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. :	6750298 20-50047
LOCALITY :	EM2018692_007
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	26/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with low biovolume BGA most numerous. Water quality may be mildly impacted.

Sedgewick-Rafter Vol.(ml) 1.0722 **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						
Centrales		2	0	93	200	0.01865
Nitzschia		0	2	4	400	0.00149
Pennales		1	0	47	300	0.01399
Pennales (small <20um)		1	0	47	251	0.01170
CHLOROPHYCEAE						
Ankistrodesmus		10	0	466	132	0.06156
Ankyra		3	0	140	40	0.00560
Chlamydomonads		2	0	93	250	0.02332
Chlorococcoids (<10um)		140	0	6529	60	0.39172
Closterium		1	0	47	4130	0.19259
Colonial green (cells)		45	0	2098	100	0.20985
Crucigenia		40	0	1865	30	0.05596
Dictyosphaerium		15	0	699	20	0.01399
Didymocystis		8	0	373	41	0.01530
Elakatothrix		0	2	4	45	0.00017
Lagerheimia		2	0	93	500	0.04663
Oocystis		320	0	14923	300	4.47678
Planctonema		350	0	16322	800	13.05727
Scenedesmus		10	0	466	250	0.11658
Selenastrum		3	0	140	250	0.03497
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	47	350	0.01632
CRYPTOPHYCEAE						
Cryptomonads		10	0	466	320	0.14923
CYANOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis* **Biologist** DATE: **27/10/2020**

METHOD NO.: MB010/MW024CV

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Limnolyngbya (Planktolyngbya circumcreta)		24	0	1119	4.9	0.00548
Planktolyngbya		11	0	513	3.8	0.00195
Pseudanabaena		11	0	513	12.5	0.00641
Synechococcales small (iauv <20)		2410	0	112386	5.25	0.59003
DINOPHYCEAE						
Gymnodiniales		0	1	2	2000	0.00373
OTHER PHYTOPLANKTON						
Other small flagellates		5	0	233	80	0.01865
Prasinophytes		1	0	47	100	0.00466

TOTAL BGA	**114531**	**0.60387**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**159775**	**19.54458**

+ 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: **27/10/2020**

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