

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6681723 20-40763
LOCALITY :	EM2014780_019
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	26/08/2020
DATE ANALYSED :	28/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed with small BGA and greens most numerous. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0208	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>		1	0	49	500	0.02449
<i>Naviculales</i>		1	0	49	1400	0.06857
<i>Nitzschia</i>		3	0	147	400	0.05878
<i>Pennales (small &lt;20um)</i>		4	0	196	251	0.04918
<i>Pleurosigma</i>		0	1	2	2000	0.00392

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		164	0	8033	132	1.06034
<i>Chlamydomonads</i>		24	0	1176	250	0.29389
<i>Chlorococcoids (&lt;10um)</i>		2420	0	118534	60	7.11207
<i>Planctonema</i>		0	5	10	800	0.00784

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		1	0	49	350	0.01714
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		59	0	2890	320	0.92476
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### CYANOPHYCEAE

<i>Leptolyngbya</i>		0	16	31	2.36	0.00007
<i>Planktolyngbya</i>		51	0	2498	3.8	0.00949
<i>Synechococcales small (iauv &lt;20)</i>		2260	0	110697	5.25	0.58116

### DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	49	20000	0.97962
<i>Gymnodiniales</i>		1	0	49	2000	0.09796
<i>Gymnodiniales (small)</i>		3	0	147	500	0.07347
<i>Peridinales</i>		2	0	98	5000	0.48981

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		60	0	2939	80	0.23511
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ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **31/08/2020**

METHOD NO.: MB010/MW024CV

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Magnification							
Fields							
Prasinophytes			32	0	1567	100	0.15674
TOTAL BGA					113226		0.59073
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					0		0.00000
TOTAL ALGAE					249210		12.24443

+ 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.