

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7136728 21-41798
LOCALITY :	EM2116912-006
SITE :	Noonameena
SAMPLE :	Surface
DATE SAMPLED :	25/08/2021
DATE ANALYSED :	27/08/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A moderately diverse algal community was observed. Current combined levels are unlikely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0255	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>		76	0	3706	200	0.74110
<i>Licmophora</i>		0	4	8	850	0.00663
<i>Nitzschia</i>		0	3	6	400	0.00234
<i>Pennales</i>		0	3	6	300	0.00176
<i>Pennales (small &lt;20um)</i>		0	1	2	251	0.00049

### CHLOROPHYCEAE

<i>Chlorococcoids (&lt;10um)</i>		22	0	1073	60	0.06436
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		15	0	731	320	0.23403
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		6	0	293	3.8	0.00111
<i>Synechococcales small (iauv &lt;20)</i>		19	0	926	5.25	0.00486

### DINOPHYCEAE

<i>Gymnodiniales (small)</i>		1	0	49	500	0.02438
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### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		4	0	195	80	0.01560
<i>Prasinophytes</i>		6	0	293	100	0.02925

TOTAL BGA	1219	0.00598
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	7288	1.12592

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+ 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.