

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7086214 21-35420
LOCALITY :	EM2113768-007
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	13/07/2021
DATE ANALYSED :	19/07/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0208	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	0.02449
<i>Nitzschia</i>	0	13	25	400	0.01019
<i>Pennales</i>	1	0	49	300	0.01469
<i>Pennales (small <20um)</i>	1	0	49	251	0.01229

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	51	0	2498	132	0.32974
<i>Chlorococcoids (<10um)</i>	45	0	2204	60	0.13225

CYANOPHYCEAE

<i>Planktolyngbya</i>	5	0	245	3.8	0.00093
<i>Synechococcales small (iauv <20)</i>	22800	0	1116771	5.25	5.86305

DINOPHYCEAE

<i>Dinoflagellates</i>	3	0	147	20000	2.93887
<i>Gymnodiniales</i>	3	0	147	2000	0.29389
<i>Gymnodiniales (small)</i>	7	0	343	500	0.17143

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	10	0	490	80	0.03918
<i>Prasinophytes</i>	4	0	196	100	0.01959
<i>Raphidophytes</i>	39	0	1910	7000	13.37187

TOTAL BGA	1117016	5.86398
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1125123	23.22247

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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.