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. :	7217252 21-52414
LOCALITY :	EM2121437-018
SITE :	Tauwitchere U/S
SAMPLE :	Surface
DATE SAMPLED :	26/10/2021
DATE ANALYSED :	9/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse range of algal taxa was observed. Excessive levels of low biovolume BGA will impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0303 **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		1	0	49	200	0.00971
Nitzschia		1	0	49	400	0.01941
Pennales		5	0	243	300	0.07279
Pennales (small <20um)		1	0	49	251	0.01218
CHLOROPHYCEAE						
Chlorococcoids (<10um)		21	0	1019	60	0.06115
Closterium		0	5	10	4130	0.04009
Coelastrum		8	0	388	80	0.03106
Crucigenia		204	0	9900	30	0.29700
Didymocystis		8	0	388	41	0.01592
Dimorphococcus		28	0	1359	20	0.02718
Eremosphaera		0	4	8	700	0.00544
Lagerheimia		5	0	243	500	0.12132
Monoraphidium		10	0	485	900	0.43677
Oocystis		93	0	4513	300	1.35397
Pediastrum		7	0	340	60	0.02038
Planctonema		865	0	41978	800	33.58245
Scenedesmus		24	0	1165	250	0.29118
CYANOPHYCEAE						
Limnolyngbya (Planktolyngbya circumcreta)		5920	0	287295	4.9	1.40775
Oscillatoriales (iauv 1-100)	P	0	25	49	60.8	0.00295
Planktolyngbya		5500	0	266913	3.8	1.01427
Pseudanabaena		62	0	3009	12.5	0.03761
Synechococcales small (iauv <20)		7220	0	350383	5.25	1.83951
OTHER PHYTOPLANKTON						

ANALYST: *Adam Deliyiannis* **Biologist**

REVIEWED: *Louise Ungemach (signatory)* **Biologist**

DATE: **10/11/2021**

METHOD NO.: MB010/MW024VCA

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Raphidophytes		1	0	49	7000	0.33971

TOTAL BGA	**907649**	**4.30209**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**49**	**0.00295**
TOTAL ALGAE	**969884**	**41.03978**

+ 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: *Adam Deliyiannis* **Biologist**

REVIEWED: *Louise Ungemach (signatory)* **Biologist**

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