

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241914 21-55807
LOCALITY :	EM2123012-015
SITE :	Sth Policeman Point
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	23/11/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A moderately diverse range of algal taxa was observed. High levels of low biovolume BGA Synechococcales will impair water quality.

Sedgewick-Rafter Vol.(ml)	1.036	Toxicogenic (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>Nitzschia</i>	0	1	2	400	0.00077
<i>Pennales (small &lt;20um)</i>	3	0	145	251	0.03634

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	880	0	42471	132	5.60618
<i>Chlorococcoids (&lt;10um)</i>	625	0	30164	60	1.80985

### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>	14880	0	718147	5.25	3.77027
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### DINOPHYCEAE

<i>Gymnodiniales</i>	3	0	145	2000	0.28958
<i>Gymnodiniales (small)</i>	3	0	145	500	0.07239

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	60	0	2896	80	0.23166
<i>Prasinophytes</i>	2	0	97	100	0.00965

TOTAL BGA	718147	3.77027
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	794212	11.82669

+ 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.

ANALYST: *Adam Deliyiannis (signatory)* REVIEWED: *Kirsten Mudie (signatory)*  
Biologist Biologist

DATE: 23/11/2021