

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7171303 21-46438
LOCALITY :	EM2119079-017
SITE :	Salt Creek Outlet
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)	1.0242	Toxicogenic (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>	1	0	49	500	0.02441
<i>Centrales</i>	1	0	49	200	0.00976
<i>Pennales</i>	1	0	49	300	0.01465
<i>Pennales (small <20um)</i>	1	0	49	251	0.01225

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	21	0	1025	132	0.13533
<i>Chlorococcoids (<10um)</i>	14	0	683	60	0.04101

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>	1	0	49	350	0.01709
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CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>	11520	0	562390	5.25	2.95255
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DINOPHYCEAE

<i>Dinoflagellate cysts</i>	0	1	2	40000	0.07811
<i>Gymnodiniales (small)</i>	0	1	2	500	0.00098

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	6	0	293	80	0.02343
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TOTAL BGA	562390	2.95255
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	564640	3.30956

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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.

ANALYST: **Adam Deliyannis**
Biologist

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

DATE: **28/09/2021**

METHOD NO.: MB010/MW024VCA

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