

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7152216 21-43664
LOCALITY :	EM2118068-007
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	9/09/2021
DATE ANALYSED :	14/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Excessive levels of low biovolume BGA Synechococcales are likely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0169	Toxicogenic (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							

BACILLARIOPHYCEAE

Centrales		2	0	98	200	0.01967
Chaetoceros		20	0	983	200	0.19668
Naviculales		1	0	49	1400	0.06884
Pennales (small <20um)		1	0	49	251	0.01234

CHLOROPHYCEAE

Ankistrodesmoideae		46	0	2262	132	0.29855
Chlorococcoids (<10um)		11	0	541	60	0.03245

CRYPTOPHYCEAE

Cryptomonads		1	0	49	320	0.01573
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CYANOPHYCEAE

Planktolyngbya		10	0	492	3.8	0.00187
Synechococcales small (iauv <20)		8720	0	428754	5.25	2.25096

DINOPHYCEAE

Gymnodiniales		1	0	49	2000	0.09834
Gymnodiniales (small)		1	0	49	500	0.02458
Peridinales		0	4	8	5000	0.03934

OTHER PHYTOPLANKTON

Other small flagellates		4	0	197	80	0.01573
Prasinophytes		4	0	197	100	0.01967
Raphidophytes		1	0	49	7000	0.34418

TOTAL BGA	429246	2.25283
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	433826	3.43893

ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Louise Ungemach (signatory)*
Biologist

DATE: **14/09/2021**

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+ 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.