

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7684064 22-64963
LOCALITY :	EM2216764-011
SITE :	Tilley U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	31/08/2022
DATE ANALYSED :	7/09/2022
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed, but current combined levels are insufficient to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0166	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>Chaetoceros</i>		1	0	49	200	0.00984
<i>Cocconeis</i>		1	0	49	450	0.02213
<i>Entomoneis</i>		0	5	10	1000	0.00984
<i>Naviculales</i>		1	0	49	1400	0.06886
<i>Nitzschia</i>		1	0	49	400	0.01967
<i>Nitzschia closterium</i>		0	1	2	40	0.00008
<i>Pennales</i>		1	0	49	300	0.01476
<i>Pennales (small &lt;20um)</i>		2	0	98	251	0.02469

### CHLOROPHYCEAE

<i>Chlamydomonads</i>		5	0	246	250	0.06148
<i>Chlorococcoids (&lt;10um)</i>		13	0	639	60	0.03836
<i>Monoraphidium (small)</i>		37	0	1820	16	0.02912
<i>Oocystis (small)</i>		5	0	246	100	0.02459
<i>Tetradon</i>		3	0	148	150	0.02213

### CHRYSTOPHYCEAE

<i>Mallomonas</i>		0	1	2	6655	0.01309
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		3	0	148	320	0.04722
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### CYANOPHYCEAE

<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	8	0	393	17.5	0.00689
<i>Planktolyngbya</i>		28	0	1377	3.8	0.00523
<i>Pseudanabaena</i>		0	6	12	12.5	0.00015
<i>Synechococcales small (iauv &lt;20)</i>		25	0	1230	5.25	0.00646

### DINOPHYCEAE

<i>Gymnodiniales</i>		1	0	49	2000	0.09837
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ANALYST: **Karen Simonsen (signatory)**  
Biologist

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

DATE: **08/09/2022**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0166 1 : 1	Toxigenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
<i>Peridinales</i>			3	0	148	5000	0.73775
<i>Prorocentrum</i>			0	4	8	3000	0.02361
<b>EUGLENOPHYCEAE</b>							
<i>Phacus</i>			0	2	4	6000	0.02361
<b>OTHER PHYTOPLANKTON</b>							
<i>Prasinophytes</i>			0	4	8	100	0.00079
TOTAL BGA			3012		0.01872		
TOTAL TOXIGENIC BGA			0		0.00000		
TOTAL POTENTIALLY TOXIC BGA			393		0.00689		
TOTAL ALGAE			6833		1.30870		

+ 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.

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Biologist

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