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. :	7394973 22-15545
LOCALITY :	EM2204816-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	16/03/2022
DATE ANALYSED :	24/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed. Current algal levels may mildly influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0311 **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	0.02910
Pennales		2	0	97	300	0.02910
Urosolenia		1	0	48	966	0.04684
CHLOROPHYCEAE						
Chlamydomonads		1	0	48	250	0.01212
Chlorococcoids (<10um)		48	0	2328	60	0.13966
Crucigenia		44	0	2134	30	0.06401
Lagerheimia		3	0	145	500	0.07274
Monoraphidium (small)		46	0	2231	16	0.03569
Monoraphidium (large)		1	0	48	400	0.01940
Oocystis		4	0	194	300	0.05819
Pediastrum		8	0	388	60	0.02328
Planctonema		68	0	3297	800	2.63796
Scenedesmus		4	0	194	250	0.04849
Tetraedron		2	0	97	150	0.01455
Tetrastrum		12	0	582	40	0.02328
CHRYSOPHYCEAE						
Other Chrysophytes		1	0	48	200	0.00970
CRYPTOPHYCEAE						
Cryptomonads		2	0	97	320	0.03103
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	36	0	1746	67	0.11696
Limnolyngbya		284	0	13772	4.9	0.06748
Planktolyngbya		792	0	38406	3.8	0.14594
Pseudanabaena		19	0	921	12.5	0.01152

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis (signatory)* DATE: **25/03/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Romeria		14	0	679	31	0.02105
Synechococcales small (iauv <20)		22	0	1067	5.25	0.00560
EUGLENOPHYCEAE						
Trachelomonas		0	1	2	3000	0.00582

TOTAL BGA	**56591**	**0.36855**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**1746**	**0.11696**
TOTAL ALGAE	**68714**	**3.66949**

+ 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 (signatory)*** DATE: **25/03/2022**
Biologist **Biologist**

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