

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7116660 21-39298
LOCALITY :	EM2115770-016
SITE :	Morella Basin @Gauge
SAMPLE :	Surface
DATE SAMPLED :	9/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0242	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

<i>Entomoneis</i>		0	2	4	1000	0.00391
<i>Naviculales</i>		14	0	683	1400	0.95684
<i>Pennales</i>		4	0	195	300	0.05858
<i>Pennales (small <20um)</i>		1	0	49	251	0.01225

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		15	0	732	132	0.09666
<i>Chlorococcoids (<10um)</i>		4	0	195	60	0.01172
<i>Oocystis</i>		4	0	195	300	0.05858

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		1	0	49	350	0.01709
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CYANOPHYCEAE

<i>Planktolyngbya</i>		5	0	244	3.8	0.00093
<i>Synechococcales small (iauv <20)</i>		86	0	4198	5.25	0.02204

DINOPHYCEAE

<i>Gymnodiniales (small)</i>		1	0	49	500	0.02441
<i>Peridinales</i>		3	0	146	5000	0.73228

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		4	0	195	80	0.01562
<i>Prasinophytes</i>		8	0	391	100	0.03905
<i>Raphidophytes</i>		3	0	146	7000	1.02519

TOTAL BGA	4442	0.02297
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	7471	3.07516

ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

DATE: **13/08/2021**

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+ 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.