

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7171304 21-46438
LOCALITY :	EM2119079-018
SITE :	1.8km W of Salt Ck
SAMPLE :	Surface
DATE SAMPLED :	22/09/2021
DATE ANALYSED :	28/09/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed. Excessive levels of low biovolume BGA are likely to impact water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0303 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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### BACILLARIOPHYCEAE

<i>Amphora</i>			2	0	97	500	0.04853
<i>Centrales</i>			1	0	49	200	0.00971
<i>Naviculales</i>			0	2	4	1400	0.00544
<i>Pennales</i>			2	0	97	300	0.02912
<i>Pennales (small &lt;20um)</i>			1	0	49	251	0.01218

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			31	0	1504	132	0.19858
<i>Chlorococcoids (&lt;10um)</i>			65	0	3154	60	0.18927

### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>			23120	0	1122003	5.25	5.89052
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### DINOPHYCEAE

<i>Gymnodiniales</i>			2	0	97	2000	0.19412
<i>Gymnodiniales (small)</i>			1	0	49	500	0.02426

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>			15	0	728	80	0.05824
<i>Prasinophytes</i>			1	0	49	100	0.00485
<i>Raphidophytes</i>			1	0	49	7000	0.33971

TOTAL BGA	1122003	5.89052
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1127929	7.00451

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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.