

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116662 21-39298
LOCALITY :	EM2115770-018
SITE :	1.8km W of Salt Ck
SAMPLE :	Surface
DATE SAMPLED :	9/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. High levels of the BGA Synechococcales are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0272	Toxigenic (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>Naviculales</i>	1	0	49	1400	0.06815
<i>Nitzschia</i>	4	0	195	400	0.07788
<i>Pennales</i>	4	0	195	300	0.05841
<i>Pennales (small &lt;20um)</i>	5	0	243	251	0.06109

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	32	0	1558	132	0.20561
<i>Chlorococcoids (&lt;10um)</i>	42	0	2044	60	0.12266

### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>	17760	0	864486	5.25	4.53855
--	-------	---	--------	------	---------

### DINOPHYCEAE

<i>Gymnodiniales</i>	1	0	49	2000	0.09735
<i>Gymnodiniales (small)</i>	14	0	681	500	0.34073

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	14	0	681	80	0.05452
<i>Prasinophytes</i>	2	0	97	100	0.00974
<i>Raphidophytes</i>	6	0	292	7000	2.04439

TOTAL BGA	864486	4.53855
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	870572	7.68005

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116662 21-39298
LOCALITY :	EM2115770-018
SITE :	1.8km W of Salt Ck
SAMPLE :	Surface
DATE SAMPLED :	9/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed. High levels of the BGA *Synechococcales* are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0272	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							

+ 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.