

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241916 21-55807
LOCALITY :	EM2123012-017
SITE :	DS Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	22/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse range of algal taxa was observed. Current excessive levels of low biovolume BGA Synechococcales will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0303	Toxicogenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

BACILLARIOPHYCEAE

Centrales		2	0	97	200	0.01941
Pennales		2	0	97	300	0.02912
Pennales (small <20um)		3	0	146	251	0.03654

CHLOROPHYCEAE

Ankistrodesmoideae		19	0	922	132	0.12171
Chlorococcoids (<10um)		41	0	1990	60	0.11938
Crucigenia		44	0	2135	30	0.06406
Dictyosphaerium		8	0	388	20	0.00776
Didymocystis		8	0	388	41	0.01592
Lagerheimia		11	0	534	500	0.26691
Monoraphidium		3	0	146	900	0.13103
Oocystis		41	0	1990	300	0.59691
Pediastrum		5	0	243	60	0.01456
Planctonema		272	0	13200	800	10.56003
Scenedesmus		18	0	874	250	0.21838
Staurostrum		1	0	49	2000	0.09706
Tetraedron		1	0	49	150	0.00728
Tetrastrum		4	0	194	40	0.00776

CYANOPHYCEAE

Aphanizomenonaceae family - straight	P	0	43	83	67	0.00559
Limnolyngbya (Planktolynbya circumcreta)		2760	0	133942	4.9	0.65631
Planktolynbya		1950	0	94633	3.8	0.35960
Synechococcales small (iauv <20)		5000	0	242648	5.25	1.27390

ANALYST: **Adam Deliyannis (signatory)** REVIEWED: **Kirsten Mudie (signatory)**
Biologist Biologist

DATE: **22/11/2021**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0303	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
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TOTAL BGA	471306	2.29541
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	83	0.00559
TOTAL ALGAE	494748	14.60925

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

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