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. :	7241908 21-55807
LOCALITY :	EM2123012-009
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	22/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse range of algal taxa was osberved. Current excessive levels of low biovolume BGA will impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0242 **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		5	0	244	200	0.04882
Pennales		1	0	49	300	0.01465
CHLOROPHYCEAE						
Ankistrodesmoideae		1	0	49	132	0.00644
Ankistrodesmus		6	0	293	132	0.03866
Chlorococcoids (<10um)		26	0	1269	60	0.07616
Crucigenia		80	0	3905	30	0.11716
Dictyosphaerium		12	0	586	20	0.01172
Didymocystis		2	0	98	41	0.00400
Filamentous Green		60	0	2929	386	1.13064
Lagerheimia		3	0	146	500	0.07323
Monoraphidium		2	0	98	900	0.08787
Oocystis		26	0	1269	300	0.38079
Pediastrum		0	7	14	60	0.00082
Planctonema		188	0	9178	800	7.34232
Scenedesmus		17	0	830	250	0.20748
Tetraedron		2	0	98	150	0.01465
Tetrastrum		4	0	195	40	0.00781
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		1420	0	69322	4.9	0.33968
Oscillatoriales (iauv 1-100)	P	0	27	53	60.8	0.00321
Planktolyngbya		5400	0	263620	3.8	1.00176
Pseudanabaena		18	0	879	12.5	0.01098
Synechococcales small (iauv <20)		2420	0	118141	5.25	0.62024
OTHER PHYTOPLANKTON						

ANALYST: *Adam Deliyiannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)* DATE: **22/11/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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. :	7241908 21-55807
LOCALITY :	EM2123012-009
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	22/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse range of algal taxa was osberved. Current excessive levels of low biovolume BGA will impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0242 **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)**
Raphidophytes		1	0	49	7000	0.34173

TOTAL BGA	**452015**	**1.97587**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**53**	**0.00321**
TOTAL ALGAE	**473314**	**11.88081**

+ 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 (signatory)* REVIEWED: *Kirsten Mudie (signatory)* DATE: **22/11/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA