

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	187811 22-45580
LOCALITY :	EM2209350-007
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	18/05/2022
DATE ANALYSED :	24/05/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa were observed. Current levels are likely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0272	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

Amphora		1	0	49	500	0.02434
Naviculales		9	0	438	1400	0.61332
Pennales		21	0	1022	300	0.30666
Pennales (small <20um)		6	0	292	251	0.07331
Pleurosigma		0	1	2	2000	0.00389

### CHLOROPHYCEAE

Ankistrodesmoideae		34	0	1655	132	0.21846
Chlorococcoids (<10um)		93	0	4527	60	0.27161
Monoraphidium (small)		136	0	6620	16	0.10592

### CRYPTOPHYCEAE

Cryptomonads		1	0	49	320	0.01558
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### CYANOPHYCEAE

Synechococcales small (iauv <20)		1080	0	52570	5.25	0.27599
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### OTHER PHYTOPLANKTON

Prasinophytes		260	0	12656	100	1.26558
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TOTAL BGA	52570	0.27599
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	79880	3.17465

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

ANALYST: **Adam Deliyannis (signatory)**  
Biologist

REVIEWED: **Louise Ungemach (signatory)**  
Biologist

DATE: **25/05/2022**

METHOD NO.: MB010/MW024VCA

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