

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007889 21-25384
LOCALITY :	EM2108900_020
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	20/05/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A moderately diverse algal community was observed with small greens and BGA numerous. Water quality may be mildly impaired.

Sedgewick-Rafter Vol.(ml)	1.0099	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	1	0	50	200	0.00990
Nitzschia	84	0	4159	400	1.66353
Pennales	16	0	792	300	0.23765
Pennales (small <20um)	8	0	396	251	0.09942

### CHLOROPHYCEAE

Ankistrodesmoideae	92	0	4555	132	0.60125
Chlorococcoids (<10um)	860	0	42578	60	2.55471

### CYANOPHYCEAE

Pseudanabaena	6	0	297	12.5	0.00371
Synechococcales small (iauv <20)	4060	0	201010	5.25	1.05530

### DINOPHYCEAE

Dinoflagellates	0	1	2	20000	0.03961
Gymnodiniales	8	0	396	2000	0.79216
Gymnodiniales (small)	5	0	248	500	0.12377

### OTHER PHYTOPLANKTON

Other small flagellates	36	0	1782	80	0.14259
Prasinophytes	1	0	50	100	0.00495

TOTAL BGA	201307	1.05902
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	256315	7.32855

ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **20/05/2021**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007889 21-25384
LOCALITY :	EM2108900_020
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	20/05/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A moderately diverse algal community was observed with small greens and BGA numerous. Water quality may be mildly impaired.

Sedgewick-Rafter Vol.(ml)	1.0099	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							

+ 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: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyiannis**  
Biologist

DATE: **20/05/2021**

METHOD NO.: MB010/MW024VCA

Page 2 of 2