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. :	6750299 20-50047
LOCALITY :	EM2018692_008
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	26/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with excessive levels of small BGA dominating. Water quality will be impaired.

Sedgewick-Rafter Vol.(ml) 1.032 **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		15	0	727	200	0.14535
Naviculales		0	2	4	1400	0.00543
Pennales		0	1	2	300	0.00058
CHLOROPHYCEAE						
Ankistrodesmus		3	0	145	132	0.01919
Ankyra		5	0	242	40	0.00969
Botryococcus		0	80	155	98	0.01519
Chlamydomonads		5	0	242	250	0.06056
Chlorococcoids (<10um)		435	0	21076	60	1.26453
Closterium		2	0	97	4130	0.40019
Colonial green (cells)		169	0	8188	100	0.81880
Crucigenia		180	0	8721	30	0.26163
Dictyosphaerium		16	0	775	20	0.01550
Didymocystis		10	0	484	41	0.01986
Elakatothrix		1	0	48	45	0.00218
Lagerheimia		45	0	2180	500	1.09012
Oocystis		360	0	17442	300	5.23256
Pediastrum		4	0	194	60	0.01163
Planctonema		850	0	41182	800	32.94574
Scenedesmus		20	0	969	250	0.24225
Schroederia		1	0	48	550	0.02665
Selenastrum		40	0	1938	250	0.48450
Tetraedron		1	0	48	150	0.00727
Tetrastrum		4	0	194	40	0.00775
CHRYSOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **27/10/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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Other Chrysophyceae		5	0	242	350	0.08479
CRYPTOPHYCEAE						
Cryptomonads		20	0	969	320	0.31008
CYANOPHYCEAE						
Leptolyngbya		65	0	3149	2.36	0.00743
Limnolyngbya (Planktolyngbya circumcreta)		505	0	24467	4.9	0.11989
Planktolyngbya		650	0	31492	3.8	0.11967
Romeria		23	0	1114	31	0.03454
Synechococcales small (iauv <20)		16500	0	799419	5.25	4.19695
OTHER PHYTOPLANKTON						
Other small flagellates		85	0	4118	80	0.32946

TOTAL BGA	**859641**	**4.47848**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**970071**	**48.28995**

+ 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: **27/10/2020**
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