

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7064963 21-32332
LOCALITY :	EM2112381-008
SITE :	1.8km W of Salt Ck
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	1/07/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A moderately diverse algal community was observed. Current combined levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0407	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

### BACILLARIOPHYCEAE

<i>Amphora</i>		3	0	144	500	0.07207
<i>Cocconeis</i>		3	0	144	450	0.06486
<i>Nitzschia</i>		140	0	6726	400	2.69050
<i>Pennales (small &lt;20um)</i>		8	0	384	251	0.09647

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		280	0	13452	132	1.77573
<i>Chlamydomonads</i>		3	0	144	250	0.03603
<i>Chlorococcoids (&lt;10um)</i>		248	0	11915	60	0.71490

### CYANOPHYCEAE

<i>Planktolyngbya</i>		6	0	288	3.8	0.00110
<i>Synechococcales small (iauv &lt;20)</i>		56330	0	2706351	5.25	14.20835

### DINOPHYCEAE

<i>Dinoflagellates</i>		0	4	8	20000	0.15374
<i>Gymnodiniales</i>		57	0	2739	2000	5.47708
<i>Peridinales</i>		1	0	48	5000	0.24022

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		7	0	336	80	0.02690
<i>Prasinophytes</i>		2	0	96	100	0.00961
<i>Raphidophytes</i>		11	0	528	7000	3.69943

TOTAL BGA	2706639	14.20944
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2743303	29.26700

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

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

DATE: **05/07/2021**

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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.