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. :	6874001 21-07778
LOCALITY :	EM2101680_019
SITE :	Tilley Swamp Drain
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed with diatoms most numerous. Water quality may be mildly impacted.

Sedgewick-Rafter Vol.(ml) 1.0168 **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						
Chaetoceros		0	27	53	200	0.01062
Fragilariaceae		37	0	1819	500	0.90972
Naviculales		2	0	98	1400	0.13769
Pennales		3	0	148	300	0.04426
Pennales (small <20um)		3	0	148	251	0.03703
CHLOROPHYCEAE						
Ankistrodesmus		3	0	148	132	0.01947
Chlamydomonads		2	0	98	250	0.02459
Chlorococcoids (<10um)		23	0	1131	60	0.06786
Oocystis		2	0	98	300	0.02950
Selenastrum		18	0	885	250	0.22128
CHRYSOPHYCEAE						
Other Chrysophyceae		2	0	98	350	0.03442
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01574
CYANOPHYCEAE						
Planktolyngbya		9	0	443	3.8	0.00168
Pseudanabaena		0	48	94	12.5	0.00118
Synechococcales small (iauv <20)		153	0	7524	5.25	0.03950
Synechococcales large (iauv 20-86)		0	20	39	54	0.00212
EUGLENOPHYCEAE						
Lepocinclis		0	1	2	29307	0.05765
OTHER PHYTOPLANKTON						
Other small flagellates		11	0	541	80	0.04327

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **09/02/2021**
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)	1.0168						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			
TOTAL BGA					**8100**		**0.04449**
TOTAL TOXIGENIC BGA					**0**		**0.00000**
TOTAL POTENTIALLY TOXIC BGA					**0**		**0.00000**
TOTAL ALGAE					**13416**		**1.69758**

+ 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)* REVIEWED: *Adam Deliyiannis* DATE: **09/02/2021**
Biologist **Biologist**

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