# RESULTS OF WATER ANALYSIS

2 samples supplied by Richmond Valley Council on 17/09/2024. Lab Job No. R8970.
Samples submitted by Water Results. Your Job: RVC Raw & Finished Weekly

| Parameter | Methods reference | Sample 1<br>RVC Finished 17/09/24 | Sample 2<br>RVC Raw 17/09/24 |
|---|---|---|---|
| | *Job No.* | *R8970/1* | *R8970/2* |
| **pH** | APHA 4500-$H^+$-B | 7.10 | 7.69 |
| **Conductivity (EC) (dS/m)** | APHA 2510-B | 0.395 | 0.329 |
| **Total Dissolved Salts (mg/L)** | ** Calculation using EC x 680 | 269 | 223 |
| **Total Suspended Solids (mg/L)** | GFC equiv. filter - APHA 2540-D | 1 | 22 |
| **Turbidity (NTU)** | APHA 2130 | <1 | 22.8 |
| **True Colour (Pt-Co)** | ** APHA 2120 | 4 | 24 |
| **Apparent Colour (Pt-Co)** | ** APHA 2120 | 10 | 184 |
| **Bicarbonate (Alkalinity) (mg/L $CaCO_3$ equivalent)** | ** Bicarbonate Alkalinity - APHA 2320 | 120 | 141 |
| **Water Hardness (mg/L $CaCO_3$ equivalent)** | ** Using Ca and Mg calculation | 134 | 126 |
| **Total Coliforms (cfu/100 ml)** | APHA 9222-B | <1 | 3,160 |
| **E.Coli (cfu/100 ml)** | ColiBlue Membrane Filtration | <1 | 30 |
| **Total Plate Count (cfu/1 ml)** | ** Inhouse | <1 | .. |
| **Total Organic Carbon (mg/L)** | APHA 5310-B | 1.68 | 2.92 |
| **Aluminium (mg/L)** | Total Available - APHA 3125 ICPMS*note 1&2 | 0.042 | 0.460 |
| **Iron (mg/L)** | Total Available - APHA 3125 ICPMS*note 1&2 | <0.005 | 0.916 |
| **Manganese (mg/L)** | Total Available - APHA 3125 ICPMS*note 1&2 | 0.001 | 0.133 |
| **Aluminium (mg/L)** | Dissolved - APHA 3125 ICPMS*note 1&2 | 0.040 | 0.017 |
| **Iron (mg/L)** | Dissolved - APHA 3125 ICPMS*note 1&2 | <0.005 | 0.074 |
| **Manganese (mg/L)** | Dissolved - APHA 3125 ICPMS*note 1&2 | 0.001 | 0.047 |
| **Calcium (mg/L)** | Dissolved - APHA 3125 ICPMS*note 1&2 | 26.9 | 25.9 |
| **Magnesium (mg/L)** | Dissolved - APHA 3125 ICPMS*note 1&2 | 16.2 | 14.9 |

**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 µg/L (micrograms per litre) = 1000 ppb (part per billion).
4. For conductivity 1 dS/m = 1 mS/cm = 1000 µS/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.
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11. Results relate only to the samples tested.
12. This report was issued on 26/09/2024.

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Graham Lancaster
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