

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6873992 21-07778
LOCALITY :	EM2101680_010
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A moderately diverse algal community was observed with high levels of small BGA and greens observed. Water quality is likely to be impaired. Health concerns may be warranted.

Sedgewick-Rafter Vol.(ml)	1.0291	Toxicogenic (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							

### BACILLARIOPHYCEAE

<i>Amphora</i>		0	2	4	500	0.00194
<i>Entomoneis</i>		0	1	2	1000	0.00194
<i>Nitzschia</i>		59	0	2867	400	1.14663
<i>Pennales</i>		1	0	49	300	0.01458
<i>Pennales (small &lt;20um)</i>		14	0	680	251	0.17073
<i>Pleurosigma</i>		0	5	10	2000	0.01943

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		160	0	7774	132	1.02614
<i>Chlorococcoids (&lt;10um)</i>		2380	0	115635	60	6.93810

### CYANOPHYCEAE

<i>Synechococcales small (iauv &lt;20)</i>		8800	0	427558	5.25	2.24468
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### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		40	0	1943	80	0.15548
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TOTAL BGA	427558	2.24468
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	556522	11.71966

+ 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 Deliyannis**  
Biologist

DATE: **09/02/2021**

METHOD NO.: MB010/MW024VCA

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