

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695249 20-42534
LOCALITY :	EM2015594_001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	9/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed. Current levels are unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0208	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>Centrales</i>		1	0	49	200	0.00980
<i>Chaetoceros</i>		0	2	4	200	0.00078
<i>Naviculales</i>		1	0	49	1400	0.06857
<i>Nitzschia</i>		1	0	49	400	0.01959
<i>Pennales</i>		1	0	49	300	0.01469
<i>Pennales (small <20um)</i>		1	0	49	251	0.01229

CHLOROPHYCEAE

<i>Ankistrodesmus</i>		5	0	245	132	0.03233
<i>Chlamydomonads</i>		4	0	196	250	0.04898
<i>Chlorococcoids (<10um)</i>		22	0	1078	60	0.06466
<i>Closterium</i>		0	3	6	4130	0.02428
<i>Crucigenia</i>		160	0	7837	30	0.23511
<i>Dictyosphaerium</i>		44	0	2155	20	0.04310
<i>Didymocystis</i>		4	0	196	41	0.00803
<i>Dimorphococcus</i>		4	0	196	20	0.00392
<i>Eremosphaera</i>		0	5	10	700	0.00686
<i>Hyaloraphidium</i>		3	0	147	750	0.11021
<i>Lagerheimia</i>		4	0	196	500	0.09796
<i>Monoraphidium</i>		0	1	2	900	0.00176
<i>Oocystis</i>		292	0	14303	300	4.29075
<i>Pediastrum</i>		8	0	392	60	0.02351
<i>Planctonema</i>		120	0	5878	800	4.70219
<i>Scenedesmus</i>		9	0	441	250	0.11021
<i>Selenastrum</i>		3	0	147	250	0.03674
<i>Staurastrum</i>		0	1	2	2000	0.00392

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV

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Fields							
<i>Tetraedron</i>			1	0	49	150	0.00735
CRYPTOPHYCEAE							
<i>Cryptomonads</i>			84	0	4114	320	1.31661
CYANOPHYCEAE							
<i>Limnolyngbya (Planktolyngbya circumcreta)</i>			40	0	1959	4.9	0.00960
<i>Planktolyngbya</i>			41	0	2008	3.8	0.00763
<i>Pseudanabaena</i>			0	36	71	12.5	0.00088
<i>Romeria</i>			6	0	294	31	0.00911
<i>Synechococcales small (iauv <20)</i>			442	0	21650	5.25	0.11366
DINOPHYCEAE							
<i>Gymnodiniales</i>			1	0	49	2000	0.09796
OTHER PHYTOPLANKTON							
<i>Other small flagellates</i>			7	0	343	80	0.02743
TOTAL BGA					25982		0.14088
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					64213		11.56049

+ 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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