

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6750297 20-50047
LOCALITY :	EM2018692-006
SITE :	1.8km West of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	26/10/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Current levels of algae are sufficient to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0311	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>Amphora</i>		0	1	2	500	0.00097
<i>Nitzschia</i>		11	0	533	400	0.21336
<i>Pennales</i>		1	0	48	300	0.01455
<i>Pennales (small &lt;20um)</i>		1	0	48	251	0.01217

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		180	0	8729	132	1.15217
<i>Chlorococcoids (&lt;10um)</i>		3120	0	151295	60	9.07768

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		6	0	291	320	0.09310
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		35	0	1697	3.8	0.00645
<i>Synechococcales small (iauv &lt;20)</i>		13760	0	667249	5.25	3.50305

### DINOPHYCEAE

<i>Dinoflagellates</i>		0	5	10	20000	0.19397
<i>Gymnodiniales</i>		1	0	48	2000	0.09698
<i>Gymnodiniales (small)</i>		18	0	873	500	0.43643
<i>Peridinales</i>		5	0	242	5000	1.21230

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		365	0	17700	80	1.41596
<i>Prasinophytes</i>		1	0	48	100	0.00485

TOTAL BGA	668946	3.50950
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	848813	17.43400

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **27/10/2020**

METHOD NO.: MB010/MW024CV

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