

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7152224 21-43664
LOCALITY :	EM2118068-015
SITE :	Morella Basin @ O/L
SAMPLE :	Surface
DATE SAMPLED :	8/09/2021
DATE ANALYSED :	13/09/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Current levels are unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0407	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

Centrales		2	0	96	200	0.01922
Cocconeis		1	0	48	450	0.02162
Entomoneis		0	1	2	1000	0.00192
Naviculales		0	3	6	1400	0.00807
Pennales		1	0	48	300	0.01441
Pennales (small <20um)		1	0	48	251	0.01206

### CHLOROPHYCEAE

Ankistrodesmoideae		21	0	1009	132	0.13318
Chlorococcoids (<10um)		14	0	673	60	0.04036
Oocystis		11	0	528	300	0.15855

### CYANOPHYCEAE

Chroococcus (small cells)		0	8	15	12	0.00018
Planktolyngbya		25	0	1201	3.8	0.00456
Pseudanabaena		17	0	817	12.5	0.01021
Synechococcales small (iauv <20)		145	0	6966	5.25	0.03657

### DINOPHYCEAE

Gymnodiniales (small)		1	0	48	500	0.02402
Peridinales		2	0	96	5000	0.48045

### OTHER PHYTOPLANKTON

Other small flagellates		8	0	384	80	0.03075
-------------------------	--	---	---	-----	----	---------

TOTAL BGA	8999	0.05153
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	11985	0.99614

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **14/09/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7152224 21-43664
LOCALITY :	EM2118068-015
SITE :	Morella Basin @ O/L
SAMPLE :	Surface
DATE SAMPLED :	8/09/2021
DATE ANALYSED :	13/09/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed. Current levels are unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml)	1.0407	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							

+ 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.