

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695255 20-42534
LOCALITY :	EM2015594_007
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	8/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with high levels of small BGA and greens present. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0235	Toxigenic (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>Centrales</i>		3	0	147	200	0.02931
<i>Chaetoceros</i>		120	0	5862	200	1.17245
<i>Naviculales</i>		4	0	195	1400	0.27357
<i>Nitzschia</i>		5	0	244	400	0.09770
<i>Pennales (small <20um)</i>		2	0	98	251	0.02452
<i>Pleurosigma</i>		0	1	2	2000	0.00391

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		22	0	1075	132	0.14187
<i>Chlamydomonads</i>		10	0	489	250	0.12213
<i>Chlorococcoids (<10um)</i>		1240	0	60576	60	3.63459
<i>Selenastrum</i>		5	0	244	250	0.06106

CRYPTOPHYCEAE

<i>Cryptomonads</i>		42	0	2052	320	0.65657
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CYANOPHYCEAE

<i>Planktolyngbya</i>		168	0	8207	3.8	0.03119
<i>Synechococcales small (iauv <20)</i>		1040	0	50806	5.25	0.26673

DINOPHYCEAE

<i>Gymnodiniales</i>		5	0	244	2000	0.48852
<i>Gymnodiniales (small)</i>		10	0	489	500	0.24426
<i>Peridinales</i>		1	0	49	5000	0.24426
<i>Polykrikos</i>		0	4	8	102170	0.79859
<i>Protoperdinium</i>		0	1	2	31000	0.06058

EUGLENOPHYCEAE

<i>Eutreptia</i>		2	0	98	1000	0.09770
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OTHER PHYTOPLANKTON

ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV

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Other small flagellates			140	0	6839	80	0.54714
Prasinophytes			70	0	3420	100	0.34196
TOTAL BGA			59013		0.29792		
TOTAL TOXIGENIC BGA			0		0.00000		
TOTAL POTENTIALLY TOXIC BGA			0		0.00000		
TOTAL ALGAE			141146		9.33862		

+ 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.

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