

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7428770 22-19601
LOCALITY :	EM2207234-002
SITE :	US Tauwitschere
SAMPLE :	Surface
DATE SAMPLED :	20/04/2022
DATE ANALYSED :	26/04/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + Current algal levels are unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0333	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>	9	0	435	2860	1.24552
<i>Centrales</i>	180	0	8710	200	1.74199
<i>Nitzschia</i>	3	0	145	400	0.05807
<i>Pennales</i>	10	0	484	300	0.14517

### CHLOROPHYCEAE

<i>Ankistrodesmus</i>	2	0	97	132	0.01277
<i>Botryococcus</i>	0	40	77	98	0.00759
<i>Chlorococcoids (&lt;10um)</i>	145	0	7016	60	0.42098
<i>Crucigenia</i>	248	0	12000	30	0.36001
<i>Dictyosphaerium</i>	315	0	15242	20	0.30485
<i>Didymocystis</i>	6	0	290	41	0.01190
<i>Eremosphaera</i>	0	12	23	700	0.01626
<i>Lagerheimia</i>	2	0	97	500	0.04839
<i>Monoraphidium (small)</i>	180	0	8710	16	0.13936
<i>Monoraphidium (large)</i>	6	0	290	400	0.11613
<i>Oocystis</i>	72	0	3484	300	1.04520
<i>Pediastrum</i>	2	0	97	60	0.00581
<i>Planctonema</i>	68	0	3290	800	2.63234
<i>Scenedesmus</i>	56	0	2710	250	0.67744
<i>Staurostrum</i>	0	1	2	2000	0.00387
<i>Tetraedron</i>	12	0	581	150	0.08710
<i>Tetrastrum</i>	56	0	2710	40	0.10839

### CRYPTOPHYCEAE

<i>Cryptomonads</i>	8	0	387	320	0.12387
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### CYANOPHYCEAE

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

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

DATE: **26/04/2022**

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Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0333 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
<i>Anabaena</i>			0	11	21	76	0.00162
<i>Aphanizomenonaceae</i> family - straight		P	12	0	581	67	0.03890
<i>Cuspidothrix issatschenkoi</i>			0	110	213	57	0.01214
<i>Limnolyngbya</i> ( <i>Planktolyngbya circumcreta</i> )			785	0	37985	4.9	0.18613
<i>Planktolyngbya</i>			1885	0	91213	3.8	0.34661
<i>Synechococcales</i> small ( <i>iauv</i> <20)			1355	0	65567	5.25	0.34422
<b>EUGLENOPHYCEAE</b>							
<i>Euglena</i>			0	3	6	7000	0.04065
<i>Phacus</i>			2	0	97	6000	0.58066
TOTAL BGA			195580		0.92962		
TOTAL TOXIGENIC BGA			0		0.00000		
TOTAL POTENTIALLY TOXIC BGA			581		0.03890		
TOTAL ALGAE			262560		10.86395		

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

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

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DATE: **26/04/2022**

METHOD NO.: MB010/MW024VCA

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