

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657132 20-37229
LOCALITY :	EM2013637-014
SITE :	Long Point
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed. Current levels are unlikely to impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0333	Toxicogenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1						
Magnification							
Fields		*	- 200x 20	- 100x 500			

### BACILLARIOPHYCEAE

<i>Chaetoceros</i>		4	0	194	200	0.03871
<i>Nitzschia</i>		0	1	2	400	0.00077
<i>Pennales</i>		0	3	6	300	0.00174

### CHLOROPHYCEAE

<i>Chlamydomonads</i>		9	0	435	250	0.10887
<i>Chlorococcoids (&lt;10um)</i>		51	0	2468	60	0.14807
<i>Filamentous Green</i>		0	27	52	386	0.02017
<i>Tetraedron</i>		1	0	48	150	0.00726

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		6	0	290	350	0.10162
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		40	0	1936	320	0.61937
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### CYANOPHYCEAE

<i>Oscillatoriales (iauv 1-100)</i>	P	0	14	27	60.8	0.00165
<i>Planktolyngbya</i>		17	0	823	3.8	0.00313
<i>Synechococcales small (iauv &lt;20)</i>		38	0	1839	5.25	0.00965

### DINOPHYCEAE

<i>Gymnodiniales</i>		0	2	4	2000	0.00774
<i>Gymnodiniales (small)</i>		1	0	48	500	0.02419
<i>Peridinales</i>		0	1	2	5000	0.00968

### EUGLENOPHYCEAE

<i>Eutreptia</i>		1	0	48	1000	0.04839
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### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		33	0	1597	80	0.12775
<i>Prasinophytes</i>		73	0	3532	100	0.35324

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **11/08/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0333	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	2689	0.01443
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	27	0.00165
TOTAL ALGAE	13351	1.63201

+ 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.