

DATE OF ISSUE: 19/02/24

REPORT NO: WN240214


## Water Analysis Report

<b>REPORT NO:</b>	WN240214	<b>ISSUE DATE:</b>	19/02/24
<b>DATE SAMPLES RECEIVED:</b>	6/02/24	<b>PURCHASE ORDER:</b>	
<b>SAMPLES RECEIVED:</b>	9	<b>COMMENT:</b>	Results relate only to items tested.

<b>SUBMITTER:</b>	David Cash
<b>COMPANY:</b>	Richmond Valley Council
<b>ADDRESS:</b>	Locked Bag 10 CASINO NSW 2470,

METHOD ID	ANALYSIS METHOD
W107	EC, pH, Alkalinity & Chloride in water by autotitrator
C806	Calculations **
W112	Turbidity of water
W111	Determination of True and Apparent Colour in Water
W125	Anions in Water and Aqueous Extracts by Ion Chromatography
W141	Ammonia Nitrogen by FIA
W151	Nitrite Nitrogen by FIA
W153	Oxidised Nitrogen by FIA
M670	Elements and Metals by ICP-AES
C804	Hardness
M671	Elements and Metals by ICP-MS

### REPORT AUTHORISATION

Approved for Release by: 

Sarah Morison  
Coordinator Analytical Services



Accreditation No. 14173  
Accredited for compliance  
with ISO/IEC 17025 - Testing



Wollongbar Agricultural Institute (WAAI)  
1243 Bruxner Hwy  
Wollongbar NSW 2477  
T: 02 6626 1103  
E: wollongbar.csu@dpi.nsw.gov.au  
W: www.dpi.nsw.gov.au

ANALYSIS RESULTS			1	2	3	4	5	6
Test Description	LOR	UNITS	Woodburn Riverside Park	Rileys Hill Community Centre	Broadwater Community Centre	Evans Head School	Evans High Zone	Coraki Memorial Park
Date Sampled		Date	06/02/24	06/02/24	06/02/24	06/02/24	06/02/24	06/02/24
Sampled By			MW	MW	MW	MW	MW	MW
Time Sampled		Time	7:25:00 AM	7:35 AM	7:45:00 AM	8:10 AM	8:20 AM	9:40 AM
Field Total Chlorine**	0.05	mg/L	0.62	0.42	0.57	0.82	0.36	0.89
Field Free Chlorine**	0.05	mg/L	0.59	0.38	0.44	0.66	0.27	0.64
Field pH**	1	pH units	7.0	7.0	7.2	7.3	7.4	7.4
Field Temperature**	1	°C	27.1	28.2	25.2	28.9	25.9	26.0
Field Electrical Conductivity**	10	µS/cm	210	220	210	200	200	210
Field TDS from Field EC	6	mg/L	140	150	140	140	140	140
Field Turbidity**	0.07	NTU	0.25	0.23	0.20	0.20	0.24	0.23
Field Dissolved Oxygen** in %	1	%	101	104	102	101	101	102
Alkalinity	14	mg/L CaCO <sub>3</sub>	86	83	85	87	84	82
True Colour	1	CU	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chloride	0.5	mg/L	16	17	16	16	15	16
Sulfate	0.5	mg/L	1.1	1.1	1.1	1.1	1.1	1.2
Ammonium Nitrogen	0.02	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nitrite Nitrogen	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate Nitrogen	0.02	mg/L	0.14	0.14	0.11	0.12	0.12	0.14
Dissolved Sodium	0.05	mg/L	13	13	13	12	12	13
Hardness	1.0	mg/L CaCO <sub>3</sub>	65	65	64	62	62	59
Calcium	0.03	mg/L	25	25	24	24	24	22
Magnesium	0.006	mg/L	0.78	0.84	0.82	0.66	0.67	0.99
Total Boron	0.05	mg/L	<0.05	<0.05	0.052	<0.05	<0.05	<0.05
Total Aluminium	0.001	mg/L	0.0013	0.0011	0.018	0.017	0.020	0.012
Total Arsenic	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Barium	0.0005	mg/L	<0.00050	<0.00050	0.0045	0.0040	0.0041	0.0033
Total Cadmium	0.0001	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Chromium	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Copper	0.0005	mg/L	<0.00050	<0.00050	0.013	0.017	0.0029	0.013
Total Iron	0.005	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Manganese	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Nickel	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Lead	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Antimony	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Selenium	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Zinc	0.001	mg/L	<0.0010	<0.0010	0.0016	0.0032	0.0032	0.0074

ANALYSIS RESULTS			7	8	9
Test Description	LOR	UNITS	Casino 15-17 Sheppard St	Casino North Reservoir	Casino Walker Street
Date Sampled		Date	06/02/24	06/02/24	06/02/24
Sampled By			MW	MW	MW
Time Sampled		Time	10:35 AM	10:45 AM	10:15 AM
Field Total Chlorine**	0.05	mg/L	1.0	1.3	1.0
Field Free Chlorine**	0.05	mg/L	0.75	1.0	0.73
Field pH**	1	pH units	7.4	7.3	7.3
Field Temperature**	1	°C	29.9	29.3	30.8
Field Electrical Conductivity**	10	µS/cm	380	370	380

ANALYSIS RESULTS					
			7	8	9
Test Description	LOR	UNITS	Casino 15-17 Sheppard St	Casino North Reservoir	Casino Walker Street
Field TDS from Field EC	6	mg/L	250	250	250
Field Turbidity**	0.07	NTU	0.28	0.42	0.50
Field Dissolved Oxygen** in %	1	%	97	99	100
Alkalinity	14	mg/L CaCO <sub>3</sub>	92	92	90
True Colour	1	CU	[NT]	[NT]	[NT]
Chloride	0.5	mg/L	26	27	26
Sulfate	0.5	mg/L	60	59	60
Ammonium Nitrogen	0.02	mg/L	<0.02	<0.02	<0.02
Nitrite Nitrogen	0.01	mg/L	<0.01	<0.01	<0.01
Nitrate Nitrogen	0.02	mg/L	0.14	0.13	0.15
Dissolved Sodium	0.05	mg/L	46	46	46
Hardness	1.0	mg/L CaCO <sub>3</sub>	70	72	70
Calcium	0.03	mg/L	15	15	15
Magnesium	0.006	mg/L	7.8	8.3	8.0
Total Boron	0.05	mg/L	<0.05	<0.05	<0.05
Total Aluminium	0.001	mg/L	0.022	0.024	0.024
Total Arsenic	0.0005	mg/L	<0.00050	<0.00050	<0.00050
Total Barium	0.0005	mg/L	0.026	0.028	0.027
Total Cadmium	0.0001	mg/L	<0.00010	<0.00010	<0.00010
Total Chromium	0.0005	mg/L	<0.00050	<0.00050	<0.00050
Total Copper	0.0005	mg/L	0.0091	0.0080	0.071
Total Iron	0.005	mg/L	<0.0050	<0.0050	0.0056
Total Manganese	0.0005	mg/L	0.010	0.025	0.030
Total Nickel	0.0005	mg/L	0.0010	0.0016	0.0014
Total Lead	0.0005	mg/L	<0.00050	<0.00050	0.0013
Total Antimony	0.0005	mg/L	<0.00050	<0.00050	<0.00050
Total Selenium	0.0005	mg/L	<0.00050	<0.00050	<0.00050
Total Zinc	0.001	mg/L	0.0040	0.0022	0.023

**LABORATORY NOTES**

**\*\*NATA Accreditation does not cover the performances of this service.**

As requested, testing for THM, Hg, H<sub>2</sub>S, and Carbon Tetrachloride will be performed by Envirolab. Results will be forwarded when received by AgEnviro Laboratory.

Unable to analyse colour due to equipment breakdown.

- Analysis is conducted within the date received and the date the report is finalised.
- Results are expressed on an 'as received' basis unless otherwise stated.
- This report should not be reproduced except in full.
- Samples will be retained for 10 working days from the date of the final report and then discarded.
- Clients wishing to recover their samples must contact the laboratory within this period.
- Sample return is at the clients expense.
- Results for elements analysed by ICP are reported in mg/L for ICP-OES and low level analysis in ug/L for ICP-MS