

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7218535 21-52583
LOCALITY :	EM2121437-019
SITE :	Tilley Swamp Drain
SAMPLE :	Surface
DATE SAMPLED :	26/10/2021
DATE ANALYSED :	9/11/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.024 1 : 1	Toxicogenic (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)
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### BACILLARIOPHYCEAE

Centrales			1	0	49	200	0.00977
Centrales - (5-10um)			4	0	195	80	0.01563
Chaetoceros			1	0	49	200	0.00977
Entomoneis			0	3	6	1000	0.00586
Pennales			3	0	146	300	0.04395
Pennales (small <20um)			2	0	98	251	0.02451

### CHLOROPHYCEAE

Ankistrodesmoideae			96	0	4688	132	0.61875
Chlamydomonads			1	0	49	250	0.01221
Chlorococcoids (<10um)			10	0	488	60	0.02930
Colonial green (cells)			28	0	1367	100	0.13672
Monoraphidium			36	0	1758	900	1.58203
Oocystis			2	0	98	300	0.02930

### CRYPTOPHYCEAE

Cryptomonads			1	0	49	320	0.01563
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### CYANOPHYCEAE

Pseudanabaena			12	0	586	12.5	0.00732
Snowella			95	0	4639	9	0.04175
Synechococcales small (iauv <20)			1680	0	82031	5.25	0.43066

### DINOPHYCEAE

Gymnodiniales (small)			1	0	49	500	0.02441
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### OTHER PHYTOPLANKTON

Other small flagellates			3	0	146	80	0.01172
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ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **10/11/2021**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.024	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							

TOTAL BGA	87256	0.47974
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	96491	3.04927

+ 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.