

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007870 21-25384
LOCALITY :	EM2108900-001
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	18/05/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0242	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>		2	0	98	500	0.04882
<i>Centrales</i>		2	0	98	200	0.01953
<i>Naviculales</i>		1	0	49	1400	0.06835
<i>Nitzschia</i>		132	0	6444	400	2.57762
<i>Pennales</i>		4	0	195	300	0.05858
<i>Pennales (small <20um)</i>		1	0	49	251	0.01225
<i>Pleurosigma</i>		0	1	2	2000	0.00391

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		97	0	4735	132	0.62507
<i>Chlorococcoids (<10um)</i>		970	0	47354	60	2.84124

CYANOPHYCEAE

<i>Planktolyngbya</i>		8	0	391	3.8	0.00148
<i>Synechococcales small (iauv <20)</i>		13280	0	648311	5.25	3.40363

DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	49	20000	0.97637
<i>Gymnodiniales (small)</i>		9	0	439	500	0.21968
<i>Peridinales</i>		1	0	49	5000	0.24409

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		13	0	635	80	0.05077
<i>Prasinophytes</i>		2	0	98	100	0.00976

TOTAL BGA	648702	3.40512
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	708996	11.16117

ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Louise Ungemach (signatory)*
Biologist

DATE: 19/05/2021

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