

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116646 21-39298
LOCALITY :	EM2115770-002
SITE :	US Tauwiche
SAMPLE :	Surface
DATE SAMPLED :	10/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0274	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

Centrales		2	0	97	200	0.01947
Fragilariaceae		67	0	3261	500	1.63033
Naviculales		2	0	97	1400	0.13627
Nitzschia		1	0	49	400	0.01947
Pennales (small <20um)		18	0	876	251	0.21988

CHLOROPHYCEAE

Ankistrodesmoideae		2	0	97	132	0.01285
Ankistrodesmus		4	0	195	132	0.02570
Botryococcus		0	90	175	98	0.01717
Chlorococcoids (<10um)		22	0	1071	60	0.06424
Closterium		0	3	6	4130	0.02412
Cosmarium		1	0	49	500	0.02433
Crucigenia		136	0	6619	30	0.19856
Didymocystis		8	0	389	41	0.01596
Eremosphaera		0	9	18	700	0.01226
Lagerheimia		3	0	146	500	0.07300
Monoraphidium		31	0	1509	900	1.35780
Nephrocystium		4	0	195	200	0.03893
Oocystis		88	0	4283	300	1.28480
Pediastrum		18	0	876	60	0.05256
Planctonema		752	0	36597	800	29.27779
Scenedesmus		44	0	2141	250	0.53533

CRYPTOPHYCEAE

Cryptomonads		6	0	292	320	0.09344
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CYANOPHYCEAE

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **16/08/2021**

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LABORATORY NO./BATCH NO. :	7116646 21-39298
LOCALITY :	EM2115770-002
SITE :	US Tauwichee
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DATE SAMPLED :	10/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0274	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							
<i>Limnolyngbya (Planktolynbya circumcreta)</i>			3400	0	165466	4.9	0.81078
<i>Planktolynbya</i>			4100	0	199533	3.8	0.75822
<i>Synechococcales small (iauv <20)</i>			6100	0	296866	5.25	1.55855
TOTAL BGA					661865		3.12755
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					720903		38.26180

+ 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.