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. :	7152211 21-43664
LOCALITY :	EM2118068-002
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	9/09/2021
DATE ANALYSED :	14/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse and abundant algal community was observed with BGA in levels sufficient to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0407 **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		36	0	1730	200	0.34592
Pennales (small <20um)		22	0	1057	251	0.26530
CHLOROPHYCEAE						
Botryococcus		0	250	480	98	0.04708
Chlorococcoids (<10um)		44	0	2114	60	0.12684
Closterium		3	0	144	4130	0.59527
Colonial green (cells)		32	0	1537	100	0.15374
Crucigenia		200	0	9609	30	0.28827
Dictyosphaerium		196	0	9417	20	0.18833
Didymocystis		28	0	1345	41	0.05516
Dimorphococcus		40	0	1922	20	0.03844
Eremosphaera		0	19	37	700	0.02556
Lagerheimia		10	0	480	500	0.24022
Monoraphidium		54	0	2594	900	2.33497
Oocystis		220	0	10570	300	3.17094
Pediastrum		4	0	192	60	0.01153
Planctonema		166	0	7975	800	6.38032
Scenedesmus		44	0	2114	250	0.52849
Staurastrum		1	0	48	2000	0.09609
Tetraedron		4	0	192	150	0.02883
Tetrastrum		56	0	2690	40	0.10762
CRYPTOPHYCEAE						
Cryptomonads		1	0	48	320	0.01537
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		2010	0	96570	4.9	0.47319

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **14/09/2021**

Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Planktolyngbya		1910	0	91765	3.8	0.34871
Pseudanabaena		13	0	625	12.5	0.00781
Synechococcales small (iauv <20)		10860	0	521764	5.25	2.73926

TOTAL BGA		**710724**	**3.56897**
TOTAL TOXIGENIC BGA		**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA		**0**	**0.00000**
TOTAL ALGAE		**767019**	**18.61327**

+ 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* DATE: **14/09/2021**
Biologist **Biologist**

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