

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6750293 20-50047
LOCALITY :	EM2018692_002
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	21/10/2020
DATE ANALYSED :	26/10/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + Excessive levels of small BGA and greens dominated the sample. Water quality will be impaired.

Sedgewick-Rafter Vol.(ml)	1.0018	Toxicogenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

### BACILLARIOPHYCEAE

<i>Amphora</i>		1	0	50	500	0.02496
<i>Centrales</i>		2	0	100	200	0.01996
<i>Naviculales</i>		1	0	50	1400	0.06987
<i>Nitzschia</i>		10	0	499	400	0.19964
<i>Pennales (small &lt;20um)</i>		1	0	50	251	0.01253
<i>Pleurosigma</i>		0	1	2	2000	0.00399

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		720	0	35935	132	4.74346
<i>Chlamydomonads</i>		4	0	200	250	0.04991
<i>Chlorococcoids (&lt;10um)</i>		6840	0	341386	60	20.48313

### CRYPTOPHYCEAE

<i>Cryptomonads</i>		5	0	250	320	0.07986
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### CYANOPHYCEAE

<i>Limnothrix/Geitlerinema/Anagnostidinema</i>	P	0	48	96	17.5	0.00168
<i>Planktolyngbya</i>		20	0	998	3.8	0.00379
<i>Pseudanabaena</i>		0	33	66	12.5	0.00082
<i>Spirulina</i>		0	163	325	5.73	0.00186
<i>Synechococcales small (iauv &lt;20)</i>		30720	0	1533240	5.25	8.04951

### DINOPHYCEAE

<i>Dinoflagellates</i>		1	0	50	20000	0.99820
<i>Gymnodiniales</i>		3	0	150	2000	0.29946
<i>Gymnodiniales (small)</i>		27	0	1348	500	0.67379
<i>Peridinales</i>		1	0	50	5000	0.24955

### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		1860	0	92833	80	7.42663
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ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **27/10/2020**

METHOD NO.: MB010/MW024CV

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TOTAL BGA	1534725	8.05767
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	96	0.00168
TOTAL ALGAE	2007678	43.39262

+ 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.

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