| Sydney | PHYTOPLANKTO | N ANALYS | SIS | | Page 1 of 2 |
|-----------------------------------|---|-----------|---------------------------------|------------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | |
| VVAITN | Supercedes Report No: | | Chlorophyll a: | NA | |
| | | | Microcystin equivalents | : NA | |
| | | | Date analysed: | 26/05/2023 | |
| Lims No: L23039583 | Date Sampled: | 9/05/2023 | Analyst: | | |
| Client ID: 233101 <i>Site:</i> | Address: | | | | |
| Client: Department of Plannin | g and Environment | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney V Laboratory Services Issued On : 28/05/20 | | Disclaimer: Sam received. | ples analysed as | |
| ТАХА | | | | | |
| | Cell mI | | Significance | ASU mL | |
| <u>Cyanophyta (Blue green)</u> | | | | | |
| Coccoid Blue Green Picoplankton | 191445 | Fi | lter clogging? | 363 | 0.086 |
| Merismopedia | 2489 | | | 2 | 2.48 0.020 |
| Microcystis | 277 | Ро | otentially toxic, taste & odour | 2 | 0.007 |
| Planktolyngbya | 19911 | Fi | lter clogging | 199 | 0.11 1.592 |
| Raphidiopsis raciborskii | 555 | Ро | otentially toxic, taste & odour | 20 | 0.97 0.016 |
| Sphaerospermopsis reniformis | 416 | Ta | ste & Odour | 10 | 6.68 0.019 |
| Spirulina | 2655 | | | 39 | 0.82 0.009 |
| Subtotal | 217748 | | | 650 | 0.58 1.749 |
| | Cells/ mL | | | ASU/ mL | Biovolume mm3/L |
| Total Blue Green | 217700 | | | 650.60 | 1.750 |
| * Potentially Toxic Blue Green | 832 | | | 28.80 | 0.023 |

Debris present in the sample.

*Taxa with potential to produce toxins.

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.

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTON | N ANALYSIS | | | Р | age 1 of 2 |
|-----------------------------------|--|------------|-------------------------------|---------------|------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | | |
| VVAIT | Supercedes Report No: | | Chlorophyll a: | NA | | |
| | | | Microcystin equivalents. | NA | | |
| | | | Date analysed: | 26/05/202 | 3 | |
| Lims No: L23039585 | Date Sampled: | 9/05/2023 | Analyst: | | | |
| Client ID: 233109 <i>Site:</i> | Address: | | | | | |
| Client: Department of Plannin | ng and Environment | | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney Wa Laboratory Services Issued On : 28/05/202. | | Disclaimer: Samp received. | oles analysed | as | |
| TAXA | | | | | | |
| | Cells/ mL | | Significance | | ASU/ mL | Biovolum mm3/L |
| <u>Cyanophyta (Blue green)</u> | | | | | | |
| Coccoid Blue Green Picoplankton | 4553757 | Filter | clogging? | : | 8,652.13 | 2.056 |
| Merismopedia | 11799 | | | | 11.79 | 0.099 |
| Planktolyngbya | 26547 | Filter | clogging | | 265.47 | 2.123 |
| Subtotal | 4592103 | | | : | 8,929.39 | 4.278 |
| | Cells/ mL | | | ASU/ mL | I | 3iovolume mm3/L |
| Total Blue Green | 4592000 | | | 8929.00 | | 4.280 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | | 0.000 |

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.

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

; Cyanodictyon

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTO | N ANALYSIS | | | Page 1 of 2 |
|-----------------------------------|--|---------------|--------------------------------|-----------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | |
| VVAITN | Supercedes Report No: | | Chlorophyll a: | NA | |
| | | | Microcystin equivalents: | NA | |
| | | | Date analysed: | 26/05/2023 | |
| Lims No: L23039587 | Date Sampled: | 9/05/2023 | Analyst: | | |
| Client ID: 233117 <i>Site:</i> | Address: | | | | |
| Client: Department of Planning | g and Environment | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney W Laboratory Services Issued On : 28/05/202 | | Disclaimer: Sampl received. | les analysed as | |
| ТАХА | | | | | |
| | Cells mL | | Significance | ASU/ mL | Biovolum mm3/L |
| <u>Cyanophyta (Blue green)</u> | | | | | |
| Coccoid Blue Green Picoplankton | 1182685 | Filter cloggi | ing? | 2,247. | 10 0.533 |
| Merismopedia | 57519 | | | 57. | 51 0.484 |
| Subtotal | 1240204 | | | 2,304. | 61 1.017 |
| | Cells/ mL | | | ASU/ mL | Biovolume mm3/L |
| Total Blue Green | 1240000 | | : | 2305.00 | 1.020 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | 0.000 |

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.

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTON | N ANALYSIS | | | Page 1 of 2 |
|---------------------------------|--|-------------|------------------------------|------------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | |
| VVAITN | Supercedes Report No: | | Chlorophyll a: | NA | |
| | | | Microcystin equivalents | s: NA | |
| | | | Date analysed: | 26/05/2023 | |
| Lims No: L23039589 | Date Sampled: | 9/05/2023 | Analyst: | | |
| Client ID: 233125 Site: | Address: | | | | |
| Client: Department of Planning | and Environment | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney Wa Laboratory Services Issued On : 28/05/2023 | | Disclaimer: Sam received. | ples analysed as | |
| ТАХА | | | | | |
| ΙΑΑΑ | Cells/ mL | | Significance | ASI ml | |
| <u>Cyanophyta (Blue green)</u> | | | | | |
| Coccoid Blue Green Picoplankton | 2190157 | Filter clog | ging? | 4,16 | 1.29 0.988 |
| Merismopedia | 23598 | | | 2 | 3.59 0.198 |
| Planktolyngbya | 12536 | Filter clog | ging | 12 | 5.36 1.002 |
| Pseudanabaena | 1041 | | | | 8.32 0.010 |
| Spirulina | 1475 | | | 2 | 2.12 0.005 |
| Subtotal | 2228807 | | | 4,34 | 0.68 2.203 |
| | Cells/ mL | | | ASU/ mL | Biovolume mm3/L |
| Total Blue Green | 2229000 | | | 4341.00 | 2.200 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | 0.000 |

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.

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTON | ANALYSIS | |] | Page 1 of 1 |
|--------------------------------|---|------------------|-------------------------------------|------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 De | pth : N | /A | |
| VVATEN | Supercedes Report No: | Ch | lorophyll a: N | A | |
| | | Mi | crocystin equivalents: N | A | |
| | | Da | tte analysed: 20 | 6/05/2023 | |
| Lims No: L23039591 | Date Sampled: | 9/05/2023 An | alyst: | | |
| Client ID: 233133 Site: | Address: | | | | |
| Client: Department of Plan | nning and Environment | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney Wat Laboratory Services Issued On : 28/05/2023 | | Disclaimer: Samples an received. | alysed as | |
| ТАХА | | | | | |
| | Cells/ mL | Sign | ificance | ASU/ mL | Biovolum mm3/L |
| <u>Cyanophyta (Blue green)</u> | | | | | |
| Coccoid Blue Green Picoplankt | on <u>3149181</u> | Filter clogging? | | 5,983.44 | 1.421 |
| Subtotal | 3149181 | | | 5,983.44 | 1.421 |
| | Cells/ mL | | ASU/ mL | | Biovolume mm3/L |
| Total Blue Green | 3149000 | | 5983.0 | 0 | 1.420 |
| * Potentially Toxic Blue Green | 0 | | 0.0 | 0 | 0.000 |

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.

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

Phycology

Sydney Water Approved Signatory:

Madhavi Mahakumbura, 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

| Sydney | PHYTOPLANKTON | N ANALYSI | IS | | I | Page 1 of 2 |
|-----------------------------------|---|-----------|------------------------------|---------------|------------|--------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | | |
| VVAIEN | Supercedes Report No: | | Chlorophyll a: | NA | | |
| | | | Microcystin equivalent | s: NA | | |
| | | | Date analysed: | 26/05/2 | 2023 | |
| Lims No: L23039593 | Date Sampled: | 9/05/2023 | Analyst: | | | |
| Client ID: 233141 <i>Site:</i> | Address: | | | | | |
| Client: Department of Plannir | ng and Environment | | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney Wo Laboratory Services Issued On : 28/05/202 | | Disclaimer: San received. | nples analyse | ed as | |
| ТАХА | | | | | | |
| | Cells/ mL | , | Significance | | ASU/ mL | Biovolum mm3/L |
| <u>Cvanophyta (Blue green)</u> | | | | | | |
| Coccoid Blue Green Picoplankton | 993203 | Filte | er clogging? | | 1,887.08 | 0.448 |
| Merismopedia | 11799 | | | | 11.79 | 0.099 |
| Planktolyngbya | 13274 | Filte | er clogging | | 132.74 | 1.061 |
| Spirulina | 2212 | | | | 33.18 | 0.008 |
| Subtotal | 1020488 | | | | 2,064.79 | 1.616 |
| | Cells/ mL | | | ASU/ mL | 1 | Biovolume mm3/L |
| Total Blue Green | 1020000 | | | 2065.00 | | 1.620 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | | 0.000 |

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.

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTON | ANALYSIS | | | Page 1 of 2 |
|-----------------------------------|---|------------|-------------------------------|-----------------|--|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | |
| VVAITN | Supercedes Report No: | | Chlorophyll a: | NA | |
| | | | Microcystin equivalents: | NA | |
| | | | Date analysed: | 26/05/2023 | |
| Lims No: L23039595 | Date Sampled: | 9/05/2023 | Analyst: | | |
| Client ID: 233149 <i>Site:</i> | Address: | | | | |
| Client: Department of Planning | g and Environment | | | | |
| <i>Method</i> : MA71CENT | Issued By : Sydney Wat Laboratory Services Issued On : 28/05/2023 | | Disclaimer: Samp received. | les analysed as | |
| TAXA | | | | | |
| | Cells/ mL | | Significance | ASU mL | |
| Cuananhuta (Plus green) | mi | | | int | iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii |
| <u>Cyanophyta (Blue green)</u> | | | | | |
| Coccoid Blue Green Picoplankton | 774298 | Filter clo | ogging? | 1,471 | 0.547 |
| Merismopedia | 8849 | | | | .84 0.074 |
| Synechococcus cf | 1475 | | | 18 | .14 0.009 |
| Subtotal | 784622 | | | 1,498 | .14 0.432 |
| | Cells/ | | | ASU/ | Biovolume |
| | mL | | | mL | mm3/L |
| Total Blue Green | 784600 | | | 1498.00 | 0.432 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | 0.000 |

Debris present in the sample.

*Taxa with potential to produce toxins.

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

Sydney Water Approved Signatory:





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

| Sydney | PHYTOPLANKTO | N ANALYSIS | | | Р | age 1 of 2 |
|-----------------------------------|--|--------------|-------------------------------|----------------|-----------|-------------------|
| Sydney WATER | REPORT Report no: | 285265 | Depth : | N/A | | |
| VVAITN | Supercedes Report No: | | Chlorophyll a: | NA | | |
| | | | Microcystin equivalents: | NA | | |
| | | | Date analysed: | 26/05/2023 | | |
| Lims No: L23039597 | Date Sampled: | 9/05/2023 | Analyst: | | | |
| Client ID: 233157 <i>Site:</i> | Address: | | | | | |
| Client: Department of Planning | g and Environment | | | | | |
| <i>Method:</i> MA71CENT | Issued By : Sydney W Laboratory Services Issued On : 28/05/202 | | Disclaimer: Samp received. | les analysed a | \$ | |
| TAXA | | | | | | |
| | Cells mL | | Significance | | SU/ mL | Biovolum mm3/L |
| <u>Cyanophyta (Blue green)</u> | | | | | | |
| Coccoid Blue Green Picoplankton | 592154 | Filter clogg | jing? | 1, | ,125.09 | 0.267 |
| Merismopedia | 17698 | | | | 17.69 | 0.149 |
| Subtotal | 609852 | | | 1, | ,142.78 | 0.416 |
| | Cells/ mL | | | ASU/ mL | E | iovolume mm3/L |
| [| iiiL | | | m | | |
| Total Blue Green | 609900 | | | 1143.00 | | 0.416 |
| * Potentially Toxic Blue Green | 0 | | | 0.00 | | 0.000 |

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.

Sydney Water Approved Signatory:





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