COFFS HARBOUR LABORATORY

Environmental Analysis

KEMPSEY SHIRE COUNCIL
BARRY YOUNG
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BATCH NUMBER: 22/0956
No. of SAMPLES: 12
DATE COLLECTED: 11/05/22
DATE RECEIVED: 11/05/22
TIME RECEIVED: 16:25
DATE TESTING COMMENCED: 11/05/22

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
22/0956/1	South Kempsey TP
22/0956/2	Crescent Head CW
22/0956/3	Gladstone TP
22/0956/4	Frederickton TP
22/0956/5	South West Rocks CW
22/0956/6	North St Final TP
22/0956/7	Hat Head C Well
22/0956/8	South Kempsey STP Head Wall Day Pond
22/0956/9	Upstream Gladstone TP
22/0956/10	Downstream Gladstone TP
22/0956/11	Upstream Frederickton TP
22/0956/12	Downstream Frederickton TP

ANALYSIS	UNITS	22/0956/1	22/0956/2	22/0956/3	22/0956/4	METHOD NO
pH	pH unit	6.9	6.8	7.6	7.2	APHA 4500-H+ B
Conductivity	µS/cm	-	717	-	-	APHA 2510 B
Turbidity	NTU	-	1.7	-	-	APHA 2130 B
Transmittance	%	-	-	63.9	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg $CaCO_3$/L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	9	6	8	4	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	2	<2	4	3	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	22/0956/1	22/0956/2	22/0956/3	22/0956/4	METHOD NO
Nitrate Nitrogen	mg/L	-	3.92	-	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	4.41	0.13	0.13	0.54	APHA 4500-NH3 H
Total Nitrogen	mg/L	6.30	5.57	1.33	2.71	APHA 4500-P J
Total Phosphorus	mg/L	2.01	0.10	2.49	3.60	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	64	6	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	20	0	1,560	240	ELM 3

ANALYSIS	UNITS	22/0956/5	22/0956/6	22/0956/7	22/0956/8	METHOD NO
pH	pH unit	7.1	6.8	7.4	-	APHA 4500-H+ B
Conductivity	µS/cm	554	-	1,040	-	APHA 2510 B
Turbidity	NTU	1.7	-	0.85	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	668	-	EL7B
Alkalinity	mg $CaCO_3$/L	78	-	174	-	APHA 2320 B
Total Suspended Solids	mg/L	3	10	4	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	<2	5	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	1.76	0.63	-	APHA 4500-NO3 I
Nitrite Nitrogen	mg/L	-	0.31	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	0.07	3.26	<0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	2.79	6.69	1.33	-	APHA 4500-P J
Total Phosphorus	mg/L	0.29	0.20	0.08	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	16	-	-	APHA 10200 H
Potassium	mg/L	14	-	20	-	EL9A
Chloride	mg/L		-	119	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Faecal Coliforms	cfu/100mL	1	105	4	30	ELM 3

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ANALYSIS	UNITS	22/0956/9	22/0956/10	22/0956/11	22/0956/12	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	165	125	45	110	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: 23/05/22

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