

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7171297 21-46438
LOCALITY :	EM2119079-011
SITE :	Stony Well
SAMPLE :	Surface
DATE SAMPLED :	22/09/2021
DATE ANALYSED :	28/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of low biovolume BGA were present, impairing water quality.

Sedgewick-Rafter Vol.(ml)	1.0333	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

Pennales		1	0	48	300	0.01452
Pennales (small <20um)		1	0	48	251	0.01215
Pleurosigma		0	1	2	2000	0.00387

CHLOROPHYCEAE

Ankistrodesmoideae		360	0	17420	132	2.29943
Chlorococcoids (<10um)		740	0	35808	60	2.14846
Monoraphidium		1	0	48	900	0.04355
Oocystis		1	0	48	300	0.01452

CRYPTOPHYCEAE

Cryptomonads		1	0	48	320	0.01548
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CYANOPHYCEAE

Synechococcales small (iauv <20)		42000	0	2032324	5.25	10.66970
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DINOPHYCEAE

Gymnodiniales		2	0	97	2000	0.19355
Gymnodiniales (small)		1	0	48	500	0.02419

TOTAL BGA	2032324	10.66970
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2085939	15.43942

+ 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 Deliyannis**
Biologist

DATE: **28/09/2021**

METHOD NO.: MB010/MW024VCA

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