

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7064973 21-32332
LOCALITY :	EM2112381-018
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	5/07/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Current levels are may impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0327	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

Naviculales	0	1	2	1400	0.00271
Pennales	2	0	97	300	0.02905

### CHLOROPHYCEAE

Ankistrodesmoideae	13	0	629	132	0.08308
Chlorococcoids (<10um)	212	0	10264	60	0.61586

### CYANOPHYCEAE

Synechococcales small (iauv <20)	2720	0	131694	5.25	0.69139
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### DINOPHYCEAE

Dinoflagellates	1	0	48	20000	0.96834
Gymnodiniales	3	0	145	2000	0.29050
Gymnodiniales (small)	14	0	678	500	0.33892

### OTHER PHYTOPLANKTON

Other small flagellates	27	0	1307	80	0.10458
Prasinophytes	40	0	1937	100	0.19367

TOTAL BGA	131694	0.69139
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	146801	3.31810

+ 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 Deliyiannis**  
Biologist

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

DATE: **05/07/2021**

METHOD NO.: MB010/MW024VCA

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