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. :	6873984 21-07778
LOCALITY :	EM2101680_002
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with low biovolume BGA most numerous. The presence of toxigenic BGA Raphidiopsis should be noted. Current levels are unlikely to pose a health risk.

Sedgewick-Rafter Vol.(ml) 1.0145 **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		18	0	887	200	0.17743
Centrales - (5-10um)		1	0	49	80	0.00394
Pennales		5	0	246	300	0.07393
CHLOROPHYCEAE						
Ankistrodesmus		24	0	1183	132	0.15614
Botryococcus		0	160	315	98	0.03091
Chlorococcoids (<10um)		12	0	591	60	0.03549
Closterium		2	0	99	4130	0.40710
Colonial green (cells)		256	0	12617	100	1.26171
Crucigenia		240	0	11828	30	0.35485
Dictyosphaerium		104	0	5126	20	0.10251
Didymocystis		24	0	1183	41	0.04850
Elakatothrix		0	2	4	45	0.00018
Eremosphaera		4	0	197	700	0.13800
Filamentous Green		8	0	394	386	0.15219
Golenkinia		10	0	493	400	0.19714
Hyaloraphidium		1	0	49	750	0.03696
Lagerheimia		156	0	7689	500	3.84426
Oocystis		164	0	8083	300	2.42484
Pediastrum		10	0	493	60	0.02957
Planctonema		990	0	48793	800	39.03401
Scenedesmus		30	0	1479	250	0.36964
Selenastrum		24	0	1183	250	0.29571
Staurastrum		2	0	99	2000	0.19714
Tetraedron		4	0	197	150	0.02957

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **09/02/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Tetrastrum		32	0	1577	40	0.06309
CYANOPHYCEAE						
Cuspidothrix issatschenkoi		512	0	25234	57	1.43834
Limnolyngbya (Planktolyngbya circumcreta)		4500	0	221784	4.9	1.08674
Planktolyngbya		8540	0	420897	3.8	1.59941
Raphidiopsis raciborskii	T	128	0	6309	42	0.26496
Romeria		22	0	1084	31	0.03361
Synechococcales small (iauv <20)		42400	0	2089699	5.25	10.97092
DINOPHYCEAE						
Gymnodiniales (small)		1	0	49	500	0.02464

TOTAL BGA	**2765007**	**15.39399**
TOTAL TOXIGENIC BGA	**6309**	**0.26496**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**2869910**	**64.88343**

+ 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* DATE: **09/02/2021**
Biologist **Biologist**

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