ALS Water
22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695250 20-42534
LOCALITY :	EM2015594_002
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	8/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with high levels of small BGA present. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml) 1.0145 **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		9	0	444	200	0.08871
Pennales		3	0	148	300	0.04436
CHLOROPHYCEAE						
Ankistrodesmus		6	0	296	132	0.03903
Botryococcus		0	420	828	98	0.08114
Chlamydomonads		1	0	49	250	0.01232
Chlorococcoids (<10um)		34	0	1676	60	0.10054
Closterium		1	0	49	4130	0.20355
Crucigenia		336	0	16560	30	0.49680
Dictyosphaerium		210	0	10350	20	0.20700
Didymocystis		16	0	789	41	0.03233
Dimorphococcus		16	0	789	20	0.01577
Elakatothrix		1	0	49	45	0.00222
Eremosphaera		0	24	47	700	0.03312
Golenkinia		5	0	246	400	0.09857
Hyaloraphidium		6	0	296	750	0.22178
Lagerheimia		28	0	1380	500	0.69000
Monoraphidium		1	0	49	900	0.04436
Oocystis		460	0	22671	300	6.80138
Pediastrum		44	0	2169	60	0.13011
Planctonema		740	0	36471	800	29.17693
Scenedesmus		34	0	1676	250	0.41893
Staurastrum		1	0	49	2000	0.09857
Tetraedron		1	0	49	150	0.00739
CHRYSOPHYCEAE						

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **14/09/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

ALS Water
22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695250 20-42534
LOCALITY :	EM2015594_002
SITE :	US Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	8/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with high levels of small BGA present. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml) 1.0145 **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 Chrysophyceae		1	0	49	350	0.01725
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01577
CYANOPHYCEAE						
Leptolyngbya		160	0	7886	2.36	0.01861
Limnolyngbya (Planktolyngbya circumcreta)		710	0	34993	4.9	0.17146
Planktolyngbya		790	0	38935	3.8	0.14795
Synechococcales small (iauv <20)		9200	0	453425	5.25	2.38048
DINOPHYCEAE						
Dinoflagellates		1	0	49	20000	0.98571
EUGLENOPHYCEAE						
Euglena		0	2	4	7000	0.02760

TOTAL BGA	**535239**	**2.71851**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**632520**	**42.80976**

+ 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)* **Biologist**

REVIEWED: *Adam Deliyiannis* **Biologist**

DATE: **14/09/2020**

METHOD NO.: MB010/MW024CV