PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053899**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235800	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**1151326**	**Filter clogging?**	**2,187.51**	**0.519**
Merismopedia	**10287**		**10.28**	**0.086**
Planktolyngbya	**3687**	**Filter clogging**	**36.87**	**0.294**
Pseudanabaena	**347**		**2.77**	**0.003**
Spirulina	**719**		**10.78**	**0.002**
Synechococcus cf	**940**		**11.56**	**0.006**
Subtotal	**1167306**		**2,259.77**	**0.910**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**1167000**	**2260.00**	**0.910**
*** 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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053900**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235801	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	**760**	**Potentially toxic**	**52.44**	**0.090**
Coccoid Blue Green Picoplankton	**826176**	**Filter clogging?**	**1,569.73**	**0.373**
Merismopedia	**24335**		**24.33**	**0.204**
Microcystis	**277**	**Potentially toxic, taste & odour**	**7.78**	**0.007**
Planktolyngbya	**12887**	**Filter clogging**	**128.87**	**1.030**
Pseudanabaena	**2950**		**23.60**	**0.029**
Spirulina	**369**		**5.53**	**0.001**
Subtotal	**867754**		**1,812.28**	**1.734**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**867800**	**1812.00**	**1.730**
*** Potentially Toxic Blue Green**	**1040**	**60.20**	**0.097**

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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053901**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235802	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**2068039**	**Filter clogging?**	**3,929.27**	**0.933**
Subtotal	**2068039**		**3,929.27**	**0.933**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**2068000**	**3929.00**	**0.933**
*** 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], Analyst [redacted], Supervisor ,

NATA WORLD RECOGNISED ACCREDITATION

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

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

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053902**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235803	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**737353**	**Filter clogging?**	**1,400.97**	**0.332**
Merismopedia	**5162**		**5.16**	**0.043**
Microcystis	**1141**	**Potentially toxic, taste & odour**	**32.06**	**0.031**
Pseudanabaena	**833**		**6.66**	**0.008**
Spirulina	**2452**		**36.78**	**0.009**
Synechococcus cf	**553**		**6.80**	**0.003**
Subtotal	**747494**		**1,488.43**	**0.426**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**747500**	**1488.00**	**0.426**
*** Potentially Toxic Blue Green**	**1140**	**32.10**	**0.031**

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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Sydney WATER

Report no:	***287892***	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053903**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235804	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**620434**	**Filter clogging?**	**1,178.82**	**0.280**
Planktolyngbya	**2212**	**Filter clogging**	**22.12**	**0.176**
Spirulina	**2065**		**30.97**	**0.007**
Subtotal	**624711**		**1,231.91**	**0.463**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**624700**	**1232.00**	**0.463**
*** 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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053904**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235805	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**554729**	**Filter clogging?**	**1,053.98**	**0.250**
Merismopedia	**6637**		**6.63**	**0.055**
Subtotal	**561366**		**1,060.61**	**0.305**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**561400**	**1061.00**	**0.305**
*** 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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053905**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235806	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Anabaenopsis	**208**	**Potentially toxic**	**14.35**	**0.024**
Coccoid Blue Green Picoplankton	**811354**	**Filter clogging?**	**1,541.57**	**0.366**
Merismopedia	**1475**		**1.47**	**0.012**
Spirulina	**1493**		**22.39**	**0.005**
Subtotal	**814530**		**1,579.78**	**0.407**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**814500**	**1580.00**	**0.407**
*** Potentially Toxic Blue Green**	**208**	**14.40**	**0.024**

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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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

PHYTOPLANKTON ANALYSIS REPORT

Report no:	*287892*	*Depth :*	**N/A**
Supercedes Report No:		*Chlorophyll a:*	**NA**
		Microcystin equivalents:	**NA**
		Date analysed:	**13/07/2023**
Lims No: **L23053906**	***Date Sampled:***	**27/06/2023**	*Analyst:* [redacted]
Client ID: 235807	***Address:***	[redacted]	
Site:			

Client: **Department of Planning and Environment**

Method: **MA71CENT**

Issued By : Sydney Water Laboratory Services
Issued On : 14/07/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
Coccoid Blue Green Picoplankton	**784622**	**Filter clogging?**	**1,490.78**	**0.354**
Spirulina	**737**		**11.05**	**0.002**
Subtotal	**785359**		**1,501.83**	**0.356**

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	**785400**	**1502.00**	**0.356**
*** 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], Supervisor ,

Where a result is required to meet a compliance limit or specification the associated uncertainty must be considered.
Uncertainty estimates are available for all accredited test results.

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