

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7366796 22-11365
LOCALITY :	EM2203091-002
SITE :	US Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	22/02/2022
DATE ANALYSED :	28/02/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0199	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

BACILLARIOPHYCEAE

Centrales		180	0	8824	200	1.76488
Naviculales		1	0	49	1400	0.06863
Nitzschia		1	0	49	400	0.01961
Pennales		4	0	196	300	0.05883

CHLOROPHYCEAE

Ankistrodesmus		6	0	294	132	0.03883
Botryococcus		0	260	510	98	0.04997
Chlamydomonads		4	0	196	250	0.04902
Chlorococcoids (<10um)		128	0	6275	60	0.37651
Closterium		0	1	2	4130	0.00810
Colonial green (cells)		8	0	392	100	0.03922
Crucigenia		144	0	7060	30	0.21179
Dictyosphaerium		120	0	5883	20	0.11766
Elakatothrix		2	0	98	45	0.00441
Eremosphaera		0	22	43	700	0.03020
Lagerheimia		8	0	392	500	0.19610
Monoraphidium (small)		60	0	2941	16	0.04706
Monoraphidium (large)		4	0	196	400	0.07844
Nephrocystium		2	0	98	200	0.01961
Oocystis		72	0	3530	300	1.05893
Pediastrum		0	14	27	60	0.00165
Planctonema		184	0	9020	800	7.21639
Scenedesmus		56	0	2745	250	0.68634
Staurostrum		2	0	98	2000	0.19610
Tetraedron		16	0	784	150	0.11766

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

REVIEWED: **Adam Deliyannis (signatory)**
Biologist

DATE: **28/02/2022**

METHOD NO.: MB010/MW024VCA

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Fields							
<i>Tetrastrum</i>			48	0	2353	40	0.09413
CRYPTOPHYCEAE							
<i>Cryptomonads</i>			8	0	392	320	0.12550
CYANOPHYCEAE							
<i>Aphanizomenonaceae family - straight</i>		P	13	0	637	67	0.04270
<i>Cuspidothrix issatschenkoi</i>			32	0	1569	57	0.08942
<i>Limnolyngbya</i>			3130	0	153446	4.9	0.75189
<i>Planktolyngbya</i>			2420	0	118639	3.8	0.45083
<i>Raphidiopsis raciborskii</i>		T	0	7	14	42	0.00058
<i>Synechococcales small (iauv <20)</i>			2510	0	123051	5.25	0.64602
DINOPHYCEAE							
<i>Gymnodiniales</i>			0	1	2	2000	0.00392
EUGLENOPHYCEAE							
<i>Euglena</i>			0	2	4	7000	0.02745
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			8	0	392	80	0.03138
TOTAL BGA					397356		1.98143
TOTAL TOXIGENIC BGA					14		0.00058
TOTAL POTENTIALLY TOXIC BGA					637		0.04270
TOTAL ALGAE					450201		14.71974

+ 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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