

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
GREG HICKSON
P.O. BOX 3078
WEST KEMPSEY NSW 2440

BATCHNUMBER: 23/1192
No. of SAMPLES: 12
DATE COLLECTED: 07/06/23
DATE RECEIVED: 07/06/23
TIME RECEIVED: 16:15
DATE TESTING COMMENCED:
07/06/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/1192/1	South Kempsey TP
23/1192/2	Crescent Head CW
23/1192/3	Gladstone TP
23/1192/4	Frederickton TP
23/1192/5	South West Rocks CW
23/1192/6	North St Final TP
23/1192/7	Hat Head C Well
23/1192/8	South Kempsey STP Head Wall Day Pond
23/1192/9	Upstream Gladstone TP
23/1192/10	Downstream Gladstone TP
23/1192/11	Upstream Frederickton TP
23/1192/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/1192/1	23/1192/2	23/1192/3	23/1192/4	METHOD NO
pH	pH unit	7.1	7.2	7.7	7.6	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	896	-	-	APHA 2510 B
Turbidity	NTU	-	1.2	-	-	APHA 2130 B
Transmittance	%	-	-	60.3	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	<2	<2	9	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	3	<2	<2	2	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	23/1192/1	23/1192/2	23/1192/3	23/1192/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.70	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	2.34	0.09	2.47	1.26	APHA 4500-NH3 H
Total Nitrogen	mg/L	8.53	1.68	3.53	7.75	APHA 4500-P J
Total Phosphorus	mg/L	3.93	0.12	7.81	5.56	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	<1	2	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	140	33	950	460	ELM 3

ANALYSIS	UNITS	23/1192/5	23/1192/6	23/1192/7	23/1192/8	METHODNO
pH	pH unit	6.8	7.4	7.3	-	APHA 4500-H+ B
Conductivity	µS/cm	501	-	932	-	APHA 2510 B
Turbidity	NTU	1.2	-	0.40	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	596	-	EL7B
Alkalinity	mg CaCO ₃ /L	40	-	110	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	32	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	16	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.76	0.67	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	1.58	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	0.08	0.76	0.03	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.78	9.21	1.36	-	APHA 4500-P J
Total Phosphorus	mg/L	0.24	0.25	0.06	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	148	-	-	APHA 10200 H
Potassium	mg/L	17	-	23	-	EL9A
Chloride	mg/L	76	-	116	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	2,270	170	6	80,000	ELM 3



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ANALYSIS	UNITS	23/1192/9	23/1192/10	23/1192/11	23/1192/12	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	75	85	70	175	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: 15/06/23



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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