

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7791222 22-70934
LOCALITY :	EM2218950-001
SITE :	US Tauwiche
SAMPLE :	Surface
DATE SAMPLED :	28/09/2022
DATE ANALYSED :	5/10/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa were observed. Current levels are unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0237	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>Aulacoseira</i>		472	0	23054	2860	65.93338
<i>Centrales</i>		18	0	879	200	0.17583
<i>Pennales</i>		8	0	391	300	0.11722

CHLOROPHYCEAE

<i>Chlorococcoids (<10um)</i>		24	0	1172	60	0.07033
<i>Coelastrum</i>		0	16	31	80	0.00250
<i>Crucigenia</i>		8	0	391	30	0.01172
<i>Dictyosphaerium</i>		16	0	781	20	0.01563
<i>Monoraphidium (small)</i>		14	0	684	16	0.01094
<i>Monoraphidium (large)</i>		1	0	49	400	0.01954
<i>Oocystis</i>		6	0	293	300	0.08792
<i>Scenedesmus</i>		10	0	488	250	0.12211

CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01563
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CYANOPHYCEAE

<i>Dolichospermum - coiled (≥6µm)</i>	P	0	30	59	280	0.01641
<i>Limnolyngbya</i>		100	0	4884	4.9	0.02393
<i>Planktolyngbya</i>		30	0	1465	3.8	0.00557
<i>Synechococcales small (iauv <20)</i>		137	0	6691	5.25	0.03513

EUGLENOPHYCEAE

<i>Euglenophytes</i>		0	1	2	4420	0.00864
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Sedgewick-Rafter Vol.(ml)	1.0237	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							

TOTAL BGA	13099	0.08104
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	59	0.01641
TOTAL ALGAE	41363	66.67243

+ 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: *Adam Deliyannis (signatory)* REVIEWED: *Louise Ungemach (signatory)*
Biologist Biologist

DATE: **06/10/2022**