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. :	6906822 21-12031
LOCALITY :	EM2103113-011
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	24/02/2021
DATE ANALYSED :	1/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. The presence of toxigenic taxa should be noted. Curret levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0333 **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	0.00077
Pennales		1	0	48	300	0.01452
CHLOROPHYCEAE						
Ankistrodesmus		2	0	97	132	0.01277
Chlorococcoids (<10um)		26	0	1258	60	0.07549
Crucigenia		4	0	194	30	0.00581
Elakatothrix		1	0	48	45	0.00218
Hyaloraphidium		0	1	2	750	0.00145
Lagerheimia		1	0	48	500	0.02419
Monoraphidium		0	1	2	900	0.00174
Oocystis		6	0	290	300	0.08710
Planctonema		6	0	290	800	0.23227
Scenedesmus		4	0	194	250	0.04839
Staurastrum		1	0	48	2000	0.09678
Tetraedron		1	0	48	150	0.00726
CHRYSOPHYCEAE						
Other Chrysophyceae		2	0	97	350	0.03387
CRYPTOPHYCEAE						
Cryptomonads		2	0	97	320	0.03097
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	68	0	3290	67	0.22046
Limnolyngbya (Planktolyngbya circumcreta)		82	0	3968	4.9	0.01944
Planktolyngbya		1820	0	88067	3.8	0.33466
Raphidiopsis raciborskii	T	17	0	823	42	0.03455
Synechococcales small (iauv <20)		247	0	11952	5.25	0.06275

ANALYST: *Adam Deliyiannis* **Biologist**

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

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

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EUGLENOPHYCEAE						
Euglena		1	0	48	7000	0.33872
OTHER PHYTOPLANKTON						
Other small flagellates		16	0	774	80	0.06194
Prasinophytes		1	0	48	100	0.00484

TOTAL BGA	**108100**	**0.67185**
TOTAL TOXIGENIC BGA	**823**	**0.03455**
TOTAL POTENTIALLY TOXIC BGA	**3290**	**0.22046**
TOTAL ALGAE	**111733**	**1.75291**

+ 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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