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. :	7328747 22-06265
LOCALITY :	EM2201088-018
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	21/01/2022
DATE ANALYSED :	1/02/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to be impaired.

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						
Centrales		410	0	20020	200	4.00391
Naviculales		1	0	49	1400	0.06836
Pennales		5	0	244	300	0.07324
CHLOROPHYCEAE						
Botryococcus		0	120	234	98	0.02297
Chlorococcoids (<10um)		45	0	2197	60	0.13184
Closterium		0	3	6	4130	0.02420
Colonial green (cells)		26	0	1270	100	0.12695
Crucigenia		340	0	16602	30	0.49805
Dictyosphaerium		180	0	8789	20	0.17578
Elakatothrix		2	0	98	45	0.00439
Eremosphaera		0	8	16	700	0.01094
Lagerheimia		25	0	1221	500	0.61035
Monoraphidium (small)		24	0	1172	16	0.01875
Monoraphidium (large)		1	0	49	400	0.01953
Oocystis		90	0	4395	300	1.31836
Planctonema		84	0	4102	800	3.28125
Scenedesmus		115	0	5615	250	1.40381
Staurastrum		0	1	2	2000	0.00391
Tetraedron		10	0	488	150	0.07324
Tetrastrum		100	0	4883	40	0.19531
CRYPTOPHYCEAE						
Cryptomonads		5	0	244	320	0.07813
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	69	0	3369	67	0.22573

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis (signatory)* **Biologist** DATE: **02/02/2022**

METHOD NO.: MB010/MW024VCA

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Cuspidothrix issatschenkoi		9	0	439	57	0.02505
Limnolyngbya (Planktolyngbya circumcreta)		4040	0	197266	4.9	0.96660
Microcystis	P	0	18	35	74	0.00260
Oscillatoriales (iauv 1-100)	P	0	145	283	60.8	0.01722
Planktolyngbya		6340	0	309570	3.8	1.17637
Pseudanabaena		40	0	1953	12.5	0.02441
Synechococcales small (iauv <20)		2788	0	136133	5.25	0.71470
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01367

TOTAL BGA	**649048**	**3.15268**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**3687**	**0.24555**
TOTAL ALGAE	**720746**	**15.30962**

+ 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: **02/02/2022**
Biologist **Biologist**

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