

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6933883 21-15798
LOCALITY :	EM2104707-020
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	17/03/2021
DATE ANALYSED :	22/03/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with small greens and BGA most numerous. Current levels may impact water quality.

Sedgewick-Rafter Vol.(ml)	1.032	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

<i>Amphora</i>		1	0	48	500	0.02422
<i>Centrales</i>		1	0	48	200	0.00969
<i>Nitzschia</i>		43	0	2083	400	0.83333
<i>Pennales</i>		6	0	291	300	0.08721
<i>Pennales (small <20um)</i>		1	0	48	251	0.01216

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		885	0	42878	132	5.65988
<i>Chlamydomonads</i>		1	0	48	250	0.01211
<i>Chlorococcoids (<10um)</i>		1100	0	53295	60	3.19767

CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		5	0	242	350	0.08479
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	48	320	0.01550
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CYANOPHYCEAE

<i>Planktolyngbya</i>		21	0	1017	3.8	0.00387
<i>Pseudanabaena</i>		0	18	35	12.5	0.00044
<i>Synechococcales small (iauv <20)</i>		10280	0	498062	5.25	2.61483

DINOPHYCEAE

<i>Gymnodiniales (small)</i>		7	0	339	500	0.16957
<i>Peridinales</i>		0	1	2	5000	0.00969

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		20	0	969	80	0.07752
<i>Prasinophytes</i>		1	0	48	100	0.00484

ANALYST: **Adam Deliyannis**
Biologist

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

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METHOD NO.: MB010/MW024VCA

Page 1 of 2

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TOTAL BGA	499114	2.61913
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	599501	12.81734

+ 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 Deliyannis**
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Page 2 of 2