

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7428769 22-19601
LOCALITY :	EM2207234-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	20/04/2022
DATE ANALYSED :	26/04/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + Current algal levels are unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0145	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	0.00986
Nitzschia		2	0	99	400	0.03943
Pennales		1	0	49	300	0.01479

CHLOROPHYCEAE

Chlorococcoids (<10um)		38	0	1873	60	0.11237
Crucigenia		16	0	789	30	0.02366
Dictyosphaerium		26	0	1281	20	0.02563
Didymocystis		2	0	99	41	0.00404
Dimorphococcus		24	0	1183	20	0.02366
Elakatothrix		0	2	4	45	0.00018
Lagerheimia		7	0	345	500	0.17250
Monoraphidium (small)		60	0	2957	16	0.04731
Monoraphidium (large)		0	3	6	400	0.00237
Oocystis		16	0	789	300	0.23657
Pediastrum		2	0	99	60	0.00591
Planctonema		40	0	1971	800	1.57713
Scenedesmus		11	0	542	250	0.13553
Staurastrum		1	0	49	2000	0.09857
Tetraedron		2	0	99	150	0.01479
Tetrastrum		4	0	197	40	0.00789

CRYPTOPHYCEAE

Cryptomonads		6	0	296	320	0.09463
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CYANOPHYCEAE

Cuspidothrix issatschenkoi		26	0	1281	57	0.07304
Limnolyngbya (Planktolynbya circumcreta)		22	0	1084	4.9	0.00531

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

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

DATE: **26/04/2022**

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Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0145 1 : 1	Toxigenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
<i>Planktolyngbya</i>			420	0	20700	3.8	0.07866
<i>Romeria</i>			18	0	887	31	0.02750
<i>Synechococcales</i> small (iauv <20)			285	0	14046	5.25	0.07374
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			4	0	197	80	0.01577
TOTAL BGA			37998		0.25826		
TOTAL TOXIGENIC BGA			0		0.00000		
TOTAL POTENTIALLY TOXIC BGA			0		0.00000		
TOTAL ALGAE			50971		2.92083		

+ 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.