

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7056264 21-31436
LOCALITY :	EM2111820-002
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	21/06/2021
DATE ANALYSED :	24/06/2021
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed, with the Synechococcales and chlorococcoid greens being most numerous. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.0291	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							

BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	49	500	0.02429
<i>Cocconeis</i>		2	0	97	450	0.04373
<i>Naviculales</i>		0	2	4	1400	0.00544
<i>Nitzschia</i>		67	0	3255	400	1.30211
<i>Pennales</i>		2	0	97	300	0.02915
<i>Pennales (small <20um)</i>		10	0	486	251	0.12195

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		184	0	8940	132	1.18006
<i>Chlamydomonads</i>		10	0	486	250	0.12147
<i>Chlorococcoids (<10um)</i>		140	0	6802	60	0.40812

CRYPTOPHYCEAE

<i>Cryptomonads</i>		1	0	49	320	0.01555
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CYANOPHYCEAE

<i>Planktolyngbya</i>		45	0	2186	3.8	0.00831
<i>Synechococcales small (iauv <20)</i>		46080	0	2238849	5.25	11.75396

DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	49	20000	0.97172
<i>Gymnodiniales (small)</i>		10	0	486	500	0.24293

EUGLENOPHYCEAE

<i>Euglena</i>		3	0	146	7000	1.02031
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OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		9	0	437	80	0.03498
<i>Raphidophytes</i>		2	0	97	7000	0.68021

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

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

DATE: **25/06/2021**

METHOD NO.: MB010/MW024VCA

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TOTAL BGA	2241035	11.76227
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	2262515	17.96429

+ 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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Biologist

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