PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*285930*	*Depth :*	N/A
Supercedes Report No:		*Chlorophyll a:*	NA
		Microcystin equivalents:	NA
		Date analysed:	7/06/2023
Lims No: L23042199	*Date Sampled:*	18/05/2023	*Analyst:* [redacted]
Client ID: 233918	*Address:*	[redacted]	
Site:			

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water Laboratory Services
Issued On : 09/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	1318	Potentially toxic	90.94	0.156
Anagnostidinema	2768		83.59	0.048
Coccoid Blue Green Picoplankton	2187502	Filter clogging?	4,156.25	0.987
Cuspidothrix issatschenkoi	7826		399.12	0.424
Microcystis	798	Potentially toxic, taste & odour	22.42	0.022
Myxobaktron	1475		25.96	0.007
Non toxic Aphanizomenonaceae	1665	Taste & Odour	68.26	0.074
Planktolyngbya	16223	Filter clogging	162.23	1.297
Pseudanabaena	37879		303.03	0.378
Raphidiopsis raciborskii	7160	Potentially toxic, taste & odour	270.64	0.210
Sphaerospermopsis aphanizomenoides	1943		58.29	0.073
Synechococcus cf	2212		27.20	0.014
Subtotal	2268769		5,667.93	3.690

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	2269000	5668.00	3.690
*** Potentially Toxic Blue Green**	9280	384.00	0.388

Comment:
Debris present in the sample.

SWC, [redacted]
(PO Box 73) West Ryde NSW 2114

*Taxa with potential to produce toxins.
ASU : One ASU (Area Standard Unit) equals 400µm² of algal cells (as cross sectional area)
Biovolume : Biovolume is calculated from cell linear dimensions. Guidelines based on Biovolume.
Coccoid Blue Green Picoplankton: *Aphanocapsa; Aphanothece; Cyanogranis; Cyanonephron; Cyanocatena; Gloeocapsa; Gloeothece ; Cyanodictyon*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
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Accreditation No.: 610 Biological testing
Accredited for compliance with ISO/IEC 17025

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*285930*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**7/06/2023**
Lims No: **L23042200**	***Date Sampled:***	**18/05/2023**	*Analyst:* [redacted]
Client ID: 233919	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 09/06/2023

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TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaena	**1108**	**Taste & Odour**	**162.87**	**0.117**
Anabaenopsis	**708**	**Potentially toxic**	**48.85**	**0.083**
Aphanizomenonaceae	**3327**	**Potentially toxic, taste & odour**	**222.90**	**0.345**
Coccoid Blue Green Picoplankton	**716779**	**Filter clogging?**	**1,361.88**	**0.323**
Cuspidothrix issatschenkoi	**4293**		**218.94**	**0.232**
Dolichospermum cf planctonicum/smithii	**278**	**Taste & Odour**	**31.77**	**0.070**
Merismopedia	**8849**		**8.84**	**0.074**
Microcystis	**590**	**Potentially toxic, taste & odour**	**16.57**	**0.016**
Planktolyngbya	**13827**	**Filter clogging**	**138.27**	**1.106**
Pseudanabaena	**61944**		**495.55**	**0.619**
Raphidiopsis raciborskii	**6410**	**Potentially toxic, taste & odour**	**242.29**	**0.188**
Sphaerospermopsis aphanizomenoides	**3989**		**119.67**	**0.150**
Subtotal	**822102**		**3,068.40**	**3.323**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**822100**	**3068.00**	**3.320**
*** Potentially Toxic Blue Green**	**11040**	**530.60**	**0.632**

Comment:
Debris present in the sample.

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(PO Box 73) West Ryde NSW 2114

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Biovolume : Biovolume is calculated from cell linear dimensions. Guidelines based on Biovolume.
Coccoid Blue Green Picoplankton: *Aphanocapsa; Aphanothece; Cyanogranis; Cyanonephron; Cyanocatena; Gloeocapsa; Gloeothece ; Cyanodictyon*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*285930*	*Depth :*	N/A
Supercedes Report No:		*Chlorophyll a:*	NA
		Microcystin equivalents:	NA
		Date analysed:	8/06/2023
Lims No: L23042201	*Date Sampled:*	18/05/2023	*Analyst:* [redacted]
Client ID: 233920	*Address:*	[redacted]	
Site:			

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water Laboratory Services
Issued On : 09/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	1804	Potentially toxic	124.47	0.213
Anagnostidinema	3885		117.32	0.068
Coccoid Blue Green Picoplankton	1049727	Filter clogging?	1,994.48	0.473
Cuspidothrix issatschenkoi	2636		134.43	0.143
Merismopedia	8849		8.84	0.074
Microcystis	3608	Potentially toxic, taste & odour	101.38	0.100
Myxobaktron	1475		25.96	0.007
Non toxic Aphanizomenonaceae	1811	Taste & Odour	74.25	0.080
Planktolyngbya	5899	Filter clogging	58.99	0.471
Pseudanabaena	34785		278.28	0.347
Raphidiopsis raciborskii	7201	Potentially toxic, taste & odour	272.19	0.211
Sphaerospermopsis aphanizomenoides	11711		351.33	0.441
Subtotal	1133391		3,541.92	2.628

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	1133000	3542.00	2.630
* Potentially Toxic Blue Green	12610	498.00	0.524

Comment:
Debris present in the sample.

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Coccoid Blue Green Picoplankton: *Aphanocapsa; Aphanothece; Cyanogranis; Cyanonephron; Cyanocatena; Gloeocapsa; Gloeothece ; Cyanodictyon*

Phycology

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[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*285930*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**6/06/2023**
Lims No: **L23042202**	***Date Sampled:***	**18/05/2023**	*Analyst:* [redacted]
Client ID: 233921	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 09/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	**2567**	**Potentially toxic**	**177.12**	**0.304**
Coccoid Blue Green Picoplankton	**563689**	**Filter clogging?**	**1,071.00**	**0.254**
Cuspidothrix issatschenkoi	**13098**		**667.99**	**0.710**
Dolichospermum affine	**1179**		**47.98**	**0.054**
Dolichospermum cf planctonicum/smithii	**1318**	**Taste & Odour**	**150.64**	**0.333**
Limnothrix	**2116**	**Potentially toxic**	**21.16**	**0.026**
Merismopedia	**8849**		**8.84**	**0.074**
Microcystis	**1410**	**Potentially toxic, taste & odour**	**39.62**	**0.039**
Planktolyngbya	**16039**	**Filter clogging**	**160.39**	**1.283**
Pseudanabaena	**167248**		**1,337.98**	**1.672**
Raphidiopsis raciborskii	**6660**	**Potentially toxic, taste & odour**	**251.74**	**0.195**
Sphaerospermopsis aphanizomenoides	**12488**		**374.64**	**0.470**
Spirulina	**2765**		**41.47**	**0.010**
Subtotal	**799426**		**4,350.57**	**5.424**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**799400**	**4351.00**	**5.420**
*** Potentially Toxic Blue Green**	**12750**	**489.60**	**0.564**

Comment:
Debris present in the sample.

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Coccoid Blue Green Picoplankton: *Aphanocapsa; Aphanothece; Cyanogranis; Cyanonephron; Cyanocatena; Gloeocapsa; Gloeothece ; Cyanodictyon*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*285930*	*Depth :*	N/A
Supercedes Report No:		*Chlorophyll a:*	NA
		Microcystin equivalents:	NA
		Date analysed:	7/06/2023
Lims No: L23042203	*Date Sampled:* 18/05/2023	*Analyst:*	[redacted]
Client ID: 233922	*Address:* [redacted]		

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water Laboratory Services
Issued On : 09/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaena	2258	Taste & Odour	331.92	0.239
Anabaenopsis	555	Potentially toxic	38.29	0.065
Aphanizomenonaceae	850	Potentially toxic, taste & odour	56.95	0.088
Coccoid Blue Green Picoplankton	1422644	Filter clogging?	2,703.02	0.642
Cuspidothrix issatschenkoi	4246		216.54	0.230
Dolichospermum	555	Potentially toxic, taste & odour	50.72	0.089
Dolichospermum cf planctonicum/smithii	382	Taste & Odour	43.66	0.096
Merismopedia	23598		23.59	0.198
Myxobaktron	1475		25.96	0.007
Planktolyngbya	30972	Filter clogging	309.72	2.477
Planktothrix	572	Potentially toxic	39.46	0.108
Pseudanabaena	142766		1,142.12	1.427
Raphidiopsis	624	Potentially toxic	37.62	0.042
Raphidiopsis raciborskii	4301	Potentially toxic, taste & odour	162.57	0.126
Sphaerospermopsis aphanizomenoides	5841		175.23	0.220
Subtotal	1641639		5,357.37	6.054

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	1642000	5357.00	6.050
* Potentially Toxic Blue Green	6830	348.00	0.476

Comment:

Debris present in the sample.

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Phycology

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