

ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6722404 20-45935
LOCALITY :	EM2017172-002
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	30/09/2020
DATE ANALYSED :	7/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse community of algal taxa was observed with small greens and low biovolume BGA most numerous. Current combined levels are likely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0208	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	49	500	0.02449
<i>Naviculales</i>		0	1	2	1400	0.00274
<i>Nitzschia</i>		7	0	343	400	0.13715
<i>Pennales</i>		1	0	49	300	0.01469
<i>Pennales (small <20um)</i>		2	0	98	251	0.02459
<i>Pleurosigma</i>		1	0	49	2000	0.09796

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		216	0	10580	132	1.39655
<i>Chlamydomonads</i>		1	0	49	250	0.01225
<i>Chlorococcoids (<10um)</i>		2380	0	116575	60	6.99451

CHRYSOPHYCEAE

<i>Other Chrysophyceae</i>		6	0	294	350	0.10286
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CRYPTOPHYCEAE

<i>Cryptomonads</i>		4	0	196	320	0.06270
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CYANOPHYCEAE

<i>Oscillatoriales (iauv 1-100)</i>	P	0	38	74	60.8	0.00453
<i>Planktolyngbya</i>		31	0	1518	3.8	0.00577
<i>Pseudanabaena</i>		10	0	490	12.5	0.00612
<i>Synechococcales small (iauv <20)</i>		17280	0	846395	5.25	4.44357

DINOPHYCEAE

<i>Dinoflagellates</i>		0	1	2	20000	0.03918
<i>Gymnodiniales</i>		15	0	735	2000	1.46944
<i>Peridinales</i>		4	0	196	5000	0.97962

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		132	0	6466	80	0.51724
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ANALYST: *Adam Deliyiannis*
Biologist

REVIEWED: *Karen Simonsen (signatory)*
Biologist

DATE: **07/10/2020**

METHOD NO.: MB010/MW024CV

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Magnification							
Fields							
<i>Prasinophytes</i>			5	0	245	100	0.02449
TOTAL BGA					848477		4.45999
TOTAL TOXIGENIC BGA					0		0.00000
TOTAL POTENTIALLY TOXIC BGA					74		0.00453
TOTAL ALGAE					984405		16.36046

+ 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.