

REPORT

Report no: 290780
 Supercedes Report No:

Depth : N/A

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 5/09/2023

Lims No: L23069417

Date Sampled: 23/08/2023

Analyst:

Client ID:
 Site:

Address:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water
 Laboratory Services
 Issued On : 08/09/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Cocoid Blue Green Picoplankton</i>	167986	Filter clogging?	319.17	0.075
<i>Dolichospermum circinale</i>	40085	Potentially toxic, taste & odour	3,483.38	6.966
Subtotal	208071		3,802.55	7.041
	Cells/ mL		ASU/ mL	Biovolume mm3/L
Total Blue Green	208100		3803.00	7.040
* Potentially Toxic Blue Green	40090		3483.00	6.970

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.

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

Phycology

Sydney Water Approved Signatory:

[REDACTED] Analyst

[REDACTED] Analyst

[REDACTED] Analyst



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

REPORT

Report no: 290780

Depth : N/A

Supersedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 6/09/2023

Lims No: L23069418

Date Sampled: 23/08/2023

Analyst:

Client ID:

Address:

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water

Laboratory Services

Issued On : 08/09/2023

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TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Merismopedia</i>	2765		2.76	0.023
<i>Pseudanabaena</i>	8013		64.10	0.080
Subtotal	10778		66.86	0.103
	Cells/ mL		ASU/ mL	Biovolume mm3/L
Total Blue Green	10780		66.90	0.103
* Potentially Toxic Blue Green	0		0.00	0.000

Comment:

Debris and cells resembling bacteria 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.

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

Phycology

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REPORT

Report no: 290780

Depth : N/A

Supersedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 6/09/2023

Lims No: L23069419

Date Sampled: 23/08/2023

Analyst: [REDACTED]

Client ID: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water
Laboratory Services
Issued On : 08/09/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Cocoid Blue Green Picoplankton</i>	496602	Filter clogging?	943.54	0.224
<i>Cuspidothrix issatschenkoi</i>	61439		3,133.38	3.334
<i>Dolichospermum</i>	2498	Potentially toxic, taste & odour	228.31	0.405
<i>Dolichospermum circinale</i>	102041	Potentially toxic, taste & odour	8,867.36	17.734
<i>Non toxic Aphanizomenonaceae</i>	7030	Taste & Odour	288.23	0.312
<i>Planktolyngbya</i>	11799	Filter clogging	117.99	0.943
<i>Pseudanabaena</i>	159008		1,272.06	1.590
<i>Raphidiopsis raciborskii</i>	295	Potentially toxic, taste & odour	11.15	0.008
<i>Synechococcus cf</i>	3503		43.08	0.023
Subtotal	844215		14,905.10	24.573
	Cells/ mL		ASU/ mL	Biovolum mm3/L
Total Blue Green	844200		14910.00	24.570
* Potentially Toxic Blue Green	104800		9107.00	18.150

Comment:

Debris and cells resembling bacteria present in the sample.

*Taxa with potential to produce toxins.

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Biovolume : Biovolume is calculated from cell linear dimensions. Guidelines based on Biovolume.

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

Phycology

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REPORT

Report no: 290780

Depth : N/A

Supersedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 6/09/2023

Lims No: L23069420

Date Sampled: 23/08/2023

Analyst: [REDACTED]

Client ID: [REDACTED]

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water
Laboratory Services
Issued On : 08/09/2023

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TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anagnostidinema</i>	5162		155.89	0.091
<i>Coccoloid Blue Green Picoplankton</i>	259500	Filter clogging?	493.05	0.117
<i>Cuspidothrix issatschenkoi</i>	21416		1,092.21	1.162
<i>Dolichospermum circinale</i>	8623	Potentially toxic, taste & odour	749.33	1.498
<i>Microcystis species 2</i>	1141	Potentially toxic, taste & odour	65.15	0.097
<i>Non toxic Aphanizomenonaceae</i>	18429	Taste & Odour	755.58	0.819
<i>Pseudanabaena</i>	296888		2,375.10	2.968
<i>Raphidiopsis raciborskii</i>	260	Potentially toxic, taste & odour	9.82	0.007
Subtotal	611419		5,696.13	6.759
	Cells/ mL		ASU/ mL	Biovolume mm3/L
Total Blue Green	611400		5696.00	6.760
* Potentially Toxic Blue Green	10020		824.30	1.600

Comment:

Debris present in the sample. Sample contained cells resembling Bacteria.

*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.

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

Phycology

Sydney Water Approved Signatory:

[REDACTED] Analyst
[REDACTED] Analyst

[REDACTED] Analyst



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REPORT

Report no: 290780 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 6/09/2023
 Analyst: [REDACTED]

Lims No: L23069421 Date Sampled: 23/08/2023
 Client ID: [REDACTED] Address: [REDACTED]
 Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water
 Laboratory Services
 Issued On : 08/09/2023
Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Coccooid Blue Green Picoplankton</i>	234695	Filter clogging?	445.92	0.105
<i>Microcystis</i>	260	Potentially toxic, taste & odour	7.30	0.007
<i>Planktolyngbya</i>	278	Filter clogging	2.78	0.022
<i>Pseudanabaena</i>	1712		13.69	0.017
Subtotal	236945		469.69	0.151
	Cells/ mL		ASU/ mL	Biovolume mm3/L
Total Blue Green	236900		469.70	0.151
* Potentially Toxic Blue Green	260		7.30	0.007

Comment:

Debris and mucilaginous material 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.

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

Phycology

Sydney Water Approved Signatory:

[REDACTED] Analyst

[REDACTED] Analyst

[REDACTED] Analyst



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Accredited for compliance with ISO/IEC 17025

REPORT
Report no:

290780

Depth :

N/A

Supersedes Report No:

Chlorophyll a:

NA

Microcystin equivalents:

NA

Date analysed:

6/09/2023

Lims No: L23069422

Date Sampled:

23/08/2023

Analyst:

Client ID:

Address:

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water

Laboratory Services

Issued On : 08/09/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Aphanizomenonaceae</i>	451	Potentially toxic, taste & odour	30.21	0.046
<i>Cocoid Blue Green Picoplankton</i>	354241	Filter clogging?	673.05	0.159
<i>Planktolyngbya</i>	2212	Filter clogging	22.12	0.176
<i>Pseudanabaena</i>	3134		25.07	0.031
<i>Romeria</i>	52		0.83	0.000
Subtotal	360090		751.28	0.412

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	360100	751.30	0.412
* Potentially Toxic Blue Green	451	30.20	0.046

Comment:

Debris and cells resembling bacteria 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.

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

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

REPORT

Report no: 290780

Depth : N/A

Supersedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 1/09/2023

Lims No: L23069423

Date Sampled: 23/08/2023

Analyst: [REDACTED]

Client ID: [REDACTED]

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water
Laboratory Services
Issued On : 08/09/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaena</i>	416	Taste & Odour	61.15	0.044
<i>Cocoid Blue Green Picoplankton</i>	634261	Filter clogging?	1,205.09	0.286
<i>Merismopedia</i>	2950		2.95	0.024
<i>Phormidium species 1</i>	88141	Potentially toxic, taste & odour	1,480.76	1.796
<i>Pseudanabaena</i>	4425		35.40	0.044
Subtotal	730193		2,785.35	2.194

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	730200	2785.00	2.190
* Potentially Toxic Blue Green	88140	1481.00	1.800

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.

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

Phycology

Sydney Water Approved Signatory:

[REDACTED] Analyst

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REPORT

Report no: 290780 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 5/09/2023

Lims No: L23069424 Date Sampled: 23/08/2023 Analyst: [REDACTED]
 Client ID: [REDACTED] Address: [REDACTED]
 Site: [REDACTED]

Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water Laboratory Services
 Issued On : 08/09/2023 Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Cocoid Blue Green Picoplankton</i>	216656	Filter clogging?	411.64	0.097
<i>Cuspidothrix issatschenkoi</i>	35470		1,808.97	1.925
<i>Dolichospermum</i>	36556	Potentially toxic, taste & odour	3,341.21	5.927
<i>Merismopedia</i>	4425		4.42	0.037
<i>Microcystis wesenbergii</i>	6105	Taste & Odour	445.66	0.949
<i>Pseudanabaena</i>	512696		4,101.56	5.126
Subtotal	811908		10,113.46	14.061
	Cells/ mL		ASU/ mL	Biovolume mm3/L
Total Blue Green	811900		10110.00	14.060
* Potentially Toxic Blue Green	36560		3341.00	5.930

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

Phycology

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