

REPORT

Address:

284604

26/04/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA

Microcystin equivalents: NA

Date analysed:

16/05/2023

Page 1 of 2

Lims No: L2303

L23036208 Date Sampled:

Analyst:

Client ID: 232653 Site:

Client:

Method: MA71CENT Issued By: Sydney Water

Department of Planning and Environment

Disclaimer: Samples analysed as

Laboratory Services

received.

Issued On: 16/05/2023

TAXA

Cells/ Significance ASU/ Biovolum mL mm3/L

Cyanophyta (Blue green)

Anabaenopsis	1457	Potentially toxic	100.53	0.172
Aphanizomenonaceae	382	Potentially toxic, taste & odour	25.59	0.039
Coccoid Blue Green Picoplankton	1541627	Filter clogging?	2,929.09	0.696
Dolichospermum affine	295		12.00	0.013
Myxobaktron	3355		59.04	0.016
Planktolyngbya	42844	Filter clogging	428.44	3.427
Pseudanabaena	4425		35.40	0.044
Raphidiopsis raciborskii	642	Potentially toxic, taste & odour	24.26	0.018
Sphaerospermopsis eucompacta	1420	Taste & Odour	42.03	0.043
Sphaerospermopsis reniformis	1041	Taste & Odour	41.74	0.048
Spirulina	2212		33.18	0.008
Synechococcus cf	10324		126.98	0.069
Subtotal	1610024		3,858.28	4.593

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	1610000	3858.00	4.590
* Potentially Toxic Blue Green	2480	150.40	0.229

Comment:

Debris present in the sample.

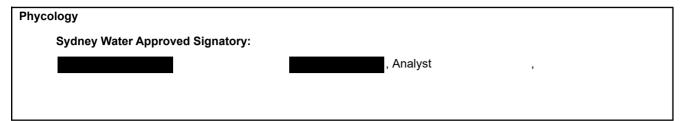
*Taxa with potential to produce toxins.

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





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 Report no.

284604

Depth: N/A

Page 1 of 2

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Lims No: L23036210 Date Sampled: 26/04/2023 Analyst:

Client ID: 232657

Address:

Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water

Laboratory Services

Issued On: 16/05/2023

Disclaimer: Samples analysed as

16/05/2023

received.

Date analysed:

TAXA

Cells/ Significance ASU/ Biovolum mL mm3/L

Cyanophyta (Blue green)

Anabaenopsis	536	Potentially toxic	36.98	0.063
Anagnostidinema	1231		37.17	0.021
Aphanizomenonaceae	1212	Potentially toxic, taste & odour	81.20	0.126
Coccoid Blue Green Picoplankton	1594501	Filter clogging?	3,029.55	0.719
Dolichospermum affine	399		16.23	0.018
Merismopedia	16223		16.22	0.136
Microcystis	968	Potentially toxic, taste & odour	27.20	0.026
Myxobaktron	1438		25.30	0.007
Planktolyngbya	11430	Filter clogging	114.30	0.914
Pseudanabaena	3318		26.54	0.033
Raphidiopsis raciborskii	555	Potentially toxic, taste & odour	20.97	0.016
Sphaerospermopsis reniformis	796	Taste & Odour	31.91	0.036
Synechococcus cf	9808		120.63	0.066
Subtotal	1642415		3,584.20	2.181

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	1642000	3584.00	2.180
* Potentially Toxic Blue Green	3270	166.40	0.231

Comment:

Debris present in the sample.

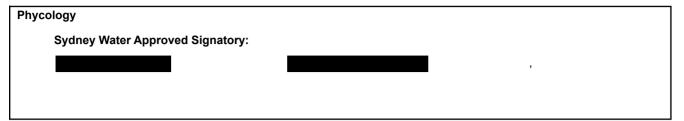
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Biovolume: Biovolume is calculated from cell linear dimensions. Guidelines based on Biovolume.

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

; Cyanodictyon





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Accreditation No.: 610 Biological testing



L23036212

PHYTOPLANKTON ANALYSIS

REPORT NO.

284604

Depth: N/A

Supercedes Report No:

Chlorophyll a:

Analyst:

NA Microcystin equivalents: NA

16/05/2023

Page 1 of 2

Date analysed:

Client ID: 232661

Address:

Date Sampled:

Site:

Lims No:

Client: **Department of Planning and Environment**

Method: MA71CENT Issued By: Sydney Water

> Laboratory Services received.

26/04/2023

Issued On: 16/05/2023

TAXA

Cells/ Significance ASU/ Biovolum mLmm3/LmL

Disclaimer: Samples analysed as

Cyanophyta (Blue green)

Anabaenopsis	295	Potentially toxic	20.35	0.034
Coccoid Blue Green Picoplankton	415024	Filter clogging?	788.54	0.187
Dolichospermum	780	Potentially toxic, taste & odour	71.29	0.126
Merismopedia	7374		7.37	0.062
Myxobaktron	369		6.49	0.001
Planktolyngbya	10508	Filter clogging	105.08	0.840
Pseudanabaena	5752		46.01	0.057
Raphidiopsis raciborskii	260	Potentially toxic, taste & odour	9.82	0.007
Synechococcus cf	2950		36.28	0.019
Subtotal	443312		1,091.23	1.333

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	443300	1091.00	1.330
* Potentially Toxic Blue Green	1340	101.50	0.167

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.

Sydney Water Approved Signatory:



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Accreditation No.: 610 Biological testing



REPORT Report no:

284604

Depth: N/A

Supercedes Report No:

Chlorophyll a: Microcystin equivalents: NA NA

Date analysed:

16/05/2023

L23036214 Lims No:

Date Sampled:

26/04/2023

Analyst:

Client ID: 232665

Site: Client: Address:

Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water Laboratory Services

Disclaimer: Samples analysed as

received.

Issued On: 16/05/2023

TAXA

Cells/ $\mathbf{m}\mathbf{L}$

Significance

ASU/ mL

Biovolum mm3/L

Cyanophyta (Blue green)

Anabaenopsis	830	Potentially toxic	57.27	0.098
Anagnostidinema	208		6.28	0.003
Coccoid Blue Green Picoplankton	1174057	Filter clogging?	2,230.70	0.530
Merismopedia	5899		5.89	0.049
Microcystis	4259	Potentially toxic, taste & odour	119.67	0.118
Myxobaktron	8849		155.74	0.044
Non toxic Aphanizomenonaceae	661	Taste & Odour	27.10	0.029
Planktolyngbya	5531	Filter clogging	55.31	0.442
Pseudanabaena	4334		34.67	0.043
Raphidiopsis	278		16.76	0.018
Raphidiopsis raciborskii	208	Potentially toxic, taste & odour	7.86	0.006
Sphaerospermopsis aphanizomenoides	208		6.24	0.007
Sphaerospermopsis reniformis	382	Taste & Odour	15.31	0.017
Spirulina	1659		24.88	0.006
Subtotal	1207363		2,763.68	1.410

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	1207000	2764.00	1.410
* Potentially Toxic Blue Green	5300	184.80	0.222

Debris present in the sample.

Page 1 of 2

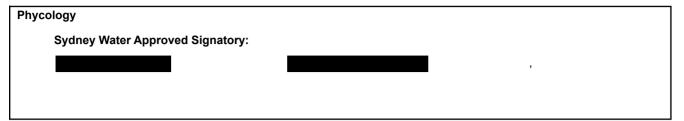
*Taxa with potential to produce toxins.

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





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Accreditation No.: 610 Biological testing



REPORT

284604

26/04/2023

Depth: N/A

Supercedes Report No:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed:

16/05/2023

Page 1 of 2

Lims No: L2303

L23036216 Date Sampled:

Department of Planning and Environment

Analyst:

Client ID: 232669

Site: Client: 2669 Address:

Method: MA71CENT

Issued By : Sydney Water

Disclaimer: Samples analysed as

received.

Issued On: 16/05/2023

Laboratory Services

TAXA

Cells/ Significance ASU/ Biovolum mL mm3/L

Cyanophyta (Blue green)

Anabaenopsis	833	Potentially toxic	57.47	0.098
Anagnostidinema	14011		423.13	0.247
Coccoid Blue Green Picoplankton	823337	Filter clogging?	1,564.34	0.371
Merismopedia	2950		2.95	0.024
Microcystis	1327	Potentially toxic, taste & odour	37.28	0.036
Planktolyngbya	7006	Filter clogging	70.06	0.560
Pseudanabaena	24704		197.63	0.247
Raphidiopsis raciborskii	451	Potentially toxic, taste & odour	17.04	0.013
Spirulina	2581		38.71	0.009
Subtotal	877200		2,408.61	1.605

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	877200	2409.00	1.610
* Potentially Toxic Blue Green	2610	111.80	0.147

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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.

Sydney Water Approved Signatory:



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Accreditation No.: 610 Biological testing



REPORT

284604

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA

Microcystin equivalents: NA

Date analysed:

16/05/2023

Page 1 of 2

Lims No: L23036218

Date Sampled:

26/04/2023

Analyst:

Client ID: 232673

3 Address:

Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water

Laboratory Services received.

Issued On: 16/05/2023

receivea.

TAXA

 $\begin{array}{cccc} Cells/ & Significance & ASU/ & Biovolum \\ mL & mL & mm3/L \end{array}$

Disclaimer: Samples analysed as

Cyanophyta (Blue green)

Anabaenopsis	416	Potentially toxic	28.70	0.049
Coccoid Blue Green Picoplankton	721065	Filter clogging?	1,370.02	0.325
Merismopedia	36171		36.17	0.304
Microcystis	1887	Potentially toxic, taste & odour	53.02	0.052
Non toxic Aphanizomenonaceae	278	Taste & Odour	11.39	0.012
Planktolyngbya	28907	Filter clogging	289.07	2.312
Pseudanabaena	10914		87.31	0.109
Raphidiopsis raciborskii	624	Potentially toxic, taste & odour	23.58	0.018
Sphaerospermopsis reniformis	711	Taste & Odour	28.51	0.033
Synechococcus cf	3447		42.39	0.023
Subtotal	804420		1,970.16	3.237

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	804400	1970.00	3.240
* Potentially Toxic Blue Green	2930	105.30	0.119

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; Cyanocaphron; Cyanocatena; Gloeocapsa; Gloeothece

^{*}Taxa with potential to produce toxins.

Sydney Water Approved Signatory:



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284604

26/04/2023

Page 1 of 2

Supercedes Report No:

REPORT NO.

Address:

Depth:

Chlorophyll a: NA

Microcystin equivalents: NA

Date analysed: 16/05/2023

N/A

Lims No: L23036220

36220 Date Sampled:

Analyst:

Client ID: 232677 Site:

Client:

Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water

Disclaimer: Samples analysed as

received.

Issued On: 16/05/2023

Laboratory Services

TAXA

 $\begin{array}{cccc} Cells/ & Significance & ASU/ & Biovolum \\ mL & mL & mm3/L \end{array}$

Cyanophyta (Blue green)

Anabaenopsis	260	Potentially toxic	17.94	0.030
Anagnostidinema	208		6.28	0.003
Coccoid Blue Green Picoplankton	660780	Filter clogging?	1,255.48	0.298
Merismopedia	10324		10.32	0.086
Microcystis	1493	Potentially toxic, taste & odour	41.95	0.041
Planktolyngbya	1193	Filter clogging	11.93	0.095
Pseudanabaena	2515		20.12	0.025
Raphidiopsis raciborskii	555	Potentially toxic, taste & odour	20.97	0.016
Sphaerospermopsis reniformis	1353	Taste & Odour	54.25	0.062
Synechococcus cf	3540		43.54	0.023
Subtotal	682221		1,482.78	0.679

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	682200	1483.00	0.679
* Potentially Toxic Blue Green	2310	80.90	0.087

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.

Sydney Water Approved Signatory:



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Accreditation No.: 610 Biological testing



REPORT Report no.

284604

Depth: N/A

Supercedes Report No:

Chlorophyll a:

NA.

NA

Microcystin equivalents:

Date analysed:

16/05/2023

Lims No: L23036222

Date Sampled:
Address:

26/04/2023

Analyst:

Client ID: 232681 Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By: Sydney Water Laboratory Services Disclaimer: Samples analysed as

received.

Issued On: 16/05/2023

TAXA

Cells/ mL Significance

ASU/ mL Biovolum mm3/L

Page 1 of 2

Cyanophyta (Blue green)

Coccoid Blue Green Picoplankton	488637	Filter clogging?	928.41	0.220
Merismopedia	4425		4.42	0.037
Subtotal	493062		932.83	0.257

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	493100	932.80	0.257
* 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

^{*}Taxa with potential to produce toxins.

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