

COFFS HARBOUR LABORATORY

Environmental Analysis

Page 1 of 3



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

BATCHNUMBER: 22/2082
No. of SAMPLES: 12
DATE COLLECTED: 12/10/22
DATE RECEIVED: 12/10/22
TIME RECEIVED: 16:35
DATE TESTING COMMENCED:
12/10/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/2082/1	South Kempsey TP
22/2082/2	Crescent Head CW
22/2082/3	Gladstone TP
22/2082/4	Frederickton TP
22/2082/5	South West Rocks CW
22/2082/6	North St Final TP
22/2082/7	Hat Head C Well
22/2082/8	South Kempsey STP Head Wall Day Pond
22/2082/9	Upstream Gladstone TP
22/2082/10	Downstream Gladstone TP
22/2082/11	Upstream Frederickton TP
22/2082/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/2082/1	22/2082/2	22/2082/3	22/2082/4	METHOD NO
pH	pH unit	6.9	7.0	10.1	9.4	APHA 4500-H+ B
Conductivity	µS/cm	-	747	-	-	APHA 2510 B
Turbidity	NTU	-	0.40	-	-	APHA 2130 B
Transmittance	%	-	-	69.0	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	2	<2	4	6	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	22/2082/1	22/2082/2	22/2082/3	22/2082/4	METHODNO
Nitrate Nitrogen	mg/L	-	2.59	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	2.55	1.74	0.06	0.30	APHA 4500-NH3 H
Total Nitrogen	mg/L	4.04	4.96	0.68	2.51	APHA 4500-P J
Total Phosphorus	mg/L	2.23	0.06	1.14	3.85	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	7	7	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	30	0	10	50	ELM 3

ANALYSIS	UNITS	22/2082/5	22/2082/6	22/2082/7	22/2082/8	METHODNO
pH	pH unit	7.3	7.2	7.5	-	APHA 4500-H+ B
Conductivity	µS/cm	475	-	946	-	APHA 2510 B
Turbidity	NTU	1.9	-	0.45	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	605	-	EL7B
Alkalinity	mg CaCO ₃ /L	60	-	128	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	19	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	12	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.01	0.15	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.80	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	1.55	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	2.11	7.64	0.70	-	APHA 4500-P J
Total Phosphorus	mg/L	1.24	0.23	0.03	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	150	-	-	APHA 10200 H
Potassium	mg/L	14	-	22	-	EL9A
Chloride	mg/L	74	-	119	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	60	2	120	ELM 3



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	22/2082/9	22/2082/10	22/2082/11	22/2082/12	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	1,000	1,200	680	390	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: 21/10/22

Approved:



Michael Nolan
Technical Officer



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.