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. :	7086224 21-35420
LOCALITY :	EM2113768-017
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	14/07/2021
DATE ANALYSED :	19/07/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with small BGA in levels that 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						
Anaulus		0	7	14	500	0.00677
Centrales		1	0	48	200	0.00968
Naviculales		0	2	4	1400	0.00542
Nitzschia		1	0	48	400	0.01936
Pennales		0	3	6	300	0.00174
CHLOROPHYCEAE						
Ankistrodesmus		0	2	4	132	0.00051
Chlorococcoids (<10um)		4	0	194	60	0.01161
Closterium		0	3	6	4130	0.02398
Crucigenia		0	12	23	30	0.00070
Didymocystis		2	0	97	41	0.00397
Lagerheimia		0	1	2	500	0.00097
Monoraphidium		13	0	629	900	0.56615
Oocystis		2	0	97	300	0.02903
Planctonema		33	0	1597	800	1.27746
Scenedesmus		2	0	97	250	0.02419
Staurastrum		0	1	2	2000	0.00387
CRYPTOPHYCEAE						
Cryptomonads		6	0	290	320	0.09291
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	0	4	8	67	0.00052
Limnolyngbya		230	0	11129	4.9	0.05453
Planktolyngbya		352	0	17033	3.8	0.06472
Synechococcales small (iauv <20)		1360	0	65809	5.25	0.34550
EUGLENOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **19/07/2021**

Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Eutreptia		1	0	48	1000	0.04839
OTHER PHYTOPLANKTON						
Other filaments (cells)		0	4	8	400	0.00310

TOTAL BGA	**93979**	**0.46527**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**8**	**0.00052**
TOTAL ALGAE	**97193**	**2.59508**

+ 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)* REVIEWED: *Adam Deliyiannis* DATE: **19/07/2021**
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