

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6781625 20-54272
LOCALITY :	EM2020558_016
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA dominating the sample. Water quality will be impaired.

Sedgewick-Rafter Vol.(ml)	1.0327	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	48	500	0.02421
<i>Centrales</i>	1	0	48	200	0.00968
<i>Naviculales</i>	2	0	97	1400	0.13557
<i>Nitzschia</i>	2	0	97	400	0.03873
<i>Pennales (small <20um)</i>	20	0	968	251	0.24305

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	670	0	32439	132	4.28198
<i>Chlorococcoids (<10um)</i>	2160	0	104580	60	6.27481

CRYPTOPHYCEAE

<i>Cryptomonads</i>	0	4	8	320	0.00248
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CYANOPHYCEAE

<i>Spirulina</i>	0	330	639	5.73	0.00366
<i>Synechococcales small (iauv <20)</i>	11040	0	534521	5.25	2.80624

DINOPHYCEAE

<i>Dinoflagellates</i>	1	0	48	20000	0.96834
<i>Gymnodiniales</i>	2	0	97	2000	0.19367
<i>Gymnodiniales (small)</i>	10	0	484	500	0.24208
<i>Peridinales</i>	1	0	48	5000	0.24208

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	60	0	2905	80	0.23240
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TOTAL BGA	535160	2.80990
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	677027	15.69898

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **23/11/2020**

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.

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