

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695257 20-42534
LOCALITY :	EM2015594-009
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	9/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A highly diverse and numerous community of algal taxa was observed. Current levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0722 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
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### BACILLARIOPHYCEAE

<i>Amphora</i>			1	0	47	500	0.02332
<i>Chaetoceros</i>			1	0	47	200	0.00933
<i>Naviculales</i>			4	0	187	1400	0.26115
<i>Nitzschia</i>			4	0	187	400	0.07461
<i>Pennales</i>			2	0	93	300	0.02798
<i>Pennales (small &lt;20um)</i>			1	0	47	251	0.01170
<i>Pleurosigma</i>			0	3	6	2000	0.01119

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>			148	0	6902	132	0.91102
<i>Chlamydomonads</i>			2	0	93	250	0.02332
<i>Chlorococcoids (&lt;10um)</i>			680	0	31711	60	1.90263

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>			1	0	47	350	0.01632
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>			4	0	187	320	0.05969
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### CYANOPHYCEAE

<i>Oscillatoriales (iauv 1-100)</i>	P		0	18	34	60.8	0.00204
<i>Planktolyngbya</i>			94	0	4384	3.8	0.01666
<i>Synechococcales small (iauv &lt;20)</i>			10400	0	484984	5.25	2.54617

### DINOPHYCEAE

<i>Dinoflagellates</i>			3	0	140	20000	2.79799
<i>Gymnodiniales</i>			1	0	47	2000	0.09327
<i>Gymnodiniales (small)</i>			3	0	140	500	0.06995
<i>Peridinales</i>			2	0	93	5000	0.46633

### OTHER PHYTOPLANKTON

ANALYST: *Adam Deliyiannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **11/09/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0722 1 : 1	Toxigenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Other small flagellates			14	0	653	80	0.05223
Prasinophytes			6	0	280	100	0.02798
TOTAL BGA			489402			2.56487	
TOTAL TOXIGENIC BGA			0			0.00000	
TOTAL POTENTIALLY TOXIC BGA			34			0.00204	
TOTAL ALGAE			530309			9.40487	

+ 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.