

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007872 21-25384
LOCALITY :	EM2108900-003
SITE :	Sth Policeman Point
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	18/05/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels are likely to impact water quality.

Sedgewick-Rafter Vol.(ml)	1.024	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

Naviculales		2	0	98	1400	0.13672
Nitzschia		144	0	7031	400	2.81250
Pennales		2	0	98	300	0.02930

### CHLOROPHYCEAE

Ankistrodesmoideae		72	0	3516	132	0.46406
Chlamydomonads		0	1	2	250	0.00049
Chlorococcoids (<10um)		460	0	22461	60	1.34766
Chlorogonium		0	1	2	50	0.00010

### CHRYSOPHYCEAE

Other Chrysophyceae		2	0	98	350	0.03418
---------------------	--	---	---	----	-----	---------

### CYANOPHYCEAE

Planktolyngbya		523	0	25537	3.8	0.09704
Synechococcales small (iauv <20)		9920	0	484375	5.25	2.54297

### DINOPHYCEAE

Dinoflagellates		1	0	49	20000	0.97656
Gymnodiniales (small)		10	0	488	500	0.24414
Peridinales		1	0	49	5000	0.24414

### OTHER PHYTOPLANKTON

Other small flagellates		10	0	488	80	0.03906
-------------------------	--	----	---	-----	----	---------

TOTAL BGA	509912	2.64001
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	544292	8.96892

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7007872 21-25384
LOCALITY :	EM2108900-003
SITE :	Sth Policeman Point
SAMPLE :	Surface
DATE SAMPLED :	12/05/2021
DATE ANALYSED :	18/05/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS: +** A diverse community of algal taxa was observed with low biovolume BGA Synechococcales most numerous. Current levels are likely to 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 (um <sup>3</sup> )	Total Biovolume (mm <sup>3</sup> /L)
Concentration	1 : 1	*	20	500			
Magnification							
Fields							

+ 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.