

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7056281 21-31436
LOCALITY :	EM2111820-019
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	21/06/2021
DATE ANALYSED :	25/06/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed and low biovolume BGA Synechococcales were most numerous. Current levels are likely to impair water quality.

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>Entomoneis</i>	1	0	49	1000	0.04898
<i>Naviculales</i>	1	0	49	1400	0.06857
<i>Nitzschia</i>	4	0	196	400	0.07837
<i>Pennales (small <20um)</i>	1	0	49	251	0.01229

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	258	0	12637	132	1.66810
<i>Chlorococcoids (<10um)</i>	224	0	10972	60	0.65831

CYANOPHYCEAE

<i>Leptolyngbya</i>	0	45	88	2.36	0.00021
<i>Synechococcales small (iauv <20)</i>	14720	0	721003	5.25	3.78527

DINOPHYCEAE

<i>Dinoflagellates</i>	1	0	49	20000	0.97962
<i>Gymnodiniales (small)</i>	7	0	343	500	0.17143

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	8	0	392	80	0.03135
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TOTAL BGA	721091	3.78547
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	745827	7.50251

+ 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 β -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

DATE: **25/06/2021**

METHOD NO.: MB010/MW024VCA

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