

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6754218 20-50457
LOCALITY :	EM2018692-017
SITE :	3.2km South of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	28/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse and abundant algal community was observed. Current excessive levels of small BGA and chlorococcoids are likely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0018	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							
BACILLARIOPHYCEAE							
<i>Amphora</i>			1	0	50	500	0.02496
<i>Cocconeis</i>			1	0	50	450	0.02246
<i>Nitzschia</i>			7	0	349	400	0.13975
<i>Pennales (small <20um)</i>			4	0	200	251	0.05011
CHLOROPHYCEAE							
<i>Ankistrodesmoideae</i>			487	0	24306	132	3.20842
<i>Chlamydomonads</i>			2	0	100	250	0.02496
<i>Chlorococcoids (<10um)</i>			5520	0	275504	60	16.53025
<i>Selenastrum</i>			34	0	1697	250	0.42424
CRYPTOPHYCEAE							
<i>Cryptomonads</i>			8	0	399	320	0.12777
CYANOPHYCEAE							
<i>Synechococcales small (iauv <20)</i>			72960	0	3641445	5.25	19.11759
DINOPHYCEAE							
<i>Gymnodiniales</i>			0	3	6	2000	0.01198
<i>Gymnodiniales (small)</i>			24	0	1198	500	0.59892
<i>Peridinales</i>			1	0	50	5000	0.24955
EUGLENOPHYCEAE							
<i>Eutreptia</i>			2	0	100	1000	0.09982
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			4	0	200	80	0.01597
<i>Prasinophytes</i>			6	0	299	100	0.02995

ANALYST: **Karen Simonsen (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **28/10/2020**

METHOD NO.: MB010/MW024CV

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TOTAL BGA	3641445	19.11759
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	3945953	40.67668

+ 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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