RESULTS OF WATER ANALYSIS

2 samples supplied by Richmond Valley Council on 6/08/2024. Lab Job No. R7343. Samples submitted by Allison Hawthorne. Your Job: RVC Raw & Finished Monthly

| Locked Bag 10 CASINO NSW 2470 | Made of sets | Sample 4 | Sample 2 |
|--|--|------------------------|-------------------|
| Parameter | Methods reference | Sample 1 RVC Finished | Sample 2 RVC Raw |
| | | | |
| рН | APHA 4500-H⁺-B | 7.11 | 7.61 |
| Conductivity (EC) (dS/m) | APHA 2510-B | 0.351 | 0.321 |
| Total Dissolved Salts (mg/L) | ** Calculation using EC x 680 | 239 | 218 |
| Total Suspended Solids (mg/L) | GFC equiv. filter - APHA 2540-D | <1 | 16 |
| Turbidity (NTU) | APHA 2130 | 0.270 | 15.1 |
| True Colour (Pt-Co) | ** APHA 2120 | 2 | 11 |
| Apparent Colour (Pt-Co) | ** APHA 2120 | 4 | 128 |
| Bicarbonate Alkalinity (mg/L CaCO ₃ equivalent) | ** Total Alkalinity - APHA 2320 | 127 | 141 |
| Water Hardness (mg/L CaCO ₃ equivalent) | ** Using Ca and Mg calculation | 136 | 134 |
| Total Phosphorus (mg/L P) | In house method W4 | 0.01 | 0.09 |
| Nitrate (mg/L N) | APHA 4500 NO₃⁻-F | 0.026 | 0.021 |
| Nitrite (mg/L N) | APHA 4500 NO₂⁻-I | <0.005 | <0.005 |
| Total Coliforms (cfu/100 ml) | APHA 9222-B | <1 | 2,580 |
| E.Coli (cfu/100 ml) | ColiBlue Membrane Filtration | <1 | 40 |
| Total Plate Count (cfu/1 ml) | ** Inhouse | <1 | |
| Total Organic Carbon (mg/L) | APHA 5310-B | 1.7 | 2.2 |
| Dissolved Organic Carbon (mg/L) | APHA 5310-B | 1.4 | 1.9 |
| Aluminium (mg/L) | Total Available - APHA 3125 ICPMS *note 182 | 0.046 | 0.179 |
| ron (mg/L) | Total Available - APHA 3125 ICPMS *note 182 | <0.005 | 0.512 |
| Manganese (mg/L) | Total Available - APHA 3125 ICPMS ^{*note 182} | <0.001 | 0.095 |
| Aluminium (mg/L) | Dissolved - APHA 3125 ICPMS *note 1&2 | 0.430 | <0.005 |
| ron (mg/L) | Dissolved - APHA 3125 ICPMS*note 182 | <0.005 | 0.013 |
| Manganese (mg/L) | Dissolved - APHA 3125 ICPMS *note 1&2 | <0.001 | 0.056 |
| Calcium (mg/L) | APHA 3125 ICPMS note 182 | 27.1 | 27.0 |
| Magnesium (mg/L) | APHA 3125 ICPMS ^{*note 182} | 16.5 | 16.1 |
| Geosmin (ng/L) | Subcontracted; Envirolab report PFH0480-01 | | <1 |
| 2-Methylisoborneol (2-MIB) (ng/L) | Subcontracted; Envirolab report PFH0480-01 | | <1 |
| TRIHALOMETHANES (THM) | | | |
| Chloroform (THM) (µg/L) | Subcontracted: SGS report SE 269281 | 4.40 | |
| Bromodichloromethane (THM) (µg/L) | Subcontracted: SGS report SE 269281 | 4.30 | |
| Dibromochloromethane (THM) (µg/L) | Subcontracted: SGS report SE 269281 | 1.60 | |
| Bromoform (THM) (μg/L) | Subcontracted: SGS report SE 269281 | 0.600 | |
| Total THM (µg/L) | Subcontracted: SGS report SE 269281 | 11.0 | |

Notes:

- 1. Total metals samples digested with nitric acid; Total available (acid soluble/ extractable) metals samples acidified with nitric acid to pH <2;
- Dissolved metals samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis 2. Metals and salts analysed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).
- 3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = $1000 \, \mu g/L$ (micrograms per litre) = $1000 \, ppb$ (part per billion).
- 4. For conductivity 1 dS/m = 1 mS/cm = 1000 $\mu\text{S/cm}.$
- 5. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- 6. Analysis conducted between sample arrival date and reporting date.
- 7. ** NATA accreditation does not cover the performance of this service.
- 8. .. Denotes not requested.
- 9. This report is not to be reproduced except in full.
- 10. All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (refer scu.edu.au/eal or on request).
- 11. Results relate only to the samples tested
- 12. This report was issued on 21/08/2024.



