

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116647 21-39298
LOCALITY :	EM2115770-003
SITE :	DS Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	10/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0291	Toxicogenic (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

<i>Amphora</i>		1	0	49	500	0.02429
<i>Cocconeis</i>		1	0	49	450	0.02186
<i>Fragilariaceae</i>		36	0	1749	500	0.87455
<i>Nitzschia</i>		2	0	97	400	0.03887
<i>Pennales</i>		2	0	97	300	0.02915
<i>Pennales (small <20um)</i>		8	0	389	251	0.09756

CHLOROPHYCEAE

<i>Chlorococcoids (<10um)</i>		44	0	2138	60	0.12827
<i>Closterium</i>		0	1	2	4130	0.00803
<i>Crucigenia</i>		132	0	6413	30	0.19240
<i>Didymocystis</i>		2	0	97	41	0.00398
<i>Eremosphaera</i>		3	0	146	700	0.10203
<i>Lagerheimia</i>		5	0	243	500	0.12147
<i>Monoraphidium</i>		34	0	1652	900	1.48674
<i>Oocystis</i>		70	0	3401	300	1.02031
<i>Pediastrum</i>		9	0	437	60	0.02624
<i>Planctonema</i>		114	0	5539	800	4.43106
<i>Scenedesmus</i>		30	0	1458	250	0.36440

CRYPTOPHYCEAE

<i>Cryptomonads</i>		9	0	437	320	0.13993
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CYANOPHYCEAE

<i>Aphanizomenonaceae family - straight</i>	P	6	0	292	67	0.01953
<i>Limnolyngbya (Planktolynbya circumcreta)</i>		3040	0	147702	4.9	0.72374
<i>Planktolynbya</i>		3350	0	162764	3.8	0.61850
<i>Synechococcales small (iauv <20)</i>		5400	0	262365	5.25	1.37742

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **16/08/2021**

METHOD NO.: MB010/MW024VCA

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TOTAL BGA	573123	2.73919
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	292	0.01953
TOTAL ALGAE	597516	11.85032

+ 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.

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

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