

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7394984 22-15545
LOCALITY :	EM2204816-012
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	17/03/2022
DATE ANALYSED :	25/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed. Current algal levels are sufficient to impair water quality (eg: discolouration).

Sedgewick-Rafter Vol.(ml)	1.0333	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>Nitzschia</i>		490	0	23710	400	9.48418
<i>Pennales</i>		1	0	48	300	0.01452
<i>Pennales (small <20um)</i>		3	0	145	251	0.03644

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		2440	0	118068	132	15.58502
<i>Carteria</i>		1	0	48	300	0.01452
<i>Chlorococcoids (<10um)</i>		4340	0	210007	60	12.60041
<i>Oocystis</i>		13	0	629	300	0.18872

CRYPTOPHYCEAE

<i>Cryptomonads</i>		3	0	145	320	0.04645
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CYANOPHYCEAE

<i>Pseudanabaena</i>		4	0	194	12.5	0.00242
<i>Synechococcales small (iauv <20)</i>		19670	0	951805	5.25	4.99698

DINOPHYCEAE

<i>Gymnodiniales (small)</i>		1	0	48	500	0.02419
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OTHER PHYTOPLANKTON

<i>Raphidophytes</i>		1	0	48	7000	0.33872
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TOTAL BGA	951999	4.99940
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1304895	43.33255

ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis (signatory)**
Biologist

DATE: **25/03/2022**

METHOD NO.: MB010/MW024VCA

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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.