

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695266 20-42534
LOCALITY :	EM2015594_018
SITE :	3.2km Sth of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	9/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.024 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
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BACILLARIOPHYCEAE

<i>Amphora</i>			1	0	49	500	0.02441
<i>Entomoneis</i>			1	0	49	1000	0.04883
<i>Naviculales</i>			1	0	49	1400	0.06836
<i>Nitzschia</i>			50	0	2441	400	0.97656
<i>Pennales (small <20um)</i>			6	0	293	251	0.07354

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			250	0	12207	132	1.61133
<i>Chlorococcoids (<10um)</i>			3880	0	189453	60	11.36719
<i>Selenastrum</i>			1	0	49	250	0.01221

CRYPTOPHYCEAE

<i>Cryptomonads</i>			11	0	537	320	0.17188
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CYANOPHYCEAE

<i>Planktolyngbya</i>			36	0	1758	3.8	0.00668
<i>Synechococcales small (iauv <20)</i>			8280	0	404297	5.25	2.12256

DINOPHYCEAE

<i>Dinoflagellates</i>			1	0	49	20000	0.97656
<i>Gymnodiniales</i>			3	0	146	2000	0.29297
<i>Gymnodiniales (small)</i>			7	0	342	500	0.17090
<i>Peridinales</i>			1	0	49	5000	0.24414

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>			11	0	537	80	0.04297
<i>Prasinophytes</i>			3	0	146	100	0.01465

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Sedgewick-Rafter Vol.(ml)	1.024	Toxigenic (T) or Potentially toxic (P)					
Concentration	1 : 1	*	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Magnification			20	500			
Fields							

TOTAL BGA	406055	2.12924
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	612451	18.22572

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV

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