

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6796583 20-56146
LOCALITY :	EM2021368_008
SITE :	3.2km South of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	30/11/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed with small BGA and greens abundant. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0199	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							

### BACILLARIOPHYCEAE

<i>Amphora</i>	1	0	49	500	0.02451
<i>Nitzschia</i>	3	0	147	400	0.05883
<i>Pennales (small &lt;20um)</i>	3	0	147	251	0.03692

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	760	0	37259	132	4.91813
<i>Chlamydomonads</i>	1	0	49	250	0.01226
<i>Chlorococcoids (&lt;10um)</i>	2260	0	110795	60	6.64771

### CRYPTOPHYCEAE

<i>Cryptomonads</i>	3	0	147	320	0.04706
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### CYANOPHYCEAE

<i>Pseudanabaena</i>	0	8	16	12.5	0.00020
<i>Synechococcales small (iauv &lt;20)</i>	27200	0	1333464	5.25	7.00069

### DINOPHYCEAE

<i>Dinoflagellates</i>	1	0	49	20000	0.98049
<i>Gymnodiniales</i>	0	10	20	2000	0.03922
<i>Gymnodiniales (small)</i>	11	0	539	500	0.26963
<i>Peridinales</i>	2	0	98	5000	0.49024

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	20	0	980	80	0.07844
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TOTAL BGA	1333480	7.00088
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1483759	20.60432

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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.

ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **04/12/2020**

METHOD NO.: MB010/MW024VCA

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