22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657128 20-37229
LOCALITY :	EM2013637-010
SITE :	Murray Mouth
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels of low biolvolume BGA may impact on water quality.

Sedgewick-Rafter Vol.(ml) 1.024 **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	2	4	500	0.00195
Asterionellopsis		0	14	27	500	0.01367
Chaetoceros		1	0	49	200	0.00977
Nitzschia		0	2	4	400	0.00156
Pennales		3	0	146	300	0.04395
CHLOROPHYCEAE						
Ankistrodesmus		6	0	293	132	0.03867
Chlamydomonads		1	0	49	250	0.01221
Chlorococcoids (<10um)		38	0	1855	60	0.11133
Closterium		0	4	8	4130	0.03227
Crucigenia		36	0	1758	30	0.05273
Didymocystis		2	0	98	41	0.00400
Filamentous Green		0	45	88	386	0.03393
Hyaloraphidium		9	0	439	750	0.32959
Lagerheimia		2	0	98	500	0.04883
Nephrocytium		2	0	98	200	0.01953
Oocystis		14	0	684	300	0.20508
Pediastrum		0	9	18	60	0.00105
Scenedesmus		14	0	684	250	0.17090
Selenastrum		5	0	244	250	0.06104
Tetraedron		1	0	49	150	0.00732
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	49	350	0.01709
CRYPTOPHYCEAE						
Cryptomonads		8	0	391	320	0.12500

ANALYST: ***Adam Deliyiannis*** **Biologist**

REVIEWED: ***Kirsten Mudie (signatory)*** **Biologist**

DATE: **11/08/2020**

METHOD NO.: MB010/MW024CV

ALS Water
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CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	14	0	684	67	0.04580
Leptolyngbya		0	205	400	2.36	0.00094
Limnolyngbya (Planktolyngbya circumcreta)		1740	0	84961	4.9	0.41631
Planktolyngbya		1420	0	69336	3.8	0.26348
Pseudanabaena		21	0	1025	12.5	0.01282
Synechococcales small (iauv <20)		23000	0	1123047	5.25	5.89600
DINOPHYCEAE						
Gymnodiniales		0	2	4	2000	0.00781
Prorocentrum		0	1	2	3000	0.00586
OTHER PHYTOPLANKTON						
Other small flagellates		9	0	439	80	0.03516
Prasinophytes		7	0	342	100	0.03418

TOTAL BGA	**1279453**	**6.63534**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**684**	**0.04580**
TOTAL ALGAE	**1287373**	**8.05982**

+ 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*** **Biologist**

REVIEWED: ***Kirsten Mudie (signatory)*** **Biologist**

DATE: **11/08/2020**

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