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. :	7545128 22-57032
LOCALITY :	EM2213883-001
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	20/07/2022
DATE ANALYSED :	25/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with current algal levels that may mildly impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0199 **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						
Aulacoseira		0	4	8	2860	0.02243
Centrales		108	0	5295	200	1.05893
Pennales		8	0	392	300	0.11766
Pennales (small <20um)		36	0	1765	251	0.44298
CHLOROPHYCEAE						
Botryococcus		0	20	39	98	0.00384
Chlorococcoids (<10um)		212	0	10393	60	0.62359
Closterium		0	1	2	4130	0.00810
Cosmarium		1	0	49	500	0.02451
Crucigenia		80	0	3922	30	0.11766
Dictyosphaerium		132	0	6471	20	0.12942
Didymocystis		24	0	1177	41	0.04824
Eremosphaera		0	5	10	700	0.00686
Lagerheimia		12	0	588	500	0.29415
Monoraphidium (small)		76	0	3726	16	0.05961
Monoraphidium (large)		2	0	98	400	0.03922
Oocystis		112	0	5491	300	1.64722
Pediastrum		8	0	392	60	0.02353
Planctonema		104	0	5099	800	4.07883
Scenedesmus		8	0	392	250	0.09805
Staurastrum		0	1	2	2000	0.00392
Tetraedron		4	0	196	150	0.02941
Tetrastrum		32	0	1569	40	0.06275
CHRYSOPHYCEAE						
Other Chrysophyceae		2	0	98	350	0.03432

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis (signatory)*** DATE: **26/07/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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CRYPTOPHYCEAE						
Cryptomonads		8	0	392	320	0.12550
CYANOPHYCEAE						
Limnolyngbya		568	0	27846	4.9	0.13644
Oscillatoriales (iauv 1-100)	P	0	48	94	60.8	0.00572
Planktolyngbya		160	0	7844	3.8	0.02981
Scytonema		0	110	216	400	0.08628
Synechococcales small (iauv <20)		524	0	25689	5.25	0.13487

TOTAL BGA	**61689**	**0.39312**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**94**	**0.00572**
TOTAL ALGAE	**109255**	**9.49388**

+ 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: **26/07/2022**
Biologist **Biologist**

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