

22 Dalmore Drive Scoresby 3179 Tel. 03 8756 8183 Fax. 03 9763 1862





ALGAL REPORT

CLIENT:	ALS			
LABORATORY NO./BATCH NO. :	6681719 20-40763			
LOCALITY:	EM2014780_015			
SITE:	Long Point			
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 current algal levels unlikely to impair water quality.

Cocconeis 0	Sedgewick-Rafter Vol.(ml) Concentration Magnification Fields	1.0199 1 : 1	Toxigenic (T) or Potentially toxic (P)	- 200x 20	- 100x 500	Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Cocconeis 0 1 2 450 0.00 Nitzschia 1 0 49 400 0.01 Pennales 2 0 98 300 0.02 CHLOROPHYCEAE Ankistrodesmoideae 10 0 490 132 0.06 Chlamydomonads 38 0 1863 250 0.46 Chlorococcoids (<10um) 28 0 1373 60 0.08 Planctonema 0 3 6 800 0.00 CHRYSOPHYCEAE 0 196 350 0.06 CRYPTOPHYCEAE 0 196 350 0.06 CRYPTOPHYCEAE 0 8530 320 2.72 CYANOPHYCEAE 0 499 0 24463 5.25 0.12 DINOPHYCEAE 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE	BACILLARIOPHYCEAE							
Nitzschia 1	Chaetoceros			9	0	441	200	0.08824
Pennales 2 0 98 300 0.02 CHLOROPHYCEAE Ankistrodesmoideae 10 0 490 132 0.06 Chlamydomonads 38 0 1863 250 0.46 Chlorococcoids (<10um)	Cocconeis			0	1	2	450	0.00088
CHLOROPHYCEAE CHLOROPHYCEAE Ankistrodesmoideae 10 0 490 132 0.06 Chlamydomonads 38 0 1863 250 0.46 Chlorococcoids (<10um)	Nitzschia			1	0	49	400	0.01961
Ankistrodesmoideae 10 0 490 132 0.06 Chlamydomonads 38 0 1863 250 0.46 Chlorococcoids (<10um)	Pennales			2	0	98	300	0.02941
Chlamydomonads 38 0 1863 250 0.46 Chlorococcoids (<10um)	CHLOROPHYCEAE	CHLOROPHYCEAE						
Chlorococcoids (<10um) 28 0 1373 60 0.08 Planctonema 0 3 6 800 0.00 CHRYSOPHYCEAE Other Chrysophyceae 4 0 196 350 0.06 CRYPTOPHYCEAE Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20) 499 0 24463 5.25 0.12 DINOPHYCEAE Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 100 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Ankistrodesmoideae			10	0	490	132	0.06471
Planctonema 0 3 6 800 0.00 CHRYSOPHYCEAE Other Chrysophyceae 4 0 196 350 0.06 CRYPTOPHYCEAE Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20)	Chlamydomonads			38	0	1863	250	0.46573
CHRYSOPHYCEAE 4 0 196 350 0.06 CRYPTOPHYCEAE Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20) 499 0 24463 5.25 0.12 DINOPHYCEAE Gymnodiniales 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Chlorococcoids (<10um)			28	0	1373	60	0.08236
Other Chrysophyceae 4 0 196 350 0.06 CRYPTOPHYCEAE Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20)	Planctonema			0	3	6	800	0.00471
CRYPTOPHYCEAE Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20)	CHRYSOPHYCEAE							
Cryptomonads 174 0 8530 320 2.72 CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20)	Other Chrysophyceae			4	0	196	350	0.06863
CYANOPHYCEAE Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20)	CRYPTOPHYCEAE							
Oscillatoriales (iauv 1-100) P 0 43 84 60.8 0.00 Synechococcales small (iauv <20) 499 0 24463 5.25 0.12 DINOPHYCEAE Gymnodiniales 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Cryptomonads			174	0	8530	320	2.72968
Synechococcales small (iauv <20) 499 0 24463 5.25 0.12 DINOPHYCEAE Gymnodiniales 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE 2 4 1000 0.00 OTHER PHYTOPLANKTON 0 2 4 1000 0.02 Other small flagellates 58 0 2843 80 0.22	CYANOPHYCEAE							
DINOPHYCEAE Gymnodiniales 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Oscillatoriales (iauv 1-100)		Р	0	43	84	60.8	0.00513
Gymnodiniales 0 2 4 2000 0.00 Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Synechococcales small (iauv <20)			499	0	24463	5.25	0.12843
Gymnodiniales (small) 1 0 49 500 0.02 EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	DINOPHYCEAE							
EUGLENOPHYCEAE Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Gymnodiniales			0	2	4	2000	0.00784
Eutreptia 0 2 4 1000 0.00 OTHER PHYTOPLANKTON Other small flagellates 58 0 2843 80 0.22	Gymnodiniales (small)			1	0	49	500	0.02451
OTHER PHYTOPLANKTON 58 0 2843 80 0.22	EUGLENOPHYCEAE							
Other small flagellates 58 0 2843 80 0.22	Eutreptia			0	2	4	1000	0.00392
	OTHER PHYTOPLANKTON							
Prasinophytes 8 0 392 100 0.03	Other small flagellates			58	0	2843	80	0.22747
	Prasinophytes			8	0	392	100	0.03922

ANALYST: Kirsten Mudie (signatory) REVIEWED: Adam Deliyiannis DATE: 31/08/2020
Biologist Biologist

METHOD NO.: MB010/MW024CV Page 1 of 2



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COMMENTS: + A diverse algal community was observed with current algal levels unlikely to impair water quality.

Sedgewick-Rafter Vol.(ml) Concentration	1.0199 1 : 1	Toxigenic (T) or Potentially			Total Cell	Individual Algal Unit	Total
Magnification		toxic (P)	- 200x	- 100x	Count (cells/mL)	Volume	Biovolume (mm3/L)
Fields		*	20	500	(CCIIS/IIIL)	(um3)	(IIIII3/L)

TOTAL BGA	24547	0.13356
TOTAL TOXIGENIC BGA	0	0.00000
TOTAL POTENTIALLY TOXIC BGA	84	0.00513
TOTAL ALGAE	40887	3.99051

⁺ 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.

ANALYST: Kirsten Mudie (signatory) REVIEWED: Adam Deliyiannis DATE: 31/08/2020 Biologist **Biologist**

METHOD NO.: MB010/MW024CV Page 2 of 2

^{*} 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.