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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6681716 20-40763
LOCALITY :	EM2014780_012
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	26/08/2020
DATE ANALYSED :	31/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with excessive levels of small BGA present. Water quality is likely to be impaired.

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						
Centrales		68	0	3320	200	0.66406
Pennales		0	5	10	300	0.00293
Pennales (small <20um)		1	0	49	251	0.01226
CHLOROPHYCEAE						
Ankistrodesmoideae		28	0	1367	132	0.18047
Botryococcus		0	80	156	98	0.01531
Chlamydomonads		20	0	977	250	0.24414
Chlorococcoids (<10um)		180	0	8789	60	0.52734
Closterium		3	0	146	4130	0.60498
Colonial green (cells)		0	302	590	100	0.05898
Cosmarium		1	0	49	500	0.02441
Crucigenia		320	0	15625	30	0.46875
Dictyosphaerium		98	0	4785	20	0.09570
Didymocystis		8	0	391	41	0.01602
Dimorphococcus		0	80	156	20	0.00313
Elakatothrix		3	0	146	45	0.00659
Eremosphaera		0	14	27	700	0.01914
Hyaloraphidium		12	0	586	750	0.43945
Lagerheimia		11	0	537	500	0.26855
Nephrocytium		1	0	49	200	0.00977
Oocystis		316	0	15430	300	4.62891
Pediastrum		52	0	2539	60	0.15234
Planctonema		224	0	10938	800	8.75000
Scenedesmus		48	0	2344	250	0.58594
Selenastrum		32	0	1563	250	0.39063

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **31/08/2020**

Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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Staurastrum		1	0	49	2000	0.09766
Tetraedron		1	0	49	150	0.00732
Tetrastrum		8	0	391	40	0.01563
CHRYSOPHYCEAE						
Other Chrysophyceae		2	0	98	350	0.03418
CRYPTOPHYCEAE						
Cryptomonads		12	0	586	320	0.18750
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	0	13	25	67	0.00170
Leptolyngbya		64	0	3125	2.36	0.00738
Limnolyngbya (Planktolyngbya circumcreta)		1450	0	70801	4.9	0.34692
Oscillatoriales (iauv 1-100)	P	0	72	141	60.8	0.00855
Planktolyngbya		1130	0	55176	3.8	0.20967
Pseudanabaena		26	0	1270	12.5	0.01587
Synechococcales small (iauv <20)		10160	0	496094	5.25	2.60449
DINOPHYCEAE						
Dinoflagellates		0	1	2	20000	0.03906
OTHER PHYTOPLANKTON						
Other small flagellates		24	0	1172	80	0.09375

TOTAL BGA	**626632**	**3.19458**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**166**	**0.01025**
TOTAL ALGAE	**699548**	**21.83948**

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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.***

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