

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241915 21-55807
LOCALITY :	EM2123012-016
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	22/11/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse range of algal taxa was observed. Current excessive levels of low biovolume BGA *Synechococcales* will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0272	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>Amphora</i>	1	0	49	500	0.02434
<i>Centrales</i>	1	0	49	200	0.00974
<i>Naviculales</i>	2	0	97	1400	0.13629
<i>Pennales</i>	1	0	49	300	0.01460
<i>Pennales (small &lt;20um)</i>	39	0	1898	251	0.47649

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	1435	0	69850	132	9.22021
<i>Chlorococcoids (&lt;10um)</i>	600	0	29206	60	1.75234

### CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>	1	0	49	350	0.01704
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### CYANOPHYCEAE

<i>Planktolyngbya</i>	30	0	1460	3.8	0.00555
<i>Synechococcales small (iauv &lt;20)</i>	30560	0	1487539	5.25	7.80958

### DINOPHYCEAE

<i>Gymnodiniales</i>	4	0	195	2000	0.38941
<i>Gymnodiniales (small)</i>	5	0	243	500	0.12169

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	7	0	341	80	0.02726
<i>Raphidophytes</i>	1	0	49	7000	0.34073

TOTAL BGA	1488999	7.81513
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1591074	20.34526

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

DATE: 22/11/2021

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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.

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

DATE: **22/11/2021**

METHOD NO.: MB010/MW024VCA

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