

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6906828 21-12031
LOCALITY :	EM2103113_017
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	25/02/2021
DATE ANALYSED :	1/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA most numerous. Water quality may be mildly 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>		1	0	49	200	0.00977
<i>Chaetoceros</i>		7	0	342	200	0.06839
<i>Entomoneis</i>		2	0	98	1000	0.09770
<i>Naviculales</i>		4	0	195	1400	0.27357
<i>Pennales (small <20um)</i>		4	0	195	251	0.04905
<i>Pleurosigma</i>		1	0	49	2000	0.09770
<i>Rhizosolenia</i>		0	10	20	500	0.00977

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		80	0	3908	132	0.51588
<i>Chlamydomonads</i>		1	0	49	250	0.01221
<i>Chlorococcoids (<10um)</i>		860	0	42013	60	2.52076
<i>Oocystis</i>		6	0	293	300	0.08793
<i>Selenastrum</i>		1	0	49	250	0.01221

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		1	0	49	350	0.01710
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CYANOPHYCEAE

<i>Planktolyngbya</i>		15	0	733	3.8	0.00278
<i>Synechococcales small (iauv <20)</i>		1810	0	88422	5.25	0.46422

DINOPHYCEAE

<i>Dinoflagellates</i>		2	0	98	20000	1.95408
<i>Gymnodiniales (small)</i>		8	0	391	500	0.19541
<i>Peridinales</i>		1	0	49	5000	0.24426
<i>Polykrikos</i>		0	1	2	102170	0.19965

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		55	0	2687	80	0.21495
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

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TOTAL BGA	89155	0.46700
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	139691	7.04740

+ 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.

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **02/03/2021**