

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6622170 20-32670
LOCALITY :	EM2011705-002
SITE :	US Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	7/07/2020
DATE ANALYSED :	10/07/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse and abundant algal community was observed. Excessive levels of cyanobacteria were present, impairing water quality and posing a health concern. (eg skin/gastric irritations)

Sedgewick-Rafter Vol.(ml)	1.0011	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)
Concentration	1 : 1	*	20	500	
Magnification					
Fields					

BACILLARIOPHYCEAE

<i>Fragilariaceae</i>	6	0	300
<i>Gomphonema</i>	0	1	2
<i>Nitzschia</i>	1	0	50
<i>Pennales (small <20um)</i>	14	0	699
<i>Tabellaria</i>	1	0	50

CHLOROPHYCEAE

<i>Actinastrum</i>	4	0	200
<i>Ankistrodesmus</i>	30	0	1498
<i>Chlamydomonads</i>	22	0	1099
<i>Chlorococcoids</i>	80	0	3996
<i>Chodatella</i>	4	0	200
<i>Closterium</i>	1	0	50
<i>Colonial green (cells)</i>	17	0	849
<i>Crucigenia</i>	312	0	15583
<i>Didymocystis</i>	36	0	1798
<i>Dimorphococcus</i>	20	0	999
<i>Elakatothrix</i>	4	0	200
<i>Eremosphaera</i>	2	0	100
<i>Hyaloraphidium</i>	44	0	2198
<i>Monoraphidium</i>	6	0	300
<i>Nephrocytium</i>	4	0	200
<i>Oocystis</i>	76	0	3796
<i>Pediastrum</i>	6	0	300
<i>Planctonema</i>	218	0	10888

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

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

DATE: **10/07/2020**

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<i>Scenedesmus</i>		32	0	1598
<i>Selenastrum</i>		24	0	1199
<i>Tetraedron</i>		2	0	100
<i>Tetrastrum</i>		32	0	1598

CRYPTOPHYCEAE

<i>Cryptomonads</i>		26	0	1299
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CYANOPHYCEAE

<i>Aphanizomenonaceae family - straight</i>	P	28	0	1398
<i>Cuspidothrix issatschenkoi</i>		101	0	5044
<i>Leptolyngbya</i>		517	0	25822
<i>Limnolyngbya (Planktolyngbya circumcreta)</i>		7200	0	359604
<i>Planktolyngbya</i>		7600	0	379582
<i>Pseudanabaena</i>		30	0	1498
<i>Synechococcales small (iauv <20)</i>		68800	0	3436220

DINOPHYCEAE

<i>Gymnodiniales (small)</i>		1	0	50
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EUGLENOPHYCEAE

<i>Euglena</i>		1	0	50
<i>Trachelomonas</i>		1	0	50

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		7	0	350
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TOTAL BGA	4209168
TOTAL TOXIGENIC BGA	0
TOTAL POTENTIALLY TOXIC BGA	1398
TOTAL ALGAE	4260817

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+ 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.

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