

DATE OF ISSUE: 9/05/23

REPORT NO: WN230795


## Water Analysis Report

<b>REPORT NO:</b>	<b>WN230795</b>	<b>ISSUE DATE:</b>	<b>9/05/23</b>
<b>DATE SAMPLES RECEIVED:</b>	<b>2/05/23</b>	<b>PURCHASE ORDER:</b>	
<b>SAMPLES RECEIVED:</b>	<b>10</b>	<b>COMMENT:</b>	Results relate only to items tested.

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

<b>METHOD ID</b>	<b>ANALYSIS METHOD</b>
W107	EC, pH, Alkalinity & Chloride in water by autotitrator
W112	Turbidity of water
W111	Determination of True and Apparent Colour in Water
C806	Calculations **
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:   
Steven Leahy  
Chemist



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



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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	2/05/2023	2/05/2023	2/05/2023	2/05/2023	2/05/2023	2/05/2023
Sampled By			MW	MW	MW	MW	MW	MW
Time Sampled		Time	7:55:00 AM	8:20:00 AM	8:40:00 AM	9:05:00 AM	9:20:00 AM	10:25:00 AM
Field Total Chlorine**	0.05	mg/L	0.95	1.0	1.1	1.0	0.75	1.0
Field Free Chlorine**	0.05	mg/L	0.78	0.76	0.60	0.73	0.56	0.84
Field pH**	1	pH units	7.5	7.6	7.7	7.8	7.8	8.2
Field Temperature**	1	°C	18.7	19.5	21.2	22.3	20.1	22.5
Field Turbidity**	0.07	NTU	0.39	0.40	0.33	0.26	0.22	0.23
Field Dissolved Oxygen** in %	1	%	92	93	95	96	93	96
Alkalinity	14	mg/L CaCO <sub>3</sub>	86	83	82	84	85	80
TDS <sub>(calc)</sub>	6	mg/L	130	140	140	130	130	130
Electrical Conductivity	10	µS/cm	200	200	200	200	200	190
Chloride	0.5	mg/L	14	14	14	13	13	13
Sulfate	0.5	mg/L	1.0	0.99	1.0	0.97	1.0	1.0
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	0.064	0.064	0.058	0.058	0.063	0.055
Dissolved Sodium	0.05	mg/L	14	14	14	14	14	14
Hardness	1.0	mg/L CaCO <sub>3</sub>	73	72	71	73	71	67
Calcium	0.03	mg/L	28	28	27	28	27	25
Magnesium	0.006	mg/L	0.74	0.79	0.78	0.67	0.67	0.99
Total Boron	0.05	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Aluminium	1.0	µg/L	34	32	44	33	31	28
Total Arsenic	0.5	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Barium	0.5	µg/L	4.0	4.0	4.1	3.7	3.6	2.9
Total Cadmium	0.1	µg/L	0.29	0.29	0.41	0.27	0.24	0.27
Total Chromium	0.5	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Copper	0.5	µg/L	52	24	30	14	15	14
Total Iron	5	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Manganese	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Nickel	0.5	µg/L	0.52	0.60	0.76	<0.50	0.77	<0.50
Total Lead	0.5	µg/L	0.74	0.82	0.63	<0.50	0.86	0.50
Total Antimony	0.5	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Selenium	0.5	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Zinc	1	µg/L	16	13	18	13	29	15

ANALYSIS RESULTS			7	8	9	10
Test Description	LOR	UNITS	Box Ridge	Casino 15-17 Sheppard St	Casino North Reservoir	Casino Walker Street
Date Sampled		Date	2/05/2023	2/05/2023	2/05/2023	2/05/2023
Sampled By			MW	MW	MW	MW
Time Sampled		Time	10:35:00 AM	11:35:00 AM	11:45:00 AM	11:25:00 AM
Field Total Chlorine**	0.05	mg/L	0.99	1.4	1.4	1.2
Field Free Chlorine**	0.05	mg/L	0.87	1.2	1.4	1.1
Field pH**	1	pH units	8.2	8.0	8.0	8.0
Field Temperature**	1	°C	22.5	22.5	20.8	22.4
Field Turbidity**	0.07	NTU	0.21	0.28	0.33	0.28
Field Dissolved Oxygen** in %	1	%	95	95	94	98
Alkalinity	14	mg/L CaCO <sub>3</sub>	80	130	130	130

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ANALYSIS RESULTS						
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Test Description	LOR	UNITS	Box Ridge	Casino 15-17 Sheppard St	Casino North Reservoir	Casino Walker Street
True Colour	1	CU		<1.0	<1.0	<1.0
TDS <sub>(calc)</sub>	6	mg/L	130	280	280	280
Electrical Conductivity	10	µS/cm	200	420	420	420
Chloride	0.5	mg/L	13	31	31	31
Sulfate	0.5	mg/L	1.0	42	42	42
Ammonium Nitrogen	0.02	mg/L	<0.02	<0.02	<0.02	<0.02
Nitrite Nitrogen	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Nitrate Nitrogen	0.02	mg/L	0.054	0.056	0.050	0.045
Dissolved Sodium	0.05	mg/L	14	42	42	42
Hardness	1.0	mg/L CaCO <sub>3</sub>	69	130	130	130
Calcium	0.03	mg/L	26	27	26	27
Magnesium	0.006	mg/L	1.0	15	15	15
Total Boron	0.05	mg/L	<0.05	<0.05	<0.05	<0.05
Total Aluminium	1.0	µg/L	27	43	81	44
Total Arsenic	0.5	µg/L	<0.50	<0.50	<0.50	<0.50
Total Barium	0.5	µg/L	3.0	26	27	26
Total Cadmium	0.1	µg/L	0.28	0.28	0.30	0.32
Total Chromium	0.5	µg/L	<0.50	<0.50	<0.50	<0.50
Total Copper	0.5	µg/L	90	6.2	11	67
Total Iron	5	µg/L	<5.0	<5.0	12	43
Total Manganese	0.5	µg/L	<0.5	3.0	87	2.7
Total Nickel	0.5	µg/L	<0.50	0.90	3.2	0.94
Total Lead	0.5	µg/L	1.1	<0.50	1.9	0.56
Total Antimony	0.5	µg/L	<0.50	<0.50	<0.50	<0.50
Total Selenium	0.5	µg/L	<0.50	<0.50	<0.50	<0.50
Total Zinc	1	µg/L	22	13	14	19

## LABORATORY NOTES

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

RVC Casino L River Quarterly

Samples outsourced to NSW Health Pathology for E.coli, TC and HPC analysis.

Samples outsourced to Envirolab for THM, Carbon Tetrachloride, Mercury and Hydrogen Sulphide analysis.

The report from the outsourced lab will sent separately.

- 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 one calendar month 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