

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6933882 21-15798
LOCALITY :	EM2104707-019
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	17/03/2021
DATE ANALYSED :	22/03/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0311	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

Centrales		1	0	48	200	0.00970
Nitzschia		2	0	97	400	0.03879
Pennales		1	0	48	300	0.01455

### CHLOROPHYCEAE

Ankistrodesmoideae		160	0	7759	132	1.02415
Chlamydomonads		1	0	48	250	0.01212
Chlorococcoids (<10um)		308	0	14936	60	0.89613

### CHRYSOPHYCEAE

Other Chrysophyceae		2	0	97	350	0.03394
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### CYANOPHYCEAE

Planktolyngbya		75	0	3637	3.8	0.01382
Pseudanabaena		0	30	58	12.5	0.00073
Synechococcales small (iauv <20)		9760	0	473281	5.25	2.48473

### DINOPHYCEAE

Dinoflagellates		1	0	48	20000	0.96984
Gymnodiniales		1	0	48	2000	0.09698
Gymnodiniales (small)		2	0	97	500	0.04849
Peridinales		0	15	29	5000	0.14548

### OTHER PHYTOPLANKTON

Other small flagellates		15	0	727	80	0.05819
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TOTAL BGA	476976	2.49927
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	500958	5.84764

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Louise Ungemach (signatory)*  
Biologist

DATE: **23/03/2021**

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+ 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.