

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484448 22-53362
LOCALITY :	EM2212385-001
SITE :	US Tauwitschere
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A highly diverse algal community was observed with current levels that may mildly influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0099	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>Aulacoseira</i>	4	0	198	2860	0.56639
<i>Centrales</i>	32	0	1584	200	0.31686
<i>Pennales</i>	8	0	396	300	0.11882
<i>Pennales (small &lt;20um)</i>	12	0	594	251	0.14912

### CHLOROPHYCEAE

<i>Botryococcus</i>	0	120	238	98	0.02329
<i>Chlorococcoids (&lt;10um)</i>	464	0	22973	60	1.37835
<i>Closterium</i>	0	1	2	4130	0.00818
<i>Colonial green (cells)</i>	90	0	4456	100	0.44559
<i>Crucigenia</i>	64	0	3169	30	0.09506
<i>Dictyosphaerium</i>	184	0	9110	20	0.18220
<i>Didymocystis</i>	32	0	1584	41	0.06496
<i>Dimorphococcus</i>	8	0	396	20	0.00792
<i>Filamentous Green</i>	88	0	4357	386	1.68175
<i>Lagerheimia</i>	24	0	1188	500	0.59412
<i>Monoraphidium (small)</i>	68	0	3367	16	0.05387
<i>Monoraphidium (large)</i>	4	0	198	400	0.07922
<i>Oocystis</i>	124	0	6139	300	1.84177
<i>Pediastrum</i>	8	0	396	60	0.02376
<i>Planctonema</i>	69	0	3416	800	2.73294
<i>Scenedesmus</i>	76	0	3763	250	0.94069
<i>Schroederia</i>	0	2	4	550	0.00218
<i>Staurostrum</i>	1	0	50	2000	0.09902
<i>Tetraedron</i>	20	0	990	150	0.14853
<i>Tetrastrum</i>	96	0	4753	40	0.19012

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

REVIEWED: **Thao Nguyen (signatory)**  
Biologist

DATE: **07/07/2022**

METHOD NO.: MB010/MW024VCA

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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		4	0	198	320	0.06337
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### CYANOPHYCEAE

<i>Limnolyngbya</i>		612	0	30300	4.9	0.14847
<i>Planktolyngbya</i>		672	0	33271	3.8	0.12643
<i>Synechococcales small (iauv &lt;20)</i>		560	0	27726	5.25	0.14556

TOTAL BGA	91297	0.42046
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	164816	12.22854

+ 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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