

**REPORT**

Report no: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
    Microcystin equivalents: NA  
    Date analysed: 29/05/2023  
 Analyst: [REDACTED]

Lims No: L23040731      Date Sampled: 10/05/2023

Client ID: 233225      Address: [REDACTED]  
 Site: [REDACTED]

Client: Department of Planning and Environment

Method: MA71CENT      Issued By : Sydney Water  
 Laboratory Services  
 Issued On : 30/05/2023

**Disclaimer: Samples analysed as received.**

**TAXA**

|                                       | Cells/<br>mL | Significance                     | ASU/<br>mL | Biovolum<br>mm3/L |
|---------------------------------------|--------------|----------------------------------|------------|-------------------|
| <b><u>Cyanophyta (Blue green)</u></b> |              |                                  |            |                   |
| <i>Anabaenopsis</i>                   | 486          | Potentially toxic                | 33.53      | 0.057             |
| <i>Cocoid Blue Green Picoplankton</i> | 618332       | Filter clogging?                 | 1,174.83   | 0.279             |
| <i>Cuspidothrix issatschenkoi</i>     | 1388         |                                  | 70.78      | 0.075             |
| <i>Planktolyngbya</i>                 | 3687         | Filter clogging                  | 36.87      | 0.294             |
| <i>Pseudanabaena</i>                  | 7374         |                                  | 58.99      | 0.073             |
| <i>Raphidiopsis raciborskii</i>       | 1249         | Potentially toxic, taste & odour | 47.21      | 0.036             |
| <i>Sphaerospermopsis reniformis</i>   | 1717         | Taste & Odour                    | 68.85      | 0.079             |
| <i>Spirulina</i>                      | 4425         |                                  | 66.37      | 0.016             |
| <b>Subtotal</b>                       | 638658       |                                  | 1,557.43   | 0.909             |

|                                       | Cells/<br>mL | ASU/<br>mL | Biovolume<br>mm3/L |
|---------------------------------------|--------------|------------|--------------------|
| <b>Total Blue Green</b>               | 638700       | 1557.00    | 0.909              |
| <b>* Potentially Toxic Blue Green</b> | 1740         | 80.70      | 0.093              |

**Comment:**  
**Debris present in the sample.**

\*Taxa with potential to produce toxins.  
 ASU : One ASU (Area Standard Unit) equals 400µm<sup>2</sup> 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:**

██████████, Supervisor



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: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
    Microcystin equivalents: NA  
    Date analysed: 29/05/2023

Lims No: L23040735      Date Sampled: 10/05/2023      Analyst: [REDACTED]

Client ID: 233239      Address: [REDACTED]  
 Site:

Client: Department of Planning and Environment

Method: MA71CENT      Issued By : Sydney Water      Disclaimer: Samples analysed as received.  
 Laboratory Services  
 Issued On : 30/05/2023

**TAXA**

|                                       | Cells/<br>mL | Significance                     | ASU/<br>mL | Biovolum<br>mm3/L |
|---------------------------------------|--------------|----------------------------------|------------|-------------------|
| <b><u>Cyanophyta (Blue green)</u></b> |              |                                  |            |                   |
| <i>Anabaenopsis</i>                   | 555          | Potentially toxic                | 38.29      | 0.065             |
| <i>Cocoid Blue Green Picoplankton</i> | 2607393      | Filter clogging?                 | 4,954.04   | 1.177             |
| <i>Cuspidothrix issatschenkoi</i>     | 347          |                                  | 17.69      | 0.018             |
| <i>Dolichospermum affine</i>          | 1804         |                                  | 73.42      | 0.083             |
| <i>Merismopedia</i>                   | 14749        |                                  | 14.74      | 0.124             |
| <i>Myxobaktron</i>                    | 3761         |                                  | 66.19      | 0.018             |
| <i>Planktolyngbya</i>                 | 30972        | Filter clogging                  | 309.72     | 2.477             |
| <i>Pseudanabaena</i>                  | 13274        |                                  | 106.19     | 0.132             |
| <i>Raphidiopsis raciborskii</i>       | 520          | Potentially toxic, taste & odour | 19.65      | 0.015             |
| <i>Sphaerospermopsis reniformis</i>   | 104          | Taste & Odour                    | 4.17       | 0.004             |
| <i>Spirulina</i>                      | 3687         |                                  | 55.30      | 0.013             |
| <i>Synechococcus cf</i>               | 1475         |                                  | 18.14      | 0.009             |
| <b>Subtotal</b>                       | 2678641      |                                  | 5,677.54   | 4.135             |

|                                       | Cells/<br>mL | ASU/<br>mL | Biovolume<br>mm3/L |
|---------------------------------------|--------------|------------|--------------------|
| <b>Total Blue Green</b>               | 2679000      | 5678.00    | 4.140              |
| <b>* Potentially Toxic Blue Green</b> | 1080         | 57.90      | 0.080              |

**Comment:**  
 Debris present in the sample.

\*Taxa with potential to produce toxins.

ASU : One ASU (Area Standard Unit) equals 400µm<sup>2</sup> 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:

██████████, Supervisor



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: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
    Microcystin equivalents: NA  
    Date analysed: 29/05/2023  
 Lims No: L23040737      Date Sampled: 10/05/2023      Analyst: [REDACTED]

Client ID: 233246      Address: [REDACTED]  
 Site:

Client: Department of Planning and Environment

Method: MA71CENT      Issued By : Sydney Water  
 Laboratory Services  
 Issued On : 30/05/2023

**Disclaimer: Samples analysed as received.**

**TAXA**

|                                       | Cells/<br>mL | Significance     | ASU/<br>mL | Biovolum<br>mm3/L  |
|---------------------------------------|--------------|------------------|------------|--------------------|
| <b>Cyanophyta (Blue green)</b>        |              |                  |            |                    |
| <i>Cocoid Blue Green Picoplankton</i> | 782705       | Filter clogging? | 1,487.13   | 0.353              |
| <i>Planktolyngbya</i>                 | 11799        | Filter clogging  | 117.99     | 0.943              |
| <b>Subtotal</b>                       | 794504       |                  | 1,605.12   | 1.296              |
|                                       | Cells/<br>mL |                  | ASU/<br>mL | Biovolume<br>mm3/L |
| <b>Total Blue Green</b>               | 794500       |                  | 1605.00    | 1.300              |
| * 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 400µm<sup>2</sup> 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:**

██████████, Supervisor



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: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
 Microcystin equivalents: NA  
 Date analysed: 29/05/2023  
 Analyst: ██████████

Lims No: L23040739      Date Sampled: 10/05/2023

Client ID: 233253

Address: ██████████

Site:

Client: Department of Planning and Environment

Method: MA71CENT

Issued By : Sydney Water  
 Laboratory Services  
 Issued On : 30/05/2023

**Disclaimer: Samples analysed as received.**

**TAXA**

|   | Cells/<br>mL | Significance                     | ASU/<br>mL | Biovolume<br>mm3/L |
|---|--------------|----------------------------------|------------|--------------------|
| <b><u>Cyanophyta (Blue green)</u></b>     |              |                                  |            |                    |
| <i>Anabaenopsis</i>                       | 2212         | Potentially toxic                | 152.62     | 0.262              |
| <i>Cocoid Blue Green Picoplankton</i>     | 121675       | Filter clogging?                 | 231.18     | 0.054              |
| <i>Cuspidothrix issatschenkoi</i>         | 1110         |                                  | 56.61      | 0.060              |
| <i>Planktolyngbya</i>                     | 4425         | Filter clogging                  | 44.25      | 0.354              |
| <i>Pseudanabaena</i>                      | 8047         |                                  | 64.37      | 0.080              |
| <i>Raphidiopsis raciborskii</i>           | 2359         | Potentially toxic, taste & odour | 89.17      | 0.069              |
| <i>Sphaerospermopsis aphanizomenoides</i> | 2775         |                                  | 83.25      | 0.104              |
| <b>Subtotal</b>                           | 142603       |                                  | 721.45     | 0.983              |

|                                       | Cells/<br>mL | ASU/<br>mL | Biovolume<br>mm3/L |
|---------------------------------------|--------------|------------|--------------------|
| <b>Total Blue Green</b>               | 142600       | 721.50     | 0.983              |
| <b>* Potentially Toxic Blue Green</b> | 4570         | 241.80     | 0.331              |

**Comment:**

**Debris present in the sample.**

\*Taxa with potential to produce toxins.

ASU : One ASU (Area Standard Unit) equals 400µm<sup>2</sup> 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:**

██████████, Supervisor



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: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
    Microcystin equivalents: NA  
    Date analysed: 29/05/2023  
 Lims No: L23040741      Date Sampled: 10/05/2023      Analyst: [REDACTED]

Client ID: 233260      Address: [REDACTED]  
 Site:

Client: Department of Planning and Environment

Method: MA71CENT      Issued By : Sydney Water      Disclaimer: Samples analysed as received.  
 Laboratory Services  
 Issued On : 30/05/2023

**TAXA**

|   | Cells/<br>mL | Significance                     | ASU/<br>mL | Biovolum<br>mm3/L |
|---|--------------|----------------------------------|------------|-------------------|
| <b><u>Cyanophyta (Blue green)</u></b>     |              |                                  |            |                   |
| <i>Anabaenopsis</i>                       | 902          | Potentially toxic                | 62.23      | 0.106             |
| <i>Anagnostidinema</i>                    | 74333        |                                  | 2,244.85   | 1.310             |
| <i>Aphanizomenonaceae</i>                 | 1665         | Potentially toxic, taste & odour | 111.55     | 0.173             |
| <i>Cocoid Blue Green Picoplankton</i>     | 1248611      | Filter clogging?                 | 2,372.36   | 0.563             |
| <i>Cuspidothrix issatschenkoi</i>         | 4787         |                                  | 244.13     | 0.259             |
| <i>Dolichospermum affine</i>              | 16223        |                                  | 660.27     | 0.753             |
| <i>Limnothrix</i>                         | 5030         | Potentially toxic                | 50.30      | 0.063             |
| <i>Planktolyngbya</i>                     | 38346        | Filter clogging                  | 383.46     | 3.067             |
| <i>Pseudanabaena</i>                      | 54643        |                                  | 437.14     | 0.546             |
| <i>Raphidiopsis</i>                       | 2144         |                                  | 129.28     | 0.144             |
| <i>Raphidiopsis raciborskii</i>           | 10392        | Potentially toxic, taste & odour | 392.81     | 0.304             |
| <i>Snowella</i>                           | 5689         |                                  | 70.54      | 0.044             |
| <i>Sphaerospermopsis aphanizomenoides</i> | 22290        |                                  | 668.70     | 0.839             |
| <i>Sphaerospermopsis reniformis</i>       | 2081         | Taste & Odour                    | 83.44      | 0.096             |
| <b>Subtotal</b>                           | 1487136      |                                  | 7,911.06   | 8.267             |

|                                       | Cells/<br>mL | ASU/<br>mL | Biovolum<br>mm3/L |
|---------------------------------------|--------------|------------|-------------------|
| <b>Total Blue Green</b>               | 1487000      | 7911.00    | 8.270             |
| <b>* Potentially Toxic Blue Green</b> | 17990        | 616.90     | 0.646             |

Comment:  
 Debris present in the sample.

\*Taxa with potential to produce toxins.

ASU : One ASU (Area Standard Unit) equals 400µm<sup>2</sup> 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:

██████████, Supervisor



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: 285353      Depth : N/A  
 Supercedes Report No:      Chlorophyll a: NA  
    Microcystin equivalents: NA  
    Date analysed: 29/05/2023  
 Analyst: [REDACTED]

Lims No: L23040743      Date Sampled: 10/05/2023  
 Client ID: 233267      Address: [REDACTED]  
 Site:

Client: Department of Planning and Environment

Method: MA71CENT      Issued By : Sydney Water      Disclaimer: Samples analysed as received.  
 Laboratory Services  
 Issued On : 30/05/2023

**TAXA**

|                                       | Cells/<br>mL | Significance     | ASU/<br>mL | Biovolum<br>mm3/L |
|---------------------------------------|--------------|------------------|------------|-------------------|
| <b>Cyanophyta (Blue green)</b>        |              |                  |            |                   |
| <i>Cocoid Blue Green Picoplankton</i> | 1265977      | Filter clogging? | 2,405.35   | 0.571             |
| <b>Subtotal</b>                       | 1265977      |                  | 2,405.35   | 0.571             |

|                                | Cells/<br>mL | ASU/<br>mL | Biovolume<br>mm3/L |
|--------------------------------|--------------|------------|--------------------|
| <b>Total Blue Green</b>        | 1266000      | 2405.00    | 0.571              |
| * 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 400µm<sup>2</sup> 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], Supervisor



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

