

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7056269 21-31436
LOCALITY :	EM2111820-007
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	21/06/2021
DATE ANALYSED :	24/06/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse algal community was observed, with the Synechococcales and chlorococcoid greens being most numerous. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0105	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1						
Magnification							
Fields		*	- 200x 20	- 100x 500			

### BACILLARIOPHYCEAE

<i>Amphora</i>		2	0	99	500	0.04948
<i>Centrales - (5-10um)</i>		1	0	49	80	0.00396
<i>Cocconeis</i>		2	0	99	450	0.04453
<i>Naviculales</i>		0	1	2	1400	0.00277
<i>Nitzschia</i>		172	0	8511	400	3.40426
<i>Pennales</i>		1	0	49	300	0.01484
<i>Pennales (small &lt;20um)</i>		1	0	49	251	0.01242

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		196	0	9698	132	1.28016
<i>Chlamydomonads</i>		1	0	49	250	0.01237
<i>Chlorococcoids (&lt;10um)</i>		547	0	27066	60	1.62395

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01583
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		30	0	1484	3.8	0.00564
<i>Pseudanabaena</i>		0	42	83	12.5	0.00104
<i>Synechococcales small (iauv &lt;20)</i>		23680	0	1171697	5.25	6.15141

### DINOPHYCEAE

<i>Gymnodiniales (small)</i>		18	0	891	500	0.44532
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### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		12	0	594	80	0.04750
<i>Raphidophytes</i>		2	0	99	7000	0.69273

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

REVIEWED: **Louise Ungemach (signatory)**  
Biologist

DATE: **25/06/2021**

METHOD NO.: MB010/MW024VCA

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Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	1173264	6.15809
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1220568	13.80821

+ 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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Biologist

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