

COFFS HARBOUR LABORATORY

Page 1 of 3
Environmental Analysis



GALINTEL
KEVINELKS
P. O. BOX 396
COFFS HARBOUR NSW 2450

BATCHNUMBER: 19/0465
No. of SAMPLES: 7
DATE COLLECTED: 20/02/19
DATE RECEIVED: 21/02/19
TIME RECEIVED: 10:45
DATE TESTING COMMENCED:
21/02/19

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
19/0465/1	POINT 1
19/0465/2	POINT 3
19/0465/3	POINT 4
19/0465/4	POINT 5
19/0465/5	POINT 6
19/0465/6	POINT 7
19/0465/7	POINT 8

ANALYSIS	UNITS	19/0465/1	19/0465/2	19/0465/3	19/0465/4	METHOD NO
pH	pH unit	6.8	7.1	7.1	5.7	APHA 4500-H+ B
Conductivity	µS/cm	700	209	148	184	APHA 2510 B
Total Suspended Solids	mg/L	59	22	17	246	APHA 2540 D
Total Dissolved Solids	mg/L	448	134	95	118	EL7B
Total Hardness	mg CaCO ₃ /L	171	44	24	22	EL9A
Alkalinity	mg CaCO ₃ /L	16	15	14	3	APHA 2320 B
Chloride	mg/L	184	43	26	43	EL10A
Sulfate	mg/L	16	8.1	6.8	7.2	EL9A
Calcium	mg/L	62	14	6.1	2.9	EL9A
Magnesium	mg/L	4.1	1.9	2.2	3.6	EL9A
Sodium	mg/L	30	15	14	22	EL9A
Potassium	mg/L	5.7	3.2	1.7	2.6	EL9A
Zinc	mg/L	35.8	4.7	0.94	3.2	EL9A
Zinc - Filtered	mg/L	35	3.8	0.86	2.0	EL9A
Copper	mg/L	0.17	0.085	0.011	0.13	EL9A
Copper - Filtered	mg/L	0.045	0.035	0.008	0.007	EL9A
Nickel	mg/L	0.028	0.013	<0.005	0.009	EL9A
Nickel - Filtered	mg/L	0.025	0.013	<0.005	<0.005	EL9A



Accredited for compliance with ISO/IEC 17025.
[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	19/0465/1	19/0465/2	19/0465/3	19/0465/4	METHODNO
Manganese	mg/L	0.79	0.16	0.085	0.14	EL9A
Manganese - Filtered	mg/L	0.71	0.13	0.074	0.088	EL9A
Iron	mg/L	8.28	1.90	0.74	7.31	EL9A
Iron - Filtered	mg/L	<0.004	0.005	0.014	0.067	EL9A
Lead	mg/L	0.083	0.016	0.018	0.073	EL9A
Lead - Filtered	mg/L	<0.010	<0.010	<0.010	<0.010	EL9A
Cobalt#	mg/L	<0.008	<0.008	<0.008	<0.008	EL9A
Cobalt - Filtered#	mg/L	<0.008	<0.008	<0.008	<0.008	EL9A
Chromium Trivalent	mg/L	0.043	0.043	<0.003	0.009	EL9A
Chromium - Hexavalent*	mg/L	<0.001	0.010	<0.001	<0.001	NW D2
Chromium	mg/L	0.043	0.053	<0.003	0.009	EL9A
Ammonia Nitrogen	mg/L	1.32	0.53	0.87	1.28	EL13F

ANALYSIS	UNITS	19/0465/5	19/0465/6	19/0465/7		METHODNO
pH	pH unit	4.3	4.1	7.3		APHA 4500-H+ B
Conductivity	µS/cm	201	73	479		APHA 2510 B
Total Suspended Solids	mg/L	150	11	31		APHA 2540 D
Total Dissolved Solids	mg/L	128	47	307		EL7B
Total Hardness	mg CaCO ₃ /L	16	2	105		EL9A
Alkalinity	mg CaCO ₃ /L	<2	<2	33		APHA 2320 B
Chloride	mg/L	43	11	95		EL10A
Sulfate	mg/L	5.8	<0.50	19		EL9A
Calcium	mg/L	2.2	0.56	35		EL9A
Magnesium	mg/L	2.5	0.23	4.2		EL9A
Sodium	mg/L	13	1.4	41		EL9A
Potassium	mg/L	1.5	0.082	4.8		EL9A
Zinc	mg/L	12.9	3.4	3.7		EL9A
Zinc - Filtered	mg/L	13	3.5	2.8		EL9A
Copper	mg/L	0.095	0.082	0.064		EL9A
Copper - Filtered	mg/L	0.039	0.080	0.028		EL9A
Nickel	mg/L	0.022	0.016	0.008		EL9A
Nickel - Filtered	mg/L	0.017	0.014	0.008		EL9A
Manganese	mg/L	0.14	0.32	0.098		EL9A
Manganese - Filtered	mg/L	0.11	0.32	0.081		EL9A
Iron	mg/L	6.67	2.82	1.84		EL9A
Iron - Filtered	mg/L	0.45	0.039	0.008		EL9A
Lead	mg/L	2.1	0.23	0.011		EL9A
Lead - Filtered	mg/L	1.3	0.24	<0.010		EL9A
Cobalt#	mg/L	<0.008	<0.008	<0.008		EL9A
Cobalt - Filtered#	mg/L	<0.008	<0.008	<0.008		EL9A
Chromium Trivalent	mg/L	0.026	<0.003	0.012		EL9A
Chromium - Hexavalent*	mg/L	<0.001	<0.001	<0.001		NW D2
Chromium	mg/L	0.026	<0.003	0.012		EL9A
Ammonia Nitrogen	mg/L	1.32	0.07	0.12		EL13F



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ANALYSIS	UNITS	19/0465/1	19/0465/2	19/0465/3	19/0465/4	METHODNO
TOTAL RECOVERABLE HYDROCARBONS						
TRH C6-C9*	ug/L	<25	<25	<25	<25	NGCMS 1121
TRH C10-C14*	ug/L	<25	<25	<25	<25	NGCMS 1112
TRH C15-C28*	ug/L	<100	<100	<100	<100	NGCMS 1112
TRH C29-C36*	ug/L	<100	<100	<100	<100	NGCMS 1112
TOTAL RECOVERABLE HYDROCARBON*						
TRH C6- C10	ug/L	<25	<25	<25	<25	NGCMS 1121
TRH C6- C10 less BTEX (F1)	ug/L	<25	<25	<25	<25	NGCMS_1121
TRH>C10-C16	ug/L	<25	<25	<25	<25	NGCMS 1112
TRH>C10 - C16 less Naph (F2)	ug/L	<25	<25	<25	<25	NGCMS_1112
TRH>C16-C34(F3)	ug/L	<100	<100	<100	<100	NGCMS 1112
TRH>C34-C40(F4)	ug/L	<100	<100	<100	<100	NGCMS 1112

ANALYSIS	UNITS	19/0465/5	19/0465/6	19/0465/7		METHODNO
TOTAL RECOVERABLE HYDROCARBONS						
TRH C6-C9*	ug/L	<25	<25	<25		NGCMS 1121
TRH C10-C14*	ug/L	<25	<25	<25		NGCMS 1112
TRH C15-C28*	ug/L	<100	<100	<100		NGCMS 1112
TRH C29-C36*	ug/L	<100	<100	<100		NGCMS 1112
TOTAL RECOVERABLE HYDROCARBON*						
TRH C6- C10	ug/L	<25	<25	<25		NGCMS 1121
TRH C6- C10 less BTEX (F1)	ug/L	<25	<25	<25		NGCMS_1121
TRH>C10-C16	ug/L	<25	<25	<25		NGCMS 1112
TRH>C10 - C16 less Naph (F2)	ug/L	<25	<25	<25		NGCMS_1112
TRH>C16-C34(F3)	ug/L	<100	<100	<100		NGCMS 1112
TRH>C34-C40(F4)	ug/L	<100	<100	<100		NGCMS 1112

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.

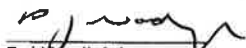
*Analysis conducted by a subcontracted laboratory (NATA Accreditation Number 198) RN 1224253.

Report Date: 6/03/19



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Approved:


B J Wadleigh
Laboratory Manager