

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484449 22-53362
LOCALITY :	EM2212385-002
SITE :	DS Tauwichee
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with current levels that may mildly influence water quality.

Sedgewick-Rafter Vol.(ml)	1.036	Toxicogenic (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		76	0	3668	200	0.73359
Pennales		8	0	386	300	0.11583
Pennales (small <20um)		32	0	1544	251	0.38764

CHLOROPHYCEAE

Chlorococcoids (<10um)		176	0	8494	60	0.50965
Closterium		0	1	2	4130	0.00797
Crucigenia		320	0	15444	30	0.46332
Dictyosphaerium		144	0	6950	20	0.13900
Didymocystis		56	0	2703	41	0.11081
Elakatothrix		2	0	97	45	0.00434
Lagerheimia		8	0	386	500	0.19305
Monoraphidium (small)		136	0	6564	16	0.10502
Monoraphidium (large)		6	0	290	400	0.11583
Oocystis		8	0	386	300	0.11583
Pediastrum		4	0	193	60	0.01158
Planctonema		13	0	627	800	0.50193
Scenedesmus		44	0	2124	250	0.53089
Tetraedron		16	0	772	150	0.11583
Tetrastrum		32	0	1544	40	0.06178

CRYPTOPHYCEAE

Cryptomonads		8	0	386	320	0.12355
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CYANOPHYCEAE

Limnolyngbya		576	0	27799	4.9	0.13622
Planktolyngbya		328	0	15830	3.8	0.06015
Synechococcales small (iauv <20)		216	0	10425	5.25	0.05473

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

REVIEWED: **Thao Nguyen (signatory)**
Biologist

DATE: **07/07/2022**

METHOD NO.: MB010/MW024VCA

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ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7484449 22-53362
LOCALITY :	EM2212385-002
SITE :	DS Tauwitschere
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with current levels that may mildly influence water quality.

Sedgewick-Rafter Vol.(ml)	1.036	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							

DINOPHYCEAE

Gymnodiniales		4	0	193	2000	0.38610
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OTHER PHYTOPLANKTON

Other small flagellates		4	0	193	80	0.01544
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TOTAL BGA	54054	0.25110
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	107000	5.00010

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

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Biologist

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