

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695264 20-42534
LOCALITY :	EM2015594_016
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	9/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with high levels of small BGA and greens present. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0046	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							

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	50	500	0.02489
<i>Centrales</i>		4	0	199	200	0.03982
<i>Chaetoceros</i>		2	0	100	200	0.01991
<i>Nitzschia</i>		57	0	2837	400	1.13478
<i>Pennales</i>		1	0	50	300	0.01493
<i>Pennales (small <20um)</i>		4	0	199	251	0.04997

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		290	0	14434	132	1.90524
<i>Chlamydomonads</i>		2	0	100	250	0.02489
<i>Chlorococcoids (<10um)</i>		3300	0	164244	60	9.85467

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		1	0	50	350	0.01742
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		11	0	547	320	0.17519
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CYANOPHYCEAE

<i>Limnothrix/Geitlerinema/Anagnostidinema</i>	P	0	120	239	17.5	0.00418
<i>Planktolyngbya</i>		15	0	747	3.8	0.00284
<i>Pseudanabaena</i>		7	0	348	12.5	0.00435
<i>Synechococcales small (iauv <20)</i>		7380	0	367310	5.25	1.92838

DINOPHYCEAE

<i>Dinoflagellates</i>		0	17	34	20000	0.67689
<i>Gymnodiniales</i>		9	0	448	2000	0.89588
<i>Gymnodiniales (small)</i>		7	0	348	500	0.17420
<i>Peridinales</i>		0	25	50	5000	0.24886

OTHER PHYTOPLANKTON

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0046 1 : 1	Toxigenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Other small flagellates			160	0	7963	80	0.63707
Prasinophytes			1	0	50	100	0.00498
TOTAL BGA					368644		1.93975
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					239		0.00418
TOTAL ALGAE					560347		17.83931

+ 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.