

REPORT NO: WN240883

Water Analysis Report


REPORT NO: WN240883 **ISSUE DATE:** 31/05/24

DATE SAMPLES RECEIVED: 7/05/24 **PURCHASE ORDER:**
SAMPLES RECEIVED: 10 **COMMENT:** Results relate only to items tested.

SUBMITTER: David Cash
COMPANY: Richmond Valley Council
ADDRESS: 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
W141	Ammonia Nitrogen by FIA
W151	Nitrite Nitrogen by FIA
W153	Oxidised Nitrogen by FIA
W130	Sulfate in water by ICP
M670	Elements and Metals by ICP-AES
W125	Anions in Water and Aqueous Extracts by Ion Chromatography
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 6828 1103
E: wollongbar.csu@dpi.nsw.gov.au
W: www.dpi.nsw.gov.au

ANALYSIS RESULTS												
			1	2	3	4	5	6	7	8	9	10
Test Description	LOR	UNITS	Woodburn Riverside Park	Rileys Hill Community Centre	Broadwater Community Centre	Evans Head School	Evans High Zone	Coraki Memorial Park	Box Ridge	Casino North Reservoir	Casino Walker Street	Casino South Reservoir
Date Sampled		Date	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24	07/05/24
Sampled By			MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
Time Sampled		Time	7:30:00 AM	7:55 AM	8:10:00 AM	8:35 AM	8:55 AM	10:10 AM	10:25 AM	11:30 AM	11:15 AM	11:05 AM
Field Total Chlorine**	0.05	mg/L	0.83	0.75	1.0	1.1	0.40	0.78	0.66	1.4	1.2	1.2
Field Free Chlorine**	0.05	mg/L	0.64	0.55	0.84	0.76	0.24	0.58	0.53	1.2	0.91	0.89
Field pH**	1	pH units	7.9	7.9	7.7	7.8	7.9	7.4	7.6	7.5	7.4	7.4
Field Temperature**	1	°C	22.3	21.3	21.5	22.8	2.1	23.0	22.2	21.7	22.0	21.4
Field Electrical Conductivity**	10	µS/cm	200	220	210	210	200	200	200	330	340	360
Field TDS from Field EC	6	mg/L	130	150	140	140	130	130	130	220	230	240
Field Turbidity**	0.07	NTU	0.42	0.33	0.32	0.33	0.25	0.20	0.18	0.15	0.16	0.17
Field Dissolved Oxygen** in %	1	%	102	101	102	101	100	102	99	100	100	101
Alkalinity	14	mg/L CaCO ₃	90	89	88	89	90	84	88	110	110	100
True Colour	1	CU								1.3	<1.0	1.4
Ammonium Nitrogen	0.02	mg/L	<0.02	<0.02	<0.02	<0.02	<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	<0.01	<0.01	<0.01	<0.01
Nitrate Nitrogen	0.02	mg/L	0.10	0.10	0.10	0.095	0.10	0.11	0.094	0.11	0.12	0.14
Sulfate	0.3	mg/L	1.1	1.1	1.1	1.1	1.1	1.2	1.2	33	34	41
Dissolved Sulfur	0.06	mg/L	0.38	0.37	0.38	0.37	0.37	0.38	0.40	11	11	14
Chloride	0.5	mg/L	15	15	15	14	13	14	14	24	25	24
Dissolved Sodium	0.05	mg/L	14	14	14	13	13	13	14	32	33	35
Hardness	1.0	mg/L CaCO ₃	60	60	59	59	60	57	57	81	82	75
Calcium	0.03	mg/L	23	23	23	23	23	21	22	16	17	15
Magnesium	0.006	mg/L	0.62	0.66	0.65	0.53	0.56	0.86	0.86	9.9	9.9	9.0
Total Boron	0.05	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Aluminium	0.001	mg/L	0.018	0.017	0.023	0.020	0.020	0.044	0.011	0.022	0.019	0.048
Total Arsenic	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Barium	0.0005	mg/L	0.0038	0.0048	0.0042	0.0037	0.0038	0.0030	0.0031	0.023	0.024	0.026
Total Cadmium	0.0001	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

ANALYSIS RESULTS												
			1	2	3	4	5	6	7	8	9	10
Test Description	LOR	UNITS	Woodburn Riverside Park	Rileys Hill Community Centre	Broadwater Community Centre	Evans Head School	Evans High Zone	Coraki Memorial Park	Box Ridge	Casino North Reservoir	Casino Walker Street	Casino South Reservoir
Total Chromium	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00090	<0.00050	<0.00050	<0.00050	<0.00050
Total Copper	0.0005	mg/L	0.014	0.017	0.0045	0.0067	0.0069	0.0051	0.035	0.0067	0.057	0.0031
Total Iron	0.005	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0076	<0.0050	<0.0050	<0.0050	0.019
Total Manganese	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0023	0.0012	0.054
Total Nickel	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00066	0.00061	0.0019
Total Lead	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00093	<0.00050	0.00099	<0.00050	<0.00050	<0.00050
Total Antimony	0.0005	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<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	<0.00050	<0.00050	<0.00050	<0.00050
Total Zinc	0.001	mg/L	0.0026	0.0019	0.0014	0.0019	0.016	0.0034	0.014	0.0019	0.010	0.0051

LABORATORY NOTES

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

As requested, testing for Mercury, Carbon Tetrachloride, THM & Low level H₂S will be performed by Envirolab. Results will be forwarded when received by AgEnviro Laboratory.

- 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