

HW-1L

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.44	0.3	1.22	0.38	1.5	0.92
ORP	mV	-	-239.2	-299.5	-241.5	-290.7	-256.4	-249.8
pH	SU	8.14-9.14	8.44	8.55	8.51	8.12	8.42	8.39
Specific Conductance	uS/cm	-	353.2	294.1	344.8	381.3	418.7	498.6
Temperature	C	-	7.1	9.3	10.6	7.4	7.16	10.72
Turbidity	NTU	-	2.98	3.3	2.9	1.7	4.07	81.8
Water Elevation	ft MSL	-	1467.56	1445.58	1444.77	1444.70	1444.71	1444.80
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	745.21	-	-	598	-	-	-
Cadmium	ug/L	3.000	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	1186.83	957	606	480	1190	1070	287
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	23.04	-	-	13.2	-	-	-
Manganese	ug/L	200	< 50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.8	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	109.06	79.1	82.2	80.7	77.0	78.6	77.6
Alkalinity, Carbonate	mg/L	7.8	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	57.2	41.5	34.8	35.6	38.7	40.1	68.2
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	33.01	30.0	26.1	27.8	26.4	28.3	24.9
Sulfide	mg/L	0.8	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	34.39	26.8	24.9	24.3	25.2	26.2	31.7
Magnesium	mg/L	14.63	11.2	10	10.4	10.2	10.9	11.8
Potassium	mg/L	6.17	1.8	1.9	1.7	1.9	1.9	2.3
Sodium	mg/L	28.01	22.9	20.1	21.3	27.9	23.7	37.4
General								
Hardness	mg/L	155.68	113	103	104	105	111	128

HW-1U LLA

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.45	2.04	1.27	1.35	1.48	0.95
ORP	mV	-	-233.5	-217.2	-241.2	-257.3	-291.4	-259.2
pH	SU	8.06-9.06	8.50	8.44	8.47	8.45	8.58	8.33
Specific Conductance	uS/cm	-	405.4	345.6	398.2	407.1	511.3	1598.4
Temperature	C	-	7.6	9.7	9.9	7.9	6.86	12.76
Turbidity	NTU	-	7.75	3.09	4.74	9.55	1.94	2.43
Water Elevation	ft MSL	-	1518.62	1486.75	1415.26	-	1472.41	1473.15
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	9.6	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	8.56	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	56769.6	344	595	293	560	774	842
Lead	ug/L	15.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	17.39	-	-	12.1	-	-	-
Manganese	ug/L	672.84	< 50.0	<50.0	<50.0	<50.0	<50.0	63.2
Mercury	ng/L	14.2	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	44.15	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	156.67	100	106	104	96.7	99.1	75.1
Alkalinity, Carbonate	mg/L	64.24	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	61.2	17.7	17.8	17.6	17.6	32.1	408
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.299	0.158	0.169	0.100	0.115	0.07	0.116
Nitrogen, Nitrate	mg/L	0.57	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.78	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	395.42	66.0	58.3	63.0	56.1	58.8	46.1
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	61.29	26.3	21.5	26.5	27.4	31.0	49.5
Magnesium	mg/L	25.82	9.9	7.9	9.7	9.5	11.1	15.1
Potassium	mg/L	16.88	2.9	3.1	3.3	3.2	3.3	6.7
Sodium	mg/L	134.27	38.7	43.0	40.0	36.8	40.1	232
General								
Hardness	mg/L	170.91	106	86.0	106	108	123	186

HW-1U UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.23	1.15	1.25	1.34	1.44	0.31
ORP	mV	-	-362.3	-243.8	-293.5	-341	-351.3	-351.3
pH	SU	8.4-9.4	8.96	8.63	8.76	8.62	8.43	8.44
Specific Conductance	uS/cm	-	237.9	139.1	218.5	245.8	5057.8	3641.3
Temperature	C	-	7.1	9.0	9.6	7.7	6.82	10.25
Turbidity	NTU	-	4.71	22.29	4.4	5.27	18.87	9.51
Water Elevation	ft MSL	-	1534.68	1536.77	1536.05	1536.26	1535.55	1535.46
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	9.3	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	1364.17	352	234	352	733	2110	976
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	16.74	-	-	<10.0	-	-	-
Manganese	ug/L	80.14	51.4	<50.0	<50.0	66.7	210	133
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	121.72	87.9	68.0	75.2	99.3	58.1	57.6
Alkalinity, Carbonate	mg/L	17.08	5.6	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	96.09	< 10.0	<10.0	<10.0	<10.0	1270	1320
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.097	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	72.34	5.4	3.2	11.9	5.3	35.5	29.5
Sulfide	mg/L	2.47	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	34.03	24.3	17.6	23.2	26.5	89.8	79.8
Magnesium	mg/L	15.63	7.2	4.5	6.5	7.2	16.3	14.9
Potassium	mg/L	20.91	4.4	2.5	4.1	3.2	9.2	8.8
Sodium	mg/L	67.74	6.8	4.8	8.4	6.2	717	588
General								
Hardness	mg/L	146.74	90.4	62.5	84.9	95.8	291	261

HW-2

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.31	0.28	1.27	1.34	0.28	1.52
ORP	mV	-	-238.2	-229.3	-175.4	-211.3	-180.6	-251.3
pH	SU	7.29-8.29	8.13	7.54	7.46	7.63	7.42	7.39
Specific Conductance	uS/cm	-	501.3	377.4	648.7	808.7	919.8	1007.5
Temperature	C	-	7.1	7.4	9.4	8.9	6.93	8.41
Turbidity	NTU	-	66.7	56.23	55.58	64.21	178.94	87.88
Water Elevation	ft MSL	-	1531.54	1538.84	1538.22	1538.76	1536.89	1537.26
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	2594.79	662	2290	2950	4580	4990	6090
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	333.37	264	457	602	661	712	713
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	141.40	81.4	80.9	70.9	75.2	95.1	92.4
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	34.7	26.1	20.5	28.0	97.1	55.4	52.2
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.083	0.0386	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	175.33	160	173	207	128	259	298
Sulfide	mg/L	0.52	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	71.88	38.1	33.6	40.9	50.3	65.1	86.4
Magnesium	mg/L	26.49	18.4	15.9	17.3	21.2	30.4	38.5
Potassium	mg/L	6.12	4.9	5.4	6.0	7.9	8.8	12.0
Sodium	mg/L	29.55	41.6	56.6	53.7	61.9	54.4	65.6
General								
Hardness	mg/L	296.9	171	149	174	213	288	374

HW-8U

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.32	0.21	2.25	1.49	0.33	1.34
ORP	mV	-	-105.2	-124.0	-85.1	-128.5	-144.3	-134.9
pH	SU	6.4-7.4	6.65	6.81	6.88	6.85	7.26	6.92
Specific Conductance	uS/cm	-	445.3	384.9	386.5	376.8	379	440
Temperature	C	-	7.3	9.1	10.6	8.0	6.11	9.8
Turbidity	NTU	-	3.82	3.12	4.57	0.52	6.01	2.58
Water Elevation	ft MSL	-	1533.32	1537.62	1536.52	1537.30	1535.76	1536.41
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4	-	-	<2.0	-	-	-
Arsenic	ug/L	8.8	7.8	7.0	6.0	5.5	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	22048.83	10200	10300	8740	7960	13800	11300
Lead	ug/L	9	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	14.39	-	-	<10.0	-	-	-
Manganese	ug/L	6267.76	6110	5530	4720	4240	3870	3580
Mercury	ng/L	4	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.8	-	-	<0.20	-	-	-
Thallium	ug/L	2	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	26.73	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	214.17	155	153	142	132	133	128
Alkalinity, Carbonate	mg/L	8	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	18.35	19.8	18.0	15.4	13.9	12.3	11.4
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.041	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	12.26	14.9	14.2	14.1	12.1	8.3	8.6
Sulfide	mg/L	0.8	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	45.93	45.6	43.6	38.6	37.8	36.8	37.8
Magnesium	mg/L	18.68	14.2	13.8	13.0	12.9	12.7	12.4
Potassium	mg/L	3.64	3.7	3.8	3.6	3.3	3.2	3.2
Sodium	mg/L	4.26	4.8	4.7	4.2	4.5	3.6	3.8
General								
Hardness	mg/L	203.47	172	166	150	148	144	146

HYG-1

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.37	1.52	1.27	1.41	0.01	1.58
ORP	mV	-	11.3	25.4	93.5	99.3	114.4	169.3
pH	SU	6.29-7.29	6.98	6.75	6.65	6.50	6.61	6.64
Specific Conductance	uS/cm	-	610.3	607.5	681.6	740.2	647.0	427.0
Temperature	C	-	7.1	10.4	9.2	8.38	6.45	8.48
Turbidity	NTU	-	1.96	2.54	2.17	0.54	0.98	0.20
Water Elevation	ft MSL	-	1532.35	1535.31	1534.79	1534.26	1532.41	1531.52
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	7.4	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	9.22	< 4.0	<4.0	<4.0	<4.0	<4.0	6.2
Iron	ug/L	481.9	< 200	<200	<200	<200	<200	<200
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	627.41	711	841	981	1090	1600	801
Mercury	ng/L	37.3	10.4	6.86	19.8	14.2	19.6	11.6
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	25.31	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	372.91	155	243	238	257	249	154
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	21.5	16.5	13.1	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.56	0.233	0.215	0.310	0.284	0.489	0.394
Nitrogen, Nitrate	mg/L	0.08	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.40	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	136.69	133	109	95.1	95.7	79.2	56.5
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	65.21	51.4	59.9	48.8	59.8	59.6	40.6
Magnesium	mg/L	34.32	25.6	28.3	25.2	28.5	28.9	18.5
Potassium	mg/L	12.96	10.4	11.5	9.9	11.2	11.3	8.8
Sodium	mg/L	80.47	25.7	38.0	42.8	45.6	36.6	21.8
General								
Hardness	mg/L	321.93	234	266	226	267	268	177

KMW-5R

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	6.68	2.71	7.35	4.93	3.02	2.96
ORP	mV	-	233.0	65.8	126.7	24.2	-33.7	4.6
pH	SU	6.67-7.67	6.96	6.62	7.05	6.76	6.85	6.72
Specific Conductance	uS/cm	-	812.9	691.4	834.2	813.2	774.1	837.1
Temperature	C	-	9.2	11.0	10.8	7.7	8.15	9.41
Turbidity	NTU	-	1087.2	746.4	147.66	119.34	176.75	62.18
Water Elevation	ft MSL	-	1560.13	1567.71	1564.29	1563.83	1560.10	1565.26
Metals								
Aluminum	ug/L	200	-	-	1500	-	-	-
Antimony	ug/L	4	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	12.2	7.8	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	28.32	37.3	28.4	6.0	5.3	4.7	4.2
Iron	ug/L	52956	128000	77000	8860	8840	12600	4120
Lead	ug/L	9	5.3	3.1	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	31.39	-	-	13.4	-	-	-
Manganese	ug/L	2789	1610	1980	718	1800	1710	1770
Mercury	ng/L	14.89	6.68	<3.1	1.55	5.30	1.09	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	44.7	38.1	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.8	-	-	<0.20	-	-	-
Thallium	ug/L	2	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	23.65	21.4	14.5	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	480.97	374	371	383	381	367	346
Alkalinity, Carbonate	mg/L	8	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	191.74	< 10.0	<50.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.063	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	138.86	75.6	66.0	76.0	67.1	65.9	55.8
Sulfide	mg/L	0.8	< 1.0	<1.0	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	166.39	105	105	107	108	108	105
Magnesium	mg/L	65.48	60.3	52.8	42.1	41.7	42.3	37.1
Potassium	mg/L	8.30	8.2	7.9	7.1	7.2	7.0	6.3
Sodium	mg/L	7.71	9.9	10.4	9.9	16.2	9.0	8.8
General								
Hardness	mg/L	757.06	511	479	441	441	443	414

MW-9R

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019*	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.7	3.05	NM	2.13	0.48	1.70
ORP	mV	-	33.6	100.1	NM	7.5	155.9	20.3
pH	SU	5.4-6.4	6.03	6.11	NM	5.98	6.17	6.01
Specific Conductance	uS/cm	-	329.3	201.1	NM	356.2	226.3	237.7
Temperature	C	-	7.5	8.3	NM	8.8	7.93	11.9
Turbidity	NTU	-	3.67	272.87	NM	23.27	0.57	6.24
Water Elevation	ft MSL	-	1596.33	1595.5	1590.99	1594.49	1596.48	1595.85
Metals								
Aluminum	ug/L	200	-	-	NM	-	-	-
Antimony	ug/L	4.0	-	-	NM	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	NM	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	NM	-	-	-
Beryllium	ug/L	2.5	-	-	NM	-	-	-
Boron	ug/L	1200	-	-	NM	-	-	-
Cadmium	ug/L	3.0	-	-	NM	-	-	-
Chromium	ug/L	40	-	-	NM	-	-	-
Cobalt	ug/L	80	-	-	NM	-	-	-
Copper	ug/L	38.92	< 4.0	<4.0	NM	<4.0	<4.0	<4.0
Iron	ug/L	4098.78	3190	1510	NM	<200	<200	1320
Lead	ug/L	9.0	< 3.0	<3.0	NM	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	NM	-	-	-
Manganese	ug/L	1376.02	99.2	92.4	NM	54.3	<50.0	61.9
Mercury	ng/L	10.07	< 1.0	<1.0	NM	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	NM	-	-	-
Nickel	ug/L	185.91	90.7	91.0	NM	176	95.4	130
Selenium	ug/L	20	-	-	NM	-	-	-
Silver	ug/L	0.80	-	-	NM	-	-	-
Thallium	ug/L	2.0	-	-	NM	-	-	-
Vanadium	ug/L	-	-	-	NM	-	-	-
Zinc	ug/L	38.14	14.1	25.9	NM	33.4	23.3	19.4
Major Anions								
Alkalinity, Bicarbonate	mg/L	85.44	33.3	<2.0	NM	49.7	33.5	17.8
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	NM	<2.0	<2.0	<2.0
Chloride	mg/L	184.87	15.5	19.2	NM	<10.0	18.2	19.1
Fluoride	mg/L	2.5	< 1.0	<1.0	NM	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.22	< 0.025	< 0.025	NM	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	3.8	< 0.10	< 0.10	NM	< 0.10	0.44	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	NM	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	334.5	75.3	41.5	NM	109	39.9	26.8
Sulfide	mg/L	0.80	< 0.20	<0.20	NM	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	116.03	27.1	17.3	NM	40.3	20.5	15.3
Magnesium	mg/L	41.43	9.4	6.1	NM	12.9	6.5	5.1
Potassium	mg/L	5.21	2.1	1.5	NM	2.6	1.9	1.5
Sodium	mg/L	47.56	7.1	7.2	NM	13.6	10.8	6.2
General								
Hardness	mg/L	479.44	106	68.3	NM	154	77.8	59.0

* - Insufficient groundwater present for sample collection

MW-701 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.75	2.41	2.75	0.66	0.15	1.98
ORP	mV	-	226.1	231.7	237.6	163.6	183.0	94.9
pH	SU	5.46-6.46	5.78	5.57	5.47	5.48	5.58	5.52
Specific Conductance	uS/cm	-	381.1	1220.1	1278.4	1369.7	2134.6	3962.5
Temperature	C	-	5.1	7.7	12.9	6.52	2.93	11.1
Turbidity	NTU	-	1.30	1.7	2.76	17.74	0.56	0.38
Water Elevation	ft MSL	-	1532.35	1537.7	1536.81	1536.11	1532.36	1536.18
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	162	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	497.99	< 200	<200	<200	<200	<200	<200
Lead	ug/L	9	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	5262.51	102	236	307	381	643	2750
Mercury	ng/L	8.44	< 1.0	1.44	1.50	1.16	5.42	19.8
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	34.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.8	-	-	<0.20	-	-	-
Thallium	ug/L	2	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	16.4	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	117.82	50.5	64.5	62.1	60.0	81.4	123
Alkalinity, Carbonate	mg/L	8	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	22.96	63.3	345	333	333	480	1010
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.402	< 0.025	<0.050	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	1.87	1.16	1.27	1.44	0.985	0.716	0.513
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	85.65	21.3	20.0	33.9	43.2	249	378
Sulfide	mg/L	0.8	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	43.04	29.6	73.9	58.8	60.3	124	197
Magnesium	mg/L	18.63	12.0	25.6	19.4	19.8	44.0	64.9
Potassium	mg/L	8.95	4.1	8.9	9.4	10.1	12.7	17.5
Sodium	mg/L	11.68	21.4	111	136	147	218	517
General								
Hardness	mg/L	199.04	123	290	227	232	491	760
Silica	mg/L	-	-	-	18.1	18.2	18.2	17.1

MW-701 UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.24	0.25	1.25	1.31	0.3	1.47
ORP	mV	-	223.4	-113.8	-153.4	-228.5	-148.4	-262.5
pH	SU	6.71-7.71	7.55	6.57	6.98	7.23	6.97	7.39
Specific Conductance	uS/cm	-	365.6	1867.8	5543.1	5298.3	5020.1	4889.0
Temperature	C	-	7.56	7.4	9.5	7.2	6.34	8.73
Turbidity	NTU	-	41.77	41.11	24.24	19.16	82.91	47.77
Water Elevation	ft MSL	-	1532.63	1537.95	1537.02	1539.69	1532.65	1536.49
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	157.47	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	45.38	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	24957.73	17500	48800	197000	201000	145000	203000
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	12.91	-	-	14.9	-	-	-
Manganese	ug/L	4677.42	1790	1870	16400	19300	13700	16700
Mercury	ng/L	4.0	< 1.0	3.37	4.35	2.12	1.18	1.54
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	13.83	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	161.71	147	112	259	242	204	132
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	48.85	14.0	238	576	615	651	784
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	1.75	< 0.025	0.089	0.1	0.1	0.041	0.1
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	52.19	2.9	619	1950	1650	1670	1310
Sulfide	mg/L	1.86	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	38.59	39.0	181	504	449	414	432
Magnesium	mg/L	16.16	13.8	71.4	162	151	151	133
Potassium	mg/L	8.53	4.3	8.2	19.3	18.3	18.8	20.0
Sodium	mg/L	33.46	6.1	90.1	530	430	382	411
General								
Hardness	mg/L	163.25	154	747	1930	1740	1660	1630
Silica	mg/L	-	-	-	32.9	19.5	17.4	15.9

MW-702 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.65	1.14	1.66	1.85	0.24	2.36
ORP	mV	-	216.7	221.4	70.3	159.8	136.0	175.6
pH	SU	8.81-9.91	7.30	6.83	6.92	6.73	6.96	6.63
Specific Conductance	uS/cm	-	363.9	380.1	406.4	436.6	515.1	482.1
Temperature	C	-	6.5	7.0	8.1	6.89	5.99	2.36
Turbidity	NTU	-	1.84	96.78	67.14	170.93	70.3	1.9
Water Elevation	ft MSL	-	1534.49	1537.05	1536.48	1537.11	1531.00	1535.32
Metals								
Aluminum	ug/L	122.72	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	195.71	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	4.5	<4.0	<4.0
Iron	ug/L	800	< 200	<200	<200	<200	<200	<200
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	545.68	< 50.0	<50.0	59.1	61.7	61.8	53.9
Mercury	ng/L	3.55	1.52	<1.0	2.53	2.98	2.74	2.37
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	160.17	111	112	114	114	131	120
Alkalinity, Carbonate	mg/L	40.7	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	17.58	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.042	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	1.24	0.209	0.442	0.192	0.224	0.345	0.473
Nitrogen, Nitrite	mg/L	0.18	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	mg/L	133.19	65.7	91.4	79.3	90.9	100	100
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	78.82	27.7	28.5	30.5	29.7	32.9	37.0
Magnesium	mg/L	14.06	10.4	14.3	12.3	11.7	13.0	13.0
Potassium	mg/L	22.00	7.5	5.4	4.6	4.0	3.8	3.6
Sodium	mg/L	60.14	28.0	33.6	33.0	42.8	46.9	45.3
General								
Hardness	mg/L	251.25	112	130	127	122	136	146

MW-702 UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	2.59	0.26	3.01	1.42	2.60	1.01
ORP	mV	-	-147.3	-264.2	-151.4	-151.1	-226.3	-208.6
pH	SU	7.11-8.11	7.91	8.19	7.92	7.53	8.02	7.98
Specific Conductance	uS/cm	-	278.5	219.3	265.4	309.5	263.4	297.6
Temperature	C	-	5.34	8.5	9.3	7.1	0.5	8.37
Turbidity	NTU	-	4.77	3.21	4.93	2.31	3.33	4.56
Water Elevation	ft MSL	-	1515.42	1509.57	1510.72	1523.54	1514.66	1521.23
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	1328.38	669	1280	536	844	982	555
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	12.91	-	-	<10.0	-	-	-
Manganese	ug/L	118.08	92.0	97.0	84.4	86.3	102	83.4
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	76.03	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	111.84	89.5	87.2	92.7	91.8	90.3	87.6
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.087	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	36.1	37.4	32.7	35.0	36.1	31.2	32.5
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	38.98	30.8	28.5	32.2	32.3	32.8	33.5
Magnesium	mg/L	11.74	9.7	8.8	9.9	9.7	10.5	9.7
Potassium	mg/L	11.24	3.1	3.3	3.1	3.0	3.1	3.1
Sodium	mg/L	5.20	3.2	3.0	3.3	9.0	3.3	3.4
General								
Hardness	mg/L	139.94	117	107	121	121	125	124

MW-703 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	5.49	6.01	6.11	6.65	4.94	5.53
ORP	mV	-	311.6	297.8	182.3	261.2	226.2	115.8
pH	SU	6.3-7.3	5.69	5.98	6.11	5.82	6.05	5.85
Specific Conductance	uS/cm	-	175.9	147.7	185.0	193.0	192.2	182.6
Temperature	C	-	5.7	6.9	7.3	6.0	5.48	6.37
Turbidity	NTU	-	2.3	2.42	2.75	0.67	1.66	0.44
Water Elevation	ft MSL	-	1534.86	1536.49	1536.39	1535.66	1534.87	1535.89
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	286.57	< 200	<200	<200	<200	<200	<200
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	106.54	< 50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	92.34	50.8	47.7	46.8	47.9	50.9	47.1
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.082	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	1.81	1.76	1.92	1.91	2.22	2.03	1.76
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	40.56	27.7	19.1	26.8	31.9	31.3	26.4
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	31.29	18.6	16.7	17.4	19.3	21.1	19.1
Magnesium	mg/L	9.83	8.0	6.9	7.8	8.5	9.4	8.2
Potassium	mg/L	2.57	1.6	1.5	1.4	1.5	1.6	1.5
Sodium	mg/L	7.74	2.0	1.7	1.7	2.4	1.9	1.8
General								
Hardness	mg/L	115.53	79.4	70.0	75.3	83.2	91.2	81.5

MW-703 UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.35	0.31	1.98	0.40	1.71	0.91
ORP	mV	-	-240.1	-238.0	-198.4	-244.0	-233.5	-240.2
pH	SU	7.44-8.44	8.32	8.20	8.07	7.91	8.18	7.98
Specific Conductance	uS/cm	-	294.3	243.6	286.4	324.6	331.2	315.1
Temperature	C	-	5.4	7.1	9.3	6.8	4.76	7.61
Turbidity	NTU	-	3.38	1.91	3.70	2.01	2.23	2.19
Water Elevation	ft MSL	-	1532.03	1536.57	1530.25	1535.72	1531.74	1534.58
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	1902.7	1290	1130	1510	1280	1860	1390
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	199.79	187	195	207	188	208	196
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	111.44	76.6	77.2	80.0	78.1	76.9	76.4
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.75	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	49.32	52.0	38.5	50.5	50.2	49.3	45.5
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	42.87	31.1	32.0	33.3	31.9	32.6	32.3
Magnesium	mg/L	13.90	10.4	10.0	11.1	10.4	11.1	10.6
Potassium	mg/L	4.23	2.3	2.3	2.4	2.2	2.2	2.2
Sodium	mg/L	17.31	2.9	2.8	3.1	3.5	3.0	2.9
General								
Hardness	mg/L	173.44	121	121	129	123	127	124

MW-703 LLA

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.24	1.26	1.26	0.27	1.50	0.37
ORP	mV	-	-229.1	-236.6	-228.1	-233.5	-245.7	-297
pH	SU	8.08-9.08	8.28	8.83	8.30	8.00	8.44	8.92
Specific Conductance	uS/cm	-	265.4	245.2	278.7	313.6	319.3	276.3
Temperature	C	-	5.9	7.4	8.2	6.8	5.28	7.27
Turbidity	NTU	-	4.06	29.21	5.13	11.15	1.48	19.7
Water Elevation	ft MSL	-	1532.56	1538.59	1537.42	1537.52	1532.56	1536.89
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	2081.98	467	<200	618	556	632	<200
Lead	ug/L	9	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	28.08	-	-	<10.0	-	-	-
Manganese	ug/L	94.53	70.2	<50.0	88.8	83.0	78.2	<50.0
Mercury	ng/L	4	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.8	-	-	<0.20	-	-	-
Thallium	ug/L	2	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	92.11	75.6	80.7	78.2	75.1	74.7	63.4
Alkalinity, Carbonate	mg/L	10.41	< 2.0	<2.0	<2.0	<2.0	<2.0	2.4
Chloride	mg/L	96.57	11.1	25.8	12.0	10.9	11.2	26.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.076	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	43.42	36.9	13.2	34.9	37.1	34.9	5.6
Sulfide	mg/L	0.8	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	33.74	25.8	16.0	26.9	27.5	25.9	11.7
Magnesium	mg/L	12.29	10.6	8.3	10.8	10.7	10.9	5.3
Potassium	mg/L	7.73	3.2	6.4	3.5	3.2	3.7	9.1
Sodium	mg/L	51.07	7.6	20.2	7.6	7.3	7.9	24.0
General								
Hardness	mg/L	134.66	108	74.2	112	113	110	51.1

MW-703 DBA

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.38	0.22	1.26	0.27	1.72	1.24
ORP	mV	-	-303.1	-262.1	-214.4	-250.6	-260.4	-203.3
pH	SU	8.89-9.89	10.18	8.43	8.60	8.47	8.82	8.14
Specific Conductance	uS/cm	-	292.5	254.3	294.9	334.4	345.8	324.1
Temperature	C	-	5.2	7.00	8.2	6.8	5.76	7.42
Turbidity	NTU	-	22.73	1.74	2.51	1.04	0.28	1.24
Water Elevation	ft MSL	-	1532.25	1535.23	1534.30	1534.55	1532.19	1533.79
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	861.32	< 200	231	<200	<200	<200	<200
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	19.81	-	-	<10.0	-	-	-
Manganese	ug/L	200	< 50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	-	-	-	<4.0	-	-	-
Zinc	ug/L	26.21	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	87.85	52.8	80.5	78.7	76.2	76.3	74.4
Alkalinity, Carbonate	mg/L	38.7	21.4	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	20	15.2	14.7	14.3	14.2	14.5	13.9
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.12	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.86	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	72.78	29.5	38.3	39.2	41.0	39.2	38.4
Sulfide	mg/L	1.27	0.29	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	27.00	18.6	28.0	26.8	27.2	26.2	29.5
Magnesium	mg/L	17.28	7.8	10.4	10.8	10.7	10.4	11.5
Potassium	mg/L	29.63	20.1	3.8	4.4	5.0	9.7	3.1
Sodium	mg/L	16.16	11.5	6.5	6.6	7.2	8.6	6.5
General								
Hardness	mg/L	139.55	78.5	113	111	112	108	121

MW-704 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm		1.39	1.3	1.23	1.36	0.28	0.38
ORP	mV		141.5	-7.6	191.6	76.7	146	31.1
pH	SU	5.43-6.43	5.68	6.51	5.73	5.69	5.66	5.71
Specific Conductance	uS/cm		392.2	448.6	537.9	607.6	717.2	1143.4
Temperature	C		6.2	7.5	11.0	9.32	6.02	7.69
Turbidity	NTU		5.42	4.71	21.00	5.23	1.42	1.23
Water Elevation	ft MSL		1532.48	1535.35	1534.58	1535.04	1532.57	1534.73
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	84519.23	< 200	21600	<200	11300	<200	25700
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	8782.76	622	2870	815	2080	1090	3670
Mercury	ng/L	34.7	< 1.0	3.82	2.64	3.81	1.98	4.01
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	25.4
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	37.8	< 10.0	<10.0	<10.0	<10.0	55.7	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	264.36	60.4	128	87.2	124	72.5	120
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	23.77	21.8	20.2	65.9	76.3	132	199
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.19	<0.050	0.70	<0.050	0.591	<0.125	0.881
Nitrogen, Nitrate	mg/L	1.47	0.71	0.328	0.109	0.601	0.773	0.405
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	44.8	96.8	57.0	68.0	47.8	51.6	31.9
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Calcium								
Calcium	mg/L	47.35	37.6	44.8	46.9	51.8	60.8	84.0
Magnesium								
Magnesium	mg/L	14.76	14.2	15.8	18.0	18.3	23.3	30.1
Potassium								
Potassium	mg/L	6.10	2.6	3.7	3.2	4.2	3.5	4.9
Sodium								
Sodium	mg/L	32.26	16.3	19.3	23.1	25.9	31.8	39.7
General								
Hardness	mg/L	191.15	152	177	191	205	248	334

MW-704 UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm		1.38	1.32	1.35	1.42	0.11	0.48
ORP	mV		-148.1	-166.7	-119.4	-151.2	-87.7	-169.0
pH	SU	6.4-7.4	6.79	6.87	6.76	6.88	6.53	6.93
Specific Conductance	uS/cm		562.1	582.9	852.0	900.2	879.8	1205.9
Temperature	C		7.1	7.7	9.5	8.69	7.34	7.96
Turbidity	NTU		8.01	5.75	3.93	3.10	4.77	3.94
Water Elevation	ft MSL		1533.00	1535.9	1535.13	1535.66	1533.08	1535.36
Metals								
Aluminum	ug/L	5824.36	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	44051.82	893	44800	69100	69100	35300	57600
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	30.14	-	-	<10.0	-	-	-
Manganese	ug/L	1384.15	50.9	1200	1380	1410	1320	1580
Mercury	ng/L	1.4	< 1.0	<1.0	1.52	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	198.18	119	187	166	190	122	146
Alkalinity, Carbonate	mg/L	8.0	2.2	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	24.46	< 10.0	32.3	86.1	81.4	134	177
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.78	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	204	< 0.10
Nitrogen, Nitrite	mg/L	0.18	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	45.37	< 1.0	46.3	31.5	10.6	28.5	6.0
Sulfide	mg/L	0.49	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	66.63	22.3	68.0	66.3	73.2	68.2	81.9
Magnesium	mg/L	14.04	11.3	18.0	21.0	21.5	24.0	25.8
Potassium	mg/L	5.28	2.6	3.5	3.6	3.8	3.8	3.8
Sodium	mg/L	43.16	10.4	18.7	25.6	28.3	33.8	36.0
General								
Hardness	mg/L	226.12	102	244	252	271	269	311

MW-704 LLA

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.24	1.4	1.18	1.29	1.58	1.58
ORP	mV	-	-246.7	-258.1	-251.3	-245.9	-258.7	-224.9
pH	SU	8.2-9.2	8.09	8.28	8.28	8.15	8.09	8.04
Specific Conductance	uS/cm	-	349	253.8	400.6	413.4	422.4	497.8
Temperature	C	-	7.1	10.0	10.3	9.0	6.4	9.94
Turbidity	NTU	-	15.68	14.22	16.45	2.06	3.99	8.60
Water Elevation	ft MSL	-	1533.45	1532.96	1531.84	1532.61	1533.54	1532.38
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	3308.59	1190	943	1390	1560	1670	1370
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	28.25	-	-	15.1	-	-	-
Manganese	ug/L	95.14	136	72.5	161	161	193	170
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	152.81	158	110	165	168	167	171
Alkalinity, Carbonate	mg/L	13.4	< 2.0	2.6	<2.0	<2.0	8.2	<2.0
Chloride	mg/L	40	13.1	10.4	14.8	16.4	17.9	18.1
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.1	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	20.79	12.2	9.2	13.5	14.2	13.0	12.2
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	33.39	40.7	23.5	44.8	45.0	50.7	47.2
Magnesium	mg/L	15.62	17.1	15.1	18.6	18.1	21.2	19.3
Potassium	mg/L	12.01	5.7	6.4	5.8	5.6	6.8	5.9
Sodium	mg/L	15.49	4.9	4.8	4.9	10	5.4	5.0
General								
Hardness	mg/L	156.51	172	121	188	187	214	197

MW-704 DBA

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.25	1.68	1.25	1.41	1.42	0.84
ORP	mV	-	-263.4	-216.6	-245.4	-137.1	-280.8	-239.8
pH	SU	8.13-9.13	8.18	8.00	8.44	7.68	8.27	8.24
Specific Conductance	uS/cm	-	232.1	246.3	264.5	264.8	275.5	336.2
Temperature	C	-	7.3	9.2	10.1	8.5	7.4	9.64
Turbidity	NTU	-	80.33	82.93	24.66	17.32	90.91	10.90
Water Elevation	ft MSL	-	1529.94	1529.62	1529.72	1529.95	1548.31	1529.81
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	8.0	-	-	<2.0	-	-	-
Arsenic	ug/L	20.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	4.0	-	-	<1.0	-	-	-
Boron	ug/L	1480	-	-	<300	-	-	-
Cadmium	ug/L	4.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	9645	882	930	950	805	816	743
Lead	ug/L	12.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	12.9	-	-	-
Manganese	ug/L	58	50.9	58.6	61.0	58.2	70.3	67.0
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	8.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	11	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	129	119	126	129	124	135	134
Alkalinity, Carbonate	mg/L	32.0	2.6	<2.0	<2.0	<2.0	3.4	<2.0
Chloride	mg/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.04	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	6	< 1.0	<1.0	1.0	1.1	<1.0	<1.0
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	27.00	22.5	22.8	23.4	24.9	28.2	25.2
Magnesium	mg/L	14.00	11.4	11.3	11.8	12.1	14.2	12.5
Potassium	mg/L	4.00	2.6	2.6	2.6	2.6	2.8	2.5
Sodium	mg/L	14.00	10.5	10.6	11.0	11.7	12.2	11.3
General								
Hardness	mg/L	111.00	103	104	107	112	129	114

* - Diver failed 9/6/17, replaced 3/15/18

MW-705 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.02	0.47	1.21	1.39	0.23	1.59
ORP	mV	-	-8.3	-64.4	-26.9	-28.8	-33.7	-49.3
pH	SU	5.67-6.67	6.51	6.29	6.31	6.02	6.27	6.37
Specific Conductance	uS/cm	-	276.7	369.8	199.6	236.6	198.8	366.3
Temperature	C	-	4.2	8.9	13.4	8.3	4.89	9.15
Turbidity	NTU	-	2.01	2.30	2.42	1.08	0.93	0.65
Water Elevation	ft MSL	-	1536.78	1537.96	1536.33	1537.31	-	1537.86
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	7.6	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	5.1	<4.0	<4.0
Iron	ug/L	12956.53	10100	13600	5300	8250	8250	11300
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	1535.09	1000	1470	498	830	728	1130
Mercury	ng/L	1.8	< 1.0	<1.0	1.42	4.28	1.54	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	283.42	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	85.4	68.8	31.1	37.8	54.7	45.7	46.3
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	51.62	52.8	72.1	23.9	21.8	15.8	66.8
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.132	0.138	0.189	0.071	0.094	0.096	0.149
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	21.2	6.1	23.8	10.4	9.0	8.3	11.2
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	23.88	17.5	22.7	11.7	13.6	11.9	18.3
Magnesium	mg/L	10.91	8.0	9.6	4.6	5.7	5.3	8.1
Potassium	mg/L	3.03	2.8	2.7	2.6	2.3	1.8	2.4
Sodium	mg/L	16.56	16.4	25.1	13.5	19.2	11.1	26.7
General								
Hardness	mg/L	109.66	76.6	96.5	48.1	57.5	51.4	78.8

MW-705 UFB

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	0.77	0.29	1.28	1.48	1.49	0.35
ORP	mV	-	-70.2	-179.9	-132.4	-123.6	-147.3	-146.5
pH	SU	6.59-7.59	7.19	7.2	7.15	7.04	7.03	7.12
Specific Conductance	uS/cm	-	303.4	287.0	345.6	344.6	317.2	432.8
Temperature	C	-	6.1	9.1	10.7	7.5	6.94	10.02
Turbidity	NTU	-	20.17	5.35	3.40	2.25	7.03	4.51
Water Elevation	ft MSL	-	1536.82	1540.24	1538.45	1539.24	1537.42	1539.03
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	13309.31	7740	10400	9750	8620	6070	8770
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	13.19	-	-	<10.0	-	-	-
Manganese	ug/L	972.64	1060	989	1050	1010	959	1120
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	34.43	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	117.78	77.3	90.3	88.4	83.8	75.8	83.0
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	35.98	36.2	33.0	38.8	41.1	41.4	41.4
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.1	< 0.025	0.030	0.026	0.029	<0.125	0.029
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	14.23	2.4	3.3	3.0	4.2	2.5	3.1
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	26.00	25.9	26.6	28.5	28.6	28.5	28.2
Magnesium	mg/L	13.29	13.3	14.2	14.8	14.3	14.6	14.4
Potassium	mg/L	4.01	3.8	3.3	3.8	4.1	4.3	3.4
Sodium	mg/L	3.37	3.2	3.0	3.5	3.9	3.6	3.2
General								
Hardness	mg/L	127.17	119	125	132	130	131	130

MW-706 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.92	0.5	1.79	2.12	0.54	0.56
ORP	mV	-	68.6	79.8	90.1	57.9	78.0	65.8
pH	SU	-	5.95	5.80	5.78	5.81	5.90	5.80
Specific Conductance	uS/cm	-	874.1	831.3	881.5	829.6	881.3	975.9
Temperature	C	-	8.1	9.5	10.1	8.1	7.81	11.04
Turbidity	NTU	-	4.17	3.43	5.69	1.74	2.76	2.95
Water Elevation	ft MSL	-	1561.82	1566.96	1563.44	1562.77	1560.59	1564.21
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	31.38	-	-	23.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	8029.11	2760	3280	2540	2860	2650	2910
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	17.21	-	-	<10.0	-	-	-
Manganese	ug/L	23484.14	11600	11000	11600	11000	11400	12000
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	27.04	< 20.0	<20.0	<20.0	<20.0	<20.0	30.4
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	4.77	-	-	<4.0	-	-	-
Zinc	ug/L	77.08	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	131.77	73.0	78.5	73.8	73.9	70.5	67.8
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	165.11	123	118	118	111	137	138
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.88	0.391	0.512	0.420	0.431	0.373	0.405
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	433.53	189	176	191	168	146	135
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	132.61	68.4	60.8	65.9	64.7	63.8	65.4
Magnesium	mg/L	43.54	27.2	24.6	26.2	25.2	25.8	26.5
Potassium	mg/L	5.64	4.6	4.0	4.6	4.5	4.5	4.6
Sodium	mg/L	139.93	44.9	42.7	47.1	54.7	49.1	49.6
General								
Hardness	mg/L	619.10	283	253	273	265	265	273

MW-707 QAL

Parameter	Unit	Recommended						
		Benchmark 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	1.64	0.37	1.55	1.60	1.66	0.41
ORP	mV	-	-123.4	-131.5	-112.9	-115.6	-129.4	-139.4
pH	SU	6.43-7.43	6.9	7.13	7.04	6.97	7.10	7.16
Specific Conductance	uS/cm	-	360.2	303.7	328.8	319.7	312.1	402.5
Temperature	C	-	6.7	7.5	9.3	6.6	6.74	9.74
Turbidity	NTU	-	2.63	1.79	3.19	0.56	0.39	1.75
Water Elevation	ft MSL	-	1583.73	1583.63	1581.74	1581.76	1581.52	1582.46
Metals								
Aluminum	ug/L	200	-	-	<50.0	-	-	-
Antimony	ug/L	4.0	-	-	<2.0	-	-	-
Arsenic	ug/L	7.5	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	ug/L	400	-	-	<100	-	-	-
Beryllium	ug/L	2.5	-	-	<1.0	-	-	-
Boron	ug/L	1200	-	-	<300	-	-	-
Cadmium	ug/L	3.0	-	-	<1.0	-	-	-
Chromium	ug/L	40	-	-	<10.0	-	-	-
Cobalt	ug/L	80	-	-	<20.0	-	-	-
Copper	ug/L	16	< 4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Iron	ug/L	7115.36	4350	4290	3980	4110	4110	4270
Lead	ug/L	9.0	< 3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lithium	ug/L	40	-	-	<10.0	-	-	-
Manganese	ug/L	1127.81	970	892	893	917	939	974
Mercury	ng/L	4.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Molybdenum	ug/L	200	-	-	<50.0	-	-	-
Nickel	ug/L	80	< 20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Selenium	ug/L	20	-	-	<5.0	-	-	-
Silver	ug/L	0.80	-	-	<0.20	-	-	-
Thallium	ug/L	2.0	-	-	<2.0	-	-	-
Vanadium	ug/L	16	-	-	<4.0	-	-	-
Zinc	ug/L	29.27	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Major Anions								
Alkalinity, Bicarbonate	mg/L	168.29	158	163	158	157	153	148
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	40	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Fluoride	mg/L	2.5	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Nitrogen, Ammonia	mg/L	0.32	0.259	0.294	0.287	0.299	0.285	0.259
Nitrogen, Nitrate	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrogen, Nitrite	mg/L	0.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	9.35	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
Sulfide	mg/L	0.80	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	45.91	42.6	41.8	43.1	43.4	43.8	43.5
Magnesium	mg/L	13.49	11.7	11.6	11.4	11.6	11.8	11.7
Potassium	mg/L	2.93	2.2	2.2	2.4	2.5	2.2	2.3
Sodium	mg/L	3.62	3.0	3.0	3.1	9.0	2.9	3.0
General								
Hardness	mg/L	162.23	155	152	154	156	158	157

MER-001

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	10.55	8.85	8.31	12.73	13.14	7.87
ORP	mV	-	239.2	173.4	177.2	220.5	244.6	72.7
pH	SU	5.7-6.7	6.87	6.72	7.64	7.52	6.69	6.61
Specific Conductance	uS/cm	-	76	87.4	155.7	117.6	66.6	134.9
Temperature	C	-	-0.04	11.01	12.8	0.62	0.29	16.98
Turbidity	NTU	-	1.88	2.35	11.72	2.6	0.35	3.05
Flow	cfs	-	-	-	5.1	33.5	25.05	35.08
Metals								
Aluminum	ug/L	-	-	-	<50.0	-	-	-
Antimony	ug/L	-	-	-	<1.0	-	-	-
Arsenic	ug/L	4	<1.0	<1.0	2.0	<1.0	<1.0	1.5
Barium	ug/L	-	-	-	8.2	-	-	-
Beryllium	ug/L	-	-	-	<1.0	-	-	-
Boron	ug/L	-	-	-	<10.0	-	-	-
Cadmium	ug/L	-	-	-	0.007	-	-	-
Chromium	ug/L	-	-	-	<1.0	-	-	-
Cobalt	ug/L	-	-	-	0.105	-	-	-
Copper	ug/L	0.98	0.56	0.59	0.232	0.46	0.72	0.59
Iron	ug/L	1206.32	881	823	1880	1110	1030	1960
Lead	ug/L	0.18	0.122	0.123	0.063	0.135	0.113	0.196
Lithium	ug/L	-	-	-	<8.0	-	-	-
Manganese	ug/L	101.06	51.4	74.9	85.7	95.1	51.2	170
Mercury	ng/L	6.93	2.70	1.73	1.32	3.39	2.78	3.02
Molybdenum	ug/L	-	-	-	<1.0	-	-	-
Nickel	ug/L	0.68	0.45	0.63	0.451	0.8	0.44	0.33
Selenium	ug/L	-	-	-	0.077	-	-	-
Silver	ug/L	-	-	-	<0.20	-	-	-
Thallium	ug/L	-	-	-	<1.0	-	-	-
Vanadium	ug/L	-	-	-	<1.0	-	-	-
Zinc	ug/L	9.31	2.59	2.43	0.58	1.59	1.19	1.88
Major Anions								
Alkalinity, Bicarbonate	mg/L	25.6	13.2	15.0	45.5	16.4	16.8	25.1
Alkalinity, Carbonate	mg/L	8.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	8.4	2.3	5.4	13.0	4.3	4.6	5.9
Fluoride	mg/L	0.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	2.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Nitrate	mg/L	2.0	0.273	<0.10	<0.10	<0.10	0.114	<0.10
Nitrogen, Nitrite	mg/L	2.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	mg/L	4.0	2.4	3.3	5.4	3.2	3.3	3.1
Sulfide	mg/L	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	7.59	5.3	5.9	15.1	5.9	6.9	9.2
Magnesium	mg/L	2.36	1.6	1.8	4.2	1.7	2.0	2.5
Potassium	mg/L	0.69	0.78	0.50	0.85	<0.50	0.60	0.69
Sodium	mg/L	5.07	1.7	3.3	7.6	2.6	3.2	3.3
General								
Hardness	mg/L	30.84	19.6	22.3	55	21.7	25.4	33.3
Total Dissolved Solids	mg/L	113.42	37	27	79	39	59	55
Total Suspended Solids	mg/L	7.57	<5.0	<5.0	10	<5.0	<2.5	<2.5

MER-002

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	11.02	8.88	8.18	12.4	13.07	7.36
ORP	mV	-	265.6	172.1	154.6	112.9	225.8	32.4
pH	SU	5.7-6.7	6.93	6.58	7.48	7.49	7.04	7.36
Specific Conductance	uS/cm	-	95.3	84.7	184.7	141.6	84.5	142.2
Temperature	C	-	-0.06	10.86	15.7	0.04	0.433	15.41
Turbidity	NTU	-	2.21	1.86	6.48	2.97	0.74	4.33
Flow	cfs	-	-	85.2	6.87	37.3	41.4	42.0
Metals								
Aluminum	ug/L	-	-	-	<50.0	-	-	-
Antimony	ug/L	-	-	-	<1.0	-	-	-
Arsenic	ug/L	0.59	< 1.0	<1.0	2.6	1.0	<1.0	2.1
Barium	ug/L	-	-	-	9.7	-	-	-
Beryllium	ug/L	-	-	-	<1.0	-	-	-
Boron	ug/L	-	-	-	14.6	-	-	-
Cadmium	ug/L	-	-	-	0.007	-	-	-
Chromium	ug/L	-	-	-	<1.0	-	-	-
Cobalt	ug/L	-	-	-	0.246	-	-	-
Copper	ug/L	0.97	0.6	0.61	0.260	0.41	0.73	0.41
Iron	ug/L	1678.69	1060	1160	2580	1420	1270	2920
Lead	ug/L	0.19	0.136	0.142	0.060	0.125	0.112	0.233
Lithium	ug/L	-	-	-	<8.0	-	-	-
Manganese	ug/L	134.19	68.4	115	210	148	81.6	216
Mercury	ng/L	6.63	3.42	1.34	1.62	3.17	3.03	3.30
Molybdenum	ug/L	-	-	-	<1.0	-	-	-
Nickel	ug/L	0.71	0.53	0.81	0.584	0.73	0.5	0.37
Selenium	ug/L	-	-	-	0.072	-	-	-
Silver	ug/L	-	-	-	<0.20	-	-	-
Thallium	ug/L	-	-	-	<1.0	-	-	-
Vanadium	ug/L	-	-	-	<1.0	-	-	-
Zinc	ug/L	7.6	2.71	2.73	0.65	1.67	1.21	2.13
Major Anions								
Alkalinity, Bicarbonate	mg/L	24.67	14.8	16.0	51.4	21.1	20.9	27.3
Alkalinity, Carbonate	mg/L	4.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	7.39	5.7	5.7	14.5	6.2	6.6	7.4
Fluoride	mg/L	0.4	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	2.0	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	0.21	0.27	< 0.10	< 0.10	< 0.10	0.114	< 0.10
Nitrogen, Nitrite	mg/L	2.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	7.91	3.7	4.7	11.7	5.4	5.2	4.9
Sulfide	mg/L	20	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	9.21	6.0	6.5	17.7	7.3	8.0	10.3
Magnesium	mg/L	2.69	1.8	2.0	4.9	2.2	2.3	2.8
Potassium	mg/L	0.68	0.83	0.60	1.2	0.56	0.69	0.74
Sodium	mg/L	5.13	3.4	3.9	9.6	4.2	4.3	4.2
General								
Hardness	mg/L	33.91	22.6	24.6	64.4	27.2	29.5	37.4
Total Dissolved Solids	mg/L	103.6	45	32	93	56	57	62
Total Suspended Solids	mg/L	7.77	< 5.0	<5.0	<5.0	<5.0	<2.6	3.0

MER-003

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	11.75	8.88	8.34	12.8	13.17	7.64
ORP	mV	-	254.9	175.7	134	230.1	220.1	34.0
pH	SU	5.6-6.6	7.24	6.99	6.78	7.09	6.89	6.76
Specific Conductance	uS/cm	-	104.3	96.0	198.1	205.7	128.4	195.2
Temperature	C	-	0.37	11.67	15.8	0.95	0.93	15.87
Turbidity	NTU	-	4.33	45.33	6.20	3.08	1.24	4.41
Flow	cfs	-	-	-	7.03	30.27	33.38	41.04
Metals								
Aluminum	ug/L	-	-	-	<50.0	-	-	-
Antimony	ug/L	-	-	-	<1.0	-	-	-
Arsenic	ug/L	1.82	< 1.0	<1.0	2.4	1.1	<1.0	1.8
Barium	ug/L	-	-	-	9.3	-	-	-
Beryllium	ug/L	-	-	-	<1.0	-	-	-
Boron	ug/L	-	-	-	21.9	-	-	-
Cadmium	ug/L	-	-	-	0.007	-	-	-
Chromium	ug/L	-	-	-	<1.0	-	-	-
Cobalt	ug/L	-	-	-	0.190	-	-	-
Copper	ug/L	0.97	0.58	0.72	0.334	0.92	<0.4	0.93
Iron	ug/L	1872.72	1150	1130	2360	1440	1390	2820
Lead	ug/L	0.24	0.135	0.137	0.050	0.126	0.116	0.211
Lithium	ug/L	-	-	-	<8.0	-	-	-
Manganese	ug/L	157.3	71.1	123	135	163	141	257
Mercury	ng/L	6.68	2.47	1.55	1.91	4.04	2.79	3.04
Molybdenum	ug/L	-	-	-	<1.0	-	-	-
Nickel	ug/L	1.18	0.69	0.98	1.36	0.45	1.88	1.56
Selenium	ug/L	-	-	-	0.074	-	-	-
Silver	ug/L	-	-	-	<0.20	-	-	-
Thallium	ug/L	-	-	-	<1.0	-	-	-
Vanadium	ug/L	-	-	-	<1.0	-	-	-
Zinc	ug/L	8.49	2.76	3.3	0.47	3.47	1.42	1.93
Major Anions								
Alkalinity, Bicarbonate	mg/L	30.51	15.2	17.8	51.5	24.2	23.0	28.8
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	10.58	6.2	8.2	17.0	10.6	9.7	9.8
Fluoride	mg/L	0.5	< 0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	2.0	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	2.0	0.259	< 0.10	< 0.10	< 0.10	0.111	< 0.10
Nitrogen, Nitrite	mg/L	2.0	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Sulfate	mg/L	14.75	5.8	13.3	14.3	24.0	17.5	15.4
Sulfide	mg/L	20	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	10.75	6.2	6.6	16.7	7.4	9.3	11.4
Magnesium	mg/L	3.33	1.9	2.2	4.9	2.6	3.0	3.5
Potassium	mg/L	0.94	0.87	0.73	1.2	0.89	1.0	1.0
Sodium	mg/L	7.42	4.9	9.2	12.2	14.9	10.0	10.0
General								
Hardness	mg/L	38.34	23.4	25.5	61.8	29.2	35.8	43.0
Total Dissolved Solids	mg/L	54	48	47	106	85	34	74
Total Suspended Solids	mg/L	9.75	< 5.0	<5.0	9.0	<5.0	<2.5	3.0

MER-004

Parameter	Unit	Recommended		
		Benchmark	Q1 2020	Q2 2020
Field				
D.O.	ppm	-	13.15	7.53
ORP	mV	-	231.2	58.3
pH	SU	-	6.0	6.67
Specific Conductance	uS/cm	-	129.8	58.3
Temperature	C	-	0.978	15.7
Turbidity	NTU	-	1.05	4.33
Flow	cfs	-	-	35.08
Metals				
Aluminum	ug/L	-	-	-
Antimony	ug/L	-	-	-
Arsenic	ug/L	-	<1.0	2.0
Barium	ug/L	-	-	-
Beryllium	ug/L	-	-	-
Boron	ug/L	-	-	-
Cadmium	ug/L	-	-	-
Chromium	ug/L	-	-	-
Cobalt	ug/L	-	-	-
Copper	ug/L	-	0.79	0.4
Iron	ug/L	-	1260	2700
Lead	ug/L	-	0.108	0.218
Lithium	ug/L	-	-	-
Manganese	ug/L	-	142	259
Mercury	ng/L	-	2.87	3.00
Molybdenum	ug/L	-	-	-
Nickel	ug/L	-	1.94	1.59
Selenium	ug/L	-	-	-
Silver	ug/L	-	-	-
Thallium	ug/L	-	-	-
Vanadium	ug/L	-	-	-
Zinc	ug/L	-	1.17	1.93
Major Anions				
Alkalinity, Bicarbonate	mg/L	-	23.4	28.0
Alkalinity, Carbonate	mg/L	-	< 2.0	<2.0
Chloride	mg/L	-	9.6	9.3
Fluoride	mg/L	-	< 0.10	<0.10
Nitrogen, Ammonia	mg/L	-	< 0.025	< 0.025
Nitrogen, Nitrate	mg/L	-	0.0437	< 0.10
Nitrogen, Nitrite	mg/L	-	< 0.10	< 0.10
Sulfate	mg/L	-	18.4	15.7
Sulfide	mg/L	-	< 0.20	<0.20
Major Cations				
Calcium	mg/L	-	9.4	11.2
Magnesium	mg/L	-	3.1	3.5
Potassium	mg/L	-	1.1	1.1
Sodium	mg/L	-	10.2	9.2
General				
Hardness	mg/L	-	36.2	42300
Total Dissolved Solids	mg/L	-	48	69
Total Suspended Solids	mg/L	-	< 2.5	2.5

Explanations of abbreviations are included on the final page of this table.

MW-703 UFB (Monitoring)

WBR-001

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	NM	7.14	7.98	11.16	NM	5.04
ORP	mV	-	NM	254.7	78.9	249.3	NM	141.8
pH	SU	4.7-5.7	NM	5.29	6.09	7.36	NM	5.36
Specific Conductance	uS/cm	-	NM	60.0	115.3	145.2	NM	145.0
Temperature	C	-	NM	12.4	14.6	0.59	NM	14.48
Turbidity	NTU	-	NM	0.77	7.79	0.8	NM	1.90
Flow	cfs	-	-	-	-	-	-	-
Metals								
Aluminum	ug/L	-	NM	-	128	-	NM	-
Antimony	ug/L	-	NM	-	<1.0	-	NM	-
Arsenic	ug/L	1.78	NM	1.2	1.8	1.6	NM	1.9
Barium	ug/L	-	NM	-	8.4	-	NM	-
Beryllium	ug/L	-	NM	-	<1.0	-	NM	-
Boron	ug/L	-	NM	-	<10.0	-	NM	-
Cadmium	ug/L	-	NM	-	0.011	-	NM	-
Chromium	ug/L	-	NM	-	<1.0	-	NM	-
Cobalt	ug/L	-	NM	-	0.427	-	NM	-
Copper	ug/L	1.07	NM	0.82	0.578	0.50	NM	<1.0
Iron	ug/L	1758.93	NM	1220	2220	1260	NM	2340
Lead	ug/L	1.08	NM	0.666	0.641	0.182	NM	1.03
Lithium	ug/L	-	NM	-	<8.0	-	NM	-
Manganese	ug/L	105.52	NM	73.6	179	127	NM	218
Mercury	ng/L	11.28	NM	<1.3	6.39	7.95	NM	3.11
Molybdenum	ug/L	-	NM	-	<1.0	-	NM	-
Nickel	ug/L	0.97	NM	0.79	0.646	0.78	NM	0.46
Selenium	ug/L	-	NM	-	0.082	-	NM	-
Silver	ug/L	-	NM	-	<0.20	-	NM	-
Thallium	ug/L	-	NM	-	<1.0	-	NM	-
Vanadium	ug/L	-	NM	-	<1.0	-	NM	-
Zinc	ug/L	11.99	NM	8.08	2.99	5.32	NM	6.12
Major Anions								
Alkalinity, Bicarbonate	mg/L	5.05	NM	<2.0	5.6	25.6	NM	4.2
Alkalinity, Carbonate	mg/L	8.0	NM	<2.0	<2.0	<2.0	NM	<2.0
Chloride	mg/L	24.92	NM	25.3	27.3	16.7	NM	20.0
Fluoride	mg/L	0.4	NM	<0.10	<0.10	<0.10	NM	<0.10
Nitrogen, Ammonia	mg/L	2.0	NM	<0.025	0.055	0.030	NM	<0.025
Nitrogen, Nitrate	mg/L	2.0	NM	<0.10	<0.10	<0.10	NM	<0.10
Nitrogen, Nitrite	mg/L	2.0	NM	<0.10	<0.10	<0.10	NM	<0.10
Sulfate	mg/L	4.0	NM	2.6	<1.0	1.9	NM	<1.0
Sulfide	mg/L	20	NM	<0.20	<0.20	<0.20	NM	<0.20
Major Cations								
Calcium	mg/L	4.84	NM	2.7	5.0	4.0	NM	4.6
Magnesium	mg/L	1.94	NM	1.1	2.0	1.6	NM	1.7
Potassium	mg/L	0.94	NM	0.63	0.58	0.55	NM	0.84
Sodium	mg/L	11.68	NM	7.8	12.5	13.3	NM	10.2
General								
Hardness	mg/L	21.14	NM	11.2	41.2	16.7	NM	18.6
Total Dissolved Solids	mg/L	210.94	NM	49	115	87	NM	84
Total Suspended Solids	mg/L	13.2	NM	<5.0	6.0	<5.0	NM	<5.3

* - Lowest achievable Reporting Limit by laboratory due to matrix interference

WBR-002

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	6.78	6.68	4.4	12.21	5.87	2.68
ORP	mV	-	51.2	167.5	-39.9	232.3	139	-14.3
pH	SU	6.04-6.94	6.45	6.03	6.53	6.92	6.09	6.16
Specific Conductance	uS/cm	-	247.6	105.7	216	225.8	231.4	257.8
Temperature	C	-	0.79	12.8	16.0	1.4	0.63	14.57
Turbidity	NTU	-	19.65	8.24	152	21.09	12.85	5.04
Flow	cfs	-	-	0.28	-	24.63	1.0	-
Metals								
Aluminum	ug/L	-	-	-	57.2	-	-	-
Antimony	ug/L	-	-	-	<1.0	-	-	-
Arsenic	ug/L	3.02	7.5	1.9	12.9	2.8	5.8	8.1
Barium	ug/L	-	-	-	16.0	-	-	-
Beryllium	ug/L	-	-	-	<1.0	-	-	-
Boron	ug/L	-	-	-	15.7	-	-	-
Cadmium	ug/L	-	-	-	<0.007	-	-	-
Chromium	ug/L	-	-	-	<1.0	-	-	-
Cobalt	ug/L	-	-	-	0.231	-	-	-
Copper	ug/L	2.54	0.6	1.22	0.331	0.92	-	<1.0
Iron	ug/L	4818.65	21800	2570	12500	4710	13900	8490
Lead	ug/L	0.55	0.207	0.092	0.078	0.280	-	0.2
Lithium	ug/L	-	-	-	<8.0	-	-	-
Manganese	ug/L	262.39	989	96.6	940	90.0	789	1180
Mercury	ng/L	3.6	1.43	<1.3	1.08	7.95	1.19	1.18
Molybdenum	ug/L	-	-	-	<1.0	-	-	-
Nickel	ug/L	2.49	2.03	1.36	0.557	1.25	-	0.96
Selenium	ug/L	-	-	-	0.081	-	-	-
Silver	ug/L	-	-	-	<0.20	-	-	-
Thallium	ug/L	-	-	-	<1.0	-	-	-
Vanadium	ug/L	-	-	-	1.1	-	-	-
Zinc	ug/L	25.07	2.67	3.37	0.61	1.59	-	1.62
Major Anions								
Alkalinity, Bicarbonate	mg/L	17.8	30.9	11.8	38.7	22.8	27.8	29.6
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride	mg/L	41.88	38.3	25.3	32.8	28.7	40.2	33.7
Fluoride	mg/L	0.4	< 0.10	<0.10	0.12	<0.10	<0.10	<0.10
Nitrogen, Ammonia	mg/L	2.0	0.19	<0.025	0.464	<0.025	<0.025	<0.025
Nitrogen, Nitrate	mg/L	2.0	<0.050	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen, Nitrite	mg/L	2.0	0.01	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	mg/L	9.1	2.2	2.6	1.0	2.5	2.2	1.9
Sulfide	mg/L	20	< 0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Major Cations								
Calcium	mg/L	7.01	9.1	4.9	9.8	6.7	8.9	9.4
Magnesium	mg/L	3.48	4.4	2.3	4.0	3.3	4.4	3.8
Potassium	mg/L	2.04	1.8	1.4	1.8	1.4	1.8	2.2
Sodium	mg/L	21.82	20.0	16.0	17.1	17.8	23.8	18.2
General								
Hardness	mg/L	32.92	41	21.6	41.2	30.4	40.5	39.0
Total Dissolved Solids	mg/L	278.46	140	67	115	117	96	101
Total Suspended Solids	mg/L	12.66	43	<5.0	6.0	<5.0	<25.0	10

* - Lowest achievable Reporting Limit by laboratory due to matrix interference

WBR-003

Parameter	Unit	Recommended Benchmark 2018						
		Q2	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	6.78	6.68	1.78	6.61	NM	1.39
ORP	mV	-	51.2	167.5	-100.1	219.2	NM	-32.3
pH	SU	5.8-6.8	6.45	6.03	6.76	6.98	NM	6.38
Specific Conductance	uS/m	-	247.6	105.7	310.6	219.2	NM	218.5
Temperature	C	-	0.79	12.8	14.5	0.28	NM	15.73
Turbidity	NTU	-	19.65	8.24	74.59	9.7	NM	15.23
Flow	cfs	-	-	0.28	-	-	-	-
Metals								
Aluminum	ug/L	-	-	-	119	-	NM	-
Antimony	ug/L	-	-	-	<1.0	-	NM	-
Arsenic	ug/L	1.72	7.5	1.9	17.7	1.6	NM	4.7
Barium	ug/L	-	-	-	30.3	-	NM	-
Beryllium	ug/L	-	-	-	<1.0	-	NM	-
Boron	ug/L	-	-	-	11.5	-	NM	-
Cadmium	ug/L	-	-	-	<0.007	-	NM	-
Chromium	ug/L	-	-	-	<1.0	-	NM	-
Cobalt	ug/L	-	-	-	1.7	-	NM	-
Copper	ug/L	0.74	0.6	1.22	0.572	0.5	NM	<1.0
Iron	ug/L	5033.49	21800	2570	35400	3260	NM	8630
Lead	ug/L	0.26	0.207	0.092	0.225	0.182	NM	0.234
Lithium	ug/L	-	-	-	<8.0	-	NM	-
Manganese	ug/L	374.44	989	96.6	1550	109	NM	757
Mercury	ng/L	3.43	1.43	<1.3	2.63	2.61	NM	1.33
Molybdenum	ug/L	-	-	-	1.5	-	NM	-
Nickel	ug/L	1.77	2.03	1.36	1.46	0.78	NM	0.7
Selenium	ug/L	-	-	-	0.157	-	NM	-
Silver	ug/L	-	-	-	<0.20	-	NM	-
Thallium	ug/L	-	-	-	<1.0	-	NM	-
Vanadium	ug/L	-	-	-	2.0	-	NM	-
Zinc	ug/L	15.47	2.67	3.37	55.5	0.93	NM	2.53
Major Anions								
Alkalinity, Bicarbonate	mg/L	33.5	30.9	11.8	90.7	25.6	NM	35.3
Alkalinity, Carbonate	mg/L	8.0	< 2.0	<2.0	<2.0	<2.0	NM	<2.0
Chloride	mg/L	31.77	38.3	25.3	21.8	24.2	NM	21.0
Fluoride	mg/L	0.34	< 0.10	<0.10	0.22	<0.10	NM	<0.10
Nitrogen, Ammonia	mg/L	2.0	0.19	<0.025	0.405	0.031	NM	0.067
Nitrogen, Nitrate	mg/L	2.0	<0.050	<0.10	<0.10	<0.10	NM	<0.10
Nitrogen, Nitrite	mg/L	2.0	0.01	<0.10	<0.10	<0.10	NM	<0.10
Sulfate	mg/L	20.0	2.2	2.6	<1.0	3.7	NM	<1.0
Sulfide	mg/L	20	< 0.20	<0.20	<0.20	<0.20	NM	<0.20
Major Cations								
Calcium	mg/L	10.59	9.1	4.9	25.3	7.2	NM	10.4
Magnesium	mg/L	4.51	4.4	2.3	8.4	3.5	NM	4.2
Potassium	mg/L	1.65	1.8	1.4	1.4	1.1	NM	1.2
Sodium	mg/L	15.1	20.0	16.0	13.5	14.4	NM	11.5
General								
Hardness	mg/L	42.56	41	21.6	97.7	32.4	NM	43.1
Total Dissolved Solids	mg/L	120.46	140	67	198	87	NM	102
Total Suspended Solids	mg/L	9.82	43	<5.0	39	<5.0	NM	15

* - Lowest achievable Reporting Limit by laboratory due to matrix interference

HMWQ-004

Parameter	Unit	Recommended						
		Benchmark 2014	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Field								
D.O.	ppm	-	NM	NM	NM	NM	NM	NM
ORP	mV	-	NM	NM	NM	NM	NM	NM
pH	SU	5.69-6.69	NM	NM	NM	NM	NM	NM
Specific Conductance	uS/m	-	NM	NM	NM	NM	NM	NM
Temperature	C	-	NM	NM	NM	NM	NM	NM
Turbidity	NTU	-	NM	NM	NM	NM	NM	NM
Flow	cfs	-	-	-	-	-	-	-
Metals								
Aluminum	ug/L	200 (p)	NM	NM	NM	NM	NM	NM
Antimony	ug/L	2.3	NM	NM	NM	NM	NM	NM
Arsenic	ug/L	35	NM	NM	NM	NM	NM	NM
Barium	ug/L	118	NM	NM	NM	NM	NM	NM
Beryllium	ug/L	4.0 (p)	NM	NM	NM	NM	NM	NM
Boron	ug/L	36	NM	NM	NM	NM	NM	NM
Cadmium	ug/L	0.1	NM	NM	NM	NM	NM	NM
Chromium	ug/L	14	NM	NM	NM	NM	NM	NM
Cobalt	ug/L	3	NM	NM	NM	NM	NM	NM
Copper	ug/L	11	NM	NM	NM	NM	NM	NM
Iron	ug/L	73,409	NM	NM	NM	NM	NM	NM
Lead	ug/L	2.1	NM	NM	NM	NM	NM	NM
Lithium	ug/L	16	NM	NM	NM	NM	NM	NM
Manganese	ug/L	2541	NM	NM	NM	NM	NM	NM
Mercury	ng/L	43	NM	NM	NM	NM	NM	NM
Molybdenum	ug/L	4.7	NM	NM	NM	NM	NM	NM
Nickel	ug/L	5.6	NM	NM	NM	NM	NM	NM
Selenium	ug/L	0.44	NM	NM	NM	NM	NM	NM
Silver	ug/L	0.35	NM	NM	NM	NM	NM	NM
Thallium	ug/L	4.0 (p)	NM	NM	NM	NM	NM	NM
Vanadium	ug/L	39	NM	NM	NM	NM	NM	NM
Zinc	ug/L	44	NM	NM	NM	NM	NM	NM
Major Anions								
Alkalinity, Bicarbonate	mg/L	68	NM	NM	NM	NM	NM	NM
Alkalinity, Carbonate	mg/L	8.0 (p)	NM	NM	NM	NM	NM	NM
Chloride	mg/L	68	NM	NM	NM	NM	NM	NM
Fluoride	mg/L	0.23	NM	NM	NM	NM	NM	NM
Nitrogen, Ammonia	mg/L	1.9	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrate	mg/L	2.0 (p)	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrite	mg/L	2.0 (p)	NM	NM	NM	NM	NM	NM
Sulfate	mg/L	4.0 (p)	NM	NM	NM	NM	NM	NM
Sulfide	mg/L	20 (p)	NM	NM	NM	NM	NM	NM
Major Cations								
Calcium	mg/L	21	NM	NM	NM	NM	NM	NM
Magnesium	mg/L	8.1	NM	NM	NM	NM	NM	NM
Potassium	mg/L	3.3	NM	NM	NM	NM	NM	NM
Sodium	mg/L	49	NM	NM	NM	NM	NM	NM
General								
Hardness	mg/L	88	NM	NM	NM	NM	NM	NM
Total Dissolved Solids	mg/L	209	NM	NM	NM	NM	NM	NM
Total Suspended Solids	mg/L	353	NM	NM	NM	NM	NM	NM

HMP-009

Parameter	Unit	Recommended Benchmark 2018							
		*	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	
Field									
D.O.	ppm		NM	5.84	2.83	11.46		NM	NM
ORP	mV		NM	324.1	204	247		NM	NM
pH	SU	6.6-7.6	NM	6.78	7.28	6.97		NM	NM
Specific Conductance	uS/m		NM	654.95	209.4	158.3		NM	NM
Temperature	C		NM	11.24	13.7	1.6		NM	NM
Turbidity	NTU		NM	2.97	3.12	3.05		NM	NM
Flow	cfs		-	-	-	-		-	-
Metals									
Aluminum	ug/L	-	NM	-	<50.0	-		NM	NM
Antimony	ug/L	-	NM	-	<1.0	-		NM	NM
Arsenic	ug/L	6.0	NM	<1.0	1.2	<1.0		NM	NM
Barium	ug/L	-	NM	-	7.7	-		NM	NM
Beryllium	ug/L	-	NM	-	<1.0	-		NM	NM
Boron	ug/L	-	NM	-	21.0	-		NM	NM
Cadmium	ug/L	-	NM	-	<0.007	-		NM	NM
Chromium	ug/L	-	NM	-	<1.0	-		NM	NM
Cobalt	ug/L	-	NM	-	0.207	-		NM	NM
Copper	ug/L	1300	NM	1.77	1.13	1.26		NM	NM
Iron	ug/L	1758.94	NM	859	1280	1130		NM	NM
Lead	ug/L	6.36	NM	0.131	0.047	0.130		NM	NM
Lithium	ug/L	-	NM	-	<8.0	-		NM	NM
Manganese	ug/L	855.5	NM	26.8	86.1	68.8		NM	NM
Mercury	ng/L	1.24	NM	1.63	2.36	3.89		NM	NM
Molybdenum	ug/L	-	NM	-	1.4	-		NM	NM
Nickel	ug/L	172.08	NM	3.13	3.18	2.13		NM	NM
Selenium	ug/L	-	NM	-	0.006	-		NM	NM
Silver	ug/L	-	NM	-	<0.20	-		NM	NM
Thallium	ug/L	-	NM	-	<1.0	-		NM	NM
Vanadium	ug/L	-	NM	-	<1.0	-		NM	NM
Zinc	ug/L	64.27	NM	2.88	0.48	1.97		NM	NM
Major Anions									
Alkalinity, Bicarbonate	mg/L	100.8	NM	21.3	59.9	24.2		NM	NM
Alkalinity, Carbonate	mg/L	8	NM	<2.0	<2.0	<2.0		NM	NM
Chloride	mg/L	37.3	NM	6.0	15.5	7.0		NM	NM
Fluoride	mg/L	2.73	NM	<0.10	<0.10	<0.10		NM	NM
Nitrogen, Ammonia	mg/L	2	NM	<0.025	<0.025	<0.025		NM	NM
Nitrogen, Nitrate	mg/L	0.16	NM	<0.10	<0.10	<0.10		NM	NM
Nitrogen, Nitrite	mg/L	2	NM	<0.10	<0.10	<0.10		NM	NM
Sulfate	mg/L	207.45	NM	5.5	9.8	6.2		NM	NM
Sulfide	mg/L	20	NM	<0.20	<0.20	<0.20		NM	NM
Major Cations									
Calcium	mg/L	77.48	NM	6.7	19.2	8.5		NM	NM
Magnesium	mg/L	66.48	NM	2.2	5.5	2.6		NM	NM
Potassium	mg/L	86.72	NM	0.7	1.4	0.72		NM	NM
Sodium	mg/L	37.45	NM	4.1	10.1	4.7		NM	NM
General									
Hardness	mg/L	342.27	NM	25.8	70.7	31.7		NM	NM
Total Dissolved Solids	mg/L	529.47	NM	27.0	108	72		NM	NM
Total Suspended Solids	mg/L	13.20	NM	<5.0	9.0	<5.0		NM	NM

* - Recommended Benchmarks are for Q2 - Insufficient Q1 Data to Develop Benchmarks