

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6754219 20-50457
LOCALITY :	EM2018692-018
SITE :	Tilley Swamp Drain U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	28/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse and abundant algal community was observed. Current overall levels are sufficient to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0099	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

BACILLARIOPHYCEAE

<i>Amphora</i>		4	0	198	500	0.09902
<i>Campylodiscus</i>		0	2	4	4000	0.01584
<i>Centrales</i>		6	0	297	200	0.05941
<i>Chaetoceros</i>		0	4	8	200	0.00158
<i>Gomphonema</i>		4	0	198	850	0.16833
<i>Naviculales</i>		3	0	149	1400	0.20794
<i>Nitzschia</i>		3	0	149	400	0.05941
<i>Pennales</i>		1	0	50	300	0.01485
<i>Pennales (small <20um)</i>		17	0	842	251	0.21126
<i>Pleurosigma</i>		0	2	4	2000	0.00792
<i>Tryblionella</i>		0	5	10	1150	0.01139

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		30	0	1485	132	0.19606
<i>Chlamydomonads</i>		5	0	248	250	0.06189
<i>Chlorococcoids (<10um)</i>		510	0	25250	60	1.51500
<i>Colonial green (cells)</i>		25	0	1238	100	0.12377
<i>Lagerheimia</i>		5	0	248	500	0.12377
<i>Oocystis</i>		29	0	1436	300	0.43074
<i>Scenedesmus</i>		4	0	198	250	0.04951
<i>Selenastrum</i>		31	0	1535	250	0.38370

CRYPTOPHYCEAE

<i>Cryptomonads</i>		5	0	248	320	0.07922
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CYANOPHYCEAE

<i>Leptolyngbya</i>		56	0	2773	2.36	0.00654
<i>Planktolyngbya</i>		10	0	495	3.8	0.00188

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **28/10/2020**

METHOD NO.: MB010/MW024CV

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Fields							
<i>Pseudanabaena</i>			4	0	198	12.5	0.00248
<i>Synechococcales</i> small (iauv <20)			1560	0	77235	5.25	0.40549
DINOPHYCEAE							
<i>Gymnodiniales</i> (small)			0	4	8	500	0.00396
<i>Peridinales</i>			0	1	2	5000	0.00990
EUGLENOPHYCEAE							
<i>Euglena</i>			0	2	4	7000	0.02773
TOTAL BGA					80701		0.41639
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					114510		4.27860

+ 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 β -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.