ALS Water
22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7218532 21-52583
LOCALITY :	EM2121437-009
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	26/10/2021
DATE ANALYSED :	9/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed with excessive levels of small BGA sufficient to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.036 **Concentration** 1 : 1 **Magnification** **Fields**	**Toxigenic (T) or Potentially toxic (P)** *	- 200x 20	- 100x 500	**Total Cell Count (cells/mL)**	**Individual Algal Unit Volume (um3)**	**Total Biovolume (mm3/L)**
BACILLARIOPHYCEAE						
Centrales		3	0	145	200	0.02896
Pennales		1	0	48	300	0.01448
Pennales (small <20um)		1	0	48	251	0.01211
CHLOROPHYCEAE						
Ankyra		0	1	2	40	0.00008
Botryococcus		0	115	222	98	0.02176
Chlorococcoids (<10um)		44	0	2124	60	0.12741
Closterium		2	0	97	4130	0.39865
Colonial green (cells)		22	0	1062	100	0.10618
Crucigenia		216	0	10425	30	0.31274
Dictyosphaerium		28	0	1351	20	0.02703
Didymocystis		8	0	386	41	0.01583
Dimorphococcus		24	0	1158	20	0.02317
Lagerheimia		4	0	193	500	0.09653
Monoraphidium		37	0	1786	900	1.60714
Oocystis		38	0	1834	300	0.55019
Pediastrum		8	0	386	60	0.02317
Planctonema		84	0	4054	800	3.24324
Scenedesmus		49	0	2365	250	0.59122
Sphaerocystis		12	0	579	300	0.17375
Tetraedron		3	0	145	150	0.02172
Tetrastrum		11	0	531	40	0.02124
CRYPTOPHYCEAE						
Cryptomonads		6	0	290	320	0.09266
CYANOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **10/11/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Limnolyngbya (Planktolyngbya circumcreta)		916	0	44208	4.9	0.21662
Planktolyngbya		1204	0	58108	3.8	0.22081
Synechococcales small (iauv <20)		7800	0	376448	5.25	1.97635

TOTAL BGA	**478764**	**2.41378**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**507995**	**9.92302**

+ 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)*** REVIEWED: ***Adam Deliyiannis*** DATE: **10/11/2021**
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