PHYTOPLANKTON ANALYSIS REPORT

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**16/06/2023**
Lims No: **L23044632**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234269	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**1212440**	**Filter clogging?**	**2,303.63**	**0.547**
Merismopedia	**11799**		**11.79**	**0.099**
Subtotal	**1224239**		**2,315.42**	**0.646**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1224000**	**2315.00**	**0.646**
*** Potentially Toxic Blue Green**	**0**	**0.00**	**0.000**

Comment:
Debris present in the sample.

*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*

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

Phycology

Sydney Water Approved Signatory:

[redacted], Analyst [redacted], Analyst ,
[redacted], Analyst

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Accreditation No.: 610 Biological testing
Accredited for compliance with ISO/IEC 17025

PHYTOPLANKTON ANALYSIS REPORT

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/06/2023**
Lims No: **L23044633**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234270	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**1217971**	**Filter clogging?**	**2,314.14**	**0.549**
Cuspidothrix issatschenkoi	**1525**		**77.77**	**0.082**
Merismopedia	**20648**		**20.64**	**0.173**
Pseudanabaena	**13274**		**106.19**	**0.132**
Raphidiopsis raciborskii	**278**	**Potentially toxic, taste & odour**	**10.50**	**0.008**
Subtotal	**1253696**		**2,529.24**	**0.944**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1254000**	**2529.00**	**0.944**
*** Potentially Toxic Blue Green**	**278**	**10.50**	**0.008**

Comment:
Debris present in the sample.

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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*

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Phycology

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PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**16/06/2023**
Lims No: **L23044634**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234271	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anagnostidinema	**3920**		**118.38**	**0.069**
Coccoid Blue Green Picoplankton	**383941**	**Filter clogging?**	**729.48**	**0.173**
Cuspidothrix issatschenkoi	**3375**		**172.12**	**0.183**
Dolichospermum affine	**3174**		**129.18**	**0.147**
Pseudanabaena	**73816**		**590.52**	**0.738**
Raphidiopsis	**243**	**Potentially toxic**	**14.65**	**0.016**
Raphidiopsis raciborskii	**2706**	**Potentially toxic, taste & odour**	**102.28**	**0.079**
Romeria	**737**		**11.79**	**0.004**
Sphaerospermopsis aphanizomenoides	**2269**		**68.07**	**0.085**
Subtotal	**474181**		**1,936.47**	**1.494**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**474200**	**1936.00**	**1.490**
*** Potentially Toxic Blue Green**	**2710**	**102.30**	**0.079**

Comment:
Debris present in the sample.

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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*

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Phycology

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**16/06/2023**
Lims No: **L23044635**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234272	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**324940**	**Filter clogging?**	**617.38**	**0.146**
Dolichospermum	**555**	**Potentially toxic, taste & odour**	**50.72**	**0.089**
Subtotal	**325495**		**668.10**	**0.235**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**325500**	**668.10**	**0.235**
*** Potentially Toxic Blue Green**	**555**	**50.70**	**0.089**

Comment:
Debris present in the sample.

*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*

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

Phycology

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PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/06/2023**
Lims No: **L23044636**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234273	***Address:***	[redacted] **RD**	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaena	**139**	**Taste & Odour**	**20.43**	**0.014**
Anagnostidinema	**19173**		**579.02**	**0.338**
Coccoid Blue Green Picoplankton	**1080146**	**Filter clogging?**	**2,052.27**	**0.487**
Cuspidothrix issatschenkoi	**208**		**10.60**	**0.011**
Myxobaktron	**2876**		**50.61**	**0.014**
Planktolyngbya	**28022**	**Filter clogging**	**280.22**	**2.241**
Pseudanabaena	**36871**		**294.96**	**0.368**
Raphidiopsis	**1162**	**Potentially toxic**	**70.06**	**0.078**
Raphidiopsis raciborskii	**1077**	**Potentially toxic, taste & odour**	**40.71**	**0.031**
Sphaerospermopsis aphanizomenoides	**1422**		**42.66**	**0.053**
Sphaerospermopsis reniformis	**1401**	**Taste & Odour**	**56.18**	**0.065**
Spirulina	**8849**		**132.73**	**0.032**
Synechococcus cf	**1475**		**18.14**	**0.009**
Subtotal	**1182821**		**3,648.59**	**3.741**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1183000**	**3649.00**	**3.740**
*** Potentially Toxic Blue Green**	**1080**	**40.70**	**0.031**

Comment:
Debris present in the sample.

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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], Analyst [redacted], Analyst ,
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PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**16/06/2023**
Lims No: **L23044637**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234274	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**1013999**	**Filter clogging?**	**1,926.59**	**0.457**
Dolichospermum	**451**	**Potentially toxic, taste & odour**	**41.22**	**0.073**
Merismopedia	**5899**		**5.89**	**0.049**
Myxobaktron	**2876**		**50.61**	**0.014**
Non toxic Aphanizomenonaceae	**208**	**Taste & Odour**	**8.52**	**0.009**
Planktolyngbya	**19173**	**Filter clogging**	**191.73**	**1.533**
Pseudanabaena	**5899**		**47.19**	**0.058**
Raphidiopsis	**208**	**Potentially toxic**	**12.54**	**0.014**
Raphidiopsis raciborskii	**2857**	**Potentially toxic, taste & odour**	**107.99**	**0.083**
Sphaerospermopsis aphanizomenoides	**208**		**6.24**	**0.007**
Sphaerospermopsis reniformis	**1075**	**Taste & Odour**	**43.10**	**0.049**
Spirulina	**2950**		**44.25**	**0.010**
Synechococcus cf	**2212**		**27.20**	**0.014**
Subtotal	**1058015**		**2,513.07**	**2.370**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1058000**	**2513.00**	**2.370**
*** Potentially Toxic Blue Green**	**3310**	**149.20**	**0.156**

Comment:
Debris present in the sample.

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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

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*286397*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**16/06/2023**
Lims No: **L23044638**	***Date Sampled:***	**24/05/2023**	*Analyst:* [redacted]
Client ID: 234275	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 17/06/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**519148**	**Filter clogging?**	**986.38**	**0.234**
Merismopedia	**2212**		**2.21**	**0.018**
Subtotal	**521360**		**988.59**	**0.252**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**521400**	**988.60**	**0.252**
*** Potentially Toxic Blue Green**	**0**	**0.00**	**0.000**

Comment:
Debris present in the sample.

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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*

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Phycology

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