

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6781624 20-54272
LOCALITY :	EM2020558_015
SITE :	Morella Creek @ gauge
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with small BGA most numerous. Water quality is unlikely to be impaired.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0145 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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BACILLARIOPHYCEAE

<i>Cocconeis</i>			1	0	49	450	0.02218
<i>Entomoneis</i>			0	1	2	1000	0.00197
<i>Naviculales</i>			2	0	99	1400	0.13800
<i>Nitzschia</i>			3	0	148	400	0.05914
<i>Pennales</i>			3	0	148	300	0.04436
<i>Pennales (small <20um)</i>			5	0	246	251	0.06185

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			32	0	1577	132	0.20818
<i>Ankistrodesmus</i>			1	0	49	132	0.00651
<i>Chlorococcoids (<10um)</i>			60	0	2957	60	0.17743
<i>Colonial green (cells)</i>			56	0	2760	100	0.27600
<i>Lagerheimia</i>			100	0	4929	500	2.46427
<i>Oocystis</i>			68	0	3351	300	1.00542
<i>Planctonema</i>			4	0	197	800	0.15771
<i>Selenastrum</i>			170	0	8379	250	2.09463

CRYPTOPHYCEAE

<i>Cryptomonads</i>			1	0	49	320	0.01577
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CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>			810	0	39921	5.25	0.20959
<i>Synechococcales large (iauv 20-86)</i>			2	0	99	54	0.00532

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>			20	0	986	80	0.07886
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **23/11/2020**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0145	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	40020	0.21491
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	65946	7.02718

+ 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.

ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

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