

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6796592 20-56146
LOCALITY :	EM2021368_017
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	1/12/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Excessive levels of small synechococcales dominated the sample. Current levels will impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0303	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

Centrales	1	0	49	200	0.00971
Nitzschia	2	0	97	400	0.03882
Pennales	1	0	49	300	0.01456
Pleurosigma	0	2	4	2000	0.00776

CHLOROPHYCEAE

Chlamydomonads	1	0	49	250	0.01213
Chlorococcoids (<10um)	305	0	14802	60	0.88809

CRYPTOPHYCEAE

Cryptomonads	1	0	49	320	0.01553
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CYANOPHYCEAE

Planktolyngbya	5	0	243	3.8	0.00092
Synechococcales small (iauv <20)	34560	0	1677181	5.25	8.80520

DINOPHYCEAE

Dinoflagellates	0	3	6	20000	0.11647
Gymnodiniales	4	0	194	2000	0.38824
Gymnodiniales (small)	4	0	194	500	0.09706
Peridinales	1	0	49	5000	0.24265

OTHER PHYTOPLANKTON

Other small flagellates	13	0	631	80	0.05047
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TOTAL BGA	1677424	8.80612
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1693597	10.68762

ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Kirsten Mudie (signatory)*
Biologist

DATE: **04/12/2020**

METHOD NO.: MB010/MW024VCA

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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.