



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	3.27	3.76	2.97	3.2	3.5	3.06	3.42	3.23	3.7	N/A <sup>(a)</sup>	N/A <sup>(b)</sup>	6.99	36.9	45.31
Bicarbonate Alkalinity as CaCO <sub>3</sub>	mg/L	162	283	178	12	32	<1	84	<1	162	N/A	N/A	55	17	12
Carbonate Alkalinity as CaCO <sub>3</sub>	mg/L	<1	<1	<1	40	63	137	14	83	<1	N/A	N/A	<1	<1	<1
Total Alkalinity as CaCO <sub>3</sub>	mg/L	162	283	178	52	95	178	99	104	162	N/A	N/A	55	17	12
pH Value	pH Unit	7.6	7.8	7.9	9.7	9.8	10.9	8.8	10.5	7.9	N/A	N/A	6.9	5.6	5.4
Electrical Conductivity	µS/cm	883	1130	1230	650	755	1060	837	1670	20000	N/A	N/A	310	94	119
Ammonia	mg/L	0.03	0.05	1.61	1.81	1.32	3.3	1.94	4.26	0.33	N/A	N/A	<0.01	0.2	<0.01
Chloride	mg/L	155	49	228	127	106	153	124	338	6320	N/A	N/A	20	15	24
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	0.07	N/A	N/A	0.03	<0.01	<0.01
Sulphate	mg/L	40	255	84	77	81	69	104	187	924	N/A	N/A	58	3	4
Sulphide	mg/L	<0.1	<0.1	<0.1	3.1	2.7	10.2	0.4	3	0.1	N/A	N/A	<0.1	<0.1	<0.1
Total Kjeldahl Nitrogen	mg/L	0.2	1.2	2	2.1	1.8	4	2.4	4.9	0.6	N/A	N/A	0.1	0.4	0.1
Nitrate	mg/L	0.05	3.32	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	N/A	N/A	<0.01	0.09	0.13
Total Nitrogen	mg/L	0.3	4.5	2	2.1	1.8	4	2.4	4.9	0.7	N/A	N/A	0.1	0.5	0.2
Boron	µg/L	160	340	220	190	220	220	200	200	2790	N/A	N/A	60	20	20
Calcium	mg/L	47.6	91.1	76.3	21.7	10.4	11.3	30.3	41.3	165	N/A	N/A	25.3	0.81	1.33
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	10.5	55.2	6.18	0.59	0.19	<0.05	2.09	<0.05	356	N/A	N/A	4.28	0.97	1.19

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	97.9	55.7	143	89.9	106	147	123	231	3230	N/A	N/A	23.7	12.2	22.4
Iron	mg/L	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	N/A	N/A	0.38	<0.04	<0.04
Potassium	mg/L	18.2	19.6	28.7	19.9	39.2	53.3	27.1	62.5	168	N/A	N/A	2.97	3.82	4.3
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	<1	1	<1	<1	<1	N/A	N/A	<1	1	3
Lead	µg/L	<1	<1	<1	<1	<1	4	<1	<1	<1	N/A	N/A	<1	<1	<1
Manganese	µg/L	191	180	575	4	2	<1	11	<1	378	N/A	N/A	633	56	13
Nickel	µg/L	<1	<1	<1	<1	<1	2	<1	2	<1	N/A	N/A	<1	<1	<1
Zinc	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	N/A	12	<10	<10
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2	<2	8	<2	<2	<2	N/A	N/A	<2	<2	<2
Chemical Oxygen Demand	mg/L	5	4	22	19	21	44	22	32	<20	N/A	N/A	4	5	4
Total Organic Carbon	mg/L	2	<1	7	6	6	11	8	10	<5	N/A	N/A	2	1	2

**Note:**

- (a) Monitoring well MWX-10 is under maintenance.
- (b) Monitoring well MWX-11 is not accessible due to the safety considerations.