

COFFS HARBOUR LABORATORY

Environmental Analysis

Page 1 of 3



KEMPSEY SHIRE COUNCIL
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BATCH NUMBER: 23/0448
No. of SAMPLES: 12
DATE COLLECTED: 01/03/23
DATE RECEIVED: 01/03/23
TIME RECEIVED: 16:20
DATE TESTING COMMENCED:
01/03/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/0448/1	South Kempsey TP
23/0448/2	Crescent Head CW
23/0448/3	Gladstone TP
23/0448/4	Frederickton TP
23/0448/5	South West Rocks CW
23/0448/6	North St Final TP
23/0448/7	Hat Head C Well
23/0448/8	South Kempsey STP Head Wall Day Pond
23/0448/9	Upstream Gladstone TP
23/0448/10	Downstream Gladstone TP
23/0448/11	Upstream Frederickton TP
23/0448/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/0448/1	23/0448/2	23/0448/3	23/0448/4	METHOD NO
pH	pH unit	6.9	7.3	9.1	7.6	APHA 4500-H+ B
Conductivity	µS/cm	-	903	-	-	APHA 2510 B
Turbidity	NTU	-	0.75	-	-	APHA 2130 B
Transmittance	%	-	-	62.8	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	2	<2	10	22	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	23/0448/1	23/0448/2	23/0448/3	23/0448/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.71	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	4.77	0.33	<0.02	0.16	APHA 4500-NH3 H
Total Nitrogen	mg/L	7.65	1.91	1.31	2.07	APHA 4500-P J
Total Phosphorus	mg/L	2.79	0.10	3.43	5.44	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	48	90	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	1,560	1	25	2,400	ELM 3

ANALYSIS	UNITS	23/0448/5	23/0448/6	23/0448/7	23/0448/8	METHODNO
pH	pH unit	7.1	8.7	7.3	-	APHA 4500-H+ B
Conductivity	µS/cm	589	-	987	-	APHA 2510 B
Turbidity	NTU	0.85	-	0.50	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	632	-	EL7B
Alkalinity	mg CaCO ₃ /L	47	-	80	-	APHA 2320 B
Total Suspended Solids	mg/L	32	32	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	8	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.65	0.27	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.98	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	0.55	0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.49	8.80	1.01	-	APHA 4500-P J
Total Phosphorus	mg/L	0.60	0.47	0.04	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	84	-	-	APHA 10200 H
Potassium	mg/L	16	-	20	-	EL9A
Chloride	mg/L	97	-	132	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	160	8	95,000	ELM 3



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ANALYSIS	UNITS	23/0448/9	23/0448/10	23/0448/11	23/0448/12	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	850	355	25	75	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: 9/03/23



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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