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Algae Analysis with Biovolume Estimates
Report and Data Set

Customer ID: 062

<u>Tracking Code:</u>	200035-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	1/8/2019	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	4.50	95.279	0.12	4,714.411	0.24	
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	7.43	254.077	0.32	43,148.777	2.23
☑ 2110	Chlorogonium	spp	.	.	.	.	Vegetative	72.00	66.464	0.08	1,174,637.245	60.59
1000538	Monomastix	minuta	.	.	.	.	Vegetative	6.00	63.519	0.08	897.985	0.05
2491	Schroederia	judayi	.	.	.	.	Vegetative	20.00	31.760	0.04	598.657	0.03
Summary for Division ~ Chlorophyta (5 detail records)								Sum Total	Chlorophyta	511.099	0.64	1,223,997.074	63.14

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	4.00	1,905.579	2.39	57,630.602	2.97
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		1,905.579	2.39	57,630.602	2.97

Division: Cryptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	51.20	11.503	0.01	114,719.101	5.92
Summary for Division ~ Cryptophyta (1 detail record)							Sum Total	Cryptophyta	11.503	0.01	114,719.101	5.92

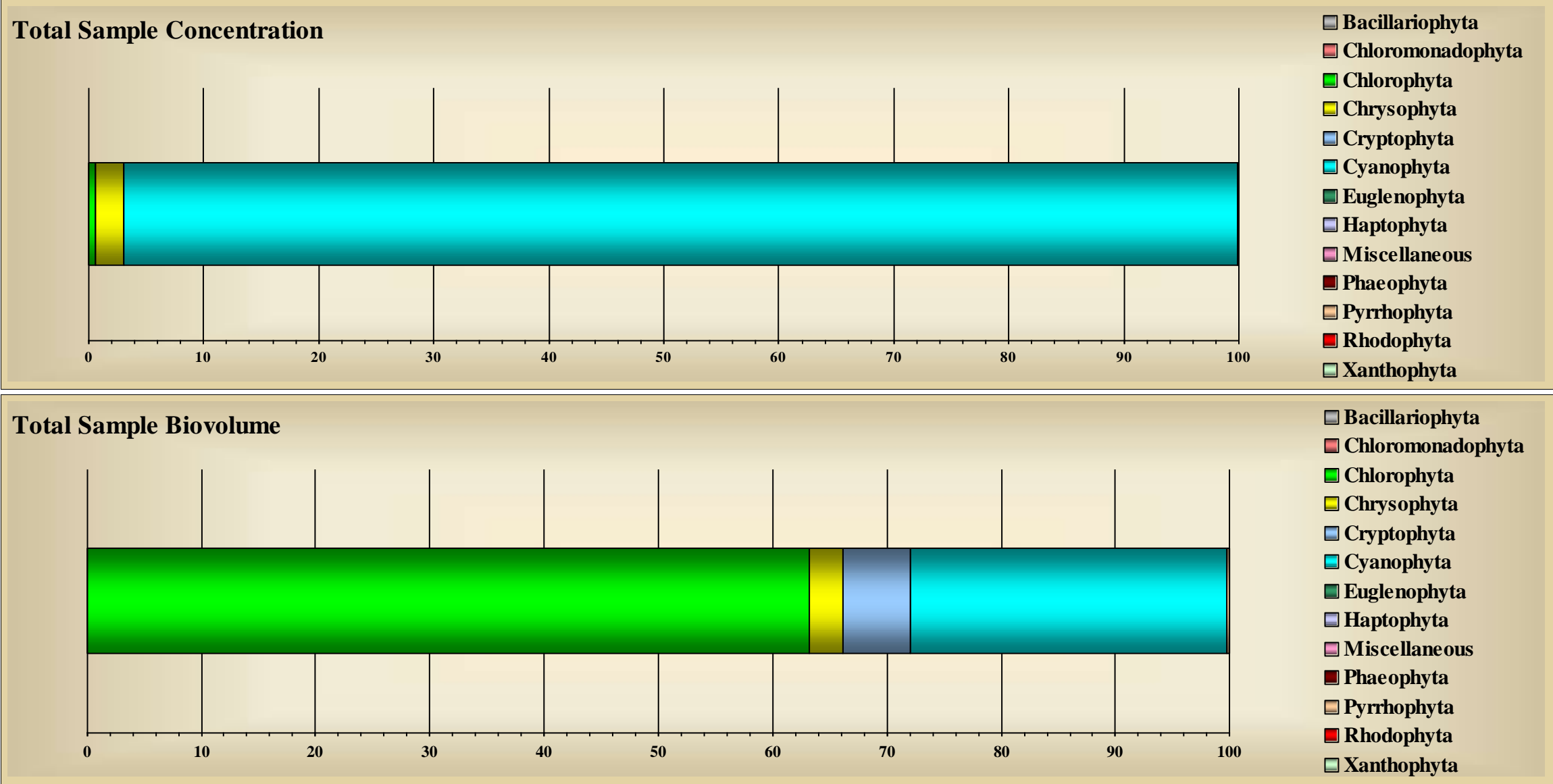
Division: Cyanophyta													
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume	
4051	<i>Aphanocapsa</i>	<i>elachista</i>	.	.	.	.	Vegetative	28.33	1,048.068	1.31	55,254.050	2.85
4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	40.00	31.760	0.04	1,795.967	0.09
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	3.00	76,223.141	95.45	478,925.236	24.70
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	31.760	0.04	56.123	0.00	
Summary for Division ~ Cyanophyta (4 detail records)								Sum Total	Cyanophyta	77,334.728	96.84	536,031.375	27.65

Division: Miscellaneous												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
7140	*	spp	.	.	.	Microflagellate	Vegetative	3.00	63.519	0.08	886.050	0.05
Summary for Division ~ Miscellaneous (1 detail record)							Sum Total	Miscellaneous	63.519	0.08	886.050	0.05

Division: Pyrrhophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume		
6033	Gymnodinium	sp. 2	.	.	.	.	Vegetative	10.00	31.760	0.04	5,321.379	0.27
Summary for Division ~ Pyrrhophyta (1 detail record)									Sum Total	Pyrrhophyta	31.760	0.04	5,321.379	0.27

Total Sample Concentration
79,858.187
NU/ml

Total Sample Biovolume
1,938,585.579
µm³ /ml



<u>Tracking Code:</u>	200036-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	2/16/2019	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	4.20	141.154	0.13	16,363.245	5.42
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	5.25	225.846	0.21	11,529.659	3.82
2211	Mucidosphaerium	pulchellum	.	.	.	.	Vegetative	10.00	28.231	0.03	463.598	0.15
Summary for Division ~ Chlorophyta (3 detail records)							Sum Total Chlorophyta		395.231	0.37	28,356.502	9.39

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.25	2,202.002	2.04	88,894.594	29.44
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		2,202.002	2.04	88,894.594	29.44

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	36.00	2.556	0.00	13,877.311	4.60
3043	Rhodomonas	minuta	.	nannoplantica	.	.	Vegetative	8.00	56.462	0.05	1,892.045	0.63

Summary for Division ~ Cryptophyta (2 detail records)												
Sum Total Cryptophyta									59.018	0.05	15,769.355	5.22
Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
<input checked="" type="checkbox"/> 4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	47.78	1,101.001	1.02	56,855.577	18.83
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	20.00	56.462	0.05	946.025	0.31
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	12.40	169.385	0.16	1,649.621	0.55
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	103,748.164	96.28	108,645.077	35.98
Summary for Division ~ Cyanophyta (4 detail records)												
Sum Total Cyanophyta									105,075.011	97.51	168,096.301	55.67
Division: Haptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	28.231	0.03	853.787	0.28
Summary for Division ~ Haptophyta (1 detail record)												
Sum Total Haptophyta									28.231	0.03	853.787	0.28

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Total Sample Concentration

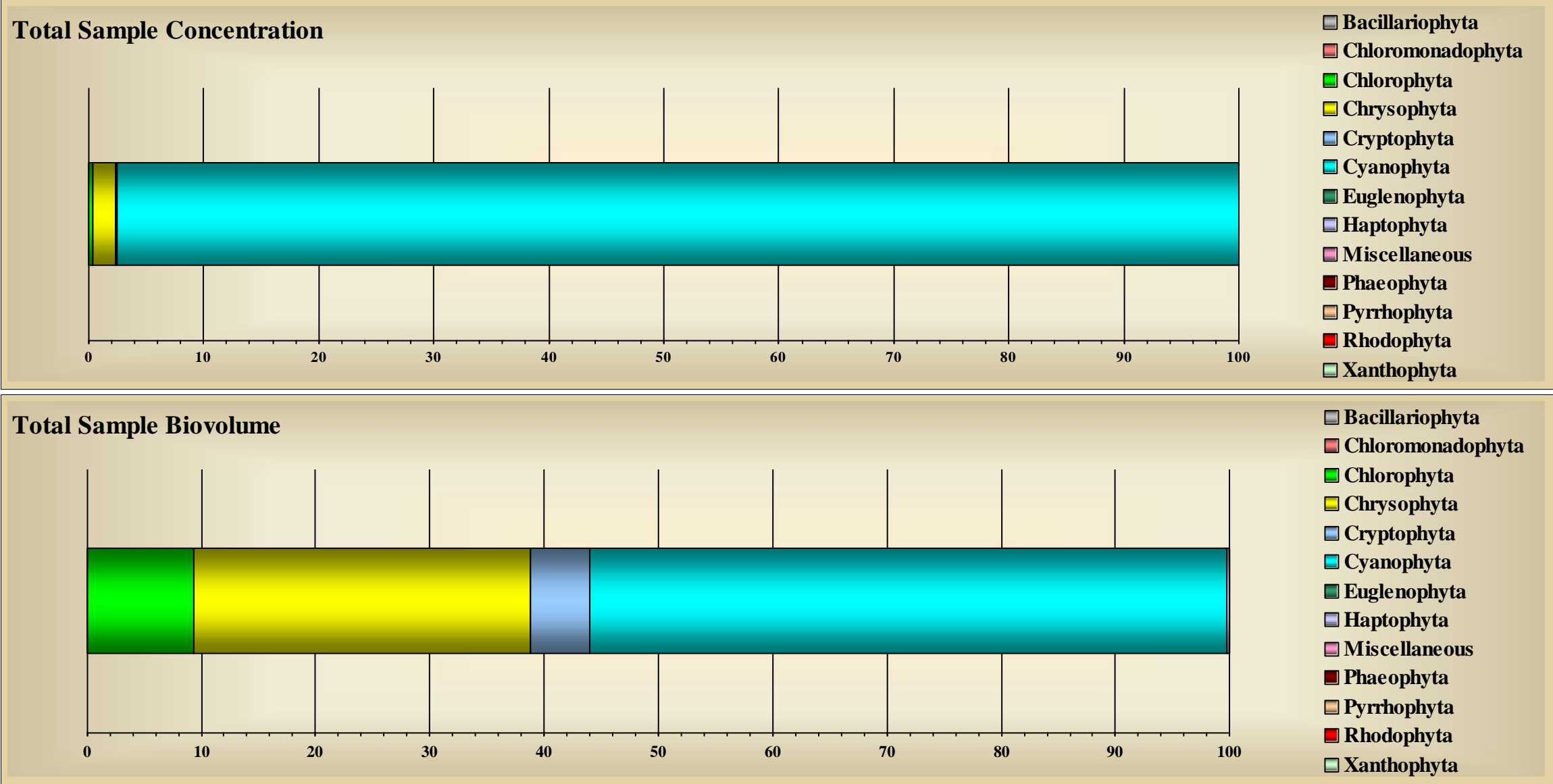
107,759.492

NU/ml

Total Sample Biovolume

301,970.538

µm³ /ml



Tracking Code: 200037-062

Customer ID: 062

Job ID: 1

System Name: Sparkling Lake

Report Notes: .

Sample ID: SSB

Sample Date: 3/6/2019

Station: 1

Site: Pump, HP, 0-bott.

Replicate: .

Sample Level: Hypsometric Pool

Sample Depth: 0

Preservative: Lugols

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	5.75	112.923	0.29	8,540.255	3.92
<input checked="" type="checkbox"/> 2110	Chlorogonium	spp	.	.	.	.	Vegetative	56.00	28.231	0.07	28,806.399	13.21
Summary for Division ~ Chlorophyta (2 detail records)							Sum Total Chlorophyta		141.154	0.36	37,346.654	17.13

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.43	2,540.771	6.56	72,326.105	33.17
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total	Chrysophyta	2,540.771	6.56	72,326.105	33.17

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4051	<i>Aphanocapsa</i>	<i>elachista</i>	.	.	.	.	Vegetative	30.00	1,185.693	3.06	46,305.947	21.24
4460	<i>Pseudanabaena</i>	<i>spp</i>	.	.	.	.	Vegetative	12.00	790.462	2.04	7,449.948	3.42
4172	<i>Pseudanabaena</i>	<i>limnetica</i>	.	.	.	.	Vegetative	9.00	197.616	0.51	1,396.865	0.64

☒ = Identification is Uncertain

*** = Family Level Identification**

200037-062

Sample Date: 3/6/2019

Wednesday, November 11, 2020

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4321	<i>Synechococcus</i>	<i>elongatus</i>	Vegetative	3.00	33,876.951	87.46	53,213.915	24.41
Summary for Division ~ <i>Cyanophyta</i> (4 detail records)								Sum Total	Cyanophyta			
									36,050.722	93.08	108,366.676	49.70

Total Sample Concentration

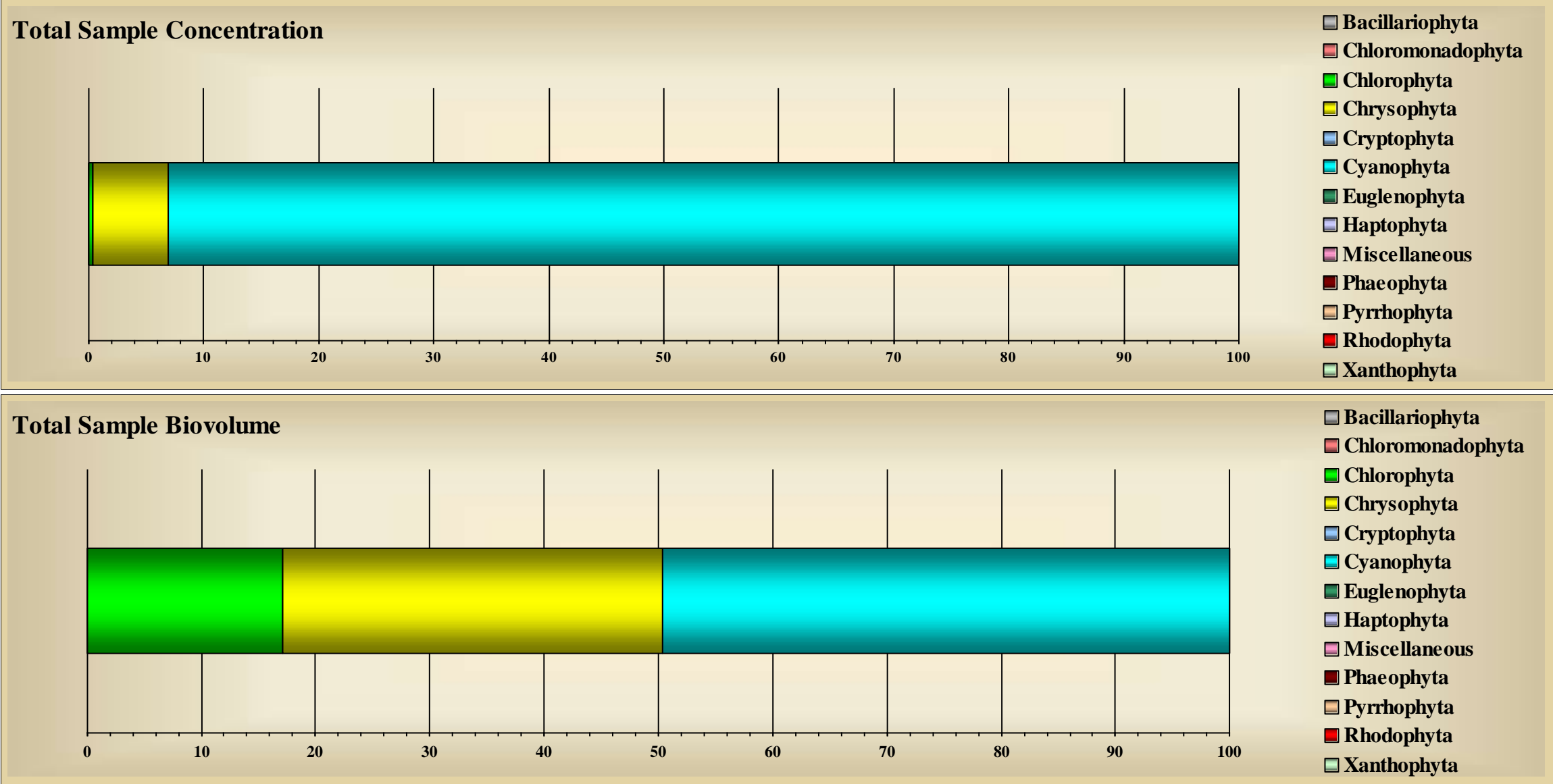
38,732.648

NU/ml

Total Sample Biovolume

218,039.436

µm³ /ml



<u>Tracking Code:</u>	200038-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	3/9/2019	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2021	Actinastrum	hantzschii	.	.	.	.	Vegetative	24.00	21.173	0.07	3,831.392	0.85
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	6.00	84.692	0.27	8,845.043	1.96
☑ 2110	Chlorogonium	spp	.	.	.	.	Vegetative	90.00	21.173	0.07	252,233.367	55.95
Summary for Division ~ Chlorophyta (3 detail records)							Sum Total	Chlorophyta	127.039	0.41	264,909.803	58.76

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.71	3,917.023	12.51	114,127.543	25.32
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		3,917.023	12.51	114,127.543	25.32

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	36.00	1.278	0.00	9,936.840	2.20
Summary for Division ~ Cryptophyta (1 detail record)							Sum Total	Cryptophyta	1.278	0.00	9,936.840	2.20

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	28.00	825.751	2.64	26,630.790	5.91
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	10.50	84.692	0.27	698.433	0.15
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.50	26,360.503	84.18	34,505.898	7.65
Summary for Division ~ Cyanophyta (3 detail records)							Sum Total	Cyanophyta	27,270.946	87.08	61,835.121	13.72

Total Sample Concentration

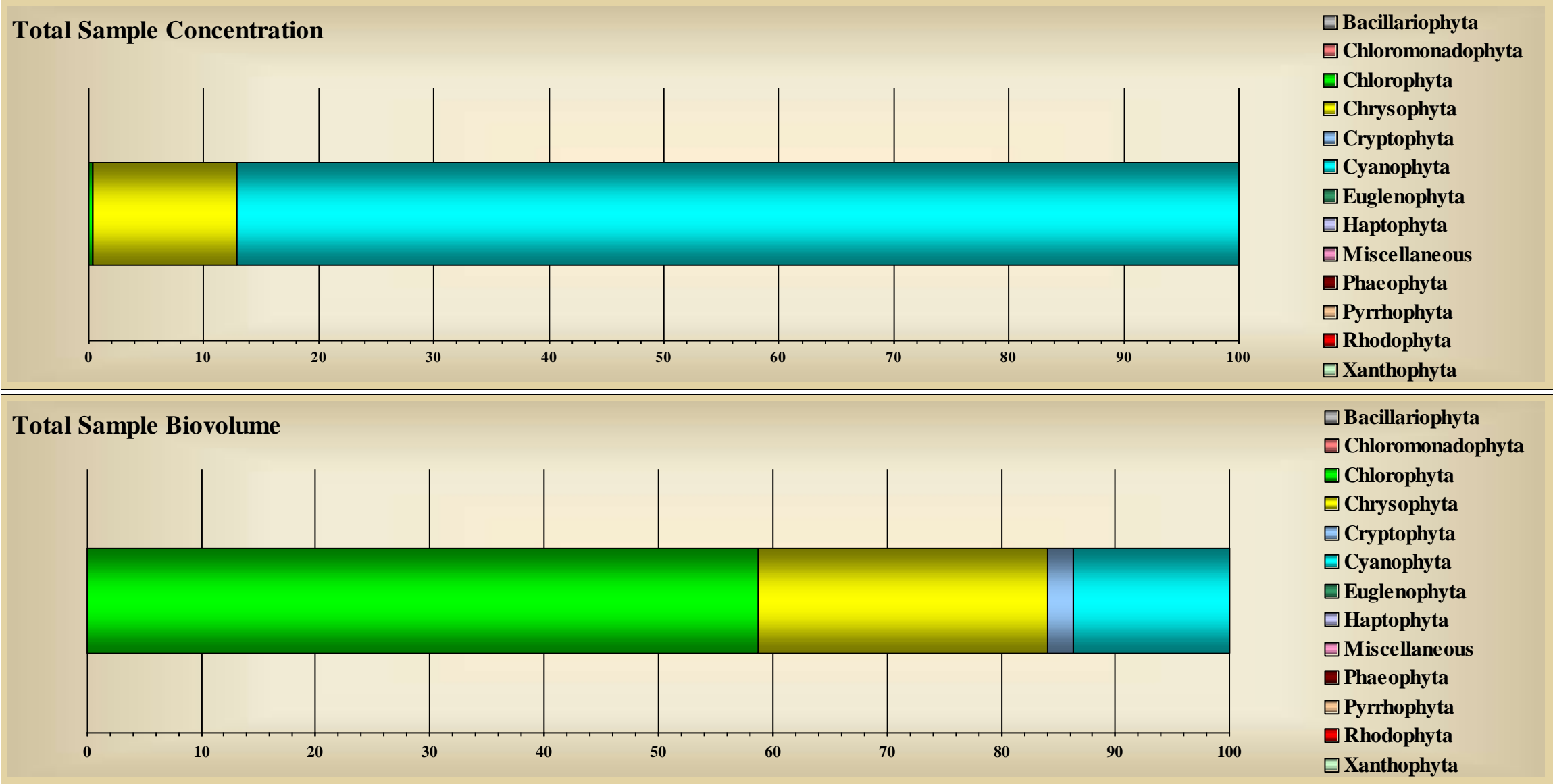
31,316.285

NU/ml

Total Sample Biovolume

450,809.306

μm^3 /ml



Tracking Code: 200039-062

Customer ID: 062

Job ID: 1

System Name: Sparkling Lake

Report Notes: .

Sample ID: SSB

Sample Date: 4/30/2019

Station: 1

Site: Pump, HP, 0-bott.

Replicate: .

Sample Level: Hypsometric Pool

Sample Depth: 0

Preservative: Lugols

Division: Bacillariophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1332	Tabellaria	flocculosa	.	.	.	.	Vegetative	74.00	56.462	0.11	300,827.328	6.79
Summary for Division ~ Bacillariophyta (1 detail record)							Sum Total	Bacillariophyta	56.462	0.11	300,827.328	6.79

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	8.00	282.308	0.53	62,006.734	1.40
<input checked="" type="checkbox"/> 2110	Chlorogonium	spp	.	.	.	.	Vegetative	79.14	734.001	1.38	3,312,579.554	74.76
1000538	Monomastix	minuta	.	.	.	.	Vegetative	6.00	56.462	0.11	798.209	0.02
2491	Schroederia	judayi	.	.	.	.	Vegetative	36.67	112.923	0.21	2,483.305	0.06
8491	Scourfieldia	cordiformis	.	.	.	.	Vegetative	5.00	28.231	0.05	1,832.949	0.04
2590	Ulothrix	spp	.	.	.	.	Vegetative	200.00	28.231	0.05	443,448.257	10.01
Summary for Division ~ Chlorophyta (6 detail records)							Sum Total Chlorophyta		1,242.155	2.33	3,823,149.008	86.28

☒ = Identification is Uncertain

*** = Family Level Identification**

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Sample Date: 4/30/2019

Wednesday, November 11, 2020

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Division: Chrysophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1653	*	spp	.	.	.	.	Cyst	10.67	84.692	0.16	53,090.806	1.20
1652	*	spp	.	.	.	.	Vegetative	5.00	3,557.080	6.68	158,832.866	3.58
Summary for Division ~ Chrysophyta (2 detail records)							Sum Total	Chrysophyta	3,641.772	6.84	211,923.672	4.78

Division: Cryptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	10.00	56.462	0.11	9,460.229	0.21
3043	Rhodomonas	minuta	.	nannoplantica	.	.	Vegetative	8.00	28.231	0.05	946.022	0.02
Summary for Division ~ Cryptophyta (2 detail records)							Sum Total	Cryptophyta	84.692	0.16	10,406.251	0.23

Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	40.00	56,462	0.11	2,594.173	0.06
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	22.00	254.077	0.48	2,508.656	0.06
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.67	47,851.194	89.87	66,814.622	1.51
Summary for Division ~ Cyanophyta (3 detail records)							Sum Total	Cyanophyta	48,161.733	90.46	71,917.451	1.62

Division: Miscellaneous												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
<input checked="" type="checkbox"/> 7130	*	spp	.	.	.	.	Vegetative	12.00	56.462	0.11	12,771.311	0.29
Summary for Division ~ Miscellaneous (1 detail record)							Sum Total	Miscellaneous	56.462	0.11	12,771.311	0.29

Total Sample Concentration

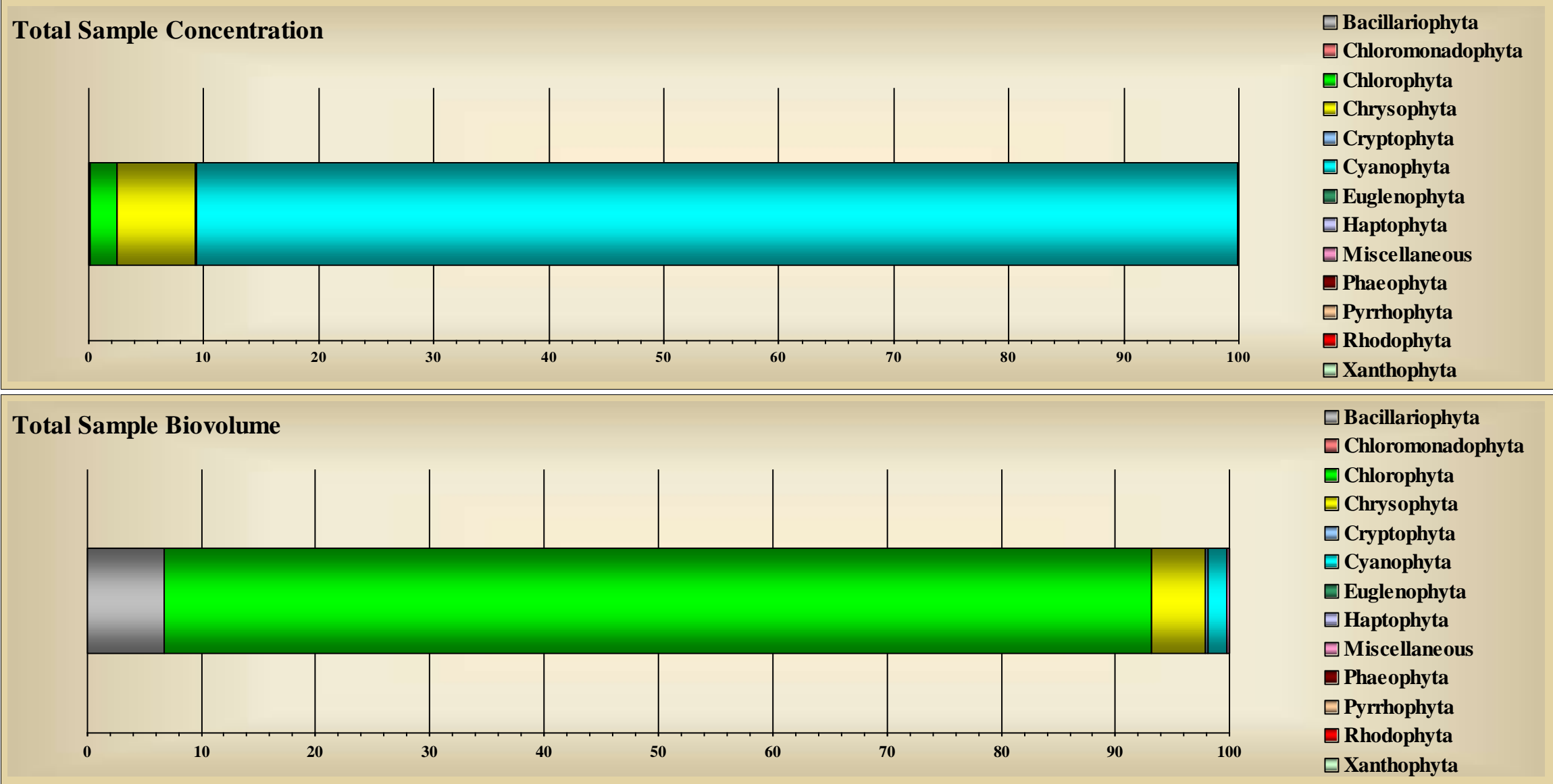
53,243.275

NU/ml

Total Sample Biovolume

4,430,995.021

µm³ /ml



<u>Tracking Code:</u>	200040-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	1/7/2020	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	5.00	127.039	0.17	8,314.649	0.67	
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	8.11	666.953	0.89	107,713.559	8.73
☑ 2110	Chlorogonium	spp	.	.	.	.	Vegetative	60.00	317.596	0.42	798,206.854	64.72
2363	Oocystis	parva	.	.	.	.	Vegetative	10.00	31.760	0.04	5,986.553	0.49
2491	Schroederia	judayi	.	.	.	.	Vegetative	40.00	127.039	0.17	1,197.313	0.10
Summary for Division ~ Chlorophyta (5 detail records)								Sum Total	Chlorophyta	1,270.386	1.69	921,418.927	74.71

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.50	1,079.828	1.43	23,860.092	1.93
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		1,079.828	1.43	23,860.092	1.93

Division: Cryptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	36.00	1.278	0.00	5,653.719	0.46
Summary for Division ~ Cryptophyta (1 detail record)							Sum Total	Cryptophyta	1.278	0.00	5,653.719	0.46

Division: Cyanophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4051	<i>Aphanocapsa</i>	<i>elachista</i>	.	.	.	.	Vegetative	54.67	1,873.819	2.49	141,650.588	11.48
4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	21.00	95.279	0.13	1,795.970	0.15
1000080	<i>Cyanodictyon</i>	<i>planctonicum</i>	.	.	.	.	Vegetative	10.00	63.519	0.08	133.035	0.01
4460	<i>Pseudanabaena</i>	<i>spp</i>	.	.	.	.	Vegetative	9.00	254.077	0.34	1,795.970	0.15
☑ 4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.50	70,506.405	93.67	92,292.884	7.48
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	31.760	0.04	56.123	0.00		
Summary for Division ~ Cyanophyta (6 detail records)									Sum Total	Cyanophyta	72,824.859	96.75	237,724.569	19.27

Division: Miscellaneous												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
☑ 7130	*	spp	.	.	.	.	Vegetative	12.00	63.519	0.08	25,542.622	2.07
Summary for Division ~ Miscellaneous (1 detail record)							Sum Total	Miscellaneous	63.519	0.08	25,542.622	2.07

Division: Pyrrhophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6033	<i>Gymnodinium</i>	<i>sp. 2</i>	Vegetative	16.00	31.760	0.04	19,156.965	1.55

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Total Sample Concentration

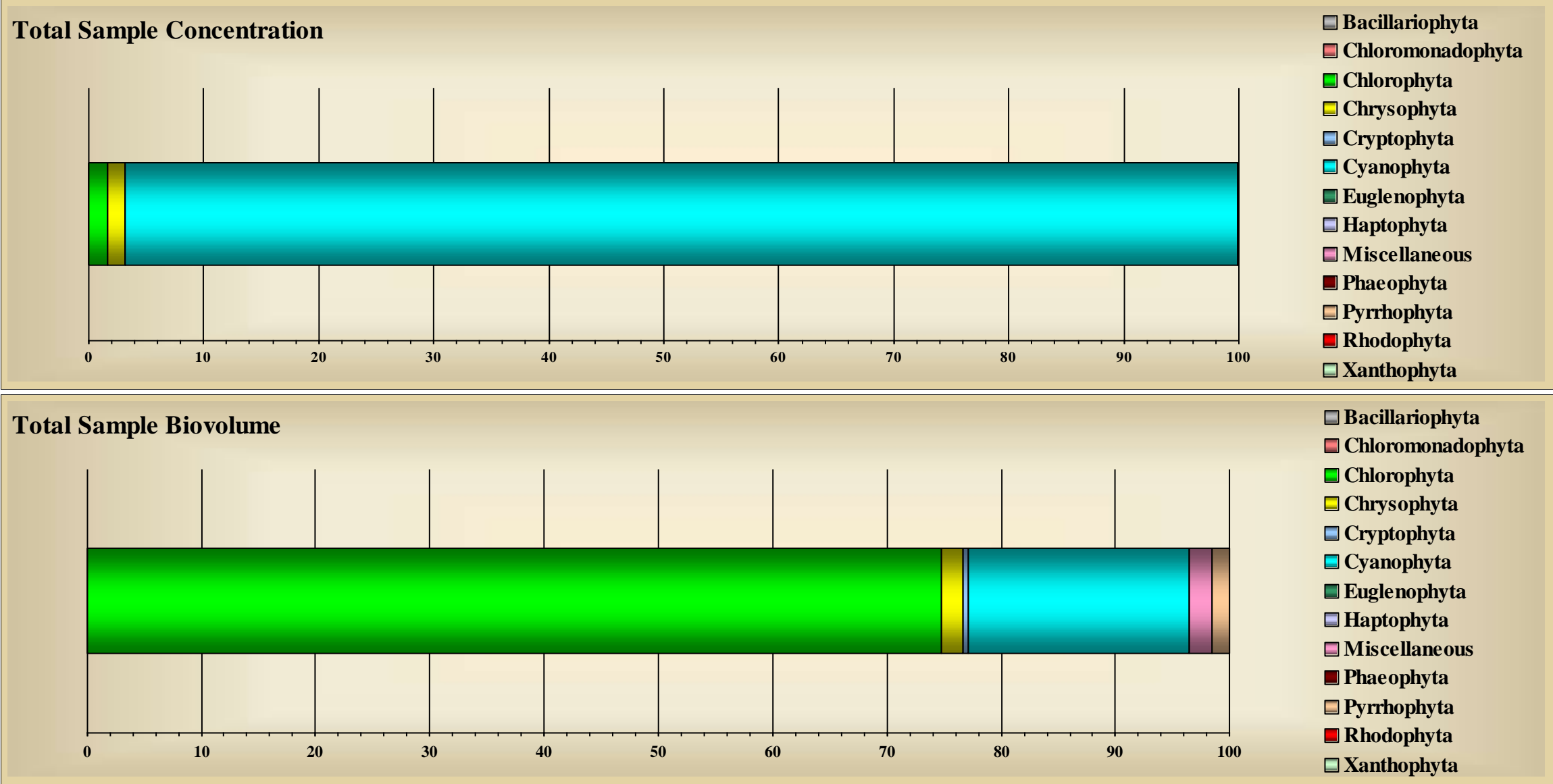
75,271.629

NU/ml

Total Sample Biovolume

1,233,356.894

µm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

Tracking Code: 200041-062

Customer ID: 062

Job ID: 1

System Name: Sparkling Lake

Report Notes: .

Sample ID: SSB

Sample Date: 1/31/2020

Station: 1

Site: Pump, HP, 0-bott.

Replicate: .

Sample Level: Hypsometric Pool

Sample Depth: 0

Preservative: Lugols

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	5.00	148.212	0.72	13,192.587	1.13
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	7.50	931.616	4.55	120,192.180	10.27
2110	Chlorogonium	spp	.	.	.	.	Vegetative	75.60	190.558	0.93	727,070.661	62.15
2363	Oocystis	parva	.	.	.	.	Vegetative	12.00	21.173	0.10	8,514.207	0.73
2491	Schroederia	judayi	.	.	.	.	Vegetative	31.33	105.866	0.52	2,527.655	0.22
8491	Scourfieldia	cordiformis	.	.	.	.	Vegetative	7.00	63.519	0.31	7,283.636	0.62
Summary for Division ~ Chlorophyta (6 detail records)							Sum Total	Chlorophyta	1,460.944	7.14	878,780.925	75.12

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.50	1,651.501	8.07	36,491.905	3.12
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		1,651.501	8.07	36,491.905	3.12

Division: Cryptophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume		
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	32.00	0.639	0.00	3,083.847	0.26
Summary for Division ~ Cryptophyta (1 detail record)									Sum Total	Cryptophyta	0.639	0.00	3,083.847	0.26

Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4051	<i>Aphanocapsa</i>	<i>elachista</i>	.	.	.	.	Vegetative	32.86	2,223.175	10.86	115,615.323	9.88
4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	12.00	42.346	0.21	354.759	0.03
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.67	14,927.032	72.90	20,842.614	1.78
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	42.346	0.21	74.830	0.01
Summary for Division ~ Cyanophyta (4 detail records)							Sum Total	Cyanophyta	17,234.899	84.18	136,887.527	11.70

Division: Euglenophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
5020	Euglena	spp	.	.	.	.	Vegetative	18.00	105.866	0.52	101,815.716	8.70
Summary for Division ~ Euglenophyta (1 detail record)							Sum Total	Euglenophyta	105.866	0.52	101,815.716	8.70

Division: Pyrrhophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume		
6033	Gymnodinium	sp. 2	.	.	.	.	Vegetative	16.00	21.173	0.10	12,771.310	1.09
Summary for Division ~ Pyrrhophyta (1 detail record)									Sum Total Pyrrhophyta		21.173	0.10	12,771.310	1.09

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Total Sample Concentration

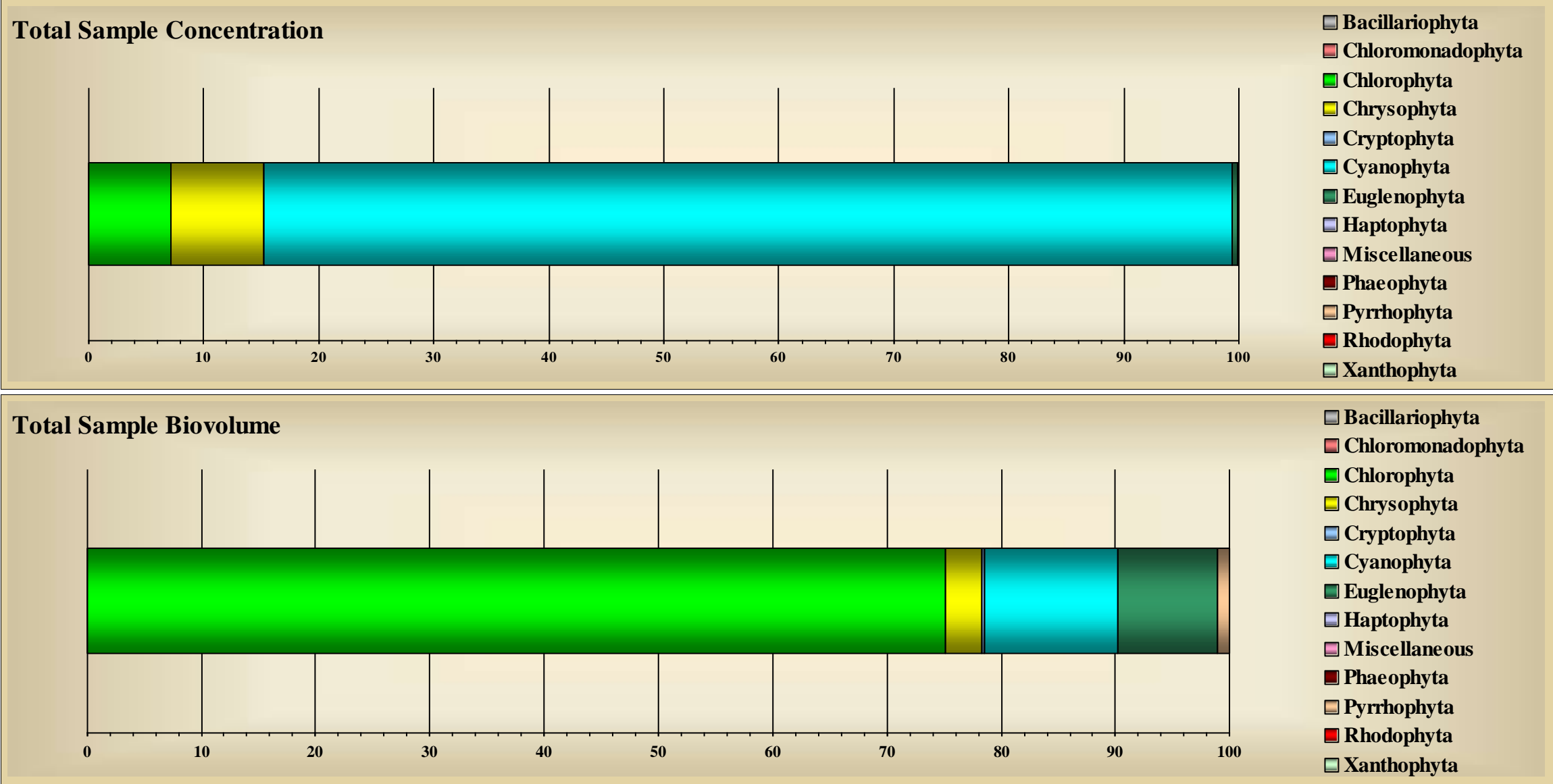
20,475.022

NU/ml

Total Sample Biovolume

1,169,831.230

µm^3 /ml



☑ = Identification is Uncertain
* = Family Level Identification

<u>Tracking Code:</u>	200042-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	2/14/2020	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	6.80	4,636.908	18.35	499,619.387	16.20
<input checked="" type="checkbox"/> 2110	Chlorogonium	spp	.	.	.	.	Vegetative	48.00	1,460.944	5.78	2,322,994.876	75.32
2491	Schroederia	judayi	.	.	.	.	Vegetative	30.00	21.173	0.08	319.282	0.01
Summary for Division ~ Chlorophyta (3 detail records)							Sum Total	Chlorophyta	6,119.024	24.21	2,822,933.545	91.52

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	4.00	4,128.753	16.34	137,520.933	4.46
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total	Chrysophyta	4,128.753	16.34	137,520.933	4.46

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	24.00	0.639	0.00	1,027.949	0.03
Summary for Division ~ Cryptophyta (1 detail record)							Sum Total	Cryptophyta	0.639	0.00	1,027.949	0.03

Division: Cyanophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	26.40	1,746.780	6.91	92,295.854	2.99
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	30.00	21.173	0.08	798.207	0.03
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	17.33	169.385	0.67	2,305.936	0.07
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.33	13,021.453	51.53	15,908.309	0.52
Summary for Division ~ Cyanophyta (4 detail records)									Sum Total	Cyanophyta	14,958.791	59.19	111,308.306	3.61

Division: Euglenophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
☑ 5020	Euglena	spp	.	.	.	.	Vegetative	10.00	63.519	0.25	11,574.001	0.38
Summary for Division ~ Euglenophyta (1 detail record)							Sum Total	Euglenophyta	63.519	0.25	11,574.001	0.38

Total Sample Concentration

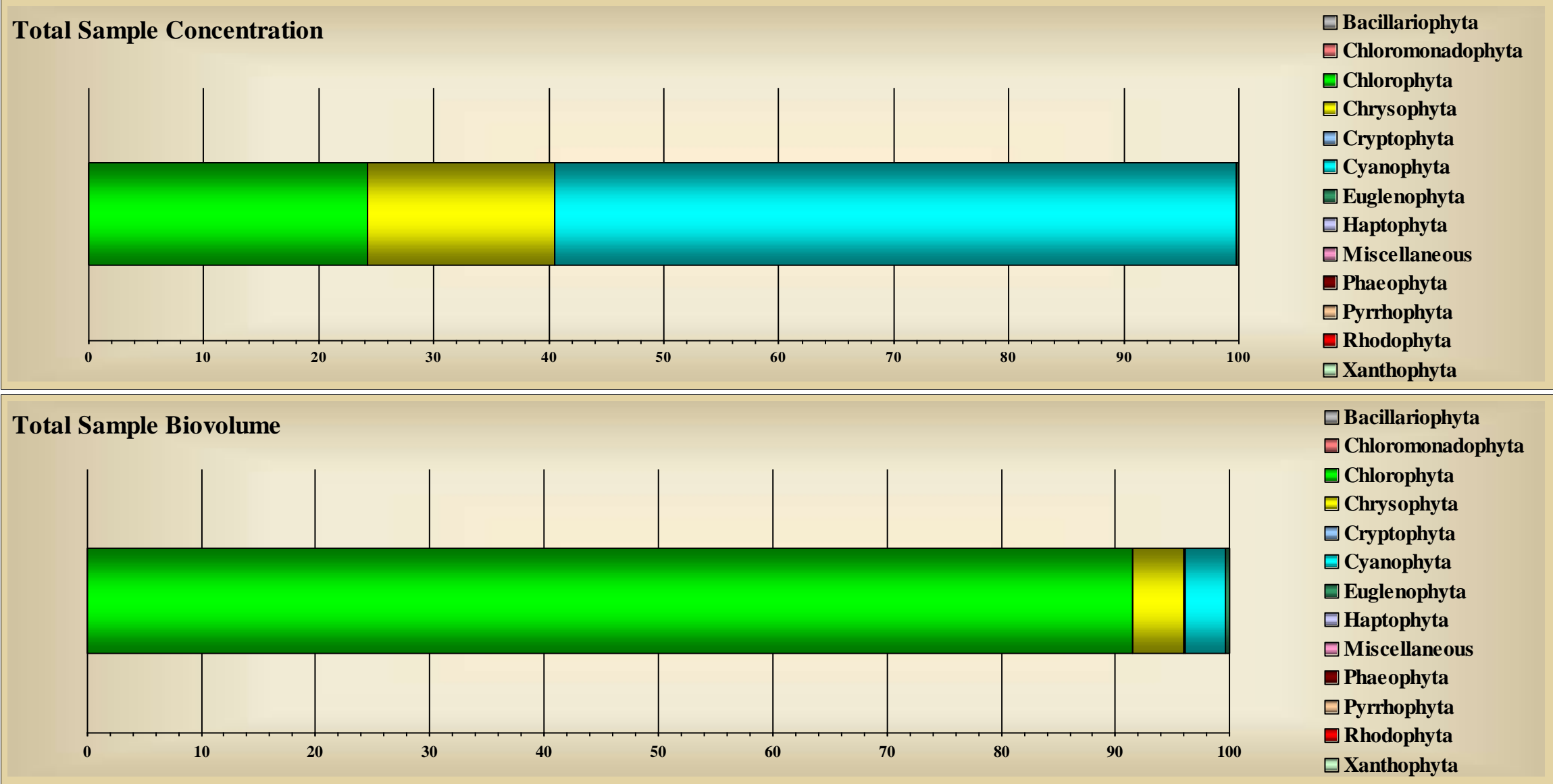
25,270.728

NU/ml

Total Sample Biovolume

3,084,364.733

μm^3 /ml



<u>Tracking Code:</u>	200043-062	<u>Sample ID:</u>	SSB	<u>Replicate:</u>	.
<u>Customer ID:</u>	062	<u>Sample Date:</u>	3/6/2020	<u>Sample Level:</u>	Hypsometric Pool
<u>Job ID:</u>	1	<u>Station:</u>	1	<u>Sample Depth:</u>	0
<u>System Name:</u>	Sparkling Lake	<u>Site:</u>	Pump, HP, 0-bott.	<u>Preservative:</u>	Lugols
<u>Report Notes:</u>	.				

Division: Chlorophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	6.60	1,810.300	12.58	178,267.985	11.19
2110	Chlorogonium	spp	.	.	.	.	Vegetative	49.20	529.327	3.68	1,321,608.843	82.99
2491	Schroederia	judayi	.	.	.	.	Vegetative	26.00	63.519	0.44	1,257.174	0.08
8491	Scourfieldia	cordiformis	.	.	.	.	Vegetative	6.00	84.692	0.59	8,950.562	0.56
Summary for Division ~ Chlorophyta (4 detail records)							Sum Total Chlorophyta		2,487.839	17.29	1,510,084.563	94.82

Division: Chrysophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1180	Mallomonas	spp	.	.	.	.	Vegetative	20.00	21.173	0.15	14,190.344	0.89
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		21.173	0.15	14,190.344	0.89

Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	.	.	.	.	Vegetative	24.00	21.173	0.15	177.380	0.01

4051	<i>Aphanocapsa</i>	<i>elachista</i>	.	.	.	.	Vegetative	33.25	614.020	4.27	38,248.456	2.40
4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	30.00	21.173	0.15	310.415	0.02
4086	<i>Chroococcus</i>	<i>minutus</i>	.	.	.	.	Vegetative	12.00	21.173	0.15	487.792	0.03
1000080	<i>Cyanodictyon</i>	<i>planctonicum</i>	.	.	.	.	Vegetative	25.00	21.173	0.15	36.030	0.00
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	3.00	11,115.875	77.26	17,460.816	1.10

Summary for Division ~ Cyanophyta (6 detail records)

Sum TotalCyanophyta

11,814.58782.1256,720.8893.56

Division: Euglenophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
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5020	<i>Euglena</i>	<i>spp</i>	Vegetative	10.00	63.519	0.44	11,574.001	0.73
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Summary for Division ~ Euglenophyta (1 detail record)

Sum TotalEuglenophyta

63.5190.4411,574.0010.73

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Total Sample Concentration

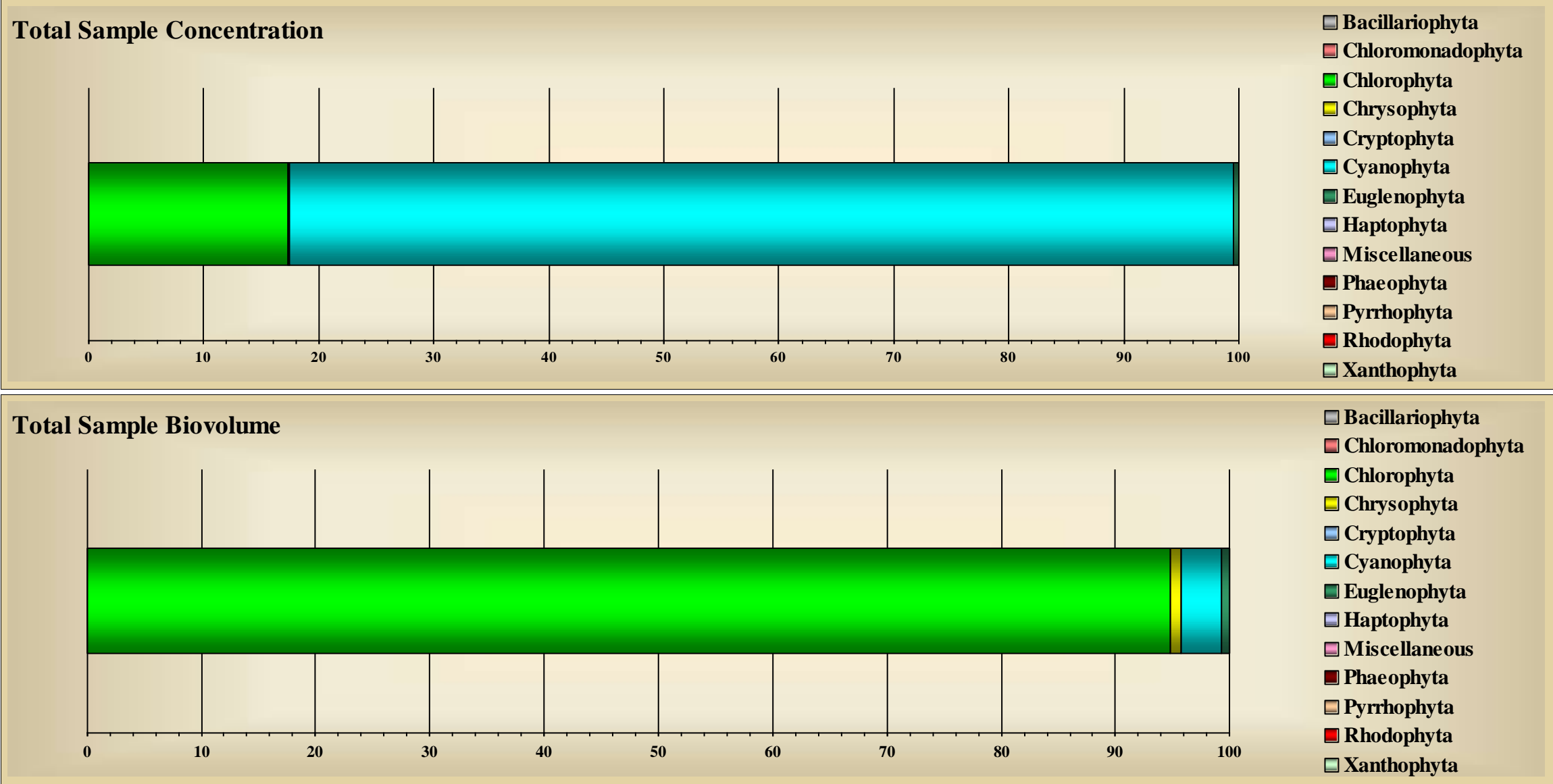
14,387.118

NU/ml

Total Sample Biovolume

1,592,569.796

µm^3 /ml



Tracking Code: 200044-062

Customer ID: 062

Job ID: 1

System Name: Sparkling Lake

Report Notes: .

Sample ID: SSB

Sample Date: 5/5/2020

Station: 1

Site: Pump, HP, 0-bott.

Replicate: .

Sample Level: Hypsometric Pool

Sample Depth: 0

Preservative: Lugols

Division: Bacillariophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
1021	Asterionella	formosa	.	.	.	.	Vegetative	104.00	1.278	0.01	508.871	0.00
1214	Navicula	cryptocephala	.	.	.	.	Vegetative	40.00	0.639	0.00	1,445.553	0.01
Summary for Division ~ Bacillariophyta (2 detail records)							Sum Total	Bacillariophyta		1.917	0.01	1,954.425	0.01

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	3.50	42.346	0.17	1,008.843	0.01
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	9.00	741.058	3.02	217,280.298	1.53
2110	Chlorogonium	spp	.	.	.	.	Vegetative	95.00	1,291.559	5.26	13,609,568.828	95.91
1000538	Monomastix	minuta	.	.	.	.	Vegetative	5.00	42.346	0.17	498.881	0.00
2491	Schroederia	judayi	.	.	.	.	Vegetative	26.67	359.943	1.47	6,784.774	0.05
8491	Scourfieldia	cordiformis	.	.	.	.	Vegetative	6.00	21.173	0.09	1,662.931	0.01
Summary for Division ~ Chlorophyta (6 detail records)												
Sum Total Chlorophyta									2,498.425	10.18	13,836,804.554	97.51

☒ = Identification is Uncertain

*** = Family Level Identification**

200044-062

Sample Date: 5/5/2020

Wednesday, November 11, 2020

Phytoplankton - Grab

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Division: Chrysophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1653	*	spp	.	.	.	.	Cyst	7.33	63.519	0.26	13,029.399	0.09
1652	*	spp	.	.	.	.	Vegetative	3.80	3,705.292	15.10	96,539.519	0.68
Summary for Division ~ Chrysophyta (2 detail records)							Sum Total	Chrysophyta	3,768.811	15.36	109,568.918	0.77

Division: Cryptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	22.00	42.346	0.17	45,143.032	0.32
3043	Rhodomonas	minuta	.	nannoplantica	.	.	Vegetative	8.00	21.173	0.09	709.517	0.01
Summary for Division ~ Cryptophyta (2 detail records)							Sum Total	Cryptophyta	63.519	0.26	45,852.549	0.32

Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	32.00	1,937.338	7.90	119,139.903	0.84
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	25.00	42.346	0.17	88.690	0.00
☑ 1000080	Cyanodictyon	planctonicum	.	.	.	.	Vegetative	10.00	42.346	0.17	399.104	0.00
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	10.00	444.635	1.81	3,492.163	0.02
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.50	15,562.225	63.44	20,370.952	0.14
Summary for Division ~ Cyanophyta (5 detail records)							Sum Total	Cyanophyta	18,028.890	73.49	143,490.813	1.01

Division: Euglenophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
5020	Euglena	spp	.	.	.	.	Vegetative	10.00	105.866	0.43	22,449.568	0.16
Summary for Division ~ Euglenophyta (1 detail record)							Sum Total	Euglenophyta	105.866	0.43	22,449.568	0.16

Division: Haptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	21.173	0.09	640.340	0.00
Summary for Division ~ Haptophyta (1 detail record)							Sum Total	Haptophyta	21.173	0.09	640.340	0.00

Division: Miscellaneous												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
<input checked="" type="checkbox"/> 7130	*	spp	.	.	.	.	Vegetative	12.00	42.346	0.17	17,028.415	0.12
Summary for Division ~ Miscellaneous (1 detail record)							Sum Total	Miscellaneous	42.346	0.17	17,028.415	0.12

Division: Pyrrhophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1000997	Durinskia	spp	.	.	.	.	Vegetative	48.00	0.639	0.00	12,849.362	0.09
Summary for Division ~ Pyrrhophyta (1 detail record)							Sum Total	Pyrrhophyta	0.639	0.00	12,849.362	0.09

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Total Sample Concentration

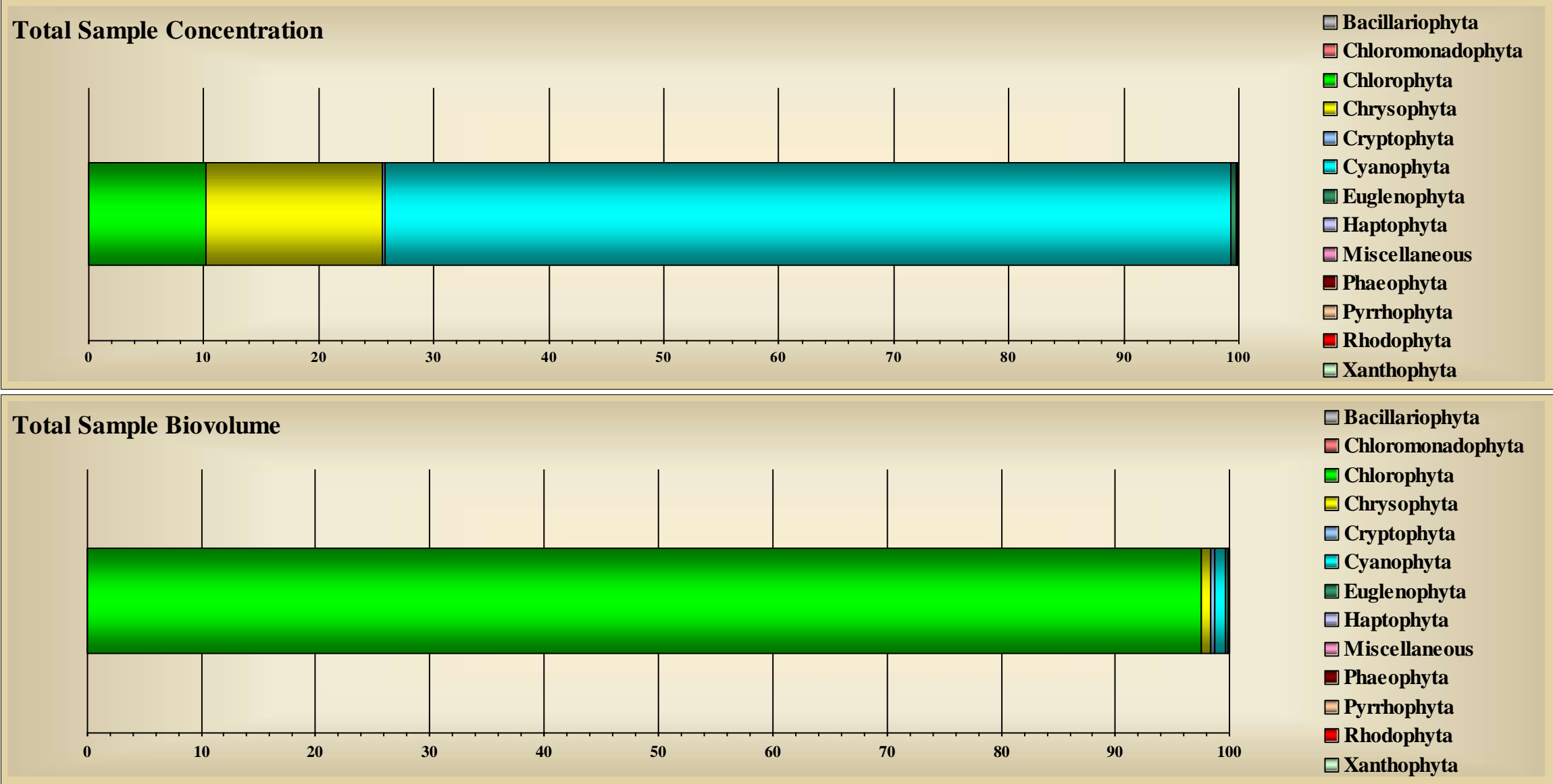
24,531.587

NU/ml

Total Sample Biovolume

14,190,638.942

µm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

Species List

Division: Bacillariophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1021	Asterionella	formosa	.	.	.		Vegetative	Hass.
1214	Navicula	cryptocephala	.	.	.		Vegetative	Ktz.
1332	Tabellaria	flocculosa	.	.	.		Vegetative	(Roth) Ktz.

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
2683	*Chlorococcaceae	spp	.	.	.		Vegetative	N/A
2021	Actinastrum	hantzschii	.	.	.		Vegetative	Lagerheim
2080	Chlamydomonas	spp	.	.	.		Vegetative	Ehrenberg
2110	Chlorogonium	spp	.	.	.		Vegetative	Dang.
1000538	Monomastix	minuta	.	.	.		Vegetative	.
2211	Mucidosphaerium	pulchellum	.	.	.		Vegetative	C.Bock, Proschold & Krienitz, 2011
2363	Oocystis	parva	.	.	.		Vegetative	West & West
2491	Schroederia	judayi	.	.	.		Vegetative	G. M. Smith
8491	Scourfieldia	cordiformis	.	.	.		Vegetative	Takeda
2590	Ulothrix	spp	.	.	.		Vegetative	Kuetzing

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1653	*,	spp	.	.	.		Cyst	N/A
1652	*,	spp	.	.	.		Vegetative	Cienkowski .
1180	Mallomonas	spp	.	.	.		Vegetative	Perty

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
3015	Cryptomonas	erosa	.	.	.		Vegetative	Ehrenberg .
3043	Rhodomonas	minuta	.	nannoplantica	.		Vegetative	Skuja

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
4054	Aphanocapsa	delicatissima	.	.	.		Vegetative	West & West
4051	Aphanocapsa	elachista	.	.	.		Vegetative	West & West
4062	Aphanothece	nidulans	.	.	.		Vegetative	P. Richter
4086	Chroococcus	minutus	.	.	.		Vegetative	(Kuetzing) Naegeli
1000080	Cyanodictyon	planctonicum	.	.	.		Vegetative	.
4460	Pseudanabaena	spp	.	.	.		Vegetative	Lauterborn
4172	Pseudanabaena	limnetica	.	.	.		Vegetative	Lemmermann
4321	Synechococcus	elongatus	.	.	.		Vegetative	Nageli
4285	Synechocystis	spp	.	.	.		Vegetative	N/A

Division: Euglenophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
5020	Euglena	spp	.	.	.		Vegetative	Ehrenberg

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1731	Chrysochromulina	parva	.	.	.		Vegetative	Lackey

Division: Miscellaneous

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
7130	*,	spp	.	.	.		Vegetative	N/A
7140	*,	spp	.	.	.		Vegetative	N/A

Division: Pyrrhophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1000997	Durinskia	spp	.	.	.		Vegetative	Woloszynska
6033	Gymnodinium	sp. 2	.	.	.		Vegetative	Stein