

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722420 20-45935
LOCALITY :	EM2017172-018
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse and abundant algal community was observed. Combined levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0235	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>Amphora</i>		0	2	4	500	0.00195
<i>Chaetoceros</i>		7	0	342	200	0.06839
<i>Cocconeis</i>		1	0	49	450	0.02198
<i>Entomoneis</i>		0	1	2	1000	0.00195
<i>Grammatophora</i>		1	0	49	2000	0.09770
<i>Gyrosigma</i>		0	1	2	1400	0.00274
<i>Hantzschia</i>		0	1	2	500	0.00098
<i>Naviculales</i>		0	2	4	1400	0.00547
<i>Nitzschia</i>		2	0	98	400	0.03908
<i>Pennales</i>		1	0	49	300	0.01466
<i>Pennales (small &lt;20um)</i>		9	0	440	251	0.11036
<i>Pleurosigma</i>		0	3	6	2000	0.01172

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		273	0	13337	132	1.76043
<i>Chlamydomonads</i>		3	0	147	250	0.03664
<i>Chlorococcoids</i>		10560	0	515877	500	257.93845

### CHRYSTOPHYCEAE

<i>Choanoflagellates</i>		10	0	489	100	0.04885
--------------------------	--	----	---	-----	-----	---------

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		9	0	440	320	0.14069
---------------------	--	---	---	-----	-----	---------

### CYANOPHYCEAE

<i>Planktolyngbya</i>		60	0	2931	3.8	0.01114
<i>Synechococcales small (iauv &lt;20)</i>		65560	0	3202736	5.25	16.81436

### DINOPHYCEAE

<i>Gymnodiniales</i>		0	5	10	2000	0.01954
----------------------	--	---	---	----	------	---------

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

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **08/10/2020**

METHOD NO.: MB010/MW024CV

Page 1 of 2

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722420 20-45935
LOCALITY :	EM2017172-018
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse and abundant algal community was observed. Combined levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0235 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)
<i>Gymnodiniales (small)</i>			14	0	684	500	0.34196
<i>Peridinales</i>			5	0	244	5000	1.22130
<i>Polykrikos</i>			0	1	2	102170	0.19965
<b>TOTAL BGA</b>					<b>3205667</b>		<b>16.82550</b>
<b>TOTAL TOXIGENIC BGA</b>					<b>0</b>		<b>0.00000</b>
<b>TOTAL POTENTIALLY TOXIC BGA</b>					<b>0</b>		<b>0.00000</b>
<b>TOTAL ALGAE</b>					<b>3737944</b>		<b>278.91000</b>

+ 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.