

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722413 20-45935
LOCALITY :	EM2017172-011
SITE :	US Tauwiche
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. High levels of greens and BGA are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0311 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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BACILLARIOPHYCEAE

Centrales			3	0	145	200	0.02910
Naviculales			0	1	2	1400	0.00272
Pennales			2	0	97	300	0.02910

CHLOROPHYCEAE

Ankistrodesmus			9	0	436	132	0.05761
Ankyra			2	0	97	40	0.00388
Chlorococcoids (<10um)			12	0	582	60	0.03491
Closterium			0	1	2	4130	0.00801
Colonial green (cells)			72	0	3491	100	0.34914
Crucigenia			352	0	17069	30	0.51207
Dictyosphaerium			12	0	582	20	0.01164
Didymocystis			4	0	194	41	0.00795
Eremosphaera			0	4	8	700	0.00543
Golenkinia			1	0	48	400	0.01940
Hyaloraphidium			1	0	48	750	0.03637
Lagerheimia			5	0	242	500	0.12123
Oocystis			166	0	8050	300	2.41490
Pediastrum			22	0	1067	60	0.06401
Planctonema			380	0	18427	800	14.74154
Scenedesmus			32	0	1552	250	0.38794

CHRYSTOPHYCEAE

Other Chrysophyceae			1	0	48	350	0.01697
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CRYPTOPHYCEAE

Cryptomonads			5	0	242	320	0.07759
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CYANOPHYCEAE

ANALYST: **Adam Deliyannis**
Biologist

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

DATE: **08/10/2020**

METHOD NO.: MB010/MW024CV

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<i>Limnolyngbya (Planktolynbya circumcreta)</i>			552	0	26768	4.9	0.13116
<i>Planktolynbya</i>			685	0	33217	3.8	0.12622
<i>Romeria</i>			16	0	776	31	0.02405
<i>Synechococcales small (iauv <20)</i>			19200	0	931045	5.25	4.88798
DINOPHYCEAE							
<i>Dinoflagellates</i>			0	5	10	20000	0.19397
<i>Gymnodiniales (small)</i>			1	0	48	500	0.02425
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			14	0	679	80	0.05431
TOTAL BGA			991806			5.16942	
TOTAL TOXIGENIC BGA			0			0.00000	
TOTAL POTENTIALLY TOXIC BGA			0			0.00000	
TOTAL ALGAE			1044972			24.37344	

+ 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.