

Cawthron Analytical Science Ensuring Integrity Through Analytical Excellence.

Project Number:	C06041						
Timaru District Coun	cil						
PO Box 522 TIMARU							
Attention:	John Clemens						
Customer Order No: Email Recipients:	38372 John Clemens						
Sample Details							
Laboratory ID:	C06041-1	Sample Type:	Water		Date Samp	oled: 05/01/2	022 13:30
Description:	Pareora Source				Date Rece	ived: 06/01/2	022 11:50
Customer ID:	Pareora River S	ource					
Species	Dese	cription		Unit Count (Units/mL)	Cell Count (Cells/mL)	Mean Cell Vol. (μm³)*	Biovolume (mm³/L)*
Total Cyanobacteria cell	count				1		0.00004
Total unit count				5			
Pseudanabaena sp. (1.3	-2.6 µm)	Potentially Toxic Cyanol	bacteria		1	39	0.0000
Planktolyngbya sp.		Cyanobacteria (not know	wn to be toxic)	5			
Guidelines (Table A4.1) : Sample Details	2009						
Laboratory ID:	C06041-2	Sample Type:	Water		Date Samp	oled: 05/01/2	
Description							022 13:30
Description:	Timaru Treated				Date Rece		022 13:30 022 11:50
•	Timaru Treated Timaru Treated				•		
Customer ID:	Timaru Treated	cription		Unit Count (Units/mL)	•		
Customer ID: Species	Timaru Treated	cription			Date Recei	ived: 06/01/2 <i>Mean Cell</i>	022 11:50 Biovolume
Customer ID: Species Total Cyanobacteria cell	Timaru Treated	cription Potentially Toxic Cyanol	bacteria		Date Receined Cell Count (Cells/mL)	ived: 06/01/2 <i>Mean Cell</i>	022 11:50 Biovolume (mm³/L)*
Customer ID: Species Total Cyanobacteria cell Pseudanabaena sp. (1.3 Pseudanabaenaceae	Timaru Treated Desc count -2.6 μm)	Potentially Toxic Cyanol Cyanobacteria (not know	wn to be toxic)		Cell Count (Cells/mL) 3 2	ived: 06/01/2 Mean Cell Vol. (µm³)* 39	022 11:50 Biovolume (mm ³ /L)* 0.0000 0.0000
Customer ID: Species Total Cyanobacteria cell Pseudanabaena sp. (1.3 Pseudanabaenaceae	Timaru Treated Desc count -2.6 μm)	Potentially Toxic Cyanol	wn to be toxic)	(Units/mL)	Date Received Cell Count (Cells/mL) 3 2	ived: 06/01/2 Mean Cell Vol. (μm³)*	022 11:50 Biovolume (mm³/L)* 0.0000
Customer ID: Species Total Cyanobacteria cell Pseudanabaena sp. (1.3 Pseudanabaenaceae Synechococcus sp. (1.0- Method: In-house, based <i>Biovolume Method: In-ho</i>	Timaru Treated Desc count -2.6 μm) 2.6 μm) I on Hotzel and Cro buse, based on NZ	Potentially Toxic Cyanol Cyanobacteria (not know Cyanobacteria (not know	wn to be toxic) wn to be toxic)	(Units/mL) 3	Date Received Cell Count (Cells/mL) 3 2 1	ived: 06/01/2 Mean Cell Vol. (µm³)* 39	022 11:50 Biovolume (mm ³ /L)* 0.0000 0.0000
Customer ID: Species Total Cyanobacteria cell Pseudanabaena sp. (1.3 Pseudanabaenaceae Synechococcus sp. (1.0- Method: In-house, based <i>Biovolume Method: In-ho</i> <i>Guidelines (Table A4.1)</i>	Timaru Treated Desc count -2.6 μm) 2.6 μm) I on Hotzel and Cro puse, based on NZ 2009	Potentially Toxic Cyanol Cyanobacteria (not know Cyanobacteria (not know	wn to be toxic) wn to be toxic) acteria in Recreat	(Units/mL) 3 ional Fresh Waters	Date Receins Cell Count (Cells/mL) 3 2 1 s - Interim	ived: 06/01/2 <i>Mean Cell</i> <i>Vol. (µm³)*</i> 39 12 2 2 2 2 2 2 2 2 2 2 3 1 2 3 1 2 2 2 2 2 2 3 9 1 2 2 2 2 2 2 2 2 2 2 2 2 2	022 11:50 Biovolume (mm³/L)* 0.0000 0.0000 0.0000 0.0000
Pseudanabaena sp. (1.3 Pseudanabaenaceae Synechococcus sp. (1.0- Method: In-house, based <i>Biovolume Method: In-ho</i> <i>Guidelines (Table A4.1)</i>	Timaru Treated Desc count -2.6 µm) 2.6 µm) I on Hotzel and Cro buse, based on NZ 2009	Potentially Toxic Cyanol Cyanobacteria (not know Cyanobacteria (not know	vn to be toxic) vn to be toxic) acteria in Recreat This docume reproduced v	(Units/mL) 3	Date Recei Cell Count (Cells/mL) 3 2 1 s - Interim R P m	ived: 06/01/2 <u>Mean Cell</u> <u>Vol. (µm³)*</u> 39 12	022 11:50 Biovolume (mm³/L)* 0.0000 0.0000 0.0000 0.0000

* Indicates an analysis that is not IANZ accredited

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Sample Details						
Laboratory ID:	C06041-3	Sample Type: Water		Date Sam	pled: 05/01/2	2022 13:30
Description:	Timaru Raw			Date Reco	eived: 06/01/2	2022 11:50
Customer ID:	Timaru Raw					
Species	Desc	Description				
Total unit count			87	0		
Planktolyngbya sp.		Cyanobacteria (not known to be t	toxic) 87	0		
Method: In-house, bas	ed on Hotzel and Cro	ome 1999				
Sample Details						
Sample Details						
Laboratory ID:	C06041-4	Sample Type: Water		Date Sam	pled: 05/01/2	2022 15:15
-	C06041-4 Opihi Gallery	Sample Type: Water		Date Sam Date Reco		2022 15:15 2022 11:50
Laboratory ID:		Sample Type: Water				
Laboratory ID: Description:	Opihi Gallery Opihi Gallery	Sample Type: Water	Unit Count (Units/mL)	Date Reco		
Laboratory ID: Description: Customer ID:	Opihi Gallery Opihi Gallery Desc			Date Reco	eived: 06/01/2 Mean Cell	Biovolume (mm³/L)*
Laboratory ID: Description: Customer ID: Species	Opihi Gallery Opihi Gallery Desc		(Units/mL)	Date Reco Cell Count (Cells/mL)	eived: 06/01/2 Mean Cell	2022 11:50 Biovolume
Laboratory ID: Description: Customer ID: Species Total Cyanobacteria ca	Opihi Gallery Opihi Gallery Desc ell count		(Units/mL)	Date Reco Cell Count (Cells/mL) 580	eived: 06/01/2 Mean Cell	Biovolume (mm³/L)*

Guidelines (Table A4.1) 2009

Laboratory ID:	C06041-5	Sample Type:	Water		Date Sampled:	05/01/2022 16:30
Description:	108 Meadows Road				Date Received:	06/01/2022 11:50
Customer ID:	108 Meadows Road					
Species	Descript	ion		Unit Count (Units/mL)		
Total unit count				6		
Planktolyngbya sp.	Cyanobacteria (not known to be toxic)		1			
Pseudanabaenaceae	Cyanobacteria (not known to be toxic)		5			
Method: In-house, based	I on Hotzel and Croome	1999				

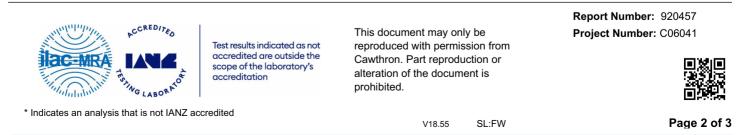
Results apply to samples as received unless otherwise specified.

Taxa identifications and enumeration are reported to the best possible certainty within the limitations of bright field microscopy and on-going taxonomic reviews. These limitations are most apparent in organisms with a cell diameter less than 2.5µm.

Our routine detection limits for chemical testing relate to samples with a clean matrix. Reported detection limits may be higher for individual samples if there is insufficient sample or the matrix is complex.

< means less than, > means greater than

Sample Details



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Date Generated: 7/1/22

Authorised by: Sumali Nanayakkara

Position: Senior Technician, Natural Toxins Laboratory

Signature: genen



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