

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023

Lims No: L23025078 Date Sampled: 21/03/2023 Analyst: ██████████

Client ID: 231813 Address: ██████████

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

Issued By: ██████████
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaenopsis</i>	541	Potentially toxic	37.32	0.064
<i>Cocoid Blue Green Picoplankton</i>	35341	Filter clogging?	67.14	0.015
<i>Merismopedia</i>	3318		3.31	0.027
<i>Microcystis</i>	21362	Potentially toxic, taste & odour	600.27	0.594
<i>Myxobaktron</i>	277		4.87	0.001
<i>Non toxic Aphanizomenonaceae</i>	2074	Taste & Odour	85.03	0.092
<i>Planktolingbya</i>	9955	Filter clogging	99.55	0.796
<i>Pseudanabaena</i>	68553		548.42	0.685
<i>Raphidiopsis raciborskii</i>	6340	Potentially toxic, taste & odour	239.65	0.185
<i>Sphaerospermopsis reniformis</i>	7466	Taste & Odour	299.38	0.346
<i>Spirulina</i>	1521		22.81	0.005
<i>Synechococcus cf</i>	3871		47.61	0.026
Subtotal	160619		2,055.36	2.836
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	1285	Filter clogging	522.99	0.772
<i>Cyclotella</i>	4701	Filter clogging	319.66	0.366
<i>Nitzschia</i>	1936		418.17	0.195
Subtotal	7922		1,260.82	1.333
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	104	Discolouration of water	183.87	0.240
Subtotal	104		183.87	0.240
<u>Chlorophyta (Green)</u>				
<i>Actinastrum</i>	691		43.53	0.014

REPORT

<i>Report no:</i>	281823	<i>Depth :</i>	N/A
<i>Supercedes Report No:</i>	281515	<i>Chlorophyll a:</i>	NA
		<i>Microcystin equivalents:</i>	NA
		<i>Date analysed:</i>	24/03/2023
<i>Lims No:</i>	L23025078	<i>Date Sampled:</i>	21/03/2023
		<i>Analyst:</i>	[REDACTED]

Client ID: 231813

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<i>Chlamydomonas</i>	138	Taste & Odour	11.04	0.011
<i>Chodatella</i>	691		133.36	0.069
<i>Crucigenia</i>	1659		13.27	0.031
<i>Dictyosphaerium</i>	8020		577.44	0.120
<i>Kirchneriella</i>	415		20.75	0.007
<i>Koliella</i>	3097	Filter clogging	46.45	0.004
<i>Lagerheimia</i>	138		26.63	0.033
<i>Monoraphidium arcuatum</i>	35		9.49	0.007
<i>Monoraphidium cf</i>	12029		322.37	0.235
<i>Oocystis</i>	3982		378.29	0.406
<i>Pediastrum</i>	1950		234.00	0.091
<i>Planctonema</i>	121		10.04	0.013
<i>Scenedesmus species 1</i>	12085		942.63	0.662
<i>Schroederia</i>	277		56.23	0.037
<i>Sphaerocystis</i>	277		31.30	0.008
<i>Tetraedron</i>	553		235.02	0.055
<i>Tetrastrum</i>	3871		530.32	0.665
Subtotal	50029		3,622.16	2.468
<u>Cryptophyta (Monad)</u>				
<i>Chroomonas</i>	3318	Common after flood	796.32	0.822
Subtotal	3318		796.32	0.822

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	160600	2055.00	2.840
* Potentially Toxic Blue Green	28240	877.20	0.843
* Potentially Toxic Algae	28240	877.20	0.843
Total Algae	222000	7919.00	7.700

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:

██████████ 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:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025079	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231818

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaenopsis</i>	3746	Potentially toxic	258.47	0.444
<i>Chroococcus species 1</i>	2212		44.24	0.026
<i>Cocoid Blue Green Picoplankton</i>	506170	Filter clogging?	961.72	0.228
<i>Dolichospermum affine</i>	780		31.74	0.036
<i>Merismopedia</i>	55362		55.36	0.466
<i>Microcystis</i>	32521	Potentially toxic, taste & odour	913.84	0.904
<i>Myxobaktron</i>	553		9.73	0.002
<i>Planktolyngbya</i>	7743	Filter clogging	77.43	0.619
<i>Pseudanabaena</i>	57492		459.93	0.574
<i>Raphidiopsis raciborskii</i>	3580	Potentially toxic, taste & odour	135.32	0.105
<i>Sphaerospermopsis aphanizomenoides</i>	3538		106.14	0.133
<i>Sphaerospermopsis reniformis</i>	14569	Taste & Odour	584.21	0.676
<i>Synechococcus cf</i>	7356		90.47	0.049
Subtotal	695622		3,728.60	4.262
<u>Chrysophyta (Golden brown)</u>				
<i>Dichotomococcus</i>	16813		210.16	0.141
Subtotal	16813		210.16	0.141
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	971	Filter clogging	395.19	0.583
<i>Cyclotella</i>	3871	Filter clogging	263.22	0.301
<i>Cyclotella species 4</i>	69	Filter clogging	107.71	0.971
<i>Cyclotella/Stephanodiscus</i>	11255	Filter clogging	602.14	0.892
<i>Cylindrotheca closterium</i>	139		45.85	0.034
<i>Nitzschia</i>	2765		597.24	0.279

REPORT

Report no:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025079	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231818

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Subtotal	19070		2,011.35	3.060
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	555	Discolouration of water	981.24	1.283
Subtotal	555		981.24	1.283
<u>Chlorophyta (Green)</u>				
<i>Actinastrum</i>	5033		317.07	0.105
<i>Ankistrodesmus</i>	1659		623.78	0.223
<i>Chlamydomonas</i>	1383	Taste & Odour	110.64	0.117
<i>Chlorogonium</i>	277		90.99	0.173
<i>Chodatella</i>	1908		368.24	0.190
<i>Dictyosphaerium</i>	23008		1,656.57	0.345
<i>Golenkinia</i>	830		58.10	0.150
<i>Kirchneriella</i>	4065		203.25	0.077
<i>Koliella</i>	553	Filter clogging	8.29	0.000
<i>Micractinium</i>	6360		82.68	0.095
<i>Monoraphidium cf</i>	4148		111.16	0.081
<i>Oocystis</i>	3982		378.29	0.406
<i>Pediastrum</i>	4718		566.16	0.221
<i>Planctonema</i>	1383		114.78	0.156
<i>Pyramimonas</i>	1106		160.37	0.451
<i>Scenedesmus species 1</i>	38715		3,019.77	2.123
<i>Scenedesmus species 2</i>	278		138.66	0.246
<i>Sphaerocystis</i>	1659		187.46	0.048
<i>Tetraedron</i>	4425		1,880.62	0.442
<i>Tetrastrum</i>	6001		822.13	1.032

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023
 Analyst: [REDACTED]

Lims No: L23025079 Date Sampled: 21/03/2023
 Client ID: 231818 Address: [REDACTED]
 Site: [REDACTED]

Client: Department of Planning and Environment

Method: MA70CENTI Issued By: [REDACTED] Disclaimer: Samples analysed as received.
 Commercial Client Representative
 Issued On : 28/03/2023

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Subtotal	111491		10,899.01	6.681
<u>Cryptophyta (Monad)</u>				
<i>Chroomonas</i>	4701	Common after flood	1,128.24	1.165
Subtotal	4701		1,128.24	1.165
<u>Xanthophyta</u>				
<i>Centritractus</i>	277		332.40	1.305
Subtotal	277		332.40	1.305

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	819100	4198.00	4.440
* Potentially Toxic Blue Green	39850	1308.00	1.450
* Potentially Toxic Algae	39850	1308.00	1.450
Total Algae	972000	19760.00	18.070

Comment:

Sample contained debris and cells resembling bacteria.

*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.

Coccolid 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:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025080	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231823

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By: [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Cocoid Blue Green Picoplankton</i>	284472	Filter clogging?	540.49	0.128
<i>Merismopedia</i>	40263		40.26	0.339
<i>Microcystis</i>	1659	Potentially toxic, taste & odour	46.61	0.046
<i>Myxobaktron</i>	553		9.73	0.002
<i>Planktolyngbya</i>	3318	Filter clogging	33.18	0.265
<i>Pseudanabaena</i>	3122		24.97	0.031
<i>Raphidiopsis raciborskii</i>	278	Potentially toxic, taste & odour	10.50	0.008
<i>Romeria</i>	553		8.84	0.003
<i>Sphaerospermopsis reniformis</i>	1422	Taste & Odour	57.02	0.066
<i>Spirulina</i>	553		8.29	0.002
<i>Synechococcus cf</i>	1908		23.46	0.012
Subtotal	338101		803.35	0.902
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	708	Filter clogging	288.15	0.425
<i>Cyclotella</i>	8020	Filter clogging	545.36	0.625
<i>Cyclotella species 4</i>	69	Filter clogging	107.71	0.971
<i>Cyclotella/Stephanodiscus</i>	7301	Filter clogging	390.60	0.578
<i>Nitzschia</i>	694		149.90	0.070
<i>Synedra</i>	69		40.98	0.037
Subtotal	16861		1,522.70	2.706
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	1041	Discolouration of water	1,840.48	2.407
<i>Trachelomonas</i>	208	Common after flood	583.64	0.470

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023
 Analyst: [REDACTED]

Lims No: L23025080

Date Sampled: 21/03/2023

Client ID: 231823

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
Subtotal	1249		2,424.12	2.877
<u>Chlorophyta (Green)</u>				
<i>Ankistrodesmus</i>	3318		1,247.56	0.447
<i>Chlorogonium</i>	277		90.99	0.173
<i>Coelastrum</i>	1659		54.74	0.112
<i>Crucigenia</i>	2738		21.90	0.052
<i>Dictyosphaerium</i>	1106		79.63	0.016
<i>Kirchneriella</i>	1659		82.95	0.031
<i>Monoraphidium cf</i>	5807		155.62	0.113
<i>Oocystis</i>	1106		105.07	0.112
<i>Pyramimonas</i>	277		40.16	0.113
<i>Scenedesmus species 1</i>	17394		1,356.73	0.954
<i>Tetraedron</i>	277		117.72	0.027
<i>Tetrastrum</i>	6388		875.15	1.098
Subtotal	42006		4,228.22	3.248
<u>Cryptophyta (Monad)</u>				
<i>Chroomonas</i>	2765	Common after flood	663.60	0.685
Subtotal	2765		663.60	0.685

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	338100	803.40	0.902
* Potentially Toxic Blue Green	1940	57.10	0.054
* Potentially Toxic Algae	1940	57.10	0.054
Total Algae	401000	9642.00	10.420

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:

██████████, 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:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025081	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231828

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaenopsis</i>	486	Potentially toxic	33.53	0.057
<i>Cocoid Blue Green Picoplankton</i>	94368	Filter clogging?	179.29	0.042
<i>Dolichospermum affine</i>	382		15.54	0.017
<i>Merismopedia</i>	24453		24.45	0.205
<i>Microcystis</i>	3111	Potentially toxic, taste & odour	87.41	0.086
<i>Myxobaktron</i>	138		2.42	0.000
<i>Non toxic Aphanizomenonaceae</i>	780	Taste & Odour	31.98	0.034
<i>Planktolyngbya</i>	4791	Filter clogging	47.91	0.383
<i>Pseudanabaena</i>	10232		81.85	0.102
<i>Radiocystis</i>	434	Potentially toxic	13.36	0.013
<i>Raphidiopsis raciborskii</i>	364	Potentially toxic, taste & odour	13.75	0.010
<i>Sphaerospermopsis reniformis</i>	2206	Taste & Odour	88.46	0.102
<i>Synechococcus cf</i>	2351		28.91	0.015
Subtotal	144096		648.86	1.066
<u>Chrysophyta (Golden brown)</u>				
<i>Dichotomococcus</i>	4425		55.31	0.037
Subtotal	4425		55.31	0.037
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	649	Filter clogging	264.14	0.390
<i>Cyclotella</i>	5946	Filter clogging	404.32	0.463
<i>Cyclotella/Stephanodiscus</i>	498	Filter clogging	26.64	0.039
<i>Nitzschia</i>	225		48.60	0.022
<i>Skeletonema</i>	747	Filter clogging	560.25	0.049
<i>Synedra</i>	69		40.98	0.037

REPORT

Report no:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025081	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231828

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By: [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
<i>Urosolenia</i>	69	Filter clogging	48.64	0.064
Subtotal	8203		1,393.57	1.064
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	52	Discolouration of water	91.93	0.120
<i>Phacus</i>	69		437.32	0.239
Subtotal	121		529.25	0.359
<u>Chlorophyta (Green)</u>				
<i>Ankistrodesmus</i>	899		338.02	0.121
<i>Ankyra</i>	69		14.00	0.017
<i>Carteria</i>	207		30.84	0.012
<i>Chlamydomonas</i>	691	Taste & Odour	55.28	0.058
<i>Chodatella</i>	69		13.31	0.006
<i>Coelastrum</i>	1452		47.91	0.098
<i>Crucigenia</i>	1991		15.92	0.037
<i>Dictyosphaerium</i>	8974		646.12	0.134
<i>Elakatothrix</i>	138		12.00	0.005
<i>Kirchneriella</i>	277		13.85	0.005
<i>Koliella</i>	1175	Filter clogging	17.62	0.001
<i>Micractinium</i>	69		0.89	0.001
<i>Monoraphidium arcuatum</i>	125		33.92	0.026
<i>Monoraphidium cf</i>	5531		148.23	0.108
<i>Oocystis</i>	1742		165.49	0.177
<i>Pediastrum</i>	382		45.84	0.017
<i>Planctonema</i>	173		14.35	0.019
<i>Scenedesmus species 1</i>	12444		970.63	0.682
<i>Schroederia</i>	17		3.45	0.002

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023
 Analyst: [REDACTED]

Lims No: L23025081 Date Sampled: 21/03/2023
 Client ID: 231828 Address: [REDACTED]
 Site:

Client: Department of Planning and Environment

Method: MA70CENTI Issued By: [REDACTED] Disclaimer: Samples analysed as received.
 Commercial Client Representative
 Issued On : 28/03/2023

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm3/L
<i>Sphaerocystis</i>	277		31.30	0.008
<i>Staurastrum</i>	17		89.94	0.035
<i>Tetrastrum</i>	3235		443.19	0.556
Subtotal	39954		3,152.10	2.125

Cryptophyta (Monad)

<i>Chroomonas</i>	553	Common after flood	132.72	0.137
<i>Cryptomonas</i>	207	Common after flood, Taste & Odour	111.78	0.196
Subtotal	760		244.50	0.333

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	144100	648.90	1.070
* Potentially Toxic Blue Green	4400	148.10	0.166
* Potentially Toxic Algae	4400	148.10	0.166
Total Algae	197600	6024.00	4.980

Comment:

Debris and cells resembling bacteria present in the sample. Sample received partially preserved, results may be compromised

*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:

██████████, 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:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025082	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231833

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<u>Cyanophyta (Blue green)</u>				
<i>Anabaenopsis</i>	139	Potentially toxic	9.59	0.016
<i>Cocoid Blue Green Picoplankton</i>	64875	Filter clogging?	123.26	0.029
<i>Merismopedia</i>	4694		4.69	0.039
<i>Microcystis</i>	498	Potentially toxic, taste & odour	13.99	0.013
<i>Pseudanabaena</i>	2005		16.04	0.020
<i>Sphaerospermopsis reniformis</i>	1106	Taste & Odour	44.35	0.051
<i>Spirulina</i>	553		8.29	0.002
<i>Synechococcus cf</i>	277		3.40	0.001
<i>Subtotal</i>	74147		223.61	0.171
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	607	Filter clogging	247.04	0.364
<i>Cyclotella</i>	1452	Filter clogging	98.73	0.113
<i>Navicula</i>	17		22.86	0.028
<i>Nitzschia</i>	207		44.71	0.020
<i>Subtotal</i>	2283		413.34	0.525
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	17	Discolouration of water	30.05	0.039
<i>Phacus</i>	17		107.74	0.059
<i>Subtotal</i>	34		137.79	0.098
<u>Chlorophyta (Green)</u>				
<i>Dictyosphaerium</i>	13688		985.53	0.205
<i>Koliella</i>	69	Filter clogging	1.03	0.000
<i>Monoraphidium cf</i>	3318		88.92	0.064

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023
 Analyst: [REDACTED]

Lims No: L23025082

Date Sampled: 21/03/2023

Client ID: 231833

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm3/L
<i>Oocystis</i>	1348		128.06	0.137
<i>Pediastrum</i>	87		10.44	0.004
<i>Planctonema</i>	1492		123.83	0.168
<i>Scenedesmus species 1</i>	2544		198.43	0.139
<i>Schroederia</i>	69		14.00	0.009
<i>Sphaerocystis</i>	69		7.79	0.002
<i>Tetrastrum</i>	553		75.76	0.095
Subtotal	23237		1,633.79	0.823
<u>Cryptophyta (Monad)</u>				
<i>Chroomonas</i>	1521	Common after flood	365.04	0.377
<i>Cryptomonas</i>	207	Common after flood, Taste & Odour	111.78	0.196
Subtotal	1728		476.82	0.573

	Cells/ mL	ASU/ mL	Biovolum mm3/L
Total Blue Green	74150	223.60	0.171
* Potentially Toxic Blue Green	637	23.60	0.029
* Potentially Toxic Algae	637	23.60	0.029
Total Algae	101400	2885.00	2.190

Comment:

Sample received unpreserved/ partially preserved, results may be compromised. 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:

██████████, 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:	281823	Depth :	N/A
Supercedes Report No:	281515	Chlorophyll a:	NA
		Microcystin equivalents:	NA
		Date analysed:	24/03/2023
Lims No: L23025083	Date Sampled: 21/03/2023	Analyst:	[REDACTED]

Client ID: 231838

Address: [REDACTED]

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

 Issued By : [REDACTED]
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.
TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolume mm ³ /L
<u>Cyanophyta (Blue green)</u>				
<i>Cocoid Blue Green Picoplankton</i>	89217	Filter clogging?	169.51	0.040
<i>Dolichospermum affine</i>	225		9.15	0.010
<i>Microcystis</i>	2987	Potentially toxic, taste & odour	83.93	0.083
<i>Planktolyngbya</i>	2074	Filter clogging	20.74	0.165
<i>Pseudanabaena</i>	2821		22.56	0.028
<i>Raphidiopsis raciborskii</i>	330	Potentially toxic, taste & odour	12.47	0.009
<i>Sphaerospermopsis eucompacta</i>	364	Taste & Odour	10.77	0.011
<i>Sphaerospermopsis reniformis</i>	728	Taste & Odour	29.19	0.033
<i>Synechococcus cf</i>	747		9.18	0.005
Subtotal	99493		367.50	0.384
<u>Chrysophyta (Golden brown)</u>				
<i>Dichotomococcus</i>	277		3.46	0.002
Subtotal	277		3.46	0.002
<u>Bacillariophyta (Diatom)</u>				
<i>Aulacoseira</i>	343	Filter clogging	139.60	0.206
<i>Cyclotella</i>	899	Filter clogging	61.13	0.070
<i>Cyclotella/Stephanodiscus</i>	4632	Filter clogging	247.81	0.367
<i>Nitzschia</i>	484		104.54	0.048
<i>Skeletonema</i>	560	Filter clogging	420.00	0.036
Subtotal	6918		973.08	0.727
<u>Euglenophyta (Euglenoid)</u>				
<i>Euglena</i>	35	Discolouration of water	61.88	0.080
Subtotal	35		61.88	0.080

REPORT

Report no: 281823 Depth : N/A
 Supercedes Report No: 281515 Chlorophyll a: NA
 Microcystin equivalents: NA
 Date analysed: 24/03/2023

Lims No: L23025083 Date Sampled: 21/03/2023 Analyst: ██████████

Client ID: 231838 Address: Building ██████████

Site:

Client: Department of Planning and Environment

Method: MA70CENTI

Issued By : ██████████
 Commercial Client Representative
 Issued On : 28/03/2023

Disclaimer: Samples analysed as received.

TAXA

	Cells/ mL	Significance	ASU/ mL	Biovolum mm ³ /L
<u>Chlorophyta (Green)</u>				
<i>Ankistrodesmus</i>	622		233.87	0.083
<i>Ankyra</i>	277		56.23	0.069
<i>Chlamydomonas</i>	1175	Taste & Odour	94.00	0.099
<i>Closteriopsis</i>	17		138.72	0.089
<i>Coelastrum</i>	553		18.24	0.037
<i>Dictyosphaerium</i>	6098		439.05	0.091
<i>Kirchneriella</i>	477		23.85	0.009
<i>Micractinium</i>	553		7.18	0.008
<i>Monoraphidium arcuatum</i>	17		4.61	0.003
<i>Monoraphidium cf</i>	138		3.69	0.002
<i>Oocystis</i>	553		52.53	0.056
<i>Pediastrum</i>	139		16.68	0.006
<i>Planctonema</i>	2938		243.85	0.331
<i>Scenedesmus species 1</i>	2862		223.23	0.157
<i>Tetraedron</i>	207		87.97	0.020
<i>Tetrastrum</i>	684		93.70	0.117
Subtotal	17310		1,737.40	1.177
<u>Cryptophyta (Monad)</u>				
<i>Chroomonas</i>	3595	Common after flood	862.80	0.891
<i>Cryptomonas</i>	622	Common after flood, Taste & Odour	335.88	0.590
Subtotal	4217		1,198.68	1.481

	Cells/ mL	ASU/ mL	Biovolume mm3/L
Total Blue Green	99490	367.50	0.384
* Potentially Toxic Blue Green	3320	96.40	0.092
* Potentially Toxic Algae	3320	96.40	0.092
Total Algae	128300	4342.00	3.850

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:

██████████, 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