

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7064960 21-32332
LOCALITY :	EM2112381-005
SITE :	Morella Basin @ O/L
SAMPLE :	Surface
DATE SAMPLED :	28/06/2021
DATE ANALYSED :	1/07/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A moderately diverse algal community was observed, however combined levels are unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0255	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>Chaetoceros</i>		9	0	439	200	0.08776
<i>Cocconeis</i>		11	0	536	450	0.24135
<i>Nitzschia</i>		86	0	4193	400	1.67723
<i>Pennales (small &lt;20um)</i>		3	0	146	251	0.03671

### CHLOROPHYCEAE

<i>Chlamydomonads</i>		3	0	146	250	0.03657
<i>Chlorococcoids</i>		17	0	829	500	0.41443
<i>Monoraphidium</i>		4	0	195	900	0.17552

### CHRYSOPHYCEAE

<i>Other Chrysophytes</i>		27	0	1316	200	0.26329
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01560
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### CYANOPHYCEAE

<i>Limnithrix/Geitlerinema/Anagnostidinema</i>	P	6	0	293	17.5	0.00512
<i>Planktolyngbya</i>		28	0	1365	3.8	0.00519
<i>Synechococcales small (iauv &lt;20)</i>		4	0	195	5.25	0.00102

### DINOPHYCEAE

<i>Dinoflagellates</i>		0	2	4	20000	0.07801
<i>Gymnodiniales</i>		0	6	12	2000	0.02340
<i>Gymnodiniales (small)</i>		9	0	439	500	0.21941
<i>Peridinales</i>		6	0	293	5000	1.46270

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		3	0	146	80	0.01170
<i>Prasinophytes</i>		149	0	7265	100	0.72647
<i>Raphidophytes</i>		12	0	585	7000	4.09556

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

REVIEWED: **Louise Ungemach (signatory)**  
Biologist

DATE: **02/07/2021**

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TOTAL BGA	1853	0.01133
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	293	0.00512
TOTAL ALGAE	18446	9.57706

+ 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.

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