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. :	7281159 21-59669
LOCALITY :	EM2125413-018
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	13/12/2021
DATE ANALYSED :	20/12/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of small BGA will impair water quality and may pose a health risk.

Sedgewick-Rafter Vol.(ml) 1.0145 **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						
Anaulus		0	6	12	500	0.00591
Aulacoseira		0	11	22	2860	0.06202
Centrales		6	0	296	200	0.05914
Nitzschia		0	3	6	400	0.00237
Pennales		16	0	789	300	0.23657
CHLOROPHYCEAE						
Botryococcus		0	140	276	98	0.02705
Chlorococcoids (<10um)		84	0	4140	60	0.24840
Chlorolobion		1	0	49	70	0.00345
Colonial green (cells)		60	0	2957	100	0.29571
Crucigenia		368	0	18137	30	0.54411
Dictyosphaerium		24	0	1183	20	0.02366
Didymocystis		16	0	789	41	0.03233
Dimorphococcus		32	0	1577	20	0.03154
Filamentous Green		64	0	3154	386	1.21755
Lagerheimia		20	0	986	500	0.49285
Monoraphidium (small)		52	0	2563	16	0.04101
Monoraphidium (large)		1	0	49	400	0.01971
Nephrocytium		6	0	296	200	0.05914
Oocystis		136	0	6703	300	2.01084
Pediastrum		8	0	394	60	0.02366
Planctonema		196	0	9660	800	7.72794
Scenedesmus		68	0	3351	250	0.83785
Tetraedron		16	0	789	150	0.11828
Tetrastrum		80	0	3943	40	0.15771

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis (signatory)*** DATE: **22/12/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01577
CYANOPHYCEAE						
Cuspidothrix issatschenkoi		0	243	479	57	0.02731
Limnolyngbya (Planktolyngbya circumcreta)		2620	0	129128	4.9	0.63273
Oscillatoriales (iauv 101-200)	P	0	25	49	142.8	0.00704
Planktolyngbya		4380	0	215870	3.8	0.82031
Synechococcales small (iauv <20)		5520	0	272055	5.25	1.42829
EUGLENOPHYCEAE						
Euglena		0	3	6	7000	0.04140

TOTAL BGA	**617581**	**2.91566**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**49**	**0.00704**
TOTAL ALGAE	**679757**	**17.25165**

+ 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)*** REVIEWED: ***Adam Deliyiannis (signatory)*** DATE: **22/12/2021**
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