

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657134 20-37229
LOCALITY :	EM2013637_016
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with small BGA and greens present in high levels. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0268	Toxicogenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

BACILLARIOPHYCEAE

<i>Chaetoceros</i>		1	0	49	200	0.00974
<i>Navicula</i>		1	0	49	1400	0.06817
<i>Pennales</i>		2	0	97	300	0.02922
<i>Pennales (small <20um)</i>		2	0	97	251	0.02444
<i>Pleurosigma</i>		0	1	2	2000	0.00390

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		46	0	2240	132	0.29568
<i>Chlamydomonads</i>		2	0	97	250	0.02435
<i>Chlorococcoids (<10um)</i>		770	0	37495	60	2.24971
<i>Oocystis</i>		1	0	49	300	0.01461

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		2	0	97	350	0.03409
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		54	0	2630	320	0.84145
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CYANOPHYCEAE

<i>Leptolyngbya</i>		0	65	127	2.36	0.00030
<i>Planktolyngbya</i>		250	0	12174	3.8	0.04626
<i>Pseudanabaena</i>		0	57	111	12.5	0.00139
<i>Synechococcales small (iauv <20)</i>		2530	0	123198	5.25	0.64679

DINOPHYCEAE

<i>Gymnodiniales</i>		2	0	97	2000	0.19478
<i>Gymnodiniales (small)</i>		4	0	195	500	0.09739
<i>Peridinales</i>		1	0	49	5000	0.24347

EUGLENOPHYCEAE

<i>Trachelomonas</i>		0	1	2	3000	0.00584
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **11/08/2020**

METHOD NO.: MB010/MW024CV

Page 1 of 2

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OTHER PHYTOPLANKTON

Other small flagellates	26	0	1266	80	0.10129
Prasinophytes	20	0	974	100	0.09739

TOTAL BGA	135610	0.69474
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	181095	5.03025

+ The comments are discretionary and are for the purpose of helping to understand WQ implications. The comments are not accredited by NATA.

The biovolume values reported are those derived from documented information, including scientific literature. These are average values and not those measured on individual samples.

A Certificate of analysis will follow, linked by the above batch number. Independent algal reports are forwarded to clients expeditiously to facilitate operational decision making.

* P's and T's denote those cyanobacteria/blue-green algae (BGA) associated with toxin production in Australian waters. Overseas studies have shown other cyanobacteria to produce toxins. All contain lipopolysaccharides (LPS) in their cell wall and many have been found to produce β -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.