

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722408 20-45935
LOCALITY :	EM2017172-006
SITE :	Salt Creek Outlet
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	7/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with small greens and low biovolume BGA most numerous. Current combined levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0168 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>			0	1	2	500	0.00098
<i>Naviculales</i>			0	1	2	1400	0.00275
<i>Nitzschia</i>			57	0	2803	400	1.12116
<i>Pennales</i>			1	0	49	300	0.01475
<i>Pennales (small <20um)</i>			2	0	98	251	0.02469

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			315	0	15490	132	2.04465
<i>Chlorococcoids</i>			6880	0	338316	500	169.15814

CRYPTOPHYCEAE

<i>Cryptomonads</i>			7	0	344	320	0.11015
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CYANOPHYCEAE

<i>Limnothrix/Geitlerinema/Anagnostidinema</i>	P		0	12	24	17.5	0.00041
<i>Planktolyngbya</i>			25	0	1229	3.8	0.00467
<i>Pseudanabaena</i>			14	0	688	12.5	0.00861
<i>Synechococcales small (iauv <20)</i>			27840	0	1369001	5.25	7.18725

DINOPHYCEAE

<i>Dinoflagellates</i>			2	0	98	20000	1.96696
<i>Gymnodiniales (small)</i>			6	0	295	500	0.14752
<i>Peridinales</i>			6	0	295	5000	1.47522

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>			45	0	2213	80	0.17703
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ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

DATE: **07/10/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0168	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	1370942	7.20094
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	24	0.00041
TOTAL ALGAE	1730947	183.44494

+ 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: **Adam Deliyiannis**
Biologist

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Biologist

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