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. :	7394974 22-15545
LOCALITY :	EM224816-002
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	16/03/2022
DATE ANALYSED :	24/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed. Current algal levels may mildly influence water quality.

Sedgewick-Rafter Vol.(ml) 1.024 **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		8	0	391	2860	1.11719
Centrales		430	0	20996	200	4.19922
Naviculales		1	0	49	1400	0.06836
Pennales		32	0	1563	300	0.46875
CHLOROPHYCEAE						
Ankistrodesmus		2	0	98	132	0.01289
Chlamydomonads		1	0	49	250	0.01221
Chlorococcoids (<10um)		20	0	977	60	0.05859
Colonial green (cells)		28	0	1367	100	0.13672
Crucigenia		144	0	7031	30	0.21094
Dictyosphaerium		148	0	7227	20	0.14453
Didymocystis		2	0	98	41	0.00400
Elakatothrix		1	0	49	45	0.00220
Eremosphaera		0	6	12	700	0.00820
Lagerheimia		4	0	195	500	0.09766
Monoraphidium (small)		28	0	1367	16	0.02188
Monoraphidium (large)		4	0	195	400	0.07813
Oocystis		42	0	2051	300	0.61523
Pediastrum		16	0	781	60	0.04688
Planctonema		162	0	7910	800	6.32813
Scenedesmus		145	0	7080	250	1.77002
Staurastrum		2	0	98	2000	0.19531
Tetraedron		16	0	781	150	0.11719
Tetrastrum		24	0	1172	40	0.04688
CRYPTOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis (signatory)* **Biologist** DATE: **25/03/2022**

METHOD NO.: MB010/MW024VCA

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Cryptomonads		1	0	49	320	0.01563
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	10	0	488	67	0.03271
Cuspidothrix issatschenkoi		0	520	1016	57	0.05789
Limnolyngbya		5040	0	246094	4.9	1.20586
Oscillatoriales (iauv 1-100)	P	0	105	205	60.8	0.01247
Planktolyngbya		5560	0	271484	3.8	1.03164
Pseudanabaena		32	0	1563	12.5	0.01953
Raphidiopsis	P	5	0	244	59	0.01440
Synechococcales small (iauv <20)		2680	0	130859	5.25	0.68701
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01367

TOTAL BGA	**651953**	**3.06152**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**937**	**0.05959**
TOTAL ALGAE	**713541**	**18.85190**

+ 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 (signatory)*** DATE: **25/03/2022**
Biologist **Biologist**

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