



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	2.77	1.96	2.63	2.73	2.61	2.49	2.5	N/A ^(a)	2.69	N/A ^(b)	2.91	6.57	35.71	41.25
Bicarbonate Alkalinity as CaCO ₃	mg/L	148	297	184	76	<1	<1	60	<1	196	N/A	150	58	14	11
Carbonate Alkalinity as CaCO ₃	mg/L	<1	<1	<1	<1	119	141	<1	88	<1	N/A	<1	<1	<1	<1
Total Alkalinity as CaCO ₃	mg/L	148	297	184	79	161	187	60	112	196	N/A	150	58	14	11
pH Value	pH Unit	7.6	8	8	8.5	10.8	10.9	8.2	10.1	8	N/A	7.8	7	5.6	5.6
Electrical Conductivity	µS/cm	1530	1080	894	758	1020	1050	1320	3550	3490	N/A	1500	276	91	103
Ammonia	mg/L	0.46	0.14	1.02	1.31	2.88	3.58	1.12	15.8	0.25	N/A	0.05	<0.01	<0.01	<0.01
Chloride	mg/L	383	58	140	128	168	170	233	1150	871	N/A	390	20	14	18
Nitrite	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.79	0.01	<0.01	N/A	<0.01	<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	0.04	N/A	0.02	0.03	0.01	<0.01
Sulphate	mg/L	72	256	67	93	77	70	266	43	402	N/A	78	49	3	5
Sulphide	mg/L	<0.1	<0.1	0.2	2.5	11	15.8	<0.1	15.8	0.3	N/A	<0.1	<0.1	<0.1	<0.1
Total Kjeldahl Nitrogen	mg/L	0.6	0.2	1.3	1.7	3.6	4.6	2.1	16	0.6	N/A	0.2	<0.1	<0.1	0.1
Nitrate	mg/L	<0.01	1.88	0.01	<0.01	<0.01	0.01	0.77	<0.01	<0.01	N/A	<0.01	<0.01	0.06	0.08
Total Nitrogen	mg/L	0.6	2	1.3	1.7	3.6	4.6	4.7	16	0.6	N/A	0.2	<0.1	0.1	0.2
Boron	µg/L	240	400	170	170	200	170	240	500	1100	N/A	120	30	20	10
Calcium	mg/L	67.4	74.5	76.9	40.9	29.8	30.2	69.6	85.8	112	N/A	92.1	23	0.82	0.95
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	16.1	54.2	4.84	1.68	<0.05	<0.05	4.9	0.15	42.3	N/A	9.05	3.77	0.97	0.83

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	184	62.2	83.1	88	133	135	146	542	489	N/A	183	23.6	12.5	14.2
Iron	mg/L	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	N/A	<0.04	0.27	<0.04	<0.04
Potassium	mg/L	21.7	18	20.4	24.6	51	51.5	50.8	64	49.2	N/A	9.7	2.85	3.88	3.7
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	2	<1	<1	N/A	<1	<1	1	2
Lead	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1
Manganese	µg/L	1020	389	546	7	<1	<1	3	<1	177	N/A	738	580	17	7
Nickel	µg/L	<1	<1	<1	<1	1	1	<1	<1	<1	N/A	<1	<1	<1	<1
Zinc	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	11	<10	14
Biochemical Oxygen Demand	mg/L	<2	<2	<2	3	3	6	<2	5	2	N/A	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	5	3	15	14	32	33	19	36	20	N/A	<2	<2	<2	<2
Total Organic Carbon	mg/L	1	2	7	9	10	11	9	13	9	N/A	<1	<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.