

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6956311 21-18638
LOCALITY :	WM2106129-008
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	7/04/2021
DATE ANALYSED :	14/04/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse range of algae was observed. Water quality is likely to be affected, health concerns may be warranted.

Sedgewick-Rafter Vol.(ml)	1.0099	Toxicogenic (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>		6	0	297	500	0.14853
<i>Centrales</i>		1	0	50	200	0.00990
<i>Cocconeis</i>		1	0	50	450	0.02228
<i>Entomoneis</i>		1	0	50	1000	0.04951
<i>Naviculales</i>		4	0	198	1400	0.27726
<i>Nitzschia</i>		1	0	50	400	0.01980
<i>Pennales</i>		9	0	446	300	0.13368
<i>Pennales (small <20um)</i>		28	0	1386	251	0.34796

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		84	0	4159	132	0.54897
<i>Chlorococcoids (<10um)</i>		460	0	22775	60	1.36647

CRYPTOPHYCEAE

<i>Cryptomonads</i>		5	0	248	320	0.07922
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CYANOPHYCEAE

<i>Planktolyngbya</i>		23	0	1139	3.8	0.00433
<i>Pseudanabaena</i>		0	15	30	12.5	0.00037
<i>Synechococcales small (iauv <20)</i>		6500	0	321814	5.25	1.68952

DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	50	20000	0.99020
<i>Gymnodiniales (small)</i>		2	0	99	500	0.04951

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		20	0	990	80	0.07922
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ANALYST: **Kirsten Mudie (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **15/04/2021**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0099	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1		- 200x	- 100x			
Magnification		*	20	500			
Fields							

TOTAL BGA	322983	1.69422
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	353831	5.81671

+ 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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