

## ALGAL REPORT

CLIENT :	ALS
LABORATORY NO./BATCH NO. :	6681721 20-40763
LOCALITY :	EM2014780_017
SITE :	Bonneys
SAMPLE :	Surface
DATE SAMPLED :	26/08/2020
DATE ANALYSED :	28/08/2020
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse algal community was observed with small BGA and greens most numerous. Water quality may be impaired.

Sedgewick-Rafter Vol.(ml)	1.0138	Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	- 200x	- 100x			
Magnification			20	500			
Fields							

### BACILLARIOPHYCEAE

<i>Centrales</i>		1	0	49	200	0.00986
<i>Chaetoceros</i>		3	0	148	200	0.02959
<i>Naviculales</i>		3	0	148	1400	0.20714
<i>Nitzschia</i>		1	0	49	400	0.01973
<i>Pennales (small &lt;20um)</i>		2	0	99	251	0.02476

### CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		40	0	1973	132	0.26041
<i>Chlamydomonads</i>		20	0	986	250	0.24660
<i>Chlorococcoids (&lt;10um)</i>		1840	0	90748	60	5.44486

### CHRYSTOPHYCEAE

<i>Other Chrysophyceae</i>		12	0	592	350	0.20714
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### CRYPTOPHYCEAE

<i>Cryptomonads</i>		32	0	1578	320	0.50503
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### CYANOPHYCEAE

<i>Planktolyngbya</i>		136	0	6707	3.8	0.02549
<i>Pseudanabaena</i>		0	36	71	12.5	0.00089
<i>Synechococcales small (iauv &lt;20)</i>		1380	0	68061	5.25	0.35732

### DINOPHYCEAE

<i>Gymnodiniales</i>		0	6	12	2000	0.02367
<i>Gymnodiniales (small)</i>		20	0	986	500	0.49319

### EUGLENOPHYCEAE

<i>Eutreptia</i>		0	2	4	1000	0.00395
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### OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		68	0	3354	80	0.26830
<i>Prasinophytes</i>		88	0	4340	100	0.43401

ANALYST: **Kirsten Mudie (signatory)**  
Biologist

REVIEWED: **Adam Deliyannis**  
Biologist

DATE: **31/08/2020**

METHOD NO.: MB010/MW024CV

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TOTAL BGA	74839	0.38370
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	179905	8.56194

+ 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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