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. :	7684054 22-64963
LOCALITY :	EM2216764-001
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	30/08/2022
DATE ANALYSED :	7/09/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed, but current combined levels are unlikely to impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0172 **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		239	0	11748	2860	33.59910
Centrales		3	0	147	200	0.02949
Chaetoceros		0	4	8	200	0.00157
Pennales		84	0	4129	300	1.23869
CHLOROPHYCEAE						
Chlamydomonads		13	0	639	250	0.15975
Chlorococcoids (<10um)		36	0	1770	60	0.10617
Chlorogonium		1	0	49	50	0.00246
Closterium		0	2	4	4130	0.01624
Crucigenia		132	0	6488	30	0.19465
Didymocystis		8	0	393	41	0.01612
Filamentous Green		2	0	98	386	0.03795
Monoraphidium (small)		57	0	2802	16	0.04483
Monoraphidium (large)		1	0	49	400	0.01966
Oocystis		10	0	492	300	0.14746
Pediastrum		10	0	492	60	0.02949
Planctonema		57	0	2802	800	2.24145
Scenedesmus		58	0	2851	250	0.71274
Staurastrum		0	2	4	2000	0.00786
Tetrastrum		4	0	197	40	0.00786
CRYPTOPHYCEAE						
Cryptomonads		22	0	1081	320	0.34605
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	7	0	344	67	0.02305
Limnolyngbya		194	0	9536	4.9	0.04673

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Lauren Minett (signatory)*** DATE: **08/09/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Planktolyngbya		147	0	7226	3.8	0.02746
Pseudanabaena		56	0	2753	12.5	0.03441
Synechococcales small (iauv <20)		63	0	3097	5.25	0.01626
DINOPHYCEAE						
Prorocentrum		0	1	2	3000	0.00590
EUGLENOPHYCEAE						
Trachelomonas		1	0	49	3000	0.14746

TOTAL BGA	**22956**	**0.14790**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**344**	**0.02305**
TOTAL ALGAE	**59250**	**39.26088**

+ 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: *Lauren Minett (signatory)* DATE: **08/09/2022**
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