

COFFS HARBOUR LABORATORY

Environmental Analysis

Page 1 of 3



KEMPSEY SHIRE COUNCIL
BLAKE GIDDY
P.O. BOX 3078
WEST KEMPSEY NSW 2440

BATCHNUMBER: 23/1392
No. of SAMPLES: 12
DATE COLLECTED: 05/07/23
DATE RECEIVED: 05/07/23
TIME RECEIVED: 16:15
DATE TESTING COMMENCED:
05/07/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/1392/1	South Kempsey TP
23/1392/2	Crescent Head CW
23/1392/3	Gladstone TP
23/1392/4	Frederickton TP
23/1392/5	South West Rocks CW
23/1392/6	North St Final TP
23/1392/7	Hat Head C Well
23/1392/8	South Kempsey STP Head Wall Day Pond
23/1392/9	Upstream Gladstone TP
23/1392/10	Downstream Gladstone TP
23/1392/11	Upstream Frederickton TP
23/1392/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/1392/1	23/1392/2	23/1392/3	23/1392/4	METHOD NO
pH	pH unit	7.0	7.0	7.7	7.8	APHA 4500-H+ B
Conductivity	µS/cm	-	981	-	-	APHA 2510 B
Turbidity	NTU	-	0.38	-	-	APHA 2130 B
Transmittance	%	-	-	60.2	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	4	<2	4	4	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	7	<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	23/1392/1	23/1392/2	23/1392/3	23/1392/4	METHODNO
Nitrate Nitrogen	mg/L	-	4.09	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	6.74	0.28	2.07	1.35	APHA 4500-NH3 H
Total Nitrogen	mg/L	12.1	5.08	3.42	5.12	APHA 4500-P J
Total Phosphorus	mg/L	5.11	0.11	6.61	4.74	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	<1	<1	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	1,500	<2	650	220	ELM 3

ANALYSIS	UNITS	23/1392/5	23/1392/6	23/1392/7	23/1392/8	METHODNO
pH	pH unit	6.8	7.5	7.2	-	APHA 4500-H+ B
Conductivity	µS/cm	578	-	891	-	APHA 2510 B
Turbidity	NTU	1.8	-	0.33	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	570	-	EL7B
Alkalinity	mg CaCO ₃ /L	31	-	102	-	APHA 2320 B
Total Suspended Solids	mg/L	6	7	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	2	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	1.99	6.84	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.13	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	13.4	0.07	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	5.94	16.5	7.46	-	APHA 4500-P J
Total Phosphorus	mg/L	0.29	0.26	0.08	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	<1	-	-	APHA 10200 H
Potassium	mg/L	20	-	24	-	EL9A
Chloride	mg/L	87	-	114	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	80	6	11,400	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	23/1392/9	23/1392/10	23/1392/11	23/1392/12	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	40	55	150	105	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: 13/07/23



Accredited for compliance with ISO/IEC 17025 - Testing
[Accreditation Numbers: 12359 (Chemical) & 14565 (Microbiological)]

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