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. :	6781610 20-54272
LOCALITY :	EM2020558_001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	17/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are are unlikely to impact on water quality.

Sedgewick-Rafter Vol.(ml) 1.0744 **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						
Asterionellopsis		0	16	30	500	0.01489
Nitzschia		1	0	47	400	0.01862
Pennales		0	1	2	300	0.00056
Pennales (small <20um)		2	0	93	251	0.02336
CHLOROPHYCEAE						
Ankistrodesmoideae		3	0	140	132	0.01843
Chlamydomonads		2	0	93	250	0.02327
Chlorococcoids (<10um)		8	0	372	60	0.02234
Crucigenia		8	0	372	30	0.01117
Dictyosphaerium		4	0	186	20	0.00372
Didymocystis		0	2	4	41	0.00015
Lagerheimia		1	0	47	500	0.02327
Oocystis		13	0	605	300	0.18150
Planctonema		39	0	1815	800	1.45197
Selenastrum		2	0	93	250	0.02327
CRYPTOPHYCEAE						
Cryptomonads		1	0	47	320	0.01489
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		0	22	41	4.9	0.00020
Oscillatoriales (iauv 1-100)	P	0	18	34	60.8	0.00204
Planktolyngbya		20	0	931	3.8	0.00354
Synechococcales small (iauv <20)		30	0	1396	5.25	0.00733
DINOPHYCEAE						
Dinoflagellates		0	2	4	20000	0.07446
Gymnodiniales		1	0	47	2000	0.09308

ANALYST: *Adam Deliyiannis* **Biologist**

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

DATE: **23/11/2020**

METHOD NO.: MB010/MW024VCA

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EUGLENOPHYCEAE						
Eutreptia		0	3	6	1000	0.00558
OTHER PHYTOPLANKTON						
Other small flagellates		2	0	93	80	0.00745
Prasinophytes		4	0	186	100	0.01862

TOTAL BGA	**2402**	**0.01310**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**34**	**0.00204**
TOTAL ALGAE	**6684**	**2.04369**

+ 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: *Adam Deliyiannis* **Biologist**

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

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