

REPORT

290780

Depth:

N/A

Supercedes Report No:

Chlorophyll a:

Microcystin equivalents:

NA NA

Date analysed:

5/09/2023

Lims No:

L23069417

Date Sampled:

Address:

23/08/2023

Analyst:

Client:

Client ID: Site:

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

Potentially toxic, taste & odour

ASU/ mL

3,483.38

3,802.55

Biovolum mm3/L

6.966

7.041

Page 1 of 2

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton Dolichospermum circinale

167986

40085

Filter clogging?

319.17 0.075

Subtotal 208071

Cells/

ASU/

Biovolume

mL

mL

mm3/L

208100

3803.00

7.040

* Potentially Toxic Blue Green

Total Blue Green

40090

3483.00

6.970

Comment:

Debris present in the sample.

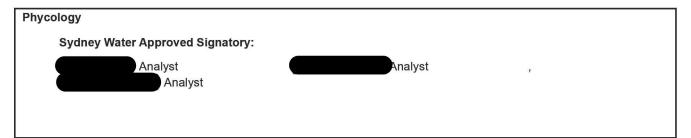
ASU: One ASU (Area Standard Unit) equals 400μm² of algal cells (as cross sectional area)

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, 51 Hermitage Rd (PO Box 73) West Rvde NSW 2114

^{*}Taxa with potential to produce toxins.





Uncertainty estimates are available for all accredited test results.

Accreditation No.: 610 Biological testing



REPORT NO.

290780

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed:

6/09/2023

Lims No: Client ID L23069418

Date Sampled:

Address:

23/08/2023

Analyst:

Client:

Site:

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

Page 1 of 2

Cyanophyta (Blue green)

Merismopedia	2765	2.76	0.023
Pseudanabaena	8013	64.10	0.080

Subtotal 10778 66.86 0.103

Cells/	ASU/	Biovolume
mL	mL	mm3/L
10780	66.90	0.103

* Potentially Toxic Blue Green

0

0.00

0.000

Comment:

Total Blue Green

Debris and cells resembling bacteria present in the sample.

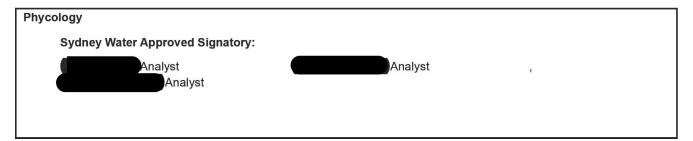
ASU: One ASU (Area Standard Unit) equals 400 µm² of algal cells (as cross sectional area)

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, 51 Hermitage Rd (PO Box 73) West Rvde NSW 2114

^{*}Taxa with potential to produce toxins.





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Accreditation No.: 610 Biological testing



REPORT

290780

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA

Microcystin equivalents:

NA

6/09/2023

Date analysed:

Lims No:

L23069419

Date Sampled:

23/08/2023

Analyst:

Client ID:

Client:

Site:

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

Page 1 of 2

Cvanophyta (Blue green)

Cyanophyta (Bide green)				
Coccoid Blue Green Picoplankton	496602	Filter clogging?	943.54	0.224
Cuspidothrix issatschenkoi	61439		3,133.38	3.334
Dolichospermum	2498	Potentially toxic, taste & odour	228.31	0.405
Dolichospermum circinale	102041	Potentially toxic, taste & odour	8,867.36	17.734
Non toxic Aphanizomenonaceae	7030	Taste & Odour	288.23	0.312
Planktolyngbya	11799	Filter clogging	117.99	0.943
Pseudanabaena	159008		1,272.06	1.590
Raphidiopsis raciborskii	295	Potentially toxic, taste & odour	11.15	0.008
Synechococcus cf	3503		43.08	0.023
Subtotal	844215		14,905.10	24.573

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	844200	14910.00	24.570
* Potentially Toxic Blue Green	104800	9107.00	18.150

Comment:

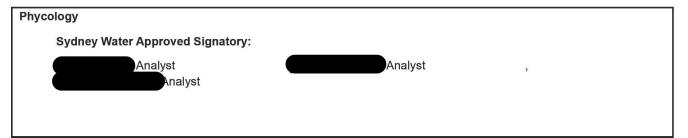
Debris and cells resembling bacteria present in the sample.

ASU: One ASU (Area Standard Unit) equals 400 µm² 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

^{*}Taxa with potential to produce toxins.





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Accreditation No.: 610 Biological testing



REPORT

290780

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed:

6/09/2023

Lims No: Client ID: L23069420

Date Sampled:

Address:

23/08/2023

Analyst:

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

Page 1 of 2

Cyanophyta (Blue green)

Cyanophyta (blue green)				
Anagnostidinema	5162		155.8	89 0.091
Coccoid Blue Green Picoplankton	259500	Filter clogging?	493.0	05 0.117
Cuspidothrix issatschenkoi	21416		1,092.2	21 1.162
Dolichospermum circinale	8623	Potentially toxic, taste & odour	749	33 1.498
Microcystis species 2	1141	Potentially toxic, taste & odour	65.	0.097
Non toxic Aphanizomenonaceae	18429	Taste & Odour	755.5	58 0.819
Pseudanabaena	296888		2,375.1	2.968
Raphidiopsis raciborskii	260	Potentially toxic, taste & odour	9.8	0.007
Subtotal	611419		5,696.	13 6.759
	Cells/		ASU/	Biovolume

	mL	mL	mm3/L
Total Blue Green	611400	5696.00	6.760
* Potentially Toxic Blue Green	10020	824.30	1.600

Comment:

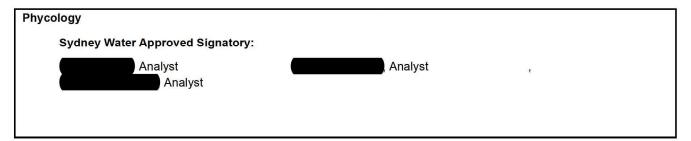
Debris present in the sample.Sample contained cells resembling Bacteria.

ASU: One ASU (Area Standard Unit) equals 400 µm² 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

^{*}Taxa with potential to produce toxins.





Uncertainty estimates are available for all accredited test results.

Accreditation No.: 610 Biological testing



REPORT

290780

Depth:

Chlorophyll a:

N/A NA

Microcystin equivalents:

Date analysed:

6/09/2023

Lims No: **Client ID:**

L23069421

Date Sampled:

Address:

Supercedes Report No:

23/08/2023

Analyst:

Site: Client:

Department of Planning and Environment

Method: **MA71CENT** Issued By: Sydney Water Laboratory Services

Disclaimer: Samples analysed as

received.

Issued On: 08/09/2023

TAXA

Cells/ mL

Significance

ASU/ mL

Biovolum mm3/L

Page 1 of 2

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	234695	Filter clogging?	445.92	0.105
Microcystis	260	Potentially toxic, taste & odour	7.30	0.007
Planktolyngbya	278	Filter clogging	2.78	0.022
Pseudanabaena	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:

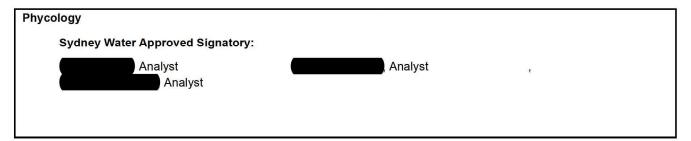
Debris and mucilaginous material present in the sample.

ASU: One ASU (Area Standard Unit) equals 400 µm² 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

^{*}Taxa with potential to produce toxins.





Uncertainty estimates are available for all accredited test results.

Accreditation No.: 610 Biological testing



REPORT

290780

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA

NA

Microcystin equivalents:

Date analysed:

6/09/2023

Lims No:

L23069422

Date Sampled:

Address:

23/08/2023

Analyst:

Client:

Client ID: Site:

Department of Planning and Environment

Method: **MA71CENT** Issued By: Sydney Water Laboratory Services

Disclaimer: Samples analysed as

received.

Issued On: 08/09/2023

TAXA

Cells/ mL

Significance

ASU/ mL

Biovolum mm3/L

Page 1 of 2

Cyanophyta (Blue green)

Aphanizomenonaceae	451	Potentially toxic, taste & odour	30.21	0.046
Coccoid Blue Green Picoplankton	354241	Filter clogging?	673.05	0.159
Planktolyngbya	2212	Filter clogging	22.12	0.176
Pseudanabaena	3134		25.07	0.031
Romeria	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.

ASU: One ASU (Area Standard Unit) equals 400 µm² 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

^{*}Taxa with potential to produce toxins.

Sydney Water Approved Signatory: Analyst Analyst 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



REPORT

290780

Depth: N/A

Supercedes Report No: Chlorophyll a:

NA Microcystin equivalents: NA Page 1 of 2

1/09/2023 Date analysed:

Lims No: L23069423 Date Sampled: 23/08/2023 Analyst:

Client ID Site:

Method:

Address:

Department of Planning and Environment Client:

MA71CENT

Issued By: Sydney Water

Disclaimer: Samples analysed as Laboratory Services received.

Issued On: 08/09/2023

TAXA

Cells/ Significance ASU/ Biovolum mL mLmm3/L

Cyanophyta (Blue green)

Anabaena	416	Taste & Odour	61.15	0.044
Coccoid Blue Green Picoplankton	634261	Filter clogging?	1,205.09	0.286
Merismopedia	2950		2.95	0.024
Phormidium species 1	88141	Potentially toxic, taste & odour	1,480.76	1.796
Pseudanabaena	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:

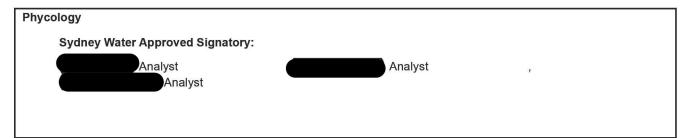
Debris present in the sample.

ASU: One ASU (Area Standard Unit) equals 400 µm² 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

^{*}Taxa with potential to produce toxins.





Uncertainty estimates are available for all accredited test results.

Accreditation No.: 610 Biological testing



REPORT

Supercedes Report No:

290780

Depth:

N

N/A NA

NA

Microcystin equivalents:

Chlorophyll a:

Date analysed:

5/09/2023

Lims No:

L23069424

Date Sampled:

Address:

23/08/2023

Analyst:

Client ID

Client:

Site:

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

Page 1 of 2

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	216656	Filter clogging?	411.64	0.097
Cuspidothrix issatschenkoi	35470		1,808.97	1.925
Dolichospermum	36556	Potentially toxic, taste & odour	3,341.21	5.927
Merismopedia	4425		4.42	0.037
Microcystis wesenbergii	6105	Taste & Odour	445.66	0.949
Pseudanabaena	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:

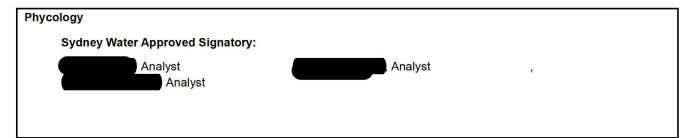
Debris present in the sample.

ASU : One ASU (Area Standard Unit) equals $400\mu m^2$ 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

^{*}Taxa with potential to produce toxins.





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