

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722403 20-45935
LOCALITY :	EM2017172-001
SITE :	Stony Well
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 may impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0235	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)
Concentration	1 : 1						
Magnification							
Fields							

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	49	500	0.02443
<i>Chaetoceros</i>		3	0	147	200	0.02931
<i>Naviculales</i>		0	1	2	1400	0.00274
<i>Nitzschia</i>		3	0	147	400	0.05862
<i>Pennales (small <20um)</i>		1	0	49	251	0.01226

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		128	0	6253	132	0.82540
<i>Chlamydomonads</i>		2	0	98	250	0.02443
<i>Chlorococcoids (<10um)</i>		1480	0	72301	60	4.33806

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		4	0	195	350	0.06839
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		11	0	537	320	0.17196
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CYANOPHYCEAE

<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	0	58	113	17.5	0.00198
<i>Oscillatoriales (iauv 1-100)</i>	P	0	39	76	60.8	0.00463
<i>Planktolyngbya</i>		24	0	1172	3.8	0.00446
<i>Pseudanabaena</i>		0	29	57	12.5	0.00071
<i>Synechococcales small (iauv <20)</i>		3240	0	158280	5.25	0.83097

DINOPHYCEAE

<i>Dinoflagellates</i>		2	0	98	20000	1.95408
<i>Gymnodiniales (small)</i>		17	0	830	500	0.41524
<i>Peridinales</i>		6	0	293	5000	1.46556

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		124	0	6058	80	0.48461
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ANALYST: **Adam Deliyiannis**
Biologist

REVIEWED: **Karen Simonsen (signatory)**
Biologist

DATE: **07/10/2020**

METHOD NO.: MB010/MW024CV

Page 1 of 2

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Sedgewick-Rafter Vol.(ml)	1.0235	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							
Prasinophytes			9	0	440	100	0.04397
TOTAL BGA					159698		0.84275
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					189		0.00662
TOTAL ALGAE					247195		10.76180

+ 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.