

COFFS HARBOUR LABORATORY

Environmental Analysis

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

BATCHNUMBER: 23/2431
No. of SAMPLES: 12
DATE COLLECTED: 08/11/23
DATE RECEIVED: 08/11/23
TIME RECEIVED: 16:30
DATE TESTING COMMENCED:
08/11/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/2431/1	South Kempsey TP
23/2431/2	Crescent Head CW
23/2431/3	Gladstone TP
23/2431/4	Frederickton TP
23/2431/5	South West Rocks CW
23/2431/6	North St Final TP
23/2431/7	Hat Head C Well
23/2431/8	South Kempsey STP Head Wall Day Pond
23/2431/9	Upstream Gladstone TP
23/2431/10	Downstream Gladstone TP
23/2431/11	Upstream Frederickton TP
23/2431/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/2431/1	23/2431/2	23/2431/3	23/2431/4	METHOD NO
pH	pH unit	6.5	7.3	9.0	7.4	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	1,090	-	-	APHA 2510 B
Turbidity	NTU	-	2.3	-	-	APHA 2130 B
Transmittance	%	-	-	61.9	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	<2	3	9	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	3	3	<2	9	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	23/2431/1	23/2431/2	23/2431/3	23/2431/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.88	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	1.58	0.97	0.09	4.33	APHA 4500-NH3 H
Total Nitrogen	mg/L	6.84	3.02	1.12	6.88	APHA 4500-P J
Total Phosphorus	mg/L	2.21	0.15	3.94	8.39	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	<1	4	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	1,240	5	180	280	ELM 3

ANALYSIS	UNITS	23/2431/5	23/2431/6	23/2431/7	23/2431/8	METHODNO
pH	pH unit	7.2	7.8	7.0	-	APHA 4500-H+ B
Conductivity	µS/cm	662	-	991	-	APHA 2510 B
Turbidity	NTU	1.1	-	0.75	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	634	-	EL7B
Alkalinity	mg CaCO ₃ /L	70	-	49	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	28	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	16	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.15	0.76	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.54	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	4.24	0.14	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	1.30	11.1	1.47	-	APHA 4500-P J
Total Phosphorus	mg/L	0.56	0.45	0.07	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	54	-	-	APHA 10200 H
Potassium	mg/L	14	-	26	-	EL9A
Chloride	mg/L	116	-	120	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	920	3	3,000	ELM 3



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ANALYSIS	UNITS	23/2431/9	23/2431/10	23/2431/11	23/2431/12	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	1,050	250	30	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.

Report Date: 20/11/23



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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