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

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7136725 21-41798
LOCALITY :	EM2116912-003
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	25/08/2021
DATE ANALYSED :	27/08/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Elevated levels of debris/sediment was observed. Excessive levels of low biovolume BGA Synechococcales are likely to impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0327 **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		2	0	97	200	0.01937
Fragilariaceae		21	0	1017	500	0.50838
Naviculales		3	0	145	1400	0.20335
Pennales		0	1	2	300	0.00058
Pennales (small <20um)		6	0	291	251	0.07292
CHLOROPHYCEAE						
Ankistrodesmoideae		17	0	823	132	0.10865
Botryococcus		0	55	107	98	0.01044
Chlamydomonads		1	0	48	250	0.01210
Chlorococcoids (<10um)		38	0	1840	60	0.11039
Closterium		0	7	14	4130	0.05599
Crucigenia		240	0	11620	30	0.34860
Dictyosphaerium		40	0	1937	20	0.03873
Didymocystis		4	0	194	41	0.00794
Elakatothrix		1	0	48	45	0.00218
Eremosphaera		4	0	194	700	0.13557
Lagerheimia		11	0	533	500	0.26629
Monoraphidium		1	0	48	900	0.04358
Nephrocytium		8	0	387	200	0.07747
Oocystis		84	0	4067	300	1.22010
Pediastrum		11	0	533	60	0.03196
Planctonema		259	0	12540	800	10.03196
Scenedesmus		40	0	1937	250	0.48417
Selenastrum		2	0	97	250	0.02421
Tetraedron		4	0	194	150	0.02905

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **27/08/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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CRYPTOPHYCEAE						
Cryptomonads		4	0	194	320	0.06197
CYANOPHYCEAE						
Limnolyngbya		4180	0	202382	4.9	0.99167
Planktolyngbya		5600	0	271134	3.8	1.03031
Romeria		12	0	581	31	0.01801
Synechococcales small (iauv <20)		14600	0	706885	5.25	3.71115
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01356

TOTAL BGA	**1180982**	**5.75114**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**1219891**	**19.67062**

+ 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: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **27/08/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA