

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
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BATCH NUMBER: 23/0763
No. of SAMPLES: 12
DATE COLLECTED: 12/04/23
DATE RECEIVED: 12/04/23
TIME RECEIVED: 16:30
DATE TESTING COMMENCED:
12/04/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/0763/1	South Kempsey TP
23/0763/2	Crescent Head CW
23/0763/3	Gladstone TP
23/0763/4	Frederickton TP
23/0763/5	South West Rocks CW
23/0763/6	North St Final TP
23/0763/7	Hat Head C Well
23/0763/8	South Kempsey STP Head Wall Day Pond
23/0763/9	Upstream Gladstone TP
23/0763/10	Downstream Gladstone TP
23/0763/11	Upstream Frederickton TP
23/0763/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/0763/1	23/0763/2	23/0763/3	23/0763/4	METHOD NO
pH	pH unit	7.0	7.0	9.1	7.3	APHA 4500-H+ B
Conductivity	$\mu\text{S}/\text{cm}$	-	969	-	-	APHA 2510 B
Turbidity	NTU	-	2.7	-	-	APHA 2130 B
Transmittance	%	-	-	59.8	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	3	5	17	33	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	4	2	4	6	APHA 5210 B



Accredited for compliance with ISO/IEC 17025 - Testing
[Accreditation Numbers: 12359 (Chemical) & 14565 (Microbiological)]

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian and International standards.

ANALYSIS	UNITS	23/0763/1	23/0763/2	23/0763/3	23/0763/4	METHODNO
Nitrate Nitrogen	mg/L	-	10.6	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	3.35	0.58	0.04	0.50	APHA 4500-NH3 H
Total Nitrogen	mg/L	6.55	11.5	1.59	4.79	APHA 4500-P J
Total Phosphorus	mg/L	3.08	0.19	3.82	3.96	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	61	80	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	120	4	155	30	ELM 3

ANALYSIS	UNITS	23/0763/5	23/0763/6	23/0763/7	23/0763/8	METHODNO
pH	pH unit	7.0	6.9	7.3	-	APHA 4500-H+ B
Conductivity	µS/cm	635	-	1,200	-	APHA 2510 B
Turbidity	NTU	1.3	-	4.0	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	768	-	EL7B
Alkalinity	mg CaCO ₃ /L	45	-	90	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	14	5	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	10	4	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	3.91	5.67	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.46	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	0.04	3.23	11.3	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	4.13	8.06	18.2	-	APHA 4500-P J
Total Phosphorus	mg/L	0.15	0.25	0.28	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	12	-	-	APHA 10200 H
Potassium	mg/L	16	-	21	-	EL9A
Chloride	mg/L	95	-	138	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	60	3,600	80	ELM 3



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ANALYSIS	UNITS	23/0763/9	23/0763/10	23/0763/11	23/0763/12	METHODNO
pH	pH unit	-	-	-	-	APHA 4500-H+ B
Conductivity	µS/cm	-	-	-	-	APHA 2510 B
Turbidity	NTU	-	-	-	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	-	-	-	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	-	-	-	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	-	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	-	-	-	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	-	-	-	-	APHA 4500-P J
Total Phosphorus	mg/L	-	-	-	-	APHA 4500-P J
Oil & Grease	mg/L	-	-	-	-	EL23A
Chlorophyll-a	µg/L	-	-	-	-	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	60	40	160	80	ELM 3

Comments

Sample(s) collected by client and analysed as received in accordance with "Standard Methods for the Examination of Water & Wastewater", 23rd Edition, 2017, APHA. Raw data sheets stating analysis dates are available upon request.

Tests marked with '#' are not covered by NATA Accreditation.

Note: Microbiological results are presumptive.

Measurement Uncertainty is available upon request.

Thermotolerant Coliforms are equivalent to Faecal Coliforms.

Report Date: 24/04/23



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Approved:

Shane Ewart
Technical Supervisor
Microbiology and Chemistry

The results of the tests, calibrations and/or measurements included in this document are traceable to Australia