

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7136735 21-41798
LOCALITY :	EM2116912-013
SITE :	Seagull Island
SAMPLE :	Surface
DATE SAMPLED :	24/08/2021
DATE ANALYSED :	27/08/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0145	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

BACILLARIOPHYCEAE

<i>Amphora</i>		5	0	246	500	0.12321
<i>Centrales - (5-10um)</i>		1	0	49	80	0.00394
<i>Cocconeis</i>		9	0	444	450	0.19961
<i>Naviculales</i>		0	1	2	1400	0.00276
<i>Nitzschia</i>		47	0	2316	400	0.92656
<i>Pennales</i>		1	0	49	300	0.01479
<i>Pennales (small <20um)</i>		18	0	887	251	0.22267

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		61	0	3006	132	0.39685
<i>Chlorococcoids (<10um)</i>		50	0	2464	60	0.14786
<i>Oocystis</i>		2	0	99	300	0.02957

CYANOPHYCEAE

<i>Planktolyngbya</i>		9	0	444	3.8	0.00169
<i>Spirulina</i>		0	315	621	5.73	0.00356
<i>Synechococcales small (iauv <20)</i>		26400	0	1301134	5.25	6.83095

DINOPHYCEAE

<i>Gymnodiniales</i>		0	2	4	2000	0.00789
<i>Gymnodiniales (small)</i>		3	0	148	500	0.07393
<i>Peridinales</i>		0	2	4	5000	0.01971

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		27	0	1331	80	0.10646
<i>Prasinophytes</i>		3	0	148	100	0.01479
<i>Raphidophytes</i>		1	0	49	7000	0.34500

ANALYST: **Karen Simonsen (signatory)**
Biologist

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **30/08/2021**

METHOD NO.: MB010/MW024VCA

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TOTAL BGA	1302199	6.83620
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1313445	9.47178

+ 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.

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