

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7609394 22-60564
LOCALITY :	EM22151-004
SITE :	Noonameena
SAMPLE :	Surface
DATE SAMPLED :	8/08/2022
DATE ANALYSED :	12/08/2022
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A moderately diverse algal community was observed, but current levels are insufficient to influence water quality. An organism resembling the ciliated protozoan *Mesodinium rubrum* was present at significant levels.

Sedgewick-Rafter Vol.(ml)	1.0204	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

### BACILLARIOPHYCEAE

<i>Chaetoceros</i>		5	0	245	200	0.04900
<i>Cocconeis</i>		0	1	2	450	0.00088
<i>Fragilariaceae</i>		0	2	4	500	0.00196
<i>Pennales (small &lt;20um)</i>		3	0	147	251	0.03690

### CHLOROPHYCEAE

<i>Chlorococcoids (&lt;10um)</i>		16	0	784	60	0.04704
<i>Monoraphidium (small)</i>		3	0	147	16	0.00235
<i>Oocystis</i>		22	0	1078	300	0.32340
<i>Scenedesmus</i>		2	0	98	250	0.02450

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		2	0	98	320	0.03136
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### DINOPHYCEAE

<i>Gymnodiniales (small)</i>		1	0	49	500	0.02450
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TOTAL BGA	0	0.00000
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2652	0.54190

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.

ANALYST: **Karen Simonsen (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis (signatory)**  
Biologist

DATE: **12/08/2022**

METHOD NO.: MB010/MW024VCA

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