

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116664 21-39298
LOCALITY :	EM2115700-020
SITE :	Tilley U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	9/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are unlikely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0303	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							

BACILLARIOPHYCEAE

Centrales	2	0	97	200	0.01941
Chaetoceros	1	0	49	200	0.00971
Entomoneis	0	5	10	1000	0.00971
Naviculales	2	0	97	1400	0.13588
Nitzschia	1	0	49	400	0.01941
Pennales	1	0	49	300	0.01456
Pennales (small <20um)	1	0	49	251	0.01218

CHLOROPHYCEAE

Ankistrodesmoideae	1	0	49	132	0.00641
Carteria	1	0	49	300	0.01456
Chlorococcoids (<10um)	7	0	340	60	0.02038
Monoraphidium	1	0	49	900	0.04368
Oocystis	2	0	97	300	0.02912

CHRYSOPHYCEAE

Other Chrysophyceae	2	0	97	350	0.03397
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CRYPTOPHYCEAE

Cryptomonads	0	1	2	320	0.00062
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CYANOPHYCEAE

Planktolyngbya	15	0	728	3.8	0.00277
Pseudanabaena	0	16	31	12.5	0.00039
Synechococcales small (iauv <20)	46	0	2232	5.25	0.01172

DINOPHYCEAE

Peridinales	0	1	2	5000	0.00971
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OTHER PHYTOPLANKTON

Other small flagellates	22	0	1068	80	0.08541
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ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

DATE: **13/08/2021**

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Prasinophytes			6	0	291	100	0.02912
Raphidophytes			0	1	2	7000	0.01359
TOTAL BGA			2991		0.01487		
TOTAL TOXIGENIC BGA			0		0.00000		
TOTAL POTENTIALLY TOXIC BGA			0		0.00000		
TOTAL ALGAE			5437		0.52229		

+ 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.