

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7394980 22-15545
LOCALITY :	EM2204816-008
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	16/03/2022
DATE ANALYSED :	25/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + Current levels will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0242	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	49	200	0.00976
Entomoneis		1	0	49	1000	0.04882
Gyrosigma		0	2	4	1400	0.00547
Naviculales		1	0	49	1400	0.06835
Nitzschia		67	0	3271	400	1.30834
Pennales		6	0	293	300	0.08787
Pennales (small <20um)		7	0	342	251	0.08577

CHLOROPHYCEAE

Ankistrodesmoideae		55	0	2685	132	0.35442
Carteria		2	0	98	300	0.02929
Chlorococcoids (<10um)		920	0	44913	60	2.69479
Monoraphidium (small)		1	0	49	16	0.00078

CYANOPHYCEAE

Pseudanabaena		4	0	195	12.5	0.00244
Synechococcales small (iauv <20)		6260	0	305604	5.25	1.60442

DINOPHYCEAE

Dinoflagellates		0	1	2	20000	0.03905
Gymnodiniales		6	0	293	2000	0.58582
Gymnodiniales (small)		7	0	342	500	0.17087
Peridinales		1	0	49	5000	0.24409

OTHER PHYTOPLANKTON

Other small flagellates		5	0	244	80	0.01953
Prasinophytes		3	0	146	100	0.01465

ANALYST: *Adam Deliyannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)*
Biologist Biologist

DATE: **25/03/2022**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0242	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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Fields							

TOTAL BGA	305799	1.60686
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	358677	7.37454

+ 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: *Adam Deliyannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)*
Biologist Biologist

DATE: 25/03/2022