

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6796582 20-56146
LOCALITY :	EM2021368_007
SITE :	1.8km West of Salt Creek
SAMPLE :	Surface
DATE SAMPLED :	30/11/2020
DATE ANALYSED :	3/12/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with small BGA and greens abundant. Water quality is likely to be impaired.

Sedgewick-Rafter Vol.(ml)	1.0018	Toxicogenic (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

<i>Naviculales</i>		1	0	50	1400	0.06987
<i>Nitzschia</i>		5	0	250	400	0.09982
<i>Pennales</i>		1	0	50	300	0.01497
<i>Pennales (small <20um)</i>		28	0	1397	251	0.35077
<i>Pleurosigma</i>		0	1	2	2000	0.00399

CHLOROPHYCEAE

<i>Ankistrodesmoideae</i>		1240	0	61889	132	8.16930
<i>Chlorococcoids (<10um)</i>		5200	0	259533	60	15.57197

CRYPTOPHYCEAE

<i>Cryptomonads</i>		2	0	100	320	0.03194
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CYANOPHYCEAE

<i>Oscillatoriales (iauv 1-100)</i>	P	0	39	78	60.8	0.00473
<i>Pseudanabaena</i>		0	20	40	12.5	0.00050
<i>Spirulina</i>		0	204	407	5.73	0.00233
<i>Synechococcales small (iauv <20)</i>		0	38160	76183	5.25	0.39996

DINOPHYCEAE

<i>Dinoflagellates</i>		4	0	200	20000	3.99281
<i>Gymnodiniales</i>		3	0	150	2000	0.29946
<i>Gymnodiniales (small)</i>		13	0	649	500	0.32442
<i>Peridinales</i>		1	0	50	5000	0.24955

OTHER PHYTOPLANKTON

<i>Other small flagellates</i>		64	0	3194	80	0.25554
<i>Prasinophytes</i>		2	0	100	100	0.00998

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

REVIEWED: **Adam Deliyannis**
Biologist

DATE: **04/12/2020**

METHOD NO.: MB010/MW024VCA

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Sedgewick-Rafter Vol.(ml)	1.0018	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	76708	0.40753
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	78	0.00473
TOTAL ALGAE	404322	29.85193

+ 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.

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