

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7281150 21-59669
LOCALITY :	EM2125413-009
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	13/12/2021
DATE ANALYSED :	20/12/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of small BGA will impair water quality and may pose a health risk.

Sedgewick-Rafter Vol.(ml)	1.0105	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>Asterionellopsis</i>		2	0	99	500	0.04948
<i>Pennales</i>		24	0	1188	300	0.35626

CHLOROPHYCEAE

<i>Chlorococcoids (<10um)</i>		800	0	39584	60	2.37506
<i>Colonial green (cells)</i>		26	0	1286	100	0.12865
<i>Crucigenia</i>		64	0	3167	30	0.09500
<i>Dictyosphaerium</i>		144	0	7125	20	0.14250
<i>Elakatothrix</i>		0	2	4	45	0.00018
<i>Lagerheimia</i>		8	0	396	500	0.19792
<i>Monoraphidium (small)</i>		68	0	3365	16	0.05383
<i>Monoraphidium (large)</i>		1	0	49	400	0.01979
<i>Nephrocystium</i>		1	0	49	200	0.00990
<i>Oocystis</i>		80	0	3958	300	1.18753
<i>Planctonema</i>		80	0	3958	800	3.16675
<i>Scenedesmus</i>		20	0	990	250	0.24740
<i>Schroederia</i>		1	0	49	550	0.02721
<i>Tetraedron</i>		1	0	49	150	0.00742
<i>Tetrastrum</i>		16	0	792	40	0.03167

CRYPTOPHYCEAE

<i>Cryptomonads</i>		52	0	2573	320	0.82335
---------------------	--	----	---	------	-----	---------

CYANOPHYCEAE

<i>Limnolyngbya (Planktolyngbya circumcreta)</i>		584	0	28897	4.9	0.14159
<i>Planktolyngbya</i>		1612	0	79762	3.8	0.30310
<i>Romeria</i>		16	0	792	31	0.02454
<i>Synechococcales small (iauv <20)</i>		3128	0	154775	5.25	0.81257

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

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

DATE: **22/12/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7281150 21-59669
LOCALITY :	EM2125413-009
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	13/12/2021
DATE ANALYSED :	20/12/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of small BGA will impair water quality and may pose a health risk.

Sedgewick-Rafter Vol.(ml)	1.0105	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							

TOTAL BGA	264226	1.28180
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	332907	10.20172

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

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

DATE: **22/12/2021**

METHOD NO.: MB010/MW024VCA

Page 2 of 2