

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6657119 20-37229
LOCALITY :	EM2013637_001
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	5/08/2020
DATE ANALYSED :	10/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse algal community was observed. Current excessive levels of small BGA and greens will impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0199	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	0.02451
<i>Nitzschia</i>		6	0	294	400	0.11766
<i>Pennales</i>		2	0	98	300	0.02941
<i>Pennales (small &lt;20um)</i>		4	0	196	251	0.04922

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		290	0	14217	132	1.87665
<i>Chlorococcoids (&lt;10um)</i>		3200	0	156878	60	9.41269

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		8	0	392	320	0.12550
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		25	0	1226	3.8	0.00466
<i>Synechococcales small (iauv &lt;20)</i>		8240	0	403961	5.25	2.12080

### DINOPHYCEAE

<i>Gymnodiniales</i>		30	0	1471	2000	2.94146
<i>Gymnodiniales (small)</i>		4	0	196	500	0.09805
<i>Peridinales</i>		5	0	245	5000	1.22561

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		405	0	19855	80	1.58839
<i>Prasinophytes</i>		35	0	1716	100	0.17159

TOTAL BGA	405187	2.12545
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	600794	19.78620

ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **11/08/2020**

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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.