

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7791227 22-70934
LOCALITY :	EM2218950-006
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	28/09/2022
DATE ANALYSED :	7/10/2022
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0237	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

Centrales		1	0	49	200	0.00977
Chaetoceros		21	0	1026	200	0.20514
Naviculales		0	1	2	1400	0.00274
Pennales		0	1	2	300	0.00059
Pennales (small <20um)		1	0	49	251	0.01226

CHLOROPHYCEAE

Chlorococcoids (<10um)		605	0	29550	60	1.77298
Monoraphidium (small)		10	0	488	16	0.00781

CYANOPHYCEAE

Chroococcus (small cells)		2	0	98	12	0.00117
Planktolyngbya		80	0	3907	3.8	0.01485
Synechococcales small (iauv <20)		4160	0	203185	5.25	1.06672

DINOPHYCEAE

Gymnodiniales		3	0	147	2000	0.29305
Gymnodiniales (small)		3	0	147	500	0.07326

OTHER PHYTOPLANKTON

Other small flagellates		190	0	9280	80	0.74241
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TOTAL BGA	207190	1.08274
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	247930	4.20274

ANALYST: *Adam Deliyannis (signatory)* REVIEWED: *Natalie Alabaster*
Biologist Biologist

DATE: **07/10/2022**

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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 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: **Natalie Alabaster**
Biologist Biologist

DATE: **07/10/2022**

METHOD NO.: MB010/MW024VCA

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