

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484459 22-53362
LOCALITY :	EM2212385-012
SITE :	Tilley Watercourse
SAMPLE :	Surface
DATE SAMPLED :	30/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed with current levels unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0235	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		0	1	2	200	0.00039
Centrales - (5-10um)		2	0	98	80	0.00782
Pennales		0	1	2	300	0.00059

### CHLOROPHYCEAE

Botryococcus		0	80	156	98	0.01532
Carteria		0	1	2	300	0.00059
Chlamydomonads		1	0	49	250	0.01221
Chlorococcoids (<10um)		2	0	98	60	0.00586
Monoraphidium (small)		1	0	49	16	0.00078
Oocystis		1	0	49	300	0.01466
Scenedesmus		0	8	16	250	0.00391

### CHRYSTOPHYCEAE

Other Chrysophyceae		4	0	195	350	0.06839
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### CRYPTOPHYCEAE

Cryptomonads		0	1	2	320	0.00063
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### CYANOPHYCEAE

Pseudanabaena		0	24	47	12.5	0.00059
Snowella		0	16	31	9	0.00028
Synechococcales small (iauv <20)		20	0	977	5.25	0.00513

### DINOPHYCEAE

Gymnodiniales		0	1	2	2000	0.00391
Gymnodiniales (small)		0	3	6	500	0.00293

### OTHER PHYTOPLANKTON

Other small flagellates		6	0	293	80	0.02345
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ANALYST: **Kirsten Mudie (signatory)**  
Biologist

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

DATE: **07/07/2022**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

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Sedgewick-Rafter Vol.(ml)	1.0235	Toxigenic (T) or Potentially toxic (P)					
Concentration	1 : 1	*	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Magnification			20	500			
Fields							

TOTAL BGA	1055	0.00600
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2074	0.16742

+ 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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Page 2 of 2