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. :	7171287 21-46438
LOCALITY :	EM2119079-001
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	23/09/2021
DATE ANALYSED :	28/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with high levels of low biovolume BGA present. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml) 1.0011 **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	100	200	0.01998
Pennales		2	0	100	300	0.02997
CHLOROPHYCEAE						
Ankyra		1	0	50	40	0.00200
Botryococcus		0	130	260	98	0.02545
Chlorococcoids (<10um)		31	0	1548	60	0.09290
Closterium		0	3	6	4130	0.02475
Crucigenia		124	0	6193	30	0.18580
Dictyosphaerium		0	40	80	20	0.00160
Didymocystis		2	0	100	41	0.00410
Dimorphococcus		4	0	200	20	0.00400
Eremosphaera		0	9	18	700	0.01259
Lagerheimia		4	0	200	500	0.09989
Monoraphidium		20	0	999	900	0.89901
Nephrocytium		3	0	150	200	0.02997
Pediastrum		0	8	16	60	0.00096
Planctonema		230	0	11487	800	9.18989
Scenedesmus		8	0	400	250	0.09989
Tetraedron		1	0	50	150	0.00749
Tetrastrum		24	0	1199	40	0.04795
CRYPTOPHYCEAE						
Cryptomonads		2	0	100	320	0.03196
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		592	0	29567	4.9	0.14488
Planktolyngbya		489	0	24423	3.8	0.09281

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis* **Biologist** DATE: **28/09/2021**

METHOD NO.: MB010/MW024VCA

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Synechococcales small (iauv <20)		5460	0	272700	5.25	1.43168

TOTAL BGA	**326690**	**1.66936**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**349946**	**12.47949**

+ 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**

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