

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722407 20-45935
LOCALITY :	EM2017172-005
SITE :	Morella Creek @ gauge
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	7/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with small greens and low biovolume BGA most numerous. Current combined levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0199	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		2	0	98	200	0.01961
Naviculales		2	0	98	1400	0.13727
Pennales		2	0	98	300	0.02941
Pennales (small <20um)		4	0	196	251	0.04922

CHLOROPHYCEAE

Ankistrodesmoideae		620	0	30395	132	4.01216
Chlamydomonads		1	0	49	250	0.01226
Chlorococcoids (<10um)		450	0	22061	60	1.32366
Colonial green (cells)		290	0	14217	100	1.42171
Lagerheimia		4	0	196	500	0.09805
Oocystis		8	0	392	300	0.11766
Selenastrum		940	0	46083	250	11.52074

CHRYSOPHYCEAE

Other Chrysophyceae		4	0	196	350	0.06863
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CRYPTOPHYCEAE

Cryptomonads		1	0	49	320	0.01569
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CYANOPHYCEAE

Limnithrix/Geitlerinema/Anagnostidinema	P	0	41	80	17.5	0.00141
Planktolyngbya		13	0	637	3.8	0.00242
Synechococcales small (iauv <20)		17120	0	839298	5.25	4.40631

DINOPHYCEAE

Gymnodiniales (small)		1	0	49	500	0.02451
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OTHER PHYTOPLANKTON

Other small flagellates		16	0	784	80	0.06275
Prasinophytes		2	0	98	100	0.00980

ANALYST: **Adam Deliyannis**
Biologist

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

DATE: **07/10/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0199	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	840015	4.41014
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	80	0.00141
TOTAL ALGAE	955074	23.33327

+ 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: **Adam Deliyiannis**
Biologist

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Biologist

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