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. :	7217245 21-52414
LOCALITY :	EM2121437-006
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	26/10/2021
DATE ANALYSED :	8/11/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed with excessive levels of small BGA likely to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0105 **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						
Centrales		2	0	99	200	0.01979
Pennales		1	0	49	300	0.01484
Pennales (small <20um)		1	0	49	251	0.01242
CHLOROPHYCEAE						
Ankistrodesmoideae		298	0	14745	132	1.94636
Chlorococcoids (<10um)		90	0	4453	60	0.26719
CRYPTOPHYCEAE						
Cryptomonads		4	0	198	320	0.06333
CYANOPHYCEAE						
Synechococcales small (iauv <20)		17280	0	855022	5.25	4.48887
DINOPHYCEAE						
Gymnodiniales		0	4	8	2000	0.01583
Gymnodiniales (small)		3	0	148	500	0.07422
OTHER PHYTOPLANKTON						
Other small flagellates		6	0	297	80	0.02375

TOTAL BGA	**855022**	**4.48887**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**875068**	**6.92662**

+ 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: **10/11/2021**

METHOD NO.: MB010/MW024VCA