ALS Water
22 Dalmore Drive Scoresby 3179
Tel. 03 8756 8183 Fax. 03 9763 1862

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7684065 22-64963
LOCALITY :	EM2216764-012
SITE :	Tilley Watercourse
SAMPLE :	Surface
DATE SAMPLED :	31/08/2022
DATE ANALYSED :	7/09/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed, but current combined levels are insufficient to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0032 **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						
Amphora		0	1	2	500	0.00100
Campylodiscus		0	1	2	4000	0.00797
Centrales - (5-10um)		0	2	4	80	0.00032
Cocconeis		0	1	2	450	0.00090
Cylindrotheca		0	1	2	500	0.00100
Fragilariaceae		2	0	100	500	0.04984
Naviculales		2	0	100	1400	0.13955
Pennales (small <20um)		3	0	150	251	0.03753
CHLOROPHYCEAE						
Chlamydomonads		1	0	50	250	0.01246
Chlorococcoids (<10um)		9	0	449	60	0.02691
Monoraphidium (small)		7	0	349	16	0.00558
Tetraedron		2	0	100	150	0.01495
CRYPTOPHYCEAE						
Cryptomonads		3	0	150	320	0.04785
CYANOPHYCEAE						
Limnothrix/Geitlerinema/Anagnostidinema	P	12	0	598	17.5	0.01047
Planktolyngbya		7	0	349	3.8	0.00133
Pseudanabaena		8	0	399	12.5	0.00498
Synechococcales small (iauv <20)		107	0	5333	5.25	0.02800
DINOPHYCEAE						
Dinoflagellates		0	1	2	20000	0.03987
Prorocentrum		0	1	2	3000	0.00598
OTHER PHYTOPLANKTON						
Prasinophytes		0	2	4	100	0.00040

ANALYST: ***Karen Simonsen (signatory)*** REVIEWED: ***Lauren Minett (signatory)*** DATE: **08/09/2022**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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		Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Sedgewick-Rafter Vol.(ml)	1.0032						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			
TOTAL BGA					**6679**		**0.04477**
TOTAL TOXIGENIC BGA					**0**		**0.00000**
TOTAL POTENTIALLY TOXIC BGA					**598**		**0.01047**
TOTAL ALGAE					**8147**		**0.43689**

+ 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: *Karen Simonsen (signatory)* REVIEWED: *Lauren Minett (signatory)* DATE: **08/09/2022**
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