

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6796590 20-56146
LOCALITY :	EM2021368_015
SITE :	Noonameena
SAMPLE :	Surface
DATE SAMPLED :	1/12/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Small synechococcales dominated the sample. Current levels may mildly impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0327	Toxigenic (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>Chaetoceros</i>		19	0	920	200	0.18398
<i>Entomoneis</i>		0	2	4	1000	0.00387
<i>Gyrosigma</i>		0	1	2	1400	0.00271
<i>Naviculales</i>		1	0	48	1400	0.06778
<i>Nitzschia</i>		2	0	97	400	0.03873
<i>Pennales</i>		3	0	145	300	0.04358
<i>Pennales (small <20um)</i>		5	0	242	251	0.06076
<i>Pleurosigma</i>		0	1	2	2000	0.00387

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		5	0	242	132	0.03196
<i>Chlorococcoids (<10um)</i>		5	0	242	60	0.01453
<i>Selenastrum</i>		1	0	48	250	0.01210

CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	48	320	0.01549
---------------------	--	---	---	----	-----	---------

CYANOPHYCEAE

<i>Oscillatoria (small cells)</i>		0	51	99	1134	0.11201
<i>Planktolyngbya</i>		14	0	678	3.8	0.00258
<i>Synechococcales small (iauv <20)</i>		770	0	37281	5.25	0.19572

DINOPHYCEAE

<i>Dinoflagellates</i>		0	3	6	20000	0.11620
------------------------	--	---	---	---	-------	---------

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		6	0	291	80	0.02324
<i>Prasinophytes</i>		1	0	48	100	0.00484

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6796590 20-56146
LOCALITY :	EM2021368_015
SITE :	Noonameena
SAMPLE :	Surface
DATE SAMPLED :	1/12/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Small synechococcales dominated the sample. Current levels may mildly impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0327	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	38058	0.31031
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	40443	0.93396

+ 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

DATE: **04/12/2020**

METHOD NO.: MB010/MW024VCA

Page 2 of 2