

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7366802 22-11365
LOCALITY :	EM2203091-008
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	22/02/2022
DATE ANALYSED :	28/02/2022
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0046	Toxicogenic (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							

### BACILLARIOPHYCEAE

Centrales		1	0	50	200	0.00995
Chaetoceros		1	0	50	200	0.00995
Pennales		7	0	348	300	0.10452
Pennales (small <20um)		4	0	199	251	0.04997

### CHLOROPHYCEAE

Chlorococcoids (<10um)		102	0	5077	60	0.30460
Oocystis		2	0	100	300	0.02986

### CRYPTOPHYCEAE

Cryptomonads		2	0	100	320	0.03185
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### CYANOPHYCEAE

Synechococcales small (iauv <20)		2800	0	139359	5.25	0.73163
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### DINOPHYCEAE

Dinoflagellates		1	0	50	20000	0.99542
Gymnodiniales		1	0	50	2000	0.09954
Gymnodiniales (small)		2	0	100	500	0.04977

### OTHER PHYTOPLANKTON

Other small flagellates		10	0	498	80	0.03982
Raphidophytes		3	0	149	7000	1.04519

TOTAL BGA	139359	0.73163
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	146130	3.50209

ANALYST: Adam Deliyannis (signatory) REVIEWED: Louise Ungemach (signatory)  
Biologist Biologist

DATE: 01/03/2022

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

DATE: **01/03/2022**