



ANNEX F8

GROUNDWATER MONITORING RESULTS

**TABLE F8.1 GROUNDWATER MONITORING RESULTS**

Parameters	Units	MWX-1	MWX-2	MWX-3	MWX-4	MWX-5	MWX-6	MWX-7	MWX-8	MWX-9	MWX-10	MWX-11	MWX-12	MWX-13	MWX-14
Water Level	mPD	3.01	3.11	3.04	2.97	3.42	3.11	3.34	N/A <sup>(a)</sup>	3.64	N/A <sup>(b)</sup>	N/A <sup>(c)</sup>	6.79	37.12	45.11
Bicarbonate Alkalinity as CaCO <sub>3</sub>	mg/L	169	297	170	88	52	86	<1	<1	165	N/A	N/A	58	26	11
Carbonate Alkalinity as CaCO <sub>3</sub>	mg/L	<1	<1	<1	<1	35	105	74	85	<1	N/A	N/A	<1	<1	<1
Total Alkalinity as CaCO <sub>3</sub>	mg/L	169	297	170	88	87	192	106	109	165	N/A	N/A	58	26	11
pH Value	pH Unit	7.7	7.8	7.8	8	9.4	9.8	10.8	10.8	7.9	N/A	N/A	6.8	6.1	5.8
Electrical Conductivity	µS/cm	862	1230	1220	725	712	875	1290	2130	19900	N/A	N/A	320	104	129
Ammonia	mg/L	0.14	0.06	1.53	0.56	0.91	1.7	3.84	3.9	0.44	N/A	N/A	0.01	0.01	0.03
Chloride	mg/L	136	58	228	105	102	126	222	513	6060	N/A	N/A	18	14	25
Nitrite	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	N/A	<0.01	<0.01	<0.01
Phosphorus	mg/L	<0.01	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01	0.06	N/A	N/A	0.03	0.01	<0.01
Sulphate	mg/L	44	437	169	79	81	48	173	165	957	N/A	N/A	58	2	5
Sulphide	mg/L	<0.1	<0.1	0.2	3.3	2	15.8	0.9	5.2	<0.1	N/A	N/A	<0.1	<0.1	<0.1
Total Kjeldahl Nitrogen	mg/L	0.2	0.2	2	0.9	1.5	2.4	4.9	5	0.6	N/A	N/A	<0.1	<0.1	<0.1
Nitrate	mg/L	0.02	2.52	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	N/A	<0.01	0.04	0.15
Total Nitrogen	mg/L	0.3	2.8	2	0.9	1.5	2.4	4.9	5	0.6	N/A	N/A	<0.1	<0.1	0.2
Boron	µg/L	170	380	230	230	220	260	240	220	2820	N/A	N/A	30	20	20
Calcium	mg/L	48.9	94.9	74.2	35.2	12.8	3.8	21.6	48.5	175	N/A	N/A	25.7	2.45	1.36
Mercury	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	N/A	N/A	<0.20	<0.20	<0.20
Magnesium	mg/L	9.74	60.1	5.75	1.53	0.31	0.45	<0.05	0.05	341	N/A	N/A	4.34	1.09	1.25

Parameters	Units	MWX-1	MWX-2	MWX-3	MWX-4	MWX-5	MWX-6	MWX-7	MWX-8	MWX-9	MWX-10	MWX-11	MWX-12	MWX-13	MWX-14
Sodium	mg/L	92.8	64.4	122	87.4	98.5	126	185	290	3110	N/A	N/A	24.4	11.9	16.5
Iron	mg/L	<0.04	<0.04	0.15	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	N/A	N/A	0.15	0.68	<0.04
Potassium	mg/L	18.9	20.6	26.6	17.1	35	49.5	49	59.8	178	N/A	N/A	3.33	3.64	4.38
Cadmium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	N/A	N/A	<0.2	<0.2	<0.2
Chromium	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	N/A	<1	<1	<1
Copper	µg/L	<1	<1	1	<1	2	3	4	<1	<1	N/A	N/A	<1	<1	2
Lead	µg/L	<1	<1	<1	<1	<1	5	<1	<1	<1	N/A	N/A	<1	<1	<1
Manganese	µg/L	210	246	902	34	4	3	<1	<1	444	N/A	N/A	462	260	13
Nickel	µg/L	<1	<1	<1	<1	<1	2	2	3	<1	N/A	N/A	<1	<1	<1
Zinc	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	N/A	15	17	18
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2	<2	7	<2	4	<2	N/A	N/A	<2	<2	<2
Chemical Oxygen Demand	mg/L	6	5	22	17	22	58	38	32	<20	N/A	N/A	3	3	<2
Total Organic Carbon	mg/L	2	<1	11	5	5	12	13	9	<5	N/A	N/A	1	1	1

**Note:**

- (a) The water level of Monitoring well MWX-8 could not be measured due to thick grass layer.
- (b) Monitoring well MWX-10 is under maintenance.
- (c) Monitoring well MWX-11 is not accessible due to the safety considerations.