

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6781627 20-54272
LOCALITY :	EM2020558_018
SITE :	3.2km South of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed with low biovolume BGA dominating the sample. Water quality will be impaired.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0168 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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### BACILLARIOPHYCEAE

<i>Amphora</i>			1	0	49	500	0.02459
<i>Centrales</i>			3	0	148	200	0.02950
<i>Naviculales</i>			0	3	6	1400	0.00826
<i>Nitzschia</i>			2	0	98	400	0.03934
<i>Pennales (small &lt;20um)</i>			16	0	787	251	0.19748

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			280	0	13769	132	1.81747
<i>Chlorococcoids (&lt;10um)</i>			2120	0	104249	60	6.25492
<i>Planctonema</i>			0	8	16	800	0.01259

### CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>			9	0	443	350	0.15490
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>			1	0	49	320	0.01574
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### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>			25720	0	1264752	5.25	6.63995
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### DINOPHYCEAE

<i>Dinoflagellates</i>			1	0	49	20000	0.98348
<i>Gymnodiniales</i>			3	0	148	2000	0.29504
<i>Gymnodiniales (small)</i>			8	0	393	500	0.19670
<i>Peridinales</i>			1	0	49	5000	0.24587

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>			40	0	1967	80	0.15736
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ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **23/11/2020**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0168	Toxigenic (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							

TOTAL BGA	1264752	6.63995
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1386972	17.07317

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

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