PHYTOPLANKTON ANALYSIS REPORT

Report no:	*285314*	*Depth :*	**N/A**
Supercedes Report No:	*285253*	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038822**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232978	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**2944987**	**Filter clogging?**	**5,595.47**	**1.329**
Myxobaktron	**369**		**6.49**	**0.001**
Planktolyngbya	**10342**	**Filter clogging**	**103.42**	**0.827**
Sphaerospermopsis reniformis	**520**	**Taste & Odour**	**20.85**	**0.024**
Spirulina	**369**		**5.53**	**0.001**
Synechococcus cf	**940**		**11.56**	**0.006**
Subtotal	**2957527**		**5,743.32**	**2.188**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**2958000**	**5743.00**	**2.190**
*** 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], Supervisor

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

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	***285314***	*Depth :*	**N/A**
Supercedes Report No:	***285253***	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038823**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232980	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	**121**	**Potentially toxic**	**8.34**	**0.014**
Coccoid Blue Green Picoplankton	**3110908**	**Filter clogging?**	**5,910.72**	**1.404**
Merismopedia	**5899**		**5.89**	**0.049**
Myxobaktron	**737**		**12.97**	**0.003**
Planktolyngbya	**8849**	**Filter clogging**	**88.49**	**0.707**
Pseudanabaena	**486**		**3.88**	**0.004**
Spirulina	**737**		**11.05**	**0.002**
Subtotal	**3127737**		**6,041.34**	**2.183**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**3128000**	**6041.00**	**2.180**
*** Potentially Toxic Blue Green**	**121**	**8.34**	**0.014**

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*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	***285314***	*Depth :*	**N/A**
Supercedes Report No:	***285253***	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038824**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232982	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Aphanizomenonaceae	**208**	**Potentially toxic, taste & odour**	**13.93**	**0.021**
Coccoid Blue Green Picoplankton	**2703849**	**Filter clogging?**	**5,137.31**	**1.220**
Dolichospermum affine	**364**		**14.81**	**0.016**
Planktolyngbya	**35396**	**Filter clogging**	**353.96**	**2.831**
Pseudanabaena	**416**		**3.32**	**0.004**
Spirulina	**737**		**11.05**	**0.002**
Synechococcus cf	**737**		**9.06**	**0.004**
Subtotal	**2741707**		**5,543.44**	**4.098**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**2742000**	**5543.00**	**4.100**
*** Potentially Toxic Blue Green**	**208**	**13.90**	**0.021**

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

Report no:	***285314***	*Depth :*	**N/A**
Supercedes Report No:	***285253***	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**26/05/2023**
Lims No: **L23038825**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232984	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**2044810**	**Filter clogging?**	**3,885.13**	**0.923**
Pseudanabaena	**588**		**4.70**	**0.005**
Raphidiopsis raciborskii	**173**	**Potentially toxic, taste & odour**	**6.53**	**0.005**
Spirulina	**1475**		**22.12**	**0.005**
Synechococcus cf	**2212**		**27.20**	**0.014**
Subtotal	**2049258**		**3,945.68**	**0.952**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**2049000**	**3946.00**	**0.952**
*** Potentially Toxic Blue Green**	**173**	**6.53**	**0.005**

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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[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*285314*	*Depth :*	**N/A**
Supercedes Report No:	*285253*	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**26/05/2023**
Lims No: **L23038826**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232986	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**793379**	**Filter clogging?**	**1,507.42**	**0.358**
Planktolyngbya	**5531**	**Filter clogging**	**55.31**	**0.442**
Sphaerospermopsis reniformis	**486**	**Taste & Odour**	**19.48**	**0.022**
Subtotal	**799396**		**1,582.21**	**0.822**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**799400**	**1582.00**	**0.822**
*** 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], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	***285314***	*Depth :*	**N/A**
Supercedes Report No:	***285253***	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038827**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232988	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anagnostidinema	**624**		**18.84**	**0.011**
Coccoid Blue Green Picoplankton	**1817609**	**Filter clogging?**	**3,453.45**	**0.820**
Dolichospermum affine	**87**		**3.54**	**0.004**
Planktolyngbya	**35396**	**Filter clogging**	**353.96**	**2.831**
Pseudanabaena	**16223**		**129.78**	**0.162**
Sphaerospermopsis reniformis	**416**	**Taste & Odour**	**16.68**	**0.019**
Spirulina	**2212**		**33.18**	**0.008**
Synechococcus cf	**2876**		**35.37**	**0.019**
Subtotal	**1875443**		**4,044.80**	**3.874**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1875000**	**4045.00**	**3.870**
*** 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], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*285314*	*Depth :*	**N/A**
Supercedes Report No:	*285253*	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038828**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232990	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**2381298**	**Filter clogging?**	**4,524.46**	**1.075**
Merismopedia	**5899**		**5.89**	**0.049**
Myxobaktron	**737**		**12.97**	**0.003**
Planktolyngbya	**18436**	**Filter clogging**	**184.36**	**1.474**
Pseudanabaena	**486**		**3.88**	**0.004**
Romeria	**1475**		**23.60**	**0.009**
Synechococcus cf	**1475**		**18.14**	**0.009**
Subtotal	**2409806**		**4,773.30**	**2.623**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**2410000**	**4773.00**	**2.620**
*** 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*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

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PHYTOPLANKTON ANALYSIS REPORT

Report no:	*285314*	*Depth :*	**N/A**
Supercedes Report No:	*285253*	*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**25/05/2023**
Lims No: **L23038829**	***Date Sampled:***	**6/05/2023**	*Analyst:* [redacted]
Client ID: 232992	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : [redacted]
Commercial Client Representative
Issued On : 29/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**1039550**	**Filter clogging?**	**1,975.14**	**0.469**
Subtotal	**1039550**		**1,975.14**	**0.469**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1040000**	**1975.00**	**0.469**
*** 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*

Phycology

Sydney Water Approved Signatory:

[redacted], Supervisor

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