

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
BARRY YOUNG
P.O. BOX 78
WEST KEMPSEY NSW 2440

BATCHNUMBER: 22/1575
No. of SAMPLES: 12
DATE COLLECTED: 03/08/22
DATE RECEIVED: 03/08/22
TIME RECEIVED: 15:45
DATE TESTING COMMENCED:
03/08/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/1575/1	South Kempsey TP
22/1575/2	Crescent Head CW
22/1575/3	Gladstone TP
22/1575/4	Frederickton TP
22/1575/5	South West Rocks CW
22/1575/6	North St Final TP
22/1575/7	Hat Head C Well
22/1575/8	South Kempsey STP Head Wall Day Pond
22/1575/9	Upstream Gladstone TP
22/1575/10	Downstream Gladstone TP
22/1575/11	Upstream Frederickton TP
22/1575/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/1575/1	22/1575/2	22/1575/3	22/1575/4	METHOD NO
pH	pH unit	6.9	7.1	8.0	10.6	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	775	-	-	APHA 2510 B
Turbidity	NTU	-	2.6	-	-	APHA 2130 B
Transmittance	%	-	-	66.9	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	2	6	4	80	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	<2	2	<2	19	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	22/1575/1	22/1575/2	22/1575/3	22/1575/4	METHODNO
Nitrate Nitrogen	mg/L	-	1.13	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	1.49	0.73	0.12	<0.02	APHA 4500-NH3 H
Total Nitrogen	mg/L	6.50	3.58	2.39	5.41	APHA 4500-P J
Total Phosphorus	mg/L	2.27	0.23	2.46	2.27	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	2	EL23A
Chlorophyll-a	µg/L	-	-	<1	893	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	45	1	275	60	ELM 3

ANALYSIS	UNITS	22/1575/5	22/1575/6	22/1575/7	22/1575/8	METHODNO
pH	pH unit	7.2	7.2	7.4	-	APHA 4500-H+ B
Conductivity	µS/cm	541	-	1,140	-	APHA 2510 B
Turbidity	NTU	1.8	-	0.60	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	728	-	EL7B
Alkalinity	mg CaCO ₃ /L	67	-	191	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	9	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	8	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.49	3.49	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.43	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	4.34	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.28	11.3	3.88	-	APHA 4500-P J
Total Phosphorus	mg/L	0.77	0.37	0.06	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	39	-	-	APHA 10200 H
Potassium	mg/L	16	-	21	-	EL9A
Chloride	mg/L	76	-	110	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	0	255	2	10,200	ELM 3



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ANALYSIS	UNITS	22/1575/9	22/1575/10	22/1575/11	22/1575/12	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
Faecal Coliforms	cfu/100mL	60	70	1,430	540	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 membrane presumptive.

Measurement Uncertainty is available upon request.

Report Date: 12/08/22



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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