

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
BLAKE GIDDY
P.O. BOX 3078
WEST KEMPSEY NSW 2440

BATCHNUMBER: 23/1603
No. of SAMPLES: 12
DATE COLLECTED: 02/08/23
DATE RECEIVED: 02/08/23
TIME RECEIVED: 16:00
DATE TESTING COMMENCED:
02/08/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/1603/1	South Kempsey TP
23/1603/2	Crescent Head CW
23/1603/3	Gladstone TP
23/1603/4	Frederickton TP
23/1603/5	South West Rocks CW
23/1603/6	North St Final TP
23/1603/7	Hat Head C Well
23/1603/8	South Kempsey STP Head Wall Day Pond
23/1603/9	Upstream Gladstone TP
23/1603/10	Downstream Gladstone TP
23/1603/11	Upstream Frederickton TP
23/1603/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/1603/1	23/1603/2	23/1603/3	23/1603/4	METHOD NO
pH	pH unit	7.1	7.2	7.7	7.7	APHA 4500-H+ B
Conductivity	µS/cm	-	976	-	-	APHA 2510 B
Turbidity	NTU	-	0.70	-	-	APHA 2130 B
Transmittance	%	-	-	59.3	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	4	2	6	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	7	<2	<2	3	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	23/1603/1	23/1603/2	23/1603/3	23/1603/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.14	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	6.39	0.19	1.75	2.12	APHA 4500-NH3 H
Total Nitrogen	mg/L	12.1	1.32	3.10	4.82	APHA 4500-P J
Total Phosphorus	mg/L	5.23	0.14	6.48	4.78	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	2	2	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	30	0	750	120	ELM 3

ANALYSIS	UNITS	23/1603/5	23/1603/6	23/1603/7	23/1603/8	METHODNO
pH	pH unit	6.9	7.5	7.3	-	APHA 4500-H+ B
Conductivity	µS/cm	537	-	879	-	APHA 2510 B
Turbidity	NTU	1.4	-	0.25	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	563	-	EL7B
Alkalinity	mg CaCO ₃ /L	43	-	122	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	22	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	7	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	2.96	2.13	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.23	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	19.4	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.02	24.0	2.88	-	APHA 4500-P J
Total Phosphorus	mg/L	0.16	0.31	0.22	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	13	-	-	APHA 10200 H
Potassium	mg/L	18	-	23	-	EL9A
Chloride	mg/L	85	-	112	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	530	0	11,800	ELM 3



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ANALYSIS	UNITS	23/1603/9	23/1603/10	23/1603/11	23/1603/12	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	40	45	175	55	ELM 3

Comments

Sample(s) collected by client and analysed as received in accordance with "Standard Methods for the Examination of Water & Wastewater", 24th Edition, 2022, 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: 10/08/23



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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