ALS Water
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. :	7056275 21-31436
LOCALITY :	EM2111820-013
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	22/06/2021
DATE ANALYSED :	24/06/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml) 1.0168 **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		6	0	295	500	0.14752
Centrales		1	0	49	200	0.00983
Nitzschia		0	2	4	400	0.00157
Pennales		1	0	49	300	0.01475
CHLOROPHYCEAE						
Ankistrodesmus		4	0	197	132	0.02596
Botryococcus		0	75	148	98	0.01446
Chlorococcoids (<10um)		68	0	3344	60	0.20063
Closterium		0	1	2	4130	0.00812
Crucigenia		336	0	16522	30	0.49567
Didymocystis		2	0	98	41	0.00403
Eremosphaera		0	6	12	700	0.00826
Filamentous Green		39	0	1918	386	0.74026
Lagerheimia		1	0	49	500	0.02459
Micractinium		1	0	49	30	0.00148
Monoraphidium		75	0	3688	900	3.31924
Nephrocytium		4	0	197	200	0.03934
Oocystis		45	0	2213	300	0.66385
Pediastrum		4	0	197	60	0.01180
Planctonema		97	0	4770	800	3.81589
Scenedesmus		24	0	1180	250	0.29504
Staurastrum		1	0	49	2000	0.09835
Tetrastrum		4	0	197	40	0.00787
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03147

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Lauren Minett (signatory)*** DATE: **24/06/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	54	0	2655	67	0.17791
Limnolyngbya (Planktolyngbya circumcreta)		2220	0	109166	4.9	0.53491
Planktolyngbya		3590	0	176534	3.8	0.67083
Synechococcales small (iauv <20)		11920	0	586153	5.25	3.07730
EUGLENOPHYCEAE						
Eutreptia		2	0	98	1000	0.09835

TOTAL BGA	**874508**	**4.46096**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**2655**	**0.17791**
TOTAL ALGAE	**909931**	**14.53930**

+ 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: ***Lauren Minett (signatory)*** DATE: **24/06/2021**
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