

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695259 20-42534
LOCALITY :	EM2015594_011
SITE :	Stony Well
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)	1.0311	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							

BACILLARIOPHYCEAE

<i>Centrales</i>		1	0	48	200	0.00970
<i>Nitzschia</i>		2	0	97	400	0.03879
<i>Pennales</i>		0	2	4	300	0.00116
<i>Pennales (small <20um)</i>		2	0	97	251	0.02434
<i>Pleurosigma</i>		0	1	2	2000	0.00388

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		340	0	16487	132	2.17632
<i>Chlamydomonads</i>		1	0	48	250	0.01212
<i>Chlorococcoids (<10um)</i>		4400	0	213364	60	12.80186

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		30	0	1455	350	0.50916
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		9	0	436	320	0.13966
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CYANOPHYCEAE

<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	11	0	533	17.5	0.00933
<i>Planktolyngbya</i>		46	0	2231	3.8	0.00848
<i>Synechococcales small (iauv <20)</i>		8400	0	407332	5.25	2.13849

DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	48	20000	0.96984
<i>Gymnodiniales</i>		3	0	145	2000	0.29095
<i>Gymnodiniales (small)</i>		4	0	194	500	0.09698
<i>Peridinales</i>		1	0	48	5000	0.24246

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		180	0	8729	80	0.69828
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV

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Fields							

TOTAL BGA	410096	2.15630
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	533	0.00933
TOTAL ALGAE	651298	20.17182

+ 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.

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