

REPORT

Report no: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023

Lims No: L23036208 Date Sampled: 26/04/2023 Analyst: [REDACTED]

Client ID: 232653 Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water
 Laboratory Services
 Issued On : 16/05/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	1457	Potentially toxic	100.53	0.172
<i>Aphanizomenonaceae</i>	382	Potentially toxic, taste & odour	25.59	0.039
<i>Cocoid Blue Green Picoplankton</i>	1541627	Filter clogging?	2,929.09	0.696
<i>Dolichospermum affine</i>	295		12.00	0.013
<i>Myxobaktron</i>	3355		59.04	0.016
<i>Planktolyngbya</i>	42844	Filter clogging	428.44	3.427
<i>Pseudanabaena</i>	4425		35.40	0.044
<i>Raphidiopsis raciborskii</i>	642	Potentially toxic, taste & odour	24.26	0.018
<i>Sphaerospermopsis eucompacta</i>	1420	Taste & Odour	42.03	0.043
<i>Sphaerospermopsis reniformis</i>	1041	Taste & Odour	41.74	0.048
<i>Spirulina</i>	2212		33.18	0.008
<i>Synechococcus cf</i>	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 $400\mu\text{m}^2$ 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]

[REDACTED]

, Analyst

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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: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023

Lims No: L23036210 Date Sampled: 26/04/2023 Analyst: [REDACTED]

Client ID: 232657 Address: [REDACTED]
 Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water Disclaimer: Samples analysed as received.
 Laboratory Services
 Issued On : 16/05/2023

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaenopsis</i>	536	Potentially toxic	36.98	0.063
<i>Anagnostidinema</i>	1231		37.17	0.021
<i>Aphanizomenonaceae</i>	1212	Potentially toxic, taste & odour	81.20	0.126
<i>Cocoid Blue Green Picoplankton</i>	1594501	Filter clogging?	3,029.55	0.719
<i>Dolichospermum affine</i>	399		16.23	0.018
<i>Merismopedia</i>	16223		16.22	0.136
<i>Microcystis</i>	968	Potentially toxic, taste & odour	27.20	0.026
<i>Myxobaktron</i>	1438		25.30	0.007
<i>Planktolyngbya</i>	11430	Filter clogging	114.30	0.914
<i>Pseudanabaena</i>	3318		26.54	0.033
<i>Raphidiopsis raciborskii</i>	555	Potentially toxic, taste & odour	20.97	0.016
<i>Sphaerospermopsis reniformis</i>	796	Taste & Odour	31.91	0.036
<i>Synechococcus cf</i>	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.

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

Phycology

Sydney Water Approved Signatory:

[REDACTED]

[REDACTED]

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REPORT

Report no: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023

Lims No: L23036212 Date Sampled: 26/04/2023 Analyst: [REDACTED]

Client ID: 232661 Address: [REDACTED]
 Site:

Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water Laboratory Services
 Issued On : 16/05/2023 Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	295	Potentially toxic	20.35	0.034
<i>Cocoid Blue Green Picoplankton</i>	415024	Filter clogging?	788.54	0.187
<i>Dolichospermum</i>	780	Potentially toxic, taste & odour	71.29	0.126
<i>Merismopedia</i>	7374		7.37	0.062
<i>Myxobaktron</i>	369		6.49	0.001
<i>Planktolyngbya</i>	10508	Filter clogging	105.08	0.840
<i>Pseudanabaena</i>	5752		46.01	0.057
<i>Raphidiopsis raciborskii</i>	260	Potentially toxic, taste & odour	9.82	0.007
<i>Synechococcus cf</i>	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

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:



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REPORT

Report no: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023
 Analyst: [REDACTED]

Lims No: L23036214 Date Sampled: 26/04/2023
 Client ID: 232665 Address: [REDACTED]
 Site:
 Client: Department of Planning and Environment
 Method: MA71CENT Issued By: Sydney Water
 Laboratory Services
 Issued On: 16/05/2023
 Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	830	Potentially toxic	57.27	0.098
<i>Anagnostidinema</i>	208		6.28	0.003
<i>Cocoid Blue Green Picoplankton</i>	1174057	Filter clogging?	2,230.70	0.530
<i>Merismopedia</i>	5899		5.89	0.049
<i>Microcystis</i>	4259	Potentially toxic, taste & odour	119.67	0.118
<i>Myxobaktron</i>	8849		155.74	0.044
<i>Non toxic Aphanizomenonaceae</i>	661	Taste & Odour	27.10	0.029
<i>Planktolyngbya</i>	5531	Filter clogging	55.31	0.442
<i>Pseudanabaena</i>	4334		34.67	0.043
<i>Raphidiopsis</i>	278		16.76	0.018
<i>Raphidiopsis raciborskii</i>	208	Potentially toxic, taste & odour	7.86	0.006
<i>Sphaerospermopsis aphanizomenoides</i>	208		6.24	0.007
<i>Sphaerospermopsis reniformis</i>	382	Taste & Odour	15.31	0.017
<i>Spirulina</i>	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

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]

[REDACTED]

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REPORT

Report no: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023

Lims No: L23036216 Date Sampled: 26/04/2023 Analyst: [REDACTED]

Client ID: 232669 Address: [REDACTED]

Site:
 Client: Department of Planning and Environment

Method: MA71CENT Issued By : Sydney Water Laboratory Services
 Issued On : 16/05/2023 Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	833	Potentially toxic	57.47	0.098
<i>Anagnostidinema</i>	14011		423.13	0.247
<i>Cocoid Blue Green Picoplankton</i>	823337	Filter clogging?	1,564.34	0.371
<i>Merismopedia</i>	2950		2.95	0.024
<i>Microcystis</i>	1327	Potentially toxic, taste & odour	37.28	0.036
<i>Planktolyngbya</i>	7006	Filter clogging	70.06	0.560
<i>Pseudanabaena</i>	24704		197.63	0.247
<i>Raphidiopsis raciborskii</i>	451	Potentially toxic, taste & odour	17.04	0.013
<i>Spirulina</i>	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

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:



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REPORT

Report no:

284604

Depth :

N/A

Supercedes Report No:

Chlorophyll a:

NA

Microcystin equivalents:

NA

Date analysed:

16/05/2023

Lims No: L23036218

Date Sampled:

26/04/2023

Analyst:

Client ID: 232673

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 received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	416	Potentially toxic	28.70	0.049
<i>Cocoid Blue Green Picoplankton</i>	721065	Filter clogging?	1,370.02	0.325
<i>Merismopedia</i>	36171		36.17	0.304
<i>Microcystis</i>	1887	Potentially toxic, taste & odour	53.02	0.052
<i>Non toxic Aphanizomenonaceae</i>	278	Taste & Odour	11.39	0.012
<i>Planktolyngbya</i>	28907	Filter clogging	289.07	2.312
<i>Pseudanabaena</i>	10914		87.31	0.109
<i>Raphidiopsis raciborskii</i>	624	Potentially toxic, taste & odour	23.58	0.018
<i>Sphaerospermopsis reniformis</i>	711	Taste & Odour	28.51	0.033
<i>Synechococcus cf</i>	3447		42.39	0.023
Subtotal	804420		1,970.16	3.237

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

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]

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Uncertainty estimates are available for all accredited test results.

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

REPORT

Report no:

284604

Depth :

N/A

Supercedes Report No:

Chlorophyll a:

NA

Microcystin equivalents:

NA

Date analysed:

16/05/2023

Lims No: L23036220

Date Sampled:

26/04/2023

Analyst:

Client ID: 232677

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 received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Anabaenopsis</i>	260	Potentially toxic	17.94	0.030
<i>Anagnostidinema</i>	208		6.28	0.003
<i>Cocoid Blue Green Picoplankton</i>	660780	Filter clogging?	1,255.48	0.298
<i>Merismopedia</i>	10324		10.32	0.086
<i>Microcystis</i>	1493	Potentially toxic, taste & odour	41.95	0.041
<i>Planktolyngbya</i>	1193	Filter clogging	11.93	0.095
<i>Pseudanabaena</i>	2515		20.12	0.025
<i>Raphidiopsis raciborskii</i>	555	Potentially toxic, taste & odour	20.97	0.016
<i>Sphaerospermopsis reniformis</i>	1353	Taste & Odour	54.25	0.062
<i>Synechococcus cf</i>	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.

*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]

[REDACTED]

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Accredited for compliance with ISO/IEC 17025

REPORT

Report no: 284604 Depth : N/A
 Supercedes Report No: Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 16/05/2023
 Analyst: [REDACTED]

Lims No: L23036222 Date Sampled: 26/04/2023
 Client ID: 232681 Address: [REDACTED]
 Site: [REDACTED]

Client: Department of Planning and Environment

Method: MA71CENT Issued By: Sydney Water Laboratory Services
 Issued On: 16/05/2023 Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Cyanophyta (Blue green)				
<i>Cocoid Blue Green Picoplankton</i>	488637	Filter clogging?	928.41	0.220
<i>Merismopedia</i>	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.

*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]

[REDACTED]

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