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. :	7548884 22-57206
LOCALITY :	EM2213882-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	20/07/2022
DATE ANALYSED :	26/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with current levels unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0199 **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						
Aulacoseira		3	0	147	2860	0.42063
Centrales		92	0	4510	200	0.90205
Naviculales		1	0	49	1400	0.06863
Pennales		2	0	98	300	0.02941
Pennales (small <20um)		26	0	1275	251	0.31993
CHLOROPHYCEAE						
Chlorococcoids (<10um)		224	0	10981	60	0.65889
Closterium		1	0	49	4130	0.20247
Crucigenia		72	0	3530	30	0.10589
Dictyosphaerium		82	0	4020	20	0.08040
Didymocystis		8	0	392	41	0.01608
Lagerheimia		6	0	294	500	0.14707
Monoraphidium (small)		44	0	2157	16	0.03451
Monoraphidium (large)		2	0	98	400	0.03922
Oocystis		72	0	3530	300	1.05893
Pediastrum		4	0	196	60	0.01177
Planctonema		106	0	5197	800	4.15727
Scenedesmus		34	0	1667	250	0.41671
Staurastrum		1	0	49	2000	0.09805
Tetraedron		8	0	392	150	0.05883
Tetrastrum		24	0	1177	40	0.04706
CHRYSOPHYCEAE						
Other Chrysophyceae		6	0	294	350	0.10295
CRYPTOPHYCEAE						
Cryptomonads		14	0	686	320	0.21963

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis (signatory)* DATE: **26/07/2022**

Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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CYANOPHYCEAE						
Limnolyngbya		856	0	41965	4.9	0.20563
Planktolyngbya		180	0	8824	3.8	0.03353
Synechococcales small (iauv <20)		40	0	1961	5.25	0.01030
EUGLENOPHYCEAE						
Trachelomonas		0	1	2	3000	0.00588

TOTAL BGA	**52750**	**0.24946**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**93540**	**9.45173**

+ 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: **26/07/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA