



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	3.17	3.14	3.12	2.93	3.39	3.14	3.12	N/A <sup>(a)</sup>	3.66	N/A <sup>(b)</sup>	N/A <sup>(c)</sup>	7.23	36.84	45.24
Bicarbonate Alkalinity as CaCO <sub>3</sub>	mg/L	166	282	213	19	83	<1	<1	<1	162	N/A	N/A	56	14	10
Carbonate Alkalinity as CaCO <sub>3</sub>	mg/L	<1	<1	<1	36	10	140	90	93	<1	N/A	N/A	<1	<1	<1
Total Alkalinity as CaCO <sub>3</sub>	mg/L	166	282	213	56	93	188	122	121	162	N/A	N/A	56	14	10
pH Value	pH Unit	7.8	7.8	7.9	9.6	8.8	11.1	10.7	10.9	7.9	N/A	N/A	6.9	5.6	5.4
Electrical Conductivity	µS/cm	918	1090	862	572	686	1080	1200	1710	19800	N/A	N/A	305	91	108
Ammonia	mg/L	0.07	0.06	0.62	1.8	0.41	3.55	6.59	4.45	0.45	N/A	N/A	0.02	<0.01	0.01
Chloride	mg/L	160	49	107	101	79	158	215	332	6680	N/A	N/A	19	14	21
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	48	267	65	69	88	71	116	202	1020	N/A	N/A	60	3	3
Sulphide	mg/L	<0.1	<0.1	<0.1	2.6	0.6	13.1	10.6	3.1	<0.1	N/A	N/A	<0.1	<0.1	<0.1
Total Kjeldahl Nitrogen	mg/L	0.2	0.6	0.9	1.8	0.8	4.6	7.8	4.8	0.6	N/A	N/A	0.1	<0.1	<0.1
Nitrate	mg/L	0.04	3.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	N/A	0.01	0.12	0.11
Total Nitrogen	mg/L	0.2	3.7	0.9	1.8	0.8	4.6	7.8	4.8	0.6	N/A	N/A	0.1	0.2	0.2
Boron	µg/L	160	330	160	150	230	210	230	210	2890	N/A	N/A	30	10	10
Calcium	mg/L	48.4	85.8	80.8	23	12.4	16.4	10.2	45.3	160	N/A	N/A	24.2	0.8	1.15
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	10.6	53.8	5.48	0.93	0.37	<0.05	0.07	0.08	351	N/A	N/A	4.13	0.95	1.04

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	99.1	53.6	69.8	68.9	89	140	173	231	3090	N/A	N/A	22.9	12.2	14.1
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	0.25	<0.04	<0.04
Potassium	mg/L	18.1	19.4	19.2	17.1	41.6	49.4	48.2	58.7	158	N/A	N/A	2.78	3.59	3.72
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	2	11
Lead	µg/L	<1	<1	<1	<1	<1	2	<1	<1	<1	N/A	N/A	<1	<1	<1
Manganese	µg/L	359	175	556	6	3	<1	<1	<1	391	N/A	N/A	691	29	13
Nickel	µg/L	<1	<1	<1	<1	<1	2	2	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	16	10	<10
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2	<2	2	5	2	<2	N/A	N/A	<2	<2	<2
Chemical Oxygen Demand	mg/L	6	4	12	15	14	43	48	27	<20	N/A	N/A	<2	2	<2
Total Organic Carbon	mg/L	1	1	4	4	5	10	14	9	<5	N/A	N/A	1	1	<1

**Note:**

- (a) The dip 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.