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Algae Analysis with Biovolume Estimates Report and Data Set

Customer ID: 398

Tracking Code: 210001-398 Sample ID: 20210819B Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/19/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Barber Pond Site: near shore Preservative: Glutaraldehyde

Report Notes:

Division:	Chlor	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
☑ 2488	Desmodesmus	denticulatus					Vegetative	12.00	10.587	0.03	997.759	0.06
2861	Monomastix	astigmata					Vegetative	4.00	63.783	0.15	384.732	0.02
2031	Monoraphidium	arcuatum				monoraphidiod	Vegetative	40.00	10.587	0.03	397.697	0.02
2530	Staurastrum	spp					Vegetative	70.00	10.587	0.03	25,329.765	1.48
Summary for 1	Division ~ Chlorophy	ta (4 detail records)				Sum To	tal Chloropl	hyta	95.542	0.23	27,109.953	1.59

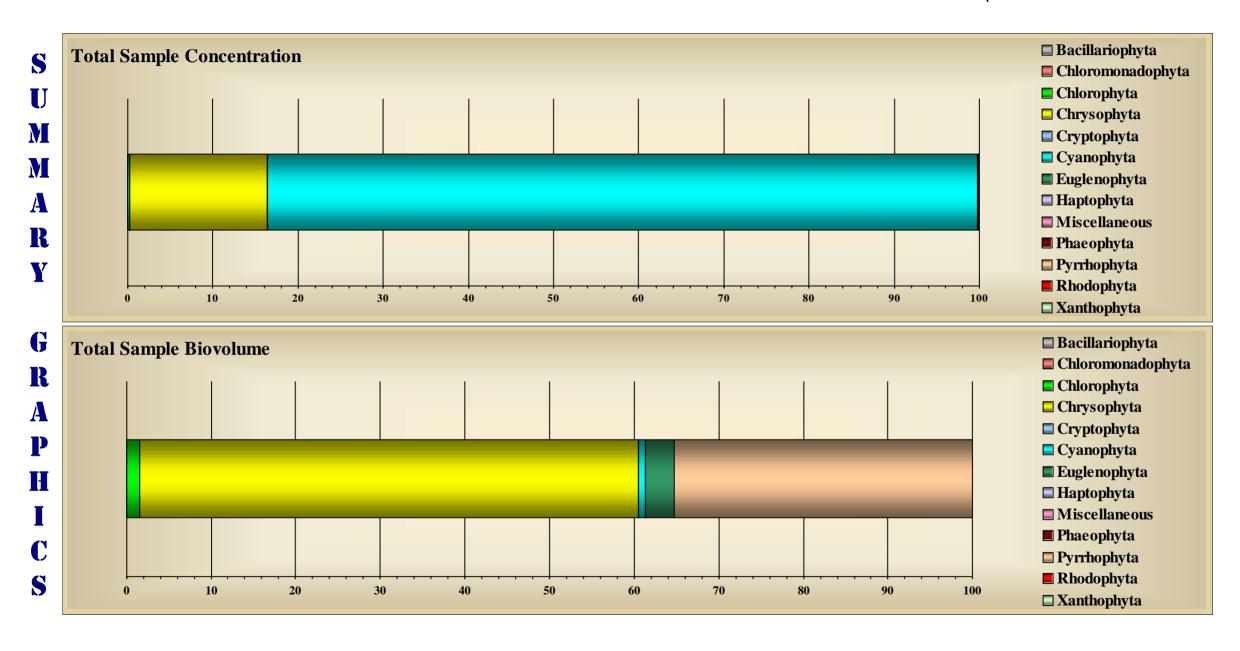
Division:	Chrys	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp					Vegetative	1.71	4,145.885	9.98	18,277.135	1.07
1653	*	spp					Cyst	4.80	63.783	0.15	3,571.310	0.21
1482	Chrysosphaerella	longispina					Vegetative	40.00	10.587	0.03	10,647.192	0.62
1123	Dinobryon	spp					Monad	9.76	1,403.223	3.38	118,947.959	6.97
9736	Dinobryon	sociale		americana			Vegetative	88.48	765.394	1.84	802,206.284	46.99
9733	Dinobryon	sociale	•	americana			Vegetative	26.40	255.131	0.61	38,866.181	2.28
1180	Mallomonas	spp					Vegetative	27.20	63.783	0.15	13,132.085	0.77

Sample Date: 8/19/2021

	Division ~ Chrysophy						tal Chrysopl		6,707.786	16.15	1,005,648.147	58.90
Division:	Cyano	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp		•		<1 um spherical	Vegetative	0.80	26,150.968	62.96	7,011.075	0.41
130785	*Nostocaceae	spp				-	Vegetative	360.00	0.639	0.00	1,055.447	0.06
10651	Cyanogranis	ferruginea					Vegetative	12.00	63.783	0.15	134.072	0.01
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	8,291.770	19.96	3,334.121	0.20
4092	Woronichinia	naegeliana	•			•	Vegetative	5.00	127.566	0.31	3,005.690	0.18
	Division ~ Cyanophy						tal Cyanoph		34,634.726	83.39	14,540.404	0.85
Division:	Eugle	nophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolum
5047	Trachelomonas	volvocina					Vegetative	16.00	63.783	0.15	57,709.363	3.38
	Division ~ Euglenoph						tal Euglenop		63.783	0.15	57,709.363	3.38
Division:	Pyrrh	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolum
6011	Ceratium	hirundinella					Vegetative	220.00	31.760	0.08	602,296.966	35.28
		vta (1 detail record)					tal Pyrrhopl					35.28

41,533.597 NU/ml 1,707,304.833 μm^3 /ml

Total Sample Biovolume



Tracking Code: 210011-398 Sample ID: 20211006B Replicate:

Customer ID: 398 Sample Date: 10/6/2021 Sample Level: Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Barber Pond Site: near shore Preservative: Glutaraldehyde

Report Notes:

Division:	Bacilla	riophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
130832	*Stephanodiscaceae	spp					Vegetative	12.00	2.823	0.02	1,915.696	0.82
1013	Achnanthidium	minutissima					Vegetative	9.60	17.009	0.09	369.340	0.16
1021	Asterionella	formosa					Vegetative	282.67	0.852	0.00	1,236.113	0.53
1109	Diatoma	tenuis					Vegetative	102.00	5.113	0.03	7,757.532	3.32
1720	Gyrosigma	spp					Vegetative	144.00	0.170	0.00	1,570.590	0.67
1332	Tabellaria	flocculosa					Vegetative	244.00	0.341	0.00	6,135.118	2.62
1315	Ulnaria	ulna					Vegetative	232.00	0.170	0.00	5,693.390	2.44
Summary for 1	Division ~ Bacillarioph	hyta (7 detail records	:)			Sum 7	Fotal Bacillari	ophyta	26.478	0.15	24,677.780	10.56

Division:	Chlore	ophyta										
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	2.50	68.035	0.37	691.372	0.30
2682	Colonial	spp		-		-	Vegetative	20.00	2.823	0.02	957.848	0.41
2195	Crucigenia	quadrata				-	Vegetative	11.20	17.009	0.09	1,175.646	0.50
2324	Kirchneriella	obesa					Vegetative	24.00	68.035	0.37	19,088.904	8.17
2840	Lobomonas	spp	·				Vegetative	4.64	136.070	0.75	3,546.027	1.52

☑ = **Identification** is **Uncertain**

210011-398

Sample Date: 10/6/2021

* = Family Level Identification

Friday, July 1, 2022

Phytoplankton - Grab

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1000538	Monomastix	minuta		-	•	•	Vegetative	4.80	17.009	0.09	123.113	0.05
2211	Mucidosphaerium	pulchellum					Vegetative	20.00	34.018	0.19	1,985.865	0.85
2462	Quadrigula	lacustris					Vegetative	40.00	2.823	0.02	302.727	0.13
2501	Selenastrum	minutum					Vegetative	9.60	17.009	0.09	492.339	0.21
2641	Sphaerocystis	schroeteri					Vegetative	80.00	0.170	0.00	1,461.972	0.63
	Division ~ Chlorophyt						Fotal Chloroph		363.001	2.00	29,825.812	12.76
Division:	Chryso	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolumo
1652	*	spp					Vegetative	2.53	425.219	2.34	2,915.599	1.25
1402	Bitrichia	phaseolus					Vegetative	49.60	17.009	0.09	583.649	0.25
1481	Chrysosphaerella	longispina					Vegetative	48.00	0.170	0.00	44.778	0.02
1482	Chrysosphaerella	longispina					Vegetative	84.00	1.193	0.01	3,550.758	1.52
7111	Gonyostomum	semen					Vegetative	48.00	0.170	0.00	2,192.958	0.94
1180	Mallomonas	spp					Vegetative	24.00	68.035	0.37	68,163.734	29.16
1183	Mallomonas	akrokomas					Vegetative	20.00	17.009	0.09	1,424.923	0.61
1320	Synura	spp					Vegetative	60.00	2.823	0.02	9,113.039	3.90
1323	Synura	spp					Vegetative	8.05	14.115	0.08	2,903.699	1.24
	Division ~ Chrysophyt						Total Chrysopl		545.744	3.00	90,893.136	38.88
Division:	Crypto	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolumo
3015	Cryptomonas	erosa					Vegetative	13.14	119.061	0.65	40,390.278	17.28
3041	Rhodomonas	minuta					Vegetative	12.00	17.009	0.09	1,603.038	0.69
	Division ~ Cryptophyto						Fotal Cryptopl		136.070	0.75	41,993.317	17.96

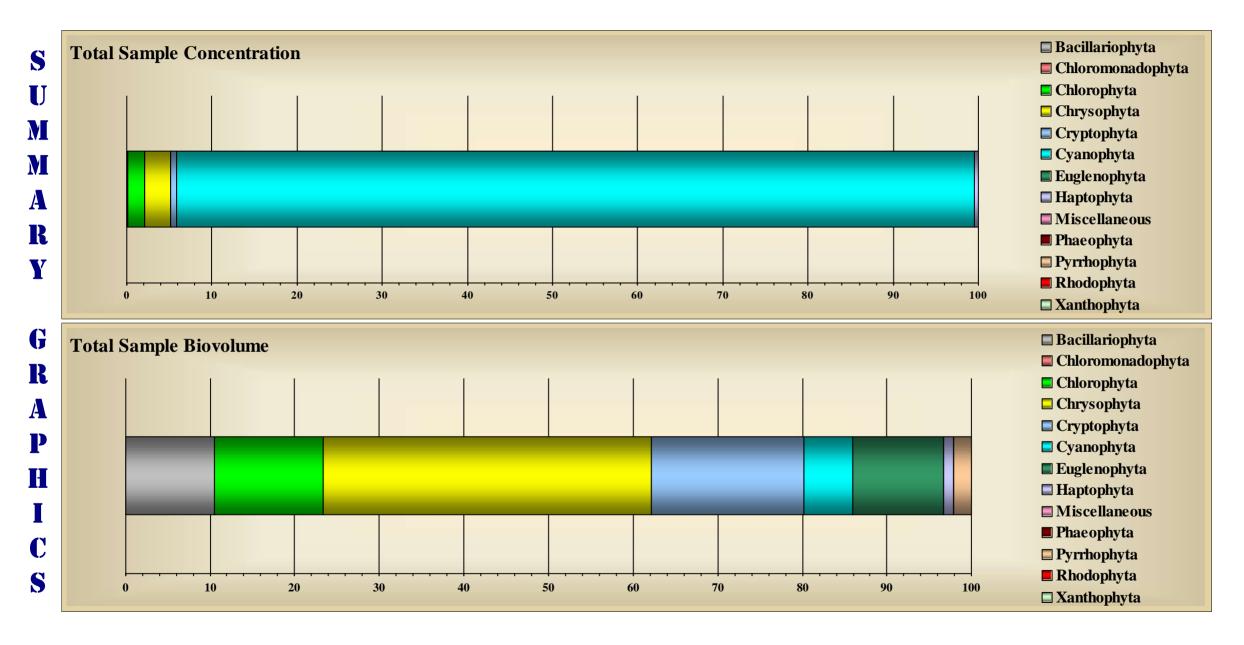
Sample Date: 10/6/2021

Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1000345	*Chroococcaceae	spp		-		> 1 um ovoid	Vegetative	2.40	136.070	0.75	437.737	0.19
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	12,246.307	67.31	3,283.235	1.40
4054	Aphanocapsa	delicatissima		-			Vegetative	4.00	17.009	0.09	35.623	0.02
4051	Aphanocapsa	elachista					Vegetative	24.00	85.044	0.47	3,764.413	1.61
4062	Aphanothece	nidulans					Vegetative	16.00	17.009	0.09	284.985	0.12
10651	Cyanogranis	ferruginea					Vegetative	7.00	102.053	0.56	257.183	0.11
Z 4331	Dolichospermum	macrosporum	•				Vegetative	48.00	0.170	0.00	154.192	0.07
4242	Gomphosphaeria	lacustris		-		-	Vegetative	45.00	5.646	0.03	611.958	0.26
107710	Planktothrix	agardhii	•		•	-	Vegetative	70.00	2.823	0.02	1,396.862	0.60
4321	Synechococcus	elongatus				-	Vegetative	2.67	357.184	1.96	498.736	0.21
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	3,826.971	21.03	1,538.825	0.66
4285	Synechocystis	spp		•		>1 um spherical	Vegetative	1.50	204.105	1.12	357.796	0.15
4092	Woronichinia	naegeliana					Vegetative	5.00	34.018	0.19	801.517	0.34
	Division ~ Cyanophyt						tal Cyanoph		17,034.409	93.63	13,423.063	5.74
Division:	Euglei	nophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5040	Trachelomonas	spp					Vegetative	36.00	2.823	0.02	23,839.778	10.20
5047	Trachelomonas	volvocina	•			-	Vegetative	24.00	0.341	0.00	1,427.707	0.61
	Division ~ Euglenoph						tal Euglenop		3.164	0.02	25,267.485	10.81

Division:	Haptor	phyta										
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	85.044	0.47	2,736.990	1.17
Summary for I	Division ~ Haptophyta	(1 detail record)				Sum 7	Total Haptophy	yta	85.044	0.47	2,736.990	1.17
Division:	Pyrrho	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
6011	Ceratium	hirundinella		•	•	•	Vegetative	240.00	0.170	0.00	4,965.564	2.12
Summary for 1	Division ~ Pyrrhophyte	a (1 detail record)				C 7	Total Pyrrhoph	4	0.170	0.00	4,965.564	2.12

NU/ml

 $\mu m^3 / ml$



★ = Family Level Identification

Tracking Code: 210002-398 Sample ID: 20210820G Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/20/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Georgiaville Pond Site: near shore Preservative: Glutaraldehyde

Report Notes: .

Division:	Bac	illariophyta										
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	76.00	25.408	0.04	13,787.920	3.00
1071	Cyclotella	sp. 1	·				Vegetative	6.50	16.939	0.02	2,118.575	0.46
1332	Tabellaria	flocculosa					Vegetative	170.00	16.939	0.02	45,259.607	9.83
	Division ~ Bacillar	riophyta (3 detail record	ds)			Sum 7	Fotal Bacillari	ophyta	59.285	0.08	61,166.102	13.29

Division:	Chloro	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2633	Arthrodesmus	incus					Vegetative	60.00	8.469	0.01	7,095.172	1.54
2041	Botryococcus	braunii					Vegetative	26.00	16.939	0.02	13,320.477	2.89
2080	Chlamydomonas	spp					Vegetative	8.00	8.469	0.01	886.897	0.19
2861	Monomastix	astigmata					Vegetative	4.00	51.026	0.07	213.739	0.05
1000538	Monomastix	minuta					Vegetative	4.00	153.079	0.21	641.217	0.14
2211	Mucidosphaerium	pulchellum					Vegetative	44.00	8.469	0.01	3,073.629	0.67
2483	Scenedesmus	bijuga					Vegetative	10.00	8.469	0.01	133.035	0.03
2491	Schroederia	judayi					Vegetative	50.00	8.469	0.01	340.568	0.07
2641	Sphaerocystis	schroeteri					Vegetative	12.00	8.469	0.01	957.848	0.21

Sample Date: 8/20/2021

2530	Staurastrum	spp					Vegetative	50.00	8.469	0.01	27,773.342	6.03
	Division ~ Chlorophyi						tal Chloroph		280.328	0.39	54,435.922	11.83
Division:	Chrys	ophyta										
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	1.50	1,377.710	1.92	2,712.848	0.59
1402	Bitrichia	phaseolus				•	Vegetative	40.00	8.469	0.01	354.759	0.08
1481	Chrysosphaerella	longispina					Vegetative	8.00	51.026	0.07	8,754.722	1.90
1180	Mallomonas	spp					Vegetative	12.80	102.053	0.14	16,086.810	3.49
1323	Synura	spp					Vegetative	10.00	50.815	0.07	11,315.381	2.46
1320	Synura	spp					Vegetative	100.00	0.511	0.00	7,327.220	1.59
	Division ~ Chrysophy						tal Chrysopl		1,590.584	2.21	46,551.739	10.11
Division:	Crypto	ophyta										
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	10.50	33.877	0.05	5,214.950	1.13
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	8.00	153.079	0.21	5,129.718	1.11
Summary for I	Division ~ Cryptophyt						tal Cryptopl	ıyta	186.956	0.26	10,344.668	2.25
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3/ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	46,689.046	65.00	12,517.333	2.72
4062	Aphanothece	nidulans					Vegetative	16.00	51.026	0.07	170.897	0.04
10651	Cyanogranis	ferruginea					Vegetative	8.53	204.105	0.28	683.956	0.15
1 107474	Dolichospermum	lemmermannii					Vegetative	24.00	8.469	0.01	3,831.393	0.83
Identifiee	tion is Uncertain				21000	22.200 Sam	ple Date: 8/20/2	2021				Friday, July 1, 20

□ = **Identification** is **Uncertain** 210002-398 **Sample Date:** 8/20/2021 * = Family Level Identification Phytoplankton - Grab

4331	Dolichospermum	macrosporum		-		Vegetative	320.00	2.556	0.00	15,419.234	3.35
4130	Gloeocapsa	spp			-	Vegetative	192.00	0.511	0.00	25,698.723	5.58
4264	Microcystis	aeruginosa	-		-	Vegetative	4.23	357.184	0.50	14,458.985	3.14
4261	Microcystis	aeruginosa				Vegetative	160.00	8.469	0.01	83,146.548	18.06
107710	Planktothrix	agardhii				Vegetative	318.40	7.158	0.01	27,564.405	5.99
4321	Synechococcus	elongatus				Vegetative	2.80	357.184	0.50	523.667	0.11
4323	Synechococcus	sp. 1			< 1um ovoid	Vegetative	1.20	21,431.037	29.84	8,617.420	1.87
4285	Synechocystis	spp			>1 um spherical	Vegetative	1.50	102.053	0.14	178.898	0.04
4091	Woronichinia	naegeliana				Vegetative	75.00	16.939	0.02	79,820.686	17.34
4092	Woronichinia	naegeliana				Vegetative	5.00	16.939	0.02	399.103	0.09
Summary for	Division ~ Cyanophyte	a (14 detail records)			Sum Tot	al Cyanoph	yta	69,252.676	96.41	273,031.249	59.31
Division:	Hapto	nhyta									
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Division:	Haptophyta
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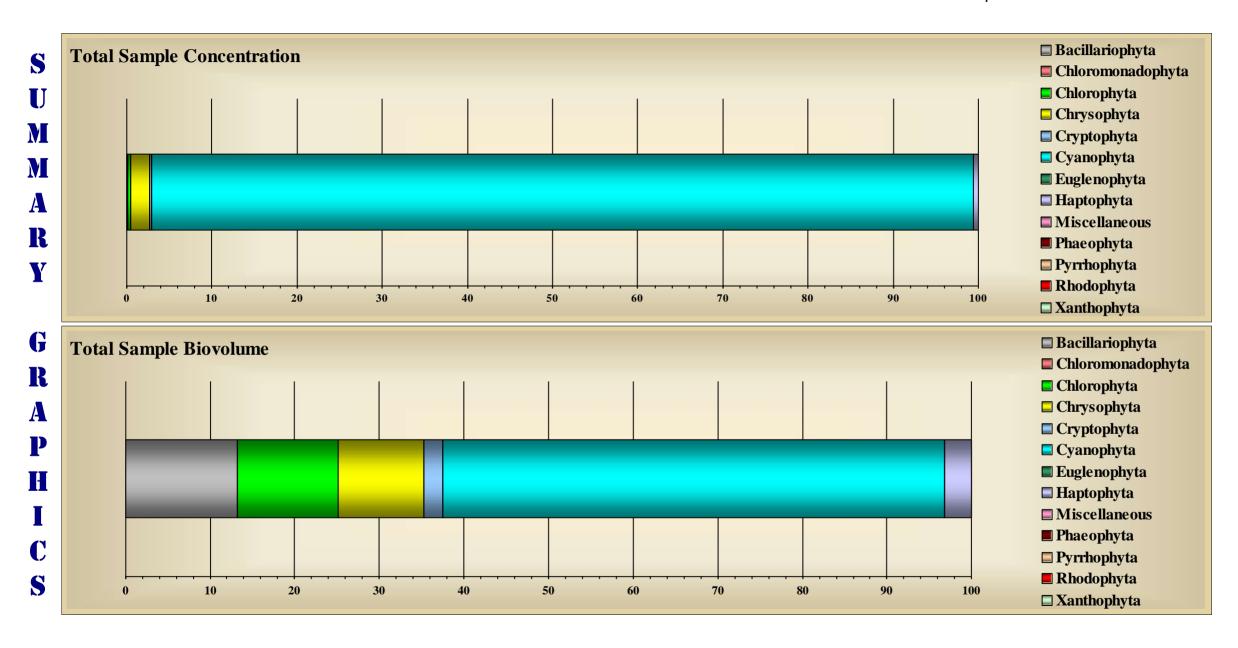
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva			•		Vegetative	4.00	459.237	0.64	14,779.747	3.21
	Division ~ Haptophyta					Sum To	tal Haptoph	yta	459.237	0.64	14,779.747	3.21

☑ = **Identification** is **Uncertain** Friday, July 1, 2022 210002-398 Sample Date: 8/20/2021 Page 12 of 88 * = Family Level Identification Phytoplankton - Grab





460,309.427



★ = Family Level Identification

Tracking Code: 210012-398 Sample ID: 20211006G Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 10/6/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Georgiaville Pond Site: near shore Preservative: Glutaraldehyde

Report Notes:

Division:	Baci	llariophyta										
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	120.00	0.170	0.00	305.393	0.04
1152	Fragilaria	crotonensis		·			Vegetative	74.00	17.009	0.04	415,186.802	59.07
Summary for 1	Division ~ Bacillar	iophyta (2 detail record.	s)			Sum 7	Fotal Bacillari	ophyta	17.179	0.04	415,492.194	59.11

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	34.018	0.08	3,716.196	0.53
2162	Closterium	moniliferum		•			Vegetative	96.00	17.009	0.04	3,553.977	0.51
2340	Mougeotia	spp					Vegetative	102.50	2.823	0.01	2,045.405	0.29
2211	Mucidosphaerium	pulchellum					Vegetative	120.00	0.170	0.00	351.019	0.05
2363	Oocystis	parva					Vegetative	22.00	5.646	0.01	2,660.690	0.38
8308	Scenedesmus	serratus					Vegetative	12.00	2.823	0.01	94.602	0.01
2491	Schroederia	judayi	•	-	•		Vegetative	36.80	17.009	0.04	218.869	0.03
2641	Sphaerocystis	schroeteri					Vegetative	35.00	5.646	0.01	4,505.434	0.64
Summary for I	Division ~ Chlorophyt	a (8 detail records)				Sum '	Total Chloropl	ıyta	85.144	0.19	17,146.192	2.44

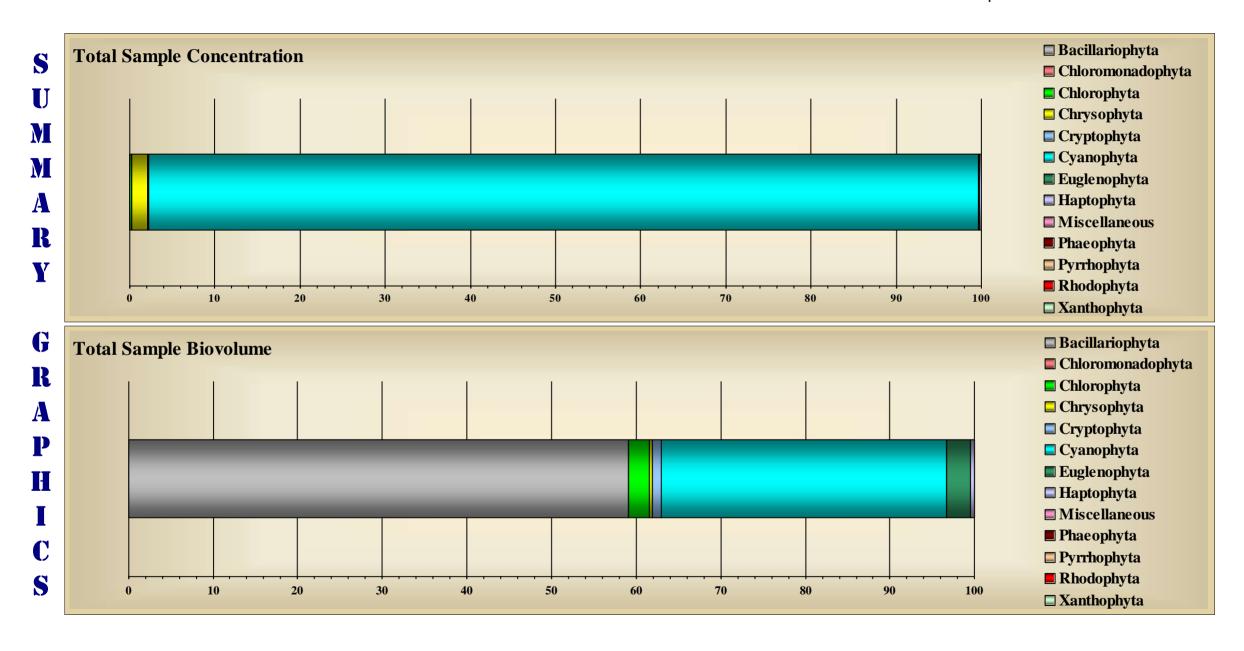
Sample Date: 10/6/2021

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	2.00	816.421	1.84	2,624.220	0.37
	Division ~ Chrysophy						tal Chrysopl	_	816.421	1.84	2,624.220	0.37
Division:	Crypt	ophyta										
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	14.40	34.018	0.08	5,872.962	0.84
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	6.40	34.018	0.08	1,139.937	0.16
Summary for 1 Division:	Division ~ Cryptophy Cyan o	,				Sum To	tal Cryptopl	hyta	68.035	0.15	7,012.899	1.00
	O j uni	эрпуса										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3/ml	Relative Total Biovolume
Taxa ID 4282	·		Subspecies	Variety	Form	Morph <1 um spherical	Structure Vegetative				Biovolume	Total
	Genus	Species	Subspecies	Variety	Form .			μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolume
4282	Genus *Chroococcaceae	Species spp	Subspecies	Variety	Form		Vegetative	μm 0.80	NU /ml 22,961.826	Count 51.84	Biovolume μm^3 /ml 6,156.066	Total Biovolume
4282 4051 10651	*Chroococcaceae Aphanocapsa	Species spp elachista	Subspecies	Variety	Form		Vegetative Vegetative	μm 0.80 28.00	NU /ml 22,961.826 34.018	51.84 0.08	Biovolume μm^3 /ml 6,156.066 503.718	Total Biovolume 0.88 0.07
4282 4051 10651 2 107474	*Chroococcaceae Aphanocapsa Cyanogranis	Species spp elachista ferruginea	Subspecies	Variety	Form		Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00	NU/ml 22,961.826 34.018 51.026	51.84 0.08 0.12	Biovolume μm^3 /ml 6,156.066 503.718 81.259	0.88 0.07 0.01
4282 4051 10651 2 107474	*Chroococcaceae Aphanocapsa Cyanogranis Dolichospermum	Species spp elachista ferruginea lemmermannii	Subspecies	Variety	Form		Vegetative Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00 40.00	NU/ml 22,961.826 34.018 51.026 0.511	51.84 0.08 0.12 0.00	Biovolume μm^3 /ml 6,156.066 503.718 81.259 359.782	0.88 0.07 0.01 0.05
4282 4051 10651 ☑ 107474 ☑ 4018	*Chroococcaceae Aphanocapsa Cyanogranis Dolichospermum Dolichospermum	spp elachista ferruginea lemmermannii planctonicum	· · · · ·		·		Vegetative Vegetative Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00 40.00 310.00	NU/ml 22,961.826 34.018 51.026 0.511 2.823	51.84 0.08 0.12 0.00 0.01	Biovolume μm^3 /ml 6,156.066 503.718 81.259 359.782 27,878.705	Total Biovolume 0.88 0.07 0.01 0.05 3.97
4282 4051 10651 ☑ 107474 ☑ 4018 4264	*Chroococcaceae Aphanocapsa Cyanogranis Dolichospermum Dolichospermum Microcystis	Species spp elachista ferruginea lemmermannii planctonicum aeruginosa	· · · · · · · · ·		·		Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00 40.00 310.00 4.40	NU/ml 22,961.826 34.018 51.026 0.511 2.823 850.438	51.84 0.08 0.12 0.00 0.01 1.92	Biovolume µm^3 /ml 6,156.066 503.718 81.259 359.782 27,878.705 38,871.905	Total Biovolume 0.88 0.07 0.01 0.05 3.97 5.53
4282 4051 10651 ☑ 107474 ☑ 4018 4264 4261	*Chroococcaceae Aphanocapsa Cyanogranis Dolichospermum Microcystis Microcystis	spp elachista ferruginea lemmermannii planctonicum aeruginosa aeruginosa	· · · · · · · · ·		·		Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00 40.00 310.00 4.40 60.67	NU/ml 22,961.826 34.018 51.026 0.511 2.823 850.438 14.115	51.84 0.08 0.12 0.00 0.01 1.92 0.03	Biovolume μm^3 /ml 6,156.066 503.718 81.259 359.782 27,878.705 38,871.905 132,063.818	Total Biovolume 0.88 0.07 0.01 0.05 3.97 5.53 18.79
4282 4051 10651 ☑ 107474 ☑ 4018 4264 4261 4321	*Chroococcaceae Aphanocapsa Cyanogranis Dolichospermum Dolichospermum Microcystis Microcystis Synechococcus	spp elachista ferruginea lemmermannii planctonicum aeruginosa aeruginosa elongatus			·	<1 um spherical	Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative	μm 0.80 28.00 10.00 40.00 310.00 4.40 60.67 3.20	NU/ml 22,961.826 34.018 51.026 0.511 2.823 850.438 14.115 51.026	Count 51.84 0.08 0.12 0.00 0.01 1.92 0.03 0.12	Biovolume μm^3 /ml 6,156.066 503.718 81.259 359.782 27,878.705 38,871.905 132,063.818 85.495	Total Biovolume 0.88 0.07 0.01 0.05 3.97 5.53 18.79 0.01

Sample Date: 10/6/2021

4091	Woronichinia	naegeliana	•				Vegetative	209.60	2.556	0.01	16,984.715	2.42
Summary for I	Division ~ Cyanophyt	a (12 detail records)				Sum 7	Total Cyanoph	yta	43,154.221	97.43	237,048.771	33.72
Division:	Eugler	nophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5047	Trachelomonas	volvocina					Vegetative	17.07	51.026	0.12	20,318.256	2.89
Summary for I	Division ~ Euglenoph	yta (1 detail record)				Sum 7	Total Euglenop	phyta	51.026	0.12	20,318.256	2.89
Division:	Hapto	phyta										
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	102.053	0.23	3,284.388	0.47

44,294.079 NU/ml 702,926.921 μm^3 /ml



Tracking Code: 210003-398 Sample ID: 20210820I Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/20/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Indian Lake Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	ision: 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
☑ 1013	Achnanthidium	minutissima					Vegetative	10.00	6.050	0.02	213.805	0.05
9141	Anomoeoneis	vitrea			costata		Vegetative	12.80	36.447	0.09	1,876.014	0.44
1210	Navicula	spp				•	Vegetative	24.00	36.447	0.09	7,914.427	1.87
		phyta (3 detail records				Sum 7	Fotal Bacillari		78.944	0.20	10,004.247	2.37

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	1.60	72.895	0.18	156.337	0.04
2633	Arthrodesmus	incus				-	Vegetative	44.00	6.050	0.02	2,432.631	0.58
2080	Chlamydomonas	spp				-	Vegetative	4.40	72.895	0.18	1,377.695	0.33
2195	Crucigenia	quadrata				-	Vegetative	14.67	12.099	0.03	2,595.942	0.61
2488	Desmodesmus	denticulatus				-	Vegetative	12.00	6.050	0.02	299.644	0.07
2251	Eudorina	elegans				-	Vegetative	50.00	12.099	0.03	12,138.927	2.87
8041	Monoraphidium	capricornutum				-	Vegetative	4.00	182.237	0.45	1,416.380	0.33
2363	Oocystis	parva				-	Vegetative	9.20	30.247	0.08	3,135.814	0.74
2501	Selenastrum	minutum				-	Vegetative	8.00	36.447	0.09	674.804	0.16

☑ = Identification is Uncertain

210003-398

Sample Date: 8/20/2021

* = Family Level Identification

Friday, July 1, 2022

Phytoplankton - Grab

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2641	Sphaerocystis	schroeteri					Vegetative	16.00	36.447	0.09	5,002.700	1.18
2931	Teilingia	granulata					Vegetative	8.00	6.050	0.02	871.122	0.21
	Division ~ Chlorophy						al Chloroph		473.514	1.18	30,101.997	7.12
Division:	Chrys	ophyta										
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	2.40	1,749.472	4.36	9,581.686	2.27
1000035	*Chrysocapsaceae	spp				>1 um spherical	Vegetative	4.80	328.026	0.82	20,879.024	4.94
1481	Chrysosphaerella	longispina				-	Vegetative	64.00	36.447	0.09	9,576.455	2.26
1482	Chrysosphaerella	longispina					Vegetative	96.00	36.447	0.09	19,152.914	4.53
1123	Dinobryon	spp	•			-	Monad	6.00	6.050	0.02	475.123	0.11
9733	Dinobryon	sociale		americana		-	Vegetative	36.00	6.050	0.02	633.498	0.15
9736	Dinobryon	sociale		americana		-	Vegetative	82.00	18.148	0.05	4,155.744	0.98
1760	Ellipsoidion	spp					Vegetative	10.13	255.131	0.64	7,044.816	1.67
	Division ~ Chrysophy						al Chrysopl		2,435.772	6.08	71,499.260	16.90
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolum
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	18,952.618	47.27	5,081.197	1.20
1000547	Jaaginema	spp				-	Vegetative	17.60	36.447	0.09	123.947	0.03
4264	Microcystis	aeruginosa					Vegetative	4.00	6.050	0.02	202.719	0.05
4172	Pseudanabaena	limnetica					Vegetative	33.60	36.447	0.09	2,152.576	0.51

1000513

4091

4092

>=2 um spherical

Vegetative

Vegetative

Vegetative

Sample Date: 8/20/2021

3.00

160.00

5.00

12.099

1.096

109.342

0.03

0.00

0.27

171.045

3,490.010

2,576.306

0.04

0.83

0.61

Synechocystis

Woronichinia

Woronichinia

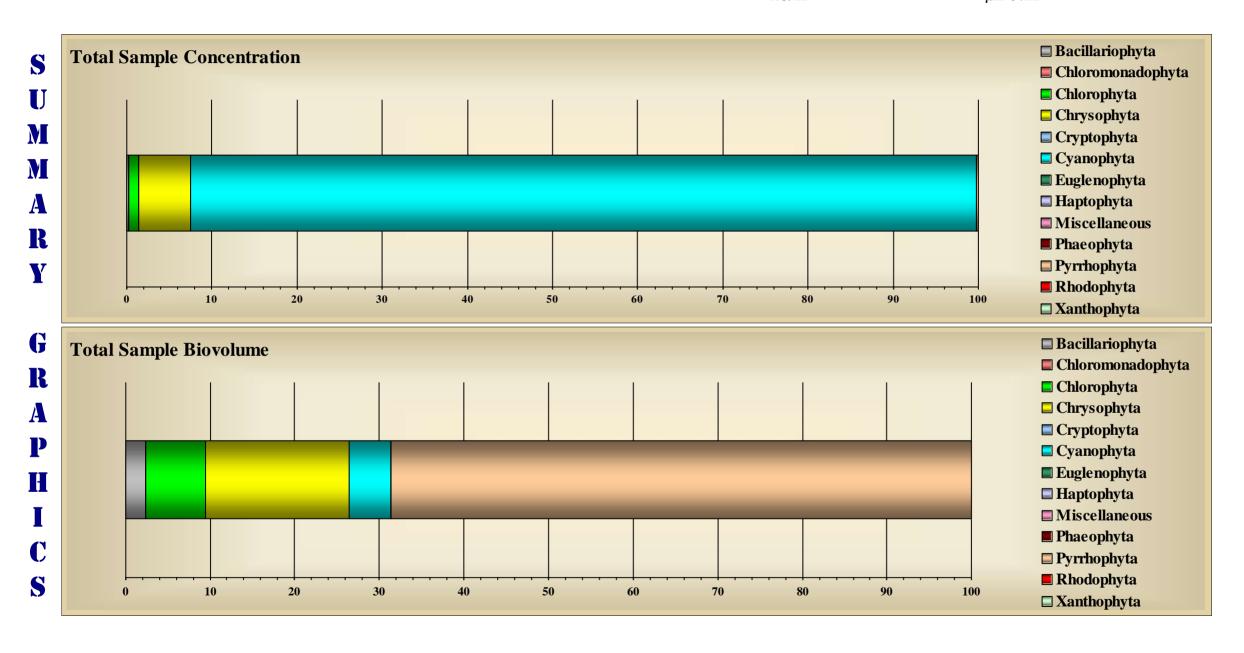
spp

naegeliana

naegeliana

Summary for I	Division ~ Cyanophy	vta (8 detail records)				Sum 7	Total Cyanoph	yta	37,013.297	92.32	20,978.983	4.96
Division:	Eugle	enophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5047	Trachelomonas	volvocina					Vegetative	16.00	0.365	0.00	330.412	0.08
Summary for I	Division ~ Euglenop	hyta (1 detail record)				Sum 7	Total Eugleno	ohyta	0.365	0.00	330.412	0.08
Division:	Pyrrh	ophyta										
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	11.20	36.447	0.09	9,849.063	2.33
6045	Naiadinium	polonicum					Vegetative	48.00	0.365	0.00	4,699.195	1.11
6041	Peridinium	cinctum	•				Vegetative	35.20	30.247	0.08	263,078.846	62.20
124851	Peridinium	inconspicuum					Vegetative	14.00	24.198	0.06	12,416.551	2.94
Summary for I	Division ~ Pyrrhoph	yta (4 detail records)				Sum 7	Total Pyrrhop	hyta	91.258	0.23	290,043.656	68.57

40,093.150 NU/ml 422,958.554 μm³ /ml



Tracking Code: 210013-398

Sample ID: 20211006I

10/6/2021

Replicate:

Customer ID: 398

Sample Date:

Sample Level:

Job ID:

Station:

Sample Depth: 0

System Name:

Indian Lake

Site: boat ramp

Preservative:

Glutaraldehyde

Epi

Report Notes:

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
1013	Achnanthidium	minutissima					Vegetative	20.00	17.009	0.12	1,367.926	2.71
9141	Anomoeoneis	vitrea		-	costata		Vegetative	22.00	2.823	0.02	609.741	1.21
1 108977	Cymbella	delicatula		delicatula			Vegetative	38.40	17.009	0.12	5,643.098	11.17
1140	Eunotia	spp					Vegetative	58.00	2.823	0.02	2,057.600	4.07
1315	Ulnaria	ulna					Vegetative	108.00	2.823	0.02	10,976.132	21.73
Summary for I	Division ~ Bacillariop	phyta (5 detail records)			Sum '	Fotal Bacillari	ophyta	42.487	0.30	20,654.498	40.90

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
1000057	*.	spp				Microflagellate	Vegetative	2.80	323.166	2.25	1,036.007	2.05
2041	Botryococcus	braunii					Vegetative	96.00	0.170	0.00	1,007.390	1.99
2080	Chlamydomonas	spp				•	Vegetative	3.47	102.053	0.71	1,366.739	2.71
Summary for	Division ~ Chlorophy	ta (3 detail records)				Sum To	tal Chloropl	nyta	425.389	2.96	3,410.136	6.75

Sample Date: 10/6/2021

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	CALD	a .	D 1 4		
						William	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1652	*.	spp					Vegetative	2.40	459.237	3.20	3,972.855	7.87
1124	Dinobryon	cylindricum					Vegetative	49.00	5.646	0.04	739.081	1.46
9736	Dinobryon	sociale		americana			Vegetative	240.00	2.823	0.02	5,543.103	10.98
1760	Ellipsoidion	spp					Vegetative	12.00	5.646	0.04	886.896	1.76
1560	Kephyrion	spp					Vegetative	6.40	17.009	0.12	277.415	0.55
	vivision ~ Chrysophyt						tal Chrysopl		490.361	3.42	11,419.350	22.61
Division:	Crypto	ophyta										
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	15.00	5.646	0.04	1,791.531	3.55
	vivision ~ Cryptophyt						tal Cryptopl		5.646	0.04	1,791.531	3.55
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp			-	<1 um spherical	Vegetative	0.80	5,442.803	37.91	1,459.216	2.89
1000345	*Chroococcaceae	spp				> 1 um ovoid	Vegetative	3.00	3,775.945	26.30	5,504.195	10.90
107474	Dolichospermum	lemmermannii					Vegetative	40.00	2.823	0.02	851.421	1.69
4261	Microcystis	aeruginosa					Vegetative	120.00	0.170	0.00	799.516	1.58
4460	Pseudanabaena	spp					Vegetative	32.00	2.823	0.02	159.642	0.32
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	4,082.102	28.44	1,641.413	3.25
4092	Woronichinia	naegeliana			-		Vegetative	5.00	34.018	0.24	801.517	1.59

☑ = **Identification** is **Uncertain**

210013-398

Sample Date: 10/6/2021

Friday, July 1, 2022

* = Family Level Identification

Phytoplankton - Grab

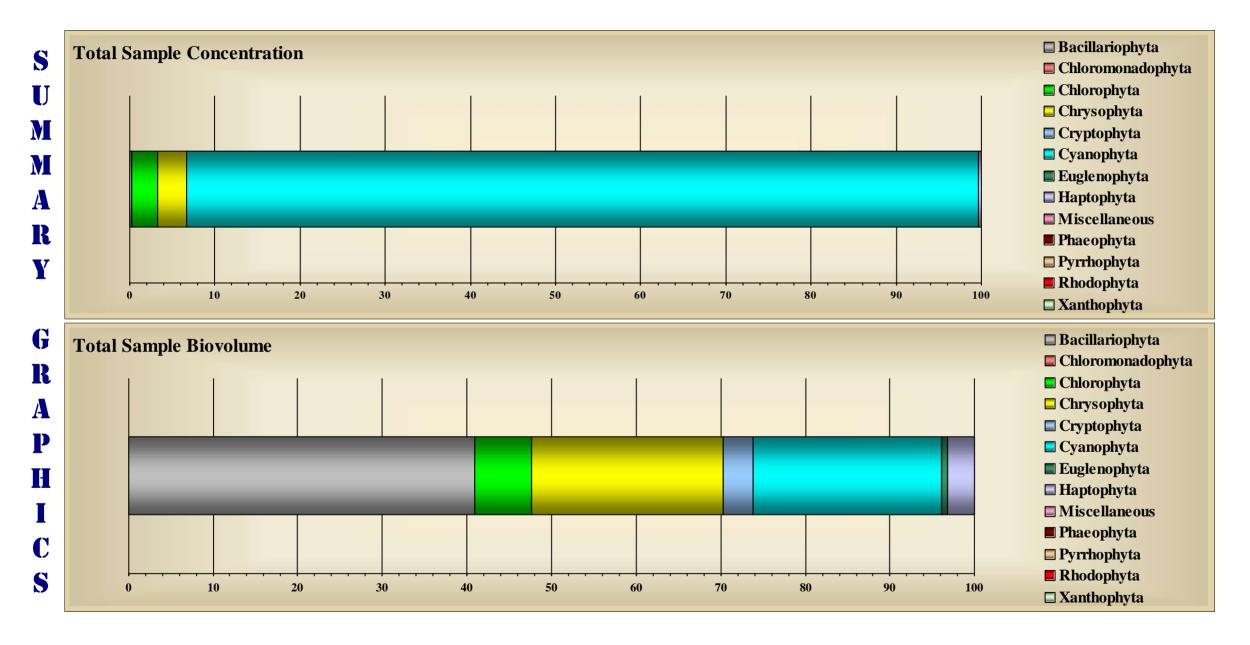
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Division:	Euglen	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
5047	Trachelomonas	volvocina					Vegetative	20.00	0.170	0.00	365.493	0.72
Summary for I	Division ~ Euglenophy	vta (1 detail record)				Sum 7	Total Euglenop	ohyta	0.170	0.00	365.493	0.72
Division:	Hapto	phyta										
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	51.026	0.36	1,642.194	3.25
Summary for 1												

Friday, July 1, 2022

NU/ml

μ**m**^3 /ml



* = Family Level Identification Phytoplankton - Grab

210004-398 20210820J **Tracking Code:** Sample ID: Replicate:

Customer ID: 398 **Sample Date:** 8/20/2021 **Sample Level:** Epi

Job ID: **Station: Sample Depth:** 0

System Name: JL Curran Reservoir Site: near shore **Preservative:** Glutaraldehyde

Report Notes:

Division:	Ba	cillariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1071	Cyclotella	sp. 1					Vegetative	4.50	892.960	1.64	35,885.647	1.75
9504	Fragilaria	tenera					Vegetative	144.00	1.278	0.00	5,889.714	0.29
		ariophyta (2 detail recor				Sum 7	Fotal Bacillari	ophyta	894.238	1.64	41,775.361	2.04

Division:	Chlore	ophyta										
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	3.42	1,275.657	2.34	31,679.921	1.54
2080	Chlamydomonas	spp				-	Vegetative	5.20	127.566	0.23	1,671.430	0.08
1000012	Closterium	spp				straight	Vegetative	56.00	63.783	0.12	8,617.930	0.42
2162	Closterium	moniliferum				-	Vegetative	72.00	63.783	0.12	23,148.537	1.13
2488	Desmodesmus	denticulatus					Vegetative	10.00	191.349	0.35	5,290.022	0.26
8171	Gloeococcus	minor					Vegetative	29.00	637.829	1.17	461,431.219	22.49
2363	Oocystis	parva				-	Vegetative	16.00	127.566	0.23	21,476.438	1.05
8101	Pyramichlamys	dissecta					Vegetative	16.00	63.783	0.12	26,717.296	1.30
2462	Quadrigula	lacustris				-	Vegetative	48.00	63.783	0.12	369.341	0.02
2483	Scenedesmus	bijuga				-	Vegetative	16.00	63.783	0.12	641.215	0.03

☑ = **Identification** is **Uncertain**

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Sample Date: 8/20/2021 Friday, July 1, 2022 Page 26 of 88 * = Family Level Identification Phytoplankton - Grab

4113	Dactylococcopsis	irregularis					Vegetative	21.40	446.480	0.82	831.748	0.04
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	36,356.224	66.62	9,747.104	0.48
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	Cyano	phyta										
	Division ~ Cryptophy						al Cryptopl		446.480	0.82	114,283.360	5.57
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	8.00	63.783	0.12	2,137.382	0.10
3015	Cryptomonas	erosa					Vegetative	14.00	382.697	0.70	112,145.978	5.47
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	Crypt	ophyta										
	Division ~ Chrysophy						al Chrysop	hyta	1,722.137	3.16	10,157.068	0.50
1760	Ellipsoidion	spp					Vegetative	7.20	382.697	0.70	4,813.373	0.23
1652	*	spp	•				Vegetative	2.00	1,339.440	2.45	5,343.695	0.26
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	•	ophyta .					G	Q.L.T.D.		D.L.C.		
Summary for I	Division ~ Chlorophy	ta (17 detail records)				Sum To	tal Chloropl	yta	3,072.802	5.63	600,261.544	29.26
			······		·····						322.309	
2530 2554	Staurastrum	spp	•	•	•	•	Vegetative Vegetative	48.00	0.639	0.00	3,387.734 522.509	0.17
2641	Sphaerocystis	schroeteri	•	•			Vegetative	15.20	127.566	0.23	10,920.606	0.53
2501	Selenastrum	minutum	•		•		Vegetative	8.00	63.783	0.12	777.379	0.04
8308	Scenedesmus	serratus		•	•	•	Vegetative	8.00	63.783	0.12	1,538.914	0.08
8303	Scenedesmus	opoliensis		carinatus			Vegetative	24.00	63.783	0.12	1,538.914	0.08

☑ = **Identification** is **Uncertain**

210004-398

Sample Date: 8/20/2021

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6011	Ceratium Peridinium	hirundinella spp	•	•	•	•	Vegetative Vegetative	168.00 48.00	0.639	0.00	34,778.939 12.849.362	0.63
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	Pyrrho	phyta										
Summary for I	Division ~ Euglenophy	eta (2 detail records)				Sum Tot	al Eugleno _l	ohyta	11.226	0.02	57,325.586	2.79
5040	Trachelomonas	spp					Vegetative	24.00	10.587	0.02	53,213.790	2.59
5050	Lepocinclis	spp	•				Vegetative	48.00	0.639	0.00	4,111.796	0.20
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
ivision:	Euglen	ophyta										
	Division ~ Cyanophyta						al Cyanoph		48,420.188	88.73	1,180,331.343	57.53
1000513	Synechocystis	spp				>=2 um spherical	Vegetative	1.60	191.349	0.35	410.385	0.02
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	10,843.084	19.87	4,360.004	0.21
1 4332	Sphaerospermopsis	aphanizomenoides				•	Vegetative	275.80	381.116	0.70	1,039,265.324	50.65
4264	Microcystis	aeruginosa				•	Vegetative	4.20	127.566	0.23	5,309.259	0.26
4261	Microcystis	aeruginosa				•	Vegetative	192.00	63.783	0.12	115,418.727	5.63
1 4331	Dolichospermum	macrosporum	•	•			Vegetative	36.00	10.587	0.02	4,988.793	0.24

Sum Total Pyrrhophyta

1.917

0.00

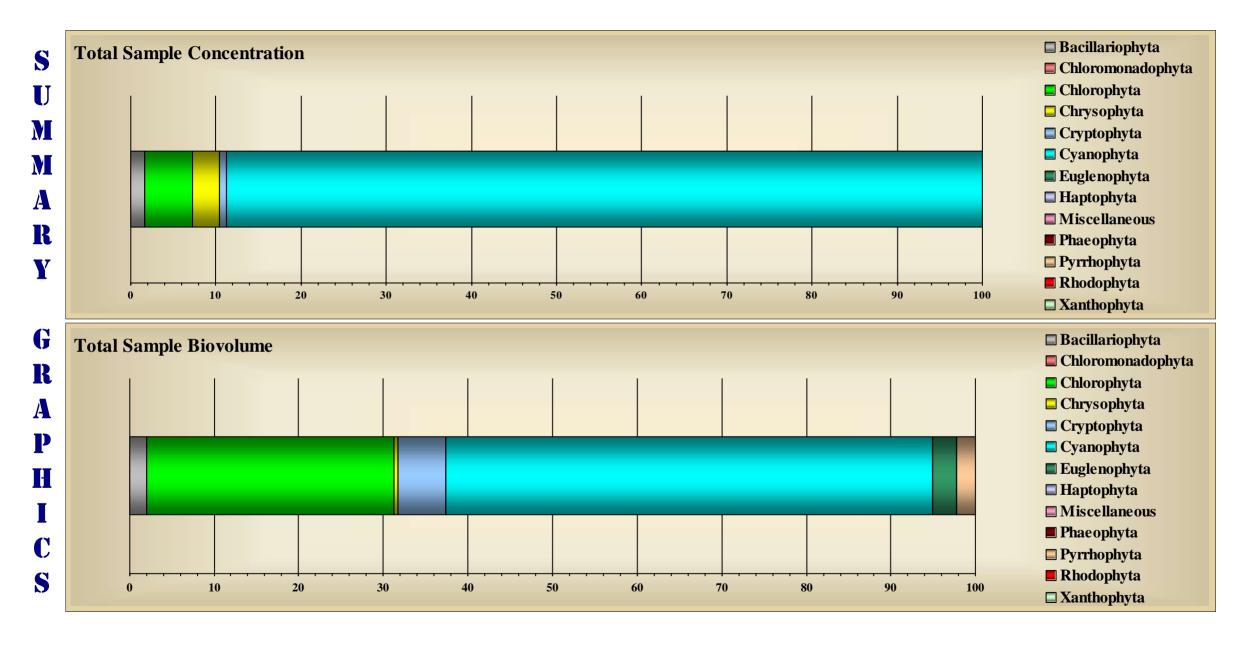
47,628.301

2.32

Summary for Division ~ Pyrrhophyta (2 detail records)

54,568.987





★ = Family Level Identification

Tracking Code: 210014-398 Sample ID: 20211006J Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 10/6/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: JL Curran Reservoir Site: near shore Preservative: Glutaraldehyde

Report Notes: .

Division:	Bacilla	ariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1013	Achnanthidium	minutissima					Vegetative	12.80	85.044	0.17	4,377.366	0.14
1000653	Cyclotella	meneghiniana		-		>8 um	Vegetative	9.60	85.044	0.17	29,547.192	0.92
1077	Discostella	stelligera					Vegetative	9.60	85.044	0.17	29,547.192	0.92
1477	Fragilaria	filiformis					Vegetative	72.67	42.346	0.09	8,504.525	0.26
ummary for 1	Division ~ Bacillario _l	phyta (4 detail records))			Sum '	Fotal Bacillari	ophyta	297.478	0.60	71,976.275	2.24

Division:	Chlore	phyta										
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	2.80	170.088	0.35	2,074.695	0.06
2686	*.	spp					Cyst	4.80	85.044	0.17	4,761.747	0.15
1000057	*.	spp				Microflagellate	Vegetative	3.60	170.088	0.35	1,390.721	0.04
2041	Botryococcus	braunii				-	Vegetative	30.00	14.115	0.03	21,569.324	0.67
2080	Chlamydomonas	spp				-	Vegetative	8.00	14.115	0.03	3,597.252	0.11
2162	Closterium	moniliferum					Vegetative	90.00	14.115	0.03	3,136.081	0.10
2180	Cosmarium	spp					Vegetative	12.00	14.115	0.03	946.022	0.03
1000538	Monomastix	minuta					Vegetative	4.80	85.044	0.17	615.564	0.02

Sample Date: 10/6/2021

2211	Mucidosphaerium	pulchellum					Vegetative	16.00	85.044	0.17	4,240.641	0.13
2363	Oocystis	parva	•			-	Vegetative	12.80	255.131	0.52	47,968.581	1.49
2641	Sphaerocystis	schroeteri	•				Vegetative	14.67	255.131	0.52	90,465.486	2.81
2563	Tetrastrum	glabrum	•				Vegetative	4.80	85.044	0.17	1,190.094	0.04
	Division ~ Chlorophyt						tal Chloropl		1,247.075	2.54	181,956.208	5.66
Division:	Chryso	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1760	Ellipsoidion	spp				-	Vegetative	8.00	170.088	0.35	7,295.601	0.23
1185	Mallomonas	caudata				-	Vegetative	120.00	14.115	0.03	292,675.849	9.10
	Division ~ Chrysophyt						tal Chrysop		184.203	0.37	299,971.450	9.32
Division:	Crypto	ophyta										
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	13.20	510.263	1.04	228,603.192	7.11
Summary for I	Division ~ Cryptophyt						tal Cryptopl		510.263	1.04	228,603.192	7.11
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	13,607.008	27.66	3,648.039	0.11
	Aphanocapsa	koordersi					Vegetative	24.00	255.131	0.52	14,249.216	0.44
4086	Chroococcus	minutus					Vegetative	8.00	85.044	0.17	1,641.507	0.05
☑ 4048	Chrysosporum	ovalisporum					Vegetative	107.52	1,360.701	2.77	1,740,876.909	54.12
4261	Microcystis	aeruginosa					Vegetative	72.67	70.577	0.14	169,101.602	5.26
4264	Microcystis	aeruginosa					Vegetative	4.16	8,674.468	17.64	333,007.603	10.35

☑ = **Identification** is **Uncertain**

210014-398

Sample Date: 10/6/2021

Friday, July 1, 2022

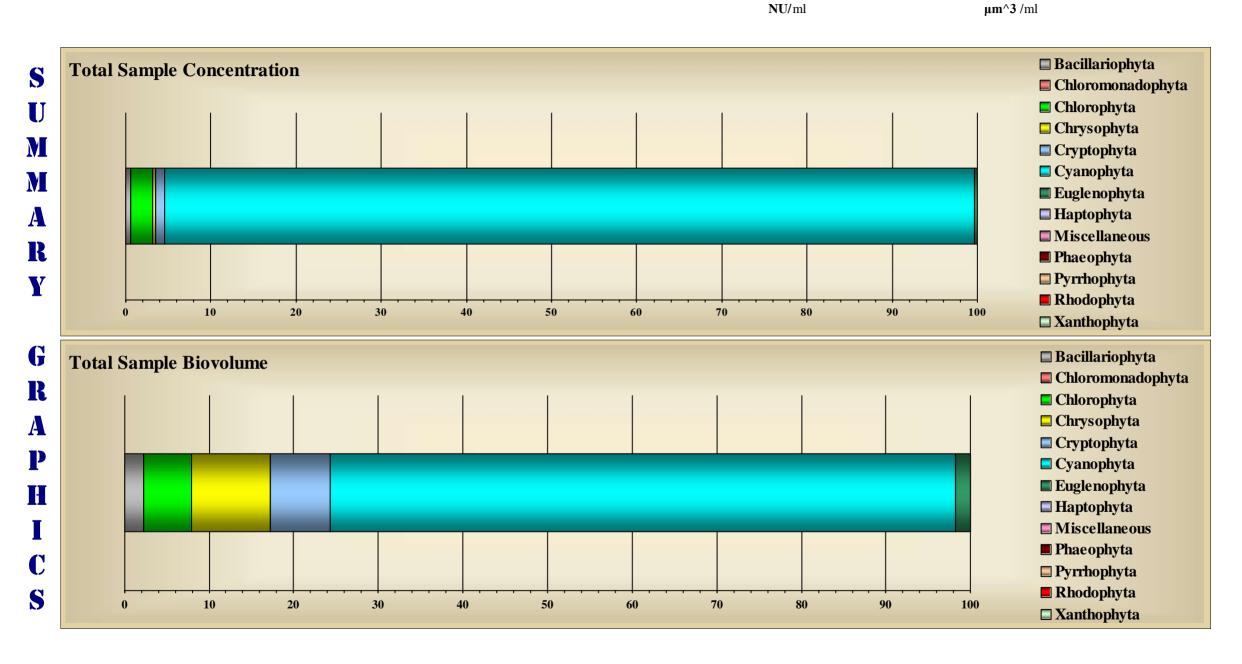
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Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
Division:	Eugl	enophyta										
Summary for	Division ~ Cyanoph	nyta (10 detail records)				Sum To	tal Cyanoph	ıyta	46,778.369	95.10	2,375,083.895	73.83
4091	Woronichinia	naegeliana					Vegetative	136.00	18.746	0.04	90,430.037	2.81
4092	Woronichinia	naegeliana					Vegetative	5.00	85.044	0.17	2,003.794	0.06
4285	Synechocystis	spp				>1 um spherical	Vegetative	1.50	8,164.205	16.60	14,311.851	0.44
4323	Synechococcus	sp. 1		•	•	< 1um ovoid	Vegetative	1.20	14,457.446	29.39	5,813.339	0.18

49,187.475

3,216,867.798 µm^3 /ml

Total Sample Biovolume



210005-398 Sample ID: 20210818MA **Tracking Code:** Replicate:

Customer ID: 398 **Sample Date:** 8/18/2021 **Sample Level:** Epi

Station: Job ID: **Sample Depth:** 0

Mashapaug Pond **System Name:** Site: **Preservative:** Glutaraldehyde boat ramp

Report Notes:

Division:	Bac	cillariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
9212	Cocconeis	placentula		lineata			Vegetative	17.60	127.566	0.13	55,298.391	0.61
Summary for I	Division ~ Bacille	ariophyta (1 detail record	()			Sum 7	Total Bacillari	ophyta	127.566	0.13	55,298.391	0.61
Division:	Ch	lorophyta										
Toyo ID	Conuc	Species	Subenaciae	Voriety	Form	Morph	Structure	CALD	Count	Polotivo	Total	Palativa

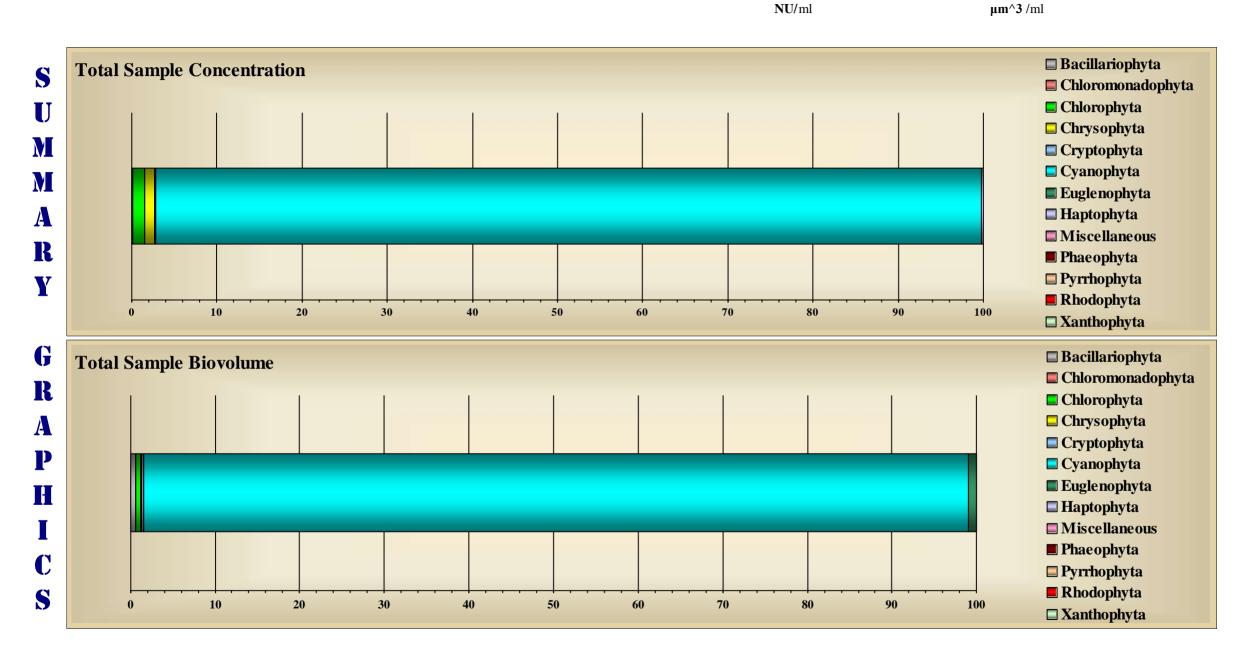
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3/ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp				2-9.9 um spherical	Vegetative	3.20	510.263	0.53	10,396.247	0.12
2080	Chlamydomonas	spp					Vegetative	5.00	42.346	0.04	1,773.793	0.02
2162	Closterium	moniliferum					Vegetative	40.00	84.692	0.09	4,945.628	0.05
2191	Crucigenia	truncata					Vegetative	8.00	42.346	0.04	2,394.622	0.03
2488	Desmodesmus	denticulatus			-		Vegetative	16.00	127.039	0.13	7,449.935	0.08
2385	Monactinus	simplex			-	•	Vegetative	160.00	1.278	0.00	7,198.539	0.08
2861	Monomastix	astigmata			-	•	Vegetative	4.80	255.131	0.27	1,282.418	0.01
2363	Oocystis	parva					Vegetative	4.80	127.566	0.13	3,283.018	0.04
2641	Sphaerocystis	schroeteri			•		Vegetative	16.00	127.566	0.13	17,509.451	0.19

Sample Date: 8/18/2021

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	2.40	1,020.526	1.07	5,912.211	0.07
1000615	Kephyrion	planctonicum					Vegetative	4.00	127.566	0.13	641.209	0.01
	Division ~ Chrysophyte						tal Chrysop		1,148.091	1.20	6,553.420	0.07
Division:	Crypto	phyta										
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	12.00	127.566	0.13	25,648.602	0.29
	Division ~ Cryptophyto					Sum Total Cryptophyta			127.566	0.13	25,648.602	0.29
Division:	Cyanoj	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3/ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	62,507.192	65.42	16,758.178	0.19
4041	Aphanizomenon	flos-aquae					Vegetative	154.00	254.077	0.27	491,695.433	5.47
4054	Aphanocapsa	delicatissima					Vegetative	20.00	255.131	0.27	2,538.149	0.03
4062	Aphanothece	nidulans					Vegetative	24.00	255.131	0.27	394.382	0.00
4046	Cuspidothrix	issatschenkoi					Vegetative	57.00	84.692	0.09	11,091.746	0.12
☑ 4331	Dolichospermum	macrosporum					Vegetative	213.60	592.847	0.62	2,358,372.661	26.22
4264	Microcystis	aeruginosa					Vegetative	3.84	6,760.982	7.08	209,887.926	2.33
4261	Microcystis	aeruginosa					Vegetative	42.50	1,020.526	1.07	981,828.584	10.92
107710	Planktothrix	agardhii					Vegetative	620.00	84.692	0.09	371,166.194	4.13
☑ 4332	Sphaerospermopsis	aphanizomenoides					Vegetative	140.60	2,286.694	2.39	4,040,203.827	44.92
4321	Synechococcus	elongatus					Vegetative	3.20	127.566	0.13	213.736	0.00

Sample Date: 8/18/2021

4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	17,859.198	18.69	7,181.183	0.08
4091	Woronichinia	naegeliana		•			Vegetative	120.00	84.692	0.09	259,417.227	2.88
4092	Woronichinia	naegeliana					Vegetative	5.00	382.697	0.40	9,017.071	0.10
	Division ~ Cyanophyta						otal Cyanoph		92,556.118	96.86	8,759,766.297	97.39
Division:	Euglen	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5040	Trachelomonas	spp					Vegetative	37.33	6.391	0.01	69,712.070	0.78
5047	Trachelomonas	volvocina	•	•		•	Vegetative	16.00	14.060	0.01	12,720.868	0.14
Summary for Division ~ Euglenophyta (2 detail records)						Sum To	otal Euglenop	hyta	20.450	0.02	82,432.939	0.92
Division:	Haptoj	phyta										
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	255.131	0.27	8,210.970	0.09
Summary for Division ~ Haptophyta (1 detail record)							Sum Total Haptophyta			0.27	8,210.970	0.09



Tracking Code: 210015-398 Sample ID: 20211006MA Replicate:

Customer ID: 398 Sample Date: 10/6/2021 Sample Level: Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Mashapaug Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	Baci	llariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1431	Aulacoseira	ambigua					Vegetative	288.00	127.566	0.09	904,882.805	4.26
1432	Aulacoseira	granulata				straight	Vegetative	442.00	21.173	0.01	1,408,036.903	6.64
Summary for L		iophyta (2 detail records					Fotal Bacillari	ophyta	148.739	0.10	2,312,919.707	10.90
Division:	Chlo	orophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2162	Closterium	moniliferum					Vegetative	62.67	2,041.051	1.44	457,557.954	2.16
2171	Coelastrum	microporum					Vegetative	36.00	21.173	0.01	57,470.895	0.27
Summary for L		hyta (2 detail records)					Fotal Chloropl		2,062.224	1.45	515,028.849	2.43
Division:	Chr	ysophyta										
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	2.00	382.697	0.27	1,590.221	0.01
		hyta (1 detail record)				~ -	Fotal Chrysop		382.697	0.27	1,590.221	0.01

☑ = **Identification** is **Uncertain**

210015-398

Sample Date: 10/6/2021

* = Family Level Identification Phytoplankton - Grab

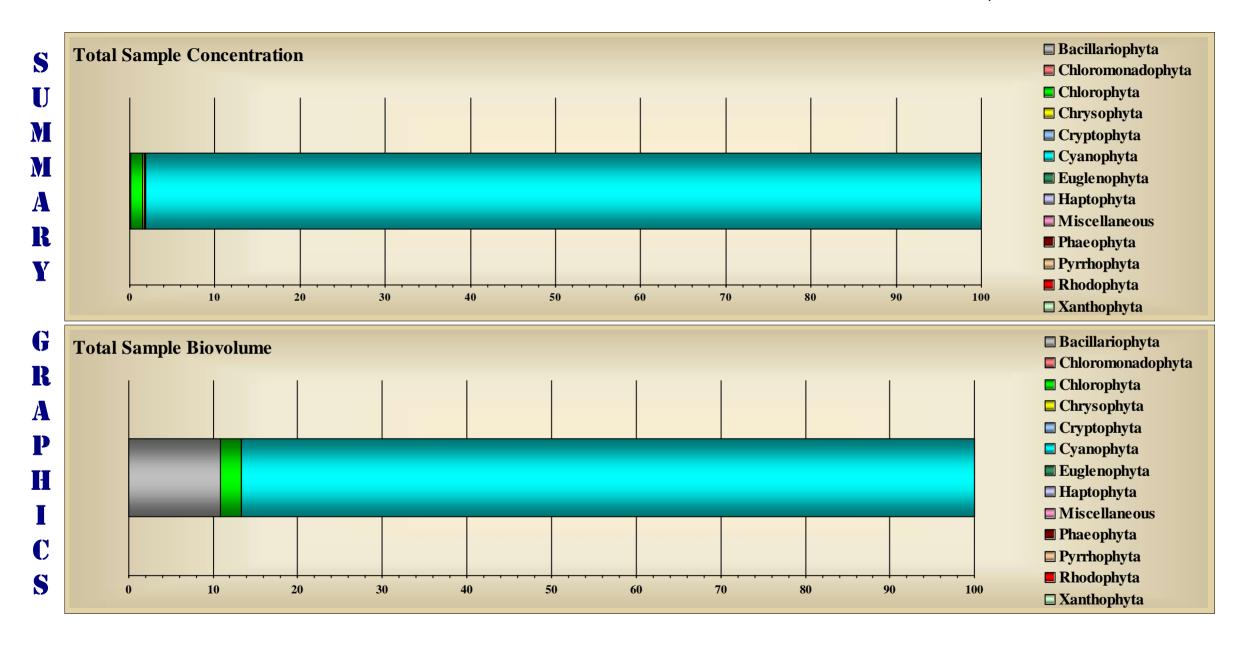
Division:	Crypt	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3043	Plagioselmis	minuta		nannoplanctica	•		Vegetative	8.00	127.566	0.09	4,274.765	0.02
	Division ~ Cryptophy						tal Cryptopl		127.566	0.09	4,274.765	0.02
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	57,404.564	40.46	15,390.164	0.07
4041	Aphanizomenon	flos-aquae					Vegetative	85.87	892.960	0.63	963,532.653	4.54
4054	Aphanocapsa	delicatissima					Vegetative	4.80	127.566	0.09	534.347	0.00
4051	Aphanocapsa	elachista					Vegetative	32.00	127.566	0.09	2,236.291	0.01
4046	Cuspidothrix	issatschenkoi			-		Vegetative	142.00	127.566	0.09	227,631.371	1.07
☑ 4331	Dolichospermum	macrosporum					Vegetative	113.92	1,658.354	1.17	2,161,801.026	10.19
₫ 4018	Dolichospermum	planctonicum			-		Vegetative	80.53	510.263	0.36	1,363,434.279	6.43
4261	Microcystis	aeruginosa			-		Vegetative	50.40	5,995.588	4.23	8,438,391.162	39.77
4264	Microcystis	aeruginosa			-		Vegetative	4.16	34,442.739	24.27	1,322,236.069	6.23
107710	Planktothrix	agardhii					Vegetative	212.00	255.131	0.18	330,866.999	1.56
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	21,686.169	15.28	8,720.009	0.04
4285	Synechocystis	spp	•		•	>1 um spherical	Vegetative	1.50	255.131	0.18	447.245	0.00
4092	Woronichinia	naegeliana	•		•	-	Vegetative	5.00	14,925.187	10.52	351,665.757	1.66
4091	Woronichinia	naegeliana				-	Vegetative	120.00	765.394	0.54	3,198,060.478	15.07
	Division ~ Cyanophyt						tal Cyanoph		139,174.177	98.08	18,384,947.848	86.64

Total Sample Biovolume 21,218,761,390

NU/ml

141,895.403

μ**m**^3 /ml



210015-398

Phytoplankton - Grab

★ = Family Level Identification

Tracking Code: 210006-398 Sample ID: 20210820ME Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/20/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Melville Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	B	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
1071	Cyclotella	sp. 1				•	Vegetative	4.00	63.783	0.08	1,603.035	0.03
		cillariophyta (1 detail record				Sum 7	Total Bacillari	ophyta	63.783	0.08	1,603.035	0.03

ivision:	Chloro	phyta										
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	2.86	446.480	0.59	6,826.812	0.12
2080	Chlamydomonas	spp					Vegetative	6.40	63.783	0.08	8,537.226	0.15
1000012	Closterium	spp				straight	Vegetative	92.00	21.173	0.03	3,263.780	0.06
2162	Closterium	moniliferum					Vegetative	40.00	10.587	0.01	618.204	0.01
2180	Cosmarium	spp					Vegetative	24.00	63.783	0.08	23,459.925	0.41
2488	Desmodesmus	denticulatus					Vegetative	12.27	255.131	0.34	12,778.715	0.22
2323	Kirchneriella	lunaris					Vegetative	24.00	10.587	0.01	519.764	0.01
2211	Mucidosphaerium	pulchellum					Vegetative	24.00	63.783	0.08	2,120.321	0.04
2363	Oocystis	parva					Vegetative	17.20	52.933	0.07	8,347.916	0.15
2483	Scenedesmus	bijuga					Vegetative	12.00	10.587	0.01	343.672	0.01
102882	Scenedesmus	raciborskii					Vegetative	12.00	10.587	0.01	412.406	0.01

Sample Date: 8/20/2021

2491	Schroederia	judayi					Vegetative	28.00	127.566	0.17	1,313.212	0.02
2641	Sphaerocystis	schroeteri	•	•	-		Vegetative	20.00	10.587	0.01	1,419.035	0.02
8332	Tetraedron	muticum	•				Vegetative	6.40	63.783	0.08	3,200.368	0.06
	Division ~ Chlorophy						al Chloroph		1,211.347	1.60	73,161.355	1.28
Division:	Chrys	ophyta										
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	1.80	1,467.006	1.94	4,467.765	0.08
	Division ~ Chrysophy						al Chrysopl		1,467.006	1.94	4,467.765	0.08
Division:	Crypt	ophyta										
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	578.221	0.01
3043	Plagioselmis	minuta		nannoplanctica		•	Vegetative	8.00	255.131	0.34	8,549.530	0.15
	Division ~ Cryptophy						al Cryptopl		255.771	0.34	9,127.751	0.16
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp		•		<1 um spherical	Vegetative	0.80	49,750.622	65.75	13,338.142	0.23
4041	Aphanizomenon	flos-aquae					Vegetative	113.00	1,513.876	2.00	2,149,704.142	37.55
4046	Cuspidothrix	issatschenkoi					Vegetative	260.00	10.587	0.01	19,456.292	0.34
10651	Cyanogranis	ferruginea					Vegetative	18.67	191.349	0.25	820.751	0.01
1 4331	Dolichospermum	macrosporum					Vegetative	97.33	42.346	0.06	72,598.984	1.27
4 018	Dolichospermum	planctonicum					Vegetative	261.67	74.106	0.10	617,715.661	10.79
										0.34		

☑ = **Identification** is **Uncertain**

Friday, July 1, 2022 210006-398 Sample Date: 8/20/2021 * = Family Level Identification Phytoplankton - Grab

1731	Chrysochromulina	parva	•	·		-	Vegetative	μ m 4.00	NU /ml	Count 0.25	Biovolume μm^3 /ml	Total Biovolume
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD	Count	Relative	Total	Relative
Division:	Haptor	phyta										
	Division ~ Euglenophy						tal Euglenop		10.587	0.01	9,578.483	0.17
5047	Trachelomonas	volvocina					Vegetative	16.00	10.587	0.01	9,578.483	0.17
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3/ml	Relative Total Biovolume
Division:	Euglen	ophyta										
Summary for I	Division ~ Cyanophyta	ı (13 detail records)				Sum To	tal Cyanoph	yta	72,468.474	95.77	5,621,286.644	98.18
4092	Woronichinia	naegeliana					Vegetative	5.00	5,102.628	6.74	120,227.609	2.10
4091	Woronichinia	naegeliana					Vegetative	96.40	772.818	1.02	2,600,258.600	45.42
4285	Synechocystis	spp				>1 um spherical	Vegetative	1.50	2,296.183	3.03	4,025.208	0.07
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	12,437.656	16.44	5,001.181	0.09
4172	Pseudanabaena	limnetica				•	Vegetative	50.00	10.587	0.01	935.399	0.02
4261	Microcystis	aeruginosa			•		Vegetative	40.00	10.587	0.01	5,543.104	0.10

Sum Total Haptophyta

191.349

0.25

6,158.228

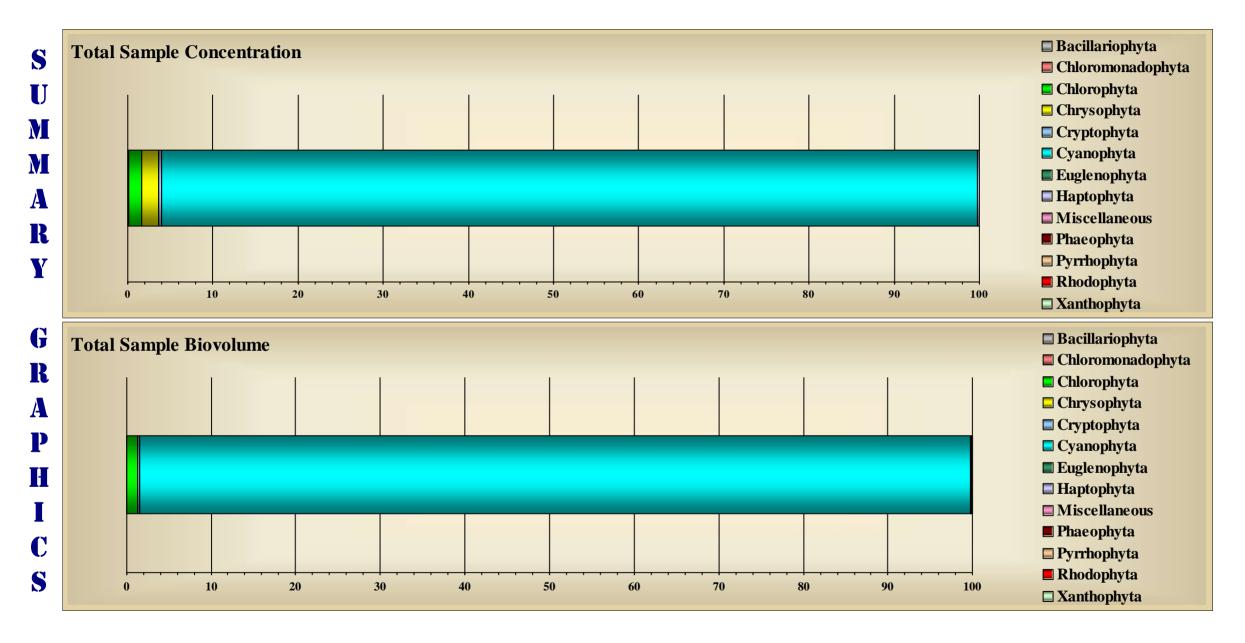
0.11

Summary for Division ~ Haptophyta (1 detail record)

75,668.315

Total Sample Biovolume





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Sample Date: 8/20/2021

Tracking Code: 210016-398 Sample ID: 20211006ME Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 10/6/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Melville Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes: .

Division:	Bacill	ariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1013	Achnanthidium	minutissima					Vegetative	9.60	170.088	0.31	3,693.401	0.23
1150	Fragilaria	spp					Vegetative	32.00	28.231	0.05	11,352.277	0.72
☑ 1210	Navicula	spp		•		•	Vegetative	19.20	85.044	0.16	10,259.446	0.65
1220	Nitzschia	spp		•		•	Vegetative	30.00	14.115	0.03	1,496.639	0.09
9123	Nitzschia	palea		•			Vegetative	20.00	42.346	0.08	5,321.379	0.34
Summary for I	Division ~ Bacillario	phyta (5 detail records	s)			Sum '	Fotal Bacillari	ophyta	339.824	0.62	32,123.141	2.03

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2687	*Chlorococcaceae	spp			•	> 1 um ovoid	Vegetative	3.20	170.088	0.31	1,641.515	0.10
1000057	*.	spp		•	٠	Microflagellate	Vegetative	3.20	85.044	0.16	569.972	0.04
2683	*Chlorococcaceae	spp				2-9.9 um spherical	Vegetative	3.60	170.088	0.31	4,308.965	0.27
2080	Chlamydomonas	spp				-	Vegetative	4.80	85.044	0.16	3,419.815	0.22
2175	Coelastrum	pseudomicroporum					Vegetative	20.00	14.115	0.03	7,568.183	0.48

Vegetative

Vegetative

Sample Date: 10/6/2021

48.00

16.00

56.462

170.088

Colonial

Crucigenia

Division:

2682

2191

Chlorophyta

spp

truncata

6.25

1.44

0.10

0.31

99,017.067

22,775.954

		1 1 .						0.60	05.044	0.16	2,279.880	0.14
2488	Desmodesmus	denticulatus	•	•	•	•	Vegetative	9.60	85.044	0.16	2,279.880	0.11
2212	Dictyosphaerium	ehrenbergianum		-			Vegetative	35.20	425.219	0.78	132,460.777	8.36
2363	Oocystis	parva			•		Vegetative	8.80	170.088	0.31	15,320.759	0.97
2491	Schroederia	judayi			•		Vegetative	42.00	28.231	0.05	532.139	0.03
2641	Sphaerocystis	schroeteri		-		-	Vegetative	27.20	84.692	0.15	67,936.271	4.29
	Division ~ Chlorophy						al Chloroph		1,544.201	2.82	357,831.297	22.58
Division:	Chrys	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD	Count	Relative	Total	Relative
								μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolume
1652	*.	spp	•				Vegetative	2.00	2,041.051	3.72	8,877.756	0.56
1320	Synura	spp	•		•		Vegetative	112.00	0.852	0.00	21,775.385	1.37
	Division ~ Chrysophy	ta (2 detail records)				Sum Tot	tal Chrysopl	hyta	2,041.903	3.73	30,653.141	1.93
Division:	Crypto	ophyta										
	Genus	ophyta Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolumo
Taxa ID			Subspecies	Variety	Form	Morph	Structure Vegetative				Biovolume	Total
Taxa ID 3015 3043	Genus	Species	Subspecies			Morph .		μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolume
3015 3043	Genus Cryptomonas Plagioselmis	Species erosa minuta		nannoplanctica			Vegetative Vegetative	μm 18.00 8.00	NU/ml 14.115 85.044	Count 0.03	Biovolume μm ³ /ml 6,651.724 2,849.843	Total Biovolume 0.42 0.18
Taxa ID 3015 3043 ummary for I	Genus Cryptomonas Plagioselmis	Species erosa minuta ta (2 detail records)		nannoplanctica			Vegetative Vegetative	μm 18.00 8.00	NU/ml 14.115 85.044	0.03 0.16	Biovolume μm ^{^3} /ml 6,651.724 2,849.843	Total Biovolumo 0.42 0.18
Taxa ID 3015 3043	Genus Cryptomonas Plagioselmis Division ~ Cryptophyt	Species erosa minuta ta (2 detail records)		nannoplanctica			Vegetative Vegetative	μm 18.00 8.00	NU/ml 14.115 85.044	0.03 0.16	Biovolume μm ^{^3} /ml 6,651.724 2,849.843	0.42 0.18 0.60 Relative Total
Taxa ID 3015 3043 mmary for I ivision: Taxa ID	Genus Cryptomonas Plagioselmis Division ~ Cryptophyl	erosa minuta ta (2 detail records) phyta	·	nannoplanctica		Sum To	Vegetative Vegetative	μm 18.00 8.00 nyta GALD	NU/ml 14.115 85.044 99.159 Count	0.03 0.16 0.18	Biovolume μm^3 /ml 6,651.724 2,849.843 9,501.567 Total Biovolume	Total Biovolumo 0.42 0.18 0.60
Taxa ID 3015 3043 wmmary for I ivision: Taxa ID	Genus Cryptomonas Plagioselmis Division ~ Cryptophyt Cyano Genus	erosa minuta ta (2 detail records) ophyta Species	·	nannoplanctica		Sum Tot	Vegetative Vegetative tal Cryptoph Structure	μm 18.00 8.00 nyta GALD μm	NU/ml 14.115 85.044 99.159 Count NU/ml	0.03 0.16 0.18 Relative Count	Biovolume μm^3 /ml 6,651.724 2,849.843 9,501.567 Total Biovolume μm^3 /ml	0.42 0.18 0.60 Relative Total Biovolume
Taxa ID 3015 3043 ummary for I	Genus Cryptomonas Plagioselmis Division ~ Cryptophyt Cyano Genus *Chroococcaceae	erosa minuta ta (2 detail records) phyta Species spp	Subspecies	nannoplanctica Variety		Sum Tot	Vegetative Vegetative tal Cryptoph Structure Vegetative	μm 18.00 8.00 nyta GALD μm 0.80	NU/ml 14.115 85.044 99.159 Count NU/ml 31,466.206	0.03 0.16 0.18 Relative Count	Biovolume μm^3 /ml 6,651.724 2,849.843 9,501.567 Total Biovolume μm^3 /ml 8,436.090	Total Biovolume 0.42 0.18 0.60 Relative Total Biovolume 0.53

☑ = **Identification** is **Uncertain**

210016-398

Sample Date: 10/6/2021

Friday, July 1, 2022

* = Family Level Identification

Phytoplankton - Grab

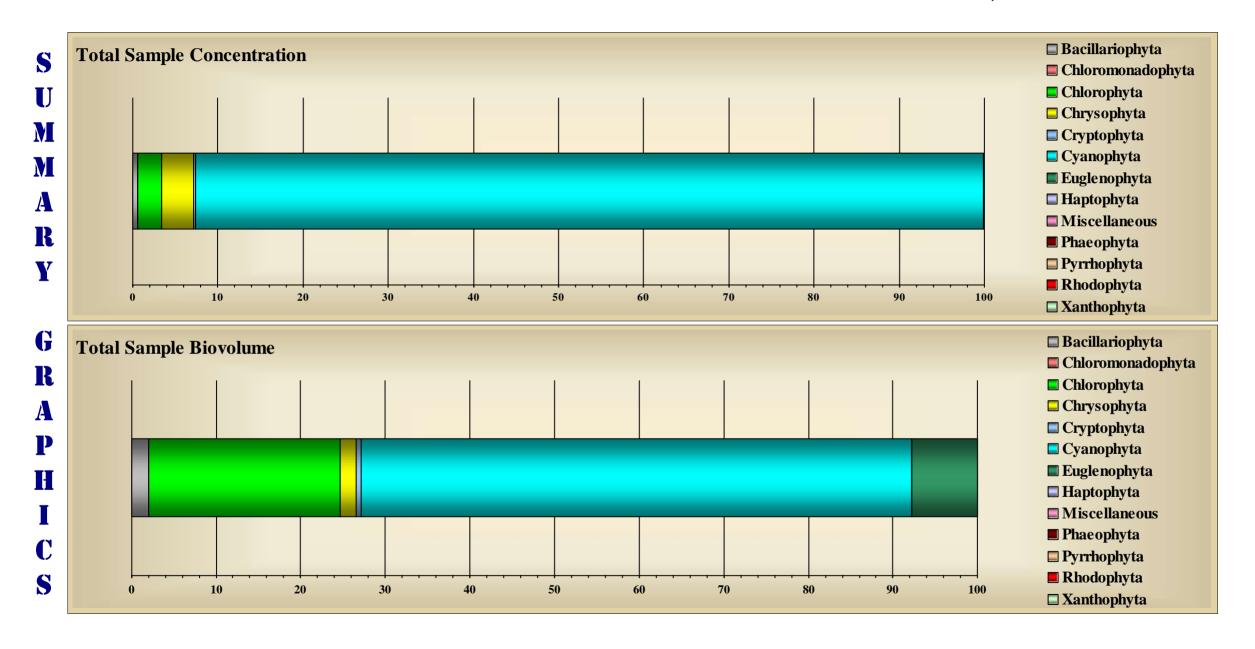
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4331	Dolichospermum	macrosporum	•	•	-	Vegetative	174.86	98.808	0.18	550,379.590	34.74
1000547	Jaaginema	spp		•		Vegetative	70.00	14.115	0.03	776.035	0.05
4166	Merismopedia	warmingiana			-	Vegetative	4.80	85.044	0.16	43.823	0.00
4172	Pseudanabaena	limnetica			-	Vegetative	30.00	28.231	0.05	1,496.639	0.09
4323	Synechococcus	sp. 1		•	< 1um ovoid	Vegetative	1.20	14,457.446	26.38	5,813.339	0.37
4285	Synechocystis	spp		•	>1 um spherical	Vegetative	1.50	170.088	0.31	298.164	0.02
1000513	Synechocystis	spp		•	>=2 um spherical	Vegetative	2.13	170.088	0.31	942.353	0.06
4091	Woronichinia	naegeliana			-	Vegetative	48.00	255.131	0.47	290,049.649	18.31
	Woronichinia	naegeliana				Vegetative	5.00	3,741.927	6.83	88,166.913	5.56

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
5040	Trachelomonas	spp	•				Vegetative	24.00	28.231	0.05	115,899.637	7.31
5047	Trachelomonas	volvocina			•		Vegetative	12.00	14.115	0.03	7,390.805	0.47
	Division ~ Euglenopl)			Sum 7	Total Eugleno	phyta	42.346	0.08	123,290.441	7.78

Total Sample Biovolume



210007-398 20210820SL **Tracking Code:** Sample ID: Replicate:

Customer ID: 398 **Sample Date:** 8/20/2021 **Sample Level:** Epi

Job ID: **Station: Sample Depth:** 0

System Name: Slack Reservoir Site: public beach **Preservative:** Glutaraldehyde

Report Notes:

Division:	Bacilla	ariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1013	Achnanthidium	minutissima					Vegetative	9.60	51.026	0.05	1,108.020	0.27
☑ 1071	Cyclotella	sp. 1	•				Vegetative	8.00	51.026	0.05	10,259.441	2.51
131261	Епсуопета	spp					Vegetative	30.00	8.469	0.01	1,058.655	0.26
☑ 9504	Fragilaria	tenera					Vegetative	128.00	0.511	0.00	4,188.241	1.02
9064	Navicula	capitatoradiata					Vegetative	40.00	8.469	0.01	8,514.206	2.08
1332	Tabellaria	flocculosa	•				Vegetative	121.14	3.579	0.00	20,517.144	5.01
Summary for I	Division ~ Racillario	ohyta (6 detail records)				Sum '	Fotal Bacillari	onhyto	123.081	0.13	45,645.707	11.15

Chloro	phyta										
Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
*Chlorococcaceae	spp				2-9.9 um spherical	Vegetative	3.20	255.131	0.26	4,377.366	1.07
Botryococcus	braunii					Vegetative	160.00	0.511	0.00	14,833.303	3.62
Chlamydomonas	spp					Vegetative	8.00	8.469	0.01	1,277.131	0.31
Colonial	spp	·				Vegetative	40.00	8.469	0.01	2,156.932	0.53
Desmodesmus	denticulatus	·	•			Vegetative	12.00	8.469	0.01	283.807	0.07
Monoraphidium	capricornutum					Vegetative	4.00	714.368	0.74	5,552.210	1.36
	*Chlorococcaceae Botryococcus Chlamydomonas Colonial Desmodesmus	*Chlorococcaceae spp Botryococcus braunii Chlamydomonas spp Colonial spp Desmodesmus denticulatus	Genus Species Subspecies *Chlorococcaceae spp . Botryococcus braunii . Chlamydomonas spp . Colonial spp . Desmodesmus denticulatus .	Genus Species Subspecies Variety *Chlorococcaceae spp . . Botryococcus braunii . . Chlamydomonas spp . . Colonial spp . . Desmodesmus denticulatus . .	Genus Species Subspecies Variety Form *Chlorococcaceae spp . . . Botryococcus braunii . . . Chlamydomonas spp . . . Colonial spp Desmodesmus denticulatus 	Genus Species Subspecies Variety Form Morph *Chlorococcaceae spp . . 2-9.9 um spherical Botryococcus braunii Chlamydomonas spp Colonial spp Desmodesmus denticulatus 	Genus Species Subspecies Variety Form Morph Structure *Chlorococcaceae spp . . 2-9.9 um spherical Vegetative Botryococcus braunii Vegetative Chlamydomonas spp Vegetative Colonial spp Vegetative Desmodesmus denticulatus Vegetative	GenusSpeciesSubspeciesVarietyFormMorphStructureGALD μm*Chlorococcaceaespp2-9.9 um sphericalVegetative3.20BotryococcusbrauniiVegetative160.00ChlamydomonassppVegetative8.00ColonialsppVegetative40.00DesmodesmusdenticulatusVegetative12.00	GenusSpeciesSubspeciesVarietyFormMorphStructureGALD μmCount NU/ml*Chlorococcaceaespp2-9.9 um sphericalVegetative3.20255.131BotryococcusbrauniiVegetative160.000.511ChlamydomonassppVegetative8.008.469ColonialsppVegetative40.008.469DesmodesmusdenticulatusVegetative12.008.469	Genus Species Subspecies Variety Form Morph Structure μm GALD μm Count NU/ml Relative Count *Chlorococcaceae spp . . 2-9.9 um spherical Vegetative 3.20 255.131 0.26 Botryococcus braunii Vegetative 160.00 0.511 0.00 Chlamydomonas spp Vegetative 8.00 8.469 0.01 Colonial spp Vegetative 40.00 8.469 0.01 Desmodesmus denticulatus Vegetative 12.00 8.469 0.01	Genus Species Subspecies Variety Form Morph Structure μm GALD μm γU/ml γU/ml Count γU/ml Relative Count Biovolume μm/3 /ml *Chlorococcaceae spp ·<

☑ = **Identification** is **Uncertain**

210007-398 Sample Date: 8/20/2021 Friday, July 1, 2022 * = Family Level Identification Phytoplankton - Grab Page 49 of 88

4331	Dolichospermum	macrosporum	·				Vegetative	160.00	0.511	0.00	355.259	0.09
1000890	Dolichospermum	spp		•	•	straight	Vegetative	180.00	0.511	0.00	740.432	0.18
10651	Cyanogranis	ferruginea					Vegetative	6.16	3,877.997	4.01	8,720.452	2.13
1000545	Aphanocapsa	holsatica		•		-	Vegetative	48.00	51.026	0.05	2,137.384	0.52
4282	*Chroococcaceae	spp		•	•	<1 um spherical	Vegetative	0.80	61,231.535	63.39	16,416.175	4.01
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolum
ivision:	Cyanoj	phyta										
	Division ~ Cryptophyto						tal Cryptopl		204.105	0.21	6,839.624	1.67
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	8.00	204.105	0.21	6,839.624	1.67
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolumo
vision:	Crypto	phyta										
	Division ~ Chrysophyte						tal Chrysopl		5,204.681	5.39	37,399.273	9.13
1652	*.	spp					Vegetative	2.32	5,204.681	5.39	37,399.273	9.13
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
ivision:	Chryso	phyta										
mmary for	Division ~ Chlorophyte	a (12 detail records)				Sum To	tal Chloroph	nyta	1,275.746	1.32	159,377.020	38.93
2530	Staurastrum	spp					Vegetative	64.00	25.408	0.03	63,562.810	15.52
2641	Sphaerocystis	schroeteri					Vegetative	46.67	25.408	0.03	35,475.860	8.66
2884	Scenedesmus	quadricauda	•		-		Vegetative	16.00	8.469	0.01	354.759	0.09
2462	Quadrigula	lacustris					Vegetative	40.00	8.469	0.01	1,816.364	0.44
2363	Oocystis	parva					Vegetative	14.60	204.105	0.21	27,796.239	6.79

☑ = **Identification** is **Uncertain**

210007-398

Sample Date: 8/20/2021

Friday, July 1, 2022 * = Family Level Identification Phytoplankton - Grab

Division: Taxa ID	Hapto Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume	Relative Total
	Hapto	phyta										
Summary for												
	Division ~ Euglenophy	eta (1 detail record)				Sum To	otal Eugleno	phyta	8.469	0.01	7,662.786	1.87
5047	Trachelomonas	volvocina					Vegetative	16.00	8.469	0.01	7,662.786	1.87
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	, I	ophyta				Sulli 10	otal Cyanoph	iyta	88,812.668	91.94	121,311.805	29.63
4091	Woronichinia Woronichinia	naegeliana naegeliana	•	•	•	•	Vegetative Vegetative	5.00	16.939	0.02	32,327.377	7.90
4323	Synechococcus	sp. 1		•		< 1um ovoid	Vegetative	1.20	22,961.826	23.77	9,232.950	2.26
4172	Pseudanabaena	limnetica			·		Vegetative	90.00	8.469	0.01	1,346.974	0.33
4460	Pseudanabaena	spp					Vegetative	12.80	51.026	0.05	1,148.040	0.28
1 107710	Planktothrix	agardhii					Vegetative	128.00	0.511	0.00	822.359	0.20
4261	Microcystis	aeruginosa				•	Vegetative	40.00	51.026	0.05	30,778.327	7.52
1261	Microcystis	aeruginosa			•		Vegetative	4.00	408.210	0.42	13,679.247	3.34

Sum Total Haptophyta

969.499

1.00

7.62

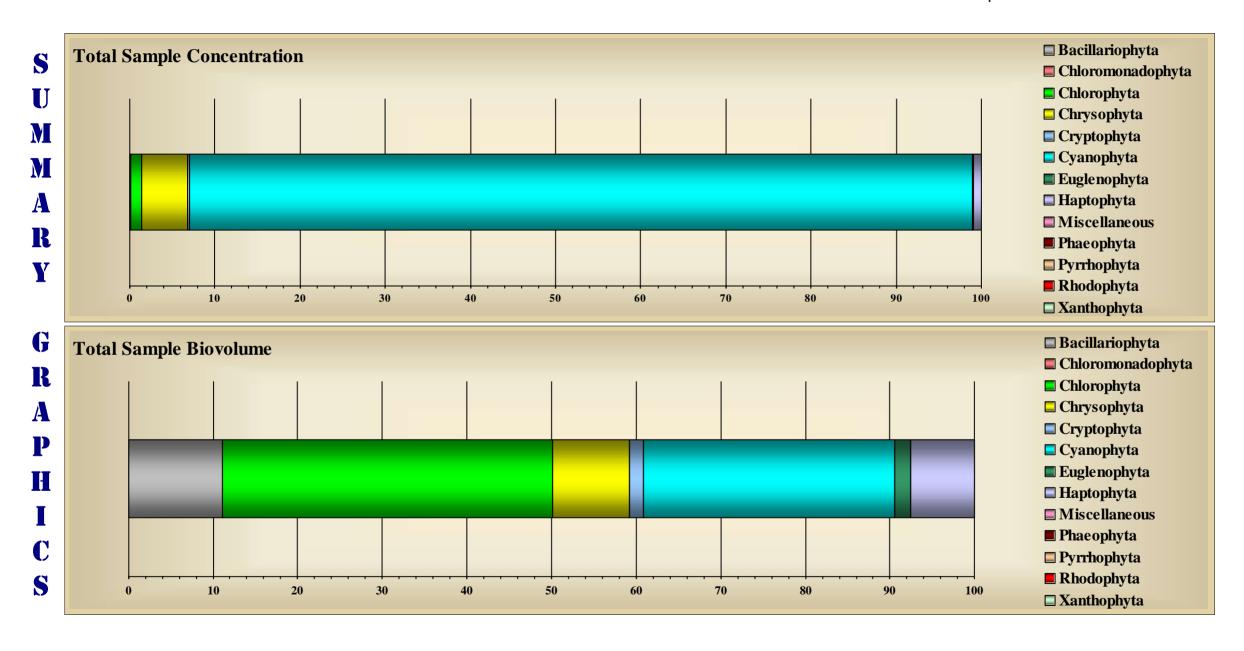
31,201.687

Summary for Division ~ Haptophyta (1 detail record)

NU/ml

96,598.249

μ**m**^3 /ml



Tracking Code: 210017-398 Sample ID: 20211006SL Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 10/6/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Slack Reservoir Site: public beach Preservative: Glutaraldehyde

Report Notes:

Division:	Baci	illariophyta										
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	106.67	12.704	0.02	11,710.838	0.68
☑ 1432	Aulacoseira	granulata				straight	Vegetative	310.00	33.877	0.05	527,880.805	30.77
1332	Tabellaria	flocculosa			•		Vegetative	56.53	51.026	0.08	55,159.546	3.22
		iophyta (3 detail record				Sum 7	Fotal Bacillari	ophyta	97.607	0.16	594,751.189	34.67

Division:	Chlore	phyta										
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	5.33	153.079	0.25	20,792.469	1.21
2080	Chlamydomonas	spp					Vegetative	4.00	25.513	0.04	821.097	0.05
2682	Colonial	spp					Vegetative	34.00	102.053	0.17	318,271.836	18.55
2195	Crucigenia	quadrata					Vegetative	14.00	38.112	0.06	3,319.453	0.19
2212	Dictyosphaerium	ehrenbergianum					Vegetative	130.00	8.469	0.01	3,405.683	0.20
8041	Monoraphidium	capricornutum					Vegetative	4.00	4.235	0.01	33.076	0.00
2363	Oocystis	parva					Vegetative	12.80	76.539	0.12	4,924.531	0.29
2381	Pediastrum	duplex					Vegetative	80.00	0.256	0.00	227.215	0.01
2463	Quadrigula	closterioides		·			Vegetative	25.00	8.469	0.01	2,440.740	0.14

Sample Date: 10/6/2021

Phytoplankton - Grab

*. Mallomonas Stichogloea Crypto Genus Crypto Genus	sophyta Species erosa minuta ta (2 detail records)	Subspecies Subspecies Subspecies	Variety	Form	Morph .	Structure Vegetative Vegetative	GALD μm 14.00 8.00	Count NU/ml 8.469 204.105	0.27 Relative Count 0.01 0.33	Total Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 16,003.368 Total Biovolume μm^3 /ml 2,625.214 6,839.624 Total Biovolume μm/3 /ml 10,875.716	Relative Total Biovolume
*. Mallomonas Stichogloea Vision ~ Chrysophys Crypto Genus Cryptomonas Plagioselmis Vision ~ Cryptophys	spp caudata olivacea wta (3 detail records) sophyta Species erosa minuta wta (2 detail records)	Subspecies	Variety	Form	Sum To	Vegetative Vegetative Vegetative Structure Vegetative Vegetative	μm 4.53 30.00 30.00 hyta GALD μm 14.00 8.00	NU/ml 153.079 4.235 8.469 165.783 Count NU/ml 8.469 204.105	0.25 0.01 0.01 0.27 Relative Count 0.01 0.33	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 16,003.368 Total Biovolume μm^3 /ml 2,625.214 6,839.624	Total Biovolume 0.32 0.30 0.31 0.93 Relative Total Biovolume 0.15 0.40
*. Mallomonas Stichogloea Crypto Genus Crypto Genus	spp caudata olivacea wta (3 detail records) cophyta Species erosa minuta	Subspecies	Variety	Form	Sum To	Vegetative Vegetative Vegetative Structure Vegetative Vegetative	μm 4.53 30.00 30.00 hyta GALD μm 14.00 8.00	NU/ml 153.079 4.235 8.469 165.783 Count NU/ml 8.469 204.105	0.25 0.01 0.01 0.27 Relative Count 0.01 0.33	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 16,003.368 Total Biovolume μm^3 /ml 2,625.214 6,839.624	Total Biovolume 0.32 0.30 0.31 0.93 Relative Total Biovolume 0.15 0.40
*. Mallomonas Stichogloea Crypte Genus Cryptomonas Plagioselmis	spp caudata olivacea wta (3 detail records) cophyta Species erosa minuta	Subspecies	Variety	Form	Sum To	Vegetative Vegetative Vegetative Structure Vegetative	μm 4.53 30.00 30.00 hyta GALD μm 14.00 8.00	NU/ml 153.079 4.235 8.469 165.783 Count NU/ml 8.469 204.105	0.25 0.01 0.01 0.27 Relative Count 0.01 0.33	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 Total Biovolume μm^3 /ml 2,625.214 6,839.624	Total Biovolume 0.32 0.30 0.31 0.93 Relative Total Biovolume 0.15 0.40
Chryse Genus * Mallomonas Stichogloea vision ~ Chrysophys Crypto Genus Cryptomonas	spp caudata olivacea wta (3 detail records) cophyta Species				Sum To	Vegetative Vegetative Vegetative Cal Chrysopl Structure	μm 4.53 30.00 30.00 hyta GALD μm	NU/ml 153.079 4.235 8.469 165.783 Count NU/ml	0.25 0.01 0.01 0.27 Relative Count	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 16,003.368 Total Biovolume μm^3 /ml 2,625.214	0.32 0.30 0.31 0.93 Relative Total Biovolume
Chryse Genus * Mallomonas Stichogloea vision ~ Chrysophyse Crypte	spp caudata olivacea vta (3 detail records)				Sum To	Vegetative Vegetative Vegetative	μm 4.53 30.00 30.00 hyta	NU/ml 153.079 4.235 8.469 165.783	0.25 0.01 0.01 0.27 Relative	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336 16,003.368 Total Biovolume	0.32 0.30 0.31 0.93 Relative Total
Chryse Genus *. Mallomonas Stichogloea vision ~ Chrysophys	spp caudata olivacea wta (3 detail records)	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	Vegetative Vegetative Vegetative	μm 4.53 30.00 30.00	NU/ml 153.079 4.235 8.469	0.25 0.01 0.01	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336	0.32 0.30 0.31
Chryse Genus * Mallomonas Stichogloea	Species spp caudata olivacea	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	Vegetative Vegetative Vegetative	μm 4.53 30.00 30.00	NU/ml 153.079 4.235 8.469	0.25 0.01 0.01	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336	0.32 0.30 0.31
Chryse Genus *. Mallomonas Stichogloea	Species spp caudata olivacea	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	Vegetative Vegetative Vegetative	μm 4.53 30.00 30.00	NU/ml 153.079 4.235 8.469	0.25 0.01 0.01	Biovolume μm^3 /ml 5,524.508 5,108.524 5,370.336	0.32 0.30 0.31
Chryse Genus * Mallomonas	Species spp	Subspecies .		Form .		Vegetative	μm 4.53	NU/ml 153.079	Count 0.25	Biovolume μm^3 /ml 5,524.508	Total Biovolumo 0.32
Chryse	Species	Subspecies		Form			μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolum
Chrys		Subspecies	Variety	Form	Morph	Structure				Biovolume	Total
Chrys											
vision ~ Спіогорнуі											
	vta (16 detail records)					al Chloroph		680.580	1.10	374,020.238	21.80
Tetraedron	gracile					Vegetative	48.00	0.256	0.00	261.765	0.02
Sphaerocystis	schroeteri		•	-		Vegetative	16.00	51.026	0.08	10,184.208	0.59
Schroederia	judayi			•	•	Vegetative	28.00	25.513	0.04	262.643	0.02
Scenedesmus	serratus		-			Vegetative	7.60	51.026	0.08	882.311	0.05
Scenedesmus	bijuga			•	-	Vegetative	20.00	8.469	0.01	798.207	0.05
Scenedesmus	spp	•				Vegetative	17.60	51.026	0.08	2,503.303	0.15
Sce Sce Sch Spi	enedesmus enedesmus enedesmus irroederia haerocystis	enedesmus spp enedesmus bijuga enedesmus serratus enedesmus judayi haerocystis schroeteri traedron gracile	enedesmus bijuga . enedesmus serratus . enedesmus judayi . enederia judayi . enederia judayi . enederia schroeteri . enedesmus serratus . enedesmus serratus . enedesmus serratus . enedesmus serratus . enedesmus gracile .	enedesmus spp	enedesmus spp	enedesmus spp	enedesmus spp . Vegetative enedesmus bijuga . Vegetative enedesmus serratus . Vegetative enedesmus judayi . Vegetative enedesia judayi . Vegetative enedesmus gracile . Vegetative enedesmus serratus . Vegetative enedesmus serratus . Vegetative enedesmus serratus . Vegetative enedesmus serratus . Vegetative	enedesmus spp	enedesmus spp	enedesmus spp Vegetative 17.60 51.026 0.08 enedesmus bijuga Vegetative 20.00 8.469 0.01 enedesmus serratus Vegetative 7.60 51.026 0.08 troederia judayi Vegetative 28.00 25.513 0.04 haerocystis schroeteri Vegetative 16.00 51.026 0.08 traedron gracile Vegetative 48.00 0.256 0.00	enedesmus spp Vegetative 17.60 51.026 0.08 2,503.303 enedesmus bijuga Vegetative 20.00 8.469 0.01 798.207 enedesmus serratus Vegetative 7.60 51.026 0.08 882.311 droederia judayi Vegetative 28.00 25.513 0.04 262.643 haerocystis schroeteri Vegetative 16.00 51.026 0.08 10,184.208

☑ = **Identification** is **Uncertain**

210017-398

Sample Date: 10/6/2021

Friday, July 1, 2022

* = Family Level Identification

Phytoplankton - Grab

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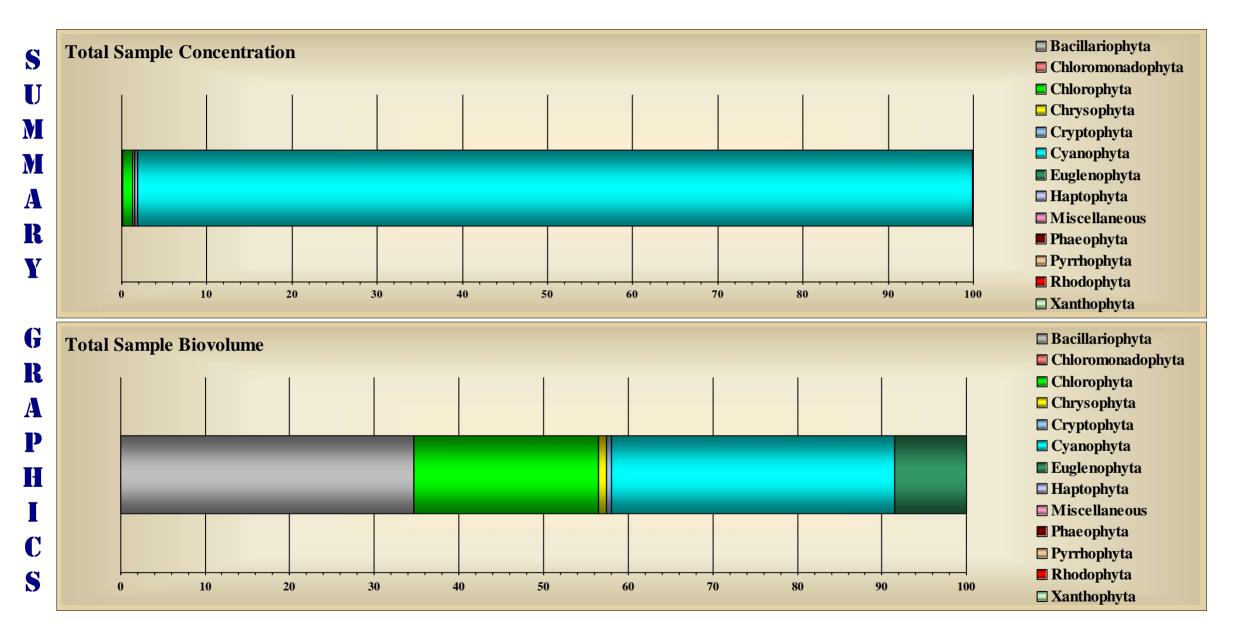
ummary for	Division ~ Cyanophy	ta (10 detail records)				Sum To	otal Cyanoph	nyta	60,542.936	98.02	574,025.181	33.46
4091	Woronichinia	naegeliana					Vegetative	88.00	0.256	0.00	1,396.004	0.08
4092	Woronichinia	naegeliana			•	•	Vegetative	5.00	25.513	0.04	601.138	0.04
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	19,134.855	30.98	7,694.125	0.45
4261	Microcystis	aeruginosa					Vegetative	74.67	76.539	0.12	544,434.402	31.74
4264	Microcystis	aeruginosa		-	•	-	Vegetative	4.00	229.618	0.37	7,694.577	0.45
10651	Cyanogranis	ferruginea		-	•	-	Vegetative	8.30	357.184	0.58	857.813	0.05
1000080	Cyanodictyon	planctonicum		-	•	-	Vegetative	9.60	25.513	0.04	246.227	0.01
4062	Aphanothece	nidulans		-	•	•	Vegetative	6.80	102.053	0.17	118.310	0.01
4054	Aphanocapsa	delicatissima	•	•	-	•	Vegetative	6.40	25.513	0.04	106.869	0.01

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
5040	Trachelomonas	spp			•	•	Vegetative	17.20	51.026	0.08	108,342.446	6.32
5047	Trachelomonas	volvocina		-			Vegetative	20.00	12.704	0.02	38,792.854	2.26
Summary for I	Division ~ Euglenoph	yta (2 detail records)				Sum T	Total Euglenop	ohyta	63.730	0.10	147,135.300	8.58

Total Sample Biovolume





Tracking Code: 210008-398 Sample ID: 20210820ST Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/20/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Stafford Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	Bacilla	riophyta										
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	120.00	0.511	0.00	2,006.796	0.49
☑ 9363	Cyclotella	ocellata					Vegetative	3.84	459.237	0.71	9,492.051	2.34
9361	Discostella	pseudostelligera					Vegetative	3.84	1,836.946	2.82	41,846.182	10.30
1152	Fragilaria	crotonensis		•			Vegetative	176.00	0.511	0.00	11,307.438	2.78
☑ 9504	Fragilaria	tenera				•	Vegetative	47.20	204.105	0.31	38,535.046	9.48
1157	Pseudostaurosira	brevistriata				•	Vegetative	20.00	51.026	0.08	7,694.579	1.89
1330	Tabellaria	spp				•	Vegetative	28.00	51.026	0.08	45,719.546	11.25
1332	Tabellaria	flocculosa					Vegetative	83.33	25.408	0.04	90,857.984	22.36
Summary for I	Division ~ Bacillariop	hyta (8 detail records)				Sum 7	Fotal Bacillari	ophyta	2,628.771	4.04	247,459.623	60.89

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
2687	*Chlorococcaceae	spp				> 1 um ovoid	Vegetative	4.80	51.026	0.08	1,313.207	0.32
2683	*Chlorococcaceae	spp				2-9.9 um spherical	Vegetative	1.60	102.053	0.16	218.872	0.05
2080	Chlamydomonas	spp					Vegetative	4.80	51.026	0.08	1,313.207	0.32
2488	Desmodesmus	denticulatus		·			Vegetative	6.00	8.469	0.01	239.462	0.06

Sample Date: 8/20/2021

1000538	Monomastix	minuta					Vegetative	3.20	102.053	0.16	492.455	0.12
8041	Monoraphidium	capricornutum					Vegetative	4.00	102.053	0.16	793.173	0.20
2363	Oocystis	parva					Vegetative	14.00	8.469	0.01	3,476.634	0.86
8308	Scenedesmus	serratus			-		Vegetative	4.00	8.469	0.01	35.476	0.01
2641	Sphaerocystis	schroeteri					Vegetative	26.67	16.939	0.03	7,000.570	1.72
	Division ~ Chlorophy	ta (9 detail records)					tal Chloroph		450.557	0.69	14,883.056	3.66
Division:	Chrys	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD	Count	Relative	Total	Relative
								μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolum
1652	*	spp		-		-	Vegetative	1.60	459.237	0.71	554.023	0.14
1180	Mallomonas	spp	•	-		•	Vegetative	16.00	8.469	0.01	1,915.697	0.47
	Division ~ Chrysophy	ta (2 detail records)					tal Chrysopl		467.706	0.72	2,469.720	0.61
Division:	Crypt	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3/ml	Relative Total Biovolume
							Vegetative	20.00	8.469	0.01	8,691.586	2.14
3015	Cryptomonas	erosa		•	•	•	vegetative					
3015 3043	Cryptomonas Plagioselmis	erosa minuta		nannoplanctica		•	Vegetative	8.00	153.079	0.24	5,129.718	1.26
	Plagioselmis	minuta		•			Vegetative				5,129.718 13,821.304	
3043	Plagioselmis	minuta a (2 detail records)		•			Vegetative					
3043 ummary for I	Plagioselmis Division ~ Cryptophys	minuta a (2 detail records)	Subspecies	•	Form		Vegetative					
3043 mmary for I ivision: Taxa ID	Plagioselmis Division ~ Cryptophys Cyano	minuta a (2 detail records) phyta				Sum To	Vegetative	nyta GALD	161.548 Count	0.25	Total Biovolume	3.40 Relative Total
3043 ummary for I	Plagioselmis Division ~ Cryptophys Cyano Genus	minuta a (2 detail records) phyta Species				Sum To	Vegetative tal Cryptoph Structure	GALD μm	Count NU/ml	0.25 Relative Count	Total Biovolume µm^3 /ml	3.40 Relative Total Biovolume
3043 ummary for I Division: Taxa ID	Plagioselmis Division ~ Cryptophys Cyano Genus *Chroococcaceae	minuta a (2 detail records) phyta Species spp				Sum To	Vegetative tal Cryptoph Structure Vegetative	GALD μm	Count NU/ml 43,627.469	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolum

☑ = **Identification** is **Uncertain**

210008-398 Phytoplankton - Grab Sample Date: 8/20/2021

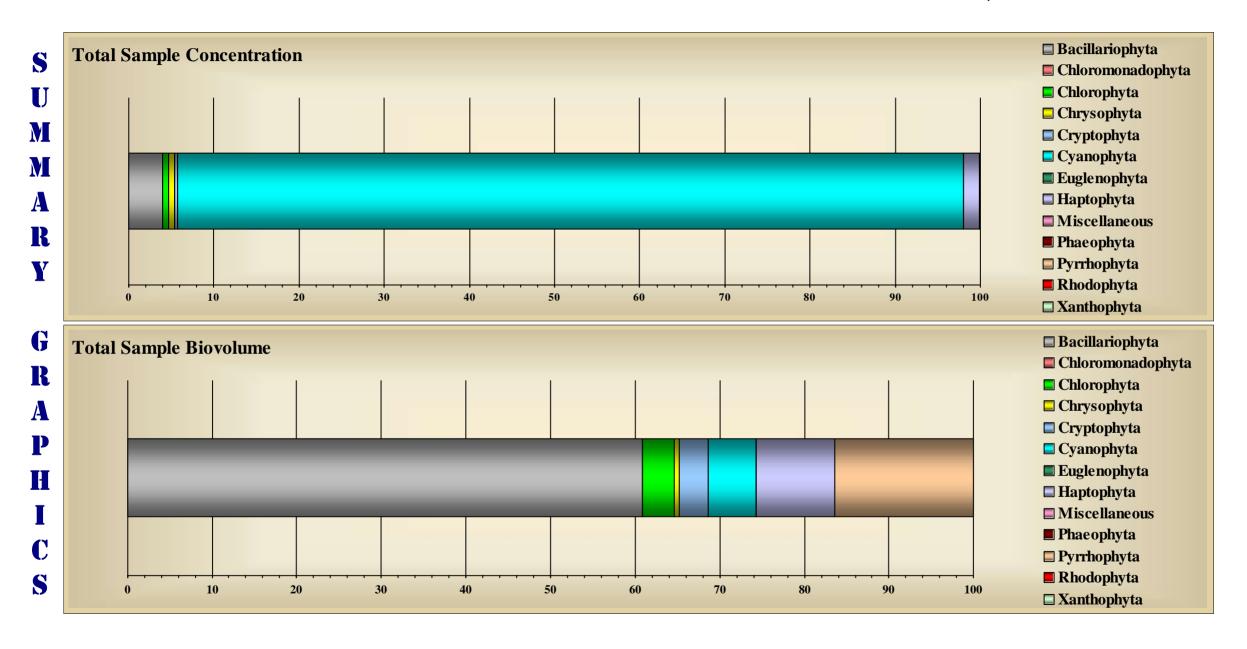
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Friday, July 1, 2022

4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	16,073.278	24.71	6,463.065	1.59
ummary for l	Division ~ Cyanophyte	a (5 detail records)				Sum T	otal Cyanoph	yta	60,057.931	92.32	23,298.711	5.73
ivision:	Hapto	phyta										
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	1,173.604	1.80	37,770.463	9.29
ummary for I	Division ~ Haptophyta	ı (1 detail record)				Sum T	otal Haptoph	yta	1,173.604	1.80	37,770.463	9.29
Division:	Pyrrho	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6040	Peridinium	spp					Vegetative	12.00	8.469	0.01	2,660.690	0.65
124851	Peridinium	inconspicuum					Vegetative	16.00	51.026	0.08	54,443.438	13.40
6044	Peridinium	umbonatum					Vegetative	11.20	51.026	0.08	9,575.479	2.36
ummary for l	Division ~ Pyrrhophyt	a (3 detail records)				Sum T	otal Pyrrhopl	nyta	110.522	0.17	66,679.607	16.41

NU/ml

 $\mu m^3 / ml$



★ = Family Level Identification

210018-398 20211006ST **Tracking Code:** Sample ID: Replicate:

Customer ID: 398 **Sample Date:** 10/6/2021 **Sample Level:** Epi

Job ID: **Station: Sample Depth:** 0

System Name: Stafford Pond Site: **Preservative:** Glutaraldehyde boat ramp

Report Notes:

Division:	Baci	llariophyta										
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	56.00	4.235	0.01	948.555	0.45
1432	Aulacoseira	granulata				straight	Vegetative	180.00	4.235	0.01	21,551.585	10.28
1071	Cyclotella	sp. 1					Vegetative	8.00	8.469	0.02	1,702.841	0.81
9123	Nitzschia	palea					Vegetative	30.00	8.469	0.02	221.503	0.11
1334	Tabellaria	binalis					Vegetative	40.00	0.256	0.00	1,308.825	0.62
1332	Tabellaria	flocculosa					Vegetative	76.00	8.469	0.02	20,529.433	9.79
Summary for L	Division ~ Bacillar	iophyta (6 detail record	ds)			Sum 7	Fotal Bacillari	ophyta	34.132	0.08	46,262.741	22.07

Division:	Chloro	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2687	*Chlorococcaceae	spp				> 1 um ovoid	Vegetative	2.24	127.566	0.28	400.123	0.19
2683	*Chlorococcaceae	spp		•		2-9.9 um spherical	Vegetative	2.40	280.645	0.62	2,299.405	1.10
2080	Chlamydomonas	spp				-	Vegetative	8.00	25.513	0.06	2,462.266	1.17
2162	Closterium	moniliferum		•		-	Vegetative	60.00	8.469	0.02	519.763	0.25
2212	Dictyosphaerium	ehrenbergianum					Vegetative	172.00	8.469	0.02	26,606.896	12.69
2031	Monoraphidium	arcuatum				monoraphidiod	Vegetative	40.00	4.235	0.01	297.683	0.14

□ = Identification is Uncertain

210018-398 Sample Date: 10/6/2021 Friday, July 1, 2022 Page 61 of 88 * = Family Level Identification Phytoplankton - Grab

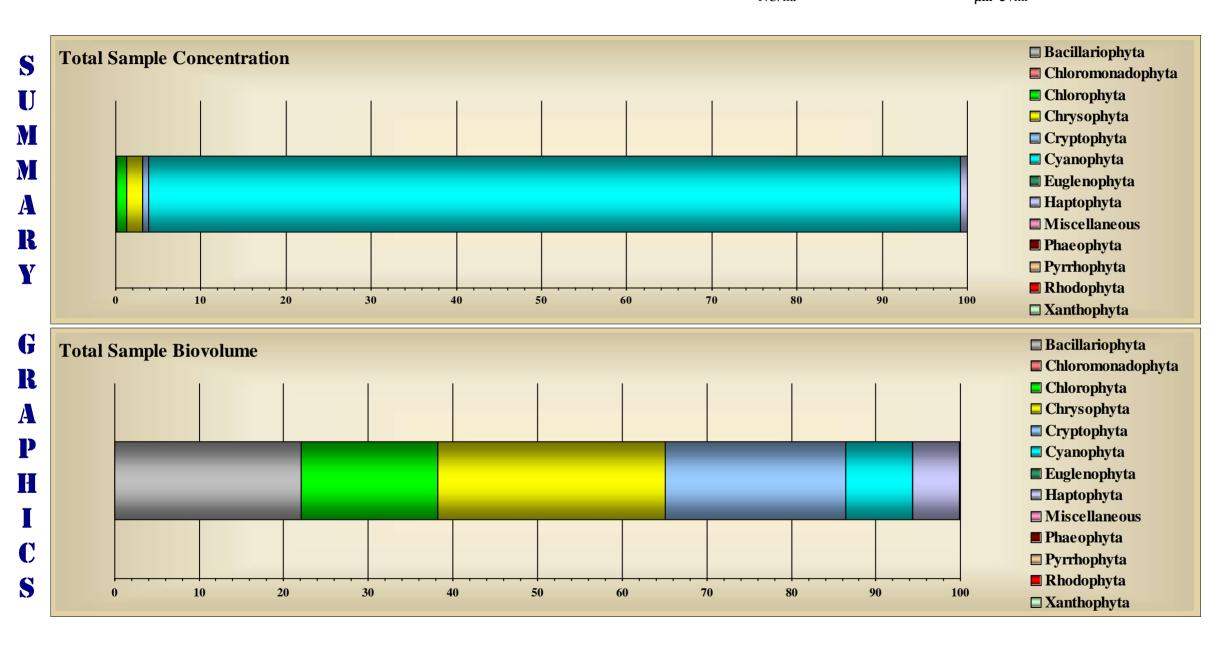
2462	Quadrigula	lacustris	•				Vegetative	16.00	51.026	0.11	1,053.305	0.50
8308	Scenedesmus	serratus		•	•		Vegetative	3.60	51.026	0.11	138.501	0.07
		yta (8 detail records)					tal Chloropl		556.949	1.23	33,777.940	16.11
Division:	Chry	sophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp					Vegetative	2.93	433.723	0.95	5,693.921	2.72
1653	*	spp					Cyst	3.20	25.513	0.06	416.122	0.20
1123	Dinobryon	spp					Monad	8.00	25.513	0.06	2,462.266	1.17
1127	Dinobryon	divergens					Vegetative	39.52	153.079	0.34	9,602.835	4.58
1128	Dinobryon	divergens					Vegetative	96.00	25.513	0.06	5,129.720	2.45
9733	Dinobryon	sociale		americana		-	Vegetative	60.00	8.469	0.02	1,995.517	0.95
1 1570	Ochromonas	spp					Vegetative	7.20	204.105	0.45	31,169.015	14.87
Division: Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD	Count	Relative	Total	Relative
								μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolume
3015	Cryptomonas	erosa					Vegetative	14.50	76.223	0.17	35,500.249	16.93
3043	Plagioselmis	minuta		nannoplanctica	-		Vegetative	8.00	204.105	0.45	6,839.624	3.26
3041	Rhodomonas	minuta					Vegetative	12.00	25.513	0.06	2,404.557	1.15
		yta (3 detail records)					tal Cryptopl		305.841	0.67	44,744.430	21.34
Division:	Cyan	ophyta										
			<u> </u>	Variety	Form	Morph	Structure	GALD	Count	Relative	Total	Relative
Taxa ID	Genus	Species	Subspecies	variety				μm	NU /ml	Count	Biovolume μm^3 /ml	Total Biovolume
	*Chroococcaceae	Species spp	Subspecies	variety		<1 um spherical	Vegetative	μm 0.80	NU /ml	43.78		

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1000915	Aphanocapsa	parasitica					Vegetative	9.60	51.026	0.11	961.825	0.46
Z 1000080	Cyanodictyon	planctonicum	•			•	Vegetative	7.52	408.210	0.90	984.889	0.47
4323	Synechococcus	sp. 1		•		< 1um ovoid	Vegetative	1.20	22,961.826	50.51	9,232.950	4.40
Summary for I	Division ~ Cyanophy	ta (4 detail records)				Sum T	otal Cyanoph	yta	43,321.311	95.30	16,514.921	7.88
Division:	Hapto	phyta										
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	357.184	0.79	11,495.358	5.48
Summary for I	Division ~ Haptophy	ta (1 detail record)				Sum T	otal Haptoph	yta	357.184	0.79	11,495.358	5.48
Division:	Pyrrh	ophyta										
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	4.235	0.01	399.104	0.19
Summary for	Division ~ Pyrrhophy	rta (1 detail record)				Sum T	otal Pyrrhopl	hyta	4.235	0.01	399.104	0.19

45,455.568 NU/ml

μ**m**^3 /ml



Tracking Code: 210009-398 Sample ID: 20210818W Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/18/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Warwick Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	Bac	illariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1071	Cyclotella	sp. 1					Vegetative	4.00	382.697	0.26	9,618.211	0.15
9361	Discostella	pseudostelligera					Vegetative	4.27	637.829	0.43	19,920.404	0.32
1477	Fragilaria	filiformis					Vegetative	108.00	127.566	0.09	35,269.364	0.57
Summary for I	Division ~ Bacilla	riophyta (3 detail records)				Sum '	Fotal Bacillari	ophyta	1,148.091	0.77	64,807.980	1.04

Division:	Chlore	ophyta										
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	2.27	1,275.657	0.86	10,758.126	0.17
2080	Chlamydomonas	spp					Vegetative	8.00	42.346	0.03	7,613.121	0.12
2171	Coelastrum	microporum					Vegetative	20.00	21.173	0.01	5,676.138	0.09
2175	Coelastrum	pseudomicroporum					Vegetative	12.00	21.173	0.01	709.517	0.01
10611	Coelastrum	reticulatum		duplex			Vegetative	12.00	21.173	0.01	9,578.481	0.15
2031	Monoraphidium	arcuatum				monoraphidiod	Vegetative	30.00	255.131	0.17	8,401.375	0.13
8101	Pyramichlamys	dissecta					Vegetative	16.00	255.131	0.17	106,869.184	1.72
8308	Scenedesmus	serratus			•		Vegetative	4.80	127.566	0.09	318.047	0.01
2501	Selenastrum	minutum		•	•	•	Vegetative	8.00	127.566	0.09	3,303.850	0.05

Sample Date: 8/18/2021

2641	Sphaerocystis	schroeteri			-		Vegetative	20.00	21.173	0.01	11,086.207	0.18
2554	Tetraedron	minimum					Vegetative	5.60	255.131	0.17	10,401.197	0.17
	Division ~ Chlorophy						tal Chloropl		2,423.221	1.63	174,715.242	2.80
Division:	Chrys	ophyta										
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	2.27	1,658.354	1.11	12,382.930	0.20
	Division ~ Chrysophy						tal Chrysop		1,658.354	1.11	12,382.930	0.20
Division:	Cyano	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	94,398.617	63.45	25,308.269	0.41
₫ 130651	*.	spp				-	Vegetative	152.40	3,444.274	2.31	4,252,025.653	68.24
10651	Cyanogranis	ferruginea				-	Vegetative	7.20	637.829	0.43	1,962.981	0.03
4113	Dactylococcopsis	irregularis					Vegetative	15.20	637.829	0.43	762.843	0.01
Z 4331	Dolichospermum	macrosporum				-	Vegetative	480.00	21.173	0.01	133,034.477	2.14
4264	Microcystis	aeruginosa				-	Vegetative	4.00	12,246.307	8.23	410,377.423	6.59
Z 4269	Microcystis	wesenbergii				•	Vegetative	32.00	255.131	0.17	115,418.714	1.85
4153	Planktolyngbya	limnetica				-	Vegetative	76.00	127.566	0.09	7,614.435	0.12
4321	Synechococcus	elongatus					Vegetative	3.20	127.566	0.09	213.736	0.00
4323	Synechococcus	sp. 1		•	•	< 1um ovoid	Vegetative	1.20	29,340.111	19.72	11,797.659	0.19
	Division ~ Cyanophyt						tal Cyanoph		141,236.402	94.93	4,958,516.190	79.58

* = Family Level Identification Phytoplankton - Grab

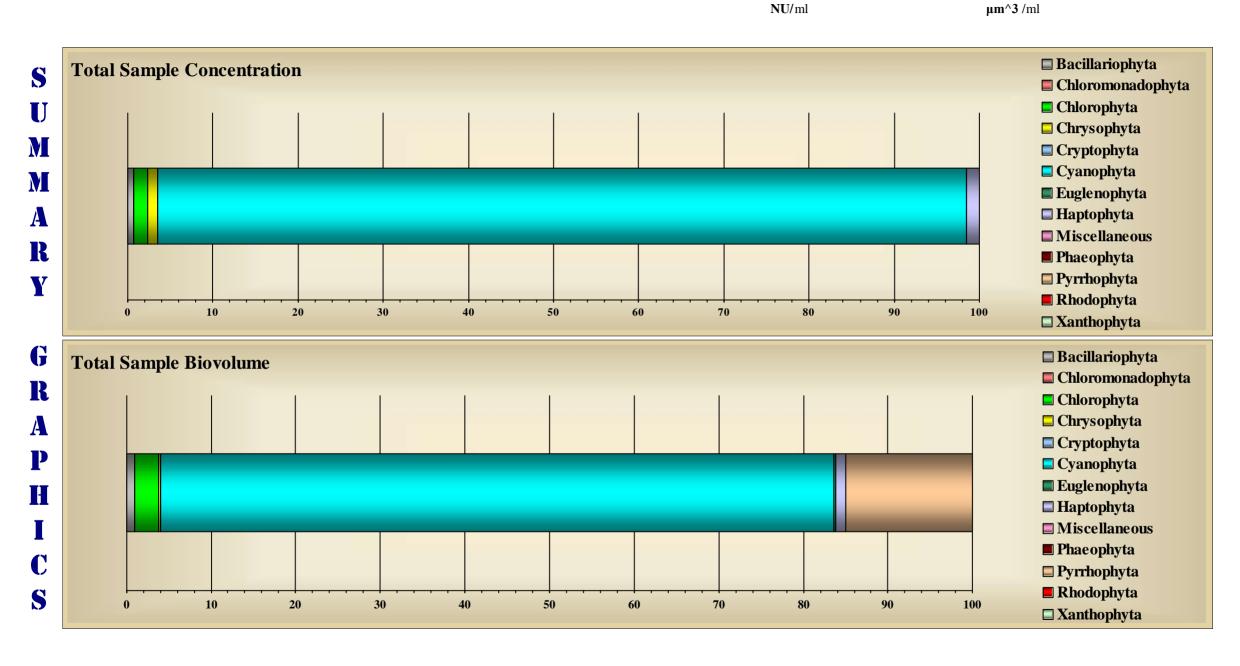
Division:	Euglen	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5040	Trachelomonas	spp					Vegetative	48.00	1.278	0.00	12,335.387	0.20
	Division ~ Euglenophy						Total Euglenop	_	1.278	0.00	12,335.387	0.20
Division:	Hapto	phyta										
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	2,296.183	1.54	73,898.733	1.19
	Division ~ Haptophyta						Total Haptoph		2,296.183	1.54	73,898.733	1.19
Division:	Pyrrho	phyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6011	Ceratium	hirundinella					Vegetative	160.00	21.173	0.01	934,212.440	14.99
	Division ~ Pyrrhophyt						Total Pyrrhopl		21.173	0.01	934,212.440	14.99

Friday, July 1, 2022 **☑** = **Identification** is **Uncertain** 210009-398 Sample Date: 8/18/2021 Page 67 of 88 * = Family Level Identification Phytoplankton - Grab

148,784.702

6,230,868.902 μm[^]3 /ml

Total Sample Biovolume



Tracking Code: 210019-398 Sample ID: 20211006W Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 10/6/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Warwick Pond Site: boat ramp Preservative: Glutaraldehyde

Report Notes:

Division:	Bac	illariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
9361	Discostella	pseudostelligera					Vegetative	4.80	637.829	0.25	27,700.509	0.19
1477	Fragilaria	filiformis					Vegetative	95.20	338.770	0.13	94,381.186	0.65
9776	Synedra	ulna		acus			Vegetative	172.00	637.829	0.25	1,123,394.567	7.75
		iophyta (3 detail records)				Sum 7	Fotal Bacillari	ophyta	1,614.427	0.64	1,245,476.262	8.59

Division:	Chlore	ophyta										
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	6.40	1,275.657	0.51	77,971.727	0.54
1000012	Closterium	spp			•	straight	Vegetative	100.00	42.346	0.02	3,991.035	0.03
2171	Coelastrum	microporum			•	-	Vegetative	16.00	42.346	0.02	11,352.277	0.08
2385	Monactinus	simplex				•	Vegetative	24.00	2.556	0.00	1,295.737	0.01
2031	Monoraphidium	arcuatum				monoraphidiod	Vegetative	24.00	42.346	0.02	1,338.783	0.01
1000031	Monoraphidium	griffithii				straight	Vegetative	100.00	84.692	0.03	3,547.586	0.02
8308	Scenedesmus	serratus					Vegetative	4.00	637.829	0.25	3,419.845	0.02
2554	Tetraedron	minimum					Vegetative	6.00	42.346	0.02	2,136.789	0.01

Sample Date: 10/6/2021

	Division ~ Chiorophy.	ta (8 detail records)				Sum To	tal Chloroph	nyta	2,170.119	0.86	105,053.778	0.72
Division:	Chrys	ophyta										
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	1.70	21,048.340	8.34	36,988.248	0.26
	Division ~ Chrysophy						tal Chrysopl		21,048.340	8.34	36,988.248	0.26
Division:	Crypt	ophyta										
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	17.00	33.232	0.01	9,465.695	0.07
3043	Plagioselmis	minuta		nannoplanctica	-		Vegetative	8.00	5.113	0.00	171.325	0.00
	Division ~ Cryptophy						tal Cryptopl		38.345	0.02	9,637.020	0.07
Division:	Cvano	ophyta					JII					
Division: Taxa ID	Cyano	ophyta Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
	•		Subspecies	Variety	Form			GALD	Count	Relative	Biovolume	Total
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Biovolume μm^3 /ml	Total Biovolume
Taxa ID 4282	Genus *Chroococcaceae	Species spp		Variety		Morph <1 um spherical	Structure Vegetative	GALD μm	Count NU/ml 21,686.169	Relative Count	Biovolume μm^3 /ml 5,814.062	Total Biovolume 0.04
Taxa ID 4282 1000345 4050	*Chroococcaceae *Chroococcaceae	Species spp spp		Variety		Morph <1 um spherical	Structure Vegetative Vegetative	GALD μm 0.80 1.60	Count NU/ml 21,686.169 1,275.657	Relative Count 8.59 0.51	Biovolume μm^3 /ml 5,814.062 1,538.953	Total Biovolume 0.04 0.01
Taxa ID 4282 1000345 4050	*Chroococcaceae *Chroococcaceae Aphanocapsa	Species spp spp spp		Variety		Morph <1 um spherical	Structure Vegetative Vegetative Vegetative	GALD μm 0.80 1.60 26.00	Count NU/ml 21,686.169 1,275.657 1,275.657	Relative Count 8.59 0.51	Biovolume μm^3 /ml 5,814.062 1,538.953 150,471.778	0.04 0.01 1.04
Taxa ID 4282 1000345 4050 4048	*Chroococcaceae *Chroococcaceae Aphanocapsa Chrysosporum	Species spp spp spp ovalisporum	· .	Variety		Morph <1 um spherical	Structure Vegetative Vegetative Vegetative Vegetative	GALD μm 0.80 1.60 26.00 297.00	Count NU/ml 21,686.169 1,275.657 1,275.657 169.385	Relative Count 8.59 0.51 0.51	Biovolume μm ³ /ml 5,814.062 1,538.953 150,471.778 616,348.733	0.04 0.01 1.04 4.25
4282 1000345 4050 4048 4046	*Chroococcaceae *Chroococcaceae Aphanocapsa Chrysosporum Cuspidothrix	Species spp spp spp ovalisporum issatschenkoi	· .	Variety		Morph <1 um spherical	Structure Vegetative Vegetative Vegetative Vegetative Vegetative	GALD μm 0.80 1.60 26.00 297.00 115.00	Count NU/ml 21,686.169 1,275.657 1,275.657 169.385 84.692	Relative Count 8.59 0.51 0.51 0.07 0.03	Biovolume μm^3 /ml 5,814.062 1,538.953 150,471.778 616,348.733 23,613.616	0.04 0.01 1.04 4.25 0.16
Taxa ID 4282 1000345 4050 4048 4046 10651 4113	*Chroococcaceae *Chroococcaceae Aphanocapsa Chrysosporum Cuspidothrix Cyanogranis	Species spp spp spp ovalisporum issatschenkoi ferruginea	· .	Variety		Morph <1 um spherical	Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative	GALD μm 0.80 1.60 26.00 297.00 115.00 6.40	Count NU/ml 21,686.169 1,275.657 1,275.657 169.385 84.692 1,275.657	Relative Count 8.59 0.51 0.51 0.07 0.03 0.51	Biovolume μm^3 /ml 5,814.062 1,538.953 150,471.778 616,348.733 23,613.616 3,184.167	Total Biovolume 0.04 0.01 1.04 4.25 0.16 0.02
4282 1000345 4050 4048 4046 10651	*Chroococcaceae *Chroococcaceae *Chroococcaceae Aphanocapsa Chrysosporum Cuspidothrix Cyanogranis Dactylococcopsis	Species spp spp spp ovalisporum issatschenkoi ferruginea irregularis	· .	Variety		Morph <1 um spherical > 1 um ovoid	Structure Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative Vegetative	GALD μm 0.80 1.60 26.00 297.00 115.00 6.40 9.60	Count NU/ml 21,686.169 1,275.657 1,275.657 169.385 84.692 1,275.657 637.829	Relative Count 8.59 0.51 0.51 0.07 0.03 0.51 0.25	Biovolume μm^3 /ml 5,814.062 1,538.953 150,471.778 616,348.733 23,613.616 3,184.167 472.312	Total Biovolume 0.04 0.01 1.04 4.25 0.16 0.02 0.00

☑ = **Identification** is **Uncertain**

210019-398

Sample Date: 10/6/2021

Friday, July 1, 2022 Page 70 of 88 * = Family Level Identification Phytoplankton - Grab

4161	Merismopedia	tenuissima				•	Vegetative	8.53	1,913.486	0.76	29,175.870	0.20
4261	Microcystis	aeruginosa				-	Vegetative	33.14	3,826.971	1.52	2,190,390.936	15.11
4264	Microcystis	aeruginosa					Vegetative	4.24	181,781.120	71.99	7,421,941.362	51.21
4153	Planktolyngbya	limnetica					Vegetative	25.60	637.829	0.25	12,824.307	0.09
4460	Pseudanabaena	spp					Vegetative	140.00	42.346	0.02	10,476.464	0.07
4172	Pseudanabaena	limnetica					Vegetative	156.00	84.692	0.03	23,347.555	0.16
4023	Raphidiopsis	raciborskii				straight	Vegetative	122.50	127.039	0.05	35,358.073	0.24
4321	Synechococcus	elongatus					Vegetative	2.40	1,275.657	0.51	1,602.991	0.01
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	9,567.427	3.79	3,847.063	0.03
4285	Synechocystis	spp				>1 um spherical	Vegetative	1.50	1,275.657	0.51	2,236.227	0.02
4091	Woronichinia	naegeliana	•			-	Vegetative	136.00	7.669	0.00	31,991.758	0.22
Summary for Division ~ Cyanophyta (21 detail records)						Sum Total Cyanophyta			227,627.669	90.15	12,913,438.914	89.10

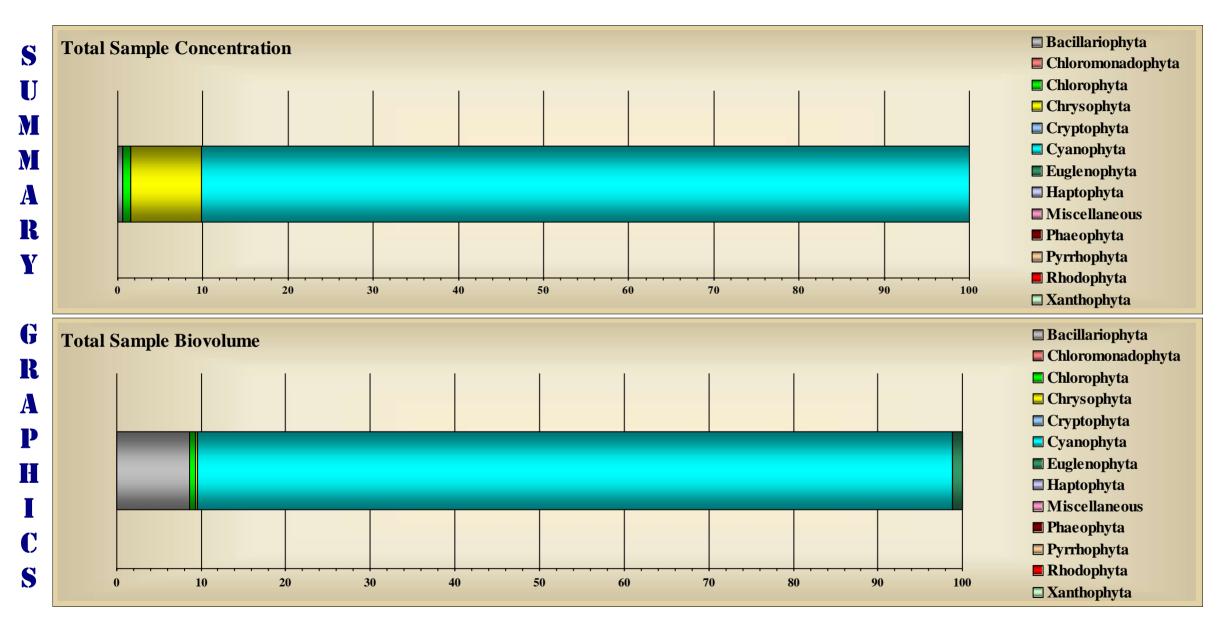
Division: Euglenophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
5050	Lepocinclis	spp		•	•		Vegetative	128.00	5.113	0.00	132,605.412	0.91
5040	Trachelomonas	spp				-	Vegetative	40.00	5.113	0.00	49,341.549	0.34
Summary for Division ~ Euglenophyta (2 detail records)						Sum Total Euglenophyta			10.225	0.00	181,946.961	1.26

14,492,541.184

Total Sample Biovolume





Tracking Code: 210010-398 Sample ID: 20210819Y Replicate:

<u>Customer ID:</u> 398 <u>Sample Date:</u> 8/19/2021 <u>Sample Level:</u> Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Yawagoo Pond Site: near shore Preservative: Glutaraldehyde

Report Notes: .

Division:	Bacil	lariophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
9361	Discostella	pseudostelligera					Vegetative	6.00	42.346	0.03	3,591.931	0.65
1140	Eunotia	spp					Vegetative	64.00	2.556	0.00	37,006.162	6.67
1000913	Fragilaria	spp					Vegetative	72.00	42.346	0.03	21,551.585	3.89
1161	Gomphonema	parvulum					Vegetative	12.00	84.692	0.06	9,977.584	1.80
1210	Navicula	spp					Vegetative	27.00	84.692	0.06	32,327.377	5.83
Summary for 1	Division ~ Bacillari	ophyta (5 detail records)				Sum '	Fotal Bacillari	ophyta	256.634	0.19	104,454.638	18.84

Division:	Chlore	ophyta										
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	2.40	510.263	0.38	3,693.384	0.67
2193	Crucigenia	tetrapedia		·			Vegetative	16.00	255.131	0.19	31,350.546	5.65
2483	Scenedesmus	bijuga					Vegetative	8.00	42.346	0.03	1,099.752	0.20
Summary for I	Division ~ Chlorophy	a (3 detail records)				Sum Tot	al Chloropl	hyta	807.740	0.61	36,143.682	6.52

Division:	Chrys	ophyta										
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	2.00	1,275.657	0.96	5,300.738	0.96
1180	Mallomonas	spp				•	Vegetative	40.00	42.346	0.03	28,735.446	5.18
☑ 1570	Ochromonas	spp			-	-	Vegetative	8.00	42.346	0.03	6,385.653	1.15
	Division ~ Chrysophy						tal Chrysopl		1,360.349	1.02	40,421.837	7.29
Division:	Crypt	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	8.00	42.346	0.03	1,419.034	0.26
	Division ~ Cryptophy Cyan o	ta (1 detail record)					tal Cryptopl		42.346	0.03	1,419.034	0.26
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	81,642.047	61.48	21,888.233	3.95
4054	Aphanocapsa	delicatissima	•			-	Vegetative	3.60	765.394	0.58	2,003.802	0.36
1000108	Aphanocapsa	incerta	•			-	Vegetative	24.00	255.131	0.19	42,747.674	7.71
☑ 4069	Aphanothece	stagnina	•		-		Vegetative	560.00	2.556	0.00	159,332.085	28.73
10651	Cyanogranis	ferruginea					Vegetative	9.00	1,020.526	0.77	2,311.899	0.42
4113	Dactylococcopsis	irregularis				-	Vegetative	16.00	255.131	0.19	321.721	0.06
☑ 4331	Dolichospermum	macrosporum				-	Vegetative	176.00	2.556	0.00	8,480.579	1.53
1000547	Jaaginema	spp					Vegetative	55.60	510.263	0.38	22,282.207	4.02
4166	Merismopedia	warmingiana					Vegetative	32.00	255.131	0.19	788.739	0.14

								•			$\mu m^3 / ml$	Biovolume
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume	Relative Total
ivision:	Miscell	aneous										
	Division ~ Haptophyta						tal Haptoph	yta	765.394	0.58	24,632.911	4.44
1731	Chrysochromulina	parva	·				Vegetative	4.00	765.394	0.58	24,632.911	4.44
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
Division:	Haptoj	ohyta					, ir	•		,		
	Division ~ Cyanophyta						tal Cyanoph		129,313.331	97.37	344,398.858	62.10
4092	Woronichinia	naegeliana	•				Vegetative	5.00	84.692	0.06	1,995.513	0.36
4090	Woronichinia	spp					Vegetative	60.00	84.692	0.06	20,952.928	3.78
4285	Synechocystis	spp				>1 um spherical	Vegetative	1.50	765.394	0.58	1,341.736	0.24
4323	Synechococcus	sp. 1	•			< 1um ovoid	Vegetative	1.20	40,821.024	30.74	16,414.134	2.96
4321	Synechococcus	elongatus					Vegetative	2.30	1,785.920	1.34	2,049.700	0.37
4191	Pseudanabaena	mucicola				•	Vegetative	5.20	765.394	0.58	3,125.946	0.56
4172	Pseudanabaena	limnetica	•	•		•	Vegetative	9.60	255.131	0.19	4,305.138	0.78

Sum Total Miscellaneous

255.131

0.19

3,077.829

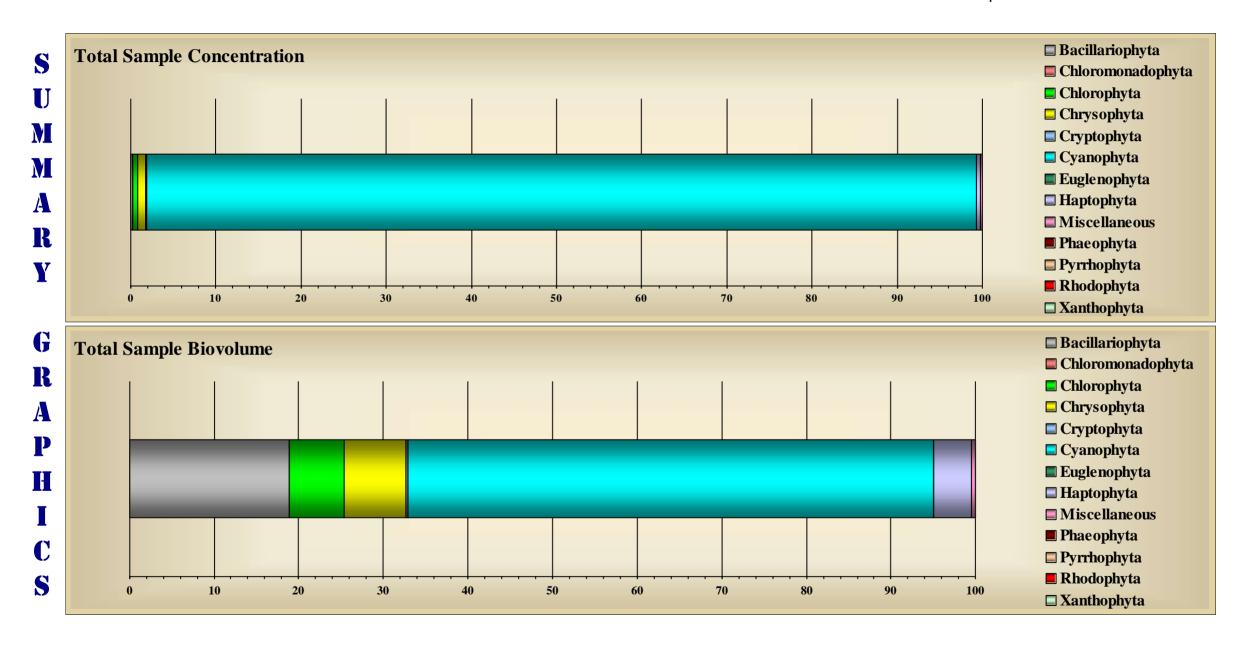
0.56

Summary for Division ~ Miscellaneous (1 detail record)

Total Sample Biovolume 554,548.788

132,800.926 NU/ml

μ**m**^3 /ml



Tracking Code: 210020-398 Sample ID: 20211006Y Replicate:

Customer ID: 398 Sample Date: 10/6/2021 Sample Level: Epi

Job ID: 1 Station: . Sample Depth: 0

System Name: Yawagoo Pond Site: near shore Preservative: Glutaraldehyde

Report Notes:

Division:	Baci	llariophyta										
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	138.67	1.278	0.00	597.217	0.49
1109	Diatoma	tenuis					Vegetative	80.00	0.852	0.00	648.567	0.53
☑ 9504	Fragilaria	tenera		-			Vegetative	56.00	0.852	0.00	1,308.825	1.07
1222	Nitzschia	gracilis		•			Vegetative	56.00	14.115	0.06	4,966.621	4.08
Summary for 1	Division ~ Bacillar	iophyta (4 detail record	ds)			Sum 7	Total Bacillari	ophyta	17.098	0.07	7,521.230	6.17

Division:	Chlore	ophyta				5 4111 200		opilj tu	17.070	0.07	7,321.230	0.17
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	2.20	85.044	0.33	485.898	0.40
2080	Chlamydomonas	spp				-	Vegetative	4.00	42.522	0.17	1,368.495	1.12
Summary for I	Division ~ Chlorophy	ta (2 detail records))			Sum Tot	al Chlorop	hyta	127.566	0.50	1,854.393	1.52

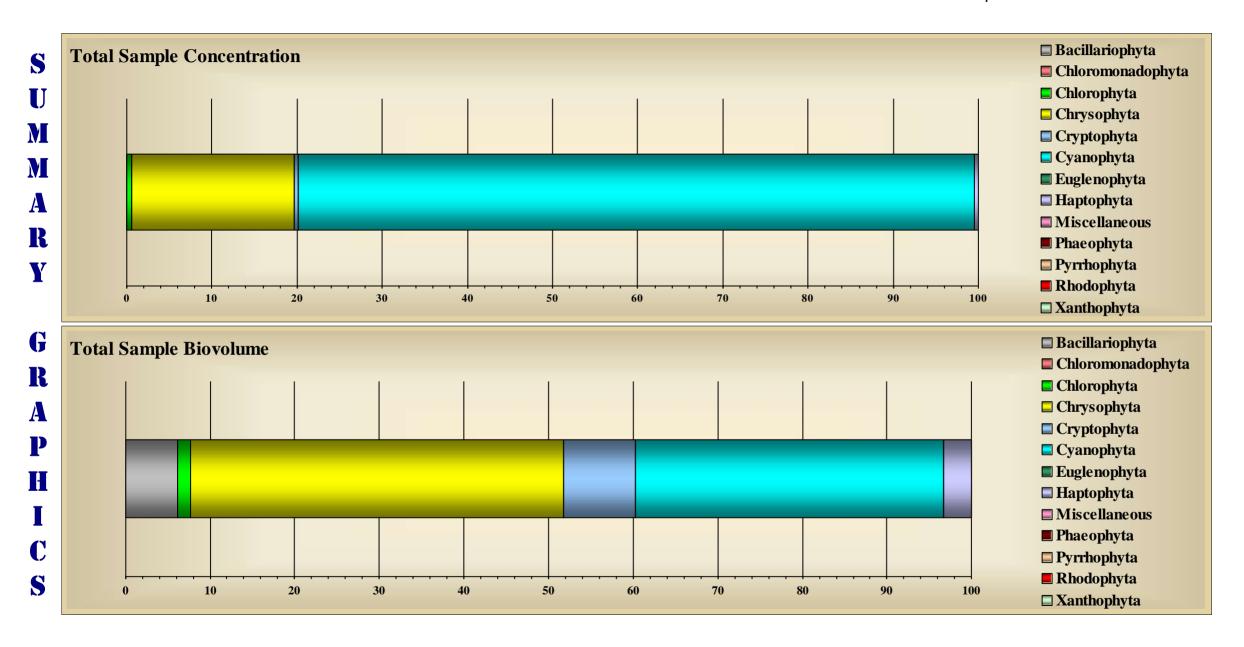
Division:	Chrys	sophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp					Vegetative	2.56	4,847.497	18.90	51,761.568	42.49
1760	Ellipsoidion	spp				-	Vegetative	8.00	42.522	0.17	1,823.900	1.50
1180	Mallomonas	spp			•	•	Vegetative	30.00	0.426	0.00	128.494	0.11
		yta (3 detail records)					al Chrysop		4,890.444	19.07	53,713.962	44.10
Division:	Crypt	tophyta										
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	12.80	35.289	0.14	4,877.932	4.00
3043	Plagioselmis	minuta		nannoplanetica			Vegetative	8.00	42.522	0.17	1,424.922	1.17
3041	Rhodomonas	minuta					Vegetative	12.00	42.522	0.17	4,007.596	3.29
	Division ~ Cryptophy	yta (3 detail records)					al Cryptopl	hyta	120.332	0.47	10,310.449	8.46
Division:	Cyan	ophyta										
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp				<1 um spherical	Vegetative	0.80	11,055.694	43.10	2,964.032	2.43
4062	Aphanothece	nidulans					Vegetative	24.00	42.522	0.17	131.457	0.11
4321	Synechococcus	elongatus		-			Vegetative	2.40	42.522	0.17	53.433	0.04
4323	Synechococcus	sp. 1				< 1um ovoid	Vegetative	1.20	5,527.847	21.55	2,222.747	1.82
1000513	Synechocystis	spp		-		>=2 um spherical	Vegetative	3.47	935.482	3.65	21,149.653	17.36
4094	Woronichinia	spp			•	•	Vegetative	3.20	2,721.402	10.61	11,672.908	9.58
1 4090	Woronichinia	spp			•	•	Vegetative	51.67	42.346	0.17	6,108.501	5.01
	Division ~ Cyanophy	rta (7 detail records)					al Cyanoph		20,367.814	79.40	44,302.730	36.37

☑ = **Identification** is **Uncertain**

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Division:	Haptoj	phyta										
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	127.566	0.50	4,105.485	3.37
	Division ~ Haptophyta					Sum 7	Total Haptoph	vta	127.566	0.50	4,105.485	3.37

μ**m**^3 /ml



Species List

Division: Bacillariophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
130832	*Stephanodiscaceae	spp					Vegetative	(Kob. & Kob.) Stoermer H†k. & Theriot.
1013	Achnanthidium	minutissima					Vegetative	Kutzing
9141	Anomoeoneis	vitrea			costata		Vegetative	(Grunow) Ross
1021	Asterionella	formosa					Vegetative	Hass.
1431	Aulacoseira	ambigua					Vegetative	(Grunow) Simonsen
1432	Aulacoseira	granulata					Vegetative	(Ehrenberg) Simonsen
9212	Cocconeis	placentula		lineata			Vegetative	(Ehrenb.) Van Heurck
1000653	Cyclotella	meneghiniana					Vegetative	
9363	Cyclotella	ocellata					Vegetative	Pant.
1071	Cyclotella	sp. 1					Vegetative	(Kutzing) de Brebisson
108977	Cymbella	delicatula		delicatula			Vegetative	Ktz.
1109	Diatoma	tenuis					Vegetative	Agardh
9361	Discostella	pseudostelligera					Vegetative	(Hust.) Houk and Klee 2004
1077	Discostella	stelligera					Vegetative	(Cleve & Grunow) Houk and Klee
131261	Encyonema	spp					Vegetative	Rabenh.
1140	Eunotia	spp					Vegetative	N"rpell-Schempp & Lange-Bert. in Lange-Bert.
1000913	Fragilaria	spp					Vegetative	Lyngbye
1150	Fragilaria	spp					Vegetative	Lyngbye
1152	Fragilaria	crotonensis		-			Vegetative	Kitton
1477	Fragilaria	filiformis					Vegetative	Grunow
9504	Fragilaria	tenera					Vegetative	W. Sm.
1161	Gomphonema	parvulum	·				Vegetative	(Ktz.) Ktz.
1720	Gyrosigma	spp					Vegetative	Hassall

1210	Navicula	spp		Vegetative	Bory .
9064	Navicula	capitatoradiata		Vegetative	Germain
1220	Nitzschia	spp		Vegetative	Hassall
1222	Nitzschia	gracilis		Vegetative	Hantzsch
9123	Nitzschia	palea		Vegetative	(Ktz.) W. Sm.
1157	Pseudostaurosira	brevistriata		Vegetative	(Grunow in Van Heurck) Williams & Round 1987
9776	Synedra	ulna	acus	Vegetative	(Nitzsch) Ehrenb.
1330	Tabellaria	spp		Vegetative	(Ehrenberg) Grunow
1334	Tabellaria	binalis		Vegetative	(Ehrenberg) Grunow
1332	Tabellaria	flocculosa		Vegetative	(Roth) Ktz.
1315	Ulnaria	ulna		Vegetative	(Nitzsch) Ehrenb.

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
2686	*.	spp					Cyst	N/A
2687	*Chlorococcaceae	spp					Vegetative	(Brandt) Beijerinck
2683	*Chlorococcaceae	spp					Vegetative	N/A
1000057	*.	spp					Vegetative	N/A
2633	Arthrodesmus	incus					Vegetative	(Brebisson) Hassall
2041	Botryococcus	braunii					Vegetative	Kuetzing
2080	Chlamydomonas	spp					Vegetative	Ehrenberg
1000012	Closterium	spp					Vegetative	
2162	Closterium	moniliferum					Vegetative	(Bory) Ehrenberg
2171	Coelastrum	microporum					Vegetative	Naeg
2175	Coelastrum	pseudomicroporum					Vegetative	Kors
10611	Coelastrum	reticulatum		duplex			Vegetative	Compere;
2681	Colonial	spp					Vegetative	N/A
2682	Colonial	spp					Vegetative	N/A

2180	Cosmarium	spp				Vegetative	Corda
2195	Crucigenia	quadrata				Vegetative	C. Morren
2193	Crucigenia	tetrapedia				Vegetative	(Kirch.) W. West and G. S. West
2191	Crucigenia	truncata				Vegetative	G. M. Smith
2488	Desmodesmus	denticulatus				Vegetative	Lagerhiem
2212	Dictyosphaerium	ehrenbergianum				Vegetative	Naegeli
2251	Eudorina	elegans				Vegetative	Ehrenberg
8171	Gloeococcus	minor				Vegetative	Braun
2323	Kirchneriella	lunaris			•	Vegetative	(Kirchner) Moebius
2324	Kirchneriella	obesa			•	Vegetative	(W. West) Schmidle
2840	Lobomonas	spp				Vegetative	Dangeard
2385	Monactinus	simplex	·			Vegetative	Meyen Lemm
2861	Monomastix	astigmata	•		•	Vegetative	Skuja
1000538	Monomastix	minuta	•		•	Vegetative	•
2031	Monoraphidium	arcuatum	•		•	Vegetative	(Corda) Ralfs
8041	Monoraphidium	capricornutum	•		•	Vegetative	(Printz) Nygaard
1000031	Monoraphidium	griffithii				Vegetative	(Corda) Ralfs
2340	Mougeotia	spp	•		•	Vegetative	Kisselew
2211	Mucidosphaerium	pulchellum	•		•	Vegetative	C.Bock, Proschold & Krienitz, 2011
2363	Oocystis	parva			•	Vegetative	West & West
2381	Pediastrum	duplex			•	Vegetative	West and West
8101	Pyramichlamys	dissecta				Vegetative	(Tiffana) Ettl
2463	Quadrigula	closterioides				Vegetative	(Bohlin) Printz
2462	Quadrigula	lacustris				Vegetative	(Chodat) G.M. Smith
2480	Scenedesmus	spp				Vegetative	Meyen
2483	Scenedesmus	bijuga				Vegetative	(Turpin) Lagerh.
8396	Scenedesmus	bijuga		alternans		Vegetative	(West and West) Chodat

8303	Scenedesmus	opoliensis	carinatus	Vegetative	Lemmermann
2884	Scenedesmus	quadricauda		Vegetative	(Turpin) Breb.
102882	Scenedesmus	raciborskii		Vegetative	
8308	Scenedesmus	serratus		Vegetative	(Corda) Bohlin
2491	Schroederia	judayi		Vegetative	G. M. Smith
2501	Selenastrum	minutum		Vegetative	(Naegeli) Collins
2641	Sphaerocystis	schroeteri		Vegetative	Chodat
2530	Staurastrum	spp		Vegetative	Meyen
2931	Teilingia	granulata		Vegetative	(Roy and Biss.) Bourrelly
2552	Tetraedron	gracile		Vegetative	(Reinsch) Hansgrig
2554	Tetraedron	minimum		Vegetative	(Braun) Hansgirg
8332	Tetraedron	muticum		Vegetative	(A. Braun) Hansgirg
2563	Tetrastrum	glabrum		Vegetative	(Roll) Ahlstrom and Tiffany

Division: Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1653	*.	spp					Cyst	N/A
1652	*.	spp					Vegetative	Cienkowski .
1000035	*Chrysocapsaceae	spp					Vegetative	N/A
1402	Bitrichia	phaseolus					Vegetative	(Fott) Fott
1481	Chrysosphaerella	longispina					Vegetative	Lauterborn
1482	Chrysosphaerella	longispina					Vegetative	Lauterborn
1123	Dinobryon	spp					Monad	Ehrenberg
1124	Dinobryon	cylindricum					Vegetative	Imhof
1127	Dinobryon	divergens					Vegetative	Imhof
1128	Dinobryon	divergens					Vegetative	Imhof
9736	Dinobryon	sociale		americana			Vegetative	(Brunnthaler) Bachmann
9733	Dinobryon	sociale		americana			Vegetative	(Brunnthaler) Bachmann

1760	Ellipsoidion	spp		Vegetative	Pascher
7111	Gonyostomum	semen		Vegetative	
1560	Kephyrion	spp		Vegetative	Pascher
1000615	Kephyrion	planetonicum		Vegetative	
1180	Mallomonas	spp		Vegetative	Perty
1183	Mallomonas	akrokomas		Vegetative	Smith
1185	Mallomonas	caudata		Vegetative	Iwanoff
1570	Ochromonas	spp		Vegetative	Wyssotzki
1611	Stichogloea	olivacea		Vegetative	Chodat
1320	Synura	spp		Vegetative	Ehrenberg
1323	Synura	spp		Vegetative	Ehrenberg

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
3015	Cryptomonas	erosa		•			Vegetative	Ehrenberg.
3043	Plagioselmis	minuta		nannoplanctica			Vegetative	Skuja
3041	Rhodomonas	minuta					Vegetative	Skuja

Division: Cyanophyta

	· · · ·		•					
Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
130651	*.	spp					Vegetative	Hansgirg
130785	*Nostocaceae	spp					Vegetative	Borge 1907
4282	*Chroococcaceae	spp					Vegetative	N/A
1000345	*Chroococcaceae	spp					Vegetative	
4041	Aphanizomenon	flos-aquae					Vegetative	(L.) Ralfs
4050	Aphanocapsa	spp					Vegetative	W. and G. S. West
4054	Aphanocapsa	delicatissima					Vegetative	West & West
4051	Aphanocapsa	elachista					Vegetative	West & West

1000545	Aphanocapsa	holsatica		Vegetative	(Lemmermann) Cronberg et Komarek 1994
1000108	Aphanocapsa	incerta		Vegetative	(Lemmermann) Cronberg et Komarek
4052	Aphanocapsa	koordersi		Vegetative	Strom
1000915	Aphanocapsa	parasitica		Vegetative	(Kützing) Komárek & Anagnostidis
4062	Aphanothece	nidulans		Vegetative	P. Richter
4069	Aphanothece	stagnina		Vegetative	(Spreg.) A. Br
4086	Chroococcus	minutus		Vegetative	(Kuetzing) Naegeli
4048	Chrysosporum	ovalisporum		Vegetative	(Forti) E.Zapomelová, O.Skácelová, P.Pumann, R.K
4046	Cuspidothrix	issatschenkoi		Vegetative	(Usachev) Rajaniemi, Komárek, Willame, Hrouzek,
1000080	Cyanodictyon	planctonicum		Vegetative	
10651	Cyanogranis	ferruginea		Vegetative	Hindak
4113	Dactylococcopsis	irregularis		Vegetative	Hansgirg
1000890	Dolichospermum	spp		Vegetative	
10222	Dolichospermum	crassum		Vegetative	Lemmermann
107474	Dolichospermum	lemmermannii		Vegetative	P. Richter
4331	Dolichospermum	macrosporum		Vegetative	Klebahn 1895
4018	Dolichospermum	planctonicum		Vegetative	Brunnthaler
4130	Gloeocapsa	spp		Vegetative	(Carm.) Kuetzing
4242	Gomphosphaeria	lacustris		Vegetative	(Chodat) Komarek et Hindak
1000547	Jaaginema	spp		Vegetative	(West et West) Anagnostidis et Komarek 1988
4161	Merismopedia	tenuissima		Vegetative	Lemmermann
4166	Merismopedia	warmingiana		Vegetative	Lagerheim
4261	Microcystis	aeruginosa		Vegetative	(Kutzing) Lemmermann
4264	Microcystis	aeruginosa		Vegetative	Kutzing
4269	Microcystis	wesenbergii		Vegetative	(Komarek) Komarek
4153	Planktolyngbya	limnetica		Vegetative	Lemmermann
107710	Planktothrix	agardhii		Vegetative	(Gomont) Anag. and Komar

4460	Pseudanabaena	spp	•	•			Vegetative	Lauterborn
4172	Pseudanabaena	limnetica					Vegetative	Lemmermann
4191	Pseudanabaena	mucicola					Vegetative	Naumann & Huber-Pestalozzi
4023	Raphidiopsis	raciborskii					Vegetative	(Wolosz.) Seena. and Subbar.
4332	Sphaerospermopsis	aphanizomenoides					Vegetative	(Forti) Zapomelová Zapomelová, Jezberová, Hrouze
4321	Synechococcus	elongatus					Vegetative	Nageli
4323	Synechococcus	sp. 1					Vegetative	Nageli
1000513	Synechocystis	spp					Vegetative	
4285	Synechocystis	spp					Vegetative	N/A
4090	Woronichinia	spp					Vegetative	Lemmermann
4094	Woronichinia	spp					Vegetative	Lemmermann
4091	Woronichinia	naegeliana					Vegetative	Unger
4092	Woronichinia	naegeliana					Vegetative	cells Unger
Division:	Euglenophy	rta	_					
Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
5050	Lepocinclis	spp					Vegetative	Perty .
5040	Trachelomonas	spp					Vegetative	Ehrenberg.
5047	Trachelomonas	volvocina					Vegetative	Ehrnb
Division:	Haptophyta	ı	_					
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
7140	*.	spp					Vegetative	N/A

Division: Pyrrhophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
6011	Ceratium	hirundinella					Vegetative	Dujardin
6033	Gymnodinium	sp. 2					Vegetative	Stein
6045	Naiadinium	polonicum					Vegetative	(Woloszynska) Carty 2014
6040	Peridinium	spp					Vegetative	Ehrenberg
6041	Peridinium	cinctum					Vegetative	(O. F. Miler) Ehrenberg
124851	Peridinium	inconspicuum					Vegetative	
6044	Peridinium	umbonatum					Vegetative	Stein