

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241905 21-55807
LOCALITY :	EM2123012-006
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	17/11/2021
DATE ANALYSED :	23/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + High levels of low biovolume BGA may mildly impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0333	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>Chaetoceros</i>	8	0	387	200	0.07742
<i>Pennales (small <20um)</i>	15	0	726	251	0.18218

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	44	0	2129	132	0.28104
<i>Chlorococcoids (<10um)</i>	140	0	6774	60	0.40646

CRYPTOPHYCEAE

<i>Cryptomonads</i>	1	0	48	320	0.01548
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CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>	6680	0	323236	5.25	1.69699
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DINOPHYCEAE

<i>Gymnodiniales</i>	1	0	48	2000	0.09678
<i>Gymnodiniales (small)</i>	3	0	145	500	0.07258

OTHER PHYTOPLANKTON

<i>Other flagellates</i>	0	2	4	90	0.00035
<i>Other small flagellates</i>	25	0	1210	80	0.09678

TOTAL BGA	323236	1.69699
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	334707	2.92607

+ 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.

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

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

DATE: **23/11/2021**

METHOD NO.: MB010/MW024VCA

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