

REPORT

Address:

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed:

1/09/2023

Page 1 of 2

Lims No: Client ID: 237644

L23069433 Date Sampled: Analyst:

Site:

Client: **Department of Planning and Environment**

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

Laboratory Services

Issued On: 08/09/2023

received.

TAXA

Cells/ **Significance** ASU/ Biovolum mL mLmm3/L

Disclaimer: Samples analysed as

51.10

0.079

Cyanophyta (Blue green)

Aphanizomenonaceae	763	Potentially toxic, taste & odour		51.12	0.079
Coccoid Blue Green Picoplankton	689678	Filter clogging?		1,310.38	0.311
Merismopedia	1475			1.47	0.012
Myxobaktron	369			6.49	0.001
Subtotal	692285			1,369.46	0.403
	Cells/ mL		ASU/ mL		olume n3/L
Total Blue Green	692300		1369.00		0.403

Comment:

Debris present in the sample.

* Potentially Toxic Blue Green

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

763

; Cyanodictyon

^{*}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

Address:

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Disclaimer: Samples analysed as

Date analysed:

1/09/2023

Client ID: 237645

L23069434 Date Sampled:

Analyst:

Site:

Lims No:

Client: Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water

Laboratory Services
Issued On: 08/09/2023

. ,

received.

TAXA

Cells/

Significance

ASU/

Biovolum

Page 1 of 1

mL

mL mm3/L

Cyanophyta (Blue green)

-	Syunophytu (Blue green)					
C	Coccoid Blue Green Picoplankton	836408	Filter clogging?		1,589.17	0.377
S	Subtotal	836408			1,589.17	0.377
		Cells/ mL		ASU/ mL		olume n3/L
	Total Blue Green	836400		1589.00		0.377
	* Potentially Toxic Blue Green	0		0.00		0.000

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

; Cyanodictyon

Phycology

Sydney Water Approved Signatory:

Jane Whitten, Analyst Brad Castelnuovo, 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

(PO Box 73) West Rvde NSW 2114

^{*}Taxa with potential to produce toxins.



REPORT

Address:

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Disclaimer: Samples analysed as

Date analysed:

1/09/2023

Client ID: 237646

L23069435 Date Sampled: Analyst:

Site:

Client:

Lims No:

Department of Planning and Environment

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

> **Laboratory Services** Issued On: 08/09/2023

received.

TAXA

Cells/ mL

Significance

ASU/ mL

Biovolum mm3/L

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	500418	Filter clogging?	950.79	0.225
Subtotal	500418		950.79	0.225

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	500400	950.80	0.225
* Potentially Toxic Blue Green	0	0.00	0.000

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

; Cyanodictyon

Phycology

Sydney Water Approved Signatory:

Jane Whitten, Analyst Brad Castelnuovo, Analyst



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Page 1 of 1

^{*}Taxa with potential to produce toxins.



REPORT

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a:

Microcystin equivalents:

NA NA

Date analysed:

Analyst:

5/09/2023

Page 1 of 2

Lims No: L2306 Client ID: 237647

L23069436 Date Sampled:

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/ Significance ASU/ Biovolum mL mm3/L

Cyanophyta (Blue green)

Anabaena	624	Taste & Odour		91.72	0.066
Coccoid Blue Green Picoplankton	1013556	Filter clogging?		1,925.75	0.457
Pseudanabaena	7743			61.94	0.077
Subtotal	1021923			2,079.41	0.600
	Cells/ mL		ASU/ mL		iovolume mm3/L
Total Blue Green	1022000		2079.00		0.600
* Potentially Toxic Blue Green	0		0.00		0.000

Comment:

Debris present in the sample.

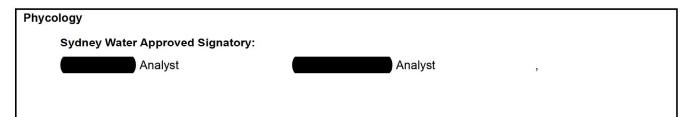
 $ASU: One\ ASU\ (Area\ Standard\ Unit)\ equals\ 400\mu m^2\ of\ algal\ cells\ (as\ cross\ sectional\ area)$

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

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

(PO Box 73) West Ryde NSW 2114

^{*}Taxa with potential to produce toxins.





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Accreditation No.: 610 Biological testing



L23069437

PHYTOPLANKTON ANALYSIS

REPORT REPORT

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Analyst:

Date analysed: 5/09/2023

Disclaimer: Samples analysed as

Client ID: 237648

Address:

Date Sampled:

Site:

Lims No:

Client: **Department of Planning and Environment**

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

> Laboratory Services received.

Issued On: 08/09/2023

TAXA

Cells/ mL

740690

Significance

ASU/ mL

1,442.17

Biovolum mm3/L

0.388

Page 1 of 2

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	734975	Filter clogging?	1,396.45	0.331
Pseudanabaena	5715		45.72	0.057
Subtotal	740600		1 442 17	0.399

Cells/ ASU/ Biovolume mL mLmm3/L

Total Blue Green	740700	1442.00	0.388
* Potentially Toxic Blue Green	0	0.00	0.000

Comment:

Debris present in the sample.

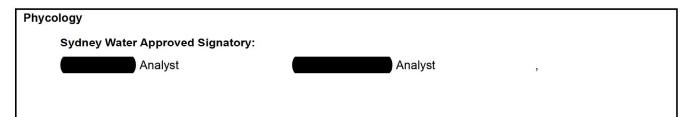
ASU: One ASU (Area Standard Unit) equals 400μm² of algal cells (as cross sectional area)

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

Coccoid Blue Green Picoplankton: Aphanocapsa; Aphanothece; Cyanogranis; Cyanonephron; Cyanocatena; Gloeocapsa; Gloeothece

; Cyanodictyon

^{*}Taxa with potential to produce toxins.





Uncertainty estimates are available for all accredited test results.

Accreditation No.: 610 Biological testing



REPORT NO.

Address:

290781

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA

NA

Microcystin equivalents:

Date analysed:

1/09/2023

Page 1 of 2

Lims No:

L23069438 Date Sampled: 22/08/2023

Analyst:

Client ID: 237649 Site:

Department of Planning and Environment Client:

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

Disclaimer: Samples analysed as

ASU/

Biovolume

received.

Issued On: 08/09/2023

Laboratory Services

TAXA

Cells/ **Significance** ASU/ Biovolum mL mLmm3/L

Cyanophyta (Blue green)

Λ nabaena	347	Taste & Odour	51.00	0.036
Coccoid Blue Green Picoplankton	805270	Filter clogging?	1,530.01	0.363
Merismopedia	737		0.73	0.006
Non toxic Aphanizomenonaceae	555	Taste & Odour	22.75	0.024
Pseudanabaena	3134		25.07	0.031
Romeria	369		5.90	0.002
Subtotal	810412		1,635.46	0.462

	mL	mL	mm3/L
Total Blue Green	810400	1635.00	0.462
* Potentially Toxic Blue Green	0	0.00	0.000

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

Cells/

; Cyanodictyon

^{*}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



L23069439

PHYTOPLANKTON ANALYSIS

REPORT

Date Sampled:

290781

Depth: N/A

Supercedes Report No:

Chlorophyll a: Microcystin equivalents:

Analyst:

NA

6/09/2023

NA

Page 1 of 2

Date analysed:

22/08/2023

Client ID: 237650

Address:

Site:

Lims No:

Department of Planning and Environment Client:

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

Laboratory Services

received.

Issued On: 08/09/2023

TAXA

Cells/ **Significance** ASU/ Biovolum mL mLmm3/L

Disclaimer: Samples analysed as

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	452632	Filter clogging?		860.00	0.204
Planktolyngbya	2581	Filter clogging		25.81	0.206
Pseudanabaena	4978			39.82	0.049
Subtotal	460191			925.63	0.459
	Cells/ mL		ASU/ mL		olume 13/L
Total Blue Green	460200		925.60		0.459
* Potentially Toxic Blue Green	0		0.00		0.000

Comment:

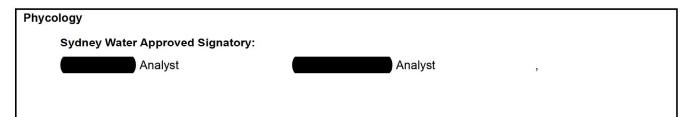
Debris and cells resembling bacteria present in the sample.

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 ; Cyanodictyon

^{*}Taxa with potential to produce toxins.





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Accreditation No.: 610 Biological testing



REPORT

290781

22/08/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a:

Microcystin equivalents: NA

Date analysed:

6/09/2023

NA

Lims No: L23069440

Date Sampled:

Address:

Analyst:

Client ID: 237651 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/

Significance

ASU/

Biovolum mm3/L

Page 1 of 2

mL

mL 1

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	638022	Filter clogging?		1,212.24	0.288
Merismopedia	12555			12.55	0.105
Subtotal	650577			1,224.79	0.393
	Cells/ mL		ASU/ mL		rolume m3/L
Total Blue Green	650600		1225.00		0.393
* Potentially Toxic Blue Green	0		0.00		0.000

Comment:

Debris present in the sample.

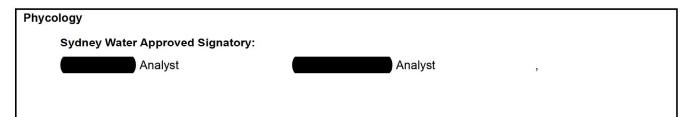
ASU : One ASU (Area Standard Unit) equals $400\mu m^2$ of algal cells (as cross sectional area)

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

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

(PO Box 73) West Ryde NSW 2114

^{*}Taxa with potential to produce toxins.





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