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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657129 20-37229
LOCALITY :	EM2013637_011
SITE :	US Tauwichere
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml) 1.0208 **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		12	0	588	200	0.11755
Cocconeis		0	1	2	450	0.00088
Pennales		1	0	49	300	0.01469
Pennales (small <20um)		1	0	49	251	0.01229
Tabellaria		2	0	98	2000	0.19592
CHLOROPHYCEAE						
Ankistrodesmus		10	0	490	132	0.06466
Botryococcus		0	520	1019	98	0.09984
Chlamydomonads		5	0	245	250	0.06123
Chlorococcoids (<10um)		124	0	6074	60	0.36442
Closterium		1	0	49	4130	0.20229
Crucigenia		124	0	6074	30	0.18221
Dictyosphaerium		32	0	1567	20	0.03135
Didymocystis		6	0	294	41	0.01205
Dimorphococcus		8	0	392	20	0.00784
Elakatothrix		3	0	147	45	0.00661
Eremosphaera		0	9	18	700	0.01234
Hyaloraphidium		64	0	3135	750	2.35110
Lagerheimia		24	0	1176	500	0.58777
Monoraphidium		0	5	10	900	0.00882
Nephrocytium		6	0	294	200	0.05878
Oocystis		104	0	5094	300	1.52821
Pediastrum		32	0	1567	60	0.09404
Planctonema		208	0	10188	800	8.15047
Scenedesmus		46	0	2253	250	0.56328

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **11/08/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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Selenastrum		24	0	1176	250	0.29389
Tetraedron		2	0	98	150	0.01469
Tetrastrum		8	0	392	40	0.01567
CHRYSOPHYCEAE						
Other Chrysophyceae		3	0	147	350	0.05143
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03135
CYANOPHYCEAE						
Cuspidothrix c.f. issatschenkoi		0	28	55	57	0.00313
Leptolyngbya		176	0	8621	2.36	0.02034
Limnolyngbya (Planktolyngbya circumcreta)		800	0	39185	4.9	0.19201
Planktolyngbya		680	0	33307	3.8	0.12657
Romeria		56	0	2743	31	0.08503
Synechococcales small (iauv <20)		5860	0	287030	5.25	1.50691
DINOPHYCEAE						
Gymnodiniales		0	1	2	2000	0.00392
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01371
OTHER PHYTOPLANKTON						
Other small flagellates		1	0	49	80	0.00392

TOTAL BGA	**370941**	**1.93398**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**413777**	**17.09123**

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Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			

+ 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: **11/08/2020**

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