

PLANKTON STUDIES IN SAN FRANCISCO BAY. II.

PHYTOPLANKTON ABUNDANCE AND SPECIES COMPOSITION, JULY 1977 - DECEMBER 1979

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ABSTRACT

Data are presented on the phytoplankton species composition and abundance in San Francisco Bay from July 1977 through December 1979. Phytoplankton identification and enumerations were made at selected stations. Sample collections were made at selected stations in the main channel of the Bay from Rio Vista on the Sacramento River to Calaveras Point in South San Francisco Bay, and at shoal stations in the central portion of South San Francisco Bay, San Pablo Bay, and Suisun Bay. Also reported, from October 1978 through December 1979, are the calculated phytoplankton carbon and percent nondiatom carbon, and the species list. This study is one component of an ongoing interdisciplinary study of San Francisco Bay.

INTRODUCTION

San Francisco Bay is an ecologically and economically important estuary that has been altered significantly by the activities of man (Conomos, 1979). The estuary has received little attention from oceanographers and particularly little is known about population dynamics of plankton in San Francisco Bay. Phytoplankton (planktonic, unicellular algae that occur singularly or form chains or colonies) are important biological constituents that: (1) affect distributions of dissolved nutrients such as N, Si, and P (Peterson, 1979); (2) affect pH and concentrations of dissolved oxygen and CO₂ through photosynthesis and respiration; and (3) provide a food source for higher trophic levels including, ultimately, harvestable fish and invertebrates.

Phytoplankton distribution is often determined by measuring photosynthetic pigments (chlorophyll a or in-vivo fluorescence). While these measurements provide information about the distribution and biomass of planktonic algae, they do not provide information about the species composition of the phytoplankton community. Such information is required for a thorough understanding of aquatic ecosystems, and particularly in estuaries where the phytoplankton communities are complex mixtures of coastal marine, brackish and freshwater organisms. The size distribution and species composition of phytoplankton are reflections of the environment and often provide clues to the physicochemical forces that govern population dynamics and primary productivity, and they indicate stresses imposed by man. Because herbivores select their food on the basis of size, information about phytoplankton population composition offers insights concerning pathways and rates of energy

transfer from the primary producers to consumers. In addition, microscopic measurement of representative phytoplankton cells can be used to estimate phytoplankton biomass (biovolume or carbon content). Biomass estimates may be used in combination with measured rates of primary production to estimate rates of population growth. Finally, taxonomic studies document community shifts, which often are sensitive indicators of stress. Long-term records of plankton species composition can be invaluable for assessing changes in the quality of natural waters, and often provide clues to the causes of changing water quality.

Data presented in this report summarize a study of phytoplankton species composition and abundance in the San Francisco Bay estuarine system from July 1977 through December 1979. This work is part of an ongoing interdisciplinary study of San Francisco Bay (Conomos and others, 1978) and complements two other reports that summarize biological water properties (Alpine and others, 1981) and zooplankton population abundance (Hutchinson, 1981) during this period. Localized or short-term studies of phytoplankton abundance and composition have been conducted in San Francisco Bay (e.g., Whedon, 1939; Storrs and others, 1966), and long-term studies exist in the Sacramento-San Joaquin River Delta and Suisun Bay (California Department of Water Resources, 1979a, 1979b, 1980). However, the study reported here represents the first attempt to document phytoplankton biomass and composition throughout the Bay system over more than one annual cycle.

We are indebted to Patricia Parsley, who kindly identified dominant flagellate species, and to Samuel L. VanLandingham, who kindly confirmed the identifications of the dominant diatom species we report here.

METHODS

1. Sampling Program

Surveys of hydrography-water chemistry in San Francisco Bay (Smith and others, 1979) were conducted on an approximately monthly basis from 1977 through 1979. On July 11, 1977, collection of phytoplankton samples for microscopic enumeration was initiated. Near-surface samples were taken at selected stations (Fig. 1) in the deep-water channel with a Niskin bottle (July 1977 through December 1977) or a flexible-impeller pump (after December 1977). Deep samples were collected with a well pump used for measuring vertical profiles of salinity, temperature and water chemistry (Schemel and Dedini, 1979). In addition to sampling at historical U.S.G.S. stations in the channel, we collected near-surface bottle samples at selected shoal stations (Fig. 1).

Major objectives of this survey were: (1) to compare phytoplankton communities in the deep channel with those over the expansive shoals where nutrient and light availability and mixing rates are different; and (2) to define seasonal patterns of changing biomass and composition of algal populations in the three major embayments of the San Francisco Bay system (South Bay, San Pablo Bay, Suisun Bay), coastal water (Golden Gate, Station 19), and in the major tributary (the Sacramento River at Rio Vista, Station 657).

2. Procedures

All samples were preserved in 125-mL Nalgene¹ bottles with 1% Lugol's solution having 10% acetate (Rodhe and others, 1958; Throndsen, 1978). An attempt was made to examine samples microscopically within one month after collection, to minimize loss of delicate flagellates. Only

¹The mention of brand names is for identification purposes and does not constitute endorsement by the U.S. Geological Survey.

selected samples were enumerated: samples representative of the channel and shoals of the major embayments were routinely examined, and other samples were selected based upon hydrographic conditions or the distribution of chlorophyll a.

In the laboratory, phytoplankton in aliquots from preserved samples were enumerated and identified to species, if possible, using the inverted microscope method (Lund, Kipling and LeCren, 1958; Hasle, 1978). Settling chambers were 9.7-cm plexiglass tubes having a 2.5-cm diameter. Pilot studies with cultures of the diatom Skeletonema costatum demonstrated that Lugol's-preserved samples must settle at least 65 hours to ensure complete settling onto the bottom of the counting chambers. Aliquot volumes varied from 1 to 10 mL, depending on turbidity and chlorophyll a concentration. Settling chambers were maintained in an ice-cooled chamber to prevent outgassing that inhibits settling of planktonic algae. Prior to November 1977, samples were enumerated at 400x magnification; subsequently, enumerations were done at 1000x using phase contrast to assure inclusion of microflagellates. Prior to January 1978, all enumerations were done without the use of a net micrometer disc; and subsequently, with a net micrometer disc (see Table 3). Usually, three aliquots were enumerated per sample, thus permitting calculation of confidence intervals around estimates of mean population abundance (Appendix A). A maximum of 50 microscopic fields was examined per aliquot. Taxonomic identifications were based upon references listed in Appendix B.

Beginning with the October 11, 1978, samples, individual cells were measured with an ocular micrometer during enumeration. Mean cell

dimensions were then calculated for each species, and the cell morphology was approximated with one of 12 geometric shapes (Appendix C), thus permitting calculation of mean cell volume for each species. From mean cell volume we then estimated carbon content of each species using the equations of Strathman (1967). The dimensions, shape, volume and calculated carbon content of each species are tabulated in Appendix D, and population estimates are summarized in Appendix E.

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TABLE 1. Quantities required to compute mean and variance of
phytoplankton density from subsample counts

$\hat{\mu}$	estimated population density (cell number/mL)
$\hat{\sigma}^2$	estimated variance of $\hat{\mu}$
$x_{i,j}$	cell count in the i'th random field of the j'th subsample
n	number of random microscopic fields counted per subsample
k	number of subsamples examined per sample
a	area of a microscopic field: 0.243 mm^2 for Zeiss inverted microscope, 400x; 0.0389 mm^2 , without net micrometer disc and 0.0156 mm^2 , with net micrometer disc, for 1000x.
A	effective settling area of a 33-mm cover glass: 491 mm^2
V	settled volume (mL) per subsample
v	volume (mL) of original sample represented by n microscopic fields

TABLE 2. San Francisco Bay Channel Stations

Station Number	UTM Coordinates		Name	N. Latitude		W. Longitude	
	Northings	Eastings					
662	4231.6	616.1	Prospect Island	38°	13.6'	121°	40.4'
659	225.5	616.8	Old Sac. River		10.7'		40.0'
657	222.9	614.9	Rio Vista		8.9'		41.3'
652	216.4	610.6	Toland's Landing		5.2'		44.8'
1	210.7	601.8	Winter Is.		2.4'		50.4'
2	213.2	600.4	Chain Is.		3.8'		51.3'
3	211.8	598.4	Pittsburg		3.0'		52.7'
4	211.5	593.4	Simmons Pt.		2.9'		56.1'
5	212.8	589.5	Middle Ground		3.6'		58.8'
6	213.3	584.7	Roe Is.		3.9'	122°	2.1'
7	211.3	579.3	Avon Pier		2.9'		5.8'
8	209.3	574.5	Martinez		1.8'		9.1'
9	211.4	572.5	Benicia		3.0'		10.4'
10	212.5	569.5	Crockett		3.6'		12.5'
11	212.7	564.6	Mare Is.		3.7'		15.8'
12	211.6	560.4	Hercules		3.1'		18.7'
13	209.3	555.7	N. of Pinole Pt.		1.9'		21.9'
14	206.7	552.5	W. of Pinole Pt.		0.5'		24.1'
15	202.4	549.5	Pt. San Pablo	37°	58.2'		26.2'
16	196.3	548.3	Red Rock		54.9'		27.0'
17	192.6	550.6	Raccoon Str.		52.9'		25.6'
18	189.3	553.1	Berkeley Pier		51.1'		23.8'
19	185.6	546.5	Golden Gate		49.1'		28.3'
911	177.9	527.2	Light Ship		45.0'		41.5'
20	185.4	552.4	Blossom Rock		49.0'		24.3'
21	183.6	555.5	Bay Bridge		48.0'		22.2'
22	179.4	556.5	Potrero Pt.		45.7'		21.5'
23	175.5	558.5	Hunters Pt.		43.6'		20.2'
24	172.5	558.3	Candlestick Pt.		42.0'		20.3'
25	169.4	559.5	Oyster Pt.		40.3'		19.5'
26	165.4	560.5	San Bruno Shoal		38.2'		19.0'
27	163.4	562.5	SFO		37.1'		17.5'
28	161.5	564.4	N. San Mateo Br.		36.0'		16.2'
29	159.5	566.7	S. San Mateo Br.		34.9'		14.8'
30	156.5	571.4	Redwood Cr.		33.3'		11.5'
31	153.8	574.5	Coyote Hills		31.8'		9.4'
32	152.5	576.5	Ravenswood Pt.		31.1'		8.1'
33	151.6	577.5	Dumbarton Br.		30.6'		7.4'
34	149.8	580.6	Newark Slough		29.6'		5.3'
35	148.5	581.5	Palo Alto		28.9'		4.7'
36	147.4	582.7	Calaveras Pt.		28.3'		3.8'

Station positions are recorded according to the Universal Transverse Mercator (UTM) System. For convenience of entry manipulation, only significant digits have been included and the kilometer has been the designated unit position. Eastings, Zone 10.

TABLE 3. San Francisco Bay Shoal Stations

UTM Coordinates			Location	North Latitude	West Longitude
Station Number	North- ings	East- ings			
South Bay					
300	4156.3	570.9	marker 2, Redwood Creek	37° 33.2'	122° 11.8'
301	159.1	571.4		34.7'	11.5'
302	161.7	571.9	San Mateo Bridge	36.1'	11.1'
303	164.3	570.9		37.5'	11.8'
304	166.9	569.7		38.9'	12.6'
305	169.5	568.6	marker 2, San Lorenzo	40.3'	13.3'
306	171.0	570.4		41.1'	12.1'
307	170.6	566.3		40.9'	14.9'
308	172.0	563.9		41.7'	16.5'
309	173.3	561.4		42.4'	18.2'
310	174.6	559.2	marker EX-A	43.1'	19.7'
San Pablo Bay					
140	4207.1	551.4	marker 5	37° 00.7'	122° 24.9'
141	209.3	551.0		01.9'	25.1'
142	211.3	550.7	marker 2	03.0'	25.3'
143	212.2	550.3	marker 4	03.5'	25.6'
144	213.7	550.3	marker 6	04.3'	25.6'
145	214.6	549.7	marker 8	04.8'	26.0'
146	215.6	549.1	marker 10	05.3'	26.4'
147	216.7	548.5	marker 12	05.9'	26.8'
148	217.6	547.8	marker 14	06.4'	27.3'
149	218.7	543.5	2nd bridge, Petaluma River	07.0'	30.2'
150	213.2	552.9		04.0'	23.8'
151	212.8	555.6		03.8'	22.0'
152	212.7	558.2		03.7'	20.2'
153	212.1	560.8	marker 13	03.4'	18.4'
Suisun Bay					
70	4211.2	577.2	marker 1	38° 02.8'	122° 07.2'
71	213.4	579.1	marker 4	04.0'	05.9'
72	215.1	580.5	marker 6	04.9'	04.9'
73	216.7	581.8	marker 8	05.8'	04.0'
74	218.0	582.7	marker 9	06.5'	03.4'
75	220.6	583.7	dolphin	07.9'	02.7'
76	219.0	584.3	dolphin	07.0'	02.4'
77	220.1	585.3		07.6'	01.6'
78	216.7	585.8	Pt. Buckler	05.8'	01.3'
79	215.3	588.0	tires	05.0'	121° 59.8'

Station positions are recorded according to the Universal Transverse Mercator (UTM) System. For convenience of entry manipulation, only significant digits have been included and the kilometer has been the designated unit position. Eastings, Zone 10.

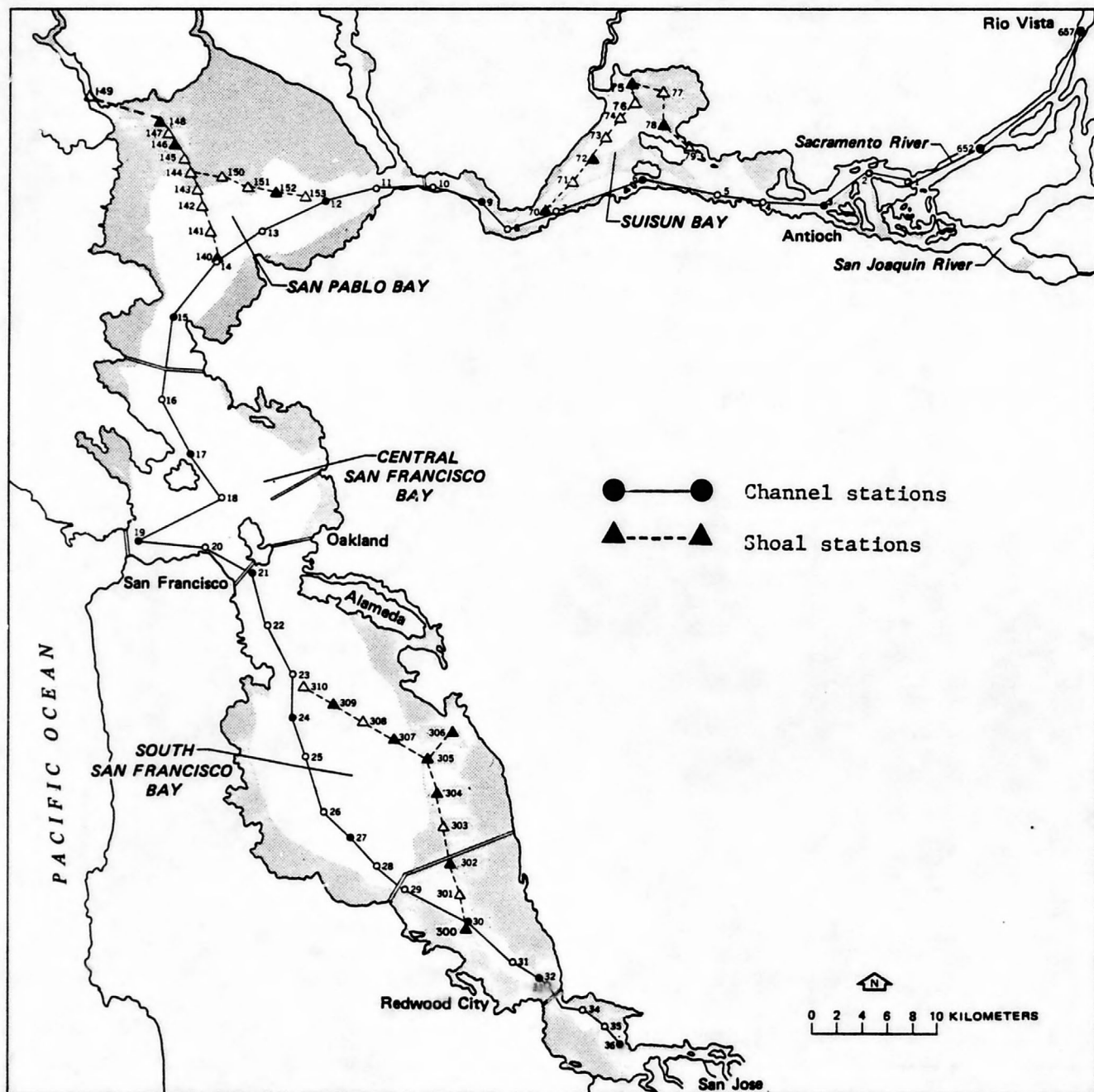


Figure 1. Map of San Francisco Bay estuary showing location of water sampling stations. Phytoplankton samples were taken at channel stations 36, 30, 27, 24, 21, 19, 17, 15, 12, 9, 6, 3, 652 and 657; and shoal stations 300, 302, 304, 305, 306, 307, 309, 140, 146, 148, 152, 70, 73, 76 and 78.

APPENDIX A: Statistical Methods

The following procedure was used to estimate mean population density and its 95-percent confidence interval from microscopic counts of subsamples randomly taken from a single water sample. Symbols are defined in Table 1. The basic variate in this analysis is the total number of algal cells enumerated within n microscopic fields of a subsample, where k subsamples were examined per sample. Although the spatial distribution of algal cells on a microscopic slide does not follow a normal distribution (Kutkuhn, 1958; Holmes and Widrig, 1956), the Central Limit Theorem states that the sum of counts in n microscopic fields is a normally-distributed variable if n is sufficiently large (30 or greater, Mendenhall, 1971), and that "normal" statistics apply. This procedure estimates variance of the estimated population density due to variability (1) among microscopic fields in a subsample and (2) among subsamples. It does not permit calculation of spatial heterogeneity (variations among discrete samples) in the field. However, continuous profiles of in-vivo chlorophyll fluorescence (Alpine and others, 1981) demonstrated that small-scale (≤ 100 m) heterogeneity of phytoplankton biomass is negligible compared to variations between major embayments in San Francisco Bay, and they suggest that discrete samples are generally representative of phytoplankton populations within major geographic areas.

Procedure:

1. Compute the total number of algal cells counted in the n fields of each subsample (i indexes microscopic fields and j indexes subsamples):

$$X_j = \sum_{i=1}^n x_{ij}, \quad j=1, k$$

2. Compute the mean number of cells counted per subsample:

$$\bar{X} = \sum_{j=1}^k X_j / k$$

3. Compute the variance of total cells counted in a subsample:

$$s_x^2 = \sum_{j=1}^k (X_j - \bar{X})^2 / (k - 1)$$

4. Compute the variance of the mean:

$$s_{\bar{x}}^2 = s_x^2 / k$$

5. Compute the volume (mL) of sample represented by n microscopic fields:

$$v = \left(\frac{a}{A} \right) \cdot V \cdot n$$

where V is the volume (mL) of settled sample.

6. Compute the estimated mean population density:

$$\hat{\mu} = \bar{X} / v$$

7. Compute the estimated variance of the mean population density:

$$\hat{\sigma}^2 = (1/v)^2 \cdot s_{\bar{x}}^2$$

8. Compute the 95-percent confidence interval:

$$95\% \text{ C.I.} = \hat{\mu} \pm 1.96 \cdot \hat{\sigma}$$

APPENDIX B: Taxonomic references

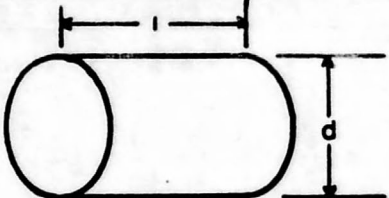
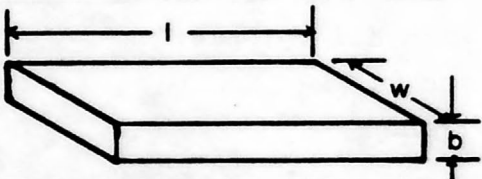
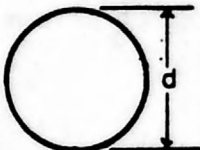
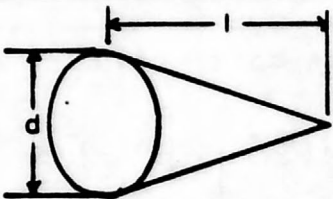


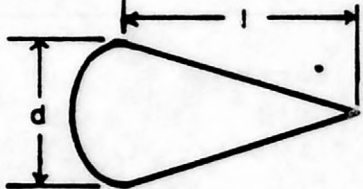
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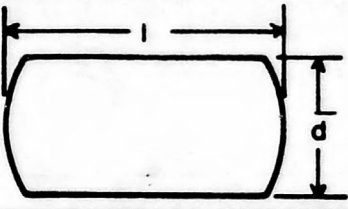
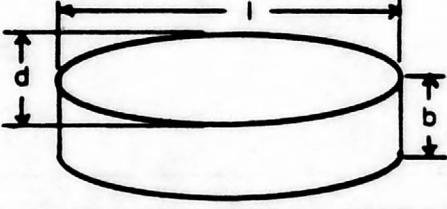
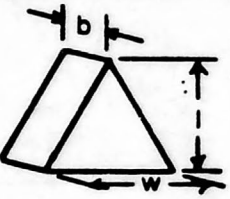
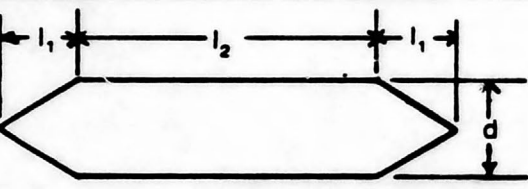
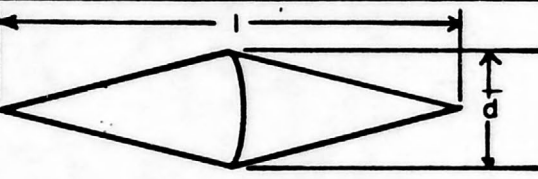
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APPENDIX C: Geometrical shapes and mathematical formulae

SHAPE CODE/MATHEMATICAL FORMULAE	GEOMETRICAL SHAPE
<p>1. Cylinder</p> $V = \pi \left(\frac{d}{2}\right)^2 l$	
<p>2. Rectangular prism</p> $V = lwd$	
<p>3. Sphere</p> $V = \frac{4}{3} \pi \left(\frac{d}{2}\right)^3$	
<p>4. Cone</p> $V = \frac{1}{3} \pi \left(\frac{d}{2}\right)^2 l$	
<p>5. Double isocoles triangular prism</p> $V = \frac{lwb}{2}$	
<p>6. Ellipsoidal sphere</p> $V = \frac{4}{3} \pi \left(\frac{l}{2}\right) \left(\frac{d}{2}\right)^2$	
<p>7. Hemispherical cone</p> $V = \left[\frac{\frac{4}{3} \pi \left(\frac{d}{2}\right)^2}{2} \right] + \left[\frac{1}{3} \pi \left(\frac{d}{2}\right)^2 l \right]$	

SHAPE CODE/MATHEMATICAL FORMULAE	GEOMETRICAL SHAPE
8. Double hemispherical cylinder $V = \left[\frac{4}{3} \pi \left(\frac{d}{2} \right)^3 \right] + \left[\frac{1}{3} \pi \left(\frac{d}{2} \right)^2 l \right]$	
9. Ellipsoidal cylinder $V = \pi \left(\frac{ld}{2} \right) b$	
10. Triangular prism $V = \left(\frac{lw}{2} \right) b$	
11. Double coned cylinder $V = \left[\frac{1}{3} \pi \left(\frac{d}{2} \right)^2 l_1 \right] + \left[\pi \left(\frac{d}{2} \right)^2 l_2 \right]$	
12. Spindle $V = \frac{1}{3} \pi \left(\frac{d}{2} \right)^2 l$	
Strathman's (1967) equations: $\log C_{\text{diatom}} = -0.422 + 0.758 (\log V)$ $\log C_{\text{ppl}} = -0.460 + 0.866 (\log V)$	
where: <div style="display: flex; justify-content: space-between;"> <div> l = length w = width d = diameter b = depth </div> <div> V = cell volume in cubic microns C = cell carbon content in picograms ppl = phytoplankters other than diatoms </div> </div>	

APPENDIX D: Species List

TAXONOMIC CODE	GENUS-SPECIES	SHAPE CODE	LENGTH	WIDTH/ DIAMETER	DEPTH	CELL VOLUME MICRONS	CARRON CONTENT PICOGRAMS
1	Mesodinium rubrum	6	25.0	17.0	0.0	3783.	435.
2	Catalogued Unknown	7	12.7	8.1	0.0	252.	42.
4	Catalogued Unknown	1	9.2	1.5	0.0	16.	4.
7	Catalogued Unknown	8	8.1	3.1	0.0	77.	15.
9	Catalogued Unknown	6	9.2	7.7	0.0	286.	46.
15	Catalogued Unknown	7	6.2	3.1	0.0	21.	5.
18	Catalogued Unknown	6	17.6	12.0	0.0	1282.	170.
19	Catalogued Unknown	7	9.2	6.2	0.0	113.	21.
23	Catalogued Unknown	3	20.8	17.8	0.0	2953.	351.
24	Catalogued Unknown	6	1.0	2.0	0.0	2.	1.
26	Catalogued Unknown	7	5.6	1.4	0.0	4.	1.
27	Catalogued Unknown	1	42.6	1.5	0.0	75.	15.
29	Catalogued Unknown	1	5.7	4.3	0.0	83.	16.
32	Catalogued Unknown	6	9.0	6.0	0.0	170.	30.
33	Catalogued Unknown	7	9.0	4.0	0.0	46.	10.
35	Catalogued Unknown	3	0.0	2.6	0.0	9.	2.
37	Catalogued Unknown	1	30.0	24.6	0.0	14259.	1372.
39	Catalogued Unknown	12	19.7	1.3	0.0	9.	2.
40	Catalogued Unknown	6	4.0	3.0	0.0	19.	4.
41	Catalogued Unknown	2	6.7	6.7	6.7	301.	49.
42	Catalogued Unknown	3	0.0	3.0	0.0	14.	3.
43	Catalogued Unknown	1	4.0	3.0	0.0	28.	6.
45	Catalogued Unknown	1	54.0	6.0	0.0	1527.	198.
46	Catalogued Unknown	1	6.4	4.7	0.0	111.	20.
47	Catalogued Unknown	3	0.0	3.1	0.0	16.	4.
48	Catalogued Unknown	6	15.1	11.0	0.0	957.	132.
49	Catalogued Unknown	1	19.3	14.7	0.0	3276.	384.
53	Catalogued Unknown	7	11.4	11.0	0.0	424.	65.
54	Catalogued Unknown	3	0.0	4.9	0.0	62.	12.
55	Catalogued Unknown	6	4.7	4.5	0.0	50.	10.
56	Catalogued Unknown	6	10.8	5.9	0.0	197.	34.
58	Catalogued Unknown	3	0.0	2.8	0.0	11.	3.
59	Catalogued Unknown	7	18.4	11.4	0.0	694.	100.
60	Catalogued Unknown	7	7.3	1.6	0.0	6.	2.
62	Catalogued Unknown	8	7.6	3.0	0.0	68.	13.
65	Catalogued Unknown	7	5.7	4.3	0.0	37.	8.
66	Catalogued Unknown	3	6.9	4.7	0.0	54.	11.
68	Catalogued Unknown	6	3.8	2.5	0.0	12.	3.
69	Catalogued Unknown	3	0.0	4.0	0.0	34.	7.
70	Catalogued Unknown	4	2.3	2.7	0.0	4.	1.
71	Catalogued Unknown	6	18.9	15.2	0.0	2286.	281.
72	Catalogued Unknown	7	31.5	20.0	0.0	3508.	407.
74	Catalogued Unknown	1	23.9	11.3	0.0	2397.	293.
76	Catalogued Unknown	6	3.8	4.4	0.0	39.	8.
77	Catalogued Unknown	5	7.6	5.0	5.0	95.	18.
78	Catalogued Unknown	5	5.1	3.3	3.3	28.	6.
79	Catalogued Unknown	5	32.9	3.8	3.8	238.	40.
80	Catalogued Unknown	6	5.5	2.5	0.0	18.	4.
81	Catalogued Unknown	6	3.8	2.5	0.0	12.	3.
83	Catalogued Unknown	6	2.6	1.5	0.0	3.	1.
85	Catalogued Unknown	4	2.7	1.4	0.0	1.	0.

TAXONOMIC CODE	GENUS-SPECIES	SHAPE CODE	LENGTH	WIDTH/ DIAMETER	DEPTH	CELL VOLUME MICRONS	CARBON CONTENT PICOGRAMS
86	Catalogued Unknown	4	10.0	5.0	0.0	65.	13.
87	Catalogued Unknown	1	14.0	2.8	0.0	86.	16.
88	Catalogued Unknown	3	0.0	4.3	0.0	42.	9.
89	Catalogued Unknown	6	6.4	4.3	0.0	62.	12.
93	Catalogued Unknown	6	2.8	1.4	0.0	3.	1.
200	Anabaena sp.	1	2.0	5.0	0.0	39.	8.
201	Pleurocapsa sp.	6	15.4	12.3	0.0	1220.	163.
202	Spirulina sp.	1	19.1	2.5	0.0	94.	18.
203	Palaeoloid form	3	0.0	2.5	0.0	8.	2.
204	Merismopedia sp.	3	0.0	1.4	0.0	1.	0.
205	Nodularia sp.	6	4.5	1.4	0.0	5.	1.
300	Ankistrodesmus falcatus	12	41.4	1.4	0.0	21.	5.
301	Chlamydomonas sp1.	6	5.0	6.0	0.0	94.	18.
302	Chlorochytrium sp.	7	11.3	6.1	0.0	130.	23.
303	Closterium sp.	12	16.8	4.5	0.0	89.	17.
304	Cosmarium sp.	6	3.0	1.5	0.0	4.	1.
305	Pediastrum sp.	7	6.0	4.5	0.0	42.	9.
306	Polyedriopsis quadrispina	2	7.2	4.8	2.5	86.	16.
307	Pyramimonas sp1.	7	8.0	6.5	0.0	111.	20.
308	Pyramimonas sp2.	7	8.8	6.3	0.0	112.	21.
309	Pyramimonas dissonata	7	9.9	5.7	0.0	101.	19.
310	Pyramimonas micron	7	6.0	5.3	0.0	59.	12.
311	Pyramimonas plurioculata	7	8.7	6.5	0.0	118.	22.
312	Tetradron sp.	10	15.0	8.5	6.5	414.	64.
313	Tetraselmis sp.	6	16.6	11.6	0.0	1170.	157.
314	Scenedesmus sp.	6	10.3	4.0	0.0	86.	16.
315	Scenedesmus bijuga	6	11.6	4.2	0.0	107.	20.
316	Chlamydomonas sp.2	6	6.4	2.8	0.0	26.	6.
317	Chlamydomonas sp.3	6	5.0	2.8	0.0	21.	5.
400	Apedinella radius	1	10.3	8.8	0.0	626.	92.
401	Chromulina sp.	6	3.8	2.5	0.0	12.	3.
402	Distephanus speculum	6	45.2	38.8	0.0	35629.	3033.
403	Mallomonas sp.	4	12.0	6.0	0.0	113.	21.
404	Ochromonas sp.	3	0.0	4.6	0.0	51.	10.
405	Pseudopedinella pyriforme	1	10.3	8.8	0.0	626.	92.
406	Chrysochromulina kappa	8	6.3	4.1	0.0	119.	22.
407	Prymnesium parvum	8	9.0	4.3	0.0	172.	30.
500	Cachonina niei	6	13.5	9.2	0.0	598.	88.
501	Dinophysis sp.	6	43.0	31.0	0.0	21637.	1969.
502	Exuviella luna	6	18.0	17.0	0.0	2724.	327.
503	Glenodinium rotundum	6	25.5	23.0	0.0	7063.	747.
504	Gymnodinium punctatum	6	9.9	7.1	0.0	261.	43.
505	Heterocapsa triquetra	12	25.5	16.0	0.0	1709.	219.
506	Katodinium rotundatum	6	11.4	6.9	0.0	284.	46.
507	Miniscula bipes	4	28.2	18.9	0.0	2637.	318.
508	Oxxtoxum sp.	12	55.4	27.1	0.0	10652.	1066.
509	Oxxtoxum milneri	12	131.0	33.7	0.0	38949.	3276.
510	Prorocentrum redfieldii	12	28.5	8.8	0.0	578.	85.
511	Gymnodinium arcticum	7	15.6	12.8	0.0	755.	108.
512	Noctiluca scintillans	3	0.0	156.2	0.0	1995459.	99046.
513	Gymnodinium simplex	6	11.4	4.3	0.0	110.	20.

TAXONOMIC CODE	GENUS-SPECIES	SHAPE CODE	LENGTH	WIDTH/ DIAMETER	DEPTH	CELL VOLUME MICRONS	CARBON CONTENT PICOGRAMS
514	Ceratium sp.	7	73.8	35.5	0.0	25008.	2232.
515	Guanodinium sp	6	10.2	5.7	0.0	174.	30.
516	Ceratium lineatum	7	148.0	51.0	0.0	102141.	7550.
517	Ceratium divaricatum	7	141.0	61.0	0.0	139304.	9878.
518	Oxytoxum diploconus	12	66.9	21.3	0.0	15844.	1503.
519	Proceratium gracile	12	36.9	14.2	0.0	3896.	446.
600	Chroomonas minuta	7	6.2	3.6	0.0	28.	6.
601	Chroomonas amphioxeia	7	11.4	6.1	0.0	131.	24.
602	Cryptomonas sp1.	7	13.3	8.9	0.0	317.	51.
603	Cryptomonas sp2.	7	17.8	4.8	0.0	119.	22.
604	Cryptomonas testacea	7	14.5	7.3	0.0	230.	39.
605	Rhabdomonas sp.	7	11.6	7.3	0.0	190.	33.
606	Hemiselmis sp.	7	6.0	3.0	0.0	19.	4.
700	Eutreptia lauwii	7	20.3	5.6	0.0	183.	32.
701	Trachelomonas sp.	6	14.2	9.3	0.0	643.	94.
702	Phacus triquetus	7	14.6	9.5	0.0	392.	61.
703	Trachelomonas hispida	6	14.2	11.4	0.0	966.	133.
800	Actinopterychus sp.	1	21.3	85.0	0.0	120867.	2694.
801	Actinopterychus senarius	1	15.6	62.5	0.0	47860.	1335.
802	Amphora ovalis	8	60.0	34.3	17.0	76570.	1906.
803	Asterionella gracilis	7	90.0	10.0	0.0	2409.	138.
804	Biddulphia sp.	9	50.8	6.4	12.7	3243.	173.
805	Biddulphia aurita	9	54.5	6.8	13.6	3959.	202.
806	Biddulphia longicruris	9	47.0	5.9	11.8	2570.	145.
807	Chaetoceros sp.	8	23.5	5.9	0.0	750.	57.
808	Chaetoceros constrictus	8	24.0	6.0	0.0	792.	60.
809	Chaetoceros didymus	8	23.0	5.8	0.0	710.	55.
810	Cocconeis sp.	9	11.0	7.0	10.0	605.	49.
811	Coscinodiscus sp.	1	107.5	162.5	0.0	2229493.	24544.
812	Coscinodiscus concinnis	1	440.0	422.5	0.0	61687476.	304067.
813	Coscinodiscus jonesianus	1	48.8	195.0	0.0	1457404.	17783.
814	Thalassiosira lineatus	1	11.9	47.5	0.0	21087.	717.
815	Coscinodiscus perforatus	1	25.0	100.0	0.0	196350.	3892.
816	Coscinodiscus radiatus	1	11.9	47.5	0.0	21087.	717.
817	Thalassiosira polychorda	1	11.3	45.0	0.0	17972.	635.
818	Cyclotella spp.	1	7.4	14.7	0.0	1256.	85.
819	Cyclotella bodanica	1	27.0	50.0	0.0	53015.	1442.
820	Cyclotella catenata	1	3.1	12.5	0.0	380.	34.
821	Cyclotella meneshiniana	1	5.0	20.0	0.0	1571.	100.
822	Cyclotella striata	1	10.0	40.0	0.0	12566.	484.
823	Diatoma sp.	5	45.0	11.5	13.5	3493.	184.
824	Diatoma vulgare	5	45.0	11.5	13.5	3493.	184.
825	Ditylum briswellii	8	49.5	12.4	0.0	6976.	310.
826	Epithemia sp.	5	21.8	14.0	16.6	2533.	144.
827	Epithemia sorex	5	32.5	8.1	8.1	1066.	75.
828	Epithemia tursida	5	110.0	20.0	25.0	27500.	877.
829	Eucampia zoodiacus	2	35.5	31.3	6.9	7667.	333.
830	Gomphonema spp.	5	14.2	5.7	5.7	231.	23.
831	Gyrosigma sp.	5	102.2	14.2	14.2	10304.	417.
832	Gyrosigma fasciola	5	102.2	14.2	14.2	10304.	417.
833	Hemiaulus senensis	9	22.1	6.8	13.6	1605.	102.

TAXONOMIC CODE	GENUS-SPECIES	SHAPE CODE	LENGTH	WIDTH/ DIAMETER	DEPTH	CELL VOLUME MICRONS	CARBON CONTENT PICOGRAMS
834	Melosira spp.	1	9.0	12.1	0.0	1035.	73.
835	Melosira binderiana	1	24.1	14.5	0.0	3980.	203.
836	Melosira distans var. lirata	1	12.0	6.3	0.0	374.	34.
837	Melosira granulata	1	26.0	13.0	0.0	3451.	182.
838	Melosira islandica	1	12.5	17.0	0.0	2837.	157.
839	Melosira italica	1	14.5	16.5	0.0	3100.	168.
840	Melosira moniliformis	8	41.5	20.0	0.0	17226.	615.
841	Melosira nummuloides	8	45.0	11.3	0.0	5268.	251.
842	Melosira varians	1	11.0	21.5	0.0	3994.	203.
843	Meridion circulare	7	46.0	6.0	6.6	452.	39.
844	Navicula sp.	5	40.0	15.0	10.0	3000.	164.
845	Navicula punctatae	5	40.0	15.0	10.0	3000.	164.
846	Nitzschia sp.	5	103.7	8.5	8.5	3746.	194.
847	Nitzschia closterium	5	10.3	8.0	8.0	330.	31.
848	Nitzschia dissipata	5	27.5	6.9	6.9	655.	52.
849	Nitzschia longissima	5	56.3	14.0	14.0	5517.	260.
850	Nitzschia pacifica	5	86.5	6.0	6.0	1557.	99.
851	Nitzschia panduriformis	6	42.6	13.6	0.0	4126.	208.
852	Nitzschia seriata	5	105.0	6.5	6.5	2218.	130.
853	Nitzschia sigma	5	220.0	11.0	11.0	13310.	506.
854	Pleurosigma sp.	5	71.0	17.0	13.6	8208.	351.
855	Rhaphoneis sp.	5	33.0	16.5	13.2	3594.	188.
856	Rhoicosphenia sp.	5	30.5	13.5	5.1	1050.	74.
857	Rhoicosphenia curvata	5	43.5	6.0	7.3	953.	69.
858	Rhoicosphenia marina	5	17.5	21.0	3.0	551.	45.
859	Rhizosolenia sp.	11	148.5	13.5	21.5	23308.	774.
860	Rhizosolenia alata	11	139.4	7.4	20.0	6569.	296.
861	Skeletonema costatum	8	8.0	6.0	0.0	339.	31.
862	Skeletonema potamus	8	8.0	6.0	0.0	339.	31.
863	Stephanopyxis sp.	8	45.0	11.3	0.0	5268.	251.
864	Surirella sp.	9	105.0	45.2	16.8	62622.	1637.
865	Surirella gemma	9	95.0	39.6	16.8	49639.	1372.
866	Surirella spiralis	9	115.0	50.8	16.9	77542.	1924.
867	Synedra sp.	1	550.0	10.5	0.0	47625.	1330.
868	Tabellaria fenestrata	2	85.0	6.0	6.0	3060.	166.
869	Thalassiosira sp.	1	4.6	29.3	0.0	3102.	168.
870	Thalassiosira eccentrica	1	9.8	18.0	0.0	2494.	142.
871	Thalassiosira nordenskioldii	1	2.0	24.5	0.0	943.	68.
872	Thalassiosira rotula	1	2.0	45.5	0.0	3252.	174.
873	Thalassiothrix longissima	1	3075.0	4.3	0.0	44655.	1266.
877	Melosira dubia	6	21.3	12.8	0.0	1827.	112.
878	Pleurosigma aestuarii	5	66.7	14.2	2.8	1326.	88.
879	Rhizosolenia setigera	11	104.5	14.2	16.0	18239.	642.
880	Rhopaloidia sibba	9	55.0	7.3	5.7	1797.	111.
881	Coscinodiscus nitidus	1	15.5	62.0	0.0	46796.	1312.
882	Pleurosigma fassiola	5	117.5	16.0	8.5	7990.	344.
883	Pleurosigma obscurum	5	105.0	11.4	5.7	3411.	180.
884	Nitzschia palae	12	45.0	5.0	0.0	295.	28.
885	Climacodium fravenfeldianum	2	35.5	8.9	0.0	0.	28.
886	Asterionella formosa	7	85.0	4.5	0.0	461.	40.
887	Nitzschia parvula	12	22.0	6.0	0.0	207.	22.

TAXONOMIC CODE	GENUS-SPECIES	SHAPE CODE	LENGTH	WIDTH/ DIAMETER	DEPTH	CELL VOLUME MICRONS	CARBON CONTENT PICOGRAMS
888	Surirella ovalis	9	62.5	32.0	7.5	11781.	461.
889	Nitzschia distans	12	140.0	5.0	0.0	916.	67.
890	Tabellaria flocculosa	9	48.3	15.0	24.1	13713.	518.
891	Chaetoceros gracilis	2	7.8	7.1	3.0	166.	18.
892	Chaetoceros subsecundus	2	34.1	8.5	6.0	1739.	108.
893	Chaetoceros debilis	2	28.4	10.4	5.0	1477.	96.
894	Thalassionema nitzschoides	2	109.3	5.0	5.0	2733.	152.
895	Nitzschia paradoxa	2	24.5	2.8	2.8	192.	20.
896	Stephanodiscus sp.	1	6.0	21.3	0.0	2138.	127.
897	Coscinodiscus concavus	1	40.0	160.0	0.0	804250.	11331.
898	Navicula distans	2	95.0	16.0	10.0	15200.	560.
899	Nitzschia pungens	5	71.0	4.3	8.3	1267.	85.
900	Leptocylindricus danicus	1	34.7	6.9	0.0	1298.	87.
901	Rhizosolenia stolterfothii	1	113.6	24.1	0.0	51821.	1418.
902	Chaetoceros vistulae	2	5.7	7.1	3.0	121.	14.
903	Amphora ventricosa	5	61.0	14.2	4.3	1861.	114.
904	Amphora spp.	5	35.5	8.5	5.7	860.	63.

APPENDIX E: Summary of Phytoplankton Enumerations

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 11 - 12, 1977

Replicates: 2

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1	36/ 1
1	Mesodinium rubrum	0.	0.	34.	0.	0.	0.	169.	0.
2	Catalogued Unknown	270.	0.	0.	0.	0.	0.	0.	0.
4	Catalogued Unknown	17.	0.	0.	0.	0.	0.	0.	0.
7	Catalogued Unknown	843.	84.	0.	0.	0.	0.	0.	0.
9	Catalogued Unknown	17.	0.	0.	0.	0.	0.	0.	0.
15	Catalogued Unknown	0.	34.	0.	0.	0.	0.	0.	0.
18	Catalogued Unknown	0.	17.	17.	17.	0.	0.	0.	0.
19	Catalogued Unknown	0.	51.	0.	0.	0.	0.	0.	0.
23	Catalogued Unknown	0.	0.	17.	0.	34.	0.	0.	0.
24	Catalogued Unknown	0.	0.	17.	0.	0.	0.	0.	0.
26	Catalogued Unknown	0.	0.	0.	0.	51.	0.	0.	0.
27	Catalogued Unknown	0.	0.	0.	0.	17.	0.	0.	0.
32	Catalogued Unknown	0.	0.	0.	0.	0.	0.	67.	0.
33	Catalogued Unknown	0.	0.	0.	0.	0.	0.	17.	0.
62	Catalogued Unknown	0.	0.	0.	0.	0.	17.	0.	0.
200	Anabaena sp.	34.	0.	0.	0.	0.	0.	0.	0.
201	Pleurocapsa sp.	67.	0.	0.	0.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	17.	0.	17.	0.	0.	0.	0.	0.
302	Chlorochytrium sp.	0.	34.	34.	0.	0.	0.	0.	0.
303	Closterium sp.	0.	67.	17.	0.	0.	0.	0.	0.
304	Cosmarium sp.	84.	0.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	0.	0.	51.	84.	185.	34.	0.	0.
312	Tetraedron sp.	17.	0.	0.	0.	0.	0.	0.	0.
315	Scenedesmus bijusa	17.	67.	0.	0.	0.	0.	0.	0.
403	Mallomonas sp.	0.	0.	0.	0.	17.	17.	0.	0.
405	Pseudopedinella pyriforme	0.	51.	17.	0.	286.	607.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	67.	0.	0.	101.	17.
507	Miniscula bipes	0.	0.	0.	0.	0.	17.	0.	17.
510	Prorocentrum redfieldii	0.	0.	0.	0.	51.	17.	0.	0.
600	Chroomonas minuta	51.	354.	185.	388.	404.	135.	1062.	455.
601	Chroomonas amphioxeia	0.	0.	17.	0.	0.	0.	0.	0.
605	Rhabdomonas sp.	84.	67.	0.	0.	0.	0.	0.	0.
150	Unknown	0.	0.	0.	0.	0.	34.	0.	0.
Total Nondiatoms		1517.	826.	421.	556.	1045.	876.	1416.	489.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 11 - 12, 1977

Replicates: 2

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1	36/ 1
801	Actinopterygus senarius	0.	0.	0.	0.	17.	0.	0.	17.
803	Asterionella gracilis	0.	0.	0.	0.	135.	84.	0.	0.
807	Chaetoceros sp.	0.	0.	0.	84.	219.	17.	0.	0.
811	Coscinodiscus sp.	17.	0.	0.	0.	101.	185.	0.	0.
818	Cyclotella spp.	135.	0.	0.	0.	0.	0.	0.	0.
822	Cyclotella striata	236.	0.	0.	0.	0.	0.	0.	0.
834	Melosira spp.	0.	0.	0.	0.	84.	0.	0.	0.
836	Melosira distans var lirata	6791.	0.	0.	0.	0.	0.	0.	0.
837	Melosira granulata	236.	0.	0.	0.	0.	0.	0.	0.
840	Melosira moniliformis	0.	0.	0.	51.	0.	0.	0.	0.
841	Melosira nummuloides	0.	0.	0.	0.	303.	0.	0.	0.
844	Navicula sp.	0.	0.	0.	0.	0.	0.	0.	34.
845	Navicula punctata	0.	0.	0.	0.	0.	0.	0.	34.
846	Nitzschia sp.	67.	17.	0.	67.	388.	67.	17.	152.
848	Nitzschia dissipata	17.	0.	0.	0.	0.	0.	0.	0.
851	Nitzschia panduriformis	17.	0.	0.	0.	0.	0.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	34.	0.	0.	0.	0.
861	Skeletonema costatum	0.	0.	0.	0.	0.	118.	0.	0.
869	Thalassiosira sp.	0.	0.	0.	0.	0.	185.	0.	17.
950	Unknown	472.	17.	0.	253.	152.	34.	0.	67.
Total Diatoms		7988.	34.	0.	489.	1399.	691.	17.	320.
Mean Cell Density (cells/ml)		9505.	859.	421.	1045.	2444.	1567.	1432.	809.
Standard Deviation (cells/ml)		191.	83.	36.	238.	60.	36.	83.	95.
Total Cells Counted		564.	51.	25.	62.	145.	93.	85.	48.
Percent Nondiatoms (cells)		16.	96.	100.	53.	43.	56.	99.	60.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 27, 1977

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1	36/ 1
1	Mesodinium rubrum	0.	11.	11.	22.	11.	5.	2.	6.
7	Catalogued Unknown	243.	0.	0.	7.	4.	0.	0.	0.
27	Catalogued Unknown	0.	0.	0.	0.	0.	0.	2.	6.
35	Catalogued Unknown	0.	0.	4.	0.	7.	0.	0.	0.
37	Catalogued Unknown	0.	0.	0.	4.	0.	0.	0.	3.
39	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	229.
40	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	28.
41	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	8.
42	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	8.
43	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	3.
62	Catalogued Unknown	0.	0.	4.	0.	0.	0.	0.	0.
200	Anabaena sp.	56.	15.	0.	0.	0.	0.	7.	525.
203	Palaeooid form	15.	0.	0.	0.	0.	0.	0.	3.
300	Ankistrodesmus falcatus	37.	15.	0.	7.	0.	0.	0.	0.
302	Chlorochytrium sp.	0.	4.	0.	0.	0.	0.	0.	0.
304	Cosmarium sp.	56.	4.	7.	0.	0.	0.	0.	0.
305	Pediastrum sp.	0.	0.	0.	0.	0.	0.	5.	6.
307	Pyramimonas sp.	0.	0.	7.	30.	11.	5.	0.	0.
315	Scenedesmus bijuga	0.	0.	0.	0.	0.	0.	0.	67.
402	Distephanus speculum	0.	0.	0.	0.	4.	0.	0.	0.
403	Mallomonas sp.	0.	0.	0.	4.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	30.	37.	0.	0.	10.	0.	3.
406	Chrysochromulina kappa	0.	0.	4.	41.	26.	15.	10.	0.
500	Cachonina niei	0.	0.	0.	0.	0.	0.	2.	0.
501	Dinophysis sp.	0.	0.	0.	4.	0.	0.	0.	0.
510	Prorocentrum redfieldii	0.	0.	0.	4.	11.	0.	0.	8.
600	Chroomonas minuta	236.	191.	169.	255.	236.	82.	482.	393.
605	Rhabdomonas sp.	0.	0.	0.	4.	0.	0.	0.	0.
150	Unknown	101.	49.	52.	37.	26.	32.	17.	31.
Total Nondiatoms		745.	318.	296.	419.	337.	150.	529.	1326.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 27, 1977

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1	36/ 1
802	<i>Amphora ovalis</i>	0.	0.	0.	0.	0.	0.	2.	0.
807	<i>Chaetoceros</i> sp.	0.	7.	0.	49.	15.	0.	0.	0.
810	<i>Cocconeis</i> sp.	0.	0.	0.	0.	0.	0.	0.	3.
814	<i>Thalassiosira lineatus</i>	0.	0.	0.	0.	0.	2.	0.	0.
818	<i>Cyclotella</i> spp.	86.	0.	7.	4.	0.	0.	0.	0.
819	<i>Cyclotella bodanica</i>	7.	0.	0.	0.	0.	0.	0.	0.
822	<i>Cyclotella striata</i>	45.	26.	7.	0.	0.	0.	0.	0.
826	<i>Epithemia</i> sp.	0.	0.	0.	0.	0.	2.	0.	0.
834	<i>Melosira</i> spp.	19.	7.	0.	11.	15.	5.	35.	3.
836	<i>Melosira distans</i> var <i>lirata</i>	281.	19.	34.	0.	0.	0.	0.	0.
837	<i>Melosira granulata</i>	49.	0.	0.	0.	0.	0.	0.	0.
841	<i>Melosira nummuloidea</i>	0.	0.	0.	0.	0.	2.	2.	0.
844	<i>Navicula</i> sp.	7.	7.	7.	7.	11.	2.	2.	8.
846	<i>Nitzschia</i> sp.	34.	7.	0.	0.	4.	0.	0.	14.
847	<i>Nitzschia closterium</i>	0.	30.	0.	0.	0.	0.	0.	0.
849	<i>Nitzschia longissima</i>	0.	0.	0.	7.	0.	0.	0.	6.
854	<i>Pleurosira</i> sp.	7.	4.	0.	0.	0.	0.	0.	3.
857	<i>Rhoicosphenia curvata</i>	15.	0.	4.	0.	0.	0.	0.	0.
859	<i>Rhizosolenia</i> sp.	0.	0.	0.	4.	0.	0.	0.	0.
861	<i>Skeletonema costatum</i>	0.	37.	0.	11.	7.	0.	0.	0.
868	<i>Tabellaria fenestrata</i>	4.	0.	0.	0.	0.	0.	0.	0.
869	<i>Thalassiosira</i> sp.	0.	0.	4.	0.	4.	0.	0.	0.
870	<i>Thalassiosira eccentrica</i>	60.	22.	15.	26.	7.	30.	7.	3.
871	<i>Thalassiosira nordenskioldii</i>	0.	0.	0.	4.	0.	0.	0.	0.
898	<i>Navicula distans</i>	0.	0.	0.	0.	7.	0.	0.	0.
950	Unknown	142.	30.	19.	34.	22.	10.	2.	3.
Total Diatoms		756.	198.	97.	157.	94.	55.	52.	42.
Mean Cell Density (cells/ml)		1502.	517.	393.	577.	431.	205.	582.	1368.
Standard Deviation (cells/ml)		80.	15.	19.	33.	76.	14.	41.	37.
Total Cells Counted		401.	138.	105.	154.	115.	82.	233.	487.
Percent Nondiatoms (cells)		50.	62.	75.	73.	78.	73.	91.	97.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 9-10, 1977

Replicates: 3

Code	Genus species	Station/Depth						
		1/ 2	6/ 2	12/ 2	17/ 2	19/ 2	32/ 2	36/ 2
1	Mesodinium rubrum	0.	47.	31.	16.	0.	35.	105.
7	Catalogued Unknown	80.	47.	0.	0.	0.	0.	0.
27	Catalogued Unknown	0.	16.	0.	0.	0.	0.	0.
35	Catalogued Unknown	40.	109.	0.	31.	16.	18.	70.
45	Catalogued Unknown	20.	16.	0.	0.	0.	0.	0.
46	Catalogued Unknown	0.	31.	0.	0.	0.	0.	0.
49	Catalogued Unknown	0.	0.	0.	0.	0.	18.	18.
203	Palmelloid form	100.	16.	0.	0.	16.	0.	0.
300	Ankistrodesmus falcatus	0.	0.	0.	0.	0.	35.	53.
304	Cosmarium sp.	60.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	0.	62.	94.	31.	0.	35.	105.
406	Chrysochromulina kappa	0.	94.	125.	94.	31.	0.	0.
510	Prorocentrum redfieldii	0.	0.	0.	0.	16.	0.	18.
600	Chroomonas minuta	602.	671.	811.	765.	374.	404.	807.
602	Cryptomonas sp.	0.	109.	0.	0.	0.	0.	0.
605	Rhabdomonas sp.	60.	0.	0.	0.	0.	0.	0.
150	Unknown	361.	312.	187.	172.	62.	123.	70.
Total Nondiatoms		1324.	1529.	1248.	1108.	515.	667.	1246.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 9-10, 1977

Replicates: 3

Code	Genus species	Station/Depth						
		1/ 2	6/ 2	12/ 2	17/ 2	19/ 2	32/ 2	36/ 2
806	Biddulphia longicruris	0.	0.	0.	0.	0.	18.	0.
818	Cyclotella spp.	120.	0.	0.	0.	0.	0.	18.
822	Cyclotella striata	60.	16.	0.	0.	0.	0.	0.
834	Melosira spp.	0.	16.	0.	0.	0.	0.	18.
836	Melosira distans var lirata	201.	0.	0.	0.	0.	0.	0.
837	Melosira granulata	241.	0.	0.	0.	0.	0.	0.
840	Melosira moniliformis	0.	0.	0.	0.	16.	0.	0.
841	Melosira nummuloides	0.	31.	0.	0.	0.	0.	0.
844	Navicula sp.	60.	0.	16.	16.	0.	0.	0.
846	Nitzschia sp.	40.	0.	0.	0.	16.	70.	35.
847	Nitzschia closterium	0.	0.	16.	0.	0.	0.	0.
852	Nitzschia seriata	0.	0.	0.	16.	47.	0.	0.
855	Rhaphoneis sp.	0.	16.	0.	0.	0.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	16.	0.	0.	0.
861	Skeletonema costatum	40.	0.	0.	0.	0.	0.	0.
862	Skeletonema potamus	261.	0.	0.	0.	0.	0.	0.
864	Surirella sp.	0.	0.	0.	16.	0.	0.	0.
869	Thalassiosira sp.	0.	0.	0.	0.	16.	0.	0.
870	Thalassiosira eccentrica	80.	0.	16.	0.	16.	0.	0.
950	Unknown	160.	62.	16.	47.	16.	18.	53.
Total Diatoms		1264.	140.	62.	109.	125.	105.	123.
Mean Cell Density (cells/ml)		2588.	1670.	1311.	1217.	640.	772.	1369.
Standard Deviation (cells/ml)		193.	90.	122.	83.	150.	97.	61.
Total Cells Counted		129.	107.	84.	78.	41.	44.	78.
Percent Nondiatoms (cells)		51.	92.	95.	91.	90.	86.	91.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 8-9, 1977

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	143/ 0	17/ 1	19/ 1	24/ 1	36/ 1
1	Mesodinium rubrum	0.	0.	0.	0.	14.	14.	0.	0.
35	Catalogued Unknown	0.	31.	16.	31.	0.	0.	0.	0.
45	Catalogued Unknown	0.	0.	0.	0.	14.	0.	0.	0.
46	Catalogued Unknown	0.	0.	0.	31.	0.	0.	0.	0.
47	Catalogued Unknown	0.	0.	0.	16.	14.	28.	0.	0.
49	Catalogued Unknown	0.	0.	0.	31.	0.	0.	0.	0.
53	Catalogued Unknown	0.	0.	0.	0.	0.	14.	0.	0.
54	Catalogued Unknown	0.	0.	0.	0.	0.	14.	0.	0.
55	Catalogued Unknown	0.	0.	0.	0.	0.	14.	16.	0.
200	Anabaena sp.	47.	0.	0.	0.	0.	0.	0.	0.
203	Palaeoform	0.	16.	0.	0.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	47.	16.	0.	0.	0.	0.	0.	0.
305	Pediastrum sp.	0.	16.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	23.	31.	0.	16.	0.	28.	16.	0.
315	Scenedesmus bijusa	47.	0.	0.	0.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	16.	0.	0.	0.	70.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	42.	42.	0.	0.
508	Oxytoxum sp.	0.	0.	0.	16.	14.	42.	0.	35.
510	Prorocentrum redfieldii	0.	16.	0.	0.	14.	0.	0.	0.
600	Chroomonas minuta	257.	655.	328.	1155.	183.	197.	62.	246.
601	Chroomonas amphioxea	0.	0.	62.	125.	28.	98.	203.	263.
602	Cryptomonas sp.	0.	0.	0.	0.	56.	14.	0.	0.
604	Cryptomonas testacea	0.	0.	62.	156.	14.	0.	0.	0.
605	Rhabdomonas sp.	0.	0.	0.	0.	0.	14.	0.	0.
150	Unknown	47.	203.	62.	78.	28.	84.	140.	98.
Total Nondiatoms		468.	999.	530.	1654.	421.	674.	437.	632.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 8-9, 1977

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	12/ 1	143/ 0	17/ 1	19/ 1	24/ 1	36/ 1
809	Chaetoceros didymus	0.	0.	0.	0.	0.	14.	0.	0.
814	Thalassiosira lineatus	0.	0.	0.	0.	0.	0.	31.	0.
816	Coscinodiscus radiatus	0.	0.	0.	0.	14.	0.	0.	0.
818	Cyclotella spp.	117.	0.	0.	0.	0.	0.	0.	0.
822	Cyclotella striata	47.	0.	0.	0.	0.	0.	0.	0.
834	Melosira spp.	23.	31.	0.	0.	0.	0.	0.	0.
836	Melosira distans var lirata	164.	0.	0.	0.	0.	0.	0.	0.
844	Navicula sp.	47.	0.	0.	0.	0.	28.	16.	18.
846	Nitzschia sp.	234.	0.	0.	0.	0.	0.	0.	0.
847	Nitzschia closterium	0.	0.	0.	0.	14.	0.	0.	0.
852	Nitzschia seriata	0.	0.	0.	0.	1587.	1573.	312.	0.
857	Rhoicosphenia curvata	23.	0.	0.	0.	0.	0.	0.	0.
950	Unknown	234.	125.	16.	0.	0.	0.	0.	18.
Total Diatoms		889.	156.	16.	0.	1615.	1615.	359.	35.
Mean Cell Density (cells/ml)		1357.	1155.	546.	1654.	2036.	2289.	796.	667.
Standard Deviation (cells/ml)		212.	198.	50.	175.	114.	57.	72.	66.
Total Cells Counted		58.	74.	35.	106.	145.	163.	51.	38.
Percent Nondiatoms (cells)		34.	86.	97.	100.	21.	29.	55.	95.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: January 4, 1978

Replicates: 3

Code	Genus species	Station/Depth					
		1/ 1	6/ 2	15/ 2	19/ 1	24/ 1	32/ 1
1	Mesodinium rubrum	0.	30.	52.	0.	0.	0.
35	Catalsued Unknown	0.	30.	105.	0.	0.	0.
40	Catalsued Unknown	0.	239.	0.	0.	0.	0.
55	Catalsued Unknown	0.	0.	79.	0.	0.	47.
56	Catalsued Unknown	0.	60.	0.	0.	0.	0.
58	Catalsued Unknown	0.	0.	0.	0.	0.	0.
201	Pleurocapsa sp.	0.	209.	183.	0.	0.	0.
307	Pyramimonas sp1.	0.	0.	0.	0.	0.	23.
311	Pyramimonas pluriculata	0.	0.	52.	0.	0.	0.
315	Scenedesmus bijusa	35.	0.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	0.	47.
406	Chrysochromulina kappa	0.	60.	0.	105.	23.	209.
600	Chroomonas minuta	244.	120.	314.	126.	116.	396.
601	Chroomonas amphioxeia	0.	60.	209.	293.	23.	93.
602	Cryptomonas sp1.	0.	0.	26.	0.	0.	0.
604	Cryptomonas testacea	0.	30.	0.	0.	0.	0.
150	Unknown	70.	269.	183.	84.	70.	93.
Total Nondiatoms		349.	1107.	1204.	607.	233.	908.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: January 4, 1978

Replicates: 3

Code	Genus species	Station/Depth					
		1/ 1	6/ 2	15/ 2	19/ 1	24/ 1	32/ 1
811	Coscinodiscus sp.	0.	30.	0.	0.	0.	0.
818	Cyclotella spp.	35.	180.	52.	0.	0.	23.
823	Diatoma sp.	0.	30.	26.	0.	0.	0.
834	Melosira spp.	0.	0.	0.	0.	0.	0.
836	Melosira distans var lirata	244.	120.	0.	0.	0.	0.
837	Melosira granulata	0.	30.	0.	0.	0.	0.
844	Navicula sp.	35.	30.	52.	21.	0.	0.
846	Nitzschia sp.	70.	0.	52.	0.	47.	0.
856	Rhoicosphenia sp.	35.	0.	0.	0.	0.	0.
864	Surirella sp.	35.	0.	0.	0.	0.	0.
950	Unknown	209.	150.	105.	21.	23.	70.
Total Diatoms		663.	568.	288.	42.	70.	93.
Mean Cell Density (cells/ml)		1012.	1675.	1492.	649.	303.	1001.
Standard Deviation (cells/ml)		205.	17.	139.	74.	48.	75.
Total Cells Counted		29.	56.	57.	31.	13.	43.
Percent Nondiatoms (cells)		34.	66.	81.	94.	77.	91.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: February 16, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	76/ 0	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1
1	Mesodinium rubrum	0.	0.	0.	0.	0.	47.	0.	78.
35	Catalogued Unknown	1675.	838.	105.	0.	0.	0.	93.	39.
47	Catalogued Unknown	0.	0.	0.	52.	39.	0.	0.	0.
54	Catalogued Unknown	1675.	0.	0.	0.	194.	140.	93.	349.
55	Catalogued Unknown	0.	0.	0.	52.	78.	23.	0.	0.
56	Catalogued Unknown	0.	0.	0.	0.	78.	0.	0.	0.
59	Catalogued Unknown	0.	0.	0.	52.	0.	0.	0.	0.
60	Catalogued Unknown	0.	0.	0.	157.	0.	23.	23.	0.
62	Catalogued Unknown	0.	0.	0.	0.	0.	70.	0.	0.
65	Catalogued Unknown	0.	0.	0.	0.	0.	23.	0.	0.
200	Anabaena sp.	1047.	0.	0.	0.	0.	0.	0.	0.
203	Palaeoecoid form	0.	0.	0.	0.	0.	116.	0.	0.
300	Ankistrodesmus falcatus	0.	209.	0.	0.	78.	0.	0.	0.
302	Chlorochytrium sp.	0.	0.	0.	0.	78.	0.	0.	0.
304	Cosmarium sp.	419.	0.	0.	0.	0.	0.	0.	0.
306	Polyedriopsis quadrispina	0.	0.	0.	0.	0.	140.	0.	0.
307	Pyramimonas sp.	0.	0.	0.	0.	0.	23.	23.	39.
311	Pyramimonas pluriculata	0.	0.	0.	0.	155.	23.	0.	116.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	39.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	39.	47.	419.	1125.
508	Oxytoxum sp.	0.	0.	0.	0.	0.	0.	23.	39.
600	Chroocomonas minuta	0.	419.	0.	157.	582.	419.	582.	1668.
601	Chroocomonas amphioxea	0.	0.	0.	52.	0.	186.	70.	582.
602	Cryptomonas sp.	209.	0.	52.	0.	0.	349.	0.	0.
605	Rhabdomonas sp.	0.	0.	0.	52.	116.	0.	116.	0.
701	Trachelomonas sp.	0.	0.	0.	0.	0.	0.	0.	78.
150	Unknown	1047.	419.	105.	52.	427.	489.	535.	737.
Total Nondiatoms		6073.	1885.	262.	628.	1900.	2118.	1978.	4848.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: February 16, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		1/ 1	6/ 1	76/ 0	12/ 1	17/ 1	19/ 1	24/ 1	32/ 1
811	Coscinodiscus sp.	0.	0.	0.	52.	0.	23.	0.	0.
818	Cyclotella spp.	0.	419.	52.	0.	116.	0.	23.	39.
823	Diatoma sp.	0.	0.	0.	52.	0.	0.	0.	0.
826	Epithemia sp.	0.	0.	0.	52.	0.	0.	0.	0.
834	Melosira spp.	0.	0.	262.	105.	39.	23.	0.	39.
836	Melosira distans var lirata	0.	628.	0.	0.	0.	0.	47.	0.
839	Melosira italica	0.	0.	157.	0.	0.	0.	0.	0.
840	Melosira moniliformis	0.	0.	0.	105.	0.	0.	0.	0.
843	Meridion circulare	0.	209.	0.	0.	0.	0.	0.	0.
844	Navicula sp.	0.	0.	0.	0.	0.	23.	23.	0.
846	Nitzschia sp.	0.	838.	52.	209.	0.	23.	116.	194.
849	Nitzschia longissima	0.	0.	0.	52.	0.	0.	0.	0.
861	Skeletonema costatum	0.	0.	0.	0.	39.	140.	0.	0.
862	Skeletonema potamus	0.	0.	0.	0.	1047.	0.	47.	0.
864	Surirella sp.	0.	0.	0.	52.	39.	0.	0.	0.
870	Thalassiosira eccentrica	0.	0.	0.	0.	0.	0.	0.	39.
872	Thalassiosira rotula	0.	0.	0.	0.	0.	47.	0.	0.
950	Unknown	1466.	209.	157.	314.	194.	186.	93.	271.
Total Diatoms		1466.	2304.	681.	995.	1474.	465.	349.	582.
Mean Cell Density (cells/ml)		7539.	4189.	942.	1623.	3374.	2583.	2327.	5430.
Standard Deviation (cells/ml)		209.	242.	209.	121.	67.	62.	71.	246.
Total Cells Counted		36.	20.	18.	31.	87.	111.	100.	140.
Percent Nondiatoms (cells)		81.	45.	28.	39.	56.	82.	85.	89.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		6/ 2	76/ 0	12/ 2	17/ 2	19/ 2	27/ 2	32/ 2	36/ 2
1	Mesodinium rubrum	0.	0.	0.	0.	35.	58.	0.	0.
35	Catalsued Unknown	628.	0.	0.	0.	0.	0.	78.	0.
41	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	209.
54	Catalsued Unknown	419.	0.	0.	0.	0.	0.	78.	209.
55	Catalsued Unknown	0.	0.	0.	0.	419.	0.	0.	3351.
56	Catalsued Unknown	0.	70.	0.	0.	0.	0.	0.	209.
62	Catalsued Unknown	0.	35.	0.	194.	0.	0.	0.	0.
66	Catalsued Unknown	0.	0.	87.	0.	105.	0.	0.	0.
68	Catalsued Unknown	0.	0.	0.	39.	0.	0.	0.	0.
69	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	0.
70	Catalsued Unknown	0.	0.	44.	0.	140.	0.	0.	0.
71	Catalsued Unknown	0.	0.	0.	0.	35.	0.	0.	0.
72	Catalsued Unknown	0.	0.	0.	0.	35.	0.	0.	0.
74	Catalsued Unknown	0.	0.	0.	0.	0.	116.	0.	0.
85	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	0.
200	Anabaena sp.	0.	0.	44.	0.	0.	0.	0.	0.
203	Palaeoloid form	0.	0.	0.	0.	140.	0.	116.	419.
300	Ankistrodesmus falcatus	209.	0.	44.	0.	0.	0.	0.	0.
302	Chlorochytrium sp.	209.	0.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp1.	209.	0.	44.	39.	0.	582.	0.	0.
311	Pyramimonas plurioculata	0.	0.	0.	0.	0.	116.	892.	12566.
401	Chromulina sp.	0.	0.	0.	0.	0.	349.	0.	1047.
406	Chrysochromulina kappa	0.	0.	0.	116.	209.	582.	1319.	11728.
507	Miniscula bipes	0.	0.	0.	0.	0.	465.	39.	0.
508	Oxystoxum sp.	0.	0.	0.	0.	0.	0.	194.	1047.
600	Chroomonas minuta	1047.	209.	305.	504.	733.	4770.	3335.	6911.
601	Chroomonas amphioxeia	0.	0.	0.	116.	105.	1745.	698.	5236.
602	Cryptomonas sp1.	0.	70.	0.	0.	489.	814.	0.	629.
604	Cryptomonas testacea	0.	0.	0.	0.	35.	0.	0.	0.
605	Rhabdomonas sp.	0.	0.	0.	78.	0.	0.	0.	0.
701	Trachelomonas sp.	0.	0.	0.	0.	0.	58.	0.	0.
150	Unknown	419.	105.	218.	310.	768.	1513.	1357.	16545.
Total Nondiatoms		3141.	489.	785.	1396.	3246.	11169.	8106.	60105.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		6/ 2	76/ 0	12/ 2	17/ 2	19/ 2	27/ 2	32/ 2	36/ 2
800	Actinopterychus sp.	0.	0.	0.	0.	0.	0.	0.	209.
804	Biddulphia sp.	209.	0.	0.	0.	0.	0.	0.	0.
818	Cyclotella spp.	0.	105.	87.	0.	0.	0.	0.	0.
821	Cyclotella meneshiniana	0.	0.	0.	0.	35.	0.	0.	0.
831	Gyrodinium sp.	0.	0.	0.	0.	0.	58.	0.	0.
834	Melosira spp.	0.	35.	654.	0.	733.	0.	116.	2513.
836	Melosira distans var lirata	1466.	0.	654.	0.	0.	0.	0.	0.
837	Melosira granulata	1047.	419.	0.	78.	0.	0.	0.	0.
844	Navicula sp.	209.	0.	131.	78.	35.	0.	39.	6492.
846	Nitzschia sp.	1257.	244.	175.	155.	70.	0.	116.	419.
847	Nitzschia closterium	0.	105.	44.	0.	0.	0.	0.	0.
849	Nitzschia longissima	0.	0.	0.	39.	0.	0.	116.	209.
854	Pleurosigma sp.	0.	0.	0.	0.	0.	0.	39.	0.
861	Skeletonema costatum	0.	0.	567.	8261.	140.	0.	0.	0.
864	Surirella sp.	0.	0.	0.	0.	0.	0.	0.	419.
869	Thalassiosira sp.	0.	0.	44.	0.	70.	116.	155.	0.
870	Thalassiosira eccentrica	0.	0.	0.	0.	0.	0.	0.	419.
896	Stephanodiscus sp.	0.	0.	0.	543.	0.	0.	0.	0.
950	Unknown	628.	35.	262.	116.	209.	58.	155.	2932.
Total Diatoms		4817.	942.	2618.	9269.	1291.	233.	737.	13613.
Mean Cell Density (cells/ml)		7958.	1431.	3403.	10665.	4538.	11402.	8842.	73718.
Standard Deviation (cells/ml)		436.	373.	400.	594.	271.	299.	706.	527.
Total Cells Counted		38.	41.	78.	275.	130.	196.	228.	352.
Percent Nondiatoms (cells)		39.	34.	23.	13.	72.	98.	92.	82.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 15, 1978

Replicates: 3

Code	Genus species	148/ 0	Station/Depth
7	Catalogued Unknown	56.	
203	Palmelloid form	22.	
300	Ankistrodesmus falcatus	67.	
308	Pyramimonas sp2.	34.	
600	Chroocomonas minuta	225.	
150	Unknown	270.	
151	Unknown	169.	
	Total Nondiatoms	843.	

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 15, 1978

Replicates: 3

Code	Genus species	Station/Depth
811	Coscinodiscus sp.	148/ 0 22.
818	Cyclotella spp.	56.
821	Cyclotella meneshiniana	34.
836	Melosira distans var lirata	67.
844	Navicula sp.	45.
846	Nitzschia sp.	135.
849	Nitzschia longissima	22.
861	Skeletonema costatum	101696.
868	Tabellaria fenestrata	11.
870	Thalassiosira eccentrica	146.
950	Unknown	67.
Total Diatoms		102303.

Mean Cell Density (cells/ml) 103146.
 Standard Deviation (cells/ml) 3820.
 Total Cells Counted 9181.
 Percent Nondiatoms (cells) 1.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 5, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		9/ 2	12/ 2	15/ 2	17/ 2	19/ 2	24/ 2	32/ 2
35	Catalogued Unknown	0.	0.	0.	39.	0.	0.	39.
55	Catalogued Unknown	419.	291.	116.	504.	209.	776.	1280.
56	Catalogued Unknown	0.	0.	0.	0.	70.	39.	0.
60	Catalogued Unknown	0.	0.	233.	388.	0.	0.	0.
76	Catalogued Unknown	0.	0.	0.	0.	0.	155.	0.
77	Catalogued Unknown	0.	58.	0.	0.	0.	0.	0.
203	Palmelloid form	0.	58.	0.	39.	0.	116.	39.
300	Ankistrodesmus falcatus	0.	58.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	0.	0.	0.	0.	279.	0.	0.
310	Pyramimonas micron	0.	0.	0.	0.	0.	233.	427.
406	Chrysochromulina kappa	0.	0.	0.	349.	1361.	1086.	3646.
507	Miniscula bipes	0.	0.	0.	39.	35.	0.	0.
508	Oxytoxum sp.	0.	0.	0.	0.	35.	0.	0.
600	Chroomonas minuta	0.	175.	175.	1202.	1117.	1241.	4499.
601	Chroomonas amphioxeia	0.	0.	465.	465.	140.	78.	78.
602	Cryptomonas sp.	628.	0.	233.	0.	0.	39.	39.
701	Trachelomonas sp.	0.	0.	0.	78.	70.	39.	39.
150	Unknown	628.	233.	640.	271.	803.	892.	1978.
Total Nondiatoms		1675.	873.	1862.	3374.	4119.	4693.	12061.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 5, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		9/ 2	12/ 2	15/ 2	17/ 2	19/ 2	24/ 2	32/ 2
807	Chaetoceros sp.	0.	0.	524.	349.	977.	116.	0.
809	Chaetoceros didymus	0.	0.	175.	116.	0.	0.	0.
811	Coscinodiscus sp.	0.	0.	58.	0.	0.	0.	0.
818	Cyclotella spp.	419.	116.	0.	78.	35.	39.	0.
821	Cyclotella meneshiniana	0.	0.	58.	0.	0.	0.	0.
831	Gyrodinium sp.	0.	0.	58.	0.	0.	0.	78.
834	Melosira spp.	5236.	1163.	2152.	349.	454.	155.	0.
836	Melosira distans var lirata	0.	756.	0.	0.	0.	0.	0.
837	Melosira granulata	1047.	349.	0.	0.	0.	0.	0.
844	Navicula sp.	628.	175.	58.	0.	70.	39.	0.
846	Nitzschia sp.	1047.	233.	0.	0.	0.	78.	78.
852	Nitzschia seriata	0.	0.	58.	78.	0.	0.	0.
856	Rhoicosphenia sp.	209.	0.	0.	0.	0.	0.	0.
861	Skeletonema costatum	5655.	2501.	5992.	1823.	733.	1163.	0.
865	Surirella semma	0.	0.	58.	0.	0.	0.	0.
869	Thalassiosira sp.	1047.	58.	58.	39.	279.	155.	233.
870	Thalassiosira eccentrica	0.	116.	0.	116.	0.	0.	0.
950	Unknown	2723.	524.	407.	233.	209.	271.	427.
Total Diatoms		18011.	5992.	9657.	3180.	2757.	2017.	814.
Mean Cell Density (cells/ml)		19686.	6865.	11518.	6554.	6876.	6709.	12876.
Standard Deviation (cells/ml)		735.	178.	533.	330.	123.	183.	404.
Total Cells Counted		94.	118.	198.	169.	197.	173.	332.
Percent Nondiatoms (cells)		9.	13.	16.	51.	60.	70.	94.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: May 24-25, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	76/ 0	148/ 0	17/ 2	19/ 2	27/ 2	36/ 2
1	Mesodinium rubrum	0.	0.	2094.	0.	70.	126.	0.
55	Catalogued Unknown	0.	2443.	3839.	0.	209.	0.	0.
76	Catalogued Unknown	0.	0.	0.	0.	209.	0.	0.
201	Pleurocapsa sp.	52.	0.	0.	0.	0.	0.	0.
203	Palmelloid form	52.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp1.	105.	0.	0.	70.	70.	0.	0.
310	Pyramimonas micron	0.	349.	349.	0.	768.	0.	0.
406	Chrysochromulina kappa	0.	1047.	4538.	1257.	2024.	84.	838.
508	Oxytoxum sp.	0.	0.	349.	0.	0.	0.	0.
600	Chroomonas minuta	262.	1396.	8028.	838.	1955.	335.	2094.
601	Chroomonas amphioxeia	0.	349.	349.	0.	0.	0.	0.
602	Cryptomonas sp1.	0.	0.	0.	0.	0.	0.	419.
701	Trachelomonas sp.	52.	0.	0.	0.	0.	0.	0.
150	Unknown	576.	2094.	1745.	977.	698.	126.	1047.
Total Nondiatoms		1099.	7679.	21292.	3141.	6004.	670.	4398.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: May 24-25, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	76/ 0	148/ 0	17/ 2	19/ 2	27/ 2	36/ 2
805	<i>Biddulphia aurita</i>	0.	0.	0.	0.	0.	84.	0.
807	<i>Chaetoceros</i> sp.	0.	0.	0.	0.	70.	0.	0.
818	<i>Cyclotella</i> spp.	262.	0.	0.	70.	0.	0.	209.
823	<i>Diatoma</i> sp.	0.	0.	0.	70.	0.	0.	0.
825	<i>Ditylum brightwellii</i>	0.	0.	0.	0.	0.	42.	0.
834	<i>Melosira</i> spp.	157.	1745.	0.	140.	0.	0.	209.
836	<i>Melosira distans</i> var <i>lirata</i>	0.	1396.	0.	0.	0.	0.	0.
837	<i>Melosira granulata</i>	52.	0.	0.	0.	0.	0.	0.
840	<i>Melosira moniliformis</i>	0.	0.	0.	0.	0.	126.	0.
844	<i>Navicula</i> sp.	0.	349.	0.	0.	0.	0.	1047.
846	<i>Nitzschia</i> sp.	209.	3490.	0.	70.	140.	1424.	2932.
853	<i>Nitzschia sigma</i>	0.	0.	349.	0.	70.	42.	0.
854	<i>Pleurosigma</i> sp.	0.	0.	0.	0.	0.	84.	0.
861	<i>Skeletonema costatum</i>	0.	24084.	0.	3351.	0.	0.	0.
869	<i>Thalassiosira</i> sp.	0.	1745.	0.	70.	0.	126.	209.
870	<i>Thalassiosira eccentrica</i>	0.	0.	0.	70.	0.	84.	209.
871	<i>Thalassiosira nordenskioldii</i>	0.	0.	0.	0.	838.	0.	0.
950	Unknown	157.	3839.	0.	279.	140.	251.	2513.
Total Diatoms		838.	36650.	349.	4119.	1257.	2262.	7330.
Mean Cell Density (cells/ml)		1937.	44329.	21641.	7260.	7260.	2932.	11728.
Standard Deviation (cells/ml)		288.	202.	1008.	161.	344.	97.	735.
Total Cells Counted		37.	127.	62.	104.	104.	70.	56.
Percent Nondiatoms (cells)		57.	17.	98.	43.	83.	23.	38.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: June 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		1/ 1	3/ 2	6/ 2	76/ 0	9/ 2	12/ 2	148/ 0	15/ 2	17/ 2
1	Mesodinium rubrum	0.	0.	0.	0.	78.	0.	947.	39.	0.
35	Catalogued Unknown	44.	0.	0.	0.	39.	39.	0.	155.	0.
54	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
55	Catalogued Unknown	480.	838.	489.	209.	0.	0.	100.	0.	78.
56	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	116.	0.
70	Catalogued Unknown	0.	0.	0.	0.	39.	0.	100.	39.	78.
203	Palaeoform	131.	209.	209.	0.	0.	0.	0.	0.	39.
300	Ankistrodesmus falcatus	0.	209.	419.	419.	271.	39.	0.	2327.	155.
302	Chlorochytrium sp.	262.	0.	0.	0.	0.	0.	0.	39.	0.
306	Polyedriopsis quadrispina	0.	0.	0.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	0.	0.	0.	0.	0.	0.	0.	116.	116.
310	Pyramimonas micron	0.	0.	0.	0.	155.	0.	249.	349.	0.
311	Pyramimonas plurioculata	0.	0.	0.	419.	0.	0.	0.	0.	349.
315	Scenedesmus bijusa	0.	0.	140.	0.	78.	78.	0.	0.	0.
401	Chromulina sp.	0.	0.	0.	0.	0.	78.	0.	0.	271.
405	Pseudopedinella pyriforme	1222.	1536.	908.	0.	0.	0.	0.	0.	0.
406	Chrysochromulina kappa	0.	70.	349.	0.	116.	892.	0.	1900.	39.
507	Miniscula bipes	0.	0.	0.	0.	0.	0.	0.	0.	0.
508	Oxytoxum sp.	0.	0.	0.	0.	0.	0.	0.	116.	504.
600	Chroomonas minuta	1222.	2792.	2234.	4189.	1319.	1202.	2493.	4033.	2327.
601	Chroomonas amphioxeia	218.	70.	140.	0.	194.	194.	748.	543.	0.
602	Cryptomonas sp.	37.	70.	0.	0.	0.	0.	0.	0.	0.
701	Trachelomonas sp.	0.	0.	70.	0.	0.	0.	0.	39.	0.
150	Unknown	1745.	2653.	2792.	3141.	1396.	1163.	848.	2133.	1629.
Total Nondiatoms		5410.	8447.	7749.	8377.	3684.	3684.	5485.	11945.	5585.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: June 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		1/ 1	3/ 2	6/ 2	76/ 0	9/ 2	12/ 2	148/ 0	15/ 2	17/ 2
803	<i>Asterionella gracilis</i>	0.	0.	0.	0.	0.	0.	0.	0.	155.
807	<i>Chaetoceros</i> sp.	0.	0.	0.	0.	0.	0.	0.	0.	78.
809	<i>Chaetoceros didymus</i>	0.	0.	0.	0.	0.	39.	0.	0.	0.
811	<i>Coscinodiscus</i> sp.	44.	0.	0.	0.	0.	0.	0.	0.	0.
818	<i>Cyclotella</i> spp.	1614.	1047.	489.	838.	233.	194.	0.	116.	0.
821	<i>Cyclotella meneshiniana</i>	0.	140.	0.	209.	0.	0.	0.	0.	0.
822	<i>Cyclotella striata</i>	0.	70.	0.	0.	0.	0.	0.	0.	0.
830	<i>Gomphonema</i> spp.	0.	0.	0.	0.	39.	0.	0.	0.	0.
831	<i>Gyrodinium</i> sp.	0.	0.	0.	0.	0.	0.	100.	0.	0.
834	<i>Melosira</i> spp.	0.	0.	349.	1257.	39.	39.	0.	1047.	116.
836	<i>Melosira distans</i> var <i>lirata</i>	2705.	558.	279.	3979.	504.	233.	0.	0.	0.
837	<i>Melosira granulata</i>	3927.	2373.	2024.	0.	0.	0.	0.	0.	0.
841	<i>Melosira nummuloides</i>	0.	0.	0.	0.	0.	0.	0.	0.	233.
844	<i>Navicula</i> sp.	436.	279.	140.	0.	0.	78.	0.	0.	78.
846	<i>Nitzschia</i> sp.	1832.	768.	1117.	1257.	194.	116.	249.	194.	78.
849	<i>Nitzschia longissima</i>	0.	0.	0.	0.	0.	0.	0.	39.	78.
850	<i>Nitzschia pacifica</i>	0.	0.	0.	0.	0.	0.	0.	0.	0.
861	<i>Skeletonema costatum</i>	0.	0.	0.	0.	1862.	1862.	1147.	233.	310.
869	<i>Thalassiosira</i> sp.	0.	0.	140.	209.	39.	0.	0.	0.	233.
870	<i>Thalassiosira eccentrica</i>	0.	0.	279.	419.	0.	0.	0.	39.	78.
950	Unknown	1309.	1396.	1187.	2094.	310.	310.	199.	233.	349.
Total Diatoms		11867.	6632.	6004.	10262.	3219.	2870.	1695.	1900.	1784.
Mean Cell Density (cells/ml)		17278.	15079.	13752.	18639.	6903.	6554.	7180.	13845.	7369.
Standard Deviation (cells/ml)		175.	436.	685.	673.	136.	258.	132.	912.	264.
Total Cells Counted		396.	216.	197.	89.	178.	169.	144.	357.	190.
Percent Nondiatoms (cells)		31.	56.	56.	45.	53.	56.	76.	86.	76.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 12-13, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		3/ 2	6/ 2	76/ 0	9/ 2	148/ 0	17/ 2	19/ 2	21/ 2	30/ 2
1	Mesodinium rubrum	0.	0.	0.	39.	0.	70.	0.	39.	39.
35	Catalogued Unknown	0.	0.	0.	78.	0.	0.	39.	39.	39.
55	Catalogued Unknown	0.	0.	0.	155.	0.	0.	0.	233.	155.
56	Catalogued Unknown	0.	0.	1047.	0.	0.	0.	0.	0.	0.
62	Catalogued Unknown	0.	0.	1745.	0.	0.	0.	0.	0.	0.
69	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	39.	0.
70	Catalogued Unknown	0.	0.	0.	39.	0.	0.	0.	0.	0.
71	Catalogued Unknown	0.	0.	0.	0.	0.	0.	0.	233.	698.
77	Catalogued Unknown	0.	0.	0.	194.	0.	0.	0.	233.	0.
83	Catalogued Unknown	0.	0.	1745.	194.	0.	303.	155.	155.	78.
85	Catalogued Unknown	0.	0.	349.	0.	0.	0.	0.	0.	0.
86	Catalogued Unknown	0.	0.	1396.	0.	0.	0.	0.	0.	39.
87	Catalogued Unknown	0.	0.	0.	78.	0.	0.	0.	0.	0.
203	Palaeooid form	209.	199.	698.	78.	0.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	0.	0.	349.	0.	0.	0.	0.	0.	0.
303	Closterium sp.	0.	100.	0.	116.	0.	0.	0.	0.	0.
306	Polyedriopsis quadrispina	0.	0.	349.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp.	0.	0.	0.	0.	0.	0.	0.	78.	0.
310	Pyramimonas micron	0.	0.	0.	0.	105.	0.	0.	0.	0.
311	Pyramimonas plurioculata	0.	0.	0.	78.	0.	70.	659.	233.	39.
315	Scenedesmus bijuga	0.	199.	0.	0.	0.	0.	0.	0.	0.
402	Distephanus speculum	0.	0.	0.	0.	0.	0.	39.	0.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	0.	93.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	0.	47.	465.	0.	0.
507	Miniscula bipes	0.	0.	0.	0.	0.	0.	0.	39.	0.
508	Oxytoxum sp.	0.	0.	0.	698.	0.	23.	233.	271.	39.
600	Chroomonas minuta	1326.	100.	1745.	543.	0.	396.	970.	1939.	2792.
601	Chroomonas amphioxeia	0.	100.	0.	349.	0.	140.	116.	310.	310.
602	Cryptomonas sp.	0.	0.	0.	853.	0.	47.	39.	349.	155.
701	Trachelomonas sp.	0.	0.	0.	0.	0.	23.	0.	0.	0.
150	Unknown	1187.	499.	4189.	1474.	140.	977.	3956.	1435.	970.
Total Nondiatoms		2723.	1197.	13613.	4964.	244.	2187.	6671.	5623.	5352.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 12-13, 1978

Replicates: 3

		Station/Depth								
Code	Genus species	3/ 2	6/ 2	76/ 0	9/ 2	148/ 0	17/ 2	19/ 2	21/ 2	30/ 2
803	Asterionella gracilis	0.	0.	0.	0.	0.	0.	78.	0.	0.
807	Chaetoceros sp.	0.	2344.	29320.	0.	0.	0.	388.	116.	155.
811	Coscinodiscus sp.	0.	50.	349.	39.	0.	0.	0.	0.	0.
813	Coscinodiscus Jonesianus	0.	0.	0.	39.	0.	0.	0.	0.	0.
817	Thalassiosira polychorda	0.	0.	2094.	0.	0.	0.	0.	0.	0.
818	Cyclotella spp.	838.	648.	698.	0.	0.	0.	0.	0.	0.
821	Cyclotella meneshiniana	628.	548.	1047.	0.	0.	0.	0.	0.	0.
822	Cyclotella striata	0.	199.	1047.	233.	0.	0.	0.	0.	0.
823	Diatoma sp.	0.	0.	349.	0.	0.	0.	0.	0.	0.
829	Eucampia zoodiacus	0.	0.	0.	0.	0.	0.	0.	39.	0.
834	Melosira spp.	1466.	548.	4538.	155.	244.	0.	0.	78.	0.
836	Melosira distans var lirata	209.	0.	1396.	0.	0.	0.	0.	0.	0.
840	Melosira moniliformis	0.	100.	1745.	0.	419.	0.	0.	0.	0.
844	Navicula sp.	140.	150.	0.	0.	140.	93.	233.	116.	39.
846	Nitzschia sp.	419.	150.	698.	39.	70.	0.	310.	39.	78.
847	Nitzschia closterium	0.	548.	4538.	155.	0.	140.	0.	0.	0.
849	Nitzschia longissima	0.	0.	0.	0.	0.	0.	465.	0.	0.
854	Pleurosigma sp.	0.	50.	0.	0.	35.	0.	0.	0.	0.
861	Skeletonema costatum	0.	0.	35602.	465.	0.	0.	931.	310.	0.
866	Surirella spiralis	0.	0.	0.	0.	0.	0.	0.	39.	0.
869	Thalassiosira sp.	0.	0.	0.	194.	0.	93.	194.	39.	0.
870	Thalassiosira eccentrica	0.	0.	0.	0.	70.	0.	39.	0.	0.
950	Unknown	698.	2294.	5236.	427.	279.	396.	1357.	349.	0.
Total Diatoms		4398.	7629.	88657.	1745.	1257.	721.	3995.	1125.	271.
Mean Cell Density (cells/ml)		7120.	8826.	102270.	6709.	1501.	2909.	10665.	6748.	5623.
Standard Deviation (cells/ml)		0.	264.	5478.	601.	112.	105.	183.	525.	90.
Total Cells Counted		102.	177.	293.	173.	43.	125.	275.	174.	145.
Percent Nondiatoms (cells)		38.	14.	13.	74.	16.	75.	63.	83.	95.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 31 - August 1, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		1/ 1	3/ 2	6/ 2	9/ 2	12/ 2	15/ 2	17/ 2	24/ 2	36/ 2
1	Mesodinium rubrum	0.	0.	58.	0.	0.	30.	39.	0.	0.
49	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	21.	0.
54	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	42.	0.
55	Catalsued Unknown	0.	0.	58.	0.	0.	60.	0.	0.	0.
62	Catalsued Unknown	0.	0.	291.	0.	0.	0.	0.	0.	0.
77	Catalsued Unknown	0.	0.	0.	50.	0.	0.	0.	0.	0.
83	Catalsued Unknown	52.	0.	0.	0.	0.	0.	0.	0.	0.
86	Catalsued Unknown	0.	0.	0.	50.	0.	0.	0.	0.	0.
87	Catalsued Unknown	0.	42.	0.	0.	0.	0.	0.	0.	0.
203	Palaeoform	52.	209.	58.	150.	0.	60.	0.	0.	0.
300	Ankistrodesmus falcatus	52.	0.	0.	50.	0.	0.	0.	0.	35.
303	Closterium sp.	0.	0.	58.	0.	0.	0.	0.	0.	0.
307	Pyramimonas sp1.	0.	0.	0.	0.	0.	30.	0.	0.	0.
311	Pyramimonas pluricoculata	0.	0.	0.	0.	0.	0.	39.	0.	35.
315	Scenedesmus bijuda	0.	42.	0.	299.	0.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	262.	0.	116.	199.	0.	30.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	648.	90.	388.	0.	942.
508	Oxytoxum sp.	0.	0.	0.	50.	0.	0.	39.	84.	70.
600	Chroomonas minuta	1152.	251.	524.	399.	698.	568.	1435.	1759.	0.
601	Chroomonas amphioxeia	52.	0.	175.	100.	50.	0.	116.	0.	0.
602	Cryptomonas sp1.	157.	0.	0.	0.	50.	0.	0.	0.	0.
701	Trachelomonas sp.	0.	0.	0.	0.	0.	60.	39.	84.	0.
150	Unknown	838.	921.	1571.	1197.	1396.	927.	931.	482.	0.
Total Nondiatoms		2618.	1466.	2909.	2543.	2842.	1855.	3025.	2471.	1082.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 31 - August 1, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		1/ 1	3/ 2	6/ 2	9/ 2	12/ 2	15/ 2	17/ 2	24/ 2	36/ 2
807	Chaetoceros sp.	0.	0.	175.	0.	0.	0.	0.	0.	0.
811	Coscinodiscus sp.	0.	0.	0.	50.	0.	0.	0.	0.	0.
818	Cyclotella spp.	1361.	712.	698.	499.	349.	60.	39.	0.	0.
821	Cyclotella meneshiniana	0.	0.	116.	50.	0.	0.	0.	0.	0.
831	Gyrodinium sp.	0.	0.	58.	0.	0.	0.	0.	0.	0.
835	Melosira binderiana	733.	0.	0.	299.	0.	0.	0.	0.	35.
841	Melosira nummuloides	0.	84.	233.	0.	0.	0.	0.	0.	140.
844	Navicula sp.	314.	168.	0.	50.	50.	0.	0.	0.	0.
846	Nitzschia sp.	314.	84.	58.	100.	0.	90.	0.	0.	0.
847	Nitzschia closterium	0.	84.	175.	0.	0.	0.	0.	0.	0.
849	Nitzschia longissima	0.	0.	0.	0.	50.	0.	0.	0.	0.
851	Nitzschia panduriformis	0.	84.	0.	0.	50.	0.	0.	0.	0.
854	Pleurosigma sp.	0.	0.	0.	100.	50.	0.	0.	0.	0.
857	Rhoicosphenia curvata	52.	0.	0.	0.	0.	0.	0.	0.	0.
861	Skeletonema costatum	0.	503.	1978.	2543.	1047.	628.	0.	0.	0.
867	Synedra sp.	0.	0.	0.	50.	0.	0.	0.	0.	35.
868	Tabellaria fenestrata	471.	0.	0.	0.	0.	0.	0.	0.	70.
869	Thalassiosira sp.	0.	0.	0.	100.	0.	0.	0.	0.	209.
870	Thalassiosira eccentrica	0.	1173.	5817.	2792.	150.	90.	0.	0.	244.
950	Unknown	419.	754.	814.	698.	449.	120.	155.	21.	0.
Total Diatoms		3665.	3644.	10122.	7330.	2194.	987.	194.	21.	733.
Mean Cell Density (cells/ml)		6283.	5110.	13031.	9873.	5036.	2842.	3219.	2492.	1815.
Standard Deviation (cells/ml)		262.	207.	67.	259.	578.	113.	377.	593.	88.
Total Cells Counted		120.	122.	224.	198.	101.	95.	83.	119.	52.
Percent Nondiatoms (cells)		42.	29.	22.	26.	56.	65.	94.	99.	60.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: August 24, 1978

Replicates: 3

Code	Genus species	Station/Depth	
		3/ 1	3/10
315	Scenedesmus bijusa	558.	0.
405	Pseudopedinella pyriforme	0.	1396.
600	Chroomonas minuta	70.	1047.
701	Trachelomonas sp.	0.	349.
150	Unknown	70.	1396.
	Total Nondiatoms	698.	4189.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: August 24, 1973

Replicates: 3

Code	Genus species	3/ 1	3/10	Station/Depth
811	Coscinodiscus sp.	70.	0.	
818	Cyclotella spp.	140.	2094.	
822	Cyclotella striata	0.	1047.	
834	Melosira spp.	70.	349.	
836	Melosira distans var lirata	0.	698.	
840	Melosira moniliformis	279.	0.	
846	Nitzschia sp.	140.	1047.	
847	Nitzschia closterium	140.	0.	
854	Pleurosigma sp.	70.	349.	
861	Skeletonema costatum	2024.	15707.	
868	Tabellaria fenestrata	140.	0.	
870	Thalassiosira eccentrica	10751.	34206.	
950	Unknown	140.	2443.	
	Total Diatoms	13962.	57941.	

Mean Cell Density (cells/ml)	14660.	62130.
Standard Deviation (cells/ml)	363.	6129.
Total Cells Counted	210.	178.
Percent Nondiatoms (cells)	5.	7.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 5, 1978

Replicates: 3

Code	Genus species	Station/Depth								
		651/ 1	3/ 1	6/ 1	76/ 0	9/ 1	15/ 1	19/ 1	24/ 1	30/ 1
1	Mesodinium rubrum	0.	0.	0.	0.	87.	0.	0.	21.	0.
35	Catalsued Unknown	0.	0.	0.	0.	0.	0.	21.	0.	0.
49	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	84.	0.
55	Catalsued Unknown	0.	0.	0.	0.	567.	314.	419.	0.	0.
77	Catalsued Unknown	58.	0.	0.	0.	0.	0.	0.	0.	0.
85	Catalsued Unknown	0.	0.	0.	0.	0.	0.	0.	21.	0.
203	Palmelloid form	116.	0.	87.	698.	87.	70.	0.	0.	0.
300	Ankistrodesmus falcatus	0.	0.	698.	2094.	480.	0.	0.	0.	0.
307	Pyramimonas sp1.	58.	0.	0.	0.	0.	0.	126.	21.	60.
311	Pyramimonas pluriloculata	0.	0.	0.	0.	44.	0.	0.	0.	0.
315	Scenedesmus bijusa	116.	175.	0.	1047.	0.	0.	0.	0.	0.
401	Chromulina sp.	0.	0.	0.	0.	0.	175.	188.	0.	0.
405	Pseudopedinella pyriforme	291.	0.	0.	349.	131.	35.	0.	21.	30.
508	Oxytoxum sp.	0.	87.	0.	0.	0.	140.	147.	42.	30.
600	Chroomonas minuta	2036.	785.	524.	349.	305.	1152.	796.	272.	180.
601	Chroomonas amphioxeia	0.	0.	87.	0.	262.	70.	42.	42.	30.
602	Cryptomonas sp1.	0.	0.	0.	349.	87.	0.	21.	0.	30.
701	Trachelomonas sp.	58.	0.	0.	0.	0.	140.	0.	21.	0.
150	Unknown	989.	436.	1222.	3490.	916.	2269.	901.	105.	239.
Total Nondiatoms		3723.	1483.	2618.	8377.	2967.	4363.	2660.	649.	598.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 5, 1973

Replicates: 3

Code	Genus species	Station/Depth								
		651/ 1	3/ 1	6/ 1	76/ 0	9/ 1	15/ 1	19/ 1	24/ 1	30/ 1
805	Biddulphia aurita	0.	0.	0.	0.	0.	0.	21.	0.	0.
807	Chaetoceros sp.	0.	0.	0.	0.	0.	0.	0.	42.	0.
818	Cyclotella spp.	58.	785.	1832.	10122.	698.	0.	0.	0.	0.
821	Cyclotella meneshiniana	0.	0.	0.	349.	0.	35.	0.	0.	0.
831	Gyrodinium sp.	0.	0.	87.	0.	0.	0.	0.	0.	0.
834	Melosira spp.	116.	87.	0.	0.	0.	0.	0.	0.	0.
836	Melosira distans var lirata	407.	0.	175.	0.	0.	0.	0.	0.	0.
840	Melosira moniliformis	0.	0.	349.	698.	87.	0.	0.	0.	0.
841	Melosira nummuloides	0.	0.	0.	0.	0.	0.	147.	0.	0.
842	Melosira varians	0.	0.	0.	0.	0.	0.	42.	0.	0.
844	Navicula sp.	58.	87.	0.	0.	44.	105.	21.	0.	0.
846	Nitzschia sp.	233.	87.	175.	349.	0.	70.	0.	0.	60.
847	Nitzschia closterium	0.	0.	175.	0.	87.	0.	21.	0.	0.
849	Nitzschia longissima	0.	0.	0.	0.	0.	140.	251.	0.	0.
854	Pleurosigma sp.	0.	0.	0.	0.	44.	0.	0.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	0.	0.	0.	188.	0.	0.
861	Skeletonema costatum	0.	175.	3403.	42234.	1745.	70.	0.	0.	0.
864	Surirella sp.	0.	0.	87.	0.	0.	0.	0.	0.	30.
869	Thalassiosira sp.	0.	0.	0.	0.	0.	0.	84.	0.	0.
870	Thalassiosira eccentrica	58.	5585.	9860.	18499.	2007.	0.	0.	21.	60.
950	Unknown	582.	1483.	785.	5236.	436.	209.	126.	42.	30.
Total Diatoms		1513.	8290.	16929.	77488.	5148.	629.	901.	105.	180.
Mean Cell Density (cells/ml)		5236.	9773.	19546.	85865.	8115.	4991.	3560.	754.	778.
Standard Deviation (cells/ml)		381.	568.	792.	8557.	231.	88.	74.	63.	17.
Total Cells Counted		90.	112.	224.	246.	186.	143.	170.	36.	26.
Percent Nondiatoms (cells)		71.	15.	13.	10.	37.	87.	75.	86.	77.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 12, 1978

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 1	170/ 1	179/ 1	19/ 1
45	Catalogued Unknown	262.	0.	0.	0.
54	Catalogued Unknown	0.	0.	0.	35.
68	Catalogued Unknown	0.	0.	35.	0.
70	Catalogued Unknown	0.	105.	35.	0.
74	Catalogued Unknown	0.	0.	0.	0.
81	Catalogued Unknown	0.	0.	0.	35.
83	Catalogued Unknown	0.	140.	105.	0.
85	Catalogued Unknown	0.	35.	0.	0.
203	Palaeoloid form	0.	0.	0.	35.
300	Ankistrodesmus falcatus	524.	35.	35.	0.
307	Pyramimonas sp.	0.	0.	105.	105.
311	Pyramimonas plurioculata	0.	209.	105.	0.
401	Chromulina sp.	0.	105.	0.	175.
406	Chrysochromulina kappa	0.	140.	70.	140.
507	Miniscula bipes	0.	0.	35.	35.
508	Oxytoxum sp.	0.	35.	0.	209.
600	Chroomonas minuta	262.	698.	593.	873.
601	Chroomonas amphioxeia	87.	0.	35.	140.
701	Trachelomonas sp.	0.	35.	70.	35.
150	Unknown	1134.	1222.	1152.	1012.
Total Nondiatoms		2269.	2757.	2373.	2827.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 12, 1973

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 1	170/ 1	179/ 1	19/ 1
805	<i>Biddulphia aurita</i>	0.	35.	0.	0.
807	<i>Chaetoceros</i> sp.	0.	0.	140.	35.
814	<i>Thalassiosira lineatus</i>	0.	35.	0.	0.
818	<i>Cyclotella</i> spp.	1920.	0.	70.	0.
821	<i>Cyclotella meneshiniana</i>	785.	0.	0.	0.
841	<i>Melosira nummuloides</i>	873.	0.	0.	0.
844	<i>Navicula</i> sp.	0.	0.	0.	35.
846	<i>Nitzschia</i> sp.	0.	70.	0.	209.
847	<i>Nitzschia closterium</i>	175.	105.	0.	0.
849	<i>Nitzschia longissima</i>	0.	279.	70.	105.
859	<i>Rhizosolenia</i> sp.	0.	384.	70.	558.
861	<i>Skeletonema costatum</i>	4101.	0.	140.	0.
867	<i>Synedra</i> sp.	87.	0.	0.	0.
869	<i>Thalassiosira</i> sp.	0.	35.	0.	0.
870	<i>Thalassiosira eccentrica</i>	5323.	0.	0.	70.
950	Unknown	873.	314.	314.	0.
Total Diatoms		14136.	1257.	803.	1012.

Mean Cell Density (cells/ml)	16405.	4014.	3176.	3839.
Standard Deviation (cells/ml)	613.	192.	232.	157.
Total Cells Counted	188.	115.	91.	110.
Percent Nondiatoms (cells)	14.	69.	75.	74.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 19-20, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		1/ 2	6/ 2	76/ 0	9/ 2	15/ 2	148/ 0	19/ 2
1	Mesodinium rubrum	0.	0.	87.	0.	0.	0.	0.
55	Catalogued Unknown	0.	0.	0.	0.	393.	299.	0.
62	Catalogued Unknown	0.	0.	175.	0.	0.	0.	0.
70	Catalogued Unknown	70.	0.	0.	0.	0.	0.	0.
83	Catalogued Unknown	0.	0.	0.	50.	262.	50.	140.
203	Palaeoform form	140.	58.	0.	50.	0.	0.	0.
300	Ankistrodesmus falcatus	0.	349.	785.	349.	44.	0.	0.
306	Polysphaeria quadrispinata	0.	0.	0.	0.	44.	0.	35.
311	Pyramimonas pluriculata	0.	0.	87.	100.	305.	399.	105.
315	Scenedesmus bijuga	0.	0.	175.	0.	0.	0.	0.
401	Chromulina sp.	0.	0.	0.	0.	131.	249.	0.
405	Pseudopedinella pyriformis	140.	0.	0.	0.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	87.	299.	87.	100.	0.
507	Miniscula bipes	0.	58.	0.	0.	44.	0.	0.
508	Oxytoxum sp.	0.	0.	87.	0.	131.	0.	489.
600	Chroomonas minuta	698.	233.	873.	548.	1527.	1596.	524.
601	Chroomonas amphioxea	0.	0.	0.	150.	87.	249.	35.
604	Cryptomonas testacea	70.	0.	0.	0.	0.	0.	0.
701	Trachelomonas sp.	0.	0.	0.	0.	87.	50.	70.
150	Unknown	558.	465.	873.	1247.	1047.	848.	942.
Total Nondiatoms		1675.	1163.	3229.	2792.	4189.	3839.	2339.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 19-20, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		1/ 2	6/ 2	76/ 0	9/ 2	15/ 2	148/ 0	19/ 2
818	Cyclotella spp.	70.	640.	349.	199.	0.	50.	0.
820	Cyclotella catenata	0.	0.	0.	0.	0.	598.	0.
821	Cyclotella meneshiniana	0.	291.	175.	0.	0.	0.	0.
822	Cyclotella striata	70.	175.	0.	0.	0.	0.	0.
831	Gyrosigma sp.	0.	0.	0.	0.	0.	199.	0.
834	Melosira spp.	209.	0.	87.	249.	44.	199.	0.
841	Melosira nummuloides	0.	407.	785.	50.	0.	0.	0.
844	Navicula sp.	0.	0.	0.	0.	0.	349.	0.
846	Nitzschia sp.	140.	58.	175.	0.	218.	349.	314.
849	Nitzschia longissima	0.	116.	0.	199.	0.	0.	0.
851	Nitzschia panduriformis	0.	58.	0.	0.	0.	0.	0.
854	Pleurosigma sp.	0.	58.	0.	0.	0.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	0.	44.	0.	419.
861	Skeletonema costatum	0.	9482.	11606.	5186.	480.	1645.	0.
870	Thalassiosira eccentrica	0.	13264.	5061.	2244.	0.	50.	35.
950	Unknown	349.	582.	1047.	748.	218.	947.	35.
Total Diatoms		838.	25131.	19285.	8876.	1004.	4388.	803.
Mean Cell Density (cells/ml)		2513.	26295.	22513.	11668.	5192.	8227.	3141.
Standard Deviation (cells/ml)		242.	1282.	1839.	217.	524.	132.	0.
Total Cells Counted		36.	452.	258.	234.	119.	165.	90.
Percent Nondiatoms (cells)		67.	4.	14.	24.	81.	47.	74.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: October 11-12, 1978

Replicates: 3

Code	Genus species	Station/Depth					
		6/ 2	76/ 0	15/ 2	148/ 0	19/ 2	27/ 2
1	Mesodinium rubrum	0.	0.	35.	209.	0.	0.
202	Spirulina sp.	0.	0.	0.	0.	0.	23.
300	Ankistrodesmus falcatus	349.	611.	0.	0.	0.	0.
306	Polyedriopsis quadrispina	0.	262.	0.	0.	0.	0.
309	Pyramimonas dissonata	0.	87.	0.	0.	39.	0.
310	Pyramimonas micron	0.	0.	70.	366.	621.	23.
311	Pyramimonas plurioculata	0.	262.	0.	0.	78.	0.
314	Scenedesmus sp.	698.	0.	0.	0.	0.	0.
400	Aedinella radious	0.	0.	0.	52.	0.	23.
405	Pseudopedinella pyriforme	0.	0.	0.	52.	78.	23.
500	Cachonina niei	0.	0.	0.	0.	0.	23.
504	Gyrodinium punctatum	0.	0.	0.	0.	0.	23.
505	Heterocapsa triquetra	0.	0.	0.	0.	0.	23.
506	Katodinium rotundatum	0.	0.	0.	0.	39.	0.
600	Chroomonas minuta	175.	87.	524.	681.	310.	1094.
601	Chroomonas amphioxeia	175.	87.	524.	419.	388.	419.
604	Cryptomonas testacea	0.	175.	70.	105.	155.	186.
700	Eutreptia lauwii	175.	87.	0.	0.	0.	23.
701	Trachelomonas sp.	0.	0.	35.	0.	39.	0.
703	Trachelomonas hispida	0.	262.	0.	0.	0.	0.
150	Unknown	0.	87.	0.	0.	0.	0.
151	Unknown	0.	175.	0.	0.	0.	0.
152	Unknown	0.	87.	0.	0.	0.	0.
153	Unknown	0.	87.	0.	0.	0.	0.
154	Unknown	0.	0.	0.	157.	0.	0.
155	Unknown	0.	0.	0.	262.	0.	0.
156	Unknown	0.	0.	0.	52.	0.	0.
157	Unknown	0.	0.	0.	105.	0.	0.
158	Unknown	0.	0.	0.	209.	0.	0.
159	Unknown	0.	0.	0.	157.	0.	0.
160	Unknown	0.	0.	0.	105.	0.	0.
161	Unknown	0.	0.	0.	105.	0.	0.
162	Unknown	0.	0.	0.	52.	0.	0.
163	Unknown	0.	0.	0.	52.	0.	0.
164	Unknown	0.	0.	0.	52.	0.	0.
165	Unknown	0.	0.	0.	105.	0.	0.
166	Unknown	0.	0.	0.	52.	0.	0.
167	Unknown	0.	0.	105.	0.	0.	0.
168	Unknown	0.	0.	35.	0.	0.	0.
169	Unknown	0.	0.	105.	0.	0.	0.
170	Unknown	0.	0.	35.	0.	0.	0.
171	Unknown	0.	0.	35.	0.	0.	0.
172	Unknown	0.	0.	35.	0.	0.	0.
173	Unknown	0.	0.	35.	0.	0.	0.
174	Unknown	0.	0.	0.	0.	78.	0.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: October 11-12, 1978

Replicates: 3

Code	Genus species	Station/Depth					
		6/ 2	76/ 0	15/ 2	148/ 0	19/ 2	27/ 2
175	Unknown	0.	0.	0.	0.	39.	0.
176	Unknown	0.	0.	0.	0.	78.	0.
177	Unknown	0.	0.	0.	0.	39.	0.
178	Unknown	0.	0.	0.	0.	39.	0.
179	Unknown	0.	0.	0.	0.	39.	0.
180	Unknown	0.	0.	0.	0.	39.	0.
181	Unknown	0.	0.	0.	0.	39.	0.
182	Unknown	0.	0.	0.	0.	0.	23.
183	Unknown	0.	0.	0.	0.	0.	23.
184	Unknown	0.	0.	0.	0.	0.	93.
185	Unknown	0.	0.	0.	0.	0.	23.
Total Nondiatoms		1571.	2356.	1641.	3351.	2133.	2048.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: October 11-12, 1978

Replicates: 3

Code	Genus species	Station/Depth					
		6/ 2	76/ 0	15/ 2	148/ 0	19/ 2	27/ 2
818	Cyclotella spp.	1222.	349.	0.	0.	0.	0.
830	Gomphonema spp.	175.	0.	0.	0.	0.	0.
832	Gyrosigma fasciola	0.	87.	0.	0.	0.	0.
833	Hemiaulus senensis	0.	0.	0.	0.	271.	0.
834	Melosira spp.	175.	436.	35.	52.	0.	0.
841	Melosira nummuloides	0.	698.	0.	0.	0.	0.
844	Navicula sp.	0.	87.	0.	0.	0.	0.
846	Nitzschia sp.	0.	0.	0.	0.	39.	0.
847	Nitzschia closterium	0.	262.	35.	262.	659.	70.
851	Nitzschia panduriformis	175.	436.	0.	0.	0.	0.
854	Pleurosigma sp.	0.	0.	0.	52.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	0.	78.	0.
861	Skeletonema costatum	1920.	4712.	0.	0.	0.	0.
870	Thalassiosira eccentrica	12042.	6545.	0.	0.	0.	0.
950	Unknown	175.	0.	0.	0.	0.	0.
951	Unknown	175.	0.	0.	0.	0.	0.
952	Unknown	175.	0.	0.	0.	0.	0.
953	Unknown	175.	0.	0.	0.	0.	0.
954	Unknown	175.	0.	0.	0.	0.	0.
955	Unknown	349.	0.	0.	0.	0.	0.
956	Unknown	349.	0.	0.	0.	0.	0.
957	Unknown	175.	0.	0.	0.	0.	0.
958	Unknown	175.	0.	0.	0.	0.	0.
959	Unknown	0.	175.	0.	0.	0.	0.
960	Unknown	0.	175.	0.	0.	0.	0.
961	Unknown	0.	87.	0.	0.	0.	0.
962	Unknown	0.	87.	0.	0.	0.	0.
963	Unknown	0.	87.	0.	0.	0.	0.
964	Unknown	0.	87.	0.	0.	0.	0.
965	Unknown	0.	87.	0.	0.	0.	0.
966	Unknown	0.	87.	0.	0.	0.	0.
967	Unknown	0.	0.	0.	52.	0.	0.
968	Unknown	0.	0.	35.	0.	0.	0.
969	Unknown	0.	0.	35.	0.	0.	0.
970	Unknown	0.	0.	35.	0.	0.	0.
971	Unknown	0.	0.	35.	0.	0.	0.
972	Unknown	0.	0.	0.	0.	39.	0.
973	Unknown	0.	0.	0.	0.	39.	0.
974	Unknown	0.	0.	0.	0.	39.	0.
975	Unknown	0.	0.	0.	0.	39.	0.
976	Unknown	0.	0.	0.	0.	39.	0.

Total Diatoms	17627.	14485.	209.	419.	1241.	70.
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Mean Cell Density (cells/ml)	19197.	16841.	1850.	3770.	3374.	2118.
Standard Deviation (cells/ml)	1136.	1011.	145.	505.	103.	238.
Total Cells Counted	110.	193.	53.	72.	87.	91.
Percent Nondiatoms (cells)	8.	14.	89.	89.	63.	97.
Phytoplankton Carbon (ug/l)	2055.	1626.	54.	281.	198.	49.
Percent Nondiatoms (carbon)	1.	6.	85.	89.	39.	96.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 8-9, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
1	Mesodinium rubrum	0.	0.	305.	0.	0.	0.	0.
203	Palaeoid form	0.	931.	0.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	0.	407.	0.	0.	0.	0.	0.
301	Chlamydomonas sp.	0.	0.	0.	0.	0.	0.	175.
310	Pyramimonas micron	0.	0.	44.	814.	116.	131.	1178.
311	Pyramimonas plurioculata	0.	0.	0.	194.	39.	0.	567.
402	Distephanus speculum	0.	0.	0.	0.	116.	0.	0.
404	Ochromonas sp.	0.	0.	829.	0.	0.	0.	873.
405	Pseudopedinella pyriforme	0.	0.	262.	0.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	0.	0.	218.
500	Cachonina niei	0.	0.	262.	116.	39.	0.	0.
506	Katodinium rotundatum	0.	0.	0.	0.	0.	52.	0.
513	Gyrodinium simplex	0.	0.	87.	0.	0.	0.	44.
600	Chroomonas minuta	116.	0.	4756.	1280.	465.	471.	15925.
601	Chroomonas amphioxys	58.	0.	524.	194.	582.	236.	8159.
604	Cryptomonas testacea	116.	291.	4538.	853.	233.	236.	4450.
606	Hemiselais sp.	0.	58.	0.	0.	0.	0.	0.
700	Eutreptia lauwii	58.	0.	0.	39.	0.	0.	0.
701	Trachelomonas sp.	0.	0.	87.	0.	78.	0.	0.
702	Phacus triquetus	0.	0.	4058.	0.	0.	0.	0.
150	Unknown	58.	58.	0.	0.	0.	0.	0.
151	Unknown	58.	0.	0.	0.	0.	0.	0.
152	Unknown	58.	0.	0.	0.	0.	0.	0.
153	Unknown	58.	0.	0.	0.	0.	0.	0.
154	Unknown	0.	0.	0.	0.	0.	0.	0.
155	Unknown	0.	0.	44.	0.	0.	0.	0.
156	Unknown	0.	0.	87.	0.	0.	0.	0.
157	Unknown	0.	0.	44.	0.	0.	0.	0.
158	Unknown	0.	0.	44.	0.	0.	0.	0.
159	Unknown	0.	0.	87.	0.	0.	0.	0.
160	Unknown	0.	0.	44.	0.	0.	0.	0.
161	Unknown	0.	0.	0.	78.	0.	0.	0.
162	Unknown	0.	0.	0.	78.	0.	0.	0.
163	Unknown	0.	0.	0.	78.	0.	0.	0.
164	Unknown	0.	0.	0.	39.	0.	0.	0.
165	Unknown	0.	0.	0.	0.	39.	0.	0.
166	Unknown	0.	0.	0.	0.	78.	0.	0.
167	Unknown	0.	0.	0.	0.	39.	0.	0.
168	Unknown	0.	0.	0.	0.	116.	0.	0.
169	Unknown	0.	0.	0.	0.	78.	0.	0.
170	Unknown	0.	0.	0.	0.	39.	0.	0.
171	Unknown	0.	0.	0.	0.	0.	26.	0.
172	Unknown	0.	0.	0.	0.	0.	79.	0.
173	Unknown	0.	0.	0.	0.	0.	52.	0.
174	Unknown	0.	0.	0.	0.	0.	52.	0.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 8-9, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
175	Unknown	0.	0.	0.	0.	0.	26.	0.
176	Unknown	0.	0.	0.	0.	0.	52.	0.
177	Unknown	0.	0.	0.	0.	0.	26.	0.
178	Unknown	0.	0.	0.	0.	0.	26.	0.
179	Unknown	0.	0.	0.	0.	0.	0.	44.
180	Unknown	0.	0.	0.	0.	0.	0.	44.
181	Unknown	0.	0.	0.	0.	0.	0.	87.
182	Unknown	0.	0.	0.	0.	0.	0.	44.
183	Unknown	0.	0.	0.	0.	0.	0.	44.
Total Nondiatoms		582.	1745.	16100.	3762.	2055.	1466.	31850.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 8-9, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
807	Chaetoceros sp.	0.	291.	0.	0.	388.	0.	0.
808	Chaetoceros constrictus	0.	0.	0.	0.	271.	0.	0.
811	Coscinodiscus sp.	58.	0.	0.	0.	0.	0.	0.
814	Thalassiosira lineatus	58.	0.	0.	0.	0.	0.	0.
815	Coscinodiscu perforatus	0.	0.	0.	0.	39.	0.	0.
818	Cyclotella spp.	291.	698.	0.	0.	0.	0.	0.
821	Cyclotella meneshiniana	175.	58.	87.	0.	39.	0.	0.
823	Diatoma sp.	0.	58.	0.	39.	0.	0.	0.
831	Gyrosoida sp.	0.	0.	0.	0.	0.	0.	44.
834	Melosira spp.	0.	116.	0.	0.	0.	0.	0.
841	Melosira nummuloides	116.	175.	0.	0.	0.	0.	0.
846	Nitzschia sp.	0.	58.	0.	0.	0.	0.	0.
847	Nitzschia closterium	0.	175.	1134.	39.	155.	157.	87.
849	Nitzschia longissima	0.	0.	0.	0.	39.	0.	0.
854	Pleurosigma sp.	0.	0.	0.	39.	0.	0.	0.
860	Rhizosolenia alata	0.	0.	0.	0.	78.	0.	0.
861	Skeletonema costatum	1803.	4654.	0.	116.	78.	0.	0.
869	Thalassiosira sp.	0.	175.	0.	0.	0.	0.	0.
870	Thalassiosira eccentrica	2560.	4770.	0.	0.	194.	0.	0.
872	Thalassiosira rotula	0.	0.	0.	0.	349.	0.	0.
873	Thalassiothrix longissima	0.	0.	0.	0.	39.	0.	0.
895	Nitzschia paradoxa	0.	0.	0.	0.	155.	0.	0.
950	Unknown	58.	0.	0.	0.	0.	0.	0.
951	Unknown	58.	0.	0.	0.	0.	0.	0.
952	Unknown	58.	0.	0.	0.	0.	0.	0.
953	Unknown	58.	0.	0.	0.	0.	0.	0.
954	Unknown	58.	0.	0.	0.	0.	0.	0.
955	Unknown	58.	0.	0.	0.	0.	0.	0.
956	Unknown	58.	0.	0.	0.	0.	0.	0.
957	Unknown	58.	0.	0.	0.	0.	0.	0.
958	Unknown	0.	0.	44.	0.	0.	0.	0.
959	Unknown	0.	0.	44.	0.	0.	0.	0.
960	Unknown	0.	0.	0.	39.	0.	0.	0.
961	Unknown	0.	0.	0.	39.	0.	0.	0.
962	Unknown	0.	0.	0.	39.	0.	0.	0.
963	Unknown	0.	0.	0.	0.	39.	0.	0.
964	Unknown	0.	0.	0.	0.	0.	26.	0.
965	Unknown	0.	0.	0.	0.	0.	26.	0.
966	Unknown	0.	0.	0.	0.	0.	26.	0.
967	Unknown	0.	0.	0.	0.	0.	26.	0.
968	Unknown	0.	0.	0.	0.	0.	26.	0.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: November 8-9, 1978

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
969	Unknown	0.	0.	0.	0.	0.	0.	44.
970	Unknown	0.	0.	0.	0.	0.	0.	44.
971	Unknown	0.	0.	0.	0.	0.	0.	44.
Total Diatoms		5527.	11228.	1309.	349.	1862.	288.	262.
Mean Cell Density (cells/ml)		6108.	12973.	17409.	4111.	3917.	1754.	32112.
Standard Deviation (cells/ml)		407.	586.	151.	59.	294.	92.	467.
Total Cells Counted		105.	223.	399.	106.	101.	67.	736.
Percent Nondiatoms (cells)		10.	13.	92.	92.	52.	84.	99.
Phytoplankton Carbon (ug/l)		2022.	1029.	736.	120.	773.	39.	548.
Percent Nondiatoms (carbon)		2.	2.	92.	75.	52.	78.	94.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		3/ 2	76/ 0	12/ 2	148/ 0	19/ 2	27/ 2	306/ 0	36/ 2
87	Catalogued Unknown	0.	0.	0.	0.	0.	0.	1222.	0.
300	Ankistrodesmus falcatus	0.	58.	0.	0.	0.	0.	0.	0.
308	Pyramimonas sp2.	0.	58.	0.	0.	0.	0.	44.	0.
310	Pyramimonas micron	0.	0.	26.	58.	26.	0.	436.	87.
311	Pyramimonas pluricoculata	0.	0.	0.	0.	0.	0.	131.	0.
404	Ochromonas sp.	0.	0.	0.	756.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	58.	0.	0.	0.	0.
500	Cachonina niei	70.	0.	0.	0.	0.	105.	0.	131.
502	Exuviella luna	0.	0.	0.	58.	0.	0.	0.	0.
506	Katodinium rotundatum	0.	58.	0.	0.	0.	0.	87.	0.
600	Chroomonas minuta	0.	58.	340.	4130.	157.	1021.	3403.	1178.
601	Chroomonas amphioxeia	0.	0.	105.	233.	79.	183.	262.	349.
604	Cryptomonas testacea	0.	0.	105.	291.	209.	288.	611.	654.
606	Hemiselaia sp.	0.	175.	52.	0.	0.	0.	0.	262.
150	Unknown	35.	0.	0.	0.	0.	0.	0.	0.
151	Unknown	35.	0.	0.	0.	0.	0.	0.	0.
152	Unknown	35.	0.	0.	0.	0.	0.	0.	0.
153	Unknown	0.	0.	26.	0.	0.	0.	0.	0.
154	Unknown	0.	0.	26.	0.	0.	0.	0.	0.
155	Unknown	0.	0.	0.	58.	0.	0.	0.	0.
156	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
157	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
158	Unknown	0.	0.	0.	0.	0.	0.	44.	0.
159	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
160	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
161	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
162	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
163	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
164	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
165	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
166	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
Total Nondiatoms		175.	407.	681.	5643.	471.	1649.	6239.	3011.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 14-15, 1978

Replicates: 3

Code	Genus species	Station/Depth							
		3/ 2	76/ 0	12/ 2	148/ 0	19/ 2	27/ 2	306/ 0	36/ 2
802	<i>Amphora ovalis</i>	0.	0.	26.	0.	0.	0.	0.	0.
811	<i>Coscinodiscus</i> sp.	0.	0.	0.	0.	26.	0.	0.	0.
818	<i>Cyclotella</i> spp.	35.	233.	131.	0.	0.	0.	218.	0.
821	<i>Cyclotella meneshiniana</i>	0.	58.	0.	0.	0.	0.	0.	0.
834	<i>Melosira</i> spp.	0.	0.	0.	291.	79.	52.	87.	44.
844	<i>Navicula</i> sp.	0.	58.	26.	0.	0.	0.	0.	0.
846	<i>Nitzschia</i> sp.	70.	116.	0.	0.	262.	0.	0.	44.
847	<i>Nitzschia closterium</i>	0.	0.	26.	0.	52.	131.	0.	0.
849	<i>Nitzschia longissima</i>	0.	0.	26.	0.	26.	0.	0.	0.
851	<i>Nitzschia panduriformis</i>	0.	0.	0.	0.	0.	0.	0.	44.
861	<i>Skeletonema costatum</i>	140.	1396.	0.	0.	0.	0.	0.	0.
864	<i>Surirella</i> sp.	0.	0.	0.	0.	0.	0.	44.	0.
869	<i>Thalassiosira</i> sp.	0.	0.	79.	0.	0.	0.	0.	0.
870	<i>Thalassiosira eccentrica</i>	244.	0.	0.	0.	0.	157.	0.	0.
872	<i>Thalassiosira rotula</i>	0.	0.	0.	0.	0.	0.	131.	0.
879	<i>Rhizosolenia setigera</i>	0.	0.	0.	0.	52.	0.	175.	0.
950	Unknown	35.	0.	0.	0.	0.	0.	0.	0.
951	Unknown	0.	58.	0.	0.	0.	0.	0.	0.
952	Unknown	0.	0.	26.	0.	0.	0.	0.	0.
953	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
954	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
955	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
956	Unknown	0.	0.	0.	0.	0.	26.	0.	0.
957	Unknown	0.	0.	0.	0.	0.	0.	44.	0.
958	Unknown	0.	0.	0.	0.	0.	0.	44.	0.
959	Unknown	0.	0.	0.	0.	0.	0.	44.	0.
960	Unknown	0.	0.	0.	0.	0.	0.	87.	0.
961	Unknown	0.	0.	0.	0.	0.	0.	44.	0.
962	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
963	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
964	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
965	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
966	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
967	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
968	Unknown	0.	0.	0.	0.	0.	0.	0.	44.
969	Unknown	0.	0.	0.	0.	0.	0.	0.	44.

Total Diatoms	524.	1920.	340.	291.	497.	445.	916.	480.
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Mean Cell Density (cells/ml)	698.	2327.	1021.	5934.	969.	2094.	7155.	3490.
Standard Deviation (cells/ml)	20.	991.	69.	202.	40.	54.	153.	197.
Total Cells Counted	20.	40.	39.	102.	37.	80.	164.	80.
Percent Nondiatoms (cells)	25.	17.	67.	95.	49.	79.	87.	86.
Phytoplankton Carbon (ug/l)	66.	109.	100.	96.	752.	67.	321.	136.
Percent Nondiatoms (carbon)	11.	5.	12.	78.	2.	48.	26.	60.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: January 15-16, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
203	Palaeooid form	0.	0.	209.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	0.	42.	0.	0.	0.	0.	0.
310	Pyramimonas micron	0.	0.	0.	26.	251.	628.	0.
311	Pyramimonas plurioculata	0.	0.	52.	0.	0.	0.	0.
315	Scenedesmus bijuga	140.	0.	0.	0.	0.	0.	0.
404	Ochromonas sp.	0.	0.	0.	0.	0.	26.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	0.	26.	0.
500	Cachonina niei	0.	0.	52.	105.	21.	79.	0.
506	Katodinium rotundatum	0.	0.	0.	0.	0.	52.	0.
507	Miniscula bipes	0.	0.	0.	0.	21.	0.	0.
511	Gymnodinium arcticum	0.	0.	0.	0.	0.	26.	0.
600	Chroomonas minuta	0.	168.	628.	157.	419.	1649.	524.
601	Chroomonas amphioxeia	0.	251.	0.	131.	105.	393.	0.
604	Cryptomonas testacea	70.	0.	366.	131.	147.	785.	550.
605	Rhabdomonas sp.	0.	0.	0.	26.	0.	0.	0.
150	Unknown	0.	42.	0.	0.	0.	0.	0.
151	Unknown	0.	0.	0.	26.	0.	0.	0.
152	Unknown	0.	0.	0.	26.	0.	0.	0.
153	Unknown	0.	0.	0.	0.	21.	0.	0.
154	Unknown	0.	0.	0.	0.	21.	0.	0.
155	Unknown	0.	0.	0.	0.	21.	0.	0.
156	Unknown	0.	0.	0.	0.	0.	26.	0.
157	Unknown	0.	0.	0.	0.	0.	0.	26.
158	Unknown	0.	0.	0.	0.	0.	0.	52.
Total Nondiatoms		209.	503.	1309.	628.	1026.	3691.	1152.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: January 15-16, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		6/ 2	76/ 0	148/ 0	15/ 2	19/ 2	27/ 2	306/ 0
818	Cyclotella spp.	35.	545.	52.	26.	0.	0.	0.
821	Cyclotella meneshiniana	0.	42.	0.	0.	0.	0.	0.
823	Diatoma sp.	0.	0.	0.	0.	0.	26.	0.
836	Melosira distans var lirata	175.	293.	0.	0.	0.	0.	0.
844	Navicula sp.	35.	42.	0.	0.	0.	0.	26.
846	Nitzschia sp.	0.	84.	52.	26.	0.	26.	0.
849	Nitzschia longissima	0.	42.	0.	0.	63.	0.	26.
851	Nitzschia panduriformis	35.	0.	0.	0.	0.	0.	0.
859	Rhizosolenia sp.	0.	0.	0.	0.	0.	52.	0.
861	Skeletonema costatum	0.	168.	419.	105.	0.	0.	0.
869	Thalassiosira sp.	105.	209.	0.	0.	0.	0.	0.
870	Thalassiosira eccentrica	0.	0.	0.	0.	21.	0.	52.
877	Melosira dubia	0.	0.	52.	0.	0.	0.	0.
878	Pleurosigma aestuarii	0.	0.	0.	0.	21.	0.	0.
950	Unknown	35.	0.	0.	0.	0.	0.	0.
951	Unknown	0.	0.	0.	26.	0.	0.	0.
952	Unknown	0.	0.	0.	0.	21.	0.	0.
953	Unknown	0.	0.	0.	0.	0.	0.	26.
Total Diatoms		419.	1424.	576.	183.	126.	105.	131.
Mean Cell Density (cells/ml)		628.	1927.	1885.	812.	1152.	3796.	1283.
Standard Deviation (cells/ml)		121.	48.	157.	106.	24.	184.	15.
Total Cells Counted		18.	46.	36.	31.	55.	145.	49.
Percent Nondiatoms (cells)		33.	26.	69.	77.	89.	97.	90.
Phytoplankton Carbon (ug/l)		46.	143.	58.	33.	48.	124.	49.
Percent Nondiatoms (carbon)		12.	5.	42.	64.	53.	59.	59.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: February 13-14, 1979

Replicates: 3

Code	Genus species	Station/Depth					
		3/ 2	6/ 2	15/ 2	19/ 1	19/ 2	27/ 2
203	Palaeoform	35.	0.	0.	0.	0.	0.
300	Ankistrodesmus falcatus	209.	35.	0.	0.	0.	0.
308	Pyramimonas sp2.	0.	0.	52.	0.	0.	0.
310	Pyramimonas micron	0.	0.	52.	0.	0.	26.
311	Pyramimonas plurioculata	0.	0.	26.	0.	0.	79.
404	Ochromonas sp.	0.	0.	0.	0.	0.	26.
405	Pseudopedinella pyriforme	0.	0.	131.	21.	0.	131.
500	Cachonina niei	0.	0.	26.	0.	0.	52.
509	Oxytoxum milneri	0.	0.	0.	0.	21.	0.
513	Gymnodinium simplex	0.	0.	26.	0.	0.	0.
600	Chroomonas minuta	0.	35.	157.	63.	42.	262.
601	Chroomonas amphioxys	0.	0.	157.	63.	126.	52.
604	Cryptomonas testacea	0.	0.	209.	21.	147.	105.
605	Rhabdomonas sp.	0.	35.	0.	0.	0.	52.
150	Unknown	35.	0.	0.	0.	0.	0.
151	Unknown	0.	35.	0.	0.	0.	0.
152	Unknown	0.	35.	0.	0.	0.	0.
153	Unknown	0.	35.	0.	0.	0.	0.
154	Unknown	0.	0.	26.	0.	0.	0.
155	Unknown	0.	0.	26.	0.	0.	0.
156	Unknown	0.	0.	26.	0.	0.	0.
157	Unknown	0.	0.	26.	0.	0.	0.
158	Unknown	0.	0.	26.	0.	0.	0.
159	Unknown	0.	0.	26.	0.	0.	0.
160	Unknown	0.	0.	26.	0.	0.	0.
161	Unknown	0.	0.	26.	0.	0.	0.
162	Unknown	0.	0.	0.	0.	21.	0.
163	Unknown	0.	0.	0.	0.	0.	26.
Total Nondiatoms		279.	209.	1047.	168.	356.	812.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: February 13-14, 1979

Replicates: 3

Code	Genus species	Station/Depth					
		3/ 2	6/ 2	15/ 2	19/ 1	19/ 2	27/ 2
807	Chaetoceros sp.	0.	0.	0.	63.	419.	0.
818	Cyclotella spp.	0.	70.	79.	0.	0.	26.
821	Cyclotella meneshiniana	35.	0.	0.	0.	0.	0.
822	Cyclotella striata	175.	35.	0.	0.	0.	0.
826	Epithemia sp.	0.	35.	0.	0.	0.	0.
834	Melosira spp.	0.	0.	0.	0.	0.	157.
837	Melosira granulata	733.	489.	0.	0.	0.	0.
846	Nitzschia sp.	0.	0.	0.	42.	0.	0.
849	Nitzschia lonsissima	0.	0.	0.	42.	21.	0.
861	Skeletonema costatum	0.	0.	0.	0.	942.	0.
869	Thalassiosira sp.	105.	35.	0.	0.	0.	0.
870	Thalassiosira eccentrica	0.	35.	79.	126.	84.	52.
879	Rhizosolenia setigera	0.	0.	26.	0.	0.	0.
894	Thalassionema nitzschoides	0.	0.	0.	0.	63.	0.
950	Unknown	35.	0.	0.	0.	0.	0.
951	Unknown	35.	0.	0.	0.	0.	0.
952	Unknown	0.	35.	0.	0.	0.	0.
953	Unknown	0.	0.	26.	0.	0.	0.
954	Unknown	0.	0.	26.	0.	0.	0.
955	Unknown	0.	0.	26.	0.	0.	0.
956	Unknown	0.	0.	0.	0.	21.	0.
Total Diatoms		1117.	733.	262.	272.	1550.	236.
Mean Cell Density (cells/ml)		1396.	942.	1309.	440.	1906.	1047.
Standard Deviation (cells/ml)		179.	35.	106.	55.	53.	54.
Total Cells Counted		40.	27.	50.	21.	91.	40.
Percent Nondiatoms (cells)		20.	22.	80.	38.	19.	78.
Phytoplankton Carbon (ug/l)		242.	132.	74.	45.	164.	50.
Percent Nondiatoms (carbon)		1.	3.	50.	10.	48.	57.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 5-6, 1979

Replicates: 3

Code	Genus species	Station/Depth								
		6/ 2	76/ 0	140/ 0	144/ 0	148/ 0	152/ 0	15/ 2	19/ 2	27/ 2
1	Mesodinium rubrum	0.	0.	35.	0.	0.	0.	0.	0.	23.
7	Catolusued Unknown	0.	0.	35.	0.	0.	0.	0.	0.	0.
62	Catolusued Unknown	0.	0.	0.	2443.	0.	4945.	262.	0.	0.
300	Ankistrodesmus falcatus	26.	105.	0.	0.	0.	58.	26.	35.	0.
303	Closterium sp.	0.	0.	35.	0.	0.	0.	0.	0.	0.
309	Pyramimonas dissonata	0.	0.	0.	0.	0.	58.	0.	0.	0.
310	Pyramimonas micron	0.	0.	0.	0.	0.	291.	0.	105.	70.
311	Pyramimonas pluricollata	0.	0.	0.	37.	0.	1163.	0.	0.	0.
315	Scenedesmus bijuda	209.	140.	0.	0.	0.	0.	0.	0.	0.
404	Ochromonas sp.	0.	0.	35.	87.	0.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	0.	0.	0.	0.	0.
406	Chrysochromulina kappa	0.	0.	0.	0.	0.	0.	0.	105.	0.
500	Cachonina niei	0.	0.	35.	175.	0.	0.	52.	70.	70.
506	Katodinium rotundatum	0.	0.	0.	87.	0.	233.	0.	0.	0.
513	Gyrodinium simplex	0.	0.	35.	0.	0.	0.	0.	0.	0.
600	Chroomonas minuta	0.	0.	105.	785.	419.	1280.	52.	349.	652.
601	Chroomonas amphioxieia	52.	384.	70.	524.	0.	349.	52.	0.	70.
603	Cryptomonas sp2.	52.	244.	70.	0.	0.	0.	0.	0.	0.
604	Cryptomonas testacea	0.	209.	140.	262.	0.	407.	105.	663.	1350.
605	Rhabdomonas sp.	0.	0.	0.	175.	0.	0.	0.	0.	0.
606	Hemiselais sp.	0.	0.	0.	0.	0.	116.	0.	0.	0.
700	Eutreptia lauwii	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	Unknown	26.	0.	0.	0.	0.	0.	0.	0.	0.
151	Unknown	26.	0.	0.	0.	0.	0.	0.	0.	0.
152	Unknown	0.	35.	0.	0.	0.	0.	0.	0.	0.
153	Unknown	0.	35.	0.	0.	0.	0.	0.	0.	0.
154	Unknown	0.	35.	0.	0.	0.	0.	0.	0.	0.
155	Unknown	0.	35.	0.	0.	0.	0.	0.	0.	0.
156	Unknown	0.	35.	0.	0.	0.	0.	0.	0.	0.
157	Unknown	0.	0.	35.	0.	0.	0.	0.	0.	0.
158	Unknown	0.	0.	35.	0.	0.	0.	0.	0.	0.
159	Unknown	0.	0.	35.	0.	0.	0.	0.	0.	0.
160	Unknown	0.	0.	35.	0.	0.	0.	0.	0.	0.
161	Unknown	0.	0.	0.	0.	0.	58.	0.	0.	0.
162	Unknown	0.	0.	0.	0.	0.	58.	0.	0.	0.
163	Unknown	0.	0.	0.	0.	0.	58.	0.	0.	0.
164	Unknown	0.	0.	0.	0.	0.	0.	26.	0.	0.
165	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
166	Unknown	0.	0.	0.	0.	0.	0.	0.	244.	0.
167	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
168	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
169	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total Nondiatoms		393.	1257.	733.	4625.	419.	9075.	576.	1606.	2234.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 5-6, 1979

Replicates: 3

Code	Genus species	Station/Depth								
		6/ 2	76/ 0	140/ 0	144/ 0	148/ 0	152/ 0	15/ 2	19/ 2	27/ 2
818	Cyclotella spp.	26.	0.	105.	349.	0.	582.	26.	0.	0.
822	Cyclotella striata	0.	0.	0.	0.	0.	0.	0.	0.	0.
824	Diatoma vulgare	0.	0.	35.	0.	0.	0.	0.	0.	0.
834	Melosira spp.	0.	0.	0.	0.	0.	407.	0.	70.	0.
836	Melosira distans var lirata	0.	0.	0.	175.	0.	0.	0.	0.	0.
837	Melosira granulata	131.	1152.	140.	0.	0.	0.	52.	0.	0.
844	Navicula sp.	0.	0.	0.	0.	0.	0.	0.	105.	0.
846	Nitzschia sp.	0.	0.	0.	0.	209.	0.	0.	0.	0.
849	Nitzschia longissima	0.	0.	0.	0.	0.	0.	0.	35.	0.
861	Skeletonema costatum	0.	0.	1117.	5323.	5445.	11577.	314.	454.	47.
869	Thalassiosira sp.	0.	0.	0.	0.	0.	0.	0.	70.	0.
870	Thalassiosira eccentrica	0.	0.	175.	0.	0.	58.	0.	35.	0.
872	Thalassiosira rotula	0.	0.	0.	0.	0.	0.	0.	0.	372.
879	Rhizosolenia setigera	0.	0.	0.	0.	0.	0.	0.	0.	0.
950	Unknown	0.	0.	0.	87.	0.	0.	0.	0.	0.
951	Unknown	0.	0.	0.	87.	0.	0.	0.	0.	0.
952	Unknown	0.	0.	0.	0.	209.	0.	0.	0.	0.
953	Unknown	0.	0.	0.	0.	0.	58.	0.	0.	0.
954	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
Total Diatoms		157.	1152.	1571.	6021.	5864.	12682.	393.	803.	419.
Mean Cell Density (cells/ml)		550.	2408.	2304.	10646.	6283.	21757.	969.	2408.	2653.
Standard Deviation (cells/ml)		94.	92.	35.	874.	1919.	732.	121.	152.	123.
Total Cells Counted		21.	69.	66.	122.	30.	374.	37.	69.	114.
Percent Nondiatoms (cells)		71.	52.	32.	43.	7.	42.	59.	67.	84.
Phytoplankton Carbon (ug/l)		35.	251.	137.	293.	217.	595.	36.	102.	142.
Percent Nondiatoms (carbon)		25.	16.	27.	30.	1.	25.	41.	39.	53.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 5-6, 1979

Replicates: 3

		Station/Depth
Code	Genus species	306/ 0
1	Mesodinium rubrum	0.
7	Catalogued Unknown	0.
62	Catalogued Unknown	0.
300	Ankistrodesmus falcatus	0.
303	Closterium sp.	0.
309	Pyramimonas dissonata	0.
310	Pyramimonas micron	349.
311	Pyramimonas plurioculata	0.
315	Scenedesmus bijuga	0.
404	Ochromonas sp.	0.
405	Pseudopedinella pyriforme	249.
406	Chrysochromulina kappa	0.
500	Cachonina niei	100.
506	Katodinium rotundatum	0.
513	Gyrodinium simplex	0.
600	Chroomonas minuta	5335.
601	Chroomonas amphioxus	150.
603	Cryptomonas sp2.	0.
604	Cryptomonas testacea	6732.
605	Rhabdomonas sp.	0.
606	Hemiselmis sp.	0.
700	Eutreptia lauwii	100.
150	Unknown	0.
151	Unknown	0.
152	Unknown	0.
153	Unknown	0.
154	Unknown	0.
155	Unknown	0.
156	Unknown	0.
157	Unknown	0.
158	Unknown	0.
159	Unknown	0.
160	Unknown	0.
161	Unknown	0.
162	Unknown	0.
163	Unknown	0.
164	Unknown	0.
165	Unknown	0.
166	Unknown	0.
167	Unknown	50.
168	Unknown	50.
169	Unknown	50.

Total Nondiatoms 13164.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: March 5-6, 1979

Replicates: 3

Code	Genus species	306/ 0	Station/Depth
818	Cyclotella spp.	0.	
822	Cyclotella striata	0.	
824	Diatoma vulgare	50.	
834	Melosira spp.	0.	
836	Melosira distans var lirata	0.	
837	Melosira granulata	0.	
844	Navicula sp.	0.	
846	Nitzschia sp.	0.	
849	Nitzschia longissima	0.	
861	Skeletonema costatum	0.	
869	Thalassiosira sp.	0.	
870	Thalassiosira eccentrica	0.	
872	Thalassiosira rotula	0.	
879	Rhizosolenia setigera	0.	
950	Unknown	0.	
951	Unknown	0.	
952	Unknown	0.	
953	Unknown	0.	
954	Unknown	0.	

Total Diatoms	50.
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Mean Cell Density (cells/ml)	13214.
Standard Deviation (cells/ml)	418.
Total Cells Counted	265.
Percent Nondiatoms (cells)	100.
Phytoplankton Carbon (ug/l)	361.
Percent Nondiatoms (carbon)	97.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 2-3, 1979

Replicates: 3

Code	Genus species	Station/Depth								
		6/ 2	140/ 0	144/ 0	148/ 0	152/ 0	15/ 2	17/ 2	19/ 2	306/ 0
83	Catolodius Unknown	0.	465.	436.	2094.	0.	87.	35.	0.	0.
204	Merismopedia sp.	0.	0.	0.	0.	0.	0.	0.	0.	0.
308	Pyramimonas sp2.	0.	58.	0.	0.	0.	0.	0.	0.	0.
310	Pyramimonas micron	0.	0.	1134.	419.	0.	0.	244.	0.	1222.
311	Pyramimonas plurioculata	0.	0.	0.	0.	0.	0.	0.	0.	0.
315	Scenedesmus bijuga	0.	0.	0.	0.	0.	218.	0.	0.	0.
404	Ochromonas sp.	0.	0.	0.	0.	0.	0.	0.	35.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	0.	0.	0.	0.	35.	0.
500	Cachonina niei	0.	0.	0.	0.	0.	0.	0.	35.	0.
505	Heterocapsa triquetra	0.	58.	0.	0.	0.	0.	0.	0.	0.
506	Katodinium rotundatum	0.	116.	87.	0.	0.	0.	105.	0.	0.
507	Miniscula bipes	0.	0.	0.	0.	0.	44.	0.	0.	0.
510	Prorocentrum redfieldii	0.	0.	0.	0.	0.	0.	0.	0.	0.
513	Gyrodinium simplex	0.	0.	0.	0.	0.	0.	0.	0.	0.
600	Chroomonas minuta	0.	873.	1309.	0.	0.	218.	524.	105.	23517.
601	Chroomonas amphioxeia	175.	116.	1134.	0.	349.	0.	175.	35.	3447.
604	Cryptomonas testacea	0.	233.	349.	209.	175.	0.	70.	0.	8595.
606	Hemiselais sp.	0.	0.	0.	0.	0.	0.	0.	35.	0.
700	Eutreptia lauwii	0.	0.	0.	0.	0.	44.	0.	0.	44.
150	Unknown	0.	0.	0.	0.	0.	0.	35.	0.	0.
151	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
152	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
153	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
154	Unknown	0.	0.	0.	0.	0.	0.	0.	35.	0.
155	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
156	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
157	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
158	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
159	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
161	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
162	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
163	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
164	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
165	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
166	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
167	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total Nondiatoms		175.	1920.	4450.	2723.	524.	611.	1187.	419.	36824.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 2-3, 1979

Replicates: 3

Code	Genus species	Station/Depth								
		6/ 2	140/ 0	144/ 0	148/ 0	152/ 0	15/ 2	17/ 2	19/ 2	306/ 0
807	Chaetoceros sp.	0.	0.	0.	0.	0.	480.	0.	0.	0.
813	Coscinodiscus Jonesianus	407.	0.	0.	0.	0.	0.	0.	0.	0.
814	Thalassiosira lineatus	0.	0.	87.	0.	0.	0.	0.	0.	0.
818	Cyclotella spp.	465.	873.	6894.	1466.	349.	349.	314.	35.	0.
821	Cyclotella meneshiniana	0.	58.	0.	0.	0.	0.	0.	35.	0.
822	Cyclotella striata	175.	0.	22601.	11937.	3403.	0.	0.	0.	0.
824	Diatoma vulgare	58.	233.	0.	0.	0.	0.	105.	0.	0.
830	Gomphonema spp.	58.	0.	0.	0.	0.	0.	0.	0.	44.
834	Melosira spp.	582.	465.	10471.	1885.	1832.	1004.	140.	0.	87.
836	Melosira distans var lirata	2676.	0.	0.	0.	0.	0.	0.	0.	0.
844	Navicula sp.	0.	0.	1047.	628.	0.	87.	0.	0.	0.
846	Nitzschia sp.	0.	0.	0.	209.	0.	0.	0.	35.	0.
851	Nitzschia panduriformis	58.	0.	0.	0.	0.	0.	0.	0.	0.
861	Skeletonema costatum	349.	5352.	8290.	2932.	3490.	3447.	733.	35.	654.
869	Thalassiosira sp.	0.	116.	0.	0.	0.	0.	0.	0.	0.
877	Melosira dubia	349.	0.	0.	0.	0.	0.	0.	0.	87.
890	Tabellaria flocculosa	58.	0.	0.	0.	0.	0.	0.	0.	0.
950	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
951	Unknown	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total Diatoms		5236.	7097.	49390.	19058.	9075.	5367.	1291.	140.	873.
Mean Cell Density (cells/ml)		5410.	9017.	53840.	21780.	9599.	5977.	2478.	558.	37697.
Standard Deviation (cells/ml)		58.	444.	4031.	1054.	782.	67.	232.	101.	462.
Total Cells Counted		93.	155.	617.	104.	110.	137.	71.	16.	864.
Percent Nondiatoms (cells)		3.	21.	8.	12.	5.	10.	48.	75.	98.
Phytoplankton Carbon (us/l)		7607.	379.	12847.	6290.	1934.	272.	97.	27.	613.
Percent Nondiatoms (carbon)		0.	10.	1.	0.	1.	8.	19.	46.	94.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 2-3, 1979

Replicates: 3

Code	Genus species	Station/Depth	
		30/ 2	36/ 0
83	Catalogued Unknown	0.	0.
204	Merismopedia sp.	0.	419.
308	Pyramimonas sp2.	0.	0.
310	Pyramimonas micron	829.	314.
311	Pyramimonas plurioculata	87.	175.
315	Scenedesmus bijuga	0.	0.
404	Ochromonas sp.	0.	0.
405	Pseudopedinella pyriforme	1222.	209.
500	Cachonina niei	87.	0.
505	Heterocapsa triquetra	0.	0.
506	Katodinium rotundatum	480.	384.
507	Miniscula bipes	0.	0.
510	Prorocentrum redfieldii	44.	0.
513	Gymnodinium simplex	436.	314.
600	Chroomonas minuta	2661.	908.
601	Chroomonas amphioxeia	654.	558.
604	Cryptomonas testacea	480.	349.
606	Hemiselmis sp.	0.	0.
700	Eutreptia lauwii	0.	0.
150	Unknown	0.	0.
151	Unknown	0.	0.
152	Unknown	0.	0.
153	Unknown	0.	0.
154	Unknown	0.	0.
155	Unknown	44.	0.
156	Unknown	44.	0.
157	Unknown	44.	0.
158	Unknown	44.	0.
159	Unknown	0.	35.
160	Unknown	0.	35.
161	Unknown	0.	35.
162	Unknown	0.	35.
163	Unknown	0.	35.
164	Unknown	0.	35.
165	Unknown	0.	35.
166	Unknown	0.	35.
167	Unknown	0.	35.
Total Nondiatoms		7155.	3944.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: April 2-3, 1979

Replicates: 3

Code	Genus species	Station/Depth	
		30/ 2	36/ 0
807	Chaetoceros sp.	0.	0.
813	Coscinodiscus jonesianus	0.	0.
814	Thalassiosira lineatus	0.	0.
818	Cyclotella spp.	0.	35.
821	Cyclotella meneshiniana	0.	0.
822	Cyclotella striata	0.	0.
824	Diatoma vulgare	0.	0.
830	Gomphonema spp.	0.	0.
834	Melosira spp.	175.	0.
836	Melosira distans var lirata	0.	0.
844	Navicula sp.	87.	0.
846	Nitzschia sp.	0.	0.
851	Nitzschia panduriformis	0.	0.
861	Skeletonema costatum	0.	0.
869	Thalassiosira sp.	0.	0.
877	Melosira dubia	0.	0.
890	Tabellaria flocculosa	0.	0.
950	Unknown	44.	0.
951	Unknown	0.	35.
Total Diatoms		305.	70.
Mean Cell Density (cells/ml)		7461.	4014.
Standard Deviation (cells/ml)		151.	293.
Total Cells Counted		171.	115.
Percent Nondiatoms (cells)		96.	98.
Phytoplankton Carbon (ug/l)		250.	96.
Percent Nondiatoms (carbon)		88.	96.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: May 8-9, 1979

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 2	12/ 2	19/ 2	27/ 2
310	Pyramimonas micron	209.	0.	35.	84.
405	Pseudopedinella pyriforme	0.	262.	0.	0.
500	Cachonina niei	209.	0.	35.	42.
506	Katodinium rotundatum	209.	0.	0.	0.
600	Chroomonas minuta	0.	0.	0.	1759.
601	Chroomonas amphioxeia	0.	262.	419.	649.
604	Cryptomonas testacea	209.	105.	140.	461.
700	Eutreptia lauwii	0.	0.	0.	21.
150	Unknown	209.	0.	0.	0.
Total Nondiatoms		1047.	628.	628.	3016.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: May 8-9, 1979

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 2	12/ 2	19/ 2	27/ 2
811	Coscinodiscus sp.	0.	0.	35.	0.
818	Cyclotella spp.	419.	52.	0.	0.
821	Cyclotella meneshiniana	1675.	0.	0.	0.
822	Cyclotella striata	1257.	0.	0.	0.
834	Melosira spp.	419.	0.	0.	0.
836	Melosira distans var lirata	419.	0.	0.	0.
844	Navicula sp.	0.	157.	70.	0.
846	Nitzschia sp.	628.	52.	0.	0.
849	Nitzschia longissima	0.	0.	140.	21.
861	Skeletonema costatum	2513.	942.	209.	0.
869	Thalassiosira sp.	209.	157.	35.	0.
870	Thalassiosira eccentrica	1675.	105.	0.	0.
950	Unknown	209.	0.	0.	0.
951	Unknown	209.	0.	0.	0.
952	Unknown	209.	0.	0.	0.
Total Diatoms		9843.	1466.	489.	21.
Mean Cell Density (cells/ml)		10890.	2094.	1117.	3037.
Standard Deviation (cells/ml)		320.	212.	179.	211.
Total Cells Counted		52.	40.	32.	145.
Percent Nondiatoms (cells)		10.	30.	56.	99.
Phytoplankton Carbon (ug/l)		1442.	145.	936.	55.
Percent Nondiatoms (carbon)		3.	24.	2.	90.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: June 4-5, 1979

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 2	78/ 0	19/ 2	27/ 2
7	Catalogued Unknown	2723.	0.	0.	0.
310	Pyramimonas micron	0.	0.	0.	147.
311	Pyramimonas plurioculata	0.	0.	70.	21.
314	Scenedesmus sp.	0.	838.	0.	0.
500	Cachonina niei	0.	0.	0.	251.
509	Oxytoxum milneri	0.	0.	0.	21.
600	Chroomonas minuta	0.	0.	0.	2220.
601	Chroomonas amphioxeia	0.	0.	35.	314.
604	Cryptomonas testacea	0.	0.	70.	775.
Total Nondiatoms		2723.	838.	175.	3749.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: June 4-5, 1979

Replicates: 3

Code	Genus species	Station/Depth			
		6/ 2	78/ 0	19/ 2	27/ 2
806	Biddulphia lonsicruris	0.	0.	105.	0.
818	Cyclotella spp.	628.	0.	0.	0.
829	Eucampia zoodiacus	0.	0.	803.	0.
834	Melosira spp.	0.	209.	0.	0.
846	Nitzschia sp.	628.	628.	35.	0.
852	Nitzschia seriata	0.	0.	0.	42.
861	Skeletonema costatum	1257.	0.	0.	63.
869	Thalassiosira sp.	0.	0.	70.	754.
870	Thalassiosira eccentrica	4607.	3979.	0.	0.
891	Chaetoceros gracilis	0.	0.	0.	21.
950	Unknown	0.	209.	0.	0.
951	Unknown	0.	209.	0.	0.
952	Unknown	0.	0.	0.	21.
Total Diatoms		7120.	5236.	1012.	901.
Mean Cell Density (cells/ml)		9843.	6073.	1187.	4649.
Standard Deviation (cells/ml)		990.	121.	53.	604.
Total Cells Counted		47.	29.	34.	222.
Percent Nondiatoms (cells)		28.	14.	15.	81.
Phytoplankton Carbon (ug/l)		909.	742.	306.	287.
Percent Nondiatoms (carbon)		4.	2.	2.	50.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 9-10, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	6/ 2	78/ 0	148/ 0	19/ 2	27/ 2	305/ 0
35	Catolusued Unknown	0.	0.	0.	0.	0.	0.	63.
300	Ankistrodesmus falcatus	0.	349.	175.	0.	0.	0.	0.
301	Chlamydomonas sp.	0.	0.	0.	209.	0.	0.	0.
310	Pyramimonas micron	0.	0.	175.	0.	35.	0.	335.
315	Scenedesmus bijusa	0.	465.	0.	0.	0.	0.	0.
400	Aepidella radious	0.	0.	0.	0.	35.	0.	0.
405	Pseudopedinella pyriforme	233.	0.	0.	0.	0.	0.	0.
506	Katodinium rotundatum	0.	0.	0.	0.	0.	0.	42.
513	Gymnodinium simplex	0.	0.	0.	0.	0.	0.	21.
600	Chroomonas minuta	0.	0.	0.	0.	0.	377.	1340.
601	Chroomonas amphioxeia	0.	0.	0.	419.	209.	31.	251.
602	Cryptomonas sp.	0.	0.	524.	0.	0.	0.	0.
604	Cryptomonas testacea	0.	0.	0.	0.	70.	0.	440.
150	Unknown	0.	0.	0.	0.	35.	0.	0.
151	Unknown	116.	0.	0.	0.	0.	0.	0.
152	Unknown	116.	0.	0.	0.	0.	0.	0.
153	Unknown	116.	0.	0.	0.	0.	0.	0.
154	Unknown	233.	0.	0.	0.	0.	0.	0.
Total Nondiatoms		814.	814.	873.	628.	384.	408.	2492.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: July 9-10, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	6/ 2	78/ 0	148/ 0	19/ 2	27/ 2	305/ 0
803	Asterionella gracilis	0.	0.	0.	0.	35.	94.	0.
818	Cyclotella spp.	1745.	3490.	3839.	209.	0.	0.	0.
821	Cyclotella meneshiniana	931.	233.	873.	0.	0.	0.	0.
822	Cyclotella striata	0.	465.	873.	0.	0.	0.	0.
830	Gomphonema spp.	116.	0.	0.	0.	0.	0.	0.
844	Navicula sp.	116.	0.	0.	0.	35.	0.	42.
846	Nitzschia sp.	0.	0.	349.	838.	70.	0.	0.
849	Nitzschia longissima	0.	0.	175.	209.	70.	0.	21.
851	Nitzschia panduriformis	233.	116.	524.	0.	0.	0.	0.
854	Pleurosigma sp.	0.	0.	349.	0.	0.	0.	0.
861	Skeletonema costatum	465.	10471.	28796.	628.	349.	0.	0.
870	Thalassiosira eccentrica	2211.	8261.	13787.	209.	0.	0.	0.
877	Melosira dubia	1629.	3141.	4538.	0.	0.	0.	0.
891	Chaetoceros gracilis	0.	0.	0.	0.	0.	94.	0.
894	Thalassionema nitzschoides	0.	0.	0.	0.	279.	0.	0.
950	Unknown	0.	0.	0.	0.	70.	0.	0.
951	Unknown	0.	0.	0.	0.	35.	0.	0.
952	Unknown	0.	0.	0.	0.	35.	0.	0.
953	Unknown	116.	0.	0.	0.	0.	0.	0.
954	Unknown	116.	0.	0.	0.	0.	0.	0.
Total Diatoms		7679.	26178.	54102.	2094.	977.	188.	63.
Mean Cell Density (cells/ml)		8493.	26993.	54974.	2723.	1361.	597.	2555.
Standard Deviation (cells/ml)		757.	1518.	3606.	242.	277.	111.	79.
Total Cells Counted		73.	232.	315.	13.	39.	19.	122.
Percent Nondiatoms (cells)		10.	3.	2.	23.	28.	68.	98.
Phytoplankton Carbon (ug/l)		854.	2430.	4569.	298.	124.	18.	50.
Percent Nondiatoms (carbon)		3.	0.	1.	5.	10.	17.	75.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: August 13-14, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	76/ 0	15/ 2	19/ 2	27/ 2	305/ 0	32/ 2
37	Catolusued Unknown	0.	0.	35.	0.	0.	0.	0.
49	Catolusued Unknown	0.	0.	0.	0.	0.	105.	0.
88	Catolusued Unknown	0.	0.	0.	0.	0.	0.	15757.
300	Ankistrodesmus falcatus	611.	0.	0.	0.	0.	0.	0.
309	Pyramimonas dissomata	0.	0.	0.	35.	0.	0.	0.
310	Pyramimonas micron	0.	0.	0.	314.	79.	209.	0.
311	Pyramimonas plurioculata	0.	0.	70.	35.	0.	0.	0.
314	Scenedesmus sp.	0.	349.	0.	0.	0.	0.	0.
405	Pseudopedinella pyriforme	0.	0.	0.	70.	0.	0.	0.
501	Dinophysis sp.	0.	0.	0.	35.	0.	0.	0.
514	Ceratium sp.	0.	0.	0.	35.	0.	0.	0.
600	Chroomonas minuta	0.	349.	1501.	70.	79.	314.	798.
601	Chroomonas amphioxeia	87.	0.	349.	105.	0.	0.	0.
602	Cryptomonas sp1.	87.	0.	105.	0.	52.	0.	50.
605	Rhabdomonas sp.	0.	349.	873.	35.	26.	0.	50.
700	Eutreptia lauwii	0.	349.	0.	0.	0.	0.	0.
150	Unknown	0.	0.	35.	0.	0.	0.	0.
151	Unknown	0.	0.	0.	35.	0.	0.	0.
152	Unknown	0.	0.	0.	35.	0.	0.	0.
153	Unknown	0.	0.	0.	35.	0.	0.	0.
154	Unknown	0.	0.	0.	35.	0.	0.	0.
155	Unknown	0.	0.	0.	0.	0.	0.	50.
Total Nondiatoms		785.	1396.	2967.	873.	236.	628.	16704.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: August 13-14, 1979

Replicates: 3

Code	Genus species	Station/Depth						
		3/ 2	76/ 0	15/ 2	19/ 2	27/ 2	305/ 0	32/ 2
804	Biddulphia sp.	0.	0.	0.	70.	0.	0.	0.
807	Chaetoceros sp.	0.	0.	0.	140.	0.	0.	0.
808	Chaetoceros constrictus	0.	0.	0.	70.	0.	0.	0.
811	Coscinodiscus sp.	0.	0.	0.	0.	0.	105.	0.
814	Thalassiosira lineatus	0.	0.	0.	0.	0.	105.	0.
818	Cyclotella spp.	1483.	1222.	70.	0.	0.	0.	0.
821	Cyclotella meneshiniana	0.	349.	0.	0.	0.	0.	0.
822	Cyclotella striata	0.	0.	35.	0.	0.	0.	0.
826	Epithemia sp.	0.	0.	0.	0.	0.	105.	0.
834	Melosira spp.	349.	0.	105.	0.	0.	209.	0.
840	Melosira moniliformis	0.	1047.	0.	0.	0.	0.	0.
844	Navicula sp.	0.	0.	0.	35.	0.	209.	0.
846	Nitzschia sp.	0.	0.	0.	105.	0.	0.	0.
847	Nitzschia closterium	0.	0.	0.	175.	0.	0.	0.
849	Nitzschia longissima	87.	175.	70.	105.	0.	0.	0.
853	Nitzschia sigma	0.	0.	0.	0.	0.	209.	0.
861	Skeletonema costatum	2269.	34730.	977.	70.	0.	0.	0.
869	Thalassiosira sp.	0.	2269.	0.	35.	0.	0.	0.
870	Thalassiosira eccentrica	4363.	0.	0.	0.	26.	0.	0.
872	Thalassiosira rotula	0.	0.	0.	0.	0.	209.	0.
877	Melosira dubia	1745.	0.	0.	0.	0.	0.	0.
899	Nitzschia pungens	0.	0.	0.	70.	0.	0.	0.
901	Rhizosolenia stolterfothii	0.	0.	0.	35.	0.	0.	0.
902	Chaetoceros vistulae	0.	0.	0.	70.	0.	0.	0.
903	Amphora ventricosa	0.	0.	0.	0.	0.	105.	0.
904	Amphora spp.	0.	0.	0.	0.	0.	105.	0.
950	Unknown	87.	0.	0.	0.	0.	0.	0.
951	Unknown	0.	0.	0.	35.	0.	0.	0.
952	Unknown	0.	0.	0.	35.	0.	0.	0.
953	Unknown	0.	0.	0.	0.	0.	105.	0.
Total Diatoms		10384.	39791.	1257.	1047.	26.	1466.	0.
Mean Cell Density (cells/ml)		11169.	41187.	4223.	1920.	262.	2094.	16704.
Standard Deviation (cells/ml)		792.	2445.	282.	141.	54.	368.	716.
Total Cells Counted		128.	236.	121.	55.	10.	20.	335.
Percent Nondiatoms (cells)		7.	3.	70.	45.	90.	30.	100.
Phytoplankton Carbon (ug/l)		1083.	2316.	181.	370.	9.	2930.	154.
Percent Nondiatoms (carbon)		1.	1.	56.	59.	57.	2.	100.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 17-18, 1979

Replicates: 3

Code	Genus species	Station/Depth				
		6/ 2	76/ 0	19/ 2	27/ 2	36/ 2
45	Catolusued Unknown	175.	175.	0.	0.	0.
62	Catolusued Unknown	0.	0.	0.	0.	21.
89	Catolusued Unknown	0.	0.	0.	0.	21.
300	Ankistrodesmus falcatus	524.	524.	0.	0.	21.
307	Pyramimonas sp.	0.	0.	0.	0.	42.
310	Pyramimonas micron	0.	0.	70.	0.	63.
311	Pyramimonas plurioculata	0.	0.	0.	0.	21.
404	Ochromonas sp.	0.	0.	0.	0.	63.
510	Prorocentrum redfieldii	0.	0.	70.	0.	0.
600	Chroomonas minuta	0.	0.	140.	21.	482.
601	Chroomonas amphioxeia	0.	175.	105.	0.	398.
602	Cryptomonas sp.	0.	0.	0.	21.	84.
604	Cryptomonas testacea	0.	0.	0.	0.	105.
605	Rhabdomonas sp.	0.	0.	0.	0.	21.
606	Hemiselais sp.	0.	0.	0.	0.	503.
150	Unknown	87.	0.	0.	0.	0.
151	Unknown	87.	0.	0.	0.	0.
152	Unknown	87.	0.	0.	0.	0.
153	Unknown	87.	0.	0.	0.	0.
154	Unknown	0.	0.	0.	21.	0.
155	Unknown	0.	0.	0.	0.	21.
156	Unknown	0.	0.	0.	0.	21.
157	Unknown	0.	0.	0.	0.	42.
158	Unknown	0.	0.	0.	0.	21.
159	Unknown	0.	0.	0.	0.	21.
160	Unknown	0.	0.	0.	0.	105.
161	Unknown	0.	0.	0.	0.	21.
162	Unknown	0.	0.	0.	0.	21.
163	Unknown	0.	0.	0.	0.	21.
164	Unknown	0.	0.	0.	0.	21.
165	Unknown	0.	0.	0.	0.	21.
Total Nondiatoms		1047.	873.	384.	63.	2178.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: September 17-18, 1979

Replicates: 3

Code	Genus species	Station/Depth				
		6/ 2	76/ 0	19/ 2	27/ 2	36/ 2
811	Coscinodiscus sp.	175.	0.	0.	0.	0.
818	Cyclotella spp.	1658.	1483.	0.	0.	21.
821	Cyclotella meneshiniana	175.	175.	0.	0.	0.
822	Cyclotella striata	262.	0.	0.	0.	0.
823	Diatoma sp.	0.	87.	0.	0.	0.
831	Gyrosoida sp.	0.	87.	0.	0.	0.
834	Melosira spp.	87.	175.	35.	21.	0.
844	Navicula sp.	87.	0.	0.	0.	0.
846	Nitzschia sp.	87.	0.	0.	0.	0.
847	Nitzschia closterium	175.	262.	0.	0.	0.
861	Skeletonema costatum	4450.	4625.	105.	0.	0.
869	Thalassiosira sp.	0.	87.	0.	0.	0.
870	Thalassiosira eccentrica	2618.	4974.	70.	21.	63.
877	Melosira dubia	0.	611.	0.	0.	0.
900	Leptocylindricus danicus	0.	0.	140.	0.	0.
950	Unknown	87.	0.	0.	0.	0.
951	Unknown	87.	0.	0.	0.	0.
952	Unknown	87.	0.	0.	0.	0.
953	Unknown	0.	0.	0.	0.	21.
954	Unknown	0.	0.	0.	0.	21.
955	Unknown	0.	0.	0.	0.	21.

Total Diatoms	10035.	12566.	349.	42.	147.
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Mean Cell Density (cells/ml)	11082.	13438.	733.	105.	2325.
Standard Deviation (cells/ml)	992.	981.	35.	24.	55.
Total Cells Counted	127.	154.	21.	5.	111.
Percent Nondiatoms (cells)	9.	6.	52.	60.	94.
Phytoplankton Carbon (ug/l)	5175.	1191.	38.	10.	48.
Percent Nondiatoms (carbon)	1.	3.	27.	53.	75.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: October 15-16, 1979

Replicates: 3

Code	Genus species	Station/Depth	
		6/ 1	17/ 1
45	Catalogued Unknown	140.	0.
300	Ankistrodesmus falcatus	175.	0.
301	Chlamydomonas sp.	35.	0.
309	Pyramimonas dissonata	0.	26.
501	Dinophysis sp.	0.	26.
516	Ceratium lineatum	0.	340.
517	Ceratium divaricatum	0.	52.
518	Oxytoxum diploconus	0.	26.
519	Proceratium gracile	0.	26.
600	Chroomonas minuta	140.	26.
150	Unknown	35.	0.
Total Nondiatoms		524.	524.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: October 15-16, 1979

Replicates: 3

Code	Genus species	6/ 1	17/ 1	Station/Depth
818	Cyclotella spp.	558.	0.	
834	Melosira spp.	314.	52.	
844	Navicula sp.	70.	0.	
847	Nitzschia closterium	175.	0.	
849	Nitzschia longissima	0.	26.	
861	Skeletonema costatum	1606.	0.	
870	Thalassiosira eccentrica	2548.	0.	
877	Melosira dubia	558.	0.	
	Total Diatoms	5829.	79.	
	Mean Cell Density (cells/ml)	6353.	602.	
	Standard Deviation (cells/ml)	157.	40.	
	Total Cells Counted	182.	23.	
	Percent Nondiatoms (cells)	8.	87.	
	Phytoplankton Carbon (ug/l)	592.	3200.	
	Percent Nondiatoms (carbon)	5.	100.	

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 7, 1979

Replicates: 3

		Station/Depth
Code	Genus species	6/ 2
300	Ankistrodesmus falcatus	84.
601	Chroomonas amphioxeia	21.
	Total Nondiatoms	105.

SUMMARY OF PHYTOPLANKTON ENUMERATION

Location: San Francisco Bay

Date: December 7, 1979

Replicates: 3

Code	Genus species	6/ 2	Station/Depth
818	Cyclotella spp.	84.	
822	Cyclotella striata	63.	
836	Melosira distans var lirata	400.	
851	Nitzschia panduriformis	21.	
861	Skeletonema costatum	42.	
869	Thalassiosira sp.	84.	
950	Unknown	21.	
951	Unknown	21.	
952	Unknown	21.	
	Total Diatoms	758.	
	Mean Cell Density (cells/ml)	864.	
	Standard Deviation (cells/ml)	53.	
	Total Cells Counted	41.	
	Percent Nondiatoms (cells)	12.	
	Phytoplankton Carbon (ug/l)	74.	
	Percent Nondiatoms (carbon)	1.	

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