

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7394988 22-15545
LOCALITY :	EM2204816-016
SITE :	Seagull Island
SAMPLE :	Surface
DATE SAMPLED :	17/03/2022
DATE ANALYSED :	25/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed. Current algal levels are sufficient to impair water quality (eg: discolouration).

Sedgewick-Rafter Vol.(ml)	1.042	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um ³)	Total Biovolume (mm ³ /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

BACILLARIOPHYCEAE

Centrales		1	0	48	200	0.00960
Nitzschia		560	0	26871	400	10.74856
Pennales		4	0	192	300	0.05758
Pennales (small <20um)		20	0	960	251	0.24088

CHLOROPHYCEAE

Ankistrodesmoideae		4340	0	208253	132	27.48944
Carteria		1	0	48	300	0.01440
Chlorococcoids (<10um)		7420	0	356046	60	21.36276
Oocystis		6	0	288	300	0.08637

CRYPTOPHYCEAE

Cryptomonads		12	0	576	320	0.18426
--------------	--	----	---	-----	-----	---------

CYANOPHYCEAE

Limnithrix/Geitlerinema/Anagnostidinema	P	0	250	480	17.5	0.00840
Synechococcales small (iauv <20)		49140	0	2357965	5.25	12.37932

DINOPHYCEAE

Gymnodiniales		1	0	48	2000	0.09597
Gymnodiniales (small)		4	0	192	500	0.09597

OTHER PHYTOPLANKTON

Other small flagellates		4	0	192	80	0.01536
-------------------------	--	---	---	-----	----	---------

TOTAL BGA	2358445	12.38772
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	480	0.00840
TOTAL ALGAE	2952159	72.78887

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7394988 22-15545
LOCALITY :	EM2204816-016
SITE :	Seagull Island
SAMPLE :	Surface
DATE SAMPLED :	17/03/2022
DATE ANALYSED :	25/03/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A moderately diverse algal community was observed. Current algal levels are sufficient to impair water quality (eg: discolouration).

Sedgewick-Rafter Vol.(ml)	1.042	Toxigenic (T) or Potentially toxic (P)	- 200x	- 100x	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

+ 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 Deliyannis (signatory)**
Biologist

DATE: **25/03/2022**

METHOD NO.: MB010/MW024VCA

Page 2 of 2