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. :	7545129 22-57032
LOCALITY :	EM2213883-002
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	20/07/2022
DATE ANALYSED :	25/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with current algal levels that may mildly impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0274 **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						
Aulacoseira		4	0	195	2860	0.55675
Centrales		38	0	1849	200	0.36987
Pennales		4	0	195	300	0.05840
Pennales (small <20um)		12	0	584	251	0.14658
CHLOROPHYCEAE						
Ankistrodesmus		2	0	97	132	0.01285
Chlamydomonads		2	0	97	250	0.02433
Chlorococcoids (<10um)		122	0	5937	60	0.35624
Closterium		0	1	2	4130	0.00804
Colonial green (cells)		0	42	82	100	0.00818
Cosmarium		1	0	49	500	0.02433
Crucigenia		152	0	7397	30	0.22192
Dictyosphaerium		38	0	1849	20	0.03699
Didymocystis		12	0	584	41	0.02394
Dimorphococcus		6	0	292	20	0.00584
Lagerheimia		2	0	97	500	0.04867
Micractinium		4	0	195	30	0.00584
Monoraphidium (small)		48	0	2336	16	0.03738
Monoraphidium (large)		2	0	97	400	0.03893
Oocystis		36	0	1752	300	0.52560
Pediastrum		8	0	389	60	0.02336
Planctonema		104	0	5061	800	4.04906
Scenedesmus		20	0	973	250	0.24333
Schroederia		1	0	49	550	0.02677
Staurastrum		1	0	49	2000	0.09733

ANALYST: ***Kirsten Mudie (signatory)*** REVIEWED: ***Adam Deliyiannis (signatory)*** DATE: **26/07/2022**
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. :	7545129 22-57032
LOCALITY :	EM2213883-002
SITE :	DS Tauwitchere
SAMPLE :	Surface
DATE SAMPLED :	20/07/2022
DATE ANALYSED :	25/07/2022
SAMPLED BY :	Sample analysed as received

COMMENTS: + A highly diverse algal community was observed with current algal levels that may mildly impair water quality.

Sedgewick-Rafter Vol.(ml) 1.0274 **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)**
Tetraedron		10	0	487	150	0.07300
Tetrastrum		8	0	389	40	0.01557
CRYPTOPHYCEAE						
Cryptomonads		12	0	584	320	0.18688
CYANOPHYCEAE						
Aphanizomenonaceae family - straight	P	10	0	487	67	0.03261
Limnolyngbya		378	0	18396	4.9	0.09014
Planktolyngbya		190	0	9247	3.8	0.03514
Synechococcales small (iauv <20)		74	0	3601	5.25	0.01891

TOTAL BGA	**31731**	**0.17679**
TOTAL TOXIGENIC BGA	**0**	**0.00000**
TOTAL POTENTIALLY TOXIC BGA	**487**	**0.03261**
TOTAL ALGAE	**63398**	**7.40276**

+ 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)* **Biologist**
REVIEWED: *Adam Deliyiannis (signatory)* **Biologist**
DATE: **26/07/2022**

METHOD NO.: MB010/MW024VCA