

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7609352 22-60563
LOCALITY :	EM2215130-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	8/08/2022
DATE ANALYSED :	12/08/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed, but current combined levels are unlikely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0578	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	47	200	0.00945
Centrales - (5-10um)	1	0	47	80	0.00378
Pennales (small <20um)	6	0	284	251	0.07119

CHLOROPHYCEAE

Chlorococcoids (<10um)	15	0	709	60	0.04254
Crucigenia	24	0	1134	30	0.03403
Didymocystis	4	0	189	41	0.00775
Monoraphidium (small)	6	0	284	16	0.00454
Monoraphidium (large)	0	5	9	400	0.00378
Planctonema	24	0	1134	800	0.90754
Scenedesmus	10	0	473	250	0.11817

CRYPTOPHYCEAE

Cryptomonads	2	0	95	320	0.03025
Cryptomonas	0	1	2	320	0.00061

CYANOPHYCEAE

Limnolyngbya	16	0	756	4.9	0.00371
Planktolyngbya	60	0	2836	3.8	0.01078
Synechococcales small (iauv <20)	32	0	1513	5.25	0.00794

DINOPHYCEAE

Dinoflagellates	0	2	4	20000	0.07563
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TOTAL BGA	5105	0.02242
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	9516	1.33169

ANALYST: **Karen Simonsen (signatory)**
Biologist

REVIEWED: **Adam Deliyiannis (signatory)**
Biologist

DATE: **12/08/2022**

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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.

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