

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657131 20-37229
LOCALITY :	EM2013637-013
SITE :	Mark Point
SAMPLE :	Surface
DATE SAMPLED :	4/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse community of algal taxa was observed. Current levels of low biovolume BGA may impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0311	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

BACILLARIOPHYCEAE

<i>Chaetoceros</i>		11	0	533	200	0.10668
<i>Nitzschia</i>		0	1	2	400	0.00078
<i>Pennales</i>		1	0	48	300	0.01455

CHLOROPHYCEAE

<i>Ankistrodesmus</i>		1	0	48	132	0.00640
<i>Chlamydomonads</i>		2	0	97	250	0.02425
<i>Chlorococcoids (<10um)</i>		42	0	2037	60	0.12220
<i>Crucigenia</i>		32	0	1552	30	0.04655
<i>Dictyosphaerium</i>		4	0	194	20	0.00388
<i>Filamentous Green</i>		26	0	1261	386	0.48666
<i>Hyaloraphidium</i>		3	0	145	750	0.10911
<i>Lagerheimia</i>		1	0	48	500	0.02425
<i>Oocystis</i>		3	0	145	300	0.04364
<i>Scenedesmus</i>		2	0	97	250	0.02425
<i>Selenastrum</i>		1	0	48	250	0.01212
<i>Tetraedron</i>		1	0	48	150	0.00727

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		6	0	291	350	0.10183
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		27	0	1309	320	0.41897
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CYANOPHYCEAE

<i>Limnolyngbya (Planktolyngbya circumcreta)</i>		28	0	1358	4.9	0.00665
<i>Planktolyngbya</i>		77	0	3734	3.8	0.01419
<i>Pseudanabaena</i>		5	0	242	12.5	0.00303
<i>Synechococcales small (iauv <20)</i>		1150	0	55766	5.25	0.29277

ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Kirsten Mudie (signatory)*
Biologist

DATE: **11/08/2020**

METHOD NO.: MB010/MW024CV

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DINOPHYCEAE

Gymnodiniales (small)		2	0	97	500	0.04849
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EUGLENOPHYCEAE

Eutreptia		1	0	48	1000	0.04849
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OTHER PHYTOPLANKTON

Other small flagellates		56	0	2716	80	0.21724
Prasinophytes		65	0	3152	100	0.31520

TOTAL BGA	61100	0.31664
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	75016	2.49946

+ 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.