

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484476 22-53363
LOCALITY :	EM2212384-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with current levels unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0274	Toxigenic (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

<i>Asterionellopsis</i>	0	32	62	500	0.03115
<i>Centrales</i>	6	0	292	200	0.05840
<i>Pennales</i>	2	0	97	300	0.02920

CHLOROPHYCEAE

<i>Ankistrodesmus</i>	3	0	146	132	0.01927
<i>Chlamydomonads</i>	1	0	49	250	0.01217
<i>Chlorococcoids (<10um)</i>	15	0	730	60	0.04380
<i>Colonial green (cells)</i>	0	70	136	100	0.01363
<i>Crucigenia</i>	40	0	1947	30	0.05840
<i>Dictyosphaerium</i>	12	0	584	20	0.01168
<i>Didymocystis</i>	2	0	97	41	0.00399
<i>Lagerheimia</i>	2	0	97	500	0.04867
<i>Monoraphidium (small)</i>	14	0	681	16	0.01090
<i>Monoraphidium (large)</i>	1	0	49	400	0.01947
<i>Oocystis</i>	18	0	876	300	0.26280
<i>Planctonema</i>	16	0	779	800	0.62293
<i>Scenedesmus</i>	10	0	487	250	0.12167
<i>Schroederia</i>	1	0	49	550	0.02677

CRYPTOPHYCEAE

<i>Cryptomonads</i>	3	0	146	320	0.04672
---------------------	---	---	-----	-----	---------

CYANOPHYCEAE

<i>Limnolyngbya</i>	39	0	1898	4.9	0.00930
<i>Planktolyngbya</i>	73	0	3553	3.8	0.01350
<i>Synechococcales small (iauv <20)</i>	9	0	438	5.25	0.00230

OTHER PHYTOPLANKTON

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

REVIEWED: **Natalie Alabaster**
Biologist

DATE: **07/07/2022**

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484476 22-53363
LOCALITY :	EM2212384-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with current levels unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0274 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)
Other small flagellates			3	0	146	80	0.01168
TOTAL BGA					5889		0.02510
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					13339		1.47838

+ 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.