

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 | 2.41 | 2.71 | 2.94 | 2.37 | 2.72 | 1.71 | 2.64 | 2.96 | 2.84 | 2.03 | 3.17 | 6.29 | Dry | 41.41 |
| Bicarbonate Alkalinity as CaCO ₃ | mg/L | 132 | 260 | 126 | <1 | <1 | <1 | 42 | <1 | 123 | 242 | 223 | 56 | NA | 12 |
| Carbonate Alkalinity as CaCO ₃ | mg/L | <1 | <1 | <1 | 72 | 88 | 134 | 24 | 79 | <1 | <1 | <1 | <1 | NA | <1 |
| Total Alkalinity as CaCO ₃ | mg/L | 132 | 260 | 126 | 108 | 141 | 204 | 66 | 117 | 123 | 242 | 223 | 56 | NA | 12 |
| pH Value | pH Unit | 7.9 | 8 | 8 | 10.9 | 11.2 | 11.4 | 9.2 | 10.9 | 8.3 | 8 | 8 | 7 | NA | 5.6 |
| Electrical Conductivity | µS/cm | 998 | 874 | 1110 | 960 | 1280 | 1300 | 2430 | 2050 | 862 | 776 | 667 | 302 | NA | 99 |
| Ammonia | mg/L | <0.01 | <0.01 | 0.18 | 0.48 | 0.27 | 0.44 | 0.66 | 0.96 | 1.74 | 0.04 | 0.17 | <0.01 | NA | <0.01 |
| Chloride | mg/L | 179 | 41 | 203 | 188 | 215 | 193 | 652 | 458 | 151 | 72 | 51 | 21 | NA | 18 |
| Nitrite | mg/L | <0.01 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.15 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | NA | <0.01 |
| Phosphorus | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.01 | <0.01 | 0.03 | 0.02 | 0.01 | 0.03 | NA | <0.01 |
| Sulphate | mg/L | 60 | 141 | 79 | 63 | 123 | 79 | 41 | 167 | 58 | 36 | 47 | 55 | NA | 4 |
| Sulphide | mg/L | <0.1 | <0.1 | <0.1 | 8.9 | 13.8 | 22.4 | 1.9 | 4.8 | 0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 |
| Total Kjeldahl Nitrogen | mg/L | 0.1 | <0.1 | 1.9 | 6 | 3.2 | 5.3 | 6.5 | 10.9 | 1.8 | <0.1 | 0.3 | <0.1 | NA | <0.1 |
| Nitrate | mg/L | <0.01 | 0.45 | <0.01 | <0.01 | <0.01 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | NA | 0.07 |
| Total Nitrogen | mg/L | 0.1 | 0.5 | 1.9 | 6 | 3.2 | 5.3 | 6.6 | 10.9 | 1.8 | <0.1 | 0.3 | <0.1 | NA | 0.1 |
| Boron | µg/L | 130 | 180 | 200 | 190 | 200 | 190 | 710 | 240 | 320 | 90 | 80 | 20 | NA | 10 |
| Calcium | mg/L | 58.8 | 57.5 | 63.9 | 38.1 | 38.5 | 31.3 | 25.1 | 51.5 | 40.9 | 79.8 | 74.8 | 25.2 | NA | 0.92 |
| 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 | NA | <0.20 |
| Magnesium | mg/L | 7.33 | 51.3 | 4.17 | <0.05 | <0.05 | <0.05 | 4.64 | <0.05 | 6.4 | 7.53 | 6 | 4.14 | NA | 0.89 |
| Sodium | mg/L | 114 | 46.9 | 125 | 115 | 158 | 161 | 437 | 320 | 102 | 57.9 | 48.6 | 25.9 | NA | 14.2 |
| Iron | mg/L | 0.05 | <0.04 | 0.1 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | <0.04 | 0.38 | NA | <0.04 |
| Potassium | mg/L | 19.8 | 10.6 | 27 | 31.3 | 56.8 | 54.9 | 50.4 | 72 | 18.6 | 8.34 | 8.51 | 3.01 | NA | 3.82 |
| 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 | NA | <0.2 |
| Chromium | µg/L | <1 | <1 | <1 | <1 | 1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 |
| Copper | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 |
| Lead | µg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 |
| Manganese | µg/L | 573 | 172 | 751 | <1 | 2 | <1 | 1 | <1 | 82 | 1120 | 750 | 726 | NA | 7 |
| Nickel | µg/L | <1 | <1 | <1 | 1 | 1 | 2 | <1 | 4 | <1 | <1 | <1 | <1 | NA | <1 |
| Zinc | µg/L | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 13 | NA | 10 |
| Biochemical Oxygen Demand | mg/L | <2 | <2 | <2 | 6 | 4 | 10 | <2 | 3 | <2 | <2 | <2 | <2 | NA | <2 |
| Chemical Oxygen Demand | mg/L | 6 | 6 | 16 | 28 | 30 | 38 | 12 | 34 | 10 | 4 | 4 | 5 | NA | <2 |
| Total Organic Carbon | mg/L | 4 | 4 | 10 | 8 | 10 | 11 | 6 | 15 | 7 | 2 | <1 | 3 | NA | <1 |