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. :	6873985 21-07778
LOCALITY :	EM2101680_003
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with low biovolume BGA most numerous. The presence of toxigenic BGA Raphidiopsis should be noted. Current levels are unlikely to pose a health risk.

Sedgewick-Rafter Vol.(ml) 1.0168 **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		26	0	1279	200	0.25570
Nitzschia		3	0	148	400	0.05901
Pennales		2	0	98	300	0.02950
Pennales (small <20um)		4	0	197	251	0.04937
CHLOROPHYCEAE						
Ankistrodesmus		22	0	1082	132	0.14280
Botryococcus		0	60	118	98	0.01157
Chlorococcoids (<10um)		30	0	1475	60	0.08851
Closterium		1	0	49	4130	0.20309
Colonial green (cells)		96	0	4721	100	0.47207
Crucigenia		64	0	3147	30	0.09441
Dictyosphaerium		18	0	885	20	0.01770
Didymocystis		4	0	197	41	0.00806
Elakatothrix		1	0	49	45	0.00221
Eremosphaera		4	0	197	700	0.13769
Golenkinia		3	0	148	400	0.05901
Hyaloraphidium		5	0	246	750	0.18440
Lagerheimia		26	0	1279	500	0.63926
Nephrocytium		8	0	393	200	0.07868
Oocystis		94	0	4622	300	1.38670
Pediastrum		24	0	1180	60	0.07081
Planctonema		840	0	41306	800	33.04485
Scenedesmus		8	0	393	250	0.09835
Schroederia		1	0	49	550	0.02705
Selenastrum		32	0	1574	250	0.39339

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **09/02/2021**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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Staurastrum		0	2	4	2000	0.00787
Tetraedron		1	0	49	150	0.00738
Tetrastrum		32	0	1574	40	0.06294
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03147
CYANOPHYCEAE						
Cuspidothrix issatschenkoi		221	0	10867	57	0.61944
Limnolyngbya (Planktolyngbya circumcreta)		940	0	46223	4.9	0.22649
Planktolyngbya		2520	0	123918	3.8	0.47089
Raphidiopsis raciborskii	T	32	0	1574	42	0.06609
Synechococcales small (iauv <20)		5480	0	269473	5.25	1.41473
DINOPHYCEAE						
Gymnodiniales (small)		2	0	98	500	0.04917
Peridiniales		1	0	49	5000	0.24587

TOTAL BGA	**452055**	**2.79765**
TOTAL TOXIGENIC BGA	**1574**	**0.06609**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**518759**	**40.75655**

+ 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: **09/02/2021**
Biologist **Biologist**

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