

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7136739 21-41798
LOCALITY :	EM2116912-017
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	24/08/2021
DATE ANALYSED :	27/08/2021
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)	1.0272	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>		0	1	2	500	0.00097
<i>Nitzschia</i>		5	0	243	400	0.09735
<i>Pennales</i>		1	0	49	300	0.01460
<i>Pennales (small <20um)</i>		2	0	97	251	0.02444

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		110	0	5354	132	0.70678
<i>Chlorococcoids (<10um)</i>		17	0	827	60	0.04965

CHRYSTOPHYCEAE

<i>Other Chrysophytes</i>		3	0	146	200	0.02921
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CYANOPHYCEAE

<i>Planktolyngbya</i>		5	0	243	3.8	0.00092
<i>Synechococcales small (iauv <20)</i>		12800	0	623053	5.25	3.27103

DINOPHYCEAE

<i>Gymnodiniales</i>		1	0	49	2000	0.09735
<i>Gymnodiniales (small)</i>		4	0	195	500	0.09735
<i>Peridinales</i>		1	0	49	5000	0.24338

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		112	0	5452	80	0.43614
<i>Raphidophytes</i>		3	0	146	7000	1.02220

TOTAL BGA	623296	3.27195
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	635905	6.09136

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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 β -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.