

|                                                | Guidelines |           | Average                                       |                                               |                                               |                                               |
|------------------------------------------------|------------|-----------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
|                                                | Health     | Aesthetic | Ayr / Brandon                                 | Home Hill                                     | Mt. Kelly                                     | Giru                                          |
| <b>Chemicals</b>                               |            |           |                                               |                                               |                                               |                                               |
| Conductivity ( $\mu\text{S}/\text{cm}$ @ 25°C) |            |           | 444.222                                       | 239.333                                       | 603.333                                       | 340.000                                       |
| pH at 21°C                                     |            | 6.5 – 8.5 | 7.030                                         | 7.650                                         | 7.353                                         | 7.373                                         |
| Total Hardness (mg $\text{CaCO}_3/\text{l}$ )  |            | <200      | 109.083                                       | 118.000                                       | 173.000                                       | 88.000                                        |
| Total Diss. Solids* (mg/L)                     |            | <500      | 304.722                                       | 290.000                                       | 390.000                                       | 200.000                                       |
| <u>Cations (mg/L)</u>                          |            |           |                                               |                                               |                                               |                                               |
| Sodium ( $\text{Na}^+$ )                       |            | <180      | 52.306                                        | 50.667                                        | 56.333                                        | 34.000                                        |
| Potassium ( $\text{K}^+$ )                     |            |           | 4.644                                         | 1.733                                         | 2.033                                         | 2.567                                         |
| Calcium ( $\text{Ca}^{++}$ )                   |            |           | 21.111                                        | 27.333                                        | 41.333                                        | 19.000                                        |
| Magnesium ( $\text{Mg}^{++}$ )                 |            |           | 13.667                                        | 12.000                                        | 18.000                                        | 9.833                                         |
| Hydrogen ( $\text{H}^+$ )                      |            |           | 0.000                                         | 0.000                                         | 0.000                                         | 0.000                                         |
| <u>Anions</u>                                  |            |           |                                               |                                               |                                               |                                               |
| Bicarbonate* ( $\text{HCO}_3^-$ )              |            |           | 181.306                                       | 246.333                                       | 171.333                                       | 94.333                                        |
| Carbonate* ( $\text{CO}_3^{--}$ )              |            |           | 0.117                                         | 0.667                                         | 0.233                                         | 0.100                                         |
| Hydroxide* ( $\text{OH}^-$ )                   |            |           | 0.000                                         | 0.000                                         | 0.000                                         | 0.000                                         |
| Chloride* ( $\text{Cl}^-$ )                    |            | <250      | 27.500                                        | 14.000                                        | 46.333                                        | 45.000                                        |
| Fluoride ( $\text{F}^-$ )                      | <1.5       |           | 0.128                                         | 0.128                                         | 0.110                                         | 0.113                                         |
| Nitrate ( $\text{NO}_3^-$ )                    | <50        |           | 21.250                                        | 12.333                                        | 28.667                                        | <0.030                                        |
| Sulphate ( $\text{SO}_4^{--}$ )                | <500       | <250      | 23.694                                        | 9.733                                         | 68.000                                        | 23.000                                        |
| <b>Heavy Metals</b>                            |            |           |                                               |                                               |                                               |                                               |
| <u>Other Dissolved Elements** (mg/L)</u>       |            |           |                                               |                                               |                                               |                                               |
| Aluminium (Al)                                 |            | <0.2      | <0.0030                                       | 0.0240                                        | <0.0030                                       | 0.1800                                        |
| Arsenic (As)                                   | <0.007     |           | 0.0005                                        | 0.0005                                        | 0.0003                                        | 0.0003                                        |
| Boron (B)                                      | <0.4       |           | 0.0556                                        | 0.0400                                        | 0.0433                                        | 0.0300                                        |
| Cadmium (Cd)                                   | <0.002     |           | <0.0001                                       | 0.2001                                        | <0.0001                                       | <0.0001                                       |
| Chromium (Cr)                                  | <0.05      |           | 0.0004                                        | 0.0016                                        | <0.0001                                       | 0.0001                                        |
| Copper (Cu)                                    | <2         | <1        | 0.0802                                        | 0.0030                                        | 0.0080                                        | 0.0023                                        |
| Iron (Fe)                                      |            | <0.3      | <0.0050                                       | 0.0137                                        | 0.0140                                        | 0.0188                                        |
| Lead (Pb)                                      | <0.01      |           | 0.0005                                        | 0.0002                                        | 0.0004                                        | 0.0002                                        |
| Manganese (Mn)                                 | <0.5       | <0.1      | 0.0004                                        | 0.0001                                        | 0.0002                                        | 0.0048                                        |
| Nickel (Ni)                                    | <0.02      |           | 0.0004                                        | 0.0002                                        | 0.0010                                        | 0.0004                                        |
| Zinc (Zn)                                      |            | <3        | 0.0135                                        | 0.0023                                        | 0.0143                                        | 0.0083                                        |
| <b>Remarks:</b>                                |            |           | Complies with NHMRC Drinking Water Guidelines | Complies with NHMRC Drinking Water Guidelines | Complies with NHMRC Drinking Water Guidelines | Complies with NHMRC Drinking Water Guidelines |

**Note:** \*Parameter is derived from calculation