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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695251 20-42534
LOCALITY :	EM2015594_003
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	8/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with high levels of small BGA present. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml) 1.0199 **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	0.00196
Centrales		11	0	539	200	0.10785
Pennales (small <20um)		2	0	98	251	0.02461
CHLOROPHYCEAE						
Ankistrodesmus		8	0	392	132	0.05177
Ankyra		2	0	98	40	0.00392
Botryococcus		0	180	353	98	0.03459
Chlamydomonads		2	0	98	250	0.02451
Chlorococcoids (<10um)		120	0	5883	60	0.35298
Closterium		1	0	49	4130	0.20247
Colonial green (cells)		16	0	784	100	0.07844
Crucigenia		820	0	40200	30	1.20600
Dictyosphaerium		184	0	9020	20	0.18041
Didymocystis		4	0	196	41	0.00804
Dimorphococcus		28	0	1373	20	0.02745
Elakatothrix		0	2	4	45	0.00018
Eremosphaera		4	0	196	700	0.13727
Hyaloraphidium		3	0	147	750	0.11030
Lagerheimia		11	0	539	500	0.26963
Nephrocytium		16	0	784	200	0.15688
Oocystis		420	0	20590	300	6.17708
Pediastrum		16	0	784	60	0.04706
Planctonema		715	0	35052	800	28.04196
Scenedesmus		25	0	1226	250	0.30640
Selenastrum		3	0	147	250	0.03677

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **14/09/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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Tetraedron		1	0	49	150	0.00735
Tetrastrum		12	0	588	40	0.02353
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03138
CYANOPHYCEAE						
Leptolyngbya		312	0	15296	2.36	0.03610
Limnolyngbya (Planktolyngbya circumcreta)		626	0	30689	4.9	0.15038
Limnothrix/Geitlerinema/Anagnostidinema	P	0	22	43	17.5	0.00075
Planktolyngbya		900	0	44122	3.8	0.16766
Pseudanabaena		10	0	490	12.5	0.00613
Romeria		9	0	441	31	0.01368
Synechococcales small (iauv <20)		9520	0	466712	5.25	2.45024
OTHER PHYTOPLANKTON						
Other small flagellates		1	0	49	80	0.00392

TOTAL BGA	**557793**	**2.82494**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**43**	**0.00075**
TOTAL ALGAE	**677133**	**40.47967**

+ 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: **14/09/2020**
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