

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6906814 21-12031
LOCALITY :	EM2103113_003
SITE :	South Policeman Point
SAMPLE :	Surface
DATE SAMPLED :	24/02/2021
DATE ANALYSED :	1/03/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse algal community was observed with low biovolume BGA abundant. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0208	Toxigenic (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>Nitzschia</i>		316	0	15478	400	6.19122
<i>Pennales</i>		1	0	49	300	0.01469
<i>Pennales (small &lt;20um)</i>		10	0	490	251	0.12294

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		870	0	42614	132	5.62500
<i>Chlorococcoids (&lt;10um)</i>		1350	0	66125	60	3.96748

### CHRYSTOPHYCEAE

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

<i>Cryptomonads</i>		1	0	49	320	0.01567
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### CYANOPHYCEAE

<i>Pseudanabaena</i>		15	0	735	12.5	0.00918
<i>Spirulina</i>		0	950	1861	5.73	0.01067
<i>Synechococcales small (iauv &lt;20)</i>		6680	0	327194	5.25	1.71777

### DINOPHYCEAE

<i>Dinoflagellates</i>		12	0	588	20000	11.75549
<i>Gymnodiniales (small)</i>		9	0	441	500	0.22042

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		50	0	2449	80	0.19592
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TOTAL BGA	329790	1.73762
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	458122	29.86360

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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.