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. :	7366797 22-11365
LOCALITY :	EM2203091-003
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	22/02/2022
DATE ANALYSED :	28/02/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed. Current algal levels are unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.027 **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		10	0	487	200	0.09737
Naviculales		1	0	49	1400	0.06816
Pennales		1	0	49	300	0.01461
CHLOROPHYCEAE						
Botryococcus		0	20	39	98	0.00382
Chlamydomonads		1	0	49	250	0.01217
Chlorococcoids (<10um)		9	0	438	60	0.02629
Chlorolobion		1	0	49	70	0.00341
Crucigenia		8	0	389	30	0.01168
Dictyosphaerium		14	0	682	20	0.01363
Didymocystis		2	0	97	41	0.00399
Lagerheimia		2	0	97	500	0.04869
Monoraphidium (small)		18	0	876	16	0.01402
Oocystis		39	0	1899	300	0.56962
Planctonema		73	0	3554	800	2.84323
Scenedesmus		2	0	97	250	0.02434
Staurastrum		0	1	2	2000	0.00389
Tetraedron		1	0	49	150	0.00730
Tetrastrum		4	0	195	40	0.00779
CHRYSOPHYCEAE						
Mallomonas		0	1	2	6655	0.01296
Other Chrysophytes		1	0	49	200	0.00974
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01558
CYANOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis (signatory)* **Biologist** DATE: **28/02/2022**

METHOD NO.: MB010/MW024VCA

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Cuspidothrix issatschenkoi		0	88	171	57	0.00977
Limnolyngbya		252	0	12269	4.9	0.06012
Limnothrix/Geitlerinema/Anagnostidinema	P	0	54	105	17.5	0.00184
Planktolyngbya		628	0	30574	3.8	0.11618
Pseudanabaena		0	25	49	12.5	0.00061
Synechococcales small (iauv <20)		64	0	3116	5.25	0.01636
OTHER PHYTOPLANKTON						
Other small flagellates		1	0	49	80	0.00389

TOTAL BGA	**46284**	**0.20488**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**105**	**0.00184**
TOTAL ALGAE	**55530**	**4.02107**

+ 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: *Adam Deliyiannis (signatory)* **Biologist** DATE: **28/02/2022**

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