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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6681717 20-40763
LOCALITY :	EM2014780_013
SITE :	DS 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) 1.0018 **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						
Aulacoseira		0	2	4	2860	0.01142
Centrales		56	0	2795	200	0.55899
CHLOROPHYCEAE						
Ankistrodesmoideae		20	0	998	132	0.13176
Botryococcus		0	120	240	98	0.02348
Chlamydomonads		4	0	200	250	0.04991
Chlorococcoids (<10um)		195	0	9732	60	0.58395
Chlorolobion		12	0	599	70	0.04192
Closterium		0	60	120	4130	0.49471
Colonial green (cells)		8	0	399	100	0.03993
Crucigenia		256	0	12777	30	0.38331
Dictyosphaerium		56	0	2795	20	0.05590
Didymocystis		8	0	399	41	0.01637
Dimorphococcus		4	0	200	20	0.00399
Elakatothrix		3	0	150	45	0.00674
Eremosphaera		0	40	80	700	0.05590
Hyaloraphidium		24	0	1198	750	0.89838
Lagerheimia		7	0	349	500	0.17469
Nephrocytium		2	0	100	200	0.01996
Oocystis		245	0	12228	300	3.66840
Pediastrum		0	4	8	60	0.00048
Planctonema		103	0	5141	800	4.11260
Scenedesmus		36	0	1797	250	0.44919
Selenastrum		8	0	399	250	0.09982
Staurastrum		0	5	10	2000	0.01996

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

METHOD NO.: MB010/MW024CV

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Tetraedron		2	0	100	150	0.01497
Tetrastrum		4	0	200	40	0.00799
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	50	350	0.01747
CRYPTOPHYCEAE						
Cryptomonads		44	0	2196	320	0.70274
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	0	19	38	67	0.00254
Leptolyngbya		25	0	1248	2.36	0.00294
Limnolyngbya (Planktolyngbya circumcreta)		2830	0	141246	4.9	0.69210
Planktolyngbya		1020	0	50908	3.8	0.19345
Synechococcales small (iauv <20)		6640	0	331403	5.25	1.73987
DINOPHYCEAE						
Gymnodiniales (small)		1	0	50	500	0.02496
EUGLENOPHYCEAE						
Eutreptia		0	4	8	1000	0.00799

TOTAL BGA	**524843**	**2.63091**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**38**	**0.00254**
TOTAL ALGAE	**580165**	**15.30878**

+ 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: **31/08/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV