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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657130 20-37229
LOCALITY :	EM2013637_012
SITE :	DS Tauwichere
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to 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		26	0	1281	200	0.25628
Cocconeis		0	1	2	450	0.00089
Pennales		4	0	197	300	0.05914
Tabellaria		2	0	99	2000	0.19714
CHLOROPHYCEAE						
Ankistrodesmus		12	0	591	132	0.07807
Botryococcus		0	450	887	98	0.08694
Chlamydomonads		5	0	246	250	0.06161
Chlorococcoids (<10um)		152	0	7491	60	0.44948
Closterium		3	0	148	4130	0.61065
Colonial green (cells)		0	32	63	100	0.00631
Crucigenia		172	0	8477	30	0.25431
Dictyosphaerium		32	0	1577	20	0.03154
Didymocystis		8	0	394	41	0.01617
Elakatothrix		4	0	197	45	0.00887
Eremosphaera		0	8	16	700	0.01104
Hyaloraphidium		105	0	5175	750	3.88122
Lagerheimia		24	0	1183	500	0.59142
Monoraphidium		0	2	4	900	0.00355
Nephrocytium		4	0	197	200	0.03943
Oocystis		164	0	8083	300	2.42484
Pediastrum		14	0	690	60	0.04140
Planctonema		280	0	13800	800	11.03992
Scenedesmus		32	0	1577	250	0.39428
Selenastrum		13	0	641	250	0.16018

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **11/08/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657130 20-37229
LOCALITY :	EM2013637_012
SITE :	DS Tauwichere
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to 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)**
Tetraedron		3	0	148	150	0.02218
Tetrastrum		8	0	394	40	0.01577
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	49	350	0.01725
CRYPTOPHYCEAE						
Cryptomonads		4	0	197	320	0.06309
CYANOPHYCEAE						
Cuspidothrix c.f. issatschenkoi		0	51	101	57	0.00573
Leptolyngbya		460	0	22671	2.36	0.05350
Limnolyngbya (Planktolyngbya circumcreta)		935	0	46082	4.9	0.22580
Oscillatoriales (iauv 101-200)	P	0	429	846	142.8	0.12077
Planktolyngbya		1480	0	72942	3.8	0.27718
Romeria		48	0	2366	31	0.07334
Synechococcales small (iauv <20)		6220	0	306555	5.25	1.60941
DINOPHYCEAE						
Gymnodiniales (small)		1	0	49	500	0.02464
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01380
Phacus		0	1	2	6000	0.01183
OTHER PHYTOPLANKTON						
Other small flagellates		2	0	99	80	0.00789

TOTAL BGA	**451563**	**2.36574**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**846**	**0.12077**
TOTAL ALGAE	**505519**	**23.24686**

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **11/08/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657130 20-37229
LOCALITY :	EM2013637_012
SITE :	DS Tauwichere
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse and abundant algal community was observed. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0145	**Toxigenic (T) or Potentially toxic (P)**			**Total Cell Count (cells/mL)**	**Individual Algal Unit Volume (um3)**	**Total Biovolume (mm3/L)**
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			

+ 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: **11/08/2020**

Biologist **Biologist**

METHOD NO.: MB010/MW024CV