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. :	7116645 21-39298
LOCALITY :	EM2115770-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	10/08/2021
DATE ANALYSED :	13/08/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml) 1.0145 **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						
Fragilariaceae		17	0	838	500	0.41893
Gyrosigma		1	0	49	1400	0.06900
Naviculales		1	0	49	1400	0.06900
Nitzschia		4	0	197	400	0.07886
Pennales (small <20um)		16	0	789	251	0.19793
CHLOROPHYCEAE						
Ankistrodesmoideae		4	0	197	132	0.02602
Chlorococcoids (<10um)		60	0	2957	60	0.17743
Closterium		0	1	2	4130	0.00814
Crucigenia		144	0	7097	30	0.21291
Didymocystis		6	0	296	41	0.01212
Eremosphaera		1	0	49	700	0.03450
Lagerheimia		3	0	148	500	0.07393
Micractinium		1	0	49	30	0.00148
Monoraphidium		24	0	1183	900	1.06456
Nephrocytium		8	0	394	200	0.07886
Oocystis		65	0	3204	300	0.96106
Pediastrum		11	0	542	60	0.03253
Planctonema		179	0	8822	800	7.05766
Scenedesmus		28	0	1380	250	0.34500
CRYPTOPHYCEAE						
Cryptomonads		31	0	1528	320	0.48891
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		1650	0	81321	4.9	0.39847
Oscillatoriales (iauv 1-100)	P	0	161	317	60.8	0.01930

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **16/08/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Oscillatoriales (iauv 201-400)	P	0	78	154	285.3	0.04387
Planktolyngbya		3400	0	167570	3.8	0.63677
Synechococcales small (iauv <20)		2900	0	142928	5.25	0.75037

TOTAL BGA		**392290**	**1.84878**
TOTAL TOXIGENIC BGA		**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA		**471**	**0.06317**
TOTAL ALGAE		**422060**	**13.25761**

+ 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: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **16/08/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA