

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6933874 21-15798
LOCALITY :	EM2104707_011
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	18/03/2021
DATE ANALYSED :	22/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA most numerous. Water quality is unlikely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0169	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

<i>Pennales</i>		1	0	49	300	0.01475
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CHLOROPHYCEAE

<i>Chlamydomonads</i>		1	0	49	250	0.01229
<i>Chlorococcoids (<10um)</i>		15	0	738	60	0.04425
<i>Crucigenia</i>		16	0	787	30	0.02360
<i>Hyaloraphidium</i>		1	0	49	750	0.03688
<i>Lagerheimia</i>		1	0	49	500	0.02458
<i>Oocystis</i>		12	0	590	300	0.17701
<i>Planctonema</i>		54	0	2655	800	2.12410
<i>Scenedesmus</i>		4	0	197	250	0.04917
<i>Selenastrum</i>		3	0	148	250	0.03688

CRYPTOPHYCEAE

<i>Cryptomonads</i>		6	0	295	320	0.09440
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CYANOPHYCEAE

<i>Aphanizomenonaceae family - straight</i>	P	0	51	100	67	0.00672
<i>Planktolyngbya</i>		39	0	1918	3.8	0.00729
<i>Synechococcales small (iauv <20)</i>		752	0	36975	5.25	0.19412

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		15	0	738	80	0.05900
<i>Prasinophytes</i>		1	0	49	100	0.00492

TOTAL BGA	38993	0.20813
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	100	0.00672
TOTAL ALGAE	45386	2.90997

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **23/03/2021**

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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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DATE: **23/03/2021**

METHOD NO.: MB010/MW024VCA

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