

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722417 20-45935
LOCALITY :	EM2017172-015
SITE :	Noonameena
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	8/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed, but overall algal levels are unlikely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0208	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1						
Magnification							
Fields		*	- 200x 20	- 100x 500			

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	49	500	0.02449
<i>Chaetoceros</i>		3	0	147	200	0.02939
<i>Licmophora</i>		3	0	147	850	0.12490
<i>Naviculales</i>		0	1	2	1400	0.00274
<i>Nitzschia</i>		0	5	10	400	0.00392
<i>Pennales</i>		0	8	16	300	0.00470
<i>Pennales (small <20um)</i>		8	0	392	251	0.09835

CHLOROPHYCEAE

<i>Chlamydomonads</i>		2	0	98	250	0.02449
<i>Chlorococcoids</i>		92	0	4506	500	2.25313
<i>Filamentous Green</i>		0	12	24	386	0.00908
<i>Oocystis</i>		4	0	196	300	0.05878
<i>Selenastrum</i>		11	0	539	250	0.13470

CRYPTOPHYCEAE

<i>Cryptomonads</i>		9	0	441	320	0.14107
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CYANOPHYCEAE

<i>Oscillatoriales (iauv 1-100)</i>	P	0	50	98	60.8	0.00596
<i>Planktolyngbya</i>		0	7	14	3.8	0.00005
<i>Synechococcales small (iauv <20)</i>		190	0	9306	5.25	0.04886

DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	49	20000	0.97962
<i>Prorocentrum cf lima</i>		0	2	4	3000	0.01176

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		1	0	49	80	0.00392
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ANALYST: **Karen Simonsen (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **08/10/2020**

METHOD NO.: MB010/MW024CV

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Magnification							
Fields							

TOTAL BGA	9418	0.05487
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	98	0.00596
TOTAL ALGAE	16087	3.95991

+ 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.

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