

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7136733 21-41798
LOCALITY :	EM2116912-011
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	24/08/2021
DATE ANALYSED :	27/08/2021
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 impact water quality.

Sedgewick-Rafter Vol.(ml)	1.036	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	48	500	0.02413
<i>Nitzschia</i>		8	0	386	400	0.15444
<i>Pennales</i>		4	0	193	300	0.05792
<i>Pennales (small <20um)</i>		4	0	193	251	0.04846
<i>Pleurosigma</i>		0	5	10	2000	0.01931

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		119	0	5743	132	0.75811
<i>Chlorococcoids (<10um)</i>		61	0	2944	60	0.17664

CHRYSOPHYCEAE

<i>Other Chrysophytes</i>		1	0	48	200	0.00965
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CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>		15120	0	729730	5.25	3.83108
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DINOPHYCEAE

<i>Dinoflagellates</i>		0	1	2	20000	0.03861
<i>Gymnodiniales (small)</i>		4	0	193	500	0.09653

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		22	0	1062	80	0.08494
<i>Raphidophytes</i>		3	0	145	7000	1.01351

TOTAL BGA	729730	3.83108
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	740697	6.31332

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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.