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. :	6906824 21-12031
LOCALITY :	EM2103113-013
SITE :	DS 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) 1.0255 **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		2	0	98	200	0.01950
Nitzschia		3	0	146	400	0.05851
Pennales		2	0	98	300	0.02925
Pennales (small <20um)		1	0	49	251	0.01224
CHLOROPHYCEAE						
Ankistrodesmus		4	0	195	132	0.02574
Chlorococcoids (<10um)		27	0	1316	60	0.07899
Closterium		0	6	12	4130	0.04833
Colonial green (cells)		48	0	2340	100	0.23403
Crucigenia		112	0	5461	30	0.16382
Dictyosphaerium		4	0	195	20	0.00390
Elakatothrix		3	0	146	45	0.00658
Golenkinia		4	0	195	400	0.07801
Hyaloraphidium		3	0	146	750	0.10970
Lagerheimia		5	0	244	500	0.12189
Oocystis		48	0	2340	300	0.70210
Pediastrum		8	0	390	60	0.02340
Planctonema		945	0	46075	800	36.86007
Scenedesmus		10	0	488	250	0.12189
Schroederia		1	0	49	550	0.02682
Selenastrum		5	0	244	250	0.06095
Staurastrum		1	0	49	2000	0.09751
Tetraedron		2	0	98	150	0.01463
Tetrastrum		8	0	390	40	0.01560
CYANOPHYCEAE						

ANALYST: *Adam Deliyiannis* **Biologist**

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

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

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Aphanizomenonaceae family - straight	P	393	0	19161	67	1.28381
Cuspidothrix cf. issatschenkoi		24	0	1170	57	0.06670
Limnolyngbya (Planktolyngbya circumcreta)		1235	0	60215	4.9	0.29505
Planktolyngbya		3320	0	161872	3.8	0.61511
Raphidiopsis raciborskii	T	90	0	4388	42	0.18430
Romeria		5	0	244	31	0.00756
Synechococcales small (iauv <20)		7080	0	345197	5.25	1.81229
DINOPHYCEAE						
Dinoflagellates		1	0	49	20000	0.97513
OTHER PHYTOPLANKTON						
Other small flagellates		7	0	341	80	0.02730

TOTAL BGA	**592247**	**4.26482**
TOTAL TOXIGENIC BGA	**4388**	**0.18430**
TOTAL POTENTIALLY TOXIC BGA	**19161**	**1.28381**
TOTAL ALGAE	**653401**	**44.18073**

+ 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**

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