



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	3.42	3.53	3.53	3.94	3.65	3.63	3.32	3.82	4.6	N/A <sup>(a)</sup>	4.73	7.22	38.24	46.07
Bicarbonate Alkalinity as CaCO <sub>3</sub>	mg/L	153	225	237	102	104	<1	4	<1	162	N/A	151	56	16	11
Carbonate Alkalinity as CaCO <sub>3</sub>	mg/L	<1	<1	<1	<1	6	130	108	73	<1	N/A	<1	<1	<1	<1
Total Alkalinity as CaCO <sub>3</sub>	mg/L	153	225	237	102	110	180	113	74	162	N/A	151	56	16	11
pH Value	pH Unit	7.7	7.9	7.6	8.1	8.6	11.1	10.1	10.2	7.9	N/A	7.7	6.9	5.6	5.4
Electrical Conductivity	µS/cm	991	3550	1120	860	657	1260	1210	1690	17800	N/A	447	309	92	125
Ammonia	mg/L	0.1	0.59	0.8	0.51	0.23	3.15	6.92	3.97	0.45	N/A	<0.01	<0.01	0.03	0.01
Chloride	mg/L	195	879	161	131	74	182	288	368	5710	N/A	29	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	<0.01	<0.01	<0.01	<0.01
Phosphorus	mg/L	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	N/A	<0.01	0.02	<0.01	<0.01
Sulphate	mg/L	50	182	93	122	89	85	70	198	870	N/A	27	59	3	6
Sulphide	mg/L	<0.1	<0.1	<0.1	0.7	0.2	14	9.9	1.8	<0.1	N/A	<0.1	<0.1	<0.1	<0.1
Total Kjeldahl Nitrogen	mg/L	0.3	0.8	1.3	0.9	0.6	4	8.2	4.6	0.7	N/A	0.2	<0.1	0.2	<0.1
Nitrate	mg/L	0.2	0.6	0.02	<0.01	<0.01	0.02	<0.01	<0.01	0.03	N/A	0.11	<0.01	0.13	0.16
Total Nitrogen	mg/L	0.5	1.4	1.3	0.9	0.6	4.1	8.2	4.6	0.7	N/A	0.3	<0.1	0.4	0.2
Boron	µg/L	180	520	200	220	250	220	300	210	2940	N/A	130	30	20	20
Calcium	mg/L	45.8	83.8	105	55.8	18.5	19.7	14	32.2	160	N/A	54	25.9	0.82	1.58
Mercury	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	N/A	<0.20	<0.20	<0.20	<0.20
Magnesium	mg/L	11.2	67.3	7.76	3.25	0.64	<0.05	1.34	0.32	341	N/A	3.11	4.25	0.86	1.49

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	118	468	104	96.2	87.8	162	188	261	3160	N/A	25.9	23.6	13.1	17.9
Iron	mg/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	N/A	<0.04	<0.04	<0.04	<0.04
Potassium	mg/L	18.8	30.6	26	20.2	41.4	57.4	44.6	66.4	165	N/A	7.55	3	3.7	4.66
Cadmium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	N/A	<0.2	<0.2	<0.2	<0.2
Chromium	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1
Copper	µg/L	<1	1	<1	<1	<1	<1	<1	<1	<1	N/A	2	<1	4	5
Lead	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1
Manganese	µg/L	178	96	974	24	8	<1	26	2	351	N/A	2	708	83	12
Nickel	µg/L	<1	<1	<1	<1	1	2	2	2	<1	N/A	<1	<1	<1	<1
Zinc	µg/L	<10	<10	<10	<10	<10	21	<10	<10	<10	N/A	46	11	15	26
Biochemical Oxygen Demand	mg/L	<2	<2	<2	<2	<2	5	7	<2	<2	N/A	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	7	8	15	14	11	40	45	30	<20	N/A	4	3	2	4
Total Organic Carbon	mg/L	3	2	8	4	5	11	12	10	<5	N/A	1	<1	<1	2

**Note:**

(a) Monitoring well MWX-10 is under maintenance.