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. :	7609391 22-60564
LOCALITY :	EM2215131-001
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	8/08/2022
DATE ANALYSED :	12/08/2022
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) 1.0238 **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						
Asterionellopsis		0	4	8	500	0.00391
Aulacoseira		129	0	6300	2860	18.01817
Centrales		0	4	8	200	0.00156
Centrales - (5-10um)		6	0	293	80	0.02344
Fragilariaceae		2	0	98	500	0.04884
Nitzschia		1	0	49	400	0.01954
Pennales (small <20um)		24	0	1172	251	0.29420
CHLOROPHYCEAE						
Actinastrum		0	8	16	60	0.00094
Ankistrodesmus		0	4	8	132	0.00103
Botryococcus		0	30	59	98	0.00574
Chlamydomonads		1	0	49	250	0.01221
Chlorococcoids (<10um)		92	0	4493	60	0.26958
Colonial green (cells)		32	0	1563	100	0.15628
Crucigenia		80	0	3907	30	0.11721
Dictyosphaerium		8	0	391	20	0.00781
Didymocystis		8	0	391	41	0.01602
Monoraphidium (small)		74	0	3614	16	0.05782
Monoraphidium (large)		3	0	147	400	0.05861
Oocystis (small)		33	0	1612	100	0.16116
Pediastrum		1	0	49	60	0.00293
Planctonema		75	0	3663	800	2.93026
Scenedesmus		18	0	879	250	0.21977
Tetrastrum		40	0	1954	40	0.07814
CRYPTOPHYCEAE						

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis (signatory)*** DATE: **15/08/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Cryptomonads		25	0	1221	320	0.39070
CYANOPHYCEAE						
Limnolyngbya		181	0	8840	4.9	0.04331
Nostocales	P	0	25	49	73.5	0.00359
Oscillatoriales (iauv 1-100)	P	0	198	387	60.8	0.02352
Planktolyngbya		245	0	11965	3.8	0.04547
Romeria		20	0	977	31	0.03028
Synechococcales small (iauv <20)		94	0	4591	5.25	0.02410
DINOPHYCEAE						
Gymnodiniales (small)		1	0	49	500	0.02442

TOTAL BGA	**26809**	**0.17027**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**436**	**0.02711**
TOTAL ALGAE	**58802**	**23.09056**

+ 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 (signatory)*** DATE: **15/08/2022**
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