

COFFS HARBOUR LABORATORY

Environmental Analysis

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

BATCHNUMBER: 22/1865
No. of SAMPLES: 12
DATE COLLECTED: 14/09/22
DATE RECEIVED: 14/09/22
TIME RECEIVED: 16:20
DATE TESTING COMMENCED:
14/09/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/1865/1	South Kempsey TP
22/1865/2	Crescent Head CW
22/1865/3	Gladstone TP
22/1865/4	Frederickton TP
22/1865/5	South West Rocks CW
22/1865/6	North St Final TP
22/1865/7	Hat Head C Well
22/1865/8	South Kempsey STP Head Wall Day Pond
22/1865/9	Upstream Gladstone TP
22/1865/10	Downstream Gladstone TP
22/1865/11	Upstream Frederickton TP
22/1865/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/1865/1	22/1865/2	22/1865/3	22/1865/4	METHOD NO
pH	pH unit	6.9	7.0	8.9	8.0	APHA 4500-H+ B
Conductivity	$\mu\text{S}/\text{cm}$	-	795	-	-	APHA 2510 B
Turbidity	NTU	-	0.90	-	-	APHA 2130 B
Transmittance	%	-	-	65.0	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	5	2	5	4	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	3	<2	<2	2	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	22/1865/1	22/1865/2	22/1865/3	22/1865/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.74	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	1.46	0.49	0.02	0.75	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.92	2.45	2.15	4.66	APHA 4500-P J
Total Phosphorus	mg/L	1.67	0.11	4.18	4.75	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	4	1	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	630	0	20	40	ELM 3

ANALYSIS	UNITS	22/1865/5	22/1865/6	22/1865/7	22/1865/8	METHODNO
pH	pH unit	7.3	7.4	7.6	-	APHA 4500-H+ B
Conductivity	µS/cm	529	-	1,030	-	APHA 2510 B
Turbidity	NTU	1.4	-	0.30	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	660	-	EL7B
Alkalinity	mg CaCO ₃ /L	57	-	166	-	APHA 2320 B
Total Suspended Solids	mg/L	2	4	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	3	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	2.93	0.45	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.56	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	4.01	0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	4.45	8.56	1.27	-	APHA 4500-P J
Total Phosphorus	mg/L	0.83	0.28	0.05	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	4	-	-	APHA 10200 H
Potassium	mg/L	15	-	21	-	EL9A
Chloride	mg/L	78	-	112	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	20	1	120	ELM 3



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ANALYSIS	UNITS	22/1865/9	22/1865/10	22/1865/11	22/1865/12	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	220	170	105	15	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: 23/09/22

Approved:



Michael Nolan
Technical Officer



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