COFFS HARBOUR LABORATORY

Environmental Analysis

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

BATCH NUMBER: 23/2192
No. of SAMPLES: 12
DATE COLLECTED: 11/10/23
DATE RECEIVED: 11/10/23
TIME RECEIVED: 16:40
DATE TESTING COMMENCED: 11/10/23

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
23/2192/1	South Kempsey TP
23/2192/2	Crescent Head CW
23/2192/3	Gladstone TP
23/2192/4	Frederickton TP
23/2192/5	South West Rocks CW
23/2192/6	North St Final TP
23/2192/7	Hat Head C Well
23/2192/8	South Kempsey STP Head Wall Day Pond
23/2192/9	Upstream Gladstone TP
23/2192/10	Downstream Gladstone TP
23/2192/11	Upstream Frederickton TP
23/2192/12	Downstream Frederickton TP

ANALYSIS	UNITS	23/2192/1	23/2192/2	23/2192/3	23/2192/4	METHOD NO
pH	pH unit	6.9	7.2	8.5	7.6	APHA 4500-H+ B
Conductivity	µS/cm	-	1,240	-	-	APHA 2510 B
Turbidity	NTU	-	1.6	-	-	APHA 2130 B
Transmittance	%	-	-	62.7	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg $CaCO_3$/L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	5	8	4	21	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	3	3	3	8	APHA 5210 B

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[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	23/2192/1	23/2192/2	23/2192/3	23/2192/4	METHOD NO
Nitrate Nitrogen	mg/L	-	5.32	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	2.53	0.96	0.66	2.63	APHA 4500-NH3 H
Total Nitrogen	mg/L	5.59	8.50	2.99	5.00	APHA 4500-P J
Total Phosphorus	mg/L	8.70	0.19	7.02	6.23	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	7	<1	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	230	0	380	1,000	ELM 3

ANALYSIS	UNITS	23/2192/5	23/2192/6	23/2192/7	23/2192/8	METHOD NO
pH	pH unit	7.2	7.5	7.2	-	APHA 4500-H+ B
Conductivity	µS/cm	598	-	1,060	-	APHA 2510 B
Turbidity	NTU	0.80	-	4.2	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	677	-	EL7B
Alkalinity	mg $CaCO_3$/L	57	-	164	-	APHA 2320 B
Total Suspended Solids	mg/L	4	16	7	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	7	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	0.74	0.65	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.15	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	9.66	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.01	11.1	1.41	-	APHA 4500-P J
Total Phosphorus	mg/L	0.24	0.65	0.07	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	2	-	-	APHA 10200 H
Potassium	mg/L	19	-	22	-	EL9A
Chloride	mg/L	46	-	61	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	300	3	14,800	ELM 3

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Batch no: 23/2192

ANALYSIS	UNITS	23/2192/9	23/2192/10	23/2192/11	23/2192/12	METHOD NO
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	60	15	90	60	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: 24/10/23

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australia

Approved:

Shane Ewart
Technical Supervisor
Microbiology and Chemistry