

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6643337 20-35580
LOCALITY :	EM2012826_011
SITE :	US Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	22/07/2020
DATE ANALYSED :	28/07/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Current high levels of BGA are sufficient to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0744	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)
Concentration	1 : 1	*	20	500	
Magnification					
Fields					

BACILLARIOPHYCEAE

<i>Anaulus</i>	2	0	93
<i>Centrales</i>	10	0	465
<i>Gomphonema</i>	1	0	47
<i>Pennales</i>	10	0	465
<i>Tabellaria</i>	1	0	47

CHLOROPHYCEAE

<i>Ankistrodesmus</i>	16	0	745
<i>Chlamydomonads</i>	2	0	93
<i>Chlorococcoids</i>	108	0	5026
<i>Closterium</i>	4	0	186
<i>Crucigenia</i>	144	0	6701
<i>Dictyosphaerium</i>	4	0	186
<i>Didymocystis</i>	2	0	93
<i>Dimorphococcus</i>	12	0	558
<i>Elakatothrix</i>	2	0	93
<i>Eremosphaera</i>	0	6	11
<i>Hyaloraphidium</i>	45	0	2094
<i>Lagerheimia</i>	5	0	233
<i>Monoraphidium</i>	1	0	47
<i>Nephrocystium</i>	6	0	279
<i>Oocystis</i>	96	0	4468
<i>Pediastrum</i>	20	0	931
<i>Planctonema</i>	170	0	7911
<i>Scenedesmus</i>	36	0	1675

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **28/07/2020**

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<i>Selenastrum</i>			15	0	698
<i>Staurastrum</i>			0	1	2
<i>Tetraedron</i>			2	0	93

CHRYSTOPHYCEAE

Other Chrysophyceae			1	0	47
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CRYPTOPHYCEAE

<i>Cryptomonads</i>			20	0	931
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CYANOPHYCEAE

<i>Aphanizomenonaceae</i> family - straight	P		9	0	419
<i>Cuspidothrix issatschenkoi</i>			0	82	153
<i>Leptolyngbya</i>			640	0	29784
<i>Limnolyngbya</i> (<i>Planktolynbya circumcreta</i>)			1205	0	56078
<i>Planktolynbya</i>			3040	0	141474
<i>Synechococcales</i> small (<i>iauv</i> <20)			14160	0	658972

DINOPHYCEAE

<i>Gymnodiniales</i> (small)			1	0	47
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EUGLENOPHYCEAE

<i>Euglena</i>			1	0	47
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TOTAL BGA	886880
TOTAL TOXIGENIC BGA	0
TOTAL POTENTIALLY TOXIC BGA	419
TOTAL ALGAE	921192

+ The comments are discretionary and are for the purpose of helping to understand WQ implications. The comments are not accredited by NATA.

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

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METHOD NO.: MB010

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