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. :	6956306 21-18638
LOCALITY :	EM2106129_003
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	8/04/2021
DATE ANALYSED :	14/04/2021
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 may impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0208 **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		36	0	1763	200	0.35266
Nitzschia		4	0	196	400	0.07837
Pennales		8	0	392	300	0.11755
Pennales (small <20um)		2	0	98	251	0.02459
CHLOROPHYCEAE						
Ankistrodesmus		36	0	1763	132	0.23276
Chlorococcoids (<10um)		34	0	1665	60	0.09992
Crucigenia		16	0	784	30	0.02351
Didymocystis		2	0	98	41	0.00402
Eremosphaera		0	10	20	700	0.01371
Golenkinia		4	0	196	400	0.07837
Hyaloraphidium		4	0	196	750	0.14694
Lagerheimia		16	0	784	500	0.39185
Nephrocytium		4	0	196	200	0.03918
Oocystis		84	0	4114	300	1.23433
Pediastrum		16	0	784	60	0.04702
Planctonema		420	0	20572	800	16.45768
Scenedesmus		20	0	980	250	0.24491
Selenastrum		10	0	490	250	0.12245
Staurastrum		1	0	49	2000	0.09796
Tetraedron		1	0	49	150	0.00735
Tetrastrum		36	0	1763	40	0.07053
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03135
CYANOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* **Biologist**
REVIEWED: *Karen Simonsen (signatory)* **Biologist**
DATE: **15/04/2021**

METHOD NO.: MB010/MW024VCA

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Aphanizomenonaceae family - straight	P	64	0	3135	67	0.21003
Cuspidothrix issatschenkoi		502	0	24589	57	1.40155
Limnolyngbya (Planktolyngbya circumcreta)		1730	0	84737	4.9	0.41521
Nodularia spumigena	T	0	94	184	227	0.04181
Planktolyngbya		8380	0	410462	3.8	1.55976
Raphidiopsis raciborskii	T	208	0	10188	42	0.42790
Synechococcales small (iauv <20)		36560	0	1790752	5.25	9.40145
DINOPHYCEAE						
Dinoflagellates		1	0	49	20000	0.97962
OTHER PHYTOPLANKTON						
Other small flagellates		10	0	490	80	0.03918

TOTAL BGA	**2324047**	**13.45771**
TOTAL TOXIGENIC BGA	**10372**	**0.46971**
TOTAL POTENTIALLY TOXIC BGA	**3135**	**0.21003**
TOTAL ALGAE	**2361636**	**34.39354**

+ 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)* **Biologist** REVIEWED: *Karen Simonsen (signatory)* **Biologist** DATE: **15/04/2021**

METHOD NO.: MB010/MW024VCA