

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6933877 21-15798
LOCALITY :	EM2104707-014
SITE :	Mark Point
SAMPLE :	Surface
DATE SAMPLED :	18/03/2021
DATE ANALYSED :	22/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed, the presence of toxic BGA *Raphidiopsis raciborskii* should be noted. Current levels are unlikely to influence 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 (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

BACILLARIOPHYCEAE

<i>Chaetoceros</i>		0	7	14	200	0.00275
<i>Pennales</i>		0	1	2	300	0.00059

CHLOROPHYCEAE

<i>Chlorococcoids (<10um)</i>		39	0	1912	60	0.11472
<i>Planctonema</i>		0	30	59	800	0.04706

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		1	0	49	350	0.01716
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		5	0	245	320	0.07844
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CYANOPHYCEAE

<i>Raphidiopsis raciborskii</i>	T	17	0	833	42	0.03500
<i>Synechococcales small (iauv <20)</i>		62	0	3040	5.25	0.01596

DINOPHYCEAE

<i>Dinoflagellates</i>		0	1	2	20000	0.03922
<i>Gymnodiniales</i>		0	1	2	2000	0.00392

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		7	0	343	80	0.02745
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TOTAL BGA	3873	0.05096
TOTAL TOXIGENIC BGA	833	0.03500
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	6501	0.38227

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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.