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. :	7064967 21-32332
LOCALITY :	EM2112381-012
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	5/07/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0242 **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		7	0	342	200	0.06835
Naviculales		1	0	49	1400	0.06835
Nitzschia		1	0	49	400	0.01953
Pennales		1	0	49	300	0.01465
CHLOROPHYCEAE						
Chlorococcoids (<10um)		35	0	1709	60	0.10252
Closterium		1	0	49	4130	0.20162
Crucigenia		24	0	1172	30	0.03515
Elakatothrix		0	3	6	45	0.00026
Lagerheimia		1	0	49	500	0.02441
Micractinium		13	0	635	30	0.01904
Monoraphidium		6	0	293	900	0.26362
Oocystis		24	0	1172	300	0.35149
Pediastrum		8	0	391	60	0.02343
Planktosphaeria		199	0	9715	120	1.16579
Scenedesmus		18	0	879	250	0.21968
Staurastrum		1	0	49	2000	0.09764
Tetraedron		2	0	98	150	0.01465
Tetrastrum		8	0	391	40	0.01562
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	50	0	2441	67	0.16354
Cuspidothrix cf. issatschenkoi		0	14	27	57	0.00156
Limnolyngbya (Planktolyngbya circumcreta)		2110	0	103007	4.9	0.50474
Planktolyngbya		2450	0	119606	3.8	0.45450
Synechococcales small (iauv <20)		17840	0	870924	5.25	4.57235

ANALYST: *Adam Deliyiannis* **Biologist**

REVIEWED: *Kirsten Mudie (signatory)* **Biologist**

DATE: **05/07/2021**

METHOD NO.: MB010/MW024VCA

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. :	7064967 21-32332
LOCALITY :	EM2112381-012
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	5/07/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml) 1.0242 **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)**
OTHER PHYTOPLANKTON						
Other small flagellates		7	0	342	80	0.02734
Prasinophytes		1	0	49	100	0.00488

TOTAL BGA	**1096005**	**5.69669**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**2441**	**0.16354**
TOTAL ALGAE	**1113493**	**8.43470**

+ 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: *Kirsten Mudie (signatory)* **Biologist**

DATE: **05/07/2021**

METHOD NO.: MB010/MW024VCA