

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6906812 21-12031
LOCALITY :	EM2103113_001
SITE :	Stony Well
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)	1.0235	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>	1	0	49	500	0.02443
<i>Centrales</i>	1	0	49	200	0.00977
<i>Naviculales</i>	2	0	98	1400	0.13679
<i>Nitzschia</i>	144	0	7035	400	2.81387
<i>Pennales</i>	4	0	195	300	0.05862
<i>Pennales (small <20um)</i>	5	0	244	251	0.06131
<i>Pleurosigma</i>	1	0	49	2000	0.09770

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	820	0	40059	132	5.28774
<i>Chlorococcoids (<10um)</i>	1620	0	79140	60	4.74841

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>	1	0	49	350	0.01710
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CRYPTOPHYCEAE

<i>Cryptomonads</i>	2	0	98	320	0.03127
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CYANOPHYCEAE

<i>Planktolyngbya</i>	106	0	5178	3.8	0.01968
<i>Pseudanabaena</i>	16	0	782	12.5	0.00977
<i>Synechococcales small (iauv <20)</i>	7220	0	352711	5.25	1.85173

DINOPHYCEAE

<i>Dinoflagellates</i>	6	0	293	20000	5.86224
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OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	23	0	1124	80	0.08989
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Sedgewick-Rafter Vol.(ml)	1.0235	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

TOTAL BGA	358671	1.88118
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	487153	21.12031

+ 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 β -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

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

REVIEWED: **Adam Deliyiannis**
Biologist

DATE: **02/03/2021**

METHOD NO.: MB010/MW024VCA

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