

## ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	7086209 21-35420
LOCALITY :	EM2113768-002
SITE :	North Jacks Point
SAMPLE :	Surface
DATE SAMPLED :	13/07/2021
DATE ANALYSED :	19/07/2021
SAMPLED BY :	Sample analysed as received

**COMMENTS:** + A diverse community of algal taxa was observed. Excessive levels of low biovolume BGA Synechococcales are likely to impair water quality.

Sedgewick-Rafter Vol.(ml)	1.0242	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		1	0	49	200	0.00976
Gyrosigma		0	1	2	1400	0.00273
Nitzschia		11	0	537	400	0.21480
Pennales		1	0	49	300	0.01465
Pennales (small <20um)		1	0	49	251	0.01225

### CHLOROPHYCEAE

Ankistrodesmoideae		145	0	7079	132	0.93439
Chlorococcoids (<10um)		32	0	1562	60	0.09373

### CYANOPHYCEAE

Synechococcales small (iauv <20)		19040	0	929506	5.25	4.87991
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### DINOPHYCEAE

Gymnodiniales		3	0	146	2000	0.29291
Gymnodiniales (small)		2	0	98	500	0.04882

### OTHER PHYTOPLANKTON

Other small flagellates		16	0	781	80	0.06249
Prasinophytes		1	0	49	100	0.00488
Raphidophytes			1	2	7000	0.01367

TOTAL BGA	929506	4.87991
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	0	0.00000
TOTAL ALGAE	939909	6.58499

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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.