

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6695260 20-42534
LOCALITY :	EM2015594-012
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	9/09/2020
DATE ANALYSED :	11/09/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse and numerous community of algal taxa was observed. Current levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0218 1 : 1	Toxicogenic (T) or Potentially toxic (P) *	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
<b>BACILLARIOPHYCEAE</b>							
<i>Amphora</i>			1	0	49	500	0.02447
<i>Nitzschia</i>			23	0	1125	400	0.45019
<i>Pennales (small &lt;20um)</i>			1	0	49	251	0.01228
<b>CHLOROPHYCEAE</b>							
<i>Ankistrodesmoideae</i>			194	0	9493	132	1.25308
<i>Chlamydomonads</i>			2	0	98	250	0.02447
<i>Chlorococcoids (&lt;10um)</i>			1780	0	87101	60	5.22607
<b>CHRYSTOPHYCEAE</b>							
<i>Other Chrysophyceae</i>			1	0	49	350	0.01713
<b>CRYPTOPHYCEAE</b>							
<i>Cryptomonads</i>			18	0	881	320	0.28186
<b>CYANOPHYCEAE</b>							
<i>Planktolyngbya</i>			46	0	2251	3.8	0.00855
<i>Synechococcales small (iauv &lt;20)</i>			22400	0	1096105	5.25	5.75455
<b>DINOPHYCEAE</b>							
<i>Dinoflagellates</i>			1	0	49	20000	0.97867
<i>Gymnodiniales</i>			5	0	245	2000	0.48933
<i>Gymnodiniales (small)</i>			8	0	391	500	0.19573
<i>Peridinales</i>			8	0	391	5000	1.95733
<b>OTHER PHYTOPLANKTON</b>							
<i>Other small flagellates</i>			17	0	832	80	0.06655
<i>Prasinophytes</i>			9	0	440	100	0.04404

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Kirsten Mudie (signatory)*  
Biologist

DATE: **11/09/2020**

METHOD NO.: MB010/MW024CV

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Sedgewick-Rafter Vol.(ml)	1.0218	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							

TOTAL BGA	1098356	5.76310
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	1199549	16.78429

+ 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  $\beta$ -N-methylamino-L-alanine (BMAA) and its analogues. Therefore all cyanobacteria could be considered to pose a level of risk.