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. :	7064968 21-32332
LOCALITY :	EM2112381-013
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	5/07/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are likely to 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						
Naviculales		0	1	2	1400	0.00274
Nitzschia		0	1	2	400	0.00078
Pennales		1	0	49	300	0.01469
Pennales (small <20um)		2	0	98	251	0.02459
CHLOROPHYCEAE						
Chlorococcoids (<10um)		29	0	1420	60	0.08523
Closterium		0	4	8	4130	0.03237
Crucigenia		56	0	2743	30	0.08229
Didymocystis		2	0	98	41	0.00402
Lagerheimia		2	0	98	500	0.04898
Micractinium		3	0	147	30	0.00441
Monoraphidium		9	0	441	900	0.39675
Nephrocytium		24	0	1176	200	0.23511
Oocystis		6	0	294	300	0.08817
Pediastrum		4	0	196	60	0.01176
Planctonema		110	0	5388	800	4.31034
Scenedesmus		21	0	1029	250	0.25715
Staurastrum		1	0	49	2000	0.09796
Tetraedron		4	0	196	150	0.02939
Tetrastrum		8	0	392	40	0.01567
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	49	350	0.01714
CRYPTOPHYCEAE						
Cryptomonads		3	0	147	320	0.04702
CYANOPHYCEAE						

ANALYST: *Adam Deliyiannis* **Biologist**

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

DATE: **05/07/2021**

METHOD NO.: MB010/MW024VCA

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Aphanizomenonaceae family - straight	P	75	0	3674	67	0.24613
Limnolyngbya (Planktolyngbya circumcreta)		3020	0	147923	4.9	0.72482
Oscillatoriales (iauv 1-100)	P	0	42	82	60.8	0.00500
Planktolyngbya		3100	0	151842	3.8	0.57700
Synechococcales small (iauv <20)		20000	0	979624	5.25	5.14303
DINOPHYCEAE						
Dinoflagellates		0	3	6	20000	0.11755
Gymnodiniales (small)		1	0	49	500	0.02449
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01371
Eutreptia		1	0	49	1000	0.04898
OTHER PHYTOPLANKTON						
Other small flagellates		6	0	294	80	0.02351
Prasinophytes		2	0	98	100	0.00980

TOTAL BGA	**1283145**	**6.69598**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**3756**	**0.25113**
TOTAL ALGAE	**1297665**	**12.74059**

+ 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**

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