

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6933865 21-15798
LOCALITY :	EM2104707-002
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	17/03/2021
DATE ANALYSED :	22/03/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed with small greens and BGA most numerous. Current levels may impact water quality.

Sedgewick-Rafter Vol.(ml)	1.024	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

Centrales		2	0	98	200	0.01953
Nitzschia		122	0	5957	400	2.38281
Pennales		2	0	98	300	0.02930
Pennales (small <20um)		3	0	146	251	0.03677

### CHLOROPHYCEAE

Ankistrodesmoideae		1480	0	72266	132	9.53906
Chlamydomonads		0	2	4	250	0.00098
Chlorococcoids (<10um)		1120	0	54688	60	3.28125

### CHRYSOPHYCEAE

Other Chrysophyceae		18	0	879	350	0.30762
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### CYANOPHYCEAE

Planktolyngbya		8	0	391	3.8	0.00148
Pseudanabaena		0	44	86	12.5	0.00107
Synechococcales small (iauv <20)		16240	0	792969	5.25	4.16309

### DINOPHYCEAE

Dinoflagellates		5	0	244	20000	4.88281
Gymnodiniales (small)		6	0	293	500	0.14648

### OTHER PHYTOPLANKTON

Other small flagellates		21	0	1025	80	0.08203
Prasinophytes		1	0	49	100	0.00488

TOTAL BGA	793446	4.16564
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	929193	24.87917

ANALYST: *Adam Deliyannis*  
Biologist

REVIEWED: *Louise Ungemach (signatory)*  
Biologist

DATE: **23/03/2021**

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