COFFS HARBOUR LABORATORY

Environmental Analysis

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

BATCH NUMBER: 22/0243
No. of SAMPLES: 12
DATE COLLECTED: 02/02/22
DATE RECEIVED: 02/02/22
TIME RECEIVED: 16:50
DATE TESTING COMMENCED: 02/02/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/0243/1	South Kempsey TP
22/0243/2	Crescent Head CW
22/0243/3	Gladstone TP
22/0243/4	Frederickton TP
22/0243/5	South West Rocks CW
22/0243/6	North St Final TP
22/0243/7	Hat Head C Well
22/0243/8	South Kempsey STP Head Wall Day Pond
22/0243/9	Upstream Gladstone TP
22/0243/10	Downstream Gladstone TP
22/0243/11	Upstream Frederickton TP
22/0243/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/0243/1	22/0243/2	22/0243/3	22/0243/4	METHOD NO
pH	pH unit	7.1	7.1	8.5	7.2	APHA 4500-H+ B
Conductivity	µS/cm	-	743	-	-	APHA 2510 B
Turbidity	NTU	-	1.5	-	-	APHA 2130 B
Transmittance	%	-	-	68.2	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg $CaCO_3$/L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	2	8	2	16	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	4	<2	2	5	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	22/0243/1	22/0243/2	22/0243/3	22/0243/4	METHOD NO
Nitrate Nitrogen	mg/L	-	0.26	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	4.33	0.10	0.03	0.81	APHA 4500-NH3 H
Total Nitrogen	mg/L	4.92	1.58	0.77	1.90	APHA 4500-P J
Total Phosphorus	mg/L	3.26	0.14	5.27	6.12	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	12	38	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	1,140	16	5	2,380	ELM 3

ANALYSIS	UNITS	22/0243/5	22/0243/6	22/0243/7	22/0243/8	METHOD NO
pH	pH unit	7.4	7.2	7.6	-	APHA 4500-H+ B
Conductivity	µS/cm	672	-	1,090	-	APHA 2510 B
Turbidity	NTU	2.3	-	0.80	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	700	-	EL7B
Alkalinity	mg $CaCO_3$/L	93	-	166	-	APHA 2320 B
Total Suspended Solids	mg/L	3	6	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	2	9	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	1.03	<0.02	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.58	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	<0.02	0.67	0.05	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	2.33	2.81	0.74	-	APHA 4500-P J
Total Phosphorus	mg/L	1.33	0.29	0.09	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	16	-	-	APHA 10200 H
Potassium	mg/L	18	-	24	-	EL9A
Chloride	mg/L	93	-	124	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	0	150	12	660	ELM 3

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ANALYSIS	UNITS	22/0243/9	22/0243/10	22/0243/11	22/0243/12	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
Faecal Coliforms	cfu/100mL	195	180	320	240	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 membrane presumptive.
Measurement Uncertainty is available upon request.

Report Date: 14/02/22

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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

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