

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6750304 20-50047
LOCALITY :	EM2018692_013
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	26/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed with low biovolume BGA most numerous. Water quality is unlikely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0235	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>Centrales</i>		1	0	49	200	0.00977
<i>Chaetoceros</i>		92	0	4494	200	0.89888
<i>Navicula</i>		1	0	49	1400	0.06839
<i>Nitzschia</i>		1	0	49	400	0.01954
<i>Pennales</i>		1	0	49	300	0.01466
<i>Pennales (small <20um)</i>		15	0	733	251	0.18393

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		32	0	1563	132	0.20635
<i>Chlamydomonads</i>		1	0	49	250	0.01221
<i>Chlorococcoids (<10um)</i>		380	0	18564	60	1.11383

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		5	0	244	350	0.08549
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CYANOPHYCEAE

<i>Planktolyngbya</i>		20	0	977	3.8	0.00371
<i>Synechococcales small (iauv <20)</i>		1870	0	91353	5.25	0.47960

DINOPHYCEAE

<i>Dinoflagellates</i>		0	1	2	20000	0.03908
<i>Gymnodiniales</i>		1	0	49	2000	0.09770
<i>Peridinales</i>		0	7	14	5000	0.06839

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		32	0	1563	80	0.12506
<i>Prasinophytes</i>		1	0	49	100	0.00489

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **27/10/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0235	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	92330	0.48332
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	119850	3.43149

+ 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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