

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241919 21-55807
LOCALITY :	EM2123012-020
SITE :	Tilley U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	23/11/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Levels of low biovolume BGA Synechococcales will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0242	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

Centrales		3	0	146	200	0.02929
Pennales		1	0	49	300	0.01465
Pennales (small <20um)		2	0	98	251	0.02451

### CHLOROPHYCEAE

Ankistrodesmoideae		6	0	293	132	0.03866
Chlorococcoids (<10um)		16	0	781	60	0.04687
Colonial green (cells)		12	0	586	100	0.05858
Oocystis		4	0	195	300	0.05858

### CHRYSTOPHYCEAE

Other Chrysophyceae		1	0	49	350	0.01709
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### CYANOPHYCEAE

Planktolyngbya		10	0	488	3.8	0.00186
Synechococcales small (iauv <20)		1190	0	58094	5.25	0.30499

### DINOPHYCEAE

Gymnodiniales		1	0	49	2000	0.09764
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### OTHER PHYTOPLANKTON

Other small flagellates		5	0	244	80	0.01953
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TOTAL BGA	58582	0.30685
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	61072	0.71224

ANALYST: *Adam Deliyannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)*  
Biologist Biologist

DATE: **23/11/2021**

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+ 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: *Adam Deliyannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)*  
Biologist Biologist

DATE: **23/11/2021**

METHOD NO.: MB010/MW024VCA

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