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. :	7152217 21-43664
LOCALITY :	EM2118068-008
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	8/09/2021
DATE ANALYSED :	14/09/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed. Excessive levels of low biovolume BGA Synechococcales are likely to influence water quality.

Sedgewick-Rafter Vol.(ml) 1.0327 **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						
Cocconeis		1	0	48	450	0.02179
Licmophora		0	1	2	850	0.00165
Nitzschia		1	0	48	400	0.01937
Pennales		2	0	97	300	0.02905
Pennales (small <20um)		1	0	48	251	0.01215
Pleurosigma		0	1	2	2000	0.00387
CHLOROPHYCEAE						
Ankistrodesmoideae		142	0	6875	132	0.90752
Chlorococcoids (<10um)		24	0	1162	60	0.06972
CYANOPHYCEAE						
Synechococcales small (iauv <20)		9840	0	476421	5.25	2.50121
DINOPHYCEAE						
Gymnodiniales		1	0	48	2000	0.09683
Gymnodiniales (small)		3	0	145	500	0.07263
OTHER PHYTOPLANKTON						
Other small flagellates		21	0	1017	80	0.08134
Prasinophytes		5	0	242	100	0.02421

TOTAL BGA	**476421**	**2.50121**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**486155**	**3.84134**

ANALYST: *Adam Deliyiannis* **Biologist**

REVIEWED: *Louise Ungemach (signatory)* **Biologist**

DATE: **14/09/2021**

METHOD NO.: MB010/MW024VCA

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

+ 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: *Adam Deliyiannis* **Biologist**

REVIEWED: *Louise Ungemach (signatory)* **Biologist**

DATE: **14/09/2021**

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