

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873996 21-07778
LOCALITY :	EM2101680_014
SITE :	Snipe Point
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	9/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with excessive levels of small BGA. Water quality is likely to be impaired. Health concerns may be warranted.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0333 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
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BACILLARIOPHYCEAE

<i>Naviculales</i>		1	0	48	1400	0.06774
<i>Nitzschia</i>		295	0	14275	400	5.70986
<i>Pennales</i>		1	0	48	300	0.01452
<i>Pennales (small <20um)</i>		25	0	1210	251	0.30364
<i>Pleurosigma</i>		0	2	4	2000	0.00774

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		2280	0	110326	132	14.56305
<i>Carteria</i>		1	0	48	300	0.01452
<i>Chlorococcoids (<10um)</i>		4760	0	230330	60	13.81980

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		10	0	484	350	0.16936
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		5	0	242	320	0.07742
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CYANOPHYCEAE

<i>Spirulina</i>		0	282	546	5.73	0.00313
<i>Synechococcales small (iauv <20)</i>		34000	0	1645214	5.25	8.63738

DINOPHYCEAE

<i>Ceratium</i>		0	1	2	44000	0.08516
<i>Dinoflagellates</i>		43	0	2081	20000	41.61425
<i>Gymnodiniales (small)</i>		19	0	919	500	0.45969

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		100	0	4839	80	0.38711
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Sedgewick-Rafter Vol.(ml)	1.0333	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	1645760	8.64050
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2010616	85.93437

+ 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: **09/02/2021**