

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873995 21-07778
LOCALITY :	EM2101680-013
SITE :	South Policeman Point
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels may pose a health risk.

Sedgewick-Rafter Vol.(ml)	1.0255	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>		0	1	2	500	0.00098
<i>Nitzschia</i>		380	0	18528	400	7.41102
<i>Pennales</i>		0	1	2	300	0.00059

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		1760	0	85812	132	11.32716
<i>Chlorococcoids (&lt;10um)</i>		1840	0	89712	60	5.38274

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		7	0	341	350	0.11945
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		0	3	6	320	0.00187
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### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>		13600	0	663091	5.25	3.48123
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### DINOPHYCEAE

<i>Dinoflagellates</i>		3	0	146	20000	2.92540
<i>Gymnodiniales</i>		5	0	244	2000	0.48757
<i>Gymnodiniales (small)</i>		6	0	293	500	0.14627
<i>Peridinales</i>		26	0	1268	5000	6.33837

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		53	0	2584	80	0.20673
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TOTAL BGA	663091	3.48123
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	862029	37.82937

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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.