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

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6781619 20-54272
LOCALITY :	EM2020558_010
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA dominating the sample. Water quality will be impaired.

Sedgewick-Rafter Vol.(ml) 1.0169 **Concentration** 1 : 1 **Magnification** **Fields**	**Toxigenic (T) or Potentially toxic (P)** *	- 200x 20	- 100x 500	**Total Cell Count (cells/mL)**	**Individual Algal Unit Volume (um3)**	**Total Biovolume (mm3/L)**
BACILLARIOPHYCEAE						
Amphora		2	0	98	500	0.04917
Centrales		2	0	98	200	0.01967
Navicula		1	0	49	1400	0.06884
Nitzschia		4	0	197	400	0.07867
Pennales		1	0	49	300	0.01475
Pennales (small <20um)		140	0	6884	251	1.72780
Pleurosigma		0	2	4	2000	0.00787
CHLOROPHYCEAE						
Ankistrodesmoideae		1100	0	54086	132	7.13935
Chlamydomonads		2	0	98	250	0.02458
Chlorococcoids (<10um)		2680	0	131773	60	7.90638
CHRYSOPHYCEAE						
Other Chrysophyceae		1	0	49	350	0.01721
CRYPTOPHYCEAE						
Cryptomonads		2	0	98	320	0.03147
CYANOPHYCEAE						
Synechococcales small (iauv <20)		17640	0	867342	5.25	4.55355
DINOPHYCEAE						
Dinoflagellates		1	0	49	20000	0.98338
Gymnodiniales		1	0	49	2000	0.09834
Gymnodiniales (small)		11	0	541	500	0.27043
Peridiniales		1	0	49	5000	0.24585
OTHER PHYTOPLANKTON						
Other small flagellates		55	0	2704	80	0.21634

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **23/11/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA

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

ALGAL REPORT

CLIENT :	Australian Laboratory Services Pty Ltd SA
LABORATORY NO./BATCH NO. :	6781619 20-54272
LOCALITY :	EM2020558_010
SITE :	Villa de Yumpa
SAMPLE :	Surface
DATE SAMPLED :	18/11/2020
DATE ANALYSED :	23/11/2020
SAMPLED BY :	Sample analysed as received

COMMENTS: + A diverse algal community was observed with low biovolume BGA dominating the sample. Water quality will be impaired.

		Toxigenic (T) or Potentially toxic (P)			Total Cell Count (cells/mL)	Individual Algal Unit Volume (um3)	Total Biovolume (mm3/L)
Sedgewick-Rafter Vol.(ml)	1.0169						
Concentration	1 : 1						
Magnification			- 200x	- 100x			
Fields		*	20	500			
TOTAL BGA					**867342**		**4.55355**
TOTAL TOXIGENIC BGA					**0**		**0.00000**
TOTAL POTENTIALLY TOXIC BGA					**0**		**0.00000**
TOTAL ALGAE					**1064217**		**23.45363**

+ 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.***

ANALYST: *Kirsten Mudie (signatory)* REVIEWED: *Adam Deliyiannis* DATE: **23/11/2020**
Biologist **Biologist**

METHOD NO.: MB010/MW024VCA