



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 | 3.51 | 2.61 | 2.64 | 2.47 | 3.42 | 2.71 | 2.44 | 3.26 | 2.84 | 2.73 | 3.07 | 6.49 | 35.92 | 41.81 |
| Bicarbonate Alkalinity as CaCO ₃ | mg/L | 168 | 276 | 137 | 6 | <1 | <1 | 64 | <1 | 141 | 211 | 167 | 55 | 17 | 12 |
| Carbonate Alkalinity as CaCO ₃ | mg/L | <1 | <1 | <1 | 48 | 84 | 144 | 18 | 92 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity as CaCO ₃ | mg/L | 168 | 276 | 137 | 54 | 101 | 177 | 82 | 124 | 141 | 211 | 167 | 55 | 17 | 12 |
| pH Value | pH Unit | 7.8 | 8 | 7.8 | 10 | 10.9 | 11.3 | 8.9 | 10.8 | 8 | 7.9 | 8 | 7 | 5.9 | 5.8 |
| Electrical Conductivity | µS/cm | 1350 | 992 | 1060 | 840 | 1270 | 1150 | 2190 | 3680 | 10200 | 938 | 414 | 295 | 93 | 98 |
| Ammonia | mg/L | 0.1 | 0.01 | 1.38 | 3.78 | 2.69 | 4.58 | 5.11 | 14.4 | 1.02 | <0.01 | 0.05 | <0.01 | 0.02 | <0.01 |
| Chloride | mg/L | 270 | 39 | 204 | 174 | 235 | 197 | 609 | 1140 | 3270 | 132 | 24 | 19 | 14 | 17 |
| Nitrite | mg/L | <0.01 | 0.01 | <0.01 | <0.01 | <0.01 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Phosphorus | mg/L | <0.01 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.02 | <0.01 | 0.05 | 0.02 | <0.01 | 0.03 | <0.01 | <0.01 |
| Sulphate | mg/L | 73 | 202 | 71 | 75 | 123 | 73 | 47 | 48 | 590 | 73 | 14 | 54 | 3 | 3 |
| Sulphide | mg/L | <0.1 | <0.1 | <0.1 | 3.6 | 6.3 | 15 | 1.7 | 14.9 | 0.2 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Total Kjeldahl Nitrogen | mg/L | 0.2 | <1.0 | 1.9 | 4.2 | 3.3 | 5.5 | 5.9 | 15.9 | 1.2 | 0.1 | 0.1 | 0.1 | <0.1 | <0.1 |
| Nitrate | mg/L | <0.01 | 5.01 | 0.01 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.1 | 0.1 |
| Total Nitrogen | mg/L | 0.2 | 5.2 | 1.9 | 4.2 | 3.3 | 5.5 | 5.9 | 15.9 | 1.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Boron | µg/L | 220 | 250 | 240 | 220 | 230 | 200 | 700 | 520 | 1940 | 160 | 60 | 20 | 10 | 10 |
| Calcium | mg/L | 72.6 | 68.4 | 62.9 | 26 | 37 | 35.8 | 27.1 | 103 | 118 | 71.4 | 54.8 | 26.4 | 0.97 | 1.5 |
| Mercury | µg/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Magnesium | mg/L | 12.6 | 52.7 | 4.64 | 0.16 | <0.05 | <0.05 | 6.68 | <0.05 | 152 | 9.51 | 3.32 | 4.22 | 1.07 | 0.97 |

| 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 | 159 | 50.6 | 114 | 114 | 170 | 155 | 335 | 567 | 1860 | 93.2 | 30.4 | 26 | 13.9 | 14.8 |
| Iron | mg/L | <0.04 | <0.04 | 0.07 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | 0.4 | <0.04 | <0.04 |
| Potassium | mg/L | 23.1 | 16.6 | 25.3 | 26.4 | 55.9 | 54.8 | 44.4 | 66.1 | 92.4 | 9.95 | 7.36 | 3.05 | 4.12 | 3.83 |
| Cadmium | µg/L | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| Chromium | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Copper | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 2 | 2 |
| Lead | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Manganese | µg/L | 784 | 208 | 766 | 1 | <1 | <1 | 2 | <1 | 251 | 2130 | 390 | 652 | 12 | 8 |
| Nickel | µg/L | <1 | <1 | <1 | <1 | <1 | 2 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Zinc | µg/L | 180 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 469 | <10 | <10 | 14 | 31 | 20 |
| Biochemical Oxygen Demand | mg/L | <2 | <2 | <2 | 7 | 4 | 13 | <2 | 12 | <2 | <2 | <2 | <2 | <2 | <2 |
| Chemical Oxygen Demand | mg/L | 6 | 3 | 18 | 21 | 28 | 53 | 10 | 42 | <20 | 5 | 4 | 3 | 3 | 2 |
| Total Organic Carbon | mg/L | 4 | 1 | 8 | 6 | 5 | 9 | 3 | 8 | <5 | 3 | 1 | 2 | <1 | 1 |