

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007875 21-25384
LOCALITY :	EM2108900-006
SITE :	Morella Basin @ Gauge
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	19/05/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse community of algal taxa was observed, with low biovolume BGA Synechococcales most numerous. Current levels are likely to impact on water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0242 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
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BACILLARIOPHYCEAE

<i>Entomoneis</i>		0	1	2	1000	0.00195
<i>Nitzschia</i>		2	0	98	400	0.03905
<i>Pennales</i>		4	0	195	300	0.05858

CHLOROPHYCEAE

<i>Chlamydomonads</i>		1	0	49	250	0.01220
<i>Chlorococcoids (<10um)</i>		275	0	13425	60	0.80551
<i>Selenastrum</i>		1	0	49	250	0.01220

CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>		7040	0	343683	5.25	1.80434
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DINOPHYCEAE

<i>Dinoflagellates</i>		6	0	293	20000	5.85823
<i>Gymnodiniales (small)</i>		39	0	1904	500	0.95196

TOTAL BGA	343683	1.80434
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	359698	9.54403

+ 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 Deliyannis*
Biologist

REVIEWED: *Louise Ungemach (signatory)*
Biologist

DATE: 19/05/2021

METHOD NO.: MB010/MW024VCA

Page 1 of 1