

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873983 21-07778
LOCALITY :	EM2101680_001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0018	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 - (5-10um)		3	0	150	80	0.01198
Naviculales		1	0	50	1400	0.06987
Rhizosolenia		0	4	8	500	0.00399

### CHLOROPHYCEAE

Chlorococcoids (<10um)		25	0	1248	60	0.07487
Crucigenia		4	0	200	30	0.00599
Lagerheimia		3	0	150	500	0.07487
Oocystis		4	0	200	300	0.05989
Planctonema		4	0	200	800	0.15971
Scenedesmus		0	4	8	250	0.00200
Staurastrum		1	0	50	2000	0.09982

### CRYPTOPHYCEAE

Cryptomonads		1	0	50	320	0.01597
--------------	--	---	---	----	-----	---------

### CYANOPHYCEAE

Limnolyngbya (Planktolyngbya circumcreta)		4	0	200	4.9	0.00098
Planktolyngbya		14	0	699	3.8	0.00266
Synechococcales small (iauv <20)		14	0	699	5.25	0.00367
Trichodesmium		0	31	62	84	0.00520

### DINOPHYCEAE

Gymnodiniales (small)		1	0	50	500	0.02496
-----------------------	--	---	---	----	-----	---------

### EUGLENOPHYCEAE

Euglena		4	0	200	7000	1.39748
---------	--	---	---	-----	------	---------

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

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **09/02/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873983 21-07778
LOCALITY :	EM2101680_001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0018	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	1660	0.01250
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	4224	2.01390

+ 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  $\beta$ -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 Deliyiannis**  
Biologist

DATE: **09/02/2021**

METHOD NO.: MB010/MW024VCA

Page 2 of 2