

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7791205 22-70933
LOCALITY :	EM2218952_004
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	29/09/2022
DATE ANALYSED :	10/10/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + High levels of small BGA and greens are likely to have an impact on water quality.

Sedgewick-Rafter Vol.(ml)	1.0147	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

Centrales		3	0	148	200	0.02957
Chaetoceros		2	0	99	200	0.01971
Pennales		8	0	394	300	0.11826
Pennales (small <20um)		3	0	148	251	0.03710
Pleurosigma		0	1	2	2000	0.00394

### CHLOROPHYCEAE

Ankistrodesmoideae		540	0	26609	132	3.51237
Chlamydomonads		1	0	49	250	0.01232
Chlorococcoids (<10um)		2440	0	120233	60	7.21395
Monoraphidium (small)		1	0	49	16	0.00079

### CRYPTOPHYCEAE

Cryptomonads		10	0	493	320	0.15768
--------------	--	----	---	-----	-----	---------

### CYANOPHYCEAE

Synechococcales small (iauv <20)		10840	0	534148	5.25	2.80428
----------------------------------	--	-------	---	--------	------	---------

### DINOPHYCEAE

Gymnodiniales		5	0	246	2000	0.49276
Gymnodiniales (small)		2	0	99	500	0.04928

### OTHER PHYTOPLANKTON

Other small flagellates		120	0	5913	80	0.47305
-------------------------	--	-----	---	------	----	---------

TOTAL BGA	534148	2.80428
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	688630	14.92505

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

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

DATE: **10/10/2022**

METHOD NO.: MB010/MW024VCA

Page 1 of 2

## ALGAL REPORT

<b>CLIENT :</b>	Australian Laboratory Services Pty Ltd SA
<b>LABORATORY NO./BATCH NO. :</b>	7791205 22-70933
<b>LOCALITY :</b>	EM2218952_004
<b>SITE :</b>	Villa de Yumpa
<b>SAMPLE :</b>	Surface
<b>DATE SAMPLED :</b>	29/09/2022
<b>DATE ANALYSED :</b>	10/10/2022
<b>SAMPLED BY :</b>	Sample analysed as received

**COMMENTS:** + High levels of small BGA and greens are likely to have an impact on water quality.

<b>Sedgewick-Rafter Vol.(ml)</b>	1.0147	<b>Toxigenic (T) or Potentially toxic (P)</b>			<b>Total Cell Count (cells/mL)</b>	<b>Individual Algal Unit Volume (um3)</b>	<b>Total Biovolume (mm3/L)</b>
<b>Concentration</b>	1 : 1		- 200x	- 100x			
<b>Magnification</b>		*	20	500			
<b>Fields</b>							

+ 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.