

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7428776 22-19601
LOCALITY :	EM2207234-008
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	20/04/2022
DATE ANALYSED :	26/04/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of low biovolume BGA and greens will impair water quality.

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							

BACILLARIOPHYCEAE

<i>Naviculales</i>		1	0	49	1400	0.06863
<i>Nitzschia</i>		2	0	98	400	0.03922
<i>Pennales</i>		24	0	1177	300	0.35298
<i>Pennales (small <20um)</i>		72	0	3530	251	0.88597
<i>Pleurosigma</i>		0	1	2	2000	0.00392

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		80	0	3922	132	0.51770
<i>Chlorococcoids (<10um)</i>		3820	0	187273	60	11.23640
<i>Filamentous Green</i>		0	126	247	386	0.09537

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		2	0	98	350	0.03432
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		20	0	980	320	0.31376
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CYANOPHYCEAE

<i>Pseudanabaena</i>		0	14	27	12.5	0.00034
<i>Synechococcales small (iauv <20)</i>		10020	0	491225	5.25	2.57893

DINOPHYCEAE

<i>Gymnodiniales</i>		8	0	392	2000	0.78439
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OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		1	0	49	80	0.00392
<i>Prasinophytes</i>		8	0	392	100	0.03922

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

REVIEWED: **Adam Deliyannis (signatory)**
Biologist

DATE: **26/04/2022**

METHOD NO.: MB010/MW024VCA

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Concentration	1 : 1	*	20	500			
Magnification							
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TOTAL BGA	491252	2.57927
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	689461	16.95507

+ 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.

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