

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6622176 20-32670
LOCALITY :	EM2011705_008
SITE :	McGrath Flat
SAMPLE :	Surface
DATE SAMPLED :	7/07/2020
DATE ANALYSED :	13/07/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with small BGA and greens dominating the sample. Water quality will be impaired and this water may pose a health concern e.g. skin/gastric irritations.

Sedgewick-Rafter Vol.(ml)	1.0291	Toxicogenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)
Concentration	1 : 1	*	20	500	
Magnification					
Fields					

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	49
<i>Chaetoceros</i>		99	0	4810
<i>Entomoneis</i>		0	1	2
<i>Navicula</i>		5	0	243
<i>Nitzschia</i>		10	0	486
<i>Pennales</i>		2	0	97
<i>Pennales (small <20um)</i>		9	0	437
<i>Pleurosigma</i>		0	3	6

CHLOROPHYCEAE

<i>Chlamydomonads</i>		390	0	18949
<i>Chlorococcoids</i>		2080	0	101059
<i>Monoraphidium</i>		320	0	15548

CRYPTOPHYCEAE

<i>Cryptomonads</i>		14	0	680
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CYANOPHYCEAE

<i>Leptolyngbya</i>		18	0	875
<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	0	159	309
<i>Planktolyngbya</i>		120	0	5830
<i>Synechococcales small (iauv <20)</i>		6420	0	311923

DINOPHYCEAE

<i>Gymnodiniales</i>		6	0	292
<i>Gymnodiniales (small)</i>		6	0	292
<i>Peridinales</i>		1	0	49

OTHER PHYTOPLANKTON

<i>Prasinophytes</i>		3	0	146
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **13/07/2020**

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Sedgewick-Rafter Vol.(ml)	1.0291	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)
Concentration	1 : 1		20	500	
Magnification		*			
Fields					

TOTAL BGA	318937
TOTAL TOXIGENIC BGA	0
TOTAL POTENTIALLY TOXIC BGA	309
TOTAL ALGAE	462082

+ The comments are discretionary and are for the purpose of helping to understand WQ implications. The comments are not accredited by NATA.

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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Biologist

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