

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657124 20-37229
LOCALITY :	EM2013637_006
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse algal community was observed. Current excessive levels of small BGA and greens will impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0274 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
<b>BACILLARIOPHYCEAE</b>							
<i>Navicula</i>			3	0	146	1400	0.20440
<i>Nitzschia</i>			41	0	1995	400	0.79813
<i>Pennales</i>			1	0	49	300	0.01460
<i>Pennales (small &lt;20um)</i>			4	0	195	251	0.04886
<b>CHLOROPHYCEAE</b>							
<i>Ankistrodesmoideae</i>			385	0	18737	132	2.47323
<i>Chlorococcoids (&lt;10um)</i>			7120	0	346506	60	20.79034
<i>Selenastrum</i>			110	0	5353	250	1.33833
<b>CHRYSTOPHYCEAE</b>							
<i>Other Chrysophyceae</i>			7	0	341	350	0.11923
<b>CRYPTOPHYCEAE</b>							
<i>Cryptomonads</i>			13	0	633	320	0.20245
<b>CYANOPHYCEAE</b>							
<i>Planktolyngbya</i>			32	0	1557	3.8	0.00592
<i>Synechococcales small (iauv &lt;20)</i>			23680	0	1152424	5.25	6.05022
<b>DINOPHYCEAE</b>							
<i>Gymnodiniales</i>			14	0	681	2000	1.36266
<i>Gymnodiniales (small)</i>			5	0	243	500	0.12167
<i>Peridinales</i>			1	0	49	5000	0.24333
<b>OTHER PHYTOPLANKTON</b>							
<i>Other small flagellates</i>			125	0	6083	80	0.48667
<i>Prasinophytes</i>			11	0	535	100	0.05353

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

REVIEWED: **Adam Deliyannis**  
Biologist

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METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0274	Toxigenic (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							

TOTAL BGA	1153981	6.05614
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1535527	34.31359

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

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