

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7281144 21-59669
LOCALITY :	EM2125413-003
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	13/12/2021
DATE ANALYSED :	21/12/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of small BGA will impair water quality and may pose a health risk.

Sedgewick-Rafter Vol.(ml)	1.0145	Toxicogenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

### BACILLARIOPHYCEAE

Centrales		2	0	99	200	0.01971
Naviculales		5	0	246	1400	0.34500
Nitzschia		3	0	148	400	0.05914
Pennales		2	0	99	300	0.02957
Pennales (small <20um)		280	0	13800	251	3.46378

### CHLOROPHYCEAE

Chlorococcoids		600	0	29571	500	14.78561
Monoraphidium		0	1	2	900	0.00177

### CYANOPHYCEAE

Synechococcales small (iauv <20)		8440	0	415968	5.25	2.18383
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### DINOPHYCEAE

Gymnodiniales		1	0	49	2000	0.09857
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### OTHER PHYTOPLANKTON

Other small flagellates		20	0	986	80	0.07886
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TOTAL BGA	415968	2.18383
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	460968	21.06585

+ 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 Deliyannis (signatory)**  
Biologist

DATE: **22/12/2021**

METHOD NO.: MB010/MW024VCA

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