

COFFS HARBOUR LABORATORY

Environmental Analysis

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GALINTEL
KEVINELKS
P. O. BOX 396
COFFSHARBOUR NSW 2450

BATCHNUMBER: 17/2593
No. of SAMPLES: 8
DATE COLLECTED: 01/12/17
DATE RECEIVED: 05/12/17
TIME RECEIVED: 09:18
DATE TESTING COMMENCED:
05/12/17

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
17/2593/1	POINT 1
17/2593/2	POINT 2A
17/2593/3	POINT 2B
17/2593/4	POINT 3
17/2593/5	POINT 4
17/2593/6	POINT 5
17/2593/7	POINT 7
17/2593/8	POINT 8

ANALYSIS	METHOD NO	UNITS	17/2593/1	17/2593/2	17/2593/3	17/2593/4
pH	APHA 4500-H+B	pH unit	6.6	7.1	6.8	6.8
Conductivity	APHA 2510B	µS/cm	82	86	87	76
Total Suspended Solids	APHA 2540 D	mg/L	2	10	7	4
Total Dissolved Solids	EL7B	mg/L	52	55	56	48
Total Hardness	EL9A	mg CaCO ₃ /L	12	20	19	16
Alkalinity	APHA 2320B	mg CaCO ₃ /L	5	15	14	13
Chloride	EL10A	mg/L	18	9.0	9.1	9.6
Sulfate	EL9A	mg/L	1.1	5.7	5.7	2.4
Calcium	EL9A	mg/L	4.1	6.1	6.0	5.4
Magnesium	EL9A	mg/L	0.43	1.1	1.0	0.52
Sodium	EL9A	mg/L	3.1	5.1	5.3	3.5
Potassium	EL9A	mg/L	0.48	0.94	0.92	1.4
Zinc - Total*	NT2 47	ug/L	4,210	280	170	820
Zinc - Filtered*	NT2 47	ug/L	4,320	210	170	770
Copper - Total*	NT2 47	ug/L	13	10	9	11
Copper - Filtered*	NT2 47	ug/L	19	6.7	8.2	8.7

ANALYSIS	METHODNO	UNITS	17/2593/1	17/2593/2	17/2593/3	17/2593/4
Nickel-Total*	NT2 47	ug/L	20	2.0	<1	5.0
Nickel-Filtered*	NT2 47	ug/L	18	1.2	<1	4.1
Manganese - Total*	NT2 47	ug/L	350	64	15	17
Manganese - Filtered*	NT2 47	ug/L	300	21	11	14
Iron - Total*	NT2 47	mg/L	120	1,400	190	74
Iron - Filtered*	NT2 47	ug/L	310	230	100	45
Lead - Total*	NT2 47	ug/L	17	15	7	2
Lead - Filtered*	NT2 47	ug/L	45	7.1	5.0	<1
Cobalt -Total*	NT2 47	ug/L	1.1	1.1	<1	<1
Cobalt -Filtered*	NT2 47	ug/L	1.0	<1	<1	<1
Chromium - Trivalent*	NT2 47	ug/L	1.8	2.6	1.5	24
Chromium - Hexavalent*	NW D2	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium - Total*	NT2 47	ug/L	2	3	2	24
Ammonia Nitrogen	EL13F	mg/L	0.21	<0.05	<0.05	<0.05

ANALYSIS	METHODNO	UNITS	17/2593/5	17/2593/6	17/2593/7	17/2593/8
pH	APHA 4500-H+B	pH unit	6.6	5.4	4.1	7.8
Conductivity	APHA 2510B	µS/cm	70	71	101	134
Total Suspended Solids	APHA 2540 D	mg/L	6	<2	8	4
Total Dissolved Solids	EL7B	mg/L	45	46	65	86
Total Hardness	EL9A	mg CaCO ₃ /L	13	5	3	29
Alkalinity	APHA 2320 B	mg CaCO ₃ /L	9	2	<2	22
Chloride	EL10A	mg/L	10	15	15	17
Sulfate	EL9A	mg/L	3.3	2.3	0.57	6.3
Calcium	EL9A	mg/L	3.6	0.58	0.34	11.0
Magnesium	EL9A	mg/L	1.0	0.91	0.42	0.44
Sodium	EL9A	mg/L	4.7	6.3	2.9	7.9
Potassium	EL9A	mg/L	0.73	0.21	0.12	1.8
Zinc - Total*	NT2 47	ug/L	95	1,120	2,740	230
Zinc - Filtered*	NT2 47	ug/L	100	1,110	2,800	150
Copper - Total*	NT2 47	ug/L	8	5	29	10
Copper - Filtered*	NT2 47	ug/L	6.6	4.4	27	8.9
Nickel-Total*	NT2 47	ug/L	<1	<1	7.2	4.8
Nickel-Filtered*	NT2 47	ug/L	<1	<1	6.6	4.4
Manganese - Total*	NT2 47	ug/L	14	5.4	650	8.7
Manganese - Filtered*	NT2 47	ug/L	14	4.7	570	6.8
Iron - Total*	NT2 47	mg/L	160	34	1,680	70
Iron - Filtered*	NT2 47	ug/L	110	30	1,270	33
Lead - Total*	NT2 47	ug/L	6	2	180	<1
Lead - Filtered*	NT2 47	ug/L	4.1	1.7	150	<1
Cobalt -Total*	NT2 47	ug/L	<1	<1	1.0	<1
Cobalt -Filtered*	NT2 47	ug/L	<1	<1	<1	<1
Chromium - Trivalent*	NT2 47	ug/L	2.4	<1	<1	11
Chromium - Hexavalent*	NW D2	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium - Total*	NT2 47	ug/L	2	<1	<1	11
Ammonia Nitrogen	EL13F	mg/L	<0.05	0.13	0.34	<0.05

ANALYSIS	METHODNO	UNITS	17/2593/1	17/2593/2	17/2593/3	17/2593/4
TOTAL RECOVERABLE HYDROCARBONS						
TRHC6-C9*	NGCMS 1121	ug/L	<25	<25	<25	<25
TRHC10-C14*	NGCMS 1112	ug/L	<25	<25	<25	<25
TRHC15-C28*	NGCMS 1112	ug/L	<100	<100	<100	<100
TRHC29-C36*	NGCMS 1112	ug/L	<100	<100	<100	<100
TOTAL RECOVERABLE HYDROCARBON*						
TRHC6-C10	NGCMS 1121	ug/L	<25	<25	<25	<25
TRHC6- C10 less BTEX (F1)	NGCMS_1121	ug/L	<25	<25	<25	<25
TRH>C10-C16	NGCMS 1112	ug/L	<25	<25	<25	<25
TRH>C10 - C16 less Naph (F2)	NGCMS_1112	ug/L	<25	<25	<25	<25
TRH>C16-C34(F3)	NGCMS 1112	ug/L	<100	<100	<100	<100
TRH>C34-C40(F4)	NGCMS 1112	ug/L	<100	<100	<100	<100

ANALYSIS	METHODNO	UNITS	17/2593/5	17/2593/6	17/2593/7	17/2593/8
TOTAL RECOVERABLE HYDROCARBONS						
TRHC6-C9*	NGCMS 1121	ug/L	<25	<25	110	<25
TRHC10-C14*	NGCMS 1112	ug/L	<25	<25	<25	<25
TRHC15-C28*	NGCMS 1112	ug/L	<100	<100	<100	<100
TRHC29-C36*	NGCMS 1112	ug/L	<100	<100	<100	<100
TOTAL RECOVERABLE HYDROCARBON*						
TRHC6- C10	NGCMS_1121	ug/L	<25	<25	110	<25
TRHC6- C10 less BTEX (F1)	NGCMS_1121	ug/L	<25	<25	<25	<25
TRH>C10-C16	NGCMS 1112	ug/L	<25	<25	<25	<25
TRH>C10 - C16 less Naph (F2)	NGCMS_1112	ug/L	<25	<25	<25	<25
TRH>C16-C34(F3)	NGCMS 1112	ug/L	<100	<100	<100	<100
TRH>C34-C40(F4)	NGCMS 1112	ug/L	<100	<100	<100	<100

Comments

Sample(s) collected by client and analysed as received in accordance with "Standard Methods for the Examination of Water

& Wastewater", 22nd Edition, 2012, APHA. Raw data sheets stating analysis dates are available upon request.

Tests marked with '#' are not covered by NATA Accreditation.

*Analysis conducted by a subcontracted laboratory (NATA Accreditation Number 198) RN 1180850.

Metla analysis conducted by a subcontracted laboratory (NATA Accreditation Number 198) RN 1181144.

Approved:  2/01/18
B J Wadleigh
Laboratory Manager



Accredited for compliance with ISO/IEC 17025.
[Accreditation Numbers: 12359 (Chemical) & 14565 (Microbiological)]