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. :	187825 22-45580
LOCALITY :	EM2209350-021
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	18/05/2022
DATE ANALYSED :	24/05/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA most numerous. Water quality may be impaired.

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		18	0	876	200	0.17527
Nitzschia		0	1	2	400	0.00078
Pennales		1	0	49	300	0.01461
Pennales (small <20um)		1	0	49	251	0.01222
CHLOROPHYCEAE						
Ankistrodesmus		5	0	243	132	0.03213
Botryococcus		0	25	49	98	0.00477
Chlorococcoids (<10um)		16	0	779	60	0.04674
Crucigenia		72	0	3505	30	0.10516
Dictyosphaerium		190	0	9250	20	0.18500
Didymocystis		12	0	584	41	0.02395
Dimorphococcus		16	0	779	20	0.01558
Lagerheimia		24	0	1168	500	0.58423
Micractinium		2	0	97	30	0.00292
Monoraphidium (small)		115	0	5599	16	0.08958
Monoraphidium (large)		2	0	97	400	0.03895
Oocystis		88	0	4284	300	1.28530
Pediastrum		12	0	584	60	0.03505
Planctonema		284	0	13827	800	11.06134
Scenedesmus		24	0	1168	250	0.29211
Tetraedron		3	0	146	150	0.02191
Tetrastrum		48	0	2337	40	0.09348
CRYPTOPHYCEAE						
Cryptomonads		4	0	195	320	0.06232
CYANOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis (signatory)* DATE: **24/05/2022**

Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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. :	187825 22-45580
LOCALITY :	EM2209350-021
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	18/05/2022
DATE ANALYSED :	24/05/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA most numerous. Water quality may be impaired.

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)**
Aphanizomenonaceae family - straight	P	15	0	730	67	0.04893
Cuspidothrix issatschenkoi		13	0	633	57	0.03608
Limnolyngbya		425	0	20691	4.9	0.10139
Limnothrix/Geitlerinema/Anagnostidinema	P	0	78	152	17.5	0.00266
Planktolyngbya		1920	0	93476	3.8	0.35521
Pseudanabaena		14	0	682	12.5	0.00852
Romeria		4	0	195	31	0.00604
Synechococcales small (iauv <20)		1515	0	73759	5.25	0.38723
EUGLENOPHYCEAE						
Euglena		0	2	4	7000	0.02726
Trachelomonas		0	1	2	3000	0.00584
OTHER PHYTOPLANKTON						
Other small flagellates		6	0	292	80	0.02337

TOTAL BGA	**190318**	**0.94605**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**882**	**0.05159**
TOTAL ALGAE	**236283**	**15.18592**

+ 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: **24/05/2022**

METHOD NO.: MB010/MW024VCA