5%			
9		8		2		3											
1000		1000		0.260		0.281		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		0%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.011		0.008		0.160		0.181		0.504		0.4		319		319		0.139	
0.001		0.001		0.176		0.182		0.372		0.3		315		317		0.155	
0		0		0		0		0		0		20		18		0	
21		21		21		18		21		21		21		21		21	
0.000		0.000		0.010		0.044		0.180		0.1		293		296		0.054	
0.100		0.032		0.306		0.323		1.390		1.4		370		358		0.155	
0		0		0		0		0		0		296		299		0	
20		20		2		1		2		3		0		0		19	
95%		95%		10%		6%		10%		14%						90%	
1		1		1		1		2		3						2	
0.77		0.77		NA		NA		9.89		9.86		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	

3	3
0.149	
0.155	
0	
21	
0.051	
0.383	
0	
18	
86%	
3	
4.6	
NA	
0%	
0%	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

-1	3	4	2	4	2	-1	3	-1	3	4	2	4	2	3	2
4740		0.0029		0.0029		2120		2110		0.0056		0.0047		0.064	
4750		0.0031		0.0031		2120		2130		0.0050		0.0050		0.050	
350		0		0		130		150		0		0		0	
21		21		21		21		21		21		21		21	
3780		0.0014		0.0014		1870		1740		0.0021		0.0021		0.016	
5240		0.0031		0.0031		2340		2370		0.0160		0.0125		0.316	
4160		0		0		1950		1780		0		0		0	
0		21		21		0		0		19		20		19	
		100%		100%						90%		95%		90%	
										1		1			
NA		0.128629205		0.109		NA		NA		NA		NA		NA	
NA		NA		NA		NA		NA		2		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	

3	2	3	3	3	3	2	3	3	3
0.060		0.186		0.203		1.430		1.006	
0.050		0.155		0.155		1.260		0.965	
0		0		0		1		1	
21		21		21		21		21	
0.016		0.080		0.030		0.155		0.155	
0.250		0.959		1.060		6.310		2.480	
0		0		0		0		0	
19		18		16		12		12	
90%		86%		76%		57%		57%	
1		1		2		1		1	
NA		NA		NA		22.65		22.33	
NA		NA		NA		NA		NA	
0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

	FLDPH_N	FLDPH_NSF	FLDDOMG_N	FLDDOMG_NSF	FLDDOMG_NVF	FLDSC_N	FLDSC_NSF	FLDSC_NVF	FLDORP_N	FLDORP_NSF	FLDORP_NVF	FLDTEMP_N	FLDTEMP_NSF	HARD_N	HARD_NSF	HARD_NVF
Parameters	Field pH		Field Diss. Oxygen			Field Specific Conductivity			Field Oxidation Reduction Potential			Field Water Temperature		Hardness		
Total/Dissolved																
Units	pH Units		mg/L			µmhos/cm			mV			°C		mg/L		
MW-11S																
Sample Date																
10/21/04	6.6	2	15.56	4		56	2		258	3		4.73	3	19	2	
03/21/05	6.41	3	10.11	4		43	2					4.56	3	20.8	3	
05/13/05	5.98	3	9.75	3		51	2		163	3		5.66	3	21.5	3	
08/16/05	6.11	3	8.16	3		51	2		115	3		7	1	19.5	3	
11/11/05	6	1	11.9	3		47	2		235	3		4.03	3	17.6	3	
03/22/06	6.73	3	9.13	3		48	2		255	3		4.71	3	19.7	3	
08/21/06	6.2	2	9.79	3		45	2		204.5	4		5.76	3	18.7	3	
11/01/06	6.47	3	11.81	4		55	2		299.99	FALSE		5.01	3	16.5	3	
03/22/07	5.97	3	10.72	4		26	2		181.2	4		4.47	3	18.2	3	
08/21/07	5.96	3	10.86	4		29	2		131.3	4		5.96	3	16.2	3	
11/11/07	6.25	3	13.96	4		39	2		228.1	4		4.39	3	16.9	3	
03/20/08	6.99	3	8.14	3		41	2		153	3		4.32	3	17.6	3	
05/18/08	6.1	2	10.53	4		47	2		186.7	4		4.89	3	16.6	3	
08/24/08	6.33	3	10.63	4		41	2		195.2	4		5.76	3	15.4	3	
10/22/08	5.9	2	11.54	4		44	2		144.4	4		3.32	3	16.6	3	
08/25/09			9.79	3		76	2				R	4.82	3	16.5	3	
08/17/10	5.72	3	10.3	3		88	2		202.5	4		4.52	3	15.1	3	
08/30/11	6.03	3	11.85	4		42.216	FALSE		102.5	4		4.64	3	16.3	3	
08/20/12	9.09	3	11.45	4		44	2		-49.5	3		4.62	3	15.1	3	

			result > crit											result <20			result > crit					
SC_N	SC_NSF	SC_NVF	TDS_N	TDS_NSF	TDS_NVF	TSS_N	TSS_NSF	TSS_NVF	ACID_N	ACID_NSF	ACID_NVF	ALK_N	ALK_NSF	ALK_NVF	NO3NO2N_N	NO3NO2N_NSF	NO3NO2N_NVF	NO2N_N	NO2N_NSF	NO2N_NVF	NO3N_N	NO3N_NSF
Lab Conductivity			**Total Dissolved Solids**			**Total Suspended Solids**			**Acidity**			**Alkalinity**			**Nitrate/ Nitrite**			**Nitrite**			**Nitrate**	
µmhos/cm			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L	
55	2		16.3	3 J-		3.89	3		8.8	2 J		16	2		**0.155**	3						
47	2		48.8	3		0.2	1 J		6.8	2 J		16	2		0.16	2						
55	2		45	2		**0.075**	2		9.75	3		15	2		0.23	2						
48.5	3		37.5	3		0.4	1 J		7	1		15.5	3		0.232	3						
48	2		52.5	3		0.3	1 J		8.25	3		16	2		0.181	3						
49.0	2		37.5	3		4.50	2		10.3	3		17.0	2		0.255	3						
49.0	2		57.5	3		**0.075**	2		8.25	3 J		15.0	2		0.193	3		**0.0155**	3		0.190	2
46.5	3		32.5	3		**0.075**	2		10.0	1		20.0	1		0.162	3		**0.0155**	3		0.134	3
46.0	2		36.3	3		0.800	1		3.75	3 J		20.0	1		0.157	3		**0.0155**	3		0.140	2
47.5	3		36.3	3		**0.075**	2		4.50	2 J		13.8	3		0.241	3						
46.0	2		33.8	3		**0.0755**	3		7.75	3 J		15.2	3		0.185	3						
50.6	3		42.5	3		**0.076**	2		17.9	3		17.8	3		0.271	3						
45.4	3		26.3	3		**0.0875**	3		**1.57**	3		15.3	3		0.237	3						
44.5	3		37.5	3		**0.0775**	3		7.72	3 J		15.1	3		0.243	3						
48.1	3		28.8	3		**0.1665**	4		5.7	2 J		15.5	3		0.171	3						
50.4	3		30	1		0.203	3 J		6.8	2 J		30	1		0.133	3						
47.3	3		31	2		**0.153**	3		8.12	3 J		14.5	3		0.169	3						
47.8	3		39	2		0.707	3		4.4	2 J		14	2		0.14	2						
45.6	3		24	2		0.202	3 J		**5.0**	1 U		12.6	3		0.145	3						

NO3N_NVF	P_N	P_NSF	P_NVF	PORTHO_N	PORTHO_NSF	PORTHO_NVF
	Total Phosphorus			Orthophosphate		
	mg/L			mg/L		
	0.05	1	J			
	0.065	2				
	0.0525	3				
	0.017	2	J			
	0.017	2	J			
	0.0130	2				
	0.0050	1	J	**0.050**	1	UJ
	0.0150	2	J-			R
	0.0160	2		**0.050**	1	UJ
	0.00155	3				
	0.0164	3				
	0.0212	3				
	0.0128	3				
	0.0139	3				
	0.0066	2	J			
	0.00155	3				
	0.0093	2	J			
	0.00155	3				
	0.0083	2	J			

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

																								depends on field pH and field Temp	
result > crit				result > crit				result > crit								result > crit								result > crit	
CL_N	CL_NSF	CL_NVF	F_N	F_NSF	F_NVF	SO4_N	SO4_NSF	SO4_NVF	CN_N	CN_NSF	CN_NVF	CNWAD_N	CNWAD_NSF	CNWAD_NVF	SCN_N	SCN_NSF	SCN_NVF	DOC_F	DOC_FSF	DOC_FVF	NH3N_N				
Chloride			**Fluoride**			**Sulfate**			**Total Cyanide**			**Cyanide WAD[5]**			**Thiocyanate**			**Carbon)**			**Ammonia[3]**			
mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			mg/L			
0.927	3		**0.0155**	3		7.82	3		**0.00125**	3		**0.00125**	3		0.16	2	J				**0.0155**			
0.751	3		**0.0155**	3		6.24	3		**0.00125**	3		**0.00125**	3		0.082	2	J				**0.0155**			
0.753	3		**0.0155**	3		5.9	2		**0.00125**	3		**0.00125**	3		**0.0295**	3					**0.0155**			
0.724	3		**0.0155**	3		5.68	3		**0.00125**	3		0.005	1		0.26	2	J				0.036			
0.67	2		**0.0155**	3		5.36	3		**0.00125**	3		**0.00125**	3		0.11	2	J				**0.0155**			
0.673	3		**0.0155**	3		5.78	3		**0.00125**	3		**0.00125**	3		**0.155**	3					**0.0155**			
0.846	3		0.0390	2	J	5.74	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0400			
0.694	3		**0.0155**	3		4.67	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0941			
0.813	3		0.0330	2	J	4.66	3		**0.00075**	2		**0.00075**	2		**0.155**	3					**0.0155**			
0.678	3		**0.0155**	3		4.76	3		**0.00075**	2		**0.00075**	2		**0.155**	3					0.0731			
0.633	3		**0.0155**	3		4.61	3		**0.00075**	2		0.0026	2	J	**0.155**	3					0.0467			
0.640	2		0.0320	2	J	5.58	3		**0.00075**	2		0.0018	2	J	**0.155**	3					**0.0155**			
0.503	3		0.052	2	J	4.86	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.075**	2		0.0348			
0.483	3		0.09	1	J	4.59	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.050**			
0.605	3		**0.0155**	3		4.11	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.075**	2		**0.050**			
0.703	3		**0.0155**	3		4.28	3		**0.0025**	2	U	**0.00075**	2		**0.155**	3		0.387	3	J	**0.0155**			
0.661	3		0.068	2	J	4.72	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.744	3		0.048	2	J	4.81	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			
0.786	3		0.061	2	J-	4.03	3		**0.00075**	2		**0.00075**	2		**0.155**	3		**0.250**	2	U	**0.0155**			

NH3N_NSF	NH3N_NVF	AL_N	AL_NSF	AL_NVF	AL_F	AL_FSF	AL_FVF	SB_N	SB_NSF	SB_NVF	SB_F	SB_FSF	SB_FVF	AS_N	AS_NSF	AS_NVF	AS_F	AS_FSF	AS_FVF	BA_N	BA_NSF	BA_NVF	BA_F	BA_FSF	BA_FVF
			Aluminum						**Antimony**						**Arsenic**						**Barium**				
			Total		Dissolved				Total		Dissolved				Total		Dissolved				Total		Dissolved		
			µg/L		µg/L				µg/L		µg/L				µg/L		µg/L				µg/L		µg/L		
3		91.1	3	**12.5**	3 U	**0.0385**	3	**0.0385**	3	**0.125**	3	**0.125**	3	3.04	3	1.88	3
3		4.74	3 J+	1.41	3 J+	0.0257	3	0.0262	3	0.159	3	0.133	3	2.5	2	2.28	3
3		9.14	3 J+	1.5	2 J+	**0.01**	1 U	0.0202	3 J+	0.111	3	0.119	3	1.91	3	2.09	3
2 J		8.7	2 J		R	**0.00155**	3		R	**0.25**	2 U	**0.25**	2	2.1	2	1.94	3
3		8.85	3 J+	**1**	1 U	0.021	2 J+	0.0234	3 J+	**0.125**	3	0.256	3 J	1.8	2	1.75	3
3		211	3	2.48	3 J+	0.0438	3 J	0.0310	2 J	**0.155**	3	**0.155**	3	6.02	3	2.08	3
1 J		3.20	2 J+	2.80	2 J+	0.0232	3 J	0.0190	2 J	**0.155**	3	**0.155**	3	1.92	3 J		R
3 J		2.55	3	**1.00**	1 U	**0.0075**	2	**0.0250**	2 U	0.496	3 J	**0.155**	3	1.58	3 J+	1.86	3 J+
3		22.9	3 J+	2.91	3 J+	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	2.13	3 J+	1.87	3 J+
3 J		12.5	3 J+	**1.00**	1 U	0.0288	3 J	0.0276	3 J	**0.155**	3	**0.155**	3	1.96	3	1.74	3 J+
3 J		23.6	3	**1.00**	1 U	0.0176	3 J	0.0276	3 J	**0.155**	3	**0.155**	3	2.02	3	1.80	2
3		9.82	3	3.17	3	0.0258	3 J	0.0256	3 J	**0.155**	3	**0.155**	3	1.99	3	1.84	3
3 J		**1.00**	1 U		R	0.0163	3 J	0.0188	3 J	**0.155**	3	**0.155**	3	1.71	3	1.85	3
1 U		4.8	2	**1.00**	1 U	0.0275	3 J	0.0249	3 J	**0.155**	3	**0.155**	3	1.78	3	1.73	3
1 U		3.03	3	**1.00**	1 U	**0.0250**	2 U	**0.0250**	2 U	**0.155**	3	**0.155**	3	1.61	3	1.77	3
3		62.4	3 J+	**1.00**	1 U	0.0345	3 J	0.0211	3 J	**0.155**	3	**0.155**	3	2.47	3	1.42	3
3		2.57	3 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.155**	3	**0.155**	3	1.65	3 J+	1.5	2 J+
3		4.6	2 J+	**1.00**	1 U	**0.0075**	2	**0.0075**	2	**0.075**	2	**0.075**	2	1.94	3	1.78	3
3		6.3	2	**1.00**	1 U	0.0188	3 J	**0.0075**	2	**0.075**	2	**0.075**	2	1.69	3	1.64	3

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								depends on Hardness				depends on Hardness																	
result > crit				result > crit				result > crit				result > crit														result > crit			
FE_N	FE_NSF	FE_NVF	FE_F		FE_FSF	FE_FVF	PB_N		PB_NSF	PB_NVF	PB_F		PB_FSF	PB_FVF	MG_N	MG_NSF	MG_NVF	MG_F	MG_FSF	MG_FVF	MN_N	MN_NSF	MN_NVF	MN_F	MN_FSF	MN_FVF
			Iron								**Lead[4]**							**Magnesium**						**Manganese**		
	Total			Dissolved				Total				Dissolved				Total			Dissolved			Total			Dissolved	
	µg/L			µg/L				µg/L				µg/L				µg/L			µg/L			µg/L			µg/L	
55.8	3		**3.1**	2			**0.05**	1			**0.05**	1			1100	2		1070	3		5.42	3		2.17	3	
7.08	3	J	**1.325**	4			**0.011**	2			0.0673	3	J		1320	3		1030	3		1.72	3		1.53	3	
11.3	3		6.19	3	J		**0.011**	2			**0.035**	2	U		1220	3		1070	3		1.15	3		1.09	3	
14.3	3	J	**6.2**	2			**0.0155**	3			0.1	1	J		1130	3		1110	3		0.991	3		0.904	3	
13.3	3	J	**3.1**	2			**0.0155**	3					R		1040	3		1050	3		1.08	3		0.379	3	
306	3		25.3	3			0.152	3	J+		**0.0130**	2			1080	3		1100	2		23.7	3		2.31	3	
3.10	2		6.44	3	J		0.327	3	J+				R		1100	2		1120	3		0.460	2	J+	0.534	3	J+
10.0	1	U	**10.0**	1	U		**0.0155**	3			**0.0155**	3			1000	1		1040	3		0.418	3	J+	0.343	3	J+
26.4	3	J+	**3.10**	2			**0.0155**	3			**0.0155**	3			1090	3		1080	3		2.71	3	J+	0.453	3	J+
25.5	3		**10.0**	1	U		**0.050**	1	U		**0.0155**	3			928	3		970	2		0.972	3	J+	0.358	3	J+
29.4	3		13.8	3	J		**0.0155**	3			**0.0155**	3			972	3		1060	3		0.746	3		0.311	3	
32.4	3		25.2	3			**0.0155**	3			**0.0155**	3			987	3		953	3		1.30	2		0.643	3	
27.5	3		23.2	3			**0.0155**	3			**0.0155**	3			969	3		1000	1		0.574	3	J+	0.657	3	J+
26.6	3		18.2	3	J		0.0383	3	J		**0.0155**	3			901	3		915	3		0.891	3		0.225	3	
17.1	3	J	14.7	3	J		**0.0155**	3			**0.0155**	3			1010	3		929	3		0.336	3		0.202	3	
76.9	3		**10.0**	1	U		**0.050**	1	U		**0.0155**	3			989	3		921	3		2.93	3	J+	0.0987	3	J+
3.10	2		**3.10**	2			**0.0155**	3			**0.0155**	3			913	3		917	3		0.301	3	J+	0.147	3	J+
40.9	3		6.94	3	J		**0.0155**	3			**0.0155**	3			1020	3		963	3		0.563	3		0.188	3	
24.1	3		14.9	3	J		**0.0155**	3			**0.0155**	3			940	2		950	2		0.7	1	J+	0.26	2	J+

CALC revised 2013												2013: DWS = NA		2013: DWS = NA									
result > crit				result > crit								result > crit		result > crit									result > crit
HG_N	HG_NSF	HG_NVF	HG_F	HG_FSF	HG_FVF	MO_N	MO_NSF	MO_NVF	MO_F	MO_FSF	MO_FVF	NI_N	NI_NSF	NI_NVF	NI_F	NI_FSF	NI_FVF	K_N	K_NSF	K_NVF	K_F	K_FSF	K_FVF	SE_N	SE_NSF
			Mercury[7]						Molybdenum						Nickel[4]						Potassium		
	Total			Dissolved			Total			Dissolved			Total			Dissolved			Total			Dissolved			Total
	µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L			µg/L
0.031	2		**0.031**	2		**0.155**	3		**0.155**	3			0.669	3		0.427	3		393	3		368	3		**0.155**	3
0.0315	3		**0.0315**	3		0.157	3	J+	0.242	3			0.553	3	J+	0.334	3		374	3		328	3		0.04	1
0.0315	3		**0.0315**	3		0.118	3		0.148	3			0.713	3		0.679	3		342	3		351	3		0.0423	3
0.031	2		**0.031**	2		**0.0031**	2				R		0.635	3		0.604	3		385	3		339	3		**0.0775**	3
0.031	2		**0.031**	2		0.0964	3	J+	0.09	1	J+		0.706	3		0.641	3		351	3		358	3		**0.0775**	3
0.000475	4		**0.000475**	4		0.427	3		0.194	3			10.4	3		2.72	3		401	3		398	3		**0.155**	3
0.000475	4		**0.000475**	4		0.0732	3	J			R		0.834	3		0.848	3		356	3		389	3		**0.155**	3
0.000475	4		**0.000475**	4		0.120	2		0.117	3			0.672	3		0.641	3		322	3		354	3		**0.155**	3
0.000169	3		**0.000475**	4		0.166	3		0.138	3			1.69	3	J+	0.971	3	J+	350	2		347	3		**0.155**	3
0.000169	3		**0.000475**	4		0.157	3		0.140	2			1.70	2	J+	0.909	3	J+	337	3		338	3		**0.155**	3
0.000169	3		**0.000475**	4		0.162	3		0.169	3			1.08	3		0.910	2		328	3		370	2		**0.155**	3
0.00075	2		**0.00075**	2		0.125	3		0.126	3			0.849	3		0.820	2		329	3		323	3		**0.155**	3
0.00075	2		**0.00075**	2		0.14	2		0.168	3			0.914	3	J		R		329	3		339	3		**0.155**	3
0.00165	3	J	**0.00075**	2		0.137	3		0.125	3			0.791	3		0.523	3		311	3		316	3		**0.155**	3
0.00075	2		**0.00075**	2		0.152	3		0.146	3			0.731	3		0.549	3		330	2		316	3		**0.155**	3
0.00075	2		**0.00075**	2		0.142	3		0.121	3			**0.310**	2	U	**0.310**	2	U	326	3		292	3		**0.155**	3
0.00075	2		**0.00075**	2		**0.0075**	2		**0.0075**	2			**0.310**	2	U	**0.310**	2	U	299	3		296	3		**0.155**	3
0.00075	2		**0.00075**	2		0.193	3		0.124	3			0.708	3		0.49	2	J	327	3		314	3		**0.155**	3
0.00075	2		**0.00075**	2		0.135	3		0.128	3			0.801	3		0.801	3		314	3		317	3		**0.155**	3

depends on Total Se
result > crit

SE_NVF	SE_F	SE_FSF	SE_FVF
	Selenium		
	Dissolved		
	µg/L		
	0.155	3	
J	0.0354	3	J
J	0.0397	3	J
	0.155	3	
	0.0775	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	
	0.155	3	

Bristol Bay/Pebble Mine Permitting Process FOIAs_Final Release

			depends on HARD; revised 2013						depends on Total Ag																				
			result > crit						result > crit																				
SI_F	SI_FSF	SI_FVF	AG_N		AG_NSF	AG_NVF	AG_F		AG_FSF	AG_FVF	NA_N		NA_NSF	NA_NVF	NA_F		NA_FSF	NA_FVF	TL_N		TL_NSF	TL_NVF	TL_F		TL_FSF	TL_FVF	SN_N		SN_ NSF	SN_NVF
	Silicon						**Silver[8]**								**Sodium**								**Thallium**						**Tin**
	Dissolved			Total					Dissolved			Total					Dissolved			Total				Dissolved			Total		
	µg/L			µg/L					µg/L			µg/L					µg/L			µg/L				µg/L			µg/L		
5230	3	J+		**0.0031**	2		**0.0031**	2			2620	3	J+	2620	3	J+			**0.0125**	3			**0.0125**	3			**0.155**	3	
4820	3			**0.001435**	4		**0.001435**	4			2450	3		1890	3				**0.005**	1	U		**0.002125**	4			**0.0302**	3	
5570	3			**0.001435**	4		**0.001435**	4			2500	2		1950	3				**0.002125**	4			**0.002125**	4			**0.0302**	3	
6200	2			**0.0031**	2		**0.0062**	2			2530	3		2490	3				**0.0031**	2			**0.0062**	2			**0.031**	2	
6360	3			**0.0031**	2		**0.0031**	2			2300	2		2320	3				**0.0031**	2			**0.0031**	2			**0.031**	2	
4940	3			**0.0031**	2		**0.0031**	2			2220	3		2260	3				**0.0025**	2			**0.0025**	2			0.104	3	
5390	3			**0.0031**	2		**0.0031**	2			2320	3		2370	3				**0.0050**	1			0.0164	3	J		**0.050**	1	
5420	3			**0.0031**	2		**0.0031**	2			2160	3		2260	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5170	3			**0.0031**	2		**0.0031**	2			2330	3		2320	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5270	3			**0.0031**	2		**0.0031**	2			2150	3		2250	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5940	3			**0.0031**	2		**0.0031**	2			2190	3		2440	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5360	3			**0.0031**	2		**0.0031**	2			2140	3		2080	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5430	3			**0.0031**	2		**0.0031**	2			2130	3		2180	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5480	3			**0.0031**	2		**0.0031**	2			2020	3		2070	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5320	3			**0.0031**	2		**0.0031**	2			2280	3		2110	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
4860	3			**0.0031**	2		**0.0031**	2			2140	3		2020	3				**0.0050**	1			**0.0050**	1			1.25	3	J+
4800	2			0.0073	2	J	**0.0031**	2			2050	3		2040	3				**0.0050**	1			**0.0050**	1			**0.050**	1	
5200	2			**0.0031**	2		**0.0031**	2			2240	3		2130	3				**0.0031**	2			**0.0031**	2			**0.0310**	2	
5320	3			**0.0031**	2		**0.0031**	2			2080	3		2150	3				**0.0031**	2			**0.0031**	2			**0.0310**	2	

																		depends on Hardness			depends on Total Zn		
																		result > crit			result > crit		
SN_F	SN_FSF	SN_FVF	V_N	V_NSF	V_NVF	V_F	V_FSF	V_FVF	ZN_N	ZN_NSF	ZN_NVF	ZN_F	ZN_FSF	ZN_FVF									
							Vanadium											**Zinc[4]**					
	Dissolved			Total			Dissolved			Total			Dissolved										
	µg/L			µg/L			µg/L			µg/L			µg/L										
0.155	3		**0.125**	3		**0.125**	3			**0.235**	3		**0.235**	3									
0.0302	3		0.192	3		0.138	3			**0.2345**	4		1.06	3									
0.0302	3		0.15	2		0.0989	3			**0.2345**	4		**0.2345**	4									
0.062	2		**0.1**	1		**0.2**	1			**0.2325**	4		**1.5**	2	U								
0.031	2		0.243	3	J	0.274	3	J		**0.75**	2	U	**0.75**	2	U								
0.050	1	U	0.540	2		**0.110**	2			2.10	2	J+	1.53	3	J+								
0.050	1		**0.250**	2		**0.250**	2			1.13	3	J+			R								
0.050	1		0.897	3	J	**0.250**	2			**0.155**	3		**0.155**	3									
0.050	1		**0.155**	3		**0.155**	3			1.04	3	J+	1.02	3	J+								
0.050	1		**0.155**	3		**0.155**	3			3.53	3	J+	1.21	3	J+								
0.050	1		**0.155**	3		**0.155**	3			1.05	3		**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			0.664	3	J	0.746	3	J								
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
0.050	1		**0.155**	3		**0.155**	3			2.2	2	J+	**0.155**	3									
0.050	1		**0.155**	3		**0.155**	3			**0.50**	1	U	**0.50**	1	U								
0.100	1	U	**0.155**	3		**0.155**	3			3.33	3	J+	**1.55**	3	U								
0.050	1		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								
0.0310	2		**0.155**	3		0.351	3	J		1.92	3	J	**1.55**	3	U								
0.0310	2		**0.155**	3		**0.155**	3			**1.55**	3	U	**1.55**	3	U								

	2	3	2	4	0	2	1	4	2	3	1	3
Mean	6.4		10.84		48		177		4.90		18	
Median	6.2		10.63		45		187		4.71		17	
St. Deviation	1		2		14		79		1		2	
# of values	18		19		19		17		19		19	
Minimum	5.7		8.14		26		-50		3.32		15	
Maximum	9.1		15.56		88		300		7.00		22	
Lowest fifth percentile	6		8		29		72		4		15	
# of values undetected	0		0		0		0		0		0	
% of values undetected												
# of values between MDL and PQL												
ronic Aquatic Life Criteria (CALC)[1]	>6.5 and <8.5		>=7		NA		NA		NA		NA	
Drinking Water Standards (DWS)[2]	>6.0 and <8.5		>=4		NA		NA		NA		NA	
% of CALC exceedences	83%		0%		0%		0%		0%		0%	
% of DWS exceedences	33%		0%		0%		0%		0%		0%	

HIDE this row - notes

RED criteria result is <6.5 OR >8.5 result < 7

1	3	1	3	2	2	2	3	0	2	3	3	4	3	2	2
48		36.5		0.64		7.5		17		0.193		0		0	
48		36.3		0.17		7.7		16		0.181		0		0	
3		10		1		3		4		0		0		0	
19		19		19		19		19		19		3		3	
45		16.3		0.08		1.6		13		0.133		0.0155		0.134	
55		57.5		4.50		17.9		30		0.271		0.0155		0.19	
45		23		0		4		14		0		0		0	
0		0		10		2		0		1		3		0	
				53%		11%				5%		100%			
				5		10									
NA		NA		NA		NA		>=20		NA		NA		NA	
NA		500		NA		NA		NA		10		NA		NA	
0%		0%		0%		0%		84%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%	
				result > crit				result <20		result > crit					

3	2	3	2
0.02		0	
0.01		0	
0		0	
19		2	
0.00		0.05	
0.07		0.05	
0		0	
3		2	
16%		100%	
7			
NA		NA	
NA		NA	
0%		0%	
0%		0%	

3	3	4	3	2	3	5	2	5	2	3	3	2	2	4
0.699		0.0312		5.17		0.00118		0.00126		0.15		0		0.0313
0.694		0.0155		4.81		0.00075		0.00075		0.16		0		0.0155
0		0		1		0		0		0		0		0
19		19		19		19		19		19		7		19
0.483		0.0155		4.03		0.00075		0.00075		0.03		0.075		0.0155
0.927		0.0900		7.82		0.00250		0.00500		0.26		0.387		0.0941
1		0		4		0		0		0		0		0
0		11		0		19		16		15		6		13
		58%				100%		84%		79%		86%		68%
		8						2		4		1		6
230		NA		NA		NA		0.0052		NA		NA		6.98
250		4		250		NA		0.2		NA		NA		NA
0%		0%		0%		0%		0%		0%		0%		0%
0%		0%		0%		0%		0%		0%		0%		0%
														depends on field pH and field Temp
result > crit		result > crit		result > crit				result > crit						result > crit

3	2	3	1	2	4	3	4	3	3	3	3	3	2	3	2	3
	25.9		2.2		0.0213		0.0223		0.164		0.152		2.20		1.82	
	8.7		1.0		0.0232		0.0250		0.155		0.155		1.94		1.82	
	50		3		0		0		0		0		1		0	
	19		17		19		18		19		19		19		18	
	1.0		1.0		0.0016		0.0075		0.075		0.075		1.58		1.42	
	211.0		12.5		0.0438		0.0385		0.496		0.256		6.02		2.28	
	2		1		0		0		0		0		2		1	
	1		11		8		7		16		16		0		0	
	5%		65%		42%		39%		84%		84%					
					9		8		1		1					
	87		87		NA		NA		150		150		NA		NA	
	NA		NA		6		NA		10		NA		2,000		NA	
	11%		0%		0%		0%		0%		0%		0%		0%	
	0%		0%		0%		0%		0%		0%		0%		0%	
	result > crit		result > crit		result > crit				result > crit		result > crit		result > crit			

4	3	4	3	4	2	4	2	2	3	2	3	4	2	4	2	-1	3
0.0118		0.0109		0.05		0.05		1.58		1.92		0.0089		0.0093		5320	
0.0125		0.0125		0.01		0.01		1.25		1.25		0.0075		0.0075		5170	
0		0		0		0		1		3		0		0		590	
19		19		19		19		19		18		19		19		19	
0.0015		0.0015		0.00		0.00		0.75		0.75		0.0031		0.0031		4490	
0.0250		0.0150		0.75		0.75		5.00		12.00		0.0185		0.0185		6610	
0		0		0		0		1		1		0		0		4535	
17		19		18		17		15		14		19		19		0	
89%		100%		95%		89%		79%		78%		100%		100%			
2						1		2		3							
NA		NA		NA		NA		NA		NA		0.067		0.066		NA	
4		NA		NA		NA		NA		NA		5		NA		NA	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
												depends on Hardness		depends on Hardness			
result > crit												result > crit		result > crit			

| | | |

1	3	1	3	4	3	4	3	-1	3	-1	3	3	3	3	3		
39.5		10.8		0.05		0.03		1040		1010		2.47		0.67			
25.5		10.0		0.02		0.02		1010		1030		0.97		0.38			
67		8		0		0		110		70		5		1			
19		19		19		17		19		19		19		19			
3.1		1.3		0.01		0.01		901		915		0.30		0.10			
306.0		25.3		0.33		0.10		1320		1120		23.70		2.31			
3		3		0		0		912		917		0		0			
3		9		16		15		0		0		0		0			
16%		47%		84%		88%											
4		7		1		2											
1000		1000		0.287		0.306		NA		NA		NA		NA			
NA		NA		15		NA		NA		NA		50		NA			
0%		0%		5%		0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%		0%		0%		0%			
				depends on Hardness		depends on Hardness											
result > crit		result > crit		result > crit		result > crit						result > crit					

5	2	5	2	3	3	3	3	3	3	3	3	0	3	0	3	3	3
0.009		0.009		0.140		0.138		1.319		0.749		342		340		0.135	
0.001		0.001		0.140		0.138		0.731		0.641		330		339		0.155	
0		0		0		0		2		1		28		29		0	
19		19		19		17		19		18		19		19		19	
0.000		0.000		0.003		0.008		0.310		0.310		299		292		0.040	
0.032		0.032		0.427		0.242		10.400		2.720		401		398		0.155	
0		0		0		0		0		0		310		296		0	
18		19		3		2		2		2		0		0		17	
95%		100%		16%		12%		11%		11%						89%	
1										1						2	
0.77		0.77		NA		NA		10.54		10.51		NA		NA		5	
2		2		NA		NA		NA		NA		NA		NA		50	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
0%		0%		0%		0%		0%		0%		0%		0%		0%	
CALC revised 2013								2013: DWS = NA		2013: DWS = NA							
result > crit		result > crit						result > crit		result > crit							result > crit

3	3
0.139	
0.155	
0	
19	
0.035	
0.155	
0	
17	
89%	
2	
4.6	
NA	
0%	
0%	

depends on Total Se

result > crit

-1	3		4	2		4	2		-1	3		-1	3		4	2		4	2		3	2
5370			0.0031			0.0031			2260			2210			0.0047			0.0053			0.115	
5320			0.0031			0.0031			2220			2180			0.0050			0.0050			0.050	
420			0			0			170			190			0			0			0	
19			19			19			19			19			19			19			19	
4800			0.0014			0.0014			2020			1890			0.0021			0.0021			0.030	
6360			0.0073			0.0062			2620			2620			0.0125			0.0164			1.250	
4818			0			0			2047			1944			0			0			0	
0			18			19			0			0			19			18			17	
			95%			100%									100%			95%			89%	
			1															1				
NA			0.146500705			0.125			NA			NA			NA			NA			NA	
NA			NA			NA			NA			NA			2			NA			NA	
0%			0%			0%			0%			0%			0%			0%			0%	
0%			0%			0%			0%			0%			0%			0%			0%	
				depends on HARD; revised 2013			depends on Total Ag															
				result > crit			result > crit											result > crit				

3	2	3	3	3	3	2	3	3	3		
0.054		0.221		0.176		1.210		0.910			
0.050		0.155		0.155		1.040		0.890			
0		0		0		1		1			
19		19		19		19		18			
0.030		0.100		0.099		0.155		0.155			
0.155		0.897		0.351		3.530		1.550			
0		0		0		0		0			
19		14		15		10		13			
100%		74%		79%		53%		72%			
		2		2		2		1			
NA		NA		NA		24.15		23.81			
NA		NA		NA		NA		NA			
0%		0%		0%		0%		0%			
0%		0%		0%		0%		0%			
						depends on Hardness		depends on Total Zn			
						result > crit		result > crit			