

# COFFS HARBOUR LABORATORY

## Environmental Analysis

Page 1 of 3



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

BATCHNUMBER: 23/1941  
No. of SAMPLES: 12  
DATE COLLECTED: 13/09/23  
DATE RECEIVED: 13/09/23  
TIME RECEIVED: 16:00  
DATE TESTING COMMENCED:  
13/09/23

### REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/1941/1	South Kempsey TP
23/1941/2	Crescent Head CW
23/1941/3	Gladstone TP
23/1941/4	Frederickton TP
23/1941/5	South West Rocks CW
23/1941/6	North St Final TP
23/1941/7	Hat Head C Well
23/1941/8	South Kempsey STP Head Wall Day Pond
23/1941/9	Upstream Gladstone TP
23/1941/10	Downstream Gladstone TP
23/1941/11	Upstream Frederickton TP
23/1941/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/1941/1	23/1941/2	23/1941/3	23/1941/4	METHOD NO
pH	pH unit	7.0	7.0	7.7	8.0	APHA 4500-H+ B
Conductivity	$\mu\text{S/cm}$	-	1,070	-	-	APHA 2510 B
Turbidity	NTU	-	1.2	-	-	APHA 2130 B
Transmittance	%	-	-	59.0	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO <sub>3</sub> /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	<2	<2	<2	15	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	2	<2	<2	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	23/1941/1	23/1941/2	23/1941/3	23/1941/4	METHODNO
Nitrate Nitrogen	mg/L	-	0.15	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	1.91	0.25	1.76	1.59	APHA 4500-NH3 H
Total Nitrogen	mg/L	7.31	1.38	4.76	4.01	APHA 4500-P J
Total Phosphorus	mg/L	6.83	0.14	9.43	4.56	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	2	11	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	120	1	960	520	ELM 3

ANALYSIS	UNITS	23/1941/5	23/1941/6	23/1941/7	23/1941/8	METHODNO
pH	pH unit	6.9	8.0	7.4	-	APHA 4500-H+ B
Conductivity	µS/cm	578	-	1,100	-	APHA 2510 B
Turbidity	NTU	1.1	-	4.1	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	707	-	EL7B
Alkalinity	mg CaCO <sub>3</sub> /L	54	-	216	-	APHA 2320 B
Total Suspended Solids	mg/L	2	27	2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	14	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	4.58	0.56	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.25	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	13.4	0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.57	21.0	1.24	-	APHA 4500-P J
Total Phosphorus	mg/L	0.42	0.36	0.13	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	127	-	-	APHA 10200 H
Potassium	mg/L	16	-	19	-	EL9A
Chloride	mg/L	91	-	118	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	300	2	3,000	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	23/1941/9	23/1941/10	23/1941/11	23/1941/12	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 <sub>3</sub> /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	10	40	10	ELM 3

### Comments

Sample(s) collected by client and analysed as received in accordance with "Standard Methods for the Examination of Water & Wastewater", 24th Edition, 2022, 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.

Report Date: 25/09/23



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