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. :	6781628 20-54272
LOCALITY :	Em020558_019
SITE :	Tilley Swamp Drain
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with greens and small BGA numerous. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml) 1.0272 **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	2	4	500	0.00195
Centrales		4	0	195	200	0.03894
Cocconeis		0	1	2	450	0.00088
Naviculales		0	3	6	1400	0.00818
Nitzschia		0	1	2	400	0.00078
Pennales		1	0	49	300	0.01460
Pennales (small <20um)		1	0	49	251	0.01222
CHLOROPHYCEAE						
Ankistrodesmoideae		25	0	1217	132	0.16063
Ankistrodesmus		6	0	292	132	0.03855
Chlorococcoids (<10um)		65	0	3164	60	0.18984
Colonial green (cells)		290	0	14116	100	1.41160
Lagerheimia		610	0	29692	500	14.84618
Oocystis		155	0	7545	300	2.26343
Selenastrum		335	0	16306	250	4.07662
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	49	350	0.01704
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01558
CYANOPHYCEAE						
Synechococcales small (iauv <20)		1985	0	96622	5.25	0.50726
OTHER PHYTOPLANKTON						
Other small flagellates		1	0	49	80	0.00389

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis*** DATE: **23/11/2020**
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)	1.0272						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			
TOTAL BGA					**96622**		**0.50726**
TOTAL TOXIGENIC BGA					**0**		**0.00000**
TOTAL POTENTIALLY TOXIC BGA					**0**		**0.00000**
TOTAL ALGAE					**169408**		**23.60817**

+ 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: **23/11/2020**
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