

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241920 21-55807
LOCALITY :	EM2123012-021
SITE :	Tilley Swamp Drain Watercourse
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	23/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Levels of low biovolume BGA Synechococcales will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0327	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

<i>Entomoneis</i>		0	2	4	1000	0.00387
<i>Pennales</i>		1	0	48	300	0.01453

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		15	0	726	132	0.09587
<i>Botryococcus</i>		0	200	387	98	0.03796
<i>Chlorococcoids (<10um)</i>		67	0	3244	60	0.19464
<i>Colonial green (cells)</i>		16	0	775	100	0.07747
<i>Filamentous Green</i>		0	33	64	386	0.02467
<i>Lagerheimia</i>		1	0	48	500	0.02421
<i>Oocystis</i>		35	0	1695	300	0.50838

CYANOPHYCEAE

<i>Planktolyngbya</i>		1720	0	83277	3.8	0.31645
<i>Synechococcales small (iauv <20)</i>		4980	0	241116	5.25	1.26586

DINOPHYCEAE

<i>Gymnodiniales</i>		1	0	48	2000	0.09683
<i>Peridinales</i>		2	0	97	5000	0.48417

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		118	0	5713	80	0.45705
--------------------------------	--	-----	---	------	----	---------

TOTAL BGA	324393	1.58231
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	337242	3.60194

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

DATE: **23/11/2021**

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7241920 21-55807
LOCALITY :	EM2123012-021
SITE :	Tilley Swamp Drain Watercourse
SAMPLE :	Surface
DATE SAMPLED :	16/11/2021
DATE ANALYSED :	23/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Levels of low biovolume BGA Synechococcales will impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0327	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							
Fields							

+ 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

DATE: **23/11/2021**