

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
BARRY YOUNG
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BATCHNUMBER: 22/2548
No. of SAMPLES: 12
DATE COLLECTED: 07/12/22
DATE RECEIVED: 07/12/22
TIME RECEIVED: 16:25
DATE TESTING COMMENCED:
07/12/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/2548/1	South Kempsey TP
22/2548/2	Crescent Head CW
22/2548/3	Gladstone TP
22/2548/4	Frederickton TP
22/2548/5	South West Rocks CW
22/2548/6	North St Final TP
22/2548/7	Hat Head C Well
22/2548/8	South Kempsey STP Head Wall Day Pond
22/2548/9	Upstream Gladstone TP
22/2548/10	Downstream Gladstone TP
22/2548/11	Upstream Frederickton TP
22/2548/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/2548/1	22/2548/2	22/2548/3	22/2548/4	METHOD NO
pH	pH unit	7.2	7.4	8.2	7.6	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	955	-	-	APHA 2510 B
Turbidity	NTU	-	2.1	-	-	APHA 2130 B
Transmittance	%	-	-	49.4	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	9	7	19	15	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	10	2	6	6	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	22/2548/1	22/2548/2	22/2548/3	22/2548/4	METHODNO
Nitrate Nitrogen	mg/L	-	3.46	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	3.27	0.71	<0.02	0.60	APHA 4500-NH3 H
Total Nitrogen	mg/L	5.48	5.88	1.33	2.76	APHA 4500-P J
Total Phosphorus	mg/L	6.63	0.23	5.78	8.02	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	22	21	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	930	3	475	60	ELM 3

ANALYSIS	UNITS	22/2548/5	22/2548/6	22/2548/7	22/2548/8	METHODNO
pH	pH unit	7.2	8.1	7.3	-	APHA 4500-H+ B
Conductivity	µS/cm	578	-	1,130	-	APHA 2510 B
Turbidity	NTU	1.5	-	0.90	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	722	-	EL7B
Alkalinity	mg CaCO ₃ /L	66	-	101	-	APHA 2320 B
Total Suspended Solids	mg/L	4	50	2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	2	22	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	0.06	1.62	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.19	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	0.94	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	2.68	6.34	2.30	-	APHA 4500-P J
Total Phosphorus	mg/L	0.86	0.85	0.06	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	252	-	-	APHA 10200 H
Potassium	mg/L	16	-	23	-	EL9A
Chloride	mg/L	92	-	123	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	80	3	140	ELM 3



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ANALYSIS	UNITS	22/2548/9	22/2548/10	22/2548/11	22/2548/12	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	30	40	70	85	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: 16/12/22

Approved:



Michael Nolan
Technical Officer



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