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Algae Analysis with Biovolume Estimates
Report and Data Set

Customer ID: 392

<u>Tracking Code:</u>	210017-392	<u>Sample ID:</u>	FOXMH	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	8/31/2021	<u>Sample Level:</u>	Epi
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Fox River	<u>Site:</u>	USGS 05549500 FOX RIVER NEAR M	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Time: 1410				

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
1432	Aulacoseira	granulata	.	.	.	straight	Vegetative	180.00	508.154	0.33	4,597,671.496	33.55
1222	Nitzschia	gracilis	.	.	.	.	Vegetative	32.00	2,721.402	1.77	136,792.611	1.00
Summary for Division ~ Bacillariophyta (2 detail records)							Sum Total Bacillariophyta		3,229.556	2.10	4,734,464.107	34.55

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2021	<i>Actinastrum</i>	<i>hantzschii</i>	.	.	.	.	Vegetative	30.00	169.385	0.11	22,704.553	0.17
2080	<i>Chlamydomonas</i>	<i>spp</i>	.	.	.	.	Vegetative	4.00	340.175	0.22	7,295.601	0.05
8011	<i>Deasonia</i>	<i>Gigantica</i>	.	.	.	.	Vegetative	9.60	340.175	0.22	157,585.037	1.15
2488	<i>Desmodesmus</i>	<i>denticulatus</i>	.	.	.	.	Vegetative	8.00	340.175	0.22	8,378.549	0.06
102059	<i>Lagerheimia</i>	<i>genevensis</i>	.	.	.	.	Vegetative	8.00	340.175	0.22	4,924.546	0.04
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	680.350	0.44	5,287.819	0.04
1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	22.40	340.175	0.22	3,191.830	0.02
2340	<i>Mougeotia</i>	<i>spp</i>	.	.	.	.	Vegetative	180.00	169.385	0.11	383,139.291	2.80
2363	<i>Oocystis</i>	<i>parva</i>	.	.	.	.	Vegetative	14.40	340.175	0.22	72,956.048	0.53
2761	<i>Phacotus</i>	<i>lendneri</i>	Vegetative	11.20	340.175	0.22	45,141.555	0.33

☒ = Identification is Uncertain

*** = Family Level Identification**

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2480	<i>Scenedesmus</i>	<i>spp</i>	Vegetative	4.00	340.175	0.22	1,823.917	0.01
2483	<i>Scenedesmus</i>	<i>bijuga</i>	Vegetative	4.00	1,020.526	0.66	7,158.783	0.05
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	16.00	340.175	0.22	3,419.815	0.02
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	11.20	340.175	0.22	10,259.446	0.07
2530	<i>Staurastrum</i>	<i>spp</i>	.	.	.	.	Vegetative	80.00	10.225	0.01	50,712.147	0.37

Summary for Division ~ Chlorophyta (15 detail records)

Sum Total Chlorophyta

5,451.6233.55783,978.9385.72

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	*	<i>spp</i>	.	.	.	.	Vegetative	2.40	1,700.876	1.11	11,504.215	0.08
9511	<i>Polygoniochloris</i>	<i>circularis</i>	.	.	.	.	Vegetative	6.40	340.175	0.22	28,240.903	0.21

Summary for Division ~ Chrysophyta (2 detail records)

Sum Total Chrysophyta

2,041.0511.3339,745.1170.29

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	81,642.047	53.11	21,888.233	0.16
4041	<i>Aphanizomenon</i>	<i>flos-aquae</i>	.	.	.	.	Vegetative	105.67	1,016.309	0.66	1,349,501.738	9.85
4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	.	.	.	.	Vegetative	6.00	680.350	0.44	1,424.926	0.01
1000545	<i>Aphanocapsa</i>	<i>holsatica</i>	.	.	.	.	Vegetative	25.60	680.350	0.44	21,373.820	0.16
1000108	<i>Aphanocapsa</i>	<i>incerta</i>	.	.	.	.	Vegetative	80.00	169.385	0.11	49,666.202	0.36
<input checked="" type="checkbox"/> 4093	<i>Coelosphaerium</i>	<i>kuetzingianum</i>	.	.	.	.	Vegetative	24.67	8,164.205	5.31	1,682,548.701	12.28
4046	<i>Cuspidothrix</i>	<i>issatschenkoi</i>	.	.	.	.	Vegetative	240.00	169.385	0.11	287,354.464	2.10
1000424	<i>Cyanocatena</i>	<i>planctonica</i>	.	.	.	.	Vegetative	16.10	3,401.752	2.21	35,752.073	0.26
10651	<i>Cyanogranis</i>	<i>ferruginea</i>	.	.	.	.	Vegetative	10.00	680.350	0.44	3,575.241	0.03
<input checked="" type="checkbox"/> 10222	<i>Dolichospermum</i>	<i>crassum</i>	.	.	.	.	Vegetative	48.00	10.225	0.01	53,732.947	0.39
<input checked="" type="checkbox"/> 4331	<i>Dolichospermum</i>	<i>macrosporum</i>	Vegetative	64.00	169.385	0.11	190,945.268	1.39

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<input checked="" type="checkbox"/>	107485	<i>Dolichospermum</i>	<i>spiroides</i>	spiroides	.	.	.	Vegetative	22.00	169.385	0.11	161,110.074	1.18	
	4264	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	4.00	1,700.876	1.11	56,996.864	0.42
	4261	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	24.00	340.175	0.22	34,198.153	0.25
	4152	<i>Planktolyngbya</i>	<i>contorta</i>	.	.	.	.	Vegetative	44.00	169.385	0.11	28,948.566	0.21
	4153	<i>Planktolyngbya</i>	<i>limnetica</i>	.	.	.	.	Vegetative	110.00	677.539	0.44	53,213.780	0.39
	107710	<i>Planktothrix</i>	<i>agardhii</i>	.	.	.	.	Vegetative	150.00	169.385	0.11	319,282.746	2.33
	4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	4.00	680.350	0.44	1,424.926	0.01
	4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	40,821.024	26.55	16,414.134	0.12	
	1000513	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>=2 um spherical	Vegetative	3.20	680.350	0.44	11,672.976	0.09	
Summary for Division ~ Cyanophyta (20 detail records)										Sum Total Cyanophyta	142,192.212	92.50	4,381,025.831	31.97

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	340.175	0.22	10,947.960	0.08
Summary for Division ~ Haptophyta (1 detail record)							Sum Total Haptophyta		340.175	0.22	10,947.960	0.08

Division: Pyrrhophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6011	Ceratium	hirundinella	.	.	.	.	Vegetative	180.00	132.928	0.09	2,897,616.718	21.15
6040	Peridinium	spp	.	.	.	.	Vegetative	24.00	340.175	0.22	854,953.509	6.24
Summary for Division ~ Pyrrhophyta (2 detail records)							Sum Total Pyrrhophyta		473.103	0.31	3,752,570.227	27.39

Total Sample Concentration

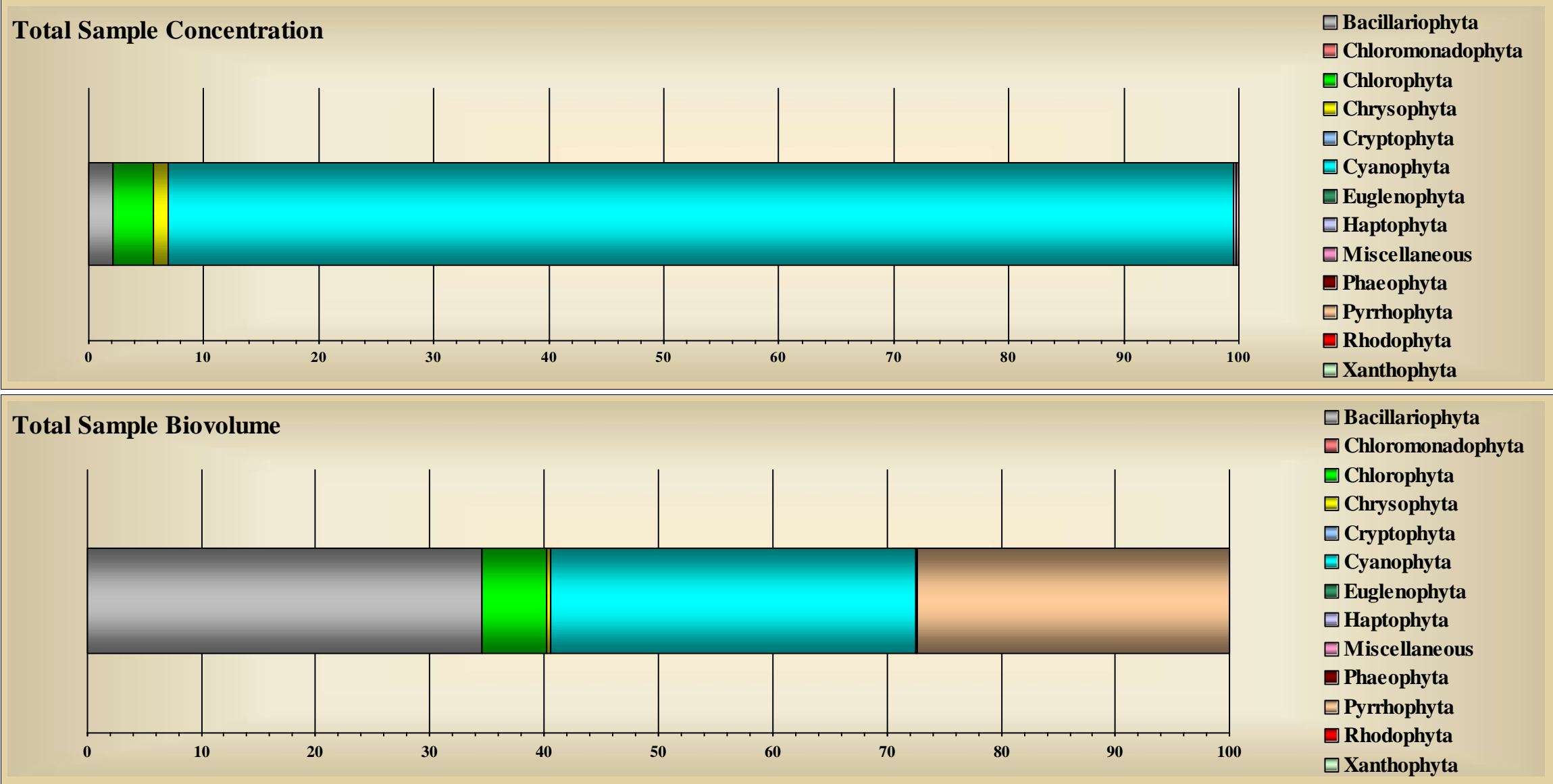
153,727.720

NU/ml

Total Sample Biovolume

13,702,732.180

µm^3 /ml



☑ = Identification is Uncertain
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<u>Tracking Code:</u>	210001-392	<u>Sample ID:</u>	ILDS 1420	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/15/2021	<u>Sample Level:</u>	Composite
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553810 ILLINOIS RIVER AT U	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Composite of 10 surface grab samples downstream of Starved Rock Dam Time: 1420				

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	
9856	Cyclotella	atomus	.	.	.	.	Vegetative	5.67	2,806.445	1.48	230,529.561	4.81
1076	Cyclotella	meneghiniana	.	.	.	.	Vegetative	6.93	1,785.920	0.94	242,259.661	5.05
1071	Cyclotella	sp. 1	.	.	.	.	Vegetative	3.20	1,530.788	0.81	16,415.103	0.34
1077	Discostella	stelligera	.	.	.	.	Vegetative	8.80	510.263	0.27	139,938.806	2.92
☑ 1210	Navicula	spp	.	.	.	.	Vegetative	8.00	255.131	0.13	8,207.552	0.17
1222	Nitzschia	gracilis	.	.	.	.	Vegetative	44.00	42.346	0.02	11,707.036	0.24
110810	Skeletonema	potamos	.	.	.	.	Vegetative	13.07	4,337.234	2.29	546,486.248	11.40
Summary for Division ~ Bacillariophyta (7 detail records)								Sum Total	Bacillariophyta	11,268.128	5.94	1,195,543.966	24.93

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	3.56	2,806.445	1.48	71,765.579	1.50
2687	*Chlorococcaceae	spp	.	.	.	> 1 um ovoid	Vegetative	4.80	765.394	0.40	14,910.415	0.31
100461	Ankistrodesmus	falcatus	falcatus	.	.	.	Vegetative	100.00	42.346	0.02	7,662.784	0.16
2080	Chlamydomonas	spp	Vegetative	5.33	765.394	0.40	62,719.385	1.31
2110	Chlorogonium	spp	Vegetative	24.00	42.346	0.02	3,831.394	0.08

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2162	<i>Closterium</i>	<i>moniliferum</i>	Vegetative	104.00	42.346	0.02	40,321.038	0.84
2175	<i>Coelastrum</i>	<i>pseudomicroporum</i>	Vegetative	13.00	211.731	0.11	85,142.074	1.78
2194	<i>Crucigenia</i>	<i>crucifera</i>	.	.	.	.	Vegetative	24.00	42.346	0.02	26,606.894	0.55
2212	<i>Dictyosphaerium</i>	<i>ehrenbergianum</i>	.	.	.	.	Vegetative	40.00	255.131	0.13	65,660.438	1.37
8241	<i>Didymogenes</i>	<i>anomala</i>	.	.	.	.	Vegetative	9.60	255.131	0.13	7,386.794	0.15
102059	<i>Lagerheimia</i>	<i>genevensis</i>	.	.	.	.	Vegetative	9.60	255.131	0.13	1,709.916	0.04
2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	28.00	84.692	0.04	2,803.572	0.06
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	1,530.788	0.81	11,897.594	0.25
2369	<i>Oocystis</i>	<i>lacustris</i>	.	.	.	.	Vegetative	17.60	255.131	0.13	338,561.583	7.06
2363	<i>Oocystis</i>	<i>parva</i>	.	.	.	.	Vegetative	9.60	255.131	0.13	26,264.170	0.55
2381	<i>Pediastrum</i>	<i>duplex</i>	.	.	.	.	Vegetative	16.00	42.346	0.02	16,531.118	0.34
8101	<i>Pyramichlamys</i>	<i>dissecta</i>	.	.	.	.	Vegetative	16.00	510.263	0.27	213,738.369	4.46
102793	<i>Scenedesmus</i>	<i>acutus</i>	alternans	.	.	.	Vegetative	19.00	84.692	0.04	6,873.447	0.14
2486	<i>Scenedesmus</i>	<i>bicaudatus</i>	.	.	.	.	Vegetative	16.00	255.131	0.13	4,274.778	0.09
8396	<i>Scenedesmus</i>	<i>bijuga</i>	.	alternans	.	.	Vegetative	12.00	42.346	0.02	4,257.105	0.09
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	12.00	255.131	0.13	2,770.038	0.06
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	22.67	765.394	0.40	22,673.349	0.47
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	2.40	510.263	0.27	1,231.111	0.03
2641	<i>Sphaerocystis</i>	<i>schroeteri</i>	.	.	.	.	Vegetative	32.00	255.131	0.13	68,396.288	1.43

Summary for Division ~ Chlorophyta (24 detail records)

Sum Total Chlorophyta
10,330.186
5.45
1,107,989.231
23.11

Division:
Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	spp	.	.	.	.	Vegetative	3.92	4,592.365	2.42	82,924.337	1.73
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		4,592.365	2.42	82,924.337	1.73

Division: Cryptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	14.67	127.039	0.07	37,604.407	0.78
3043	Plagioselmis	minuta	.	nannoplantica	.	.	Vegetative	8.00	510.263	0.27	17,099.059	0.36
Summary for Division ~ Cryptophyta (2 detail records)							Sum Total	Cryptophyta	637.301	0.34	54,703.466	1.14

Division: Cyanophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	94,398.617	49.78	25,308.269	0.53		
4054	Aphanocapsa	delicatissima	.	.	.	.	Vegetative	16.00	255.131	0.13	4,007.604	0.08
1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	16.00	255.131	0.13	670.358	0.01
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	16.00	255.131	0.13	2,145.119	0.04
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	10.00	42.346	0.02	709.519	0.01
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	6.40	255.131	0.13	788.739	0.02
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	113.75	465.808	0.25	1,894,588.334	39.51
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.48	6,123.154	3.23	294,815.147	6.15
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	130.00	42.346	0.02	69,177.929	1.44
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.33	15,307.884	8.07	18,701.642	0.39
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	44,647.995	23.54	17,952.959	0.37		
Summary for Division ~ Cyanophyta (11 detail records)									Sum Total	Cyanophyta	162,048.675	85.45	2,328,865.618	48.57

Division: Haptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	<i>Chrysochromulina</i>	<i>parva</i>	.	.	.	.	Vegetative	4.00	765.394	0.40	24,632.911	0.51

Total Sample Concentration

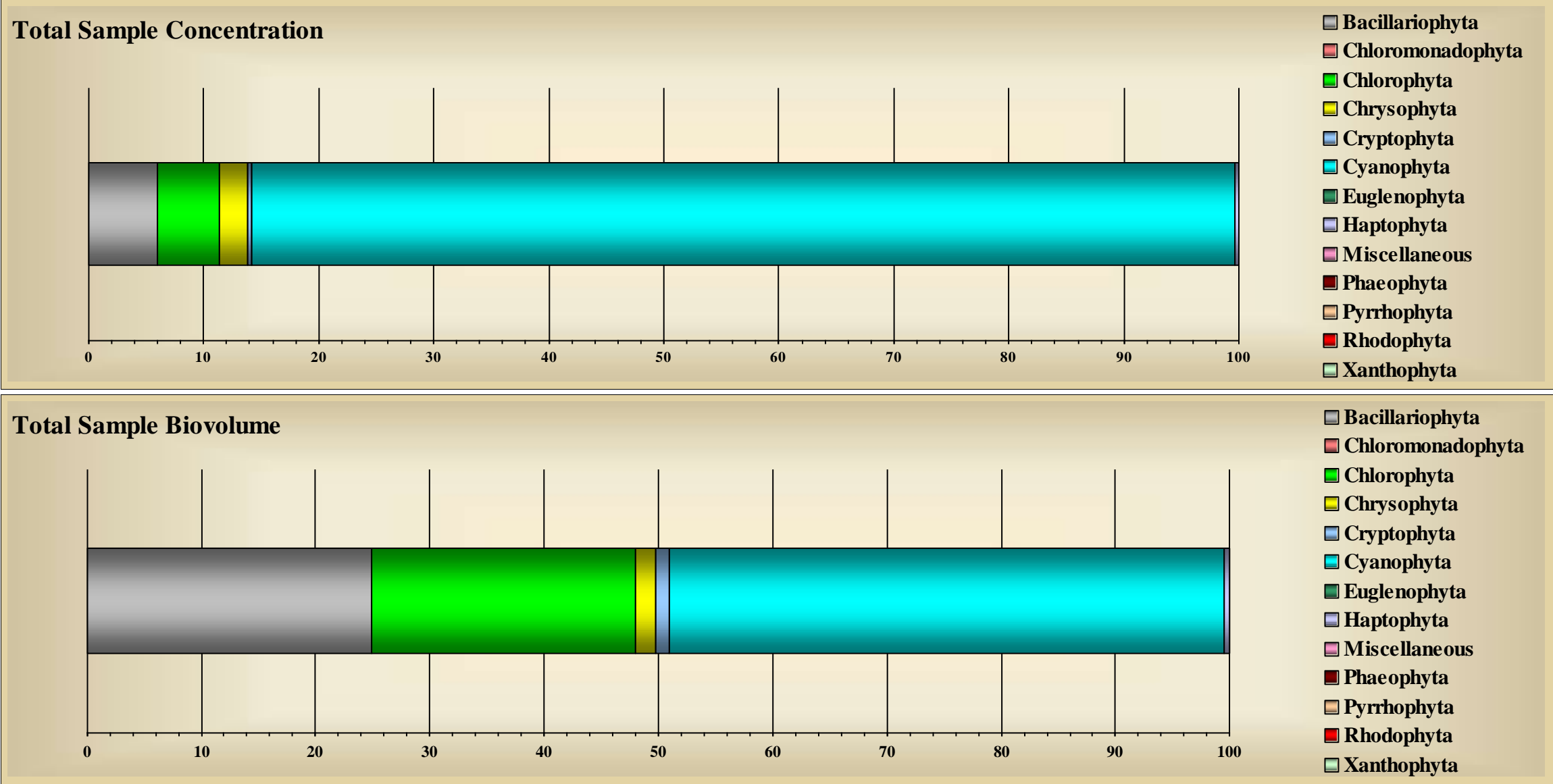
189,642.049

NU/ml

Total Sample Biovolume

4,794,659.529

µm³ /ml



<u>Tracking Code:</u>	210002-392	<u>Sample ID:</u>	ILSR 1530	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/15/2021	<u>Sample Level:</u>	Surface
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553700 ILLINOIS RIVER AT S	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Scum at Starved Rock Dam lock Time: 1530				

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
1430	<i>Aulacoseira</i>	<i>spp</i>	.	.	.	.	Vegetative	256.00	2.556	0.00	205,589.787	3.19
9856	<i>Cyclotella</i>	<i>atomus</i>	.	.	.	.	Vegetative	5.28	2,551.314	1.18	176,359.833	2.73
1000653	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	>8 um	Vegetative	9.76	2,041.051	0.94	827,895.872	12.84
1076	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	.	Vegetative	6.40	510.263	0.24	52,528.340	0.81
1071	<i>Cyclotella</i>	<i>sp. 1</i>	.	.	.	.	Vegetative	3.60	3,061.577	1.41	68,019.969	1.05
1221	<i>Nitzschia</i>	<i>acicularis</i>	.	.	.	.	Vegetative	50.00	84.692	0.04	3,192.826	0.05
9123	<i>Nitzschia</i>	<i>palea</i>	.	.	.	.	Vegetative	24.00	84.692	0.04	12,771.306	0.20
110810	<i>Skeletonema</i>	<i>potamos</i>	.	.	.	.	Vegetative	16.80	9,694.993	4.47	1,541,501.961	23.91
1300	<i>Surirella</i>	<i>spp</i>	.	.	.	.	Vegetative	96.00	2.556	0.00	222,036.970	3.44
9776	<i>Synedra</i>	<i>ulna</i>	.	acus	.	.	Vegetative	144.00	2.556	0.00	13,251.856	0.21
Summary for Division ~ Bacillariophyta (10 detail records)							Sum Total	Bacillariophyta	18,036.252	8.31	3,123,148.721	48.43

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	3.47	2,041.051	0.94	55,993.790	0.87
2687	*Chlorococcaceae	spp	.	.	.	> 1 um ovoid	Vegetative	4.80	1,020.526	0.47	26,264.145	0.41

2021	<i>Actinastrum</i>	<i>hantzschii</i>	.	.	.	.	Vegetative	32.00	2.556	0.00	253.506	0.00
2080	<i>Chlamydomonas</i>	<i>spp</i>	.	.	.	.	Vegetative	8.00	84.692	0.04	21,583.514	0.33
2175	<i>Coelastrum</i>	<i>pseudomicroporum</i>	.	.	.	.	Vegetative	9.60	510.263	0.24	70,037.804	1.09
2681	<i>Colonial</i>	<i>spp</i>	.	.	.	.	Vegetative	8.00	84.692	0.04	3,192.826	0.05
2488	<i>Desmodesmus</i>	<i>denticulatus</i>	.	.	.	.	Vegetative	12.00	84.692	0.04	4,789.244	0.07
2212	<i>Dictyosphaerium</i>	<i>ehrenbergianum</i>	.	.	.	.	Vegetative	25.00	169.385	0.08	30,154.484	0.47
102059	<i>Lagerheimia</i>	<i>genevensis</i>	.	.	.	.	Vegetative	4.80	510.263	0.24	3,419.832	0.05
2331	<i>Micractinium</i>	<i>pusillum</i>	.	.	.	.	Vegetative	30.00	84.692	0.04	17,901.123	0.28
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	1,020.526	0.47	7,931.729	0.12
2035	<i>Monoraphidium</i>	<i>convolutus</i>	.	.	.	.	Vegetative	10.80	1,020.526	0.47	17,738.164	0.28
1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	64.00	84.692	0.04	5,108.526	0.08
2363	<i>Oocystis</i>	<i>parva</i>	.	.	.	.	Vegetative	12.00	84.692	0.04	17,028.411	0.26
8101	<i>Pyramichlamys</i>	<i>dissecta</i>	.	.	.	.	Vegetative	16.00	3,061.577	1.41	1,282,430.213	19.89
8399	<i>Scenedesmus</i>	<i>acutus</i>	.	.	.	.	Vegetative	10.00	169.385	0.08	15,120.384	0.23
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	23.00	169.385	0.08	24,123.591	0.37
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	8.00	84.692	0.04	1,649.630	0.03
=====												
Summary for Division ~ Chlorophyta (18 detail records)							Sum Total Chlorophyta		10,288.288	4.74	1,604,720.914	24.89

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	*	<i>spp</i>	.	.	.	.	Vegetative	2.97	3,061.577	1.41	33,907.881	0.53
=====												
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		3,061.577	1.41	33,907.881	0.53

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	<i>Cryptomonas</i>	<i>erosa</i>	.	.	.	.	Vegetative	11.33	254.077	0.12	48,247.165	0.75

3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplanctica	.	.	Vegetative	6.40	1,530.788	0.71	51,297.178	0.80
Summary for Division ~ Cryptophyta (2 detail records)												
Sum Total Cryptophyta									1,784.866	0.82	99,544.342	1.54

Division: Cyanophyta

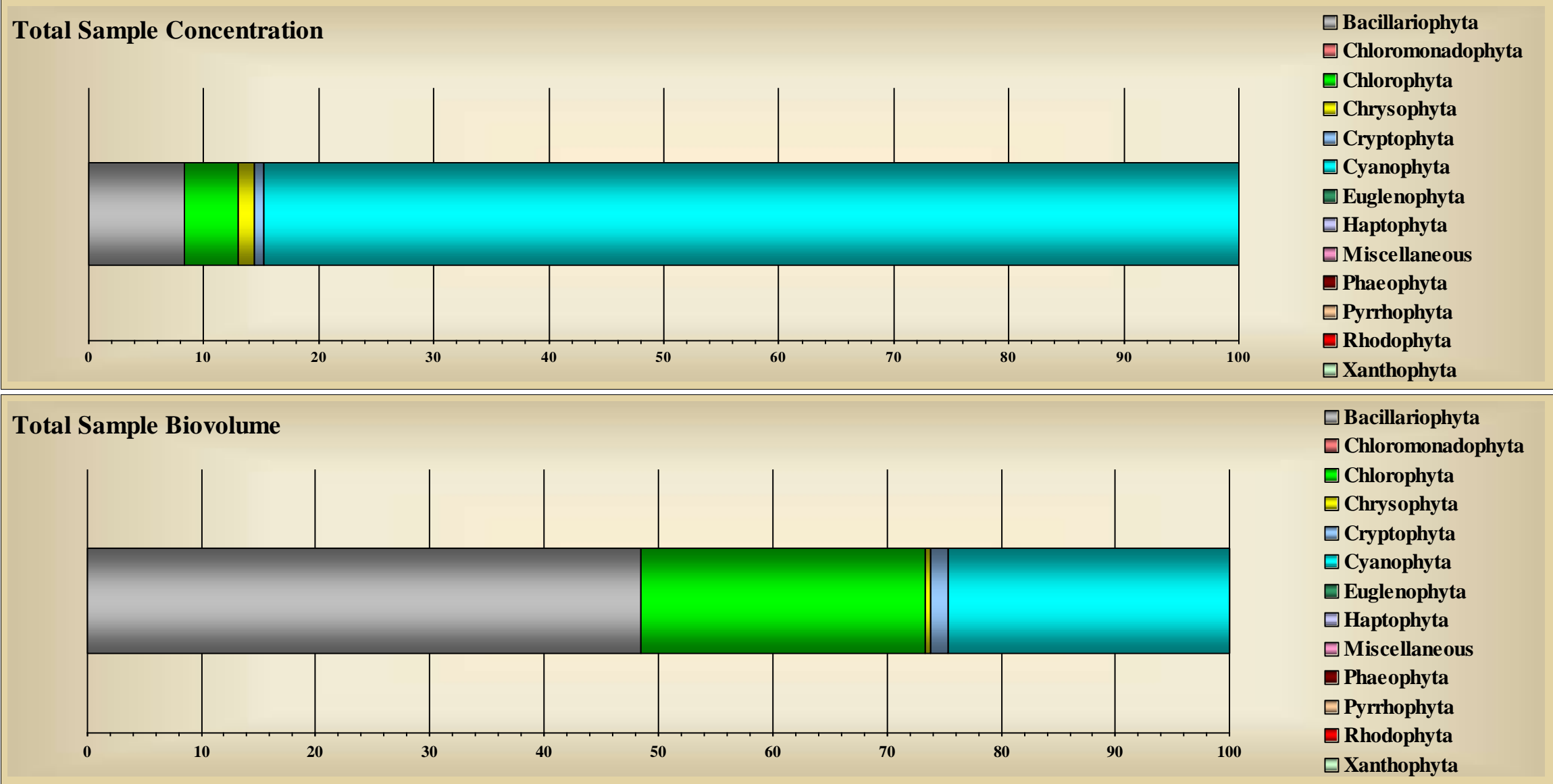
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	123,993.859	57.11	33,242.754	0.52	
4054	Aphanocapsa	delicatissima	.	.	.	.	Vegetative	6.00	1,020.526	0.47	3,206.083	0.05
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	4.00	1,530.788	0.71	1,608.859	0.02
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	7.20	1,020.526	0.47	3,154.955	0.05
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.00	3,571.840	1.65	119,693.415	1.86
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	245.00	169.385	0.08	1,352,339.796	20.97
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	624.00	7.669	0.00	32,929.933	0.51
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	20.00	84.692	0.04	2,993.274	0.05
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.27	11,225.782	5.17	19,144.448	0.30
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	39,800.498	18.33	16,003.780	0.25	
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	1,530.788	0.71	2,683.472	0.04	
Summary for Division ~ Cyanophyta (11 detail records)									Sum Total Cyanophyta	183,956.352	84.72	1,587,000.769	24.61

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Total Sample Concentration
217,127.334
NU/ml

Total Sample Biovolume
6,448,322.627
µm³ /ml



☑ = Identification is Uncertain
※ = Family Level Identification

<u>Tracking Code:</u>	210003-392	<u>Sample ID:</u>	ILUS 0915	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/16/2021	<u>Sample Level:</u>	Surface
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	412026088481301 Upstream of Fox River	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	upstream of island upstream of Fox River Time: 0915				

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
1430	<i>Aulacoseira</i>	<i>spp</i>	.	.	.	.	Vegetative	16.00	255.131	0.13	73,867.989	0.50
9856	<i>Cyclotella</i>	<i>atomus</i>	.	.	.	.	Vegetative	9.60	510.263	0.26	177,283.154	1.21
1076	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	.	Vegetative	7.20	255.131	0.13	37,395.655	0.25
9361	<i>Discostella</i>	<i>pseudostelligera</i>	.	.	.	.	Vegetative	5.07	765.394	0.39	43,756.514	0.30
1222	<i>Nitzschia</i>	<i>gracilis</i>	.	.	.	.	Vegetative	64.00	84.692	0.04	43,103.170	0.29
9123	<i>Nitzschia</i>	<i>palea</i>	.	.	.	.	Vegetative	22.00	84.692	0.04	11,707.036	0.08
110810	<i>Skeletonema</i>	<i>potamos</i>	.	.	.	.	Vegetative	16.22	10,205.256	5.15	1,900,795.242	12.93
☑ 1296	<i>Stephanodiscus</i>	<i>hantzschii</i>	.	.	.	.	Vegetative	20.00	255.131	0.13	801,518.934	5.45
Summary for Division ~ Bacillariophyta (8 detail records)												
Sum Total							Bacillariophyta		12,415.692	6.27	3,089,427.694	21.02

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	4.80	255.131	0.13	3,693.410	0.03
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	2.00	510.263	0.26	2,137.389	0.01
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	8.00	255.131	0.13	24,622.655	0.17
8041	Monoraphidium	capricornutum	.	.	.	.	Vegetative	4.80	1,530.788	0.77	12,803.667	0.09

8226	<i>Scenedesmus</i>	<i>intermedius</i>	.	.	.	.	Vegetative	20.00	84.692	0.04	1,773.797	0.01
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	64.00	255.131	0.13	95,754.793	0.65
2551	<i>Tetraedron</i>	<i>caudatum</i>	.	.	.	.	Vegetative	8.00	84.692	0.04	5,436.937	0.04
8332	<i>Tetraedron</i>	<i>muticum</i>	.	.	.	.	Vegetative	6.40	255.131	0.13	9,405.164	0.06

Summary for Division ~ Chlorophyta (8 detail records)

Sum TotalChlorophyta

3,230.9621.63155,627.8121.06

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
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1652	*	<i>spp</i>	Vegetative	1.60	765.394	0.39	1,481.497	0.01
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Summary for Division ~ Chrysophyta (1 detail record)

Sum TotalChrysophyta

765.3940.391,481.4970.01

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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3015	<i>Cryptomonas</i>	<i>erosa</i>	Vegetative	12.00	169.385	0.09	34,056.821	0.23
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3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	8.00	255.131	0.13	8,549.530	0.06
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Summary for Division ~ Cryptophyta (2 detail records)

Sum TotalCryptophyta

424.5160.2142,606.3510.29

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	36,738.921	18.55	9,849.705	0.07
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10651	<i>Cyanogranis</i>	<i>ferruginea</i>	Vegetative	4.40	510.263	0.26	938.475	0.01
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4261	<i>Microcystis</i>	<i>aeruginosa</i>	Vegetative	83.33	2,794.849	1.41	6,753,251.365	45.94
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4264	<i>Microcystis</i>	<i>aeruginosa</i>	Vegetative	4.24	107,537.884	54.30	4,390,664.258	29.87
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107710	<i>Planktothrix</i>	<i>agardhii</i>	Vegetative	220.00	84.692	0.04	234,140.676	1.59
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4321	<i>Synechococcus</i>	<i>elongatus</i>	Vegetative	2.00	8,036.639	4.06	8,415.968	0.06
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4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	22,961.826	11.59	9,232.950	0.06
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	2,551.314	1.29	4,472.453	0.03
Summary for Division ~ <i>Cyanophyta</i> (8 detail records)									181,216.387	91.50	11,410,965.852	77.63

Total Sample Concentration

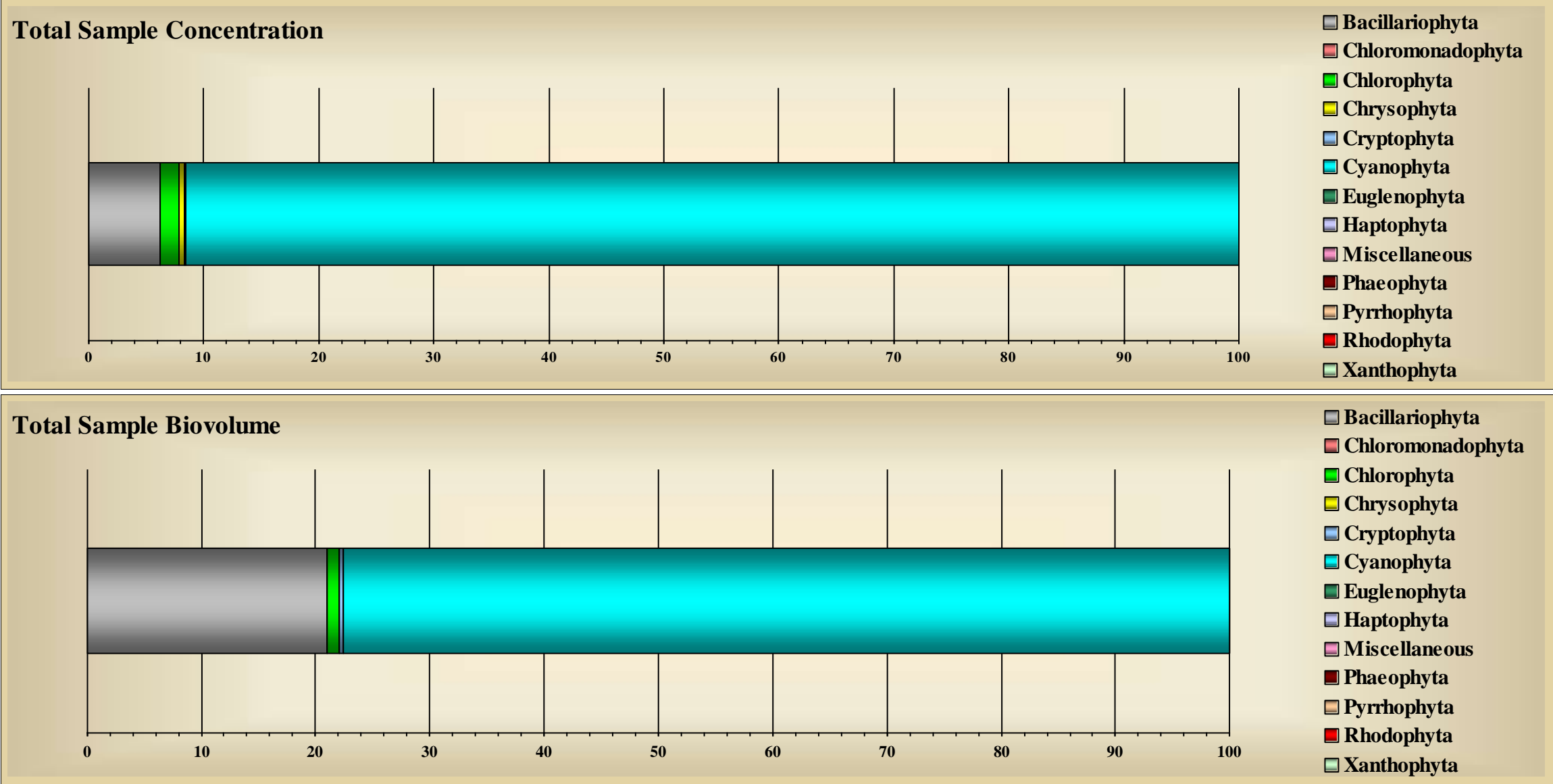
198,052.951

NU/ml

Total Sample Biovolume

14,700,109.205

µm^3 /ml



☑ = Identification is Uncertain
* = Family Level Identification

<u>Tracking Code:</u>	210004-392	<u>Sample ID:</u>	ILBR 1115	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/16/2021	<u>Sample Level:</u>	Surface
<u>Job ID:</u>	1	<u>Station:</u>	Boat Ramp	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553700 ILLINOIS RIVER AT S	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	at Corps of Engineer boat ramp upstream Starved Rock dam Time: 1115				

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	
☑ 1431	<i>Aulacoseira</i>	<i>ambigua</i>	.	.	.	.	Vegetative	36.00	423.462	0.05	299,327.553	0.58
1076	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	.	Vegetative	4.80	1,700.876	0.21	98,490.584	0.19
1000653	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	>8 um	Vegetative	14.00	423.462	0.05	456,308.264	0.89	
9363	<i>Cyclotella</i>	<i>ocellata</i>	.	.	.	.	Vegetative	6.40	1,700.876	0.21	175,094.467	0.34
☑ 9687	<i>Navicula</i>	<i>viridula</i>	.	germainii	.	.	Vegetative	36.00	25.563	0.00	23,128.851	0.05	
1221	<i>Nitzschia</i>	<i>acicularis</i>	.	.	.	.	Vegetative	60.00	423.462	0.05	53,878.962	0.10
9118	<i>Nitzschia</i>	<i>linearis</i>	.	.	.	.	Vegetative	52.00	423.462	0.05	216,181.022	0.42
110810	<i>Skeletonema</i>	<i>potamos</i>	.	.	.	.	Vegetative	21.60	1,693.848	0.21	613,022.914	1.19
Summary for Division ~ Bacillariophyta (8 detail records)								Sum Total	Bacillariophyta	6,815.010	0.83	1,935,432.617	3.77

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	<i>Chlamydomonas</i>	<i>spp</i>	.	.	.	.	Vegetative	8.00	1,700.876	0.21	164,151.031	0.32
2175	<i>Coelastrum</i>	<i>pseudomicroporum</i>	.	.	.	.	Vegetative	12.00	1,700.876	0.21	455,975.255	0.89
2853	<i>Lagerheimia</i>	<i>quadriseta</i>	.	.	.	.	Vegetative	12.00	1,700.876	0.21	32,830.138	0.06
2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	10.00	423.462	0.05	5,197.614	0.01

☒ = Identification is Uncertain

*** = Family Level Identification**

210004-392

Sample Date: 6/16/2021

Thursday, January 20, 2022

Phytoplankton - Grab

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8041	<i>Monoraphidium</i>	<i>capricornutum</i>	Vegetative	4.00	3,401.752	0.41	26,439.097	0.05
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	20.00	846.924	0.10	76,273.109	0.15
Summary for Division ~ Chlorophyta (6 detail records)									9,774.766	1.19	760,866.243	1.48

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	137,770.954	16.78	36,936.393	0.07
4161	<i>Merismopedia</i>	<i>tenuissima</i>	.	.	.	.	Vegetative	8.00	1,700.876	0.21	14,249.259	0.03
4264	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	4.29	576,596.957	70.22	24,436,986.279	47.62
4261	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	113.27	5,081.543	0.62	24,039,571.646	46.85
107710	<i>Planktothrix</i>	<i>agardhii</i>	.	.	.	.	Vegetative	136.00	25.563	0.00	23,923.457	0.05
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.00	11,906.132	1.45	12,468.101	0.02
4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	61,231.535	7.46	24,621.200	0.05
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	5,102.628	0.62	8,944.907	0.02
1000513	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>=2 um spherical	Vegetative	2.00	5,102.628	0.62	21,373.888	0.04
Summary for Division ~ Cyanophyta (9 detail records)									804,518.816	97.98	48,619,075.129	94.75

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Total Sample Concentration

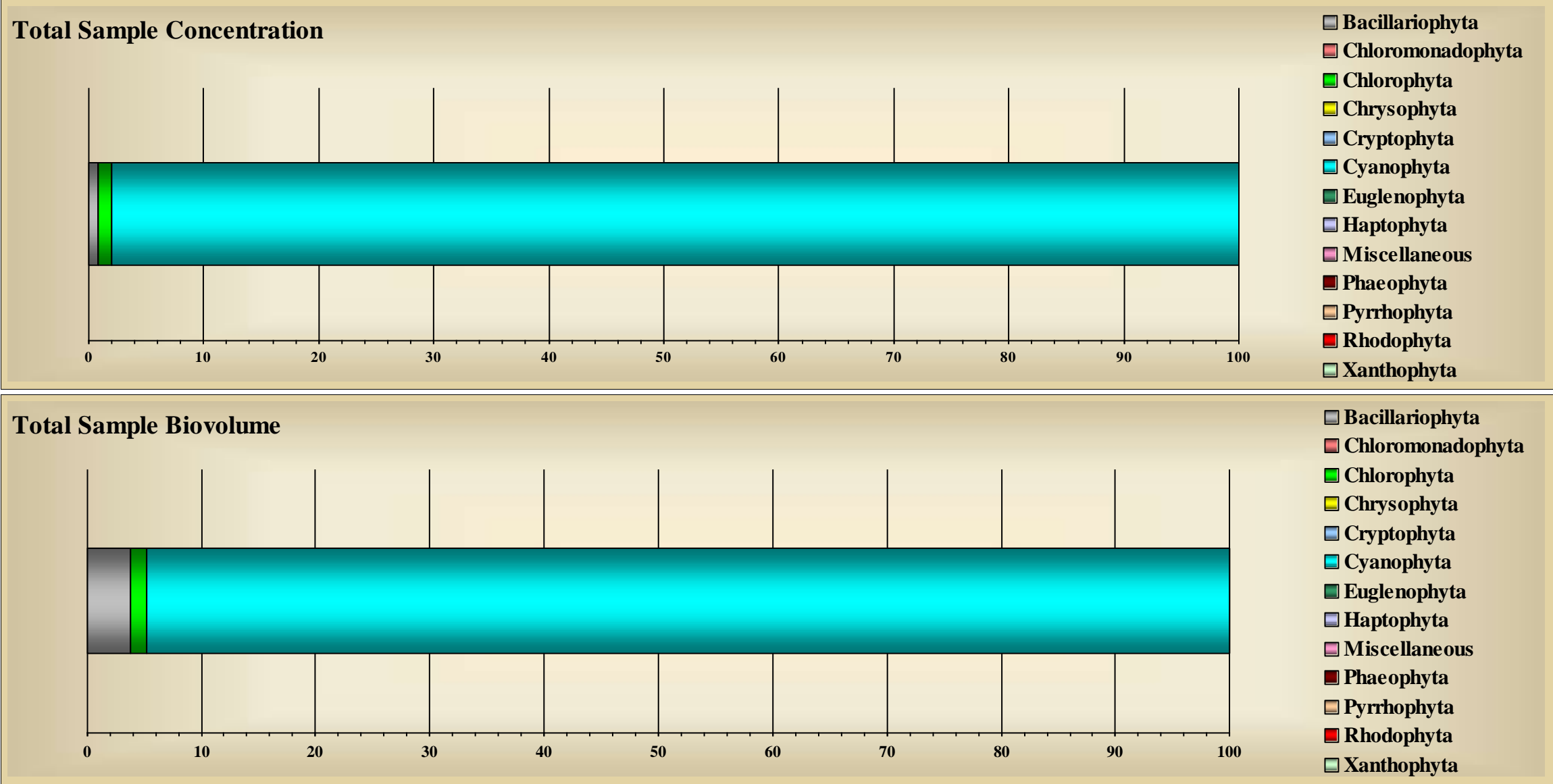
821,108.592

NU/ml

Total Sample Biovolume

51,315,373.988

µm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

<u>Tracking Code:</u>	210005-392	<u>Sample ID:</u>	ILSR 1200	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/16/2021	<u>Sample Level:</u>	Surface
<u>Job ID:</u>	1	<u>Station:</u>	Gage	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553700 ILLINOIS RIVER AT S	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	at sensors Time: 1200				

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	
1701	Actinocyclus	normanii	.	.	.	.	Vegetative	24.00	102.053	0.13	1,108,019.757	18.63
1431	Aulacoseira	ambigua	.	.	.	.	Vegetative	680.00	1.023	0.00	19,659.523	0.33
1074	Cyclotella	spp	.	.	.	.	Vegetative	9.60	816.421	1.07	283,653.046	4.77
<input checked="" type="checkbox"/> 9856	Cyclotella	atomus	.	.	.	.	Vegetative	5.12	2,245.156	2.94	157,543.964	2.65
1076	Cyclotella	meneghiniana	.	.	.	.	Vegetative	6.40	102.053	0.13	10,505.668	0.18
1071	Cyclotella	sp. 1	.	.	.	.	Vegetative	3.20	102.053	0.13	1,313.212	0.02
1221	Nitzschia	acicularis	.	.	.	.	Vegetative	64.00	102.053	0.13	3,283.021	0.06
1222	Nitzschia	gracilis	.	.	.	.	Vegetative	46.67	50.815	0.07	5,055.312	0.08
110810	Skeletonema	potamos	.	.	.	.	Vegetative	14.32	2,449.261	3.21	357,521.137	6.01
Summary for Division ~ Bacillariophyta (9 detail records)								Sum Total	Bacillariophyta	5,970.887	7.82	1,946,554.641	32.73

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	4.80	102.053	0.13	1,477.364	0.02
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	4.27	306.158	0.40	13,569.827	0.23
2021	Actinastrum	hantzschii	.	.	.	.	Vegetative	30.00	16.939	0.02	4,086.819	0.07

☒ = Identification is Uncertain

*** = Family Level Identification**

210005-392

Sample Date: 6/16/2021

Thursday, January 20, 2022

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2080	<i>Chlamydomonas</i>	<i>spp</i>	Vegetative	5.20	408.210	0.53	20,190.568	0.34
2175	<i>Coelastrum</i>	<i>pseudomicroporum</i>	Vegetative	16.00	67.754	0.09	24,407.395	0.41
2194	<i>Crucigenia</i>	<i>crucifera</i>	.	.	.	.	Vegetative	16.00	16.939	0.02	1,915.696	0.03
2195	<i>Crucigenia</i>	<i>quadrata</i>	.	.	.	.	Vegetative	14.40	102.053	0.13	13,062.728	0.22
2212	<i>Dictyosphaerium</i>	<i>ehrenbergianum</i>	.	.	.	.	Vegetative	28.00	102.053	0.13	17,509.443	0.29
8241	<i>Didymogenes</i>	<i>anomala</i>	.	.	.	.	Vegetative	9.60	102.053	0.13	5,252.839	0.09
2385	<i>Monactinus</i>	<i>simplex</i>	.	.	.	.	Vegetative	48.00	0.511	0.00	1,276.105	0.02
2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	16.00	204.105	0.27	5,251.604	0.09
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	816.421	1.07	6,345.383	0.11
1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	64.00	102.053	0.13	28,015.122	0.47
2387	<i>Pediastrum</i>	<i>tetras</i>	.	tetraodon	.	.	Vegetative	30.00	16.939	0.02	27,547.155	0.46
2484	<i>Scenedesmus</i>	<i>abundans</i>	.	.	.	.	Vegetative	12.00	16.939	0.02	1,277.131	0.02
8399	<i>Scenedesmus</i>	<i>acutus</i>	.	.	.	.	Vegetative	12.00	102.053	0.13	6,080.812	0.10
102793	<i>Scenedesmus</i>	<i>acutus</i>	alternans	.	.	.	Vegetative	20.00	102.053	0.13	15,389.159	0.26
2483	<i>Scenedesmus</i>	<i>bijuga</i>	.	.	.	.	Vegetative	4.80	204.105	0.27	5,252.829	0.09
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	32.00	102.053	0.13	3,283.021	0.06
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	23.40	408.210	0.53	34,471.722	0.58
102882	<i>Scenedesmus</i>	<i>raciborskii</i>	.	.	.	.	Vegetative	4.80	102.053	0.13	1,025.945	0.02
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	8.00	204.105	0.27	2,856.227	0.05

Summary for Division ~ Chlorophyta (22 detail records)

Sum Total Chlorophyta

3,605.8074.72239,544.8904.03

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
9511	<i>Polygoniochloris</i>	<i>circularis</i>	.	.	.	.	Vegetative	6.40	102.053	0.13	8,472.271	0.14

Summary for Division ~ Chrysophyta (1 detail record)

Sum Total Chrysophyta

102.0530.138,472.2710.14

Division: Cryptophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
3020	Chroomonas	spp	.	.	.	.	Vegetative	5.60	408.210	0.53	7,879.233	0.13
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	12.00	84.692	0.11	16,531.749	0.28
3043	Plagioselmis	minuta	.	nannoplanctica	.	.	Vegetative	8.00	714.368	0.94	23,938.683	0.40		
Summary for Division ~ Cryptophyta (3 detail records)									Sum Total	Cryptophyta	1,207.271	1.58	48,349.665	0.81

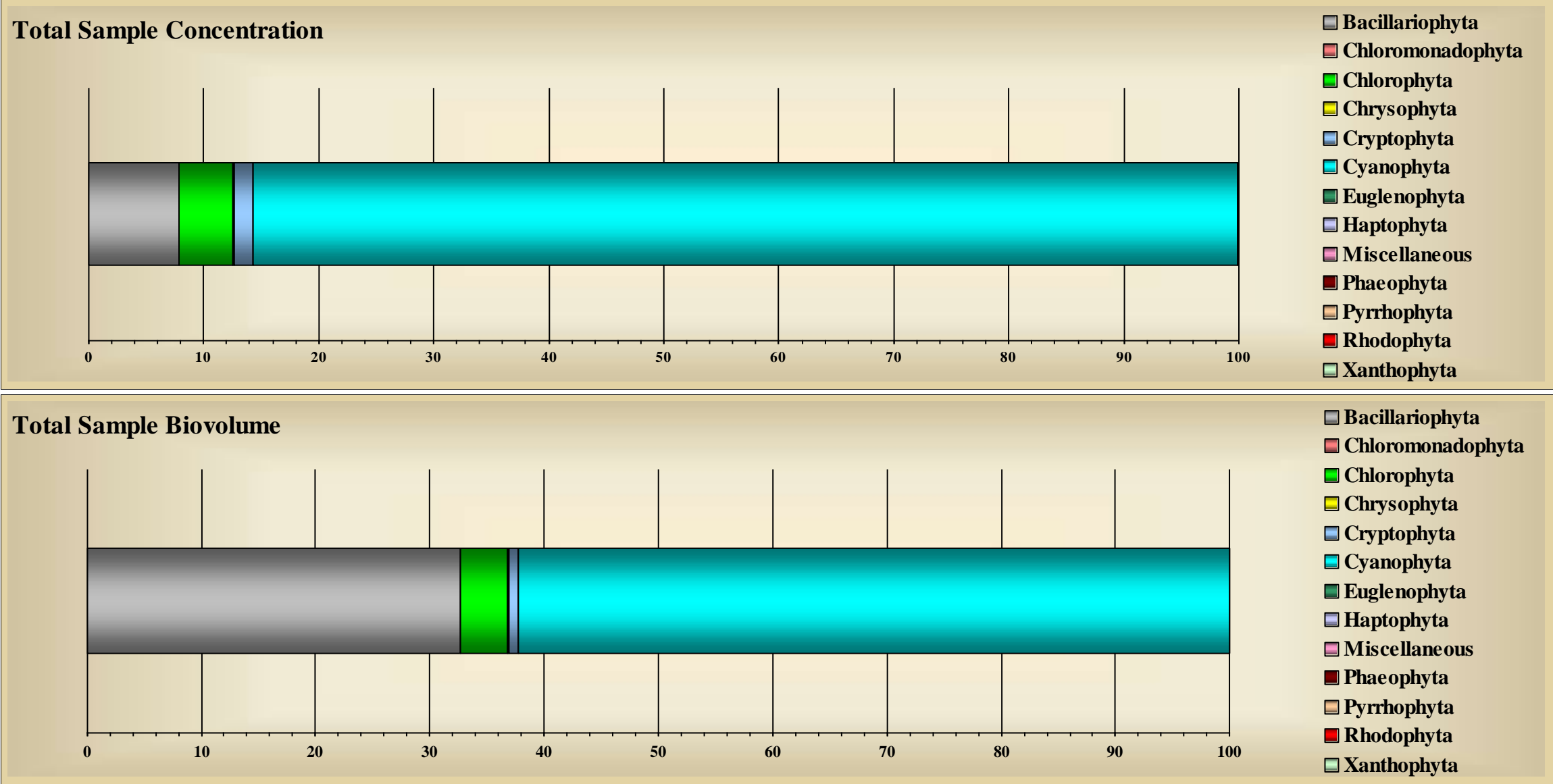
Division: Cyanophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	36,126.606	47.34	9,685.543	0.16		
1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	7.20	306.158	0.40	536.296	0.01
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	6.40	102.053	0.13	214.515	0.00
1000547	Jaaginema	spp	.	.	.	.	Vegetative	162.00	50.815	0.07	6,465.475	0.11
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	12.80	306.158	0.40	23,083.738	0.39
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	4.80	408.210	0.53	525.816	0.01
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	111.11	152.446	0.20	3,360,025.169	56.49
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.32	6,327.259	8.29	273,770.991	4.60
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	44.00	16.939	0.02	9,365.627	0.16
4191	Pseudanabaena	mucicola	.	.	.	.	Vegetative	8.00	204.105	0.27	1,282.433	0.02
4210	Spirulina	spp	.	.	.	.	Vegetative	96.00	1.023	0.00	1,644.718	0.03
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	8,878.573	11.63	9,297.641	0.16
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	12,246.307	16.05	4,924.240	0.08		
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	204.105	0.27	357.796	0.01		
Summary for Division ~ Cyanophyta (14 detail records)									Sum Total	Cyanophyta	65,330.755	85.60	3,701,179.999	62.23

Division: Euglenophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
5020	Euglena	spp	.	.	.	.	Vegetative	32.00	0.511	0.00	542.757	0.01
Summary for Division ~ Euglenophyta (1 detail record)							Sum Total	Euglenophyta	0.511	0.00	542.757	0.01

Division: Haptophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume		
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	102.053	0.13	3,284.388	0.06
Summary for Division ~ Haptophyta (1 detail record)							Sum Total	Haptophyta			102.053	0.13	3,284.388	0.06

Total Sample Concentration
76,319.335
NU/ml

Total Sample Biovolume
5,947,928.611
µm³ /ml



<u>Tracking Code:</u>	210006-392	<u>Sample ID:</u>	ILSRM 1630	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/16/2021	<u>Sample Level:</u>	Composite
<u>Job ID:</u>	1	<u>Station:</u>	Marina	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553700 ILLINOIS RIVER AT S	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Composite of 10 surface grab samples upstream of Starved Rock Dam, at Starved Rock Marina Time: 1630				

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
1070	Cyclotella	spp	.	.	.	.	Vegetative	5.60	1,020.526	0.40	82,075.566	1.01
9856	Cyclotella	atomus	.	.	.	.	Vegetative	4.80	510.263	0.20	25,853.791	0.32
1000653	Cyclotella	meneghiniana	.	.	.	>8 um	Vegetative	18.67	127.039	0.05	401,231.980	4.92
1076	Cyclotella	meneghiniana	.	.	.	.	Vegetative	6.40	1,020.526	0.40	131,320.824	1.61
1071	Cyclotella	sp. 1	.	.	.	.	Vegetative	4.80	1,530.788	0.61	88,641.526	1.09
9072	Navicula	cryptotenella	.	.	.	.	Vegetative	24.00	510.263	0.20	307,783.272	3.78
1222	Nitzschia	gracilis	.	.	.	.	Vegetative	36.00	42.346	0.02	5,387.896	0.07
9123	Nitzschia	palea	.	.	.	.	Vegetative	32.00	42.346	0.02	13,303.449	0.16
110810	Skeletonema	potamos	.	.	.	.	Vegetative	14.40	7,653.942	3.03	2,016,750.165	24.75
Summary for Division ~ Bacillariophyta (9 detail records)							Sum Total	Bacillariophyta	12,458.038	4.94	3,072,348.470	37.71

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	2.31	5,102.628	2.02	38,947.849	0.48
2021	Actinastrum	hantzschii	.	.	.	.	Vegetative	35.20	510.263	0.20	78,792.536	0.97
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	6.00	1,020.526	0.40	60,188.762	0.74

1000012	<i>Closterium</i>	<i>spp</i>	.	.	.	straight	Vegetative	96.00	510.263	0.20	328,302.163	4.03
2682	<i>Colonial</i>	<i>spp</i>	.	.	.	.	Vegetative	9.60	510.263	0.20	35,018.876	0.43
2197	<i>Crucigenia</i>	<i>apiculata</i>	.	.	.	.	Vegetative	12.00	42.346	0.02	1,064.274	0.01
2212	<i>Dictyosphaerium</i>	<i>ehrenbergianum</i>	.	.	.	.	Vegetative	16.00	42.346	0.02	3,192.826	0.04
2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	20.00	42.346	0.02	1,338.783	0.02
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	1,530.788	0.61	11,897.594	0.15
1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	64.00	84.692	0.03	8,301.352	0.10
2211	<i>Mucidosphaerium</i>	<i>pulchellum</i>	.	.	.	.	Vegetative	8.00	510.263	0.20	3,950.557	0.05
2387	<i>Pediastrum</i>	<i>tetras</i>	.	tetraodon	.	.	Vegetative	25.60	510.263	0.20	106,220.028	1.30
2480	<i>Scenedesmus</i>	<i>spp</i>	.	.	.	.	Vegetative	4.80	510.263	0.20	13,132.072	0.16
8226	<i>Scenedesmus</i>	<i>intermedius</i>	.	.	.	.	Vegetative	16.00	84.692	0.03	2,527.653	0.03
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	16.00	510.263	0.20	7,386.819	0.09
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	32.80	1,020.526	0.40	86,726.510	1.06

Summary for Division ~ Chlorophyta (16 detail records)

Sum TotalChlorophyta

12,542.7314.97786,988.6549.66

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
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1652	*	<i>spp</i>	Vegetative	2.00	2,551.314	1.01	8,881.379	0.11
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Summary for Division ~ Chrysophyta (1 detail record)

Sum TotalChrysophyta

2,551.3141.018,881.3790.11

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
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3020	<i>Chroomonas</i>	<i>spp</i>	Vegetative	6.40	510.263	0.20	17,099.059	0.21
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3015	<i>Cryptomonas</i>	<i>erosa</i>	Vegetative	12.00	42.346	0.02	8,514.205	0.10
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Summary for Division ~ Cryptophyta (2 detail records)

Sum TotalCryptophyta

552.6090.2225,613.2650.31

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	135,219.640	53.59	36,252.386	0.44		
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	16.00	510.263	0.20	536.286	0.01
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	16.00	510.263	0.20	12,824.282	0.16
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.16	28,574.717	11.32	1,096,966.220	13.46
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	233.33	127.039	0.05	2,127,886.452	26.12
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	404.00	5.113	0.00	25,955.710	0.32
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	53.00	84.692	0.03	7,932.178	0.10
131150	Romeria	spp	.	.	.	.	Vegetative	2.40	510.263	0.20	1,923.640	0.02
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	10,205.256	4.04	10,686.944	0.13
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	43,372.338	17.19	17,440.017	0.21		
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	510.263	0.20	894.491	0.01		
1000513	Synechocystis	spp	.	.	.	>=2 um spherical	Vegetative	2.40	1,530.788	0.61	11,080.153	0.14		
Summary for Division ~ Cyanophyta (12 detail records)									Sum Total	Cyanophyta	221,160.634	87.65	3,350,378.758	41.12

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	2,551.314	1.01	82,109.703	1.01
Summary for Division ~ Haptophyta (1 detail record)									Sum Total Haptophyta	2,551.314	1.01	82,109.703	1.01

Division: Pyrrhophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6040	Peridinium	spp	.	.	.	.	Vegetative	24.00	510.263	0.20	820,755.357	10.07

☒ = Identification is Uncertain

* = Family Level Identification

Summary for Division ~ Pyrrhophyta (1 detail record)	Sum Total	Pyrrhophyta	510.263	0.20	820,755.357	10.07
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Total Sample Concentration

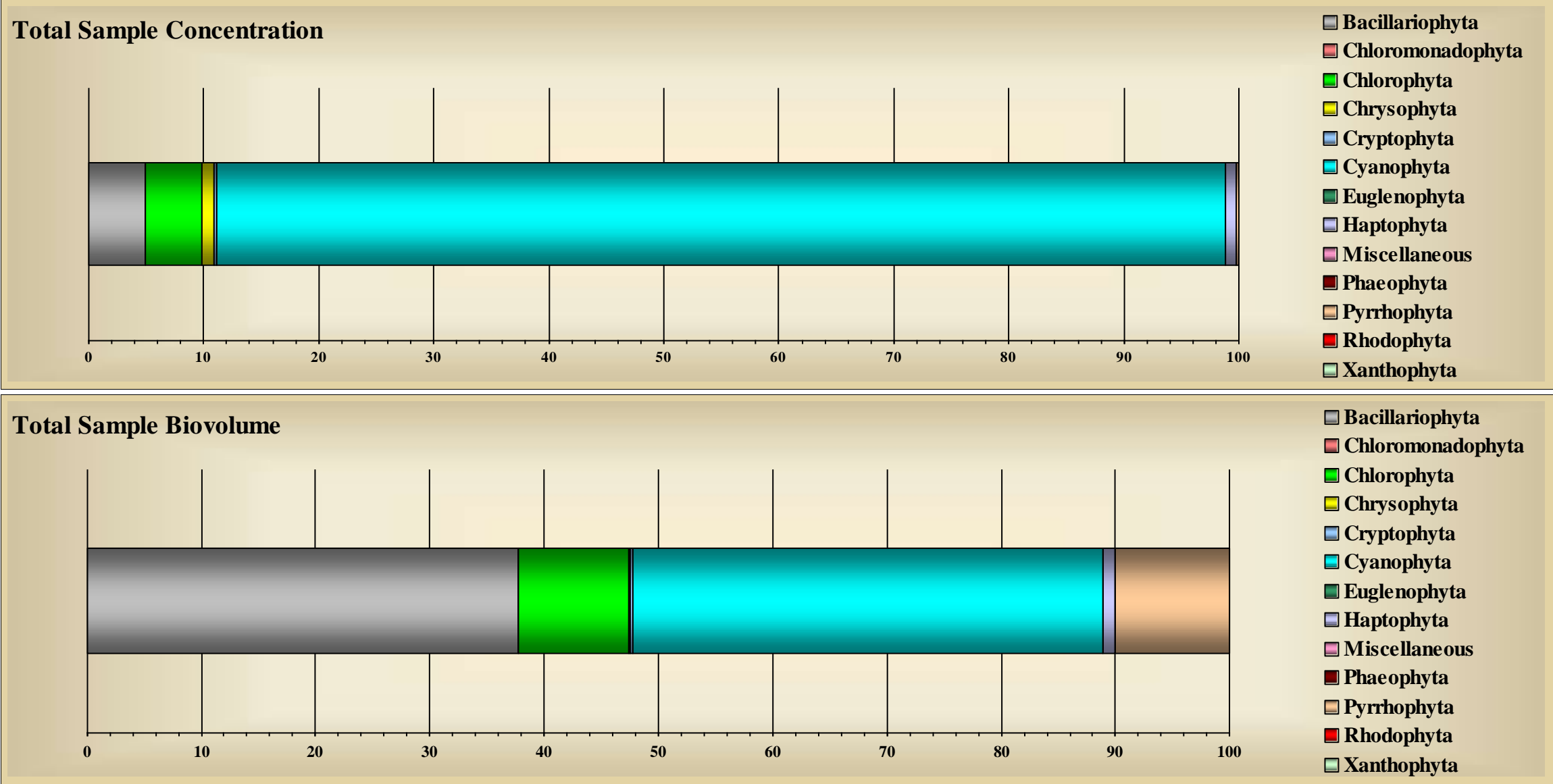
252,326.902

NU/ml

Total Sample Biovolume

8,147,075.585

µm^3 /ml



<u>Tracking Code:</u>	210013-392	<u>Sample ID:</u>	Henry 1200	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	6/23/2021	<u>Sample Level:</u>	.
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05558300 ILLINOIS RIVER AT H	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Time: 1200				

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
1432	<i>Aulacoseira</i>	<i>granulata</i>	.	.	.	straight	Vegetative	88.00	65,084.540	0.22	103,641,304.948	1.81
9856	<i>Cyclotella</i>	<i>atomus</i>	.	.	.	.	Vegetative	6.00	10,802.599	0.04	916,308.878	0.02
1076	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	.	Vegetative	6.40	65,084.540	0.22	5,234,411.116	0.09
1000653	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	>8 um	Vegetative	9.60	65,084.540	0.22	22,612,647.169	0.39
1210	<i>Navicula</i>	<i>spp</i>	.	.	.	.	Vegetative	24.00	10,802.599	0.04	3,665,235.514	0.06
9072	<i>Navicula</i>	<i>cryptotenella</i>	.	.	.	.	Vegetative	20.00	65,084.540	0.22	11,777,418.502	0.21
9687	<i>Navicula</i>	<i>viridula</i>	.	germainii	.	.	Vegetative	30.00	86,420.794	0.29	65,159,740.547	1.14
1222	<i>Nitzschia</i>	<i>gracilis</i>	.	.	.	.	Vegetative	36.00	10,802.599	0.04	3,817,954.020	0.07
9118	<i>Nitzschia</i>	<i>linearis</i>	.	.	.	.	Vegetative	44.00	10,802.599	0.04	6,719,598.082	0.12
9123	<i>Nitzschia</i>	<i>palea</i>	.	.	.	.	Vegetative	14.40	65,084.540	0.22	1,472,179.753	0.03
9125	<i>Nitzschia</i>	<i>sigmoidea</i>	.	.	.	.	Vegetative	176.00	652.117	0.00	6,490,238.790	0.11
1250	<i>Pleurosigma</i>	<i>spp</i>	.	.	.	.	Vegetative	104.00	652.117	0.00	4,340,491.845	0.08
111365	<i>Tryblionella</i>	<i>levidensis</i>	.	.	.	.	Vegetative	48.00	652.117	0.00	3,146,782.442	0.05
Summary for Division ~ Bacillariophyta (13 detail records)							Sum Total Bacillariophyta		457,010.243	1.53	238,994,311.605	4.16

☒ = Identification is Uncertain

*** = Family Level Identification**

210013-392

Sample Date: 6/23/2021

Thursday, January 20, 2022

Phytoplankton - Grab

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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	65,084.540	0.22	942,196.344	0.02	
1000057	*	spp	.	.	.	Microflagellate	Vegetative	4.00	65,084.540	0.22	2,094,635.278	0.04	
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	6.40	65,084.540	0.22	8,711,455.041	0.15
2175	Coelastrum	pseudomicroporum	.	.	.	.	Vegetative	10.00	10,802.599	0.04	2,895,988.901	0.05
2031	Monoraphidium	arcuatum	.	.	.	monoraphidiod	Vegetative	10.00	10,802.599	0.04	229,023.747	0.00	
8041	Monoraphidium	capricornutum	.	.	.	.	Vegetative	6.40	130,169.080	0.44	4,561,137.583	0.08
102793	Scenedesmus	acutus	alternans	.	.	.	Vegetative	20.00	10,802.599	0.04	1,018,121.216	0.02	
2884	Scenedesmus	quadricauda	.	.	.	.	Vegetative	25.60	65,084.540	0.22	5,862,535.503	0.10
Summary for Division ~ Chlorophyta (8 detail records)									Sum Total Chlorophyta	422,915.038	1.42	26,315,093.612	0.46

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	2.00	650,845.400	2.18	2,704,457.892	0.05
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		650,845.400	2.18	2,704,457.892	0.05

Division: Cryptophyta													
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
3020	Chroomonas	spp	.	.	.	.	Vegetative	5.60	130,169.080	0.44	4,362,004.924	0.08
3043	Plagioselmis	minuta	.	nannoplantica	.	.	Vegetative	8.00	65,084.540	0.22	2,181,002.462	0.04	
Summary for Division ~ Cryptophyta (2 detail records)									Sum Total Cryptophyta	195,253.620	0.65	6,543,007.386	0.11

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	976,268.101	3.27	261,737.478	0.00		
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	16.00	65,084.540	0.22	1,090,504.485	0.02
1000547	Jaaginema	spp	.	.	.	.	Vegetative	11.20	65,084.540	0.22	572,516.157	0.01
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.32	25,773,477.856	86.27	1,115,179,726.607	19.43
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	117.45	715,929.940	2.40	4,301,114,139.050	74.92
4170	Oscillatoria	spp	.	.	.	.	Vegetative	48.00	10,802.599	0.04	26,063,897.947	0.45
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	128.00	65,084.540	0.22	16,750,111.666	0.29
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	58.00	21,605.199	0.07	2,214,414.023	0.04
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	260,338.160	0.87	497,636.393	0.01
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	130,169.080	0.44	228,186.397	0.00		
Summary for Division ~ Cyanophyta (10 detail records)									Sum Total	Cyanophyta	28,083,844.555	94.00	5,463,972,870.203	95.18

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	65,084.540	0.22	2,094,635.278	0.04
Summary for Division ~ Haptophyta (1 detail record)							Sum Total Haptophyta		65,084.540	0.22	2,094,635.278	0.04

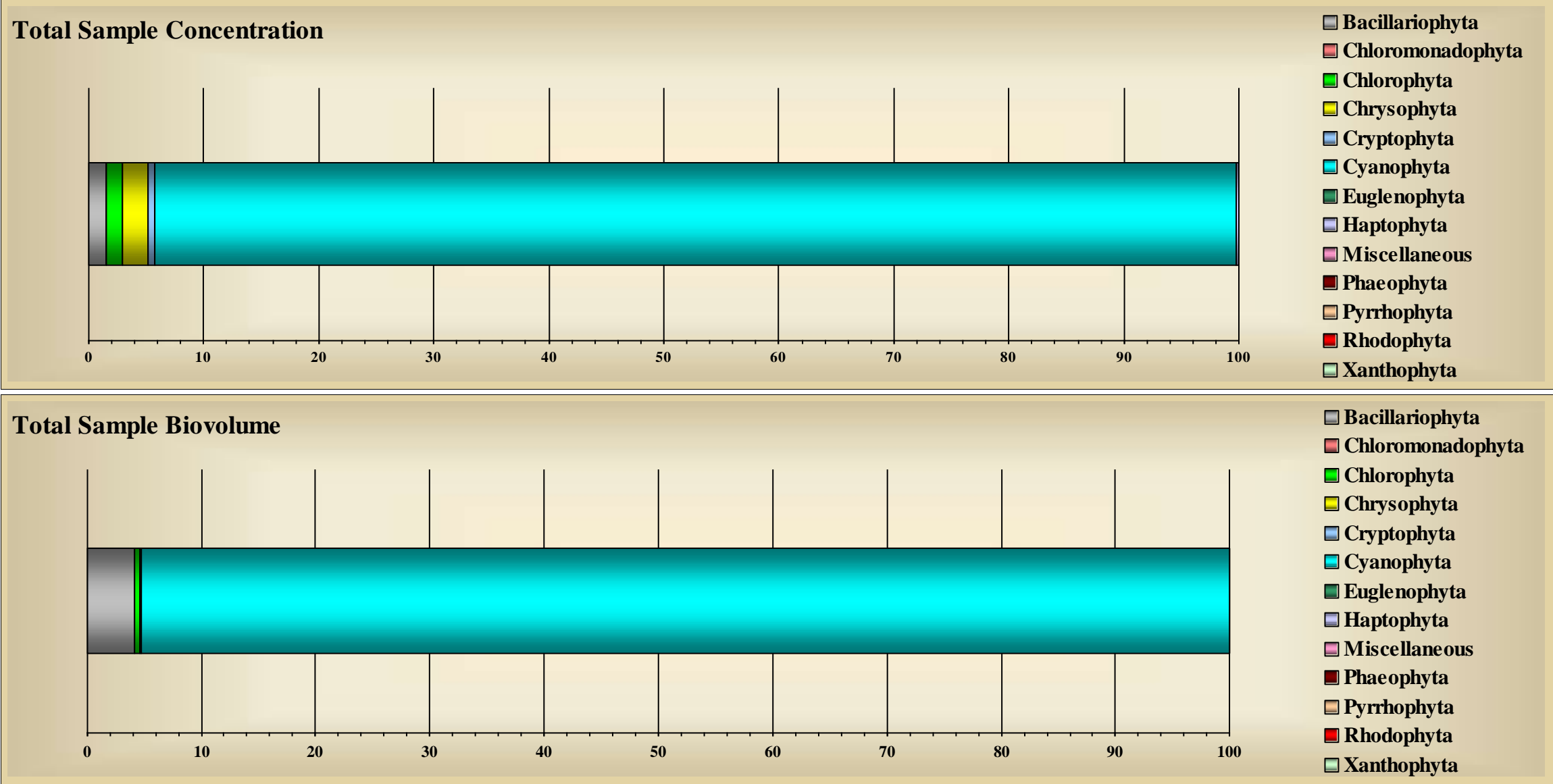
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Total Sample Concentration
29,874,953.397
NU/ml

Total Sample Biovolume

µm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

Replicate: .

Sample Level: .

Sample Depth: 0

Site: USGS 05553700 ILLINOIS RIVER AT S **Preservative:** Glutaraldehyde

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	<i>Aulacoseira</i>	<i>ambigua</i>	Vegetative	40.00	127.566	0.25	92,334.974	0.75
8616	<i>Aulacoseira</i>	<i>islandica</i>	Vegetative	44.00	42.346	0.08	93,656.271	0.76
1433	<i>Aulacoseira</i>	<i>pusilla</i>	Vegetative	32.00	84.692	0.17	544,909.221	4.44
☑ 1522	<i>Cyclostephanos</i>	<i>tholiformis</i>	Vegetative	9.60	127.566	0.25	44,320.789	0.36
9856	<i>Cyclotella</i>	<i>atomus</i>	Vegetative	5.12	1,148.091	2.26	77,653.680	0.63
1000653	<i>Cyclotella</i>	<i>meneghiniana</i>	.	.	.	>8 um	Vegetative	14.00	2,168.617	4.26	2,611,252.397	21.28
1076	<i>Cyclotella</i>	<i>meneghiniana</i>	Vegetative	5.83	1,913.486	3.76	159,113.015	1.30
1071	<i>Cyclotella</i>	<i>sp. 1</i>	Vegetative	2.93	382.697	0.75	6,309.565	0.05
1720	<i>Gyrosigma</i>	<i>spp</i>	Vegetative	104.00	1.278	0.00	13,292.756	0.11
1195	<i>Melosira</i>	<i>varians</i>	Vegetative	280.00	42.346	0.08	3,724,965.350	30.35
9113	<i>Nitzschia</i>	<i>dissipata</i>	Vegetative	24.00	127.566	0.25	12,311.327	0.10
1222	<i>Nitzschia</i>	<i>gracilis</i>	Vegetative	40.00	127.566	0.25	20,518.879	0.17
9123	<i>Nitzschia</i>	<i>palea</i>	Vegetative	12.27	382.697	0.75	8,720.519	0.07
110810	<i>Skeletonema</i>	<i>potamos</i>	Vegetative	28.32	8,929.599	17.54	3,660,466.719	29.83
111364	<i>Tryblionella</i>	<i>hungarica</i>	Vegetative	32.00	1.278	0.00	4,111.796	0.03
Summary for Division ~ Bacillariophyta (15 detail records)							Sum Total	Bacillariophyta	15,607.391	30.66	11,073,937.257	90.23

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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	2.80	382.697	0.75	1,436.339	0.01
1000057	.*	spp	.	.	.	Microflagellate	Vegetative	4.80	127.566	0.25	1,846.705	0.02
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	2.89	1,913.486	3.76	29,488.725	0.24
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	5.87	382.697	0.75	64,954.910	0.53
2195	Crucigenia	quadrata	.	.	.	.	Vegetative	16.00	42.346	0.08	3,048.926	0.02
1000973	Desmodesmus	spp	.	.	.	.	Vegetative	36.80	127.566	0.25	16,415.103	0.13
2488	Desmodesmus	denticulatus	.	.	.	.	Vegetative	9.60	127.566	0.25	3,693.397	0.03
2212	Dictyosphaerium	ehrenbergianum	.	.	.	.	Vegetative	31.00	211.731	0.42	48,779.316	0.40
2300	Gonium	spp	.	.	.	.	Vegetative	48.00	127.566	0.25	52,528.340	0.43
102059	Lagerheimia	genevensis	.	.	.	.	Vegetative	8.00	510.263	1.00	5,830.773	0.05
2031	Monoraphidium	arcuatum	.	.	.	monoraphidiod	Vegetative	15.60	382.697	0.75	11,922.469	0.10
8041	Monoraphidium	capricornutum	.	.	.	.	Vegetative	4.00	2,934.011	5.76	22,803.721	0.19
2035	Monoraphidium	convolutus	.	.	.	.	Vegetative	10.80	255.131	0.50	3,886.876	0.03
1000031	Monoraphidium	griffithii	.	.	.	straight	Vegetative	24.00	84.692	0.17	1,915.699	0.02
2211	Mucidosphaerium	pulchellum	.	.	.	.	Vegetative	10.80	255.131	0.50	3,848.683	0.03
2483	Scenedesmus	bijuga	.	.	.	.	Vegetative	4.40	255.131	0.50	2,351.112	0.02
8226	Scenedesmus	intermedius	.	.	.	.	Vegetative	12.00	765.394	1.50	3,693.410	0.03
8303	Scenedesmus	opoliensis	.	carinatus	.	.	Vegetative	32.60	637.829	1.25	60,327.669	0.49
2884	Scenedesmus	quadricauda	.	.	.	.	Vegetative	10.00	255.131	0.50	1,709.916	0.01
8308	Scenedesmus	serratus	.	.	.	.	Vegetative	4.00	127.566	0.25	683.969	0.01
2491	Schroederia	judayi	.	.	.	.	Vegetative	20.00	127.566	0.25	2,391.755	0.02
2641	Sphaerocystis	schroeteri	.	.	.	.	Vegetative	12.00	127.566	0.25	5,540.102	0.05
2551	Tetraedron	caudatum	.	.	.	.	Vegetative	4.80	127.566	0.25	1,242.337	0.01
2561	Tetrastrum	staurogeniaeforme	.	.	.	.	Vegetative	8.00	255.131	0.50	2,128.842	0.02

Summary for Division ~ Chlorophyta (24 detail records)

Sum Total Chlorophyta

10,544.02620.71352,469.0912.87

☒ = Identification is Uncertain

* = Family Level Identification

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Division: Chrysophyta													
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume	
1652	*	spp	.	.	.	.	Vegetative	1.73	510.263	1.00	1,365.208	0.01
Summary for Division ~ Chrysophyta (1 detail record)									Sum Total Chrysophyta	510.263	1.00	1,365.208	0.01

Division: Cryptophyta														
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
3020	Chroomonas	spp	.	.	.	.	Vegetative	7.20	127.566	0.25	4,274.765	0.03
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	10.40	510.263	1.00	51,798.766	0.42
3043	Plagioselmis	minuta	.	nannoplantica	.	.	Vegetative	8.00	510.263	1.00	17,099.059	0.14		
Summary for Division ~ Cryptophyta (3 detail records)									Sum Total	Cryptophyta	1,148.091	2.26	73,172.590	0.60

Division: Cyanophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	14,542.490	28.57	3,898.842	0.03
1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	8.40	1,530.788	3.01	3,619.855	0.03
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	9.33	637.829	1.25	2,569.683	0.02
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	4.40	510.263	1.00	525.826	0.00
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	68.80	510.263	1.00	660,024.108	5.38
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.27	1,785.920	3.51	74,369.629	0.61
4170	Oscillatoria	spp	.	.	.	.	Vegetative	128.00	1.278	0.00	8,223.592	0.07
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	600.00	1.278	0.00	5,277.233	0.04
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	24.00	127.566	0.25	6,155.670	0.05
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.40	255.131	0.50	320.598	0.00

4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	1,913.486	3.76	769.413	0.01
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	1,148.091	2.26	2,012.604	0.02
Summary for Division ~ Cyanophyta (12 detail records)												
Sum Total Cyanophyta									22,964.382	45.12	767,767.051	6.26

Division: **Haptophyta**

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	127.566	0.25	4,105.485	0.03
Summary for Division ~ Haptophyta (1 detail record)									Sum Total	Haptophyta	127.566	0.25	4,105.485	0.03

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Total Sample Concentration

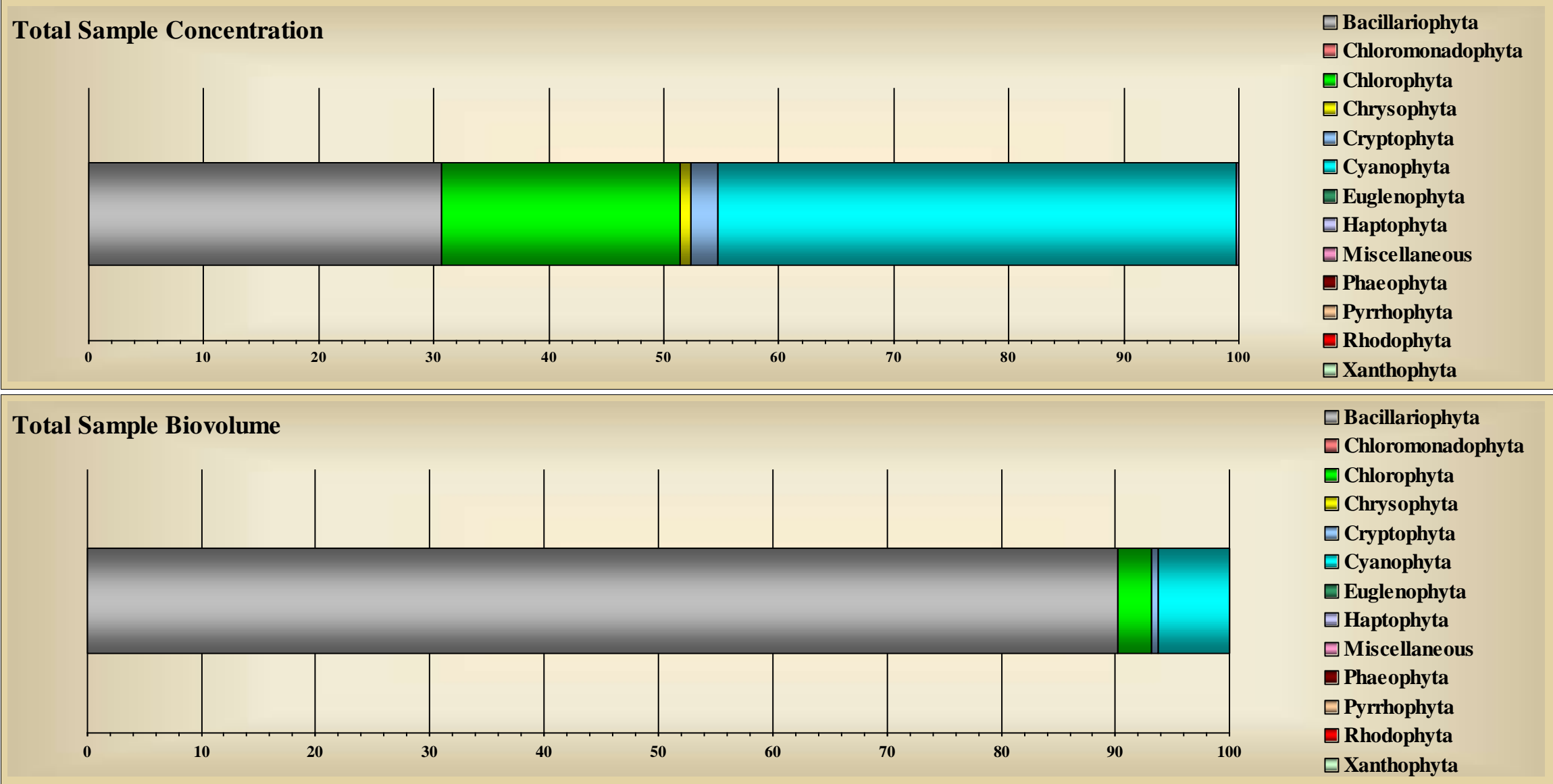
50,901.718

NU/ml

Total Sample Biovolume

12,272,816.683

μm^3 /ml



☑ = Identification is Uncertain
* = Family Level Identification

2381	<i>Pediastrum</i>	<i>duplex</i>	.	.	.	.	Vegetative	20.00	340.175	0.46	91,377.487	11.14
8226	<i>Scenedesmus</i>	<i>intermedius</i>	.	.	.	.	Vegetative	17.60	340.175	0.46	4,924.546	0.60
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	4.00	340.175	0.46	1,823.917	0.22
2501	<i>Selenastrum</i>	<i>minutum</i>	.	.	.	.	Vegetative	4.00	340.175	0.46	6,219.015	0.76

Summary for Division ~ Chlorophyta (12 detail records)

Sum TotalChlorophyta

5,788.0917.77168,377.78520.52

Division:Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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1652	*	<i>spp</i>	Vegetative	1.20	4,422.278	5.93	3,948.209	0.48
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Summary for Division ~ Chrysophyta (1 detail record)

Sum TotalChrysophyta

4,422.2785.933,948.2090.48

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	8.00	340.175	0.46	11,399.373	1.39
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Summary for Division ~ Cryptophyta (1 detail record)

Sum TotalCryptophyta

340.1750.4611,399.3731.39

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	51,026.279	68.48	13,680.146	1.67
1000424	<i>Cyanocatena</i>	<i>planctonica</i>	.	.	.	.	Vegetative	4.80	340.175	0.46	1,430.097	0.17
10651	<i>Cyanogranis</i>	<i>ferruginea</i>	.	.	.	.	Vegetative	18.40	2,041.051	2.74	13,192.538	1.61
107710	<i>Planktothrix</i>	<i>agardhii</i>	.	.	.	.	Vegetative	336.00	5.113	0.01	11,821.002	1.44
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.00	2,041.051	2.74	2,137.389	0.26
4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	5,102.628	6.85	2,051.767	0.25
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	680.350	0.91	1,192.654	0.15

Summary for Division ~ Cyanophyta (7 detail records)												
Sum Total		Cyanophyta		61,236.648		82.18		45,505.592		5.55		
Division: Haptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	340.175	0.46	10,947.960	1.33
Summary for Division ~ Haptophyta (1 detail record)												
Sum Total		Haptophyta		340.175		0.46		10,947.960		1.33		

Total Sample Concentration

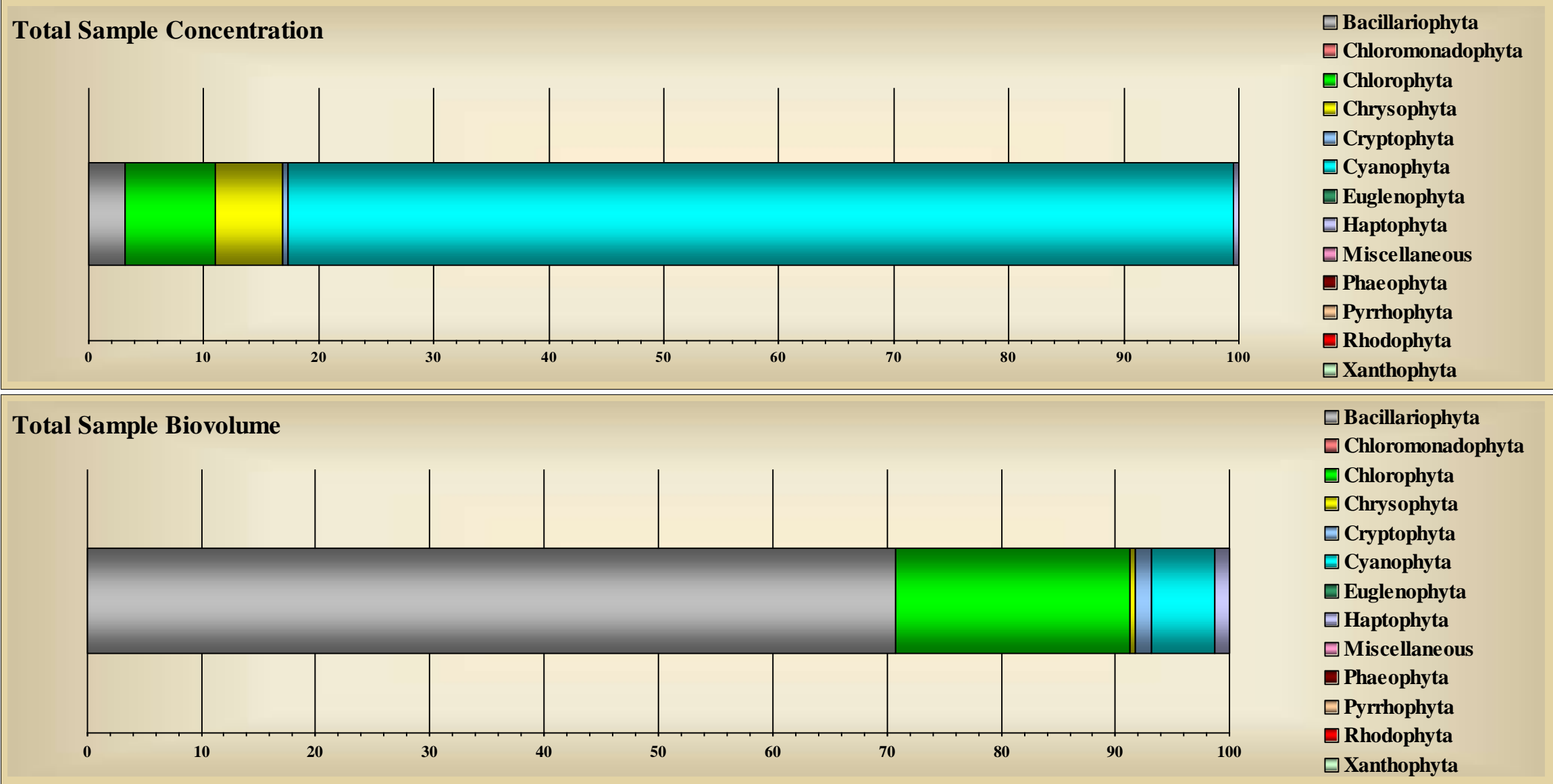
74,513.706

NU/ml

Total Sample Biovolume

820,366.082

μm^3 /ml



2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	12.00	1,020.526	0.51	26,054.427	1.31	
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	4,082.102	2.04	31,726.916	1.59
2035	<i>Monoraphidium</i>	<i>convolutus</i>	.	.	.	.	Vegetative	10.40	1,020.526	0.51	16,993.078	0.85
2371	<i>Pandorina</i>	<i>morum</i>	.	.	.	.	Vegetative	48.00	2.556	0.00	79,165.774	3.98
8226	<i>Scenedesmus</i>	<i>intermedius</i>	.	.	.	.	Vegetative	10.00	42.346	0.02	295.335	0.01
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	25.60	510.263	0.25	10,259.446	0.52	
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	16.00	510.263	0.25	4,924.546	0.25
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	3.73	4,082.102	2.04	19,606.746	0.99
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	5.60	1,020.526	0.51	7,485.249	0.38
Summary for Division ~ Chlorophyta (15 detail records)									Sum Total Chlorophyta	19,987.498	9.97	413,342.138	20.77

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	2.80	4,082.102	2.04	29,957.733	1.51
Summary for Division ~ Chrysophyta (1 detail record)							Sum Total Chrysophyta		4,082.102	2.04	29,957.733	1.51

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	16.00	510.263	0.25	136,792.577	6.87
3043	Plagioselmis	minuta	.	nannoplantica	.	.	Vegetative	8.00	2,041.051	1.02	68,396.237	3.44
3041	Rhodomonas	minuta	.	.	.	.	Vegetative	12.00	510.263	0.25	48,091.146	2.42
Summary for Division ~ Cryptophyta (3 detail records)							Sum Total Cryptophyta		3,061.577	1.53	253,279.959	12.73

☒ = Identification is Uncertain

✱ = Family Level Identification

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume		
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	81,642.047	40.72	21,888.233	1.10		
4054	Aphanocapsa	delicatissima	.	.	.	.	Vegetative	11.47	1,530.788	0.76	17,099.059	0.86
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	60.00	1,530.788	0.76	137,861.271	6.93
4086	Chroococcus	minutus	.	.	.	.	Vegetative	8.00	510.263	0.25	8,549.555	0.43
1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	4.00	510.263	0.25	536.286	0.03
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	20.00	1,530.788	0.76	93,296.806	4.69
4261	Microcystis	aeruginosa	.	.	.	.	Vegetative	60.00	42.346	0.02	287,354.469	14.44
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.00	127.039	0.06	4,257.101	0.21
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	114.00	84.692	0.04	17,061.669	0.86
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	28,574.717	14.25	29,923.443	1.50
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	38,269.710	19.09	15,388.250	0.77		
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	14,287.358	7.13	25,045.739	1.26		
Summary for Division ~ Cyanophyta (12 detail records)									Sum Total	Cyanophyta	168,640.799	84.11	658,261.881	33.07

Division: Pyrrhophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
6033	Gymnodinium	sp. 2	.	.	.	.	Vegetative	20.00	2.556	0.00	3,426.497	0.17
Summary for Division ~ Pyrrhophyta (1 detail record)							Sum Total Pyrrhophyta		2.556	0.00	3,426.497	0.17

Division: Xanthophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1681	Goniochloris	fallax	.	.	.	.	Vegetative	20.00	42.346	0.02	2,210.471	0.11

☒ = Identification is Uncertain

* = Family Level Identification

Summary for Division ~ Xanthophyta (1 detail record)					
	Sum Total	Xanthophyta	42.346	0.02	2,210.471
					0.11

Total Sample Concentration

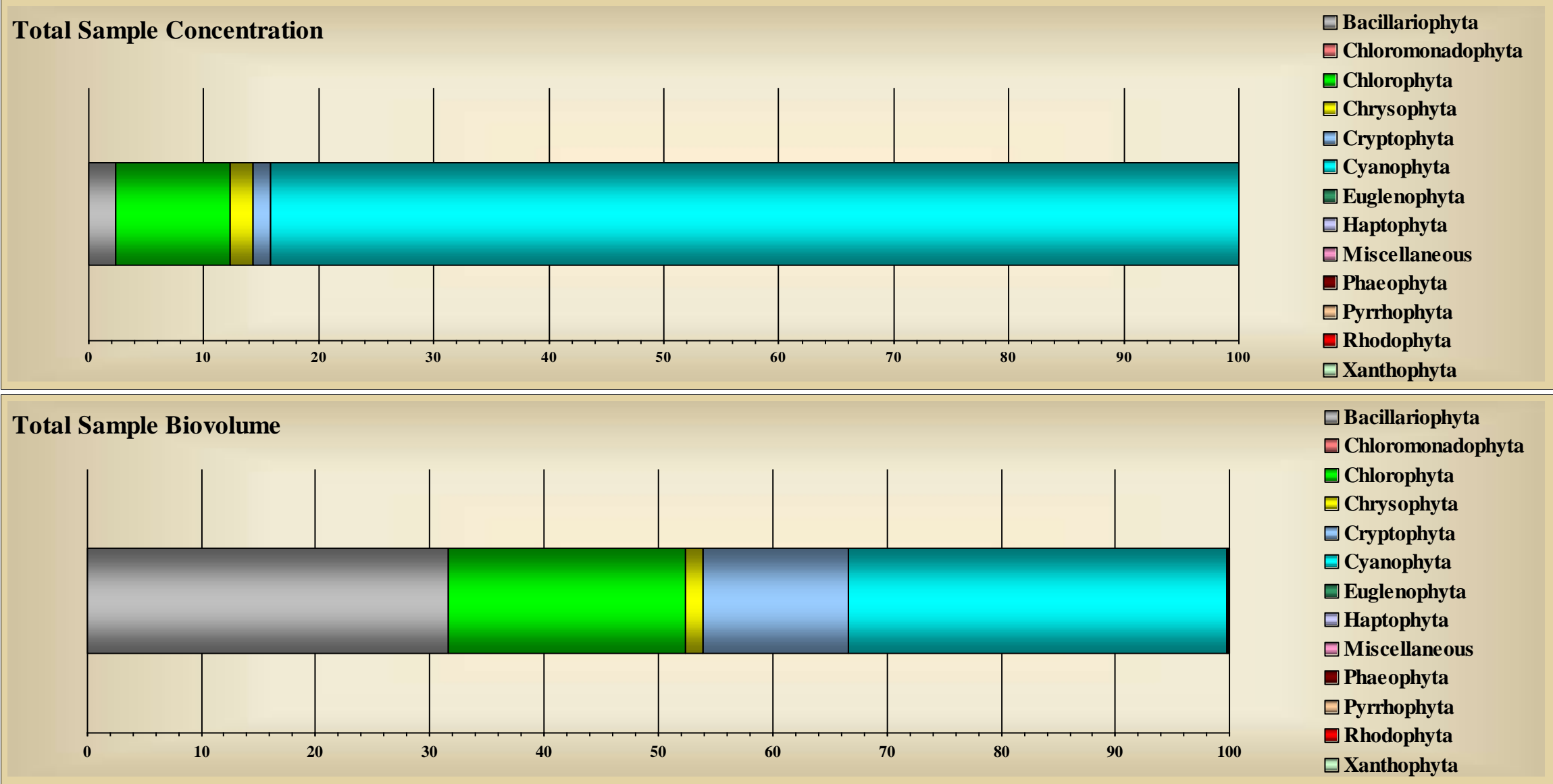
200,499.049

NU/ml

Total Sample Biovolume

1,990,333.798

μm³ /ml



<u>Tracking Code:</u>	210019-392	<u>Sample ID:</u>	IL Grab @ sensors	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	8/31/2021	<u>Sample Level:</u>	Epi
<u>Job ID:</u>	1	<u>Station:</u>	Gage	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	USGS 05553700 ILLINOIS RIVER AT S	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Time: 0830				

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
1076	Cyclotella	meneghiniana	.	.	.	.	Vegetative	6.40	1,020.526	0.25	105,056.680	4.80
1000653	Cyclotella	meneghiniana	.	.	.	>8 um	Vegetative	14.00	169.385	0.04	193,698.194	8.85
1071	Cyclotella	sp. 1	.	.	.	.	Vegetative	3.73	1,530.788	0.38	43,192.266	1.97
9123	Nitzschia	palea	.	.	.	.	Vegetative	24.00	84.692	0.02	7,183.862	0.33
110810	Skeletonema	potamos	.	.	.	.	Vegetative	12.93	2,551.314	0.63	373,101.604	17.05
Summary for Division ~ Bacillariophyta (5 detail records)							Sum Total	Bacillariophyta	5,356.705	1.32	722,232.605	33.00

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	3.60	1,020.526	0.25	25,853.791	1.18
2687	*Chlorococcaceae	spp	.	.	.	> 1 um ovoid	Vegetative	2.40	510.263	0.13	1,641.515	0.08
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	4.00	1,530.788	0.38	31,599.146	1.44
2175	Coelastrum	pseudomicroporum	.	.	.	.	Vegetative	19.60	510.263	0.13	363,115.863	16.59
2212	Dictyosphaerium	ehrenbergianum	.	.	.	.	Vegetative	56.00	510.263	0.13	187,132.246	8.55
2031	Monoraphidium	arcuatum	.	.	.	monoraphidioid	Vegetative	24.00	1,020.526	0.25	13,158.759	0.60
8041	Monoraphidium	capricornutum	Vegetative	4.00	4,082.102	1.00	31,726.916	1.45

☒ = Identification is Uncertain

*** = Family Level Identification**

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1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	44.00	84.692	0.02	1,560.940	0.07
2381	<i>Pediastrum</i>	<i>duplex</i>	.	.	.	.	Vegetative	32.00	5.113	0.00	2,505.612	0.11
8226	<i>Scenedesmus</i>	<i>intermedius</i>	.	.	.	.	Vegetative	10.00	84.692	0.02	709.519	0.03
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	21.60	1,530.788	0.38	7,386.819	0.34
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	10.00	84.692	0.02	2,378.653	0.11

Summary for Division ~ Chlorophyta (12 detail records)

Sum TotalChlorophyta10,974.7092.70668,769.78030.56

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
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1652	*	spp	Vegetative	2.00	8,674.468	2.14	37,169.226	1.70
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Summary for Division ~ Chrysophyta (1 detail record)

Sum TotalChrysophyta8,674.4682.1437,169.2261.70

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
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3020	<i>Chroomonas</i>	spp	Vegetative	6.40	510.263	0.13	17,099.059	0.78
3015	<i>Cryptomonas</i>	<i>erosa</i>	Vegetative	13.20	2,551.314	0.63	383,703.079	17.53
3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	8.00	1,020.526	0.25	34,198.119	1.56

Summary for Division ~ Cryptophyta (3 detail records)

Sum TotalCryptophyta4,082.1021.00435,000.25619.88

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
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4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	265,336.653	65.31	71,136.757	3.25
4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	.	.	.	.	Vegetative	4.00	1,530.788	0.38	4,274.727	0.20
1000545	<i>Aphanocapsa</i>	<i>holsatica</i>	.	.	.	.	Vegetative	40.00	84.692	0.02	5,321.383	0.24
<input checked="" type="checkbox"/> 1000043	<i>Aphanothece</i>	spp	.	.	.	< 1um ovoid	Vegetative	9.04	11,225.782	2.76	37,306.640	1.70

1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	4.00	510.263	0.13	536.286	0.02
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	8.00	510.263	0.13	1,072.572	0.05
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	12.80	2,041.051	0.50	58,136.894	2.66
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	9.87	2,041.051	0.50	7,011.011	0.32
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.00	1,020.526	0.25	34,198.119	1.56
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	14.40	510.263	0.13	12,915.466	0.59
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.00	19,389.986	4.77	20,305.194	0.93
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	56,128.907	13.82	22,569.434	1.03		
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	15,307.884	3.77	26,834.720	1.23		
1000513	Synechocystis	spp	.	.	.	>=2 um spherical	Vegetative	2.40	1,020.526	0.25	7,386.768	0.34		
Summary for Division ~ Cyanophyta (14 detail records)									Sum Total	Cyanophyta	376,658.634	92.71	309,005.969	14.12

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	510.263	0.13	16,421.941	0.75
Summary for Division ~ Haptophyta (1 detail record)							Sum Total	Haptophyta	510.263	0.13	16,421.941	0.75

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Total Sample Concentration

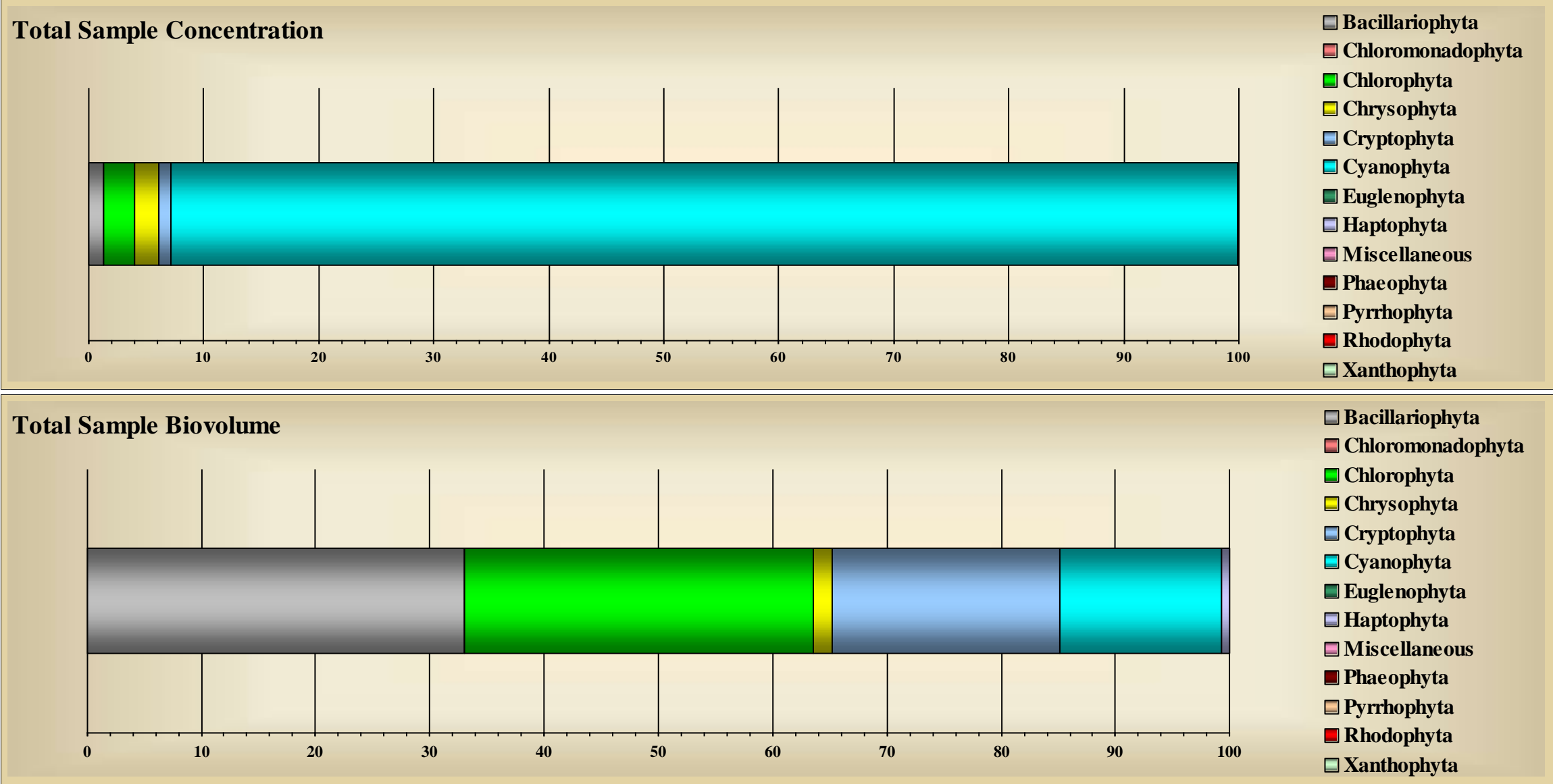
406,256.881

NU/ml

Total Sample Biovolume

2,188,599.776

μm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

<u>Tracking Code:</u>	210020-392	<u>Sample ID:</u>	ILUPFOX	<u>Replicate:</u>	.
<u>Customer ID:</u>	392	<u>Sample Date:</u>	8/31/2021	<u>Sample Level:</u>	Epi
<u>Job ID:</u>	1	<u>Station:</u>	.	<u>Sample Depth:</u>	0
<u>System Name:</u>	Illinois River	<u>Site:</u>	412026088481301 Upstream of Fox River	<u>Preservative:</u>	Glutaraldehyde
<u>Report Notes:</u>	Time: 1600				

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
9856	Cyclotella	atomus	.	.	.	.	Vegetative	4.80	510.263	0.21	22,160.407	0.38
1076	Cyclotella	meneghiniana	.	.	.	.	Vegetative	5.60	510.263	0.21	35,189.865	0.60
1000653	Cyclotella	meneghiniana	.	.	.	>8 um	Vegetative	16.00	169.385	0.07	544,909.221	9.37
1071	Cyclotella	sp. 1	.	.	.	.	Vegetative	3.60	1,020.526	0.42	25,956.354	0.45
9123	Nitzschia	palea	.	.	.	.	Vegetative	24.00	338.770	0.14	28,735.446	0.49
110810	Skeletonema	potamos	.	.	.	.	Vegetative	27.20	1,016.309	0.42	682,626.498	11.73
Summary for Division ~ Bacillariophyta (6 detail records)							Sum Total	Bacillariophyta	3,565.514	1.46	1,339,577.791	23.03

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
2684	*Chlorococcaceae	spp	.	.	.	> 10 um spherical	Vegetative	24.00	510.263	0.21	3,693,399.208	63.48
2683	*Chlorococcaceae	spp	.	.	.	2-9.9 um spherical	Vegetative	4.00	510.263	0.21	17,099.059	0.29
2080	Chlamydomonas	spp	.	.	.	.	Vegetative	3.20	510.263	0.21	8,322.437	0.14
2175	Coelastrum	pseudomicroporum	.	.	.	.	Vegetative	12.00	169.385	0.07	38,313.934	0.66
102059	Lagerheimia	genevensis	.	.	.	.	Vegetative	7.20	1,530.788	0.63	11,695.836	0.20
2331	Micractinium	pusillum	.	.	.	.	Vegetative	80.00	5.113	0.00	13,163.229	0.23

2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	12.00	510.263	0.21	10,006.764	0.17
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	510.263	0.21	3,965.865	0.07
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	4.80	510.263	0.21	3,283.031	0.06
☑ 2554	<i>Tetraedron</i>	<i>minimum</i>	.	.	.	.	Vegetative	4.80	510.263	0.21	14,107.746	0.24

Summary for Division ~ Chlorophyta (10 detail records)

Sum TotalChlorophyta

5,277.1252.163,813,357.10765.55

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	*	<i>spp</i>	.	.	.	.	Vegetative	1.73	3,571.840	1.46	9,556.457	0.16

Summary for Division ~ Chrysophyta (1 detail record)

Sum TotalChrysophyta

3,571.8401.469,556.4570.16

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	<i>Cryptomonas</i>	<i>erosa</i>	.	.	.	.	Vegetative	18.00	508.154	0.21	399,103.449	6.86
3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	8.00	510.263	0.21	17,099.059	0.29

Summary for Division ~ Cryptophyta (2 detail records)

Sum TotalCryptophyta

1,018.4170.42416,202.5087.15

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	177,571.452	72.80	47,606.906	0.82
4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	.	.	.	.	Vegetative	10.00	3,061.577	1.26	34,064.634	0.59
1000043	<i>Aphanothece</i>	<i>spp</i>	.	.	.	< 1um ovoid	Vegetative	5.80	2,551.314	1.05	8,683.142	0.15
4046	<i>Cuspidothrix</i>	<i>issatschenkoi</i>	.	.	.	.	Vegetative	160.00	10.225	0.00	11,258.096	0.19
4161	<i>Merismopedia</i>	<i>tenuissima</i>	.	.	.	.	Vegetative	4.00	1,530.788	0.63	8,549.606	0.15
4166	<i>Merismopedia</i>	<i>warmingiana</i>	.	.	.	.	Vegetative	14.67	677.539	0.28	11,352.302	0.20

4172	<i>Pseudanabaena</i>	<i>limnetica</i>	.	.	.	.	Vegetative	193.00	169.385	0.07	57,770.230	0.99
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	1.80	12,756.570	5.23	12,023.067	0.21
4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	21,431.037	8.79	8,617.420	0.15
1000513	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>=2 um spherical	Vegetative	2.00	2,041.051	0.84	8,549.555	0.15
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	8,164.205	3.35	14,311.851	0.25

Summary for Division ~ *Cyanophyta* (11 detail records)

Sum TotalCyanophyta

229,965.14494.28222,786.8103.83

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
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1731	<i>Chrysochromulina</i>	<i>parva</i>	Vegetative	4.00	510.263	0.21	16,421.941	0.28
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Summary for Division ~ *Haptophyta* (1 detail record)

Sum TotalHaptophyta

510.2630.2116,421.9410.28

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Total Sample Concentration

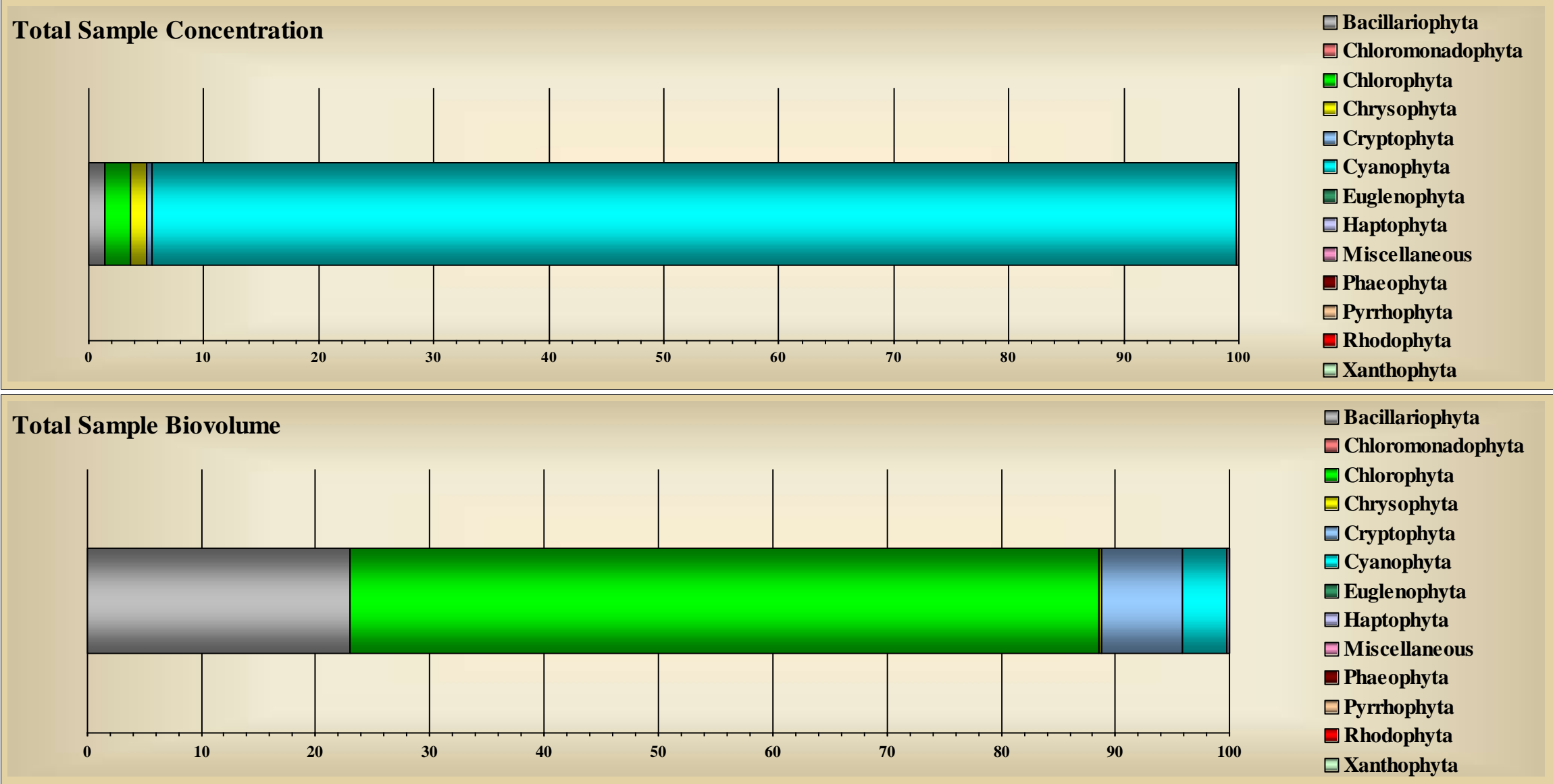
243,908.302

NU/ml

Total Sample Biovolume

5,817,902.614

μm^3 /ml



☑ = Identification is Uncertain
※ = Family Level Identification

2363	<i>Oocystis</i>	<i>parva</i>	.	.	.	.	Vegetative	16.00	169.385	0.04	39,732.972	1.97
8101	<i>Pyramichlamys</i>	<i>dissecta</i>	.	.	.	.	Vegetative	16.00	84.692	0.02	35,475.859	1.76
2483	<i>Scenedesmus</i>	<i>bijuga</i>	.	.	.	.	Vegetative	4.80	510.263	0.13	5,129.723	0.25
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	14.80	1,020.526	0.27	18,809.001	0.93
2884	<i>Scenedesmus</i>	<i>quadricauda</i>	.	.	.	.	Vegetative	32.00	84.692	0.02	17,028.411	0.85
102882	<i>Scenedesmus</i>	<i>raciborskii</i>	.	.	.	.	Vegetative	6.40	510.263	0.13	2,462.273	0.12
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	4.40	1,020.526	0.27	6,018.856	0.30
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	8.00	84.692	0.02	3,192.826	0.16

Summary for Division ~ Chlorophyta (16 detail records)

Sum Total Chlorophyta12,849.3793.40264,093.26913.12

Division:Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1652	*	<i>spp</i>	.	.	.	.	Vegetative	2.13	2,041.051	0.54	10,255.874	0.51

Summary for Division ~ Chrysophyta (1 detail record)

Sum Total Chrysophyta2,041.0510.5410,255.8740.51

Division:Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
3015	<i>Cryptomonas</i>	<i>erosa</i>	.	.	.	.	Vegetative	14.50	338.770	0.09	109,443.015	5.44

3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	6.40	510.263	0.13	17,099.059	0.85
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Summary for Division ~ Cryptophyta (2 detail records)

Sum Total Cryptophyta849.0320.22126,542.0746.29

Division:Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	107,155.187	28.33	28,728.306	1.43

4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	Vegetative	8.00	1,020.526	0.27	10,152.597	0.50
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☒ = Identification is Uncertain

* = Family Level Identification

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<input type="checkbox"/>	1000043	<i>Aphanothece</i>	<i>spp</i>	.	.	.	< 1um ovoid	Vegetative	6.72	4,082.102	1.08	39,327.791	1.95	
	4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	48.00	510.263	0.13	58,778.039	2.92
<input checked="" type="checkbox"/>	4046	<i>Cuspidothrix</i>	<i>issatschenkoi</i>	.	.	.	.	Vegetative	96.00	5.113	0.00	6,167.694	0.31
	4161	<i>Merismopedia</i>	<i>tenuissima</i>	.	.	.	.	Vegetative	10.00	84.692	0.02	4,257.105	0.21
	4166	<i>Merismopedia</i>	<i>warmingiana</i>	.	.	.	.	Vegetative	12.80	2,041.051	0.54	18,404.159	0.91
	4264	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	4.80	1,530.788	0.40	88,641.526	4.40
	4261	<i>Microcystis</i>	<i>aeruginosa</i>	.	.	.	.	Vegetative	112.00	84.692	0.02	241,235.848	11.98
	4172	<i>Pseudanabaena</i>	<i>limnetica</i>	.	.	.	.	Vegetative	50.80	508.154	0.13	45,617.517	2.27
<input checked="" type="checkbox"/>	107455	<i>Sphaerospermopsis</i>	<i>aphanizomenoides</i>	.	.	.	.	Vegetative	100.00	5.113	0.00	3,518.156	0.17
	4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.32	102,052.559	26.98	123,963.243	6.16
	4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	81,642.047	21.59	32,828.267	1.63	
	4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	56,128.907	14.84	98,393.975	4.89	
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Summary for Division ~ Cyanophyta (14 detail records)										Sum Total Cyanophyta	356,851.195	94.35	800,014.220	39.74

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	510.263	0.13	16,421.941	0.82
Summary for Division ~ Haptophyta (1 detail record)												
Sum Total							Haptophyta		510.263	0.13	16,421.941	0.82

Total Sample Concentration

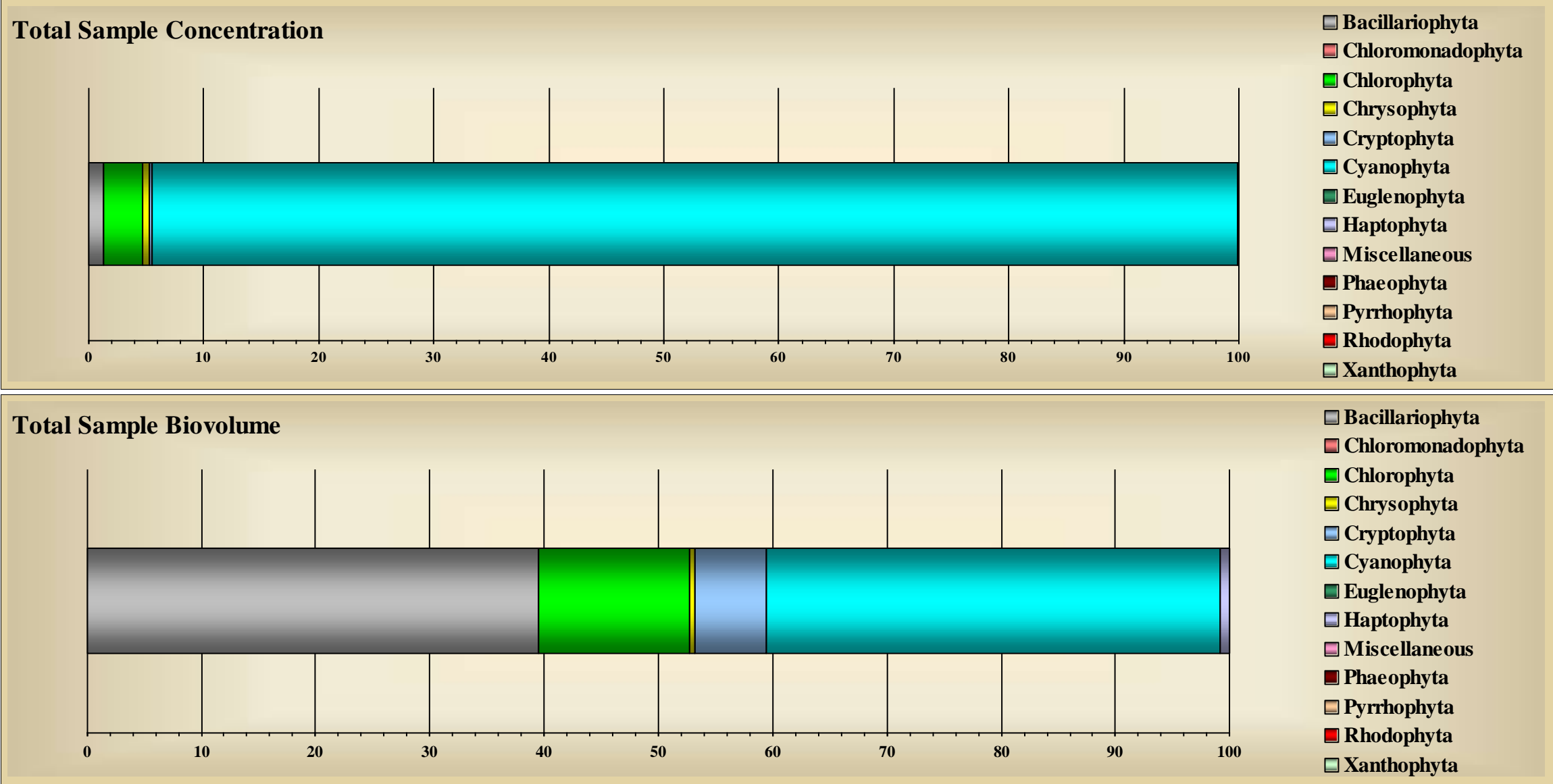
378,203.548

NU/ml

Total Sample Biovolume

2,013,357.440

μm^3 /ml



2483	<i>Scenedesmus</i>	<i>bijuga</i>	.	.	.	.	Vegetative	4.00	510.263	0.30	2,735.876	0.17
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	38.00	510.263	0.30	88,641.577	5.61
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	4.40	1,020.526	0.60	7,865.599	0.50
Summary for Division ~ Chlorophyta (11 detail records)												
Sum Total							Chlorophyta		5,446.510	3.19	540,230.553	34.20

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	2.00	2,041.051	1.19	8,745.700	0.55
Summary for Division ~ Chrysophyta (1 detail record)									Sum Total Chrysophyta	2,041.051	1.19	8,745.700	0.55

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
3015	<i>Cryptomonas</i>	<i>erosa</i>	.	.	.	.	Vegetative	12.00	169.385	0.10	34,056.821	2.16
3043	<i>Plagioselmis</i>	<i>minuta</i>	.	nannoplantica	.	.	Vegetative	8.00	1,530.788	0.90	51,297.178	3.25	
Summary for Division ~ Cryptophyta (2 detail records)									Sum Total Cryptophyta	1,700.173	0.99	85,353.999	5.40

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
4282	*Chroococcaceae	<i>spp</i>	.	.	.	<1 um spherical	Vegetative	0.80	61,231.535	35.82	16,416.175	1.04
4054	<i>Aphanocapsa</i>	<i>delicatissima</i>	.	.	.	.	Vegetative	12.00	2,041.051	1.19	16,564.763	1.05
4062	<i>Aphanothece</i>	<i>nidulans</i>	.	.	.	.	Vegetative	20.00	3,061.577	1.79	41,679.081	2.64
4083	<i>Chroococcus</i>	<i>minimus</i>	.	.	.	.	Vegetative	20.00	510.263	0.30	26,264.196	1.66
4046	<i>Cuspidothrix</i>	<i>issatschenkoi</i>	.	.	.	.	Vegetative	80.00	169.385	0.10	95,784.827	6.06
10651	<i>Cyanogranis</i>	<i>ferruginea</i>	.	.	.	.	Vegetative	16.00	510.263	0.30	3,283.031	0.21
4161	<i>Merismopedia</i>	<i>tenuissima</i>	Vegetative	6.67	1,530.788	0.90	18,167.703	1.15

☒ = Identification is Uncertain

* = Family Level Identification

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4166	<i>Merismopedia</i>	<i>warmingiana</i>	Vegetative	4.00	1,530.788	0.90	1,314.641	0.08
4264	<i>Microcystis</i>	<i>aeruginosa</i>	Vegetative	4.00	1,020.526	0.60	34,198.119	2.16
4172	<i>Pseudanabaena</i>	<i>limnetica</i>	.	.	.	.	Vegetative	116.00	508.154	0.30	104,165.985	6.59
4321	<i>Synechococcus</i>	<i>elongatus</i>	.	.	.	.	Vegetative	2.40	29,595.242	17.31	37,189.381	2.35
4323	<i>Synechococcus</i>	<i>sp. 1</i>	.	.	.	< 1um ovoid	Vegetative	1.20	27,554.191	16.12	11,079.540	0.70
4285	<i>Synechocystis</i>	<i>spp</i>	.	.	.	>1 um spherical	Vegetative	1.50	27,554.191	16.12	48,302.497	3.06
Summary for Division ~ Cyanophyta (13 detail records)												
Sum Total Cyanophyta									156,817.954	91.73	454,409.938	28.76

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	1,020.526	0.60	32,843.881	2.08
Summary for Division ~ Haptophyta (1 detail record)							Sum Total	Haptophyta	1,020.526	0.60	32,843.881	2.08

Total Sample Concentration

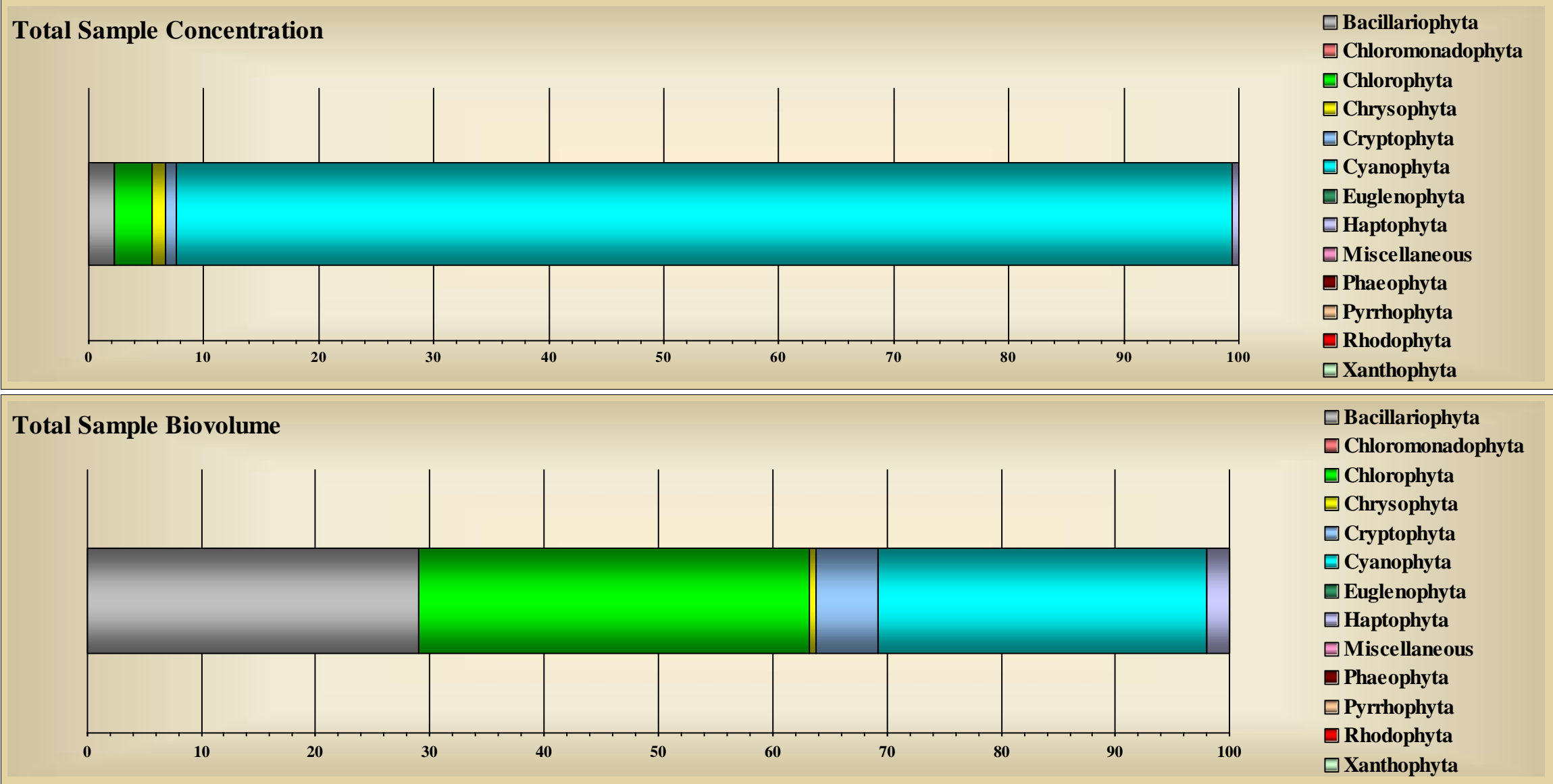
170,952.161

NU/ml

Total Sample Biovolume

1,579,745.359

µm³ /ml



8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	5,102.628	2.19	39,658.645	1.68
2035	<i>Monoraphidium</i>	<i>convolutus</i>	.	.	.	.	Vegetative	4.80	510.263	0.22	3,663.789	0.16
1000031	<i>Monoraphidium</i>	<i>griffithii</i>	.	.	.	straight	Vegetative	68.00	510.263	0.22	58,136.843	2.47	
2211	<i>Mucidosphaerium</i>	<i>pulchellum</i>	.	.	.	.	Vegetative	6.80	1,020.526	0.44	8,721.922	0.37
8471	<i>Nephroselmis</i>	<i>spp</i>	.	.	.	.	Vegetative	10.00	84.692	0.04	7,982.070	0.34
2363	<i>Oocystis</i>	<i>parva</i>	.	.	.	.	Vegetative	10.00	84.692	0.04	5,543.099	0.24
2480	<i>Scenedesmus</i>	<i>spp</i>	.	.	.	.	Vegetative	3.60	1,020.526	0.44	6,053.043	0.26
2483	<i>Scenedesmus</i>	<i>bijuga</i>	.	.	.	.	Vegetative	8.00	84.692	0.04	1,419.038	0.06
2501	<i>Selenastrum</i>	<i>minutum</i>	.	.	.	.	Vegetative	6.40	1,020.526	0.44	23,213.283	0.98
2551	<i>Tetraedron</i>	<i>caudatum</i>	.	.	.	.	Vegetative	6.40	510.263	0.22	4,969.347	0.21
2554	<i>Tetraedron</i>	<i>minimum</i>	.	.	.	.	Vegetative	6.00	84.692	0.04	4,273.577	0.18
Summary for Division ~ Chlorophyta (16 detail records)									Sum Total Chlorophyta	18,798.035	8.07	268,251.713	11.38

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	1.60	4,592.365	1.97	5,540.229	0.23
Summary for Division ~ Chrysophyta (1 detail record)								Sum Total Chrysophyta	4,592.365	1.97	5,540.229	0.23

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	10.49	5,102.628	2.19	474,290.288	20.11
Summary for Division ~ Cryptophyta (1 detail record)							Sum Total Cryptophyta		5,102.628	2.19	474,290.288	20.11

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	96,949.931	41.63	25,992.277	1.10	
4054	Aphanocapsa	delicatissima	.	.	.	.	Vegetative	4.00	510.263	0.22	1,068.694	0.05
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	12.00	1,530.788	0.66	45,620.249	1.93
1000043	Aphanothece	spp	.	.	.	< 1um ovoid	Vegetative	4.80	510.263	0.22	262.938	0.01	
1000424	Cyanocatena	planctonica	.	.	.	.	Vegetative	9.60	6,123.154	2.63	24,362.803	1.03
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	4.20	2,041.051	0.88	1,876.951	0.08
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	24.00	510.263	0.22	12,824.282	0.54
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	12.80	1,020.526	0.44	3,417.944	0.14
4460	Pseudanabaena	spp	.	.	.	.	Vegetative	260.00	84.692	0.04	38,912.582	1.65
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	48.00	84.692	0.04	7,183.862	0.30
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	2.27	17,348.935	7.45	28,087.926	1.19
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	40,821.024	17.53	16,414.134	0.70	
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	15,818.147	6.79	27,729.211	1.18	
Summary for Division ~ Cyanophyta (13 detail records)								Sum Total	Cyanophyta	183,353.728	78.74	233,753.853	9.91

Division: Haptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	510.263	0.22	16,421.941	0.70
Summary for Division ~ Haptophyta (1 detail record)							Sum Total Haptophyta		510.263	0.22	16,421.941	0.70

☒ = Identification is Uncertain

※ = Family Level Identification

Total Sample Concentration

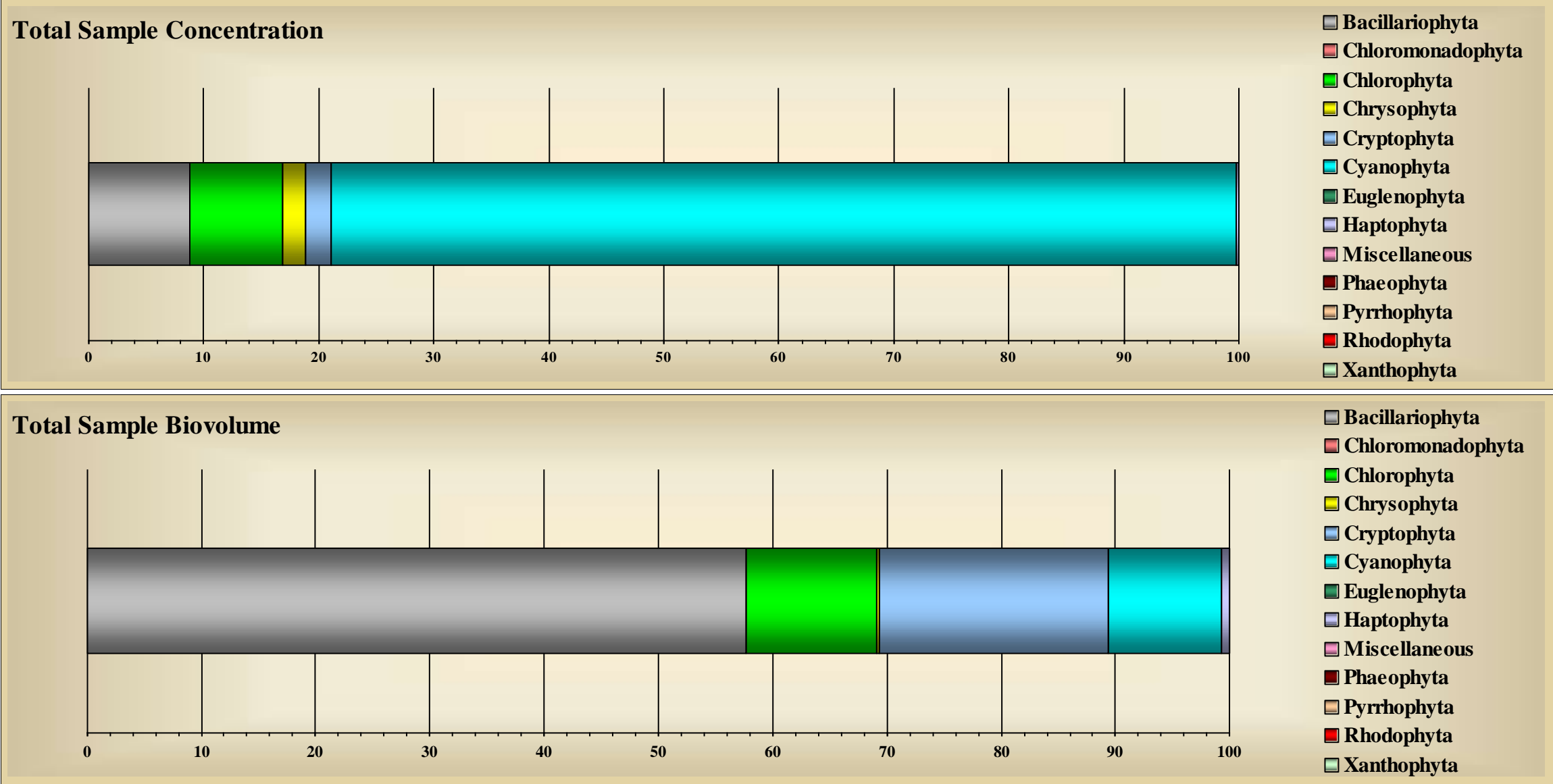
232,857.336

NU/ml

Total Sample Biovolume

2,358,094.228

µm^3 /ml



8309	<i>Desmodesmus</i>	<i>subspicatus</i>	.	.	.	.	Vegetative	22.00	84.692	0.02	2,838.067	0.09
2212	<i>Dictyosphaerium</i>	<i>ehrenbergianum</i>	.	.	.	.	Vegetative	24.00	84.692	0.02	25,542.620	0.85
2031	<i>Monoraphidium</i>	<i>arcuatum</i>	.	.	.	monoraphidiod	Vegetative	10.80	1,020.526	0.27	20,502.155	0.68	
8041	<i>Monoraphidium</i>	<i>capricornutum</i>	.	.	.	.	Vegetative	4.00	3,571.840	0.95	27,761.051	0.92
2035	<i>Monoraphidium</i>	<i>convolutus</i>	.	.	.	.	Vegetative	7.20	510.263	0.14	9,328.522	0.31
2211	<i>Mucidosphaerium</i>	<i>pulchellum</i>	.	.	.	.	Vegetative	4.00	510.263	0.14	7,901.113	0.26
2480	<i>Scenedesmus</i>	<i>spp</i>	.	.	.	.	Vegetative	2.40	510.263	0.14	1,641.515	0.05
8303	<i>Scenedesmus</i>	<i>opoliensis</i>	.	carinatus	.	.	Vegetative	38.67	254.077	0.07	109,560.983	3.63	
8308	<i>Scenedesmus</i>	<i>serratus</i>	.	.	.	.	Vegetative	4.16	2,551.314	0.68	13,268.874	0.44
2554	<i>Tetraedron</i>	<i>minimum</i>	.	.	.	.	Vegetative	3.20	1,020.526	0.27	7,947.343	0.26
2561	<i>Tetrastrum</i>	<i>staurogeniaeforme</i>	.	.	.	.	Vegetative	4.80	510.263	0.14	2,735.876	0.09
Summary for Division ~ Chlorophyta (15 detail records)									Sum Total Chlorophyta	19,898.141	5.28	455,656.720	15.09

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	2.00	510.263	0.14	2,120.295	0.07
Summary for Division ~ Chrysophyta (1 detail record)									Sum Total Chrysophyta	510.263	0.14	2,120.295	0.07

Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume	
3015	Cryptomonas	erosa	.	.	.	.	Vegetative	14.67	254.077	0.07	73,789.793	2.44
Summary for Division ~ Cryptophyta (1 detail record)									Sum Total Cryptophyta	254.077	0.07	73,789.793	2.44

☒ = Identification is Uncertain

※ = Family Level Identification

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Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD µm	Count NU/ml	Relative Count	Total Biovolume µm^3 /ml	Relative Total Biovolume	
4282	*Chroococcaceae	spp	.	.	.	<1 um spherical	Vegetative	0.80	122,463.071	32.51	32,832.349	1.09	
4051	Aphanocapsa	elachista	.	.	.	.	Vegetative	10.93	3,061.577	0.81	51,881.786	1.72
1000043	Aphanothece	spp	.	.	.	< 1um ovoid	Vegetative	18.67	3,571.840	0.95	27,928.571	0.92	
4062	Aphanothece	nidulans	.	.	.	.	Vegetative	12.00	1,530.788	0.41	20,518.841	0.68
10651	Cyanogranis	ferruginea	.	.	.	.	Vegetative	32.00	510.263	0.14	9,384.906	0.31
1000890	Dolichospermum	spp	.	.	.	straight	Vegetative	160.00	84.692	0.02	63,856.546	2.11	
4161	Merismopedia	tenuissima	.	.	.	.	Vegetative	4.00	510.263	0.14	2,137.389	0.07
4166	Merismopedia	warmingiana	.	.	.	.	Vegetative	8.80	2,551.314	0.68	7,558.778	0.25
4264	Microcystis	aeruginosa	.	.	.	.	Vegetative	4.00	510.263	0.14	17,099.059	0.57
107710	Planktothrix	agardhii	.	.	.	.	Vegetative	56.00	5.113	0.00	1,970.167	0.07
4172	Pseudanabaena	limnetica	.	.	.	.	Vegetative	40.00	84.692	0.02	5,986.549	0.20
4561	Raphidiopsis	raciborskii	.	.	.	curled	Vegetative	65.60	510.263	0.14	94,386.881	3.13	
4321	Synechococcus	elongatus	.	.	.	.	Vegetative	3.20	145,424.896	38.61	243,659.414	8.07
4323	Synechococcus	sp. 1	.	.	.	< 1um ovoid	Vegetative	1.20	52,046.805	13.82	20,928.020	0.69	
4285	Synechocystis	spp	.	.	.	>1 um spherical	Vegetative	1.50	14,797.621	3.93	25,940.230	0.86	
Summary for Division ~ Cyanophyta (15 detail records)									Sum Total Cyanophyta	347,663.460	92.30	626,069.485	20.73

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	32.00	5.113	0.00	21,929.577	0.73
Summary for Division ~ Euglenophyta (1 detail record)							Sum Total Euglenophyta		5.113	0.00	21,929.577	0.73

☒ = Identification is Uncertain

* = Family Level Identification

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Division: Haptophyta												
Taxa ID	Genus	Species	Subspecies	Variety	Form	Morph	Structure	GALD μm	Count NU/ml	Relative Count	Total Biovolume μm^3 /ml	Relative Total Biovolume
1731	Chrysochromulina	parva	.	.	.	.	Vegetative	4.00	1,020.526	0.27	32,843.881	1.09
Summary for Division ~ Haptophyta (1 detail record)						Sum Total	Haptophyta		1,020.526	0.27	32,843.881	1.09

Total Sample Concentration

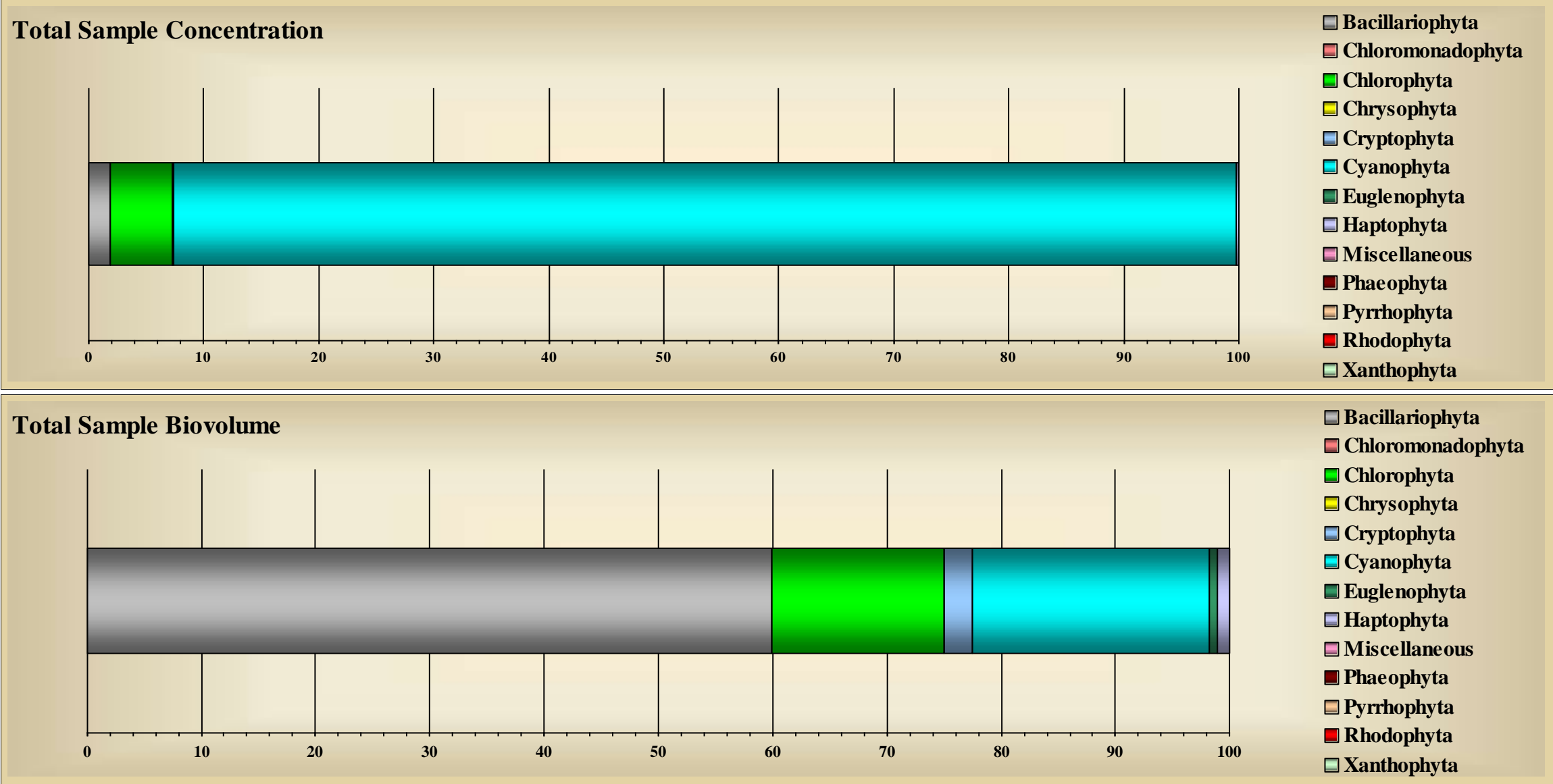
376,679.981

NU/ml

Total Sample Biovolume

3,020,325.298

µm^3 /ml



Species List

Division: Bacillariophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1701	Actinocyclus	normanii	.	.	.		Vegetative	(W. Greg.) Hust.
1430	Aulacoseira	spp	.	.	.		Vegetative	Thwaites
1431	Aulacoseira	ambigua	.	.	.		Vegetative	(Grunow) Simonsen
1432	Aulacoseira	granulata	.	.	.		Vegetative	(Ehrenberg) Simonsen
8616	Aulacoseira	islandica	.	.	.		Vegetative	(O. M H .) Simonsen
1433	Aulacoseira	pusilla	.	.	.		Vegetative	(Ehrenb.) Simonsen
1522	Cyclostephanos	tholiformis	.	.	.		Vegetative	Stoermer H†k. & Theriot
1074	Cyclotella	spp	.	.	.		Vegetative	(Kutzing) de Brebisson
1070	Cyclotella	spp	.	.	.		Vegetative	(Kutzing) de Brebisson
9856	Cyclotella	atomus	.	.	.		Vegetative	Hust.
1000653	Cyclotella	meneghiniana	.	.	.		Vegetative	.
1076	Cyclotella	meneghiniana	.	.	.		Vegetative	Kutzing
9363	Cyclotella	ocellata	.	.	.		Vegetative	Pant.
1071	Cyclotella	sp. 1	.	.	.		Vegetative	(Kutzing) de Brebisson
9361	Discostella	pseudostelligera	.	.	.		Vegetative	(Hust.) Houk and Klee 2004
1077	Discostella	stelligera	.	.	.		Vegetative	(Cleve & Grunow) Houk and Klee
1000913	Fragilaria	spp	.	.	.		Vegetative	Lyngbye
1720	Gyrosigma	spp	.	.	.		Vegetative	Hassall
1000936	Lindavia	intermedia	.	.	.		Vegetative	(Manguin ex Kociolek and Reviers) Nakov et al. ex
1195	Melosira	varians	.	.	.		Vegetative	C. Agardh
1210	Navicula	spp	.	.	.		Vegetative	Bory .
9072	Navicula	cryptotenella	.	.	.		Vegetative	Lange-Bert.
9687	Navicula	viridula	.	germainii	.		Vegetative	(J. H. Wallace) Lange-Bert.

1221	Nitzschia	acicularis	.	.	.	Vegetative	(Kutzing) W. Smith
9113	Nitzschia	dissipata	.	.	.	Vegetative	(Kütz.) Grunow
1222	Nitzschia	gracilis	.	.	.	Vegetative	Hantzsch
9118	Nitzschia	linearis	.	.	.	Vegetative	(C. Agardh) W. Sm.
9123	Nitzschia	palea	.	.	.	Vegetative	(Kütz.) W. Sm.
9125	Nitzschia	sigmoidea	.	.	.	Vegetative	(Nitzsch) W. Sm.
1250	Pleurosigma	spp	.	.	.	Vegetative	W. Smith .
110810	Skeletonema	potamos	.	.	.	Vegetative	(Weber) Hasle in Hasle & Evensen
1296	Stephanodiscus	hantzschii	.	.	.	Vegetative	Grunow
1300	Surirella	spp	.	.	.	Vegetative	Turpin
9776	Synedra	ulna	.	acus	.	Vegetative	(Nitzsch) Ehrenb.
111364	Tryblionella	hungarica	.	.	.	Vegetative	(Grunow) D. G. Mann
111365	Tryblionella	levidensis	.	.	.	Vegetative	W. Sm.
1315	Ulnaria	ulna	.	.	.	Vegetative	(Nitzsch) Ehrenb.

Division: Chlorophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
2683	*Chlorococcaceae	spp	.	.	.		Vegetative	N/A
1000057	.*	spp	.	.	.		Vegetative	N/A
2687	*Chlorococcaceae	spp	.	.	.		Vegetative	(Brandt) Beijerinck
2684	*Chlorococcaceae	spp	.	.	.		Vegetative	N/A
2021	Actinastrum	hantzschii	.	.	.		Vegetative	Lagerheim
100461	Ankistrodesmus	falcatus	falcatus	.	.		Vegetative	(Corda) Ralfs
2080	Chlamydomonas	spp	.	.	.		Vegetative	Ehrenberg
2110	Chlorogonium	spp	.	.	.		Vegetative	Dang.
1000012	Closterium	spp	.	.	.		Vegetative	.
2162	Closterium	moniliferum	.	.	.		Vegetative	(Bory) Ehrenberg
2175	Coelastrum	pseudomicroporum	.	.	.		Vegetative	Kors

2681	Colonial	spp	.	.	.	Vegetative	N/A
2682	Colonial	spp	.	.	.	Vegetative	N/A
2197	Crucigenia	apiculata	.	.	.	Vegetative	(Lemmermann) Schmidle
2194	Crucigenia	crucifera	.	.	.	Vegetative	(Wolle) Collins
2195	Crucigenia	quadrata	.	.	.	Vegetative	C. Morren
2193	Crucigenia	tetrapedia	.	.	.	Vegetative	(Kirch.) W. West and G. S. West
8011	Deasonia	Gigantica	.	.	.	Vegetative	(Deason) Ettl et Komarek
1000973	Desmodesmus	spp	.	.	.	Vegetative	(Chodat) S.S.An, T.Friedl & E.Hegewald, 1999
2488	Desmodesmus	denticulatus	.	.	.	Vegetative	Lagerhiem
8309	Desmodesmus	subspicatus	.	.	.	Vegetative	Chodat .
2212	Dictyosphaerium	ehrenbergianum	.	.	.	Vegetative	Naegeli
8241	Didymogenes	anomala	.	.	.	Vegetative	(Kirchn.) Chodat
2300	Gonium	spp	.	.	.	Vegetative	Paschcer
102059	Lagerheimia	genevensis	.	.	.	Vegetative	(Chodat) Chodat 1895
2853	Lagerheimia	quadriseta	.	.	.	Vegetative	(Lemmermann) G.M. Smith
2331	Micractinium	pusillum	.	.	.	Vegetative	Fresenius
2385	Monactinus	simplex	.	.	.	Vegetative	Meyen Lemm
2031	Monoraphidium	arcuatum	.	.	.	Vegetative	(Corda) Ralfs
8041	Monoraphidium	capricornutum	.	.	.	Vegetative	(Printz) Nygaard
2035	Monoraphidium	convolutus	.	.	.	Vegetative	Corda
1000031	Monoraphidium	griffithii	.	.	.	Vegetative	(Corda) Ralfs
2340	Mougeotia	spp	.	.	.	Vegetative	Kisselew
2211	Mucidosphaerium	pulchellum	.	.	.	Vegetative	C.Bock, Proschold & Krienitz, 2011
8471	Nephroselmis	spp	.	.	.	Vegetative	Stein 1878
2369	Oocystis	lacustris	.	.	.	Vegetative	Chodat
2363	Oocystis	parva	.	.	.	Vegetative	West & West
2371	Pandorina	morum	.	.	.	Vegetative	(O. Muller) Bory De St Vincent

2381	Pediastrum	duplex	.	.	.	Vegetative	West and West
2387	Pediastrum	tetras	.	tetraodon	.	Vegetative	(Corda) Rabenhorst
2761	Phacotus	lendneri	.	.	.	Vegetative	Chodat
8101	Pyramichlamys	dissecta	.	.	.	Vegetative	(Tiffana) Ettl
2480	Scenedesmus	spp	.	.	.	Vegetative	Meyen
2484	Scenedesmus	abundans	.	.	.	Vegetative	(Kirchn.) Chodat
8399	Scenedesmus	acutus	.	.	.	Vegetative	Lagh. Chodat
102793	Scenedesmus	acutus	alternans	.	.	Vegetative	Hortobagyi 1941
2486	Scenedesmus	bicaudatus	.	.	.	Vegetative	(Guglielmetti-printz)
2483	Scenedesmus	bijuga	.	.	.	Vegetative	(Turpin) Lagerh.
8396	Scenedesmus	bijuga	.	alternans	.	Vegetative	(West and West) Chodat
8226	Scenedesmus	intermedius	.	.	.	Vegetative	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
2551	Tetraedron	caudatum	.	.	.	Vegetative	(Corda) Hansgirg
2554	Tetraedron	minimum	.	.	.	Vegetative	(Braun) Hansgirg
8332	Tetraedron	muticum	.	.	.	Vegetative	(A. Braun) Hansgirg
2561	Tetrastrum	staurogeniaeforme	.	.	.	Vegetative	(Schroeder) Lemm.

Division:
Chrysophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1652	*,	spp	.	.	.		Vegetative	Cienkowski .

9511	Polygoniochloris	circularis	.	.	.		Vegetative	Lemmermann
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Division: Cryptophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
3020	Chroomonas	spp	.	.	.		Vegetative	Hansgirg .
3015	Cryptomonas	erosa	.	.	.		Vegetative	Ehrenberg .
3043	Plagioselmis	minuta	.	nannoplantica	.		Vegetative	Skuja
3041	Rhodomonas	minuta	.	.	.		Vegetative	Skuja

Division: Cyanophyta

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
4282	*Chroococcaceae	spp	.	.	.		Vegetative	N/A
4041	Aphanizomenon	flos-aquae	.	.	.		Vegetative	(L.) Ralfs
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
1000043	Aphanothece	spp	.	.	.		Vegetative	.
4062	Aphanothece	nidulans	.	.	.		Vegetative	P. Richter
4083	Chroococcus	minimus	.	.	.		Vegetative	(Keis.) Lemmermann
4086	Chroococcus	minutus	.	.	.		Vegetative	(Kuetzing) Naegeli
4093	Coelosphaerium	kuetzingianum	.	.	.		Vegetative	Naegeli 1849
4046	Cuspidothrix	issatschenkoi	.	.	.		Vegetative	(Usachev) Rajaniemi, Komárek, Willame, Hrouzek,
1000424	Cyanocatena	planctonica	.	.	.		Vegetative	Hindak
10651	Cyanogranis	ferruginea	.	.	.		Vegetative	Hindak
1000890	Dolichospermum	spp	.	.	.		Vegetative	.
10222	Dolichospermum	crassum	.	.	.		Vegetative	Lemmermann
4331	Dolichospermum	macrosporum	.	.	.		Vegetative	Klebahn 1895

107485	Dolichospermum	spiroides	spiroides	.	.	Vegetative	.
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
4170	Oscillatoria	spp	.	.	.	Vegetative	Gomont
4152	Planktolyngbya	contorta	.	.	.	Vegetative	Lemm
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
4561	Raphidiopsis	raciborskii	.	.	.	Vegetative	(Wolosz.) Seen. and Subbar.
131150	Romeria	spp	.	.	.	Vegetative	.
107455	Sphaerospermopsis	aphanizomenoides	.	.	.	Vegetative	(Forti) Zapomelová Zapomelová, Jezberová, Hrouze
4210	Spirulina	spp	.	.	.	Vegetative	Playfair
4321	Synechococcus	elongatus	.	.	.	Vegetative	Nageli
4323	Synechococcus	sp. 1	.	.	.	Vegetative	Nageli
4285	Synechocystis	spp	.	.	.	Vegetative	N/A
1000513	Synechocystis	spp	.	.	.	Vegetative	.

Division: **Euglenophyta**

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
5020	Euglena	spp	.	.	.		Vegetative	Ehrenberg
5040	Trachelomonas	spp	.	.	.		Vegetative	Ehrenberg .

Division: **Haptophyta**

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

Division: **Pyrrhophyta**

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
6011	Ceratium	hirundinella	.	.	.		Vegetative	Dujardin
6033	Gymnodinium	sp. 2	.	.	.		Vegetative	Stein
6040	Peridinium	spp	.	.	.		Vegetative	Ehrenberg

Division: **Xanthophyta**

Taxa ID	Genus	Species	Subspecies	Variety	Form	PhysiState	Structure	Authority
1681	Goniochloris	fallax	.	.	.		Vegetative	Fott