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. :	7086217 21-35420
LOCALITY :	EM2113768-010
SITE :	Tilley U/S Morella
SAMPLE :	Surface
DATE SAMPLED :	13/07/2021
DATE ANALYSED :	19/07/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with current algal levels unlikely to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0145 **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						
Anaulus		0	1	2	500	0.00099
Centrales		8	0	394	200	0.07886
Chaetoceros		3	0	148	200	0.02957
Cocconeis		0	1	2	450	0.00089
Naviculales		1	0	49	1400	0.06900
Pennales		1	0	49	300	0.01479
Pennales (small <20um)		1	0	49	251	0.01237
CHLOROPHYCEAE						
Chlorococcoids (<10um)		5	0	246	60	0.01479
Dictyosphaerium		4	0	197	20	0.00394
Monoraphidium		2	0	99	900	0.08871
Oocystis		4	0	197	300	0.05914
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01577
CYANOPHYCEAE						
Anabaena		0	14	28	76	0.00210
Pseudanabaena		0	12	24	12.5	0.00030
Synechococcales small (iauv <20)		260	0	12814	5.25	0.06727
DINOPHYCEAE						
Peridiniales		1	0	49	5000	0.24643
EUGLENOPHYCEAE						
Trachelomonas		0	1	2	3000	0.00591
OTHER PHYTOPLANKTON						
Other small flagellates		2	0	99	80	0.00789
Prasinophytes		1	0	49	100	0.00493

ANALYST: *Kirsten Mudie (signatory)* **Biologist** REVIEWED: *Adam Deliyiannis* **Biologist** DATE: **19/07/2021**

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)	1.0145						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			

TOTAL BGA	**12866**	**0.06967**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**14546**	**0.72364**

+ 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**

REVIEWED: *Adam Deliyiannis* **Biologist**

DATE: **19/07/2021**

METHOD NO.: MB010/MW024VCA