

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7171295 21-46438
LOCALITY :	EM2119079-009
SITE :	Parnka Point
SAMPLE :	Surface
DATE SAMPLED :	22/09/2021
DATE ANALYSED :	28/09/2021
SAMPLED BY :	Sample analysed as received

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

Sedgewick-Rafter Vol.(ml)	1.0327	Toxicogenic (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

<i>Amphora</i>	1	0	48	500	0.02421
<i>Nitzschia</i>	1	0	48	400	0.01937
<i>Pennales</i>	1	0	48	300	0.01453
<i>Pennales (small <20um)</i>	2	0	97	251	0.02431

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>	108	0	5229	132	0.69023
<i>Chlorococcoids (<10um)</i>	15	0	726	60	0.04358

CRYPTOPHYCEAE

<i>Cryptomonads</i>	1	0	48	320	0.01549
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CYANOPHYCEAE

<i>Synechococcales small (iauv <20)</i>	19440	0	941222	5.25	4.94142
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DINOPHYCEAE

<i>Gymnodiniales</i>	3	0	145	2000	0.29050
<i>Gymnodiniales (small)</i>	3	0	145	500	0.07263

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>	11	0	533	80	0.04261
<i>Prasinophytes</i>	3	0	145	100	0.01453
<i>Raphidophytes</i>	1	0	48	7000	0.33892

TOTAL BGA	941222	4.94142
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	948482	6.53229

ANALYST: *Adam Deliyannis*
Biologist

REVIEWED: *Louise Ungemach (signatory)*
Biologist

DATE: **29/09/2021**

METHOD NO.: MB010/MW024VCA

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+ 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.