ALS Water
22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722412 20-45935
LOCALITY :	EM2017172-010
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels of BGA may 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						
Asterionellopsis		0	16	31	500	0.01548
Centrales		2	0	97	200	0.01936
Naviculales		1	0	48	1400	0.06774
Pennales (small <20um)		1	0	48	251	0.01215
CHLOROPHYCEAE						
Ankistrodesmus		4	0	194	132	0.02555
Ankyra		2	0	97	40	0.00387
Chlorococcoids (<10um)		10	0	484	60	0.02903
Closterium		0	4	8	4130	0.03198
Crucigenia		12	0	581	30	0.01742
Dictyosphaerium		4	0	194	20	0.00387
Didymocystis		2	0	97	41	0.00397
Dimorphococcus		8	0	387	20	0.00774
Hyaloraphidium		2	0	97	750	0.07258
Lagerheimia		5	0	242	500	0.12097
Monoraphidium		0	1	2	900	0.00174
Oocystis		92	0	4452	300	1.33553
Planctonema		111	0	5371	800	4.29691
Scenedesmus		4	0	194	250	0.04839
Selenastrum		2	0	97	250	0.02419
CRYPTOPHYCEAE						
Cryptomonads		4	0	194	320	0.06194
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		49	0	2371	4.9	0.01162
Planktolyngbya		80	0	3871	3.8	0.01471

ANALYST: *Adam Deliyiannis* **Biologist**
REVIEWED: *Karen Simonsen (signatory)* **Biologist**
DATE: **08/10/2020**

METHOD NO.: MB010/MW024CV

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Pseudanabaena		0	12	23	12.5	0.00029
Romeria		18	0	871	31	0.02700
Synechococcales small (iauv <20)		1690	0	81777	5.25	0.42933
DINOPHYCEAE						
Gymnodiniales (small)		2	0	97	500	0.04839
OTHER PHYTOPLANKTON						
Other small flagellates		15	0	726	80	0.05807
Prasinophytes		3	0	145	100	0.01452

TOTAL BGA	**88913**	**0.48295**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**102796**	**6.80434**

+ 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: *Karen Simonsen (signatory)* **Biologist**

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