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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722419 20-45935
LOCALITY :	EM2017172-107
SITE :	Mc Grath Flat North
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse and abundant algal community was observed. Combined levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0138	**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			
BACILLARIOPHYCEAE							
Amphora			1	0	49	500	0.02466
Centrales			1	0	49	200	0.00986
Chaetoceros			20	0	986	200	0.19728
Cocconeis			2	0	99	450	0.04439
Entomoneis			0	1	2	1000	0.00197
Gyrosigma			0	1	2	1400	0.00276
Naviculales			0	1	2	1400	0.00276
Nitzschia			2	0	99	400	0.03946
Pennales			1	0	49	300	0.01480
Pennales (small <20um)			2	0	99	251	0.02476
Pleurosigma			0	1	2	2000	0.00395
CHLOROPHYCEAE							
Ankistrodesmoideae			168	0	8286	132	1.09371
Chlamydomonads			5	0	247	250	0.06165
Chlorococcoids			15360	0	757546	500	378.77293
Selenastrum			4	0	197	250	0.04932
CHRYSOPHYCEAE							
Choanoflagellates			23	0	1134	100	0.11343
CRYPTOPHYCEAE							
Cryptomonads			10	0	493	320	0.15782
CYANOPHYCEAE							
Planktolyngbya			110	0	5425	3.8	0.02062
Pseudanabaena			9	0	444	12.5	0.00555
Synechococcales small (iauv <20)			18880	0	931150	5.25	4.88854
DINOPHYCEAE							

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **08/10/2020**

Biologist **Biologist**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml) 1.0138 **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)**
Gymnodiniales		1	0	49	2000	0.09864
Gymnodiniales (small)		4	0	197	500	0.09864
Peridiniales		4	0	197	5000	0.98639
Polykrikos		0	1	2	102170	0.20156

TOTAL BGA	**937019**	**4.91470**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**1706805**	**386.91543**

+ 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: ***Karen Simonsen (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **08/10/2020**
Biologist **Biologist**

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