

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6906829 21-12031
LOCALITY :	EM2103113_018
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	25/02/2021
DATE ANALYSED :	1/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA abundant. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0169	Toxigenic (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>Amphora</i>		2	0	98	500	0.04917
<i>Centrales</i>		1	0	49	200	0.00983
<i>Chaetoceros</i>		2	0	98	200	0.01967
<i>Naviculales</i>		2	0	98	1400	0.13767
<i>Nitzschia</i>		2	0	98	400	0.03934
<i>Pennales</i>		4	0	197	300	0.05900
<i>Pennales (small <20um)</i>		2	0	98	251	0.02468
<i>Pleurosigma</i>		1	0	49	2000	0.09834

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		90	0	4425	132	0.58413
<i>Chlorococcoids (<10um)</i>		1160	0	57036	60	3.42217
<i>Filamentous Green</i>		0	5	10	386	0.00380

CRYPTOPHYCEAE

<i>Cryptomonads</i>		4	0	197	320	0.06294
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CYANOPHYCEAE

<i>Planktolyngbya</i>		30	0	1475	3.8	0.00561
<i>Pseudanabaena</i>		15	0	738	12.5	0.00922
<i>Synechococcales small (iauv <20)</i>		9200	0	452355	5.25	2.37486

DINOPHYCEAE

<i>Dinoflagellates</i>		5	0	246	20000	4.91690
<i>Gymnodiniales</i>		1	0	49	2000	0.09834
<i>Gymnodiniales (small)</i>		19	0	934	500	0.46711
<i>Peridinales</i>		1	0	49	5000	0.24585

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		40	0	1967	80	0.15734
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

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TOTAL BGA	454568	2.38969
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	520266	12.78595

+ 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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Page 2 of 2