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. :	7484453 22-53362
LOCALITY :	EM2212385-006
SITE :	McGrath Flat North
SAMPLE :	Surface
DATE SAMPLED :	29/06/2022
DATE ANALYSED :	5/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + Current high levels of algae are sufficient to impair water quality.

Sedgewick-Rafter Vol.(ml) 1.027 **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 - (5-10um)		6	0	292	80	0.02337
Chaetoceros		80	0	3895	200	0.77897
Naviculales		2	0	97	1400	0.13632
Nitzschia		11	0	536	400	0.21422
Pennales		5	0	243	300	0.07303
Pennales (small <20um)		2	0	97	251	0.02444
CHLOROPHYCEAE						
Ankistrodesmoideae		1300	0	63291	132	8.35443
Chlamydomonads		6	0	292	250	0.07303
Chlorococcoids (<10um)		1700	0	82765	60	4.96592
Monoraphidium (small)		27	0	1315	16	0.02103
CHRYSOPHYCEAE						
Other Chrysophyceae		3	0	146	350	0.05112
CRYPTOPHYCEAE						
Cryptomonads		1	0	49	320	0.01558
CYANOPHYCEAE						
Pseudanabaena		4	0	195	12.5	0.00243
Synechococcales small (iauv <20)		10180	0	495618	5.25	2.60200
DINOPHYCEAE						
Dinoflagellates		0	1	2	20000	0.03895
Gymnodiniales		1	0	49	2000	0.09737
Gymnodiniales (small)		1	0	49	500	0.02434
OTHER PHYTOPLANKTON						
Other small flagellates		110	0	5355	80	0.42843
Prasinophytes		18	0	876	100	0.08763

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Thao Nguyen (signatory)* DATE: **07/07/2022**
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)	1.027						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			

TOTAL BGA	**495813**	**2.60443**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**0**	**0.00000**
TOTAL ALGAE	**655162**	**18.01261**

+ 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: *Thao Nguyen (signatory)* **Biologist**

DATE: **07/07/2022**

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