

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6956305 21-18638
LOCALITY :	EM2106129-002
SITE :	US Tauwiche
SAMPLE :	Surface
DATE SAMPLED :	8/04/2021
DATE ANALYSED :	13/04/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diversity of algae was present with excessive levels of low biovolume BGA noted. Water quality will be impaired and health concerns may be warranted.

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

<i>Centrales</i>		140	0	6863	200	1.37268
<i>Naviculales</i>		1	0	49	1400	0.06863
<i>Nitzschia</i>		3	0	147	400	0.05883
<i>Pennales</i>		16	0	784	300	0.23532

CHLOROPHYCEAE

<i>Ankistrodesmus</i>		24	0	1177	132	0.15531
<i>Chlorococcoids (<10um)</i>		96	0	4706	60	0.28238
<i>Closterium</i>		3	0	147	4130	0.60741
<i>Colonial green (cells)</i>		48	0	2353	100	0.23532
<i>Crucigenia</i>		64	0	3138	30	0.09413
<i>Dictyosphaerium</i>		104	0	5099	20	0.10197
<i>Didymocystis</i>		2	0	98	41	0.00402
<i>Dimorphococcus</i>		8	0	392	20	0.00784
<i>Eremosphaera</i>		0	25	49	700	0.03432
<i>Golenkinia</i>		1	0	49	400	0.01961
<i>Hyaloraphidium</i>		1	0	49	750	0.03677
<i>Lagerheimia</i>		24	0	1177	500	0.58829
<i>Nephrocystium</i>		2	0	98	200	0.01961
<i>Oocystis</i>		52	0	2549	300	0.76478
<i>Pediastrum</i>		16	0	784	60	0.04706
<i>Planctonema</i>		380	0	18629	800	14.90342
<i>Scenedesmus</i>		84	0	4118	250	1.02951
<i>Selenastrum</i>		40	0	1961	250	0.49024
<i>Staurastrum</i>		0	2	4	2000	0.00784
<i>Tetraedron</i>		3	0	147	150	0.02206

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

REVIEWED: **Lauren Minett (signatory)**
Biologist

DATE: **15/04/2021**

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Magnification							
Fields							
<i>Tetrastrum</i>			16	0	784	40	0.03138
CRYPTOPHYCEAE							
<i>Cryptomonads</i>			2	0	98	320	0.03138
CYANOPHYCEAE							
<i>Aphanizomenonaceae family - straight</i>		P	163	0	7991	67	0.53540
<i>Cuspidothrix issatschenkoi</i>			932	0	45691	57	2.60437
<i>Limnolyngbya</i>			1340	0	65693	4.9	0.32189
<i>Planktolyngbya</i>			5020	0	246103	3.8	0.93519
<i>Raphidiopsis</i>		P	408	0	20002	59	1.18012
<i>Synechococcales small (iauv <20)</i>			46080	0	2259045	5.25	11.85999
DINOPHYCEAE							
<i>Dinoflagellates</i>			1	0	49	20000	0.98049
<i>Gymnodiniales</i>			1	0	49	2000	0.09805
EUGLENOPHYCEAE							
<i>Euglena</i>			1	0	49	7000	0.34317
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			6	0	294	80	0.02353
TOTAL BGA					2644525		17.43695
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					27993		1.71551
TOTAL ALGAE					2700415		40.13232

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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.

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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Biologist

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Biologist

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METHOD NO.: MB010/MW024VCA

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