

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7056271 21-31436
LOCALITY :	EM2111820-009
SITE :	3.2km Sth of Salt Ck
SAMPLE :	Surface
DATE SAMPLED :	21/06/2021
DATE ANALYSED :	24/06/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse range of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels are likely to impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0208	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>		3	0	147	500	0.07347
<i>Centrales</i>		1	0	49	200	0.00980
<i>Entomoneis</i>		1	0	49	1000	0.04898
<i>Nitzschia</i>		82	0	4016	400	1.60658
<i>Pennales</i>		5	0	245	300	0.07347
<i>Pennales (small <20um)</i>		1	0	49	251	0.01229

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		215	0	10531	132	1.39009
<i>Carteria</i>		1	0	49	300	0.01469
<i>Chlorococcoids (<10um)</i>		572	0	28017	60	1.68103

CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01567
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CYANOPHYCEAE

<i>Planktolyngbya</i>		31	0	1518	3.8	0.00577
<i>Pseudanabaena</i>		0	19	37	12.5	0.00047
<i>Synechococcales small (iauv <20)</i>		18560	0	909091	5.25	4.77273

DINOPHYCEAE

<i>Dinoflagellates</i>		7	0	343	20000	6.85737
<i>Gymnodiniales</i>		4	0	196	2000	0.39185
<i>Gymnodiniales (small)</i>		9	0	441	500	0.22042
<i>Peridinales</i>		1	0	49	5000	0.24491

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		23	0	1127	80	0.09013
<i>Prasinophytes</i>		1	0	49	100	0.00490

ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

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METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0208	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	910646	4.77896
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	956052	17.51461

+ 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 Deliyannis**
Biologist

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Biologist

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