

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
WEST TROTTER
P.O. BOX 78
WEST KEMPSEY NSW 2440

BATCHNUMBER: 23/0036
No. of SAMPLES: 12
DATE COLLECTED: 04/01/23
DATE RECEIVED: 04/01/23
TIME RECEIVED: 12:00
DATE TESTING COMMENCED:
04/01/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/0036/1	South Kempsey TP
23/0036/2	Crescent Head CW
23/0036/3	Gladstone TP
23/0036/4	Frederickton TP
23/0036/5	South West Rocks CW
23/0036/6	North St Final TP
23/0036/7	Hat Head C Well
23/0036/8	South Kempsey STP Head Wall Day Pond
23/0036/9	Upstream Gladstone TP
23/0036/10	Downstream Gladstone TP
23/0036/11	Upstream Frederickton TP
23/0036/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/0036/1	23/0036/2	23/0036/3	23/0036/4	METHOD NO
pH	pH unit	7.2	7.6	8.5	8.0	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	1,200	-	-	APHA 2510 B
Turbidity	NTU	-	5.2	-	-	APHA 2130 B
Transmittance	%	-	-	58.2	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	8	13	15	33	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	9	11	5	5	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	23/0036/1	23/0036/2	23/0036/3	23/0036/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.12	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	8.01	24.3	<0.02	12.7	APHA 4500-NH3 H
Total Nitrogen	mg/L	12.5	30.3	1.55	18.8	APHA 4500-P J
Total Phosphorus	mg/L	7.52	1.83	5.19	9.14	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	58	129	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	5,400	27	510	850	ELM 3

ANALYSIS	UNITS	23/0036/5	23/0036/6	23/0036/7	23/0036/8	METHODNO
pH	pH unit	7.2	7.5	7.6	-	APHA 4500-H+ B
Conductivity	µS/cm	647	-	1,230	-	APHA 2510 B
Turbidity	NTU	1.9	-	0.50	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	784	-	EL7B
Alkalinity	mg CaCO ₃ /L	74	-	149	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	21	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	14	2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	0.08	4.05	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.19	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	0.96	0.90	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	6.26	6.47	6.45	-	APHA 4500-P J
Total Phosphorus	mg/L	0.77	1.07	<0.03	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	132	-	-	APHA 10200 H
Potassium	mg/L	19	-	25	-	EL9A
Chloride	mg/L	112	-	150	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	150	2	560	ELM 3



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ANALYSIS	UNITS	23/0036/9	23/0036/10	23/0036/11	23/0036/12	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	25	30	270	30	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: 16/01/23



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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