

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722416 20-45935
LOCALITY :	EM2017172-014
SITE :	Long Point
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	6/10/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed with small greens and low biovolume BGA most numerous. Current combined levels may mildly impair water quality.

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

### BACILLARIOPHYCEAE

<i>Licmophora</i>		0	1	2	850	0.00165
<i>Naviculales</i>		1	0	48	1400	0.06774
<i>Nitzschia</i>		0	1	2	400	0.00077
<i>Pennales (small &lt;20um)</i>		1	0	48	251	0.01215

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		2	0	97	132	0.01277
<i>Chlamydomonads</i>		1	0	48	250	0.01210
<i>Chlorococcoids</i>		7	0	339	500	0.16936
<i>Colonial green (cells)</i>		60	0	2903	100	0.29033
<i>Crucigenia</i>		4	0	194	30	0.00581
<i>Oocystis</i>		0	4	8	300	0.00232
<i>Planctonema</i>		3	0	145	800	0.11613
<i>Scenedesmus</i>		0	4	8	250	0.00194
<i>Selenastrum</i>		2	0	97	250	0.02419

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		16	0	774	320	0.24775
---------------------	--	----	---	-----	-----	---------

### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>		280	0	13549	5.25	0.07113
--	--	-----	---	-------	------	---------

### DINOPHYCEAE

<i>Dinoflagellates</i>		0	1	2	20000	0.03871
------------------------	--	---	---	---	-------	---------

### EUGLENOPHYCEAE

<i>Eutreptia</i>		1	0	48	1000	0.04839
------------------	--	---	---	----	------	---------

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		9	0	435	80	0.03484
<i>Prasinophytes</i>		1	0	48	100	0.00484

ANALYST: **Adam Deliyannis**  
Biologist

REVIEWED: **Karen Simonsen (signatory)**  
Biologist

DATE: **07/10/2020**

METHOD NO.: MB010/MW024CV

Page 1 of 2

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722416 20-45935
LOCALITY :	EM2017172-014
SITE :	Long Point
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	6/10/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed with small greens and low biovolume BGA most numerous. Current combined levels may mildly impair water quality.

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	13549	0.07113
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	18795	1.16292

+ 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.