

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7064965 21-32332
LOCALITY :	EM2112381-010
SITE :	Tilley U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	1/07/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0235	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

### BACILLARIOPHYCEAE

<i>Cyclotella</i>		0	3	6	3483	0.02042
<i>Fragilariaceae</i>		3	0	147	500	0.07328
<i>Nitzschia</i>		1	0	49	400	0.01954
<i>Pennales</i>		4	0	195	300	0.05862
<i>Pleurosigma</i>		0	1	2	2000	0.00391

### CHLOROPHYCEAE

<i>Chlamydomonads</i>		1	0	49	250	0.01221
<i>Chlorococcoids (&lt;10um)</i>		14	0	684	60	0.04104
<i>Cosmarium</i>		0	1	2	500	0.00098

### CYANOPHYCEAE

<i>Leptolyngbya</i>		0	55	107	2.36	0.00025
<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	0	120	234	17.5	0.00410
<i>Oscillatoriales (iauv 1-100)</i>	P	0	21	41	60.8	0.00249
<i>Planktolyngbya</i>		12	0	586	3.8	0.00223
<i>Pseudanabaena</i>		0	9	18	12.5	0.00022
<i>Synechococcales small (iauv &lt;20)</i>		4	0	195	5.25	0.00103

### DINOPHYCEAE

<i>Gymnodiniales (small)</i>		0	1	2	500	0.00098
<i>Peridinales</i>		0	1	2	5000	0.00977
<i>Prorocentrum</i>		1	0	49	3000	0.14656

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		2	0	98	80	0.00782
<i>Prasinophytes</i>		3	0	147	100	0.01466

ANALYST: **Karen Simonsen (signatory)**  
Biologist

REVIEWED: **Louise Ungemach (signatory)**  
Biologist

DATE: **02/07/2021**

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TOTAL BGA	1181	0.01033
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	275	0.00660
TOTAL ALGAE	2613	0.42009

+ 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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