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. :	6873990 21-07778
LOCALITY :	EM2101680-008
SITE :	McGrath Flat
SAMPLE :	Surface
DATE SAMPLED :	3/02/2021
DATE ANALYSED :	8/02/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels may pose a health risk.

Sedgewick-Rafter Vol.(ml) 1.0242 **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		1	0	49	500	0.02441
Centrales		2	0	98	200	0.01953
Gyrosigma		0	1	2	1400	0.00273
Naviculales		1	0	49	1400	0.06835
Nitzschia		45	0	2197	400	0.87873
Pennales		5	0	244	300	0.07323
Pennales (small <20um)		1	0	49	251	0.01225
Pleurosigma		0	4	8	2000	0.01562
CHLOROPHYCEAE						
Ankistrodesmoideae		122	0	5956	132	0.78617
Chlorococcoids (<10um)		890	0	43449	60	2.60691
Oocystis		3	0	146	300	0.04394
CHRYSOPHYCEAE						
Other Chrysophyceae		3	0	146	350	0.05126
CRYPTOPHYCEAE						
Cryptomonads		4	0	195	320	0.06249
CYANOPHYCEAE						
Planktolyngbya		4	0	195	3.8	0.00074
Pseudanabaena		11	0	537	12.5	0.00671
Synechococcales small (iauv <20)		18400	0	898262	5.25	4.71588
DINOPHYCEAE						
Gymnodiniales		1	0	49	2000	0.09764
OTHER PHYTOPLANKTON						
Other small flagellates		14	0	683	80	0.05468
Prasinophytes		1	0	49	100	0.00488

ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Kirsten Mudie (signatory)*
Biologist

DATE: **09/02/2021**

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)	1.0242						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			
TOTAL BGA					**898994**		**4.72333**
TOTAL TOXIGENIC BGA					**0**		**0.00000**
TOTAL POTENTIALLY TOXIC BGA					**0**		**0.00000**
TOTAL ALGAE					**952363**		**9.52615**

+ 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: *Kirsten Mudie (signatory)* **Biologist**

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