ALS Water
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ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7152219 21-43664
LOCALITY :	EM2118068-010
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	8/09/2021
DATE ANALYSED :	14/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse community of algal taxa was observed. Excessive levels of low biovolume BGA Synechococcales are likely to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0407 **Concentration** 1 : 1 **Magnification** **Fields**	**Toxigenic (T) or Potentially toxic (P) ***	- 200x 20	- 100x 500	**Total Cell Count (cells/mL)**	**Individual Algal Unit Volume (um3)**	**Total Biovolume (mm3/L)**
BACILLARIOPHYCEAE						
Pennales		1	0	48	300	0.01441
Pleurosigma		0	1	2	2000	0.00384
CHLOROPHYCEAE						
Ankistrodesmoideae		62	0	2979	132	0.39320
Chlorococcoids (<10um)		11	0	528	60	0.03171
CYANOPHYCEAE						
Synechococcales small (iauv <20)		21280	0	1022389	5.25	5.36754
DINOPHYCEAE						
Gymnodiniales (small)		6	0	288	500	0.14413
OTHER PHYTOPLANKTON						
Other small flagellates		14	0	673	80	0.05381
Prasinophytes		1	0	48	100	0.00480
Raphidophytes		3	0	144	7000	1.00894

TOTAL BGA	**1022389**	**5.36754**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**1027099**	**7.02239**

+ 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 β-N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.***

ANALYST: *Adam Deliyiannis* **Biologist**

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

DATE: **14/09/2021**

METHOD NO.: MB010/MW024VCA