

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7086208 21-35420
LOCALITY :	EM2113768-001
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	13/07/2021
DATE ANALYSED :	19/07/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Excessive levels of low biovolume BGA Synechococcales 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 (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

### BACILLARIOPHYCEAE

<i>Nitzschia</i>		7	0	343	400	0.13715
<i>Pennales</i>		2	0	98	300	0.02939
<i>Pennales (small &lt;20um)</i>		2	0	98	251	0.02459
<i>Pleurosigma</i>		0	1	2	2000	0.00392

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		122	0	5976	132	0.78879
<i>Chlorococcoids (&lt;10um)</i>		54	0	2645	60	0.15870

### CHRYSTOPHYCEAE

<i>Other Chrysophytes</i>		1	0	49	200	0.00980
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		15	0	735	3.8	0.00279
<i>Synechococcales small (iauv &lt;20)</i>		15680	0	768025	5.25	4.03213

### DINOPHYCEAE

<i>Gymnodiniales</i>		2	0	98	2000	0.19592
<i>Gymnodiniales (small)</i>		4	0	196	500	0.09796
<i>Peridinales</i>		0	1	2	5000	0.00980

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		23	0	1127	80	0.09013
<i>Prasinophytes</i>		2	0	98	100	0.00980
<i>Raphidophytes</i>		0	11	22	7000	0.15086

TOTAL BGA	768760	4.03492
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	779514	5.74172

ANALYST: *Adam Deliyiannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **19/07/2021**

METHOD NO.: MB010/MW024VCA

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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.