

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695252 20-42534
LOCALITY :	EM2015594-004
SITE :	Mark Point
SAMPLE :	Surface
DATE SAMPLED :	8/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A highly diverse community of algal taxa was observed. Current levels may impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0168	Toxicogenic (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>		424	0	20850	200	4.16994
<i>Naviculales</i>		1	0	49	1400	0.06884
<i>Pennales (small &lt;20um)</i>		1	0	49	251	0.01234

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		4	0	197	132	0.02596
<i>Chlamydomonads</i>		4	0	197	250	0.04917
<i>Chlorococcoids (&lt;10um)</i>		32	0	1574	60	0.09441
<i>Crucigenia</i>		16	0	787	30	0.02360
<i>Didymocystis</i>		2	0	98	41	0.00403
<i>Filamentous Green</i>		8	0	393	386	0.15185
<i>Oocystis</i>		11	0	541	300	0.16227

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		2	0	98	350	0.03442
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		74	0	3639	320	1.16444
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		12	0	590	3.8	0.00224
<i>Romeria</i>		5	0	246	31	0.00762
<i>Synechococcales small (iauv &lt;20)</i>		480	0	23603	5.25	0.12392

### DINOPHYCEAE

<i>Dinoflagellates</i>		0	17	33	20000	0.66876
<i>Gymnodiniales (small)</i>		2	0	98	500	0.04917

### EUGLENOPHYCEAE

<i>Eutreptia</i>		2	0	98	1000	0.09835
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### OTHER PHYTOPLANKTON

ANALYST: *Adam Deliyiannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **11/09/2020**

METHOD NO.: MB010/MW024CV

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Concentration	1 : 1	*	20	500			
Magnification							
Fields							
Other small flagellates			58	0	2852	80	0.22817
Prasinophytes			6	0	295	100	0.02950
TOTAL BGA					24439		0.13378
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					56287		7.16904

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.