

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

BATCHNUMBER: 19/1040
No. of SAMPLES: 9
DATE COLLECTED: 30/04/19
DATE RECEIVED: 30/04/19
TIME RECEIVED: 15:00
DATE TESTING COMMENCED:
30/04/19

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
19/1040/1	PIT 1, 12.55AM, 30.4.19, K ELKS
19/1040/2	PIT 2A, 1.30PM, 30.4.19, K ELKS
19/1040/3	PIT 2B, 1.30PM, 30.4.19, K ELKS
19/1040/4	PIT 3, 12.55PM, 30.4.19, K ELKS
19/1040/5	PIT 4, 12.55PM, 30.4.19, K ELKS
19/1040/6	PIT 5, 12.55 PM, 30.4.19, K ELKS
19/1040/7	PIT 6, 12.55PM, 30.4.19, K ELKS
19/1040/8	PIT 7, 12.55PM, 30.4.19, K ELKS
19/1040/9	POINT 9, 1.30PM, 30.4.19, K ELKS

ANALYSIS	UNITS	19/1040/1	19/1040/2	19/1040/3	19/1040/4	METHOD NO
pH	pH unit	7.6	9.8	9.2	10.0	APHA 4500-H+ B
Conductivity	µS/cm	258	228	169	207	APHA 2510 B
Total Suspended Solids	mg/L	3	39	20	12	APHA 2540 D
Total Dissolved Solids	mg/L	165	146	108	132	EL7B
Total Hardness	mg CaCO ₃ /L	70	24	39	34	EL9A
Alkalinity	mg CaCO ₃ /L	22	78	38	63	APHA 2320 B
Chloride	mg/L	58	13	23	19	EL10A
Sulfate	mg/L	8.2	13	10	6.9	EL9A
Calcium	mg/L	26	8.1	13	13	EL9A
Magnesium	mg/L	1.2	0.89	1.8	0.46	EL9A
Sodium	mg/L	14	24	14	20	EL9A
Potassium	mg/L	4.3	26	8.3	17	EL9A
Zinc	mg/L	5.0	0.11	0.33	0.53	EL9A
Zinc - Filtered	mg/L	4.6	0.008	0.051	0.035	EL9A
Copper	mg/L	0.030	0.018	0.037	0.040	EL9A



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[Accreditation Numbers: 12359 (Chemical) & 14565 (Microbiological)]

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ANALYSIS	UNITS	19/1040/1	19/1040/2	19/1040/3	19/1040/4	METHODNO
Copper - Filtered	mg/L	0.009	0.005	0.013	0.011	EL9A
Nickel	mg/L	<0.005	<0.005	<0.005	<0.005	EL9A
Nickel - Filtered	mg/L	<0.005	<0.005	<0.005	<0.005	EL9A
Manganese	mg/L	0.41	0.049	0.059	0.14	EL9A
Manganese - Filtered	mg/L	0.39	<0.003	0.016	0.034	EL9A
Iron	mg/L	0.88	1.30	1.27	1.27	EL9A
Iron - Filtered	mg/L	<0.004	0.020	0.056	0.061	EL9A
Lead	mg/L	<0.010	0.012	0.023	<0.010	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	<0.003	<0.003	<0.003	0.006	EL9A
Chromium - Hexavalent*	mg/L	0.004	0.020	0.003	0.005	NW D2
Chromium	mg/L	0.007	0.022	0.005	0.011	EL9A
Ammonia Nitrogen	mg/L	0.20	<0.02	<0.02	<0.02	EL13F

ANALYSIS	UNITS	19/1040/5	19/1040/6	19/1040/7	19/1040/8	METHODNO
pH	pH unit	7.5	5.4	4.0	4.7	APHA 4500-H+ B
Conductivity	µS/cm	148	131	103	45	APHA 2510 B
Total Suspended Solids	mg/L	6	9	10	<2	APHA 2540 D
Total Dissolved Solids	mg/L	95	84	66	28	EL7B
Total Hardness	mg CaCO ₃ /L	35	11	3	2	EL9A
Alkalinity	mg CaCO ₃ /L	28	3	<2	<2	APHA 2320 B
Chloride	mg/L	24	33	18	9.7	EL10A
Sulfate	mg/L	6.8	4.7	2.1	0.69	EL9A
Calcium	mg/L	11	1.1	0.32	0.34	EL9A
Magnesium	mg/L	2.0	2.0	0.53	0.22	EL9A
Sodium	mg/L	14	17	4.5	3.2	EL9A
Potassium	mg/L	1.2	0.63	0.23	0.096	EL9A
Zinc	mg/L	0.36	1.1	4.0	1.8	EL9A
Zinc - Filtered	mg/L	0.28	1.1	3.9	1.8	EL9A
Copper	mg/L	0.006	0.027	0.031	0.045	EL9A
Copper - Filtered	mg/L	<0.004	0.017	0.030	0.039	EL9A
Nickel	mg/L	<0.005	<0.005	0.007	0.007	EL9A
Nickel - Filtered	mg/L	<0.005	<0.005	0.008	0.006	EL9A
Manganese	mg/L	0.017	0.017	0.016	0.12	EL9A
Manganese - Filtered	mg/L	0.01	0.013	0.012	0.11	EL9A
Iron	mg/L	0.46	0.38	1.33	0.59	EL9A
Iron - Filtered	mg/L	<0.004	0.033	0.64	0.013	EL9A
Lead	mg/L	<0.010	<0.010	0.42	0.070	EL9A
Lead - Filtered	mg/L	<0.010	<0.010	0.37	0.061	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	<0.003	<0.003	0.006	<0.003	EL9A
Chromium - Hexavalent*	mg/L	<0.001	<0.001	<0.001	<0.001	NW D2



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Chromium	mg/L	<0.003	<0.003	0.006	<0.003	EL9A
Ammonia Nitrogen	mg/L	0.06	0.29	0.23	0.02	EL13F

ANALYSIS	UNITS	19/1040/9				METHODNO
pH	pH unit	6.8				APHA 4500-H+ B
Conductivity	µS/cm	7,630				APHA 2510 B
Total Suspended Solids	mg/L	2				APHA 2540 D
Total Dissolved Solids	mg/L	4,880				EL7B
Total Hardness	mg CaCO ₃ /L	819				EL9A
Alkalinity	mg CaCO ₃ /L	38				APHA 2320 B
Chloride	mg/L	2,540				EL10A
Sulfate	mg/L	385				EL9A
Calcium	mg/L	57				EL9A
Magnesium	mg/L	164				EL9A
Sodium	mg/L	1,310				EL9A
Potassium	mg/L	64				EL9A
Zinc	mg/L	0.022				EL9A
Zinc - Filtered	mg/L	0.025				EL9A
Copper	mg/L	<0.004				EL9A
Copper - Filtered	mg/L	<0.004				EL9A
Nickel	mg/L	<0.005				EL9A
Nickel - Filtered	mg/L	<0.005				EL9A
Manganese	mg/L	0.10				EL9A
Manganese - Filtered	mg/L	0.095				EL9A
Iron	mg/L	0.65				EL9A
Iron - Filtered	mg/L	0.052				EL9A
Lead	mg/L	<0.010				EL9A
Lead - Filtered	mg/L	<0.010				EL9A
Cobalt#	mg/L	<0.008				EL9A
Cobalt - Filtered#	mg/L	<0.008				EL9A
Chromium Trivalent	mg/L	<0.003				EL9A
Chromium - Hexavalent*	mg/L	<0.001				NW D2
Chromium	mg/L	<0.003				EL9A
Ammonia Nitrogen	mg/L	0.06				EL13F

ANALYSIS	UNITS	19/1040/1	19/1040/2	19/1040/3	19/1040/4	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



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ANALYSIS	UNITS	19/1040/1	19/1040/2	19/1040/3	19/1040/4	METHODNO
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	19/1040/5	19/1040/6	19/1040/7	19/1040/8	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	19/1040/9				METHODNO
TOTAL RECOVERABLE HYDROCARBONS						
TRH C6-C9*	ug/L	<25				NGCMS_1121
TRH C10-C14*	ug/L	<25				NGCMS_1112
TRH C15-C28*	ug/L	<100				NGCMS_1112
TRH C29-C36*	ug/L	<100				NGCMS_1112
TOTAL RECOVERABLE HYDROCARBON*						
TRH C6- C10	ug/L	<25				NGCMS_1121
TRH C6- C10 less BTEX (F1)	ug/L	<25				NGCMS_1121
TRH>C10-C16	ug/L	<25				NGCMS_1112
TRH>C10 - C16 less Naph (F2)	ug/L	<25				NGCMS_1112
TRH>C16-C34(F3)	ug/L	<100				NGCMS_1112
TRH>C34-C40(F4)	ug/L	<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.

Measurement Uncertainty is available upon request.

*Analysis conducted by a subcontracted laboratory (NATA Accreditation Number 198) RN1231692,

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Approved:

B J Wadleigh
Laboratory Manager

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