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. :	6796585 20-56146
LOCALITY :	EM2021368_010
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	30/11/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml) 1.0274 **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						
Nitzschia		0	1	2	400	0.00078
CHLOROPHYCEAE						
Ankistrodesmus		3	0	146	132	0.01927
Botryococcus		0	260	506	98	0.04960
Chlamydomonads		3	0	146	250	0.03650
Chlorococcoids (<10um)		12	0	584	60	0.03504
Colonial green (cells)		8	0	389	100	0.03893
Crucigenia		28	0	1363	30	0.04088
Didymocystis		2	0	97	41	0.00399
Golenkinia		1	0	49	400	0.01947
Hyaloraphidium		1	0	49	750	0.03650
Lagerheimia		1	0	49	500	0.02433
Monoraphidium		0	4	8	900	0.00701
Oocystis		35	0	1703	300	0.51100
Planctonema		128	0	6229	800	4.98345
Scenedesmus		2	0	97	250	0.02433
Schroederia		1	0	49	550	0.02677
Selenastrum		3	0	146	250	0.03650
Staurastrum		0	1	2	2000	0.00389
CRYPTOPHYCEAE						
Cryptomonads		3	0	146	320	0.04672
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		9	0	438	4.9	0.00215
Planktolyngbya		70	0	3407	3.8	0.01295
Synechococcales small (iauv <20)		1036	0	50419	5.25	0.26470

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **04/12/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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DINOPHYCEAE						
Gymnodiniales (small)		1	0	49	500	0.02433
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01363
OTHER PHYTOPLANKTON						
Other small flagellates		4	0	195	80	0.01557

TOTAL BGA	**54264**	**0.27979**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**66270**	**6.27829**

+ 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)* **Biologist**

REVIEWED: *Adam Deliyiannis* **Biologist**

DATE: **04/12/2020**

METHOD NO.: MB010/MW024VCA