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

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657123 20-37229
LOCALITY :	EM2013637_005
SITE :	Morella Creek @ Gauge
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed. Current excessive levels of small BGA and greens will impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0291 **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		3	0	146	200	0.02915
Chaetoceros		10	0	486	200	0.09717
Navicula		39	0	1895	1400	2.65280
Pennales		6	0	292	300	0.08746
Pennales (small <20um)		5	0	243	251	0.06098
CHLOROPHYCEAE						
Ankistrodesmoideae		404	0	19629	132	2.59100
Ankistrodesmus		1	0	49	132	0.00641
Chlamydomonads		1	0	49	250	0.01215
Chlorococcoids (<10um)		320	0	15548	60	0.93285
Dictyosphaerium		8	0	389	20	0.00777
Elakatothrix		2	0	97	45	0.00437
Oocystis		13	0	632	300	0.18949
Selenastrum		1160	0	56360	250	14.08998
CHRYSOPHYCEAE						
Other Chrysophyceae		2	0	97	350	0.03401
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01555
CYANOPHYCEAE						
Planktolyngbya		92	0	4470	3.8	0.01699
Pseudanabaena		0	3	6	12.5	0.00007
Synechococcales small (iauv <20)		6500	0	315810	5.25	1.65800
DINOPHYCEAE						
Gymnodiniales		3	0	146	2000	0.29152
Gymnodiniales (small)		5	0	243	500	0.12147

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

METHOD NO.: MB010/MW024CV

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Peridiniales		1	0	49	5000	0.24293
EUGLENOPHYCEAE						
Euglena		0	1	2	7000	0.01360
OTHER PHYTOPLANKTON						
Other small flagellates		4	0	194	80	0.01555
Prasinophytes		15	0	729	100	0.07288

TOTAL BGA	**320286**	**1.67506**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**417610**	**23.24415**

+ 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.***

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