

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873989 21-07778
LOCALITY :	EM2101680-007
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels may pose a health risk.

Sedgewick-Rafter Vol.(ml)	1.0255	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>		1	0	49	500	0.02438
<i>Centrales</i>		1	0	49	200	0.00975
<i>Centrales - (5-10um)</i>		1	0	49	80	0.00390
<i>Chaetoceros</i>		1	0	49	200	0.00975
<i>Entomoneis</i>		0	3	6	1000	0.00585
<i>Gyrosigma</i>		2	0	98	1400	0.13652
<i>Naviculales</i>		13	0	634	1400	0.88737
<i>Nitzschia</i>		3	0	146	400	0.05851
<i>Pennales</i>		7	0	341	300	0.10239
<i>Pennales (small <20um)</i>		1	0	49	251	0.01224
<i>Pleurosigma</i>		0	11	21	2000	0.04291

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		67	0	3267	132	0.43120
<i>Ankyra</i>		1	0	49	40	0.00195
<i>Chlorococcoids (<10um)</i>		770	0	37543	60	2.25256

CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01560
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CYANOPHYCEAE

<i>Planktolyngbya</i>		36	0	1755	3.8	0.00667
<i>Synechococcales small (iauv <20)</i>		13120	0	639688	5.25	3.35836

DINOPHYCEAE

<i>Gymnodiniales</i>		1	0	49	2000	0.09751
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OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		6	0	293	80	0.02340
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ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Kirsten Mudie (signatory)*
Biologist

DATE: **09/02/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

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Sedgewick-Rafter Vol.(ml)	1.0255	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							
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TOTAL BGA	641443	3.36503
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	684184	7.48083

+ 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: **Adam Deliyiannis**
Biologist

REVIEWED: **Kirsten Mudie (signatory)**
Biologist

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Page 2 of 2