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. :	6906823 21-12031
LOCALITY :	EM2103113-012
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	24/02/2021
DATE ANALYSED :	1/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. The presence of toxigenic taxa should be noted. Curret levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0303 **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		5	0	243	200	0.04853
Nitzschia		2	0	97	400	0.03882
Pennales		0	1	2	300	0.00058
CHLOROPHYCEAE						
Ankistrodesmus		4	0	194	132	0.02562
Chlorococcoids (<10um)		20	0	971	60	0.05824
Closterium		0	10	19	4130	0.08017
Colonial green (cells)		55	0	2669	100	0.26691
Crucigenia		92	0	4465	30	0.13394
Elakatothrix		1	0	49	45	0.00218
Eremosphaera		0	2	4	700	0.00272
Golenkinia		4	0	194	400	0.07765
Lagerheimia		8	0	388	500	0.19412
Monoraphidium		0	1	2	900	0.00175
Oocystis		59	0	2863	300	0.85897
Pediastrum		4	0	194	60	0.01165
Planctonema		708	0	34359	800	27.48714
Scenedesmus		6	0	291	250	0.07279
Schroederia		1	0	49	550	0.02669
Staurastrum		3	0	146	2000	0.29118
Tetraedron		2	0	97	150	0.01456
Tetrastrum		12	0	582	40	0.02329
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	236	0	11453	67	0.76735
Cuspidothrix cf. issatschenkoi		25	0	1213	57	0.06915

ANALYST: *Adam Deliyiannis* **Biologist**

REVIEWED: *Kirsten Mudie (signatory)* **Biologist**

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

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Limnolyngbya (Planktolyngbya circumcreta)		1120	0	54353	4.9	0.26633
Planktolyngbya		5980	0	290207	3.8	1.10279
Raphidiopsis raciborskii	T	210	0	10191	42	0.42803
Synechococcales small (iauv <20)		8080	0	392119	5.25	2.05862
DINOPHYCEAE						
Dinoflagellates		1	0	49	20000	0.97059
Peridiniales		1	0	49	5000	0.24265
EUGLENOPHYCEAE						
Euglena		1	0	49	7000	0.33971
OTHER PHYTOPLANKTON						
Other small flagellates		4	0	194	80	0.01553

TOTAL BGA	**759536**	**4.69227**
TOTAL TOXIGENIC BGA	**10191**	**0.42803**
TOTAL POTENTIALLY TOXIC BGA	**11453**	**0.76735**
TOTAL ALGAE	**807755**	**35.97826**

+ 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: *Adam Deliyiannis* **Biologist**

REVIEWED: *Kirsten Mudie (signatory)* **Biologist**

DATE: **02/03/2021**

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