

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657136 20-37229
LOCALITY :	EM2013637_018
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	11/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse algal community was observed with small BGA and greens present in excessive levels. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0274	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							

### BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	49	500	0.02433
<i>Navicula</i>		1	0	49	1400	0.06813
<i>Nitzschia</i>		1	0	49	400	0.01947
<i>Pennales</i>		2	0	97	300	0.02920
<i>Pennales (small &lt;20um)</i>		7	0	341	251	0.08551

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		195	0	9490	132	1.25268
<i>Chlamydomonads</i>		2	0	97	250	0.02433
<i>Chlorococcoids (&lt;10um)</i>		1760	0	85653	60	5.13919
<i>Staurostrum</i>		0	1	2	2000	0.00389

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		7	0	341	320	0.10901
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		25	0	1217	3.8	0.00462
<i>Synechococcales small (iauv &lt;20)</i>		5880	0	286159	5.25	1.50234

### DINOPHYCEAE

<i>Gymnodiniales</i>		5	0	243	2000	0.48667
<i>Gymnodiniales (small)</i>		14	0	681	500	0.34067
<i>Peridinales</i>		6	0	292	5000	1.46000

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		265	0	12897	80	1.03173
<i>Prasinophytes</i>		13	0	633	100	0.06327

ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **11/08/2020**

METHOD NO.: MB010/MW024CV

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TOTAL BGA	287376	1.50696
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	398290	11.64503

+ 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.

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Biologist

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