

Technical Report 2001-001

Weeks Bay Data Report

WBAY-2 to WBAY-56 Cruises
(May 1996 –May 2000)

Jonathan R. Pennock
James H. Cowan, Jr.
Kelly M. Shotts
Jean L. W. Cowan
Leslie J. Gallagher

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Purpose of Study

This research was designed to examine the effects of nutrient inputs on phytoplankton and higher trophic level production in the Weeks Bay ecosystem. This report contains physical, chemical and biological data collected during a four-year series of surveys carried out in the Fish River and Weeks Bay between May, 1996 and May, 2000. Surveys consisted of 8 stations, 4 in Fish River and 4 in Weeks Bay (see page 9 for a general map with all station locations). Following Cruise 26 (24 July 1997), only 7 stations were sampled as Station 1 became inaccessible after Hurricane Georges. For 1996-97, surveys were conducted on a biweekly basis between late spring and mid-fall, and on a monthly basis during cooler months. For 1998-2000, surveys were conducted on a near-monthly basis.

Acknowledgements

We would like to acknowledge Jessica Noel, Todd Brackin, Chad Lopez and Cary Burns for their efforts during field surveys. In addition, the efforts of the DISL technical support staff, in particular, Alan Gunter, Mike Dardeau, Russell Wilson and Rodney Collier, are greatly appreciated. We would also like to acknowledge the support of the Dauphin Island Sea Lab, Mississippi-Alabama Sea Grant and NOAA-National Estuarine Research Reserve System in providing funding for this research.

Station and Field Sampling Procedures

Water samples were obtained from 23-foot outboard boats operated by the Dauphin Island Sea Lab. Sampling typically commenced by 0900 hr at the head of the Fish River (Station 1) and continued toward the mouth of Weeks Bay (Station 8) with final samples collected by 1300 hr for each cruise. At each station, local time, station location and bottom depth were recorded. The following measurements were made at each station:

Hydrographic Sampling

A Hydrolab Surveyor 3 DataSonde was used to collect vertical hydrographic profiles of salinity, temperature and dissolved oxygen. These measurements were taken at discrete sampling depths (generally 0.25-0.5 meters apart) and stored to memory until downloading at the laboratory.

The underwater light regime was quantified using a LiCor Quantum Irradiance Meter fitted with a 3-pi spherical underwater sensor and an above water reference sensor. LiCor profiles were recorded at 10-25 cm increments through the photic zone. The diffuse attenuation coefficient for PAR (k_d ; /m) was calculated for each station via regression of \ln irradiance vs. depth for the entire subsurface profile after correction of in-water irradiance for instantaneous variations in surface irradiance. During some surveys, light attenuation data was also collected using a 20 cm diameter secchi disk. Secchi measurements were generally estimated to the nearest 5 cm.

Discrete Water Sampling

Five liter PVC Niskin bottles were deployed to collect water samples at the surface and at one meter above the bottom at all stations. One liter of water was transferred into an acid washed HDPE bottle, and maintained in the dark on ice until return to the laboratory. One liter of water was also collected in a polycarbonate bottle and held at ambient temperature in the dark until processed for phytoplankton production experiments. In addition, a sample for dissolved inorganic carbon (DIC) was collected in a glass scintillation vial, capped without air contamination, and returned to the laboratory for analysis. Upon completion of water collection, temperature, salinity and dissolved oxygen were measured in all discrete samples using a YSI multi-sensor probe with a resolution of 0.1 °C, 0.1 ppt and .01mg/l, respectively.

Laboratory Processing and Analysis

In the laboratory, samples were split into dissolved and particulate fractions using Whatman GF/F glass fiber filters that had been muffled (450 °C for 2 hours) to remove organic contamination. These filters have a nominal pore size of 0.7-1.0 µm. Specific processing, storage and analytical procedures are detailed below.

Particulate Organic Phosphorus (PP), Silicate (SI), and pH were not measured during the Weeks Bay Cruises of May 1996-2000. However, columns for these parameters were included in the data report to maintain consistency with previous technical reports, specifically DISL Technical Report 99-002, Weeks Bay Data Report, June 1990-August 1992.

Dissolved Matter

Dissolved Inorganic Carbon

The dissolved inorganic carbon (TCO₂) concentration was determined from filtered samples using a Shimadzu TOC-5000 fitted with a non-dispersive IR detector. This instrument has a precision of 10 µM at a concentration of 1500 µM.

Dissolved Inorganic Nutrients

Dissolved nutrients (phosphate, ammonium, nitrate and nitrite) were determined from the filtrate using standard colorimetric methods (Strickland and Parsons, 1972) adapted for use on an Alpkem RFA/2 Autoanalyzer. Detection limits are 0.01 µM (NO₃, NO₂, PO₄) and 0.02 µM (NH₄). Standard error using the Alpkem ranges from 2-3% for each analyte.

Dissolved Organic Carbon

Dissolved organic carbon (DOC) measurements were obtained from filtered (GF/F) sample water that had been ampulated in muffled (450° for 2 hrs) glass vials, sealed and frozen until analysis. Once thawed, samples were acidified with HCl and sparged with purified gas to

remove the inorganic carbon component. Samples were then analyzed using a Shimadzu TOC-5000 to obtain the organic carbon concentration. This method has a detection limit of 10 μM and standard error of 5% at 300 μM .

Dissolved Organic Nitrogen

Dissolved organic nitrogen (DON) was calculated from measurements of total dissolved nitrogen according to the persulfate oxidation methods of D'Elia (1977). Nitrate, nitrite and ammonium is subtracted from TDN to give DON. This method has a detection limit of 0.6 μM with a standard error of 1%.

Dissolved Organic Phosphorus

Dissolved organic phosphorus (DOP) was determined using the high temperature combustion method of Solarzano and Sharp (1980) for total dissolved phosphorus (TDP). Subsequently inorganic PO_4 is subtracted from TDP to give DOP. This method has a precision of $\pm 5\%$ within the range of concentrations found in Weeks Bay.

Particulate Matter

Suspended Sediments

Total suspended sediments (inorganic sediment plus living and dead organic matter) was determined by passing a known volume of water through a tared GF/F filter. After filtration, each filter was rinsed with deionized water to remove salts, dried at 50°C, cooled and re-weighed, following the methods of Strickland and Parsons (1972). Suspended sediments can be detected to 0.1 mg/l with a standard error of 5%.

Particulate Carbon and Nitrogen

Particulate Carbon (PC) and Particulate Nitrogen (PN) were measured on particulate matter collected on a 25mm GF/F filter via high temperature combustion (Sharp 1974) using a Carlo-Erba NA 1500 CNS analyzer fitted with a thermal conductivity detector. This method provides a detection limit of 1.0 μM with a standard error of 5%.

Biological Biomass and Productivity

Chlorophyll-a

Chlorophyll *a* was collected on 25 mm Whatman GF/F filters, extracted for 24 hours in cold 90% acetone, and measured by fluorometry using a Turner Designs Model 10 fluorometer. The fluorometer was calibrated with pure chlorophyll *a* extracts (Sigma Chemical) using the equations of Lorenzen (1967) to account for phaeopigments. The detection limit of this method is 0.01 $\mu\text{g/l}$ with a standard error of 5%.

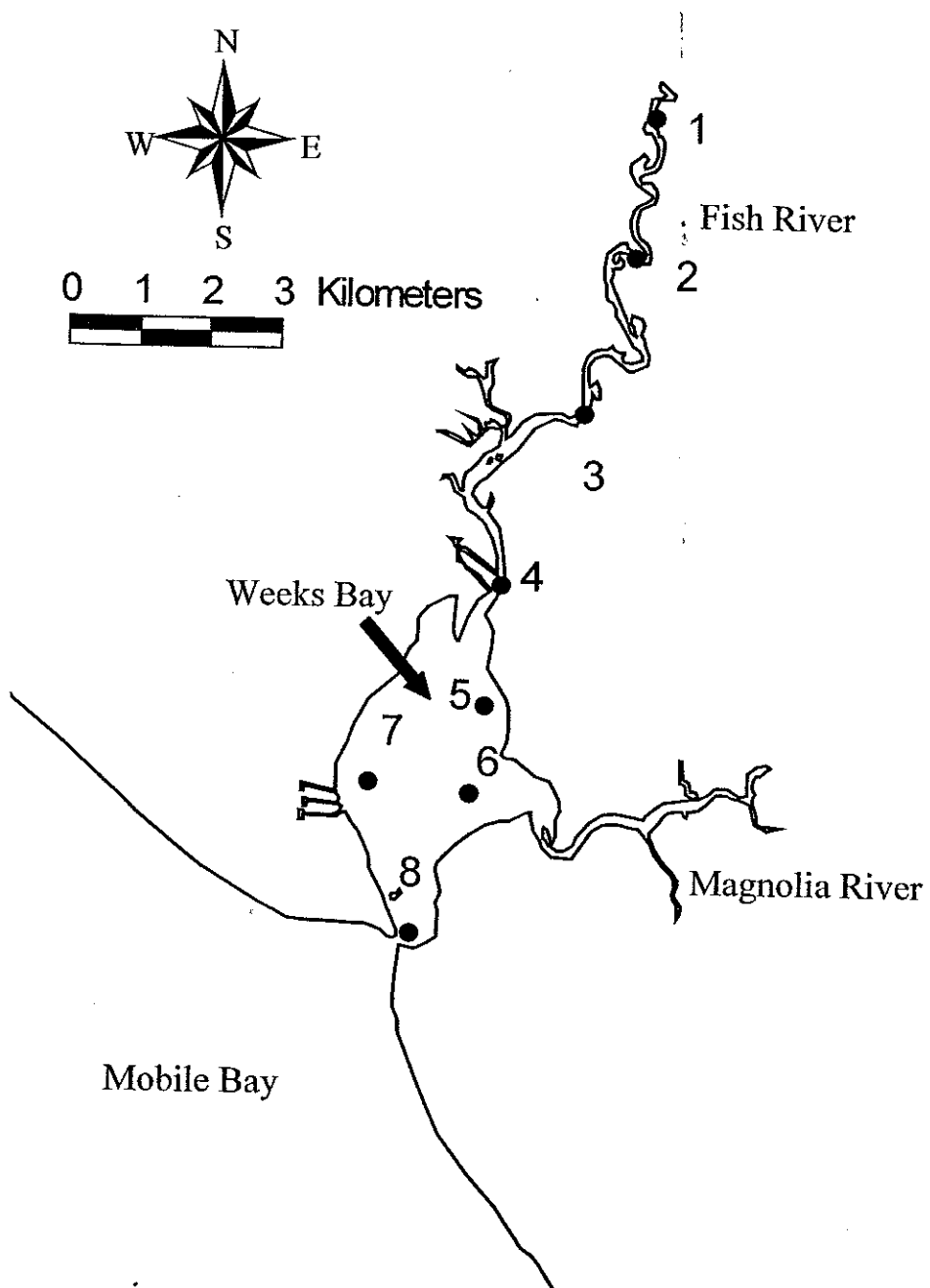
Phytoplankton Production

Phytoplankton production was measured using the ^{14}C method. For each sample, 2 μCi of $\text{NaH}^{14}\text{CO}_3$ was spiked into 125 ml of sample and the incorporation of ^{14}C into particulate matter was quantified using 24-hour simulated in situ incubations. These incubations were carried out at six light intensities (100, 57, 26, 9, 5, 1% ambient) in a flow-through deck incubator (Pennock & Sharp 1986). Incubations were terminated by filtering the particulate matter onto Whatman GF/F filters and rinsing with filtered ambient water. Filters were immediately placed in scintillation vials filled with 5 ml of Beckman Ready-Safe scintillation fluor, allowed to sit for at least 24 hours, and counted on a Packard 2500 Tri-Carb liquid scintillation counter.

Maximum production per unit volume (mg C/l/d) was determined using the maximum rate obtained from the 6 point light series. Areal production was determined by integrating the values obtained at each of the light levels over the light profile described by the diffuse attenuation coefficient.

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Weeks Bay Cruise WBAY: 2

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
5/21/96	01-S	0.3		945	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	24.0	6.6			
5/21/96	01-B	5.0	5.2	945	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	23.7	6.3			
5/21/96	02-S	0.3		1018	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	27.1	5.9			
5/21/96	02-B	3.2	3.4	1018	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	26.2	6.9			
5/21/96	03-S	0.3		1039	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	27.6	5.5			
5/21/96	03-B	5.0	5.2	1039	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	28.1	5.5			
5/21/96	04-S	0.3		1052	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	27.4	5.8			
5/21/96	04-B	3.8	4.0	1052	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	27.2	5.3			
5/21/96	05-S	0.3		1201	12901.1	47130.8	30 : 24.1	87 : 49.6	0.0	28.4	6.4			
5/21/96	05-B	1.0	1.2	1201	12901.1	47130.8	30 : 24.1	87 : 49.6	0.0	30.0	6.9			
5/21/96	06-S	0.3		1254	12899.6	47128.3	30 : 23.6	87 : 49.7	0.0	30.4	6.3			
5/21/96	06-B	1.3	1.5	1254	12899.6	47128.3	30 : 23.6	87 : 49.7	0.0	30.8	6.2			
5/21/96	07-S	0.3		1345	12890.2	47128.3	30 : 23.6	87 : 50.6	0.0	29.8	6.2			
5/21/96	07-B	1.0	1.2	1345	12890.2	47128.3	30 : 23.6	87 : 50.6	0.0	30.3	6.4			
5/21/96	08-S	0.3		1437	12893.3	47123.1	30 : 22.4	87 : 50.2	0.0	30.6	6.0			
5/21/96	08-B	1.3	1.5	1437	12893.3	47123.1	30 : 22.4	87 : 50.2	0.0	31.1	5.7			

Weeks Bay Cruise WBAY: 2

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
5/21/96	01-S	0.3	292		89.32	0.42	1.22	11.54			0.08				107		1.3		
5/21/96	01-B	5.0	274		90.11	0.35	1.12	11.92			0.12						0.8		
5/21/96	02-S	0.3	271	94.35	83.57	0.32	0.72	15.05	14.32		0.10					130	8.2		
5/21/96	02-B	3.2	341	65.65	84.97	0.32	0.80	11.57	11.68		0.04						4.9		
5/21/96	03-S	0.3	279	91.33	72.20	0.54	1.13	15.58	19.40		0.07					110	8.4		
5/21/96	03-B	5.0	378	66.41	79.43	0.55	0.75	15.43	13.97		0.02						4.8		
5/21/96	04-S	0.3	267	218.99	49.14	0.47	0.56	15.57	27.17		0.01					90	15.0		
5/21/96	04-B	3.8	311	230.38	52.52	0.18	1.58	16.54	39.23		0.00						12.9		
5/21/96	05-S	0.3	313	317.34	27.42	0.29	0.63	20.59	43.35		0.06					70	22.5		
5/21/96	05-B	1.0	324	420.21	26.08	0.33	0.31	22.07	50.29		0.02						33.5		
5/21/96	06-S	0.3	392	396.33	0.05	0.05	0.42	22.33	53.91		0.03					60	18.9		
5/21/96	06-B	1.3	364		0.23	0.09	0.42	20.22			0.00						33.5		
5/21/96	07-S	0.3	356	391.95	0.00	0.06	0.26	20.98	50.58		0.01					60	13.7		
5/21/96	07-B	1.0	365	420.85	0.00	0.07	0.31	21.01	52.74		0.04						26.9		
5/21/96	08-S	0.3	352	387.89	0.01	0.04	0.26	20.77	46.30		0.00					60	15.9		
5/21/96	08-B	1.3	361	406.16	0.06	0.04	0.65	19.21	42.88		0.06						13.5		

Weeks Bay Cruise WBAY: 3

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LON : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
6/4/96	01-S	0.3		909	12919.2	47148.0	30 : 28.2	87 : 48.1	0.1	23.2	6.8			
6/4/96	01-B	4.4	4.6	909	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	22.5	6.7			
6/4/96	02-S	0.3		926	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	24.1	6.6			
6/4/96	02-B	4.7	4.9	926	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	23.6	6.5	77		
6/4/96	03-S	0.3		943	12911.8	47139.0	30 : 26.1	87 : 48.7	0.1	25.6	6.4	78		
6/4/96	03-B	4.4	4.6	943	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	24.7	6.1	71		
6/4/96	04-S	0.3		952	12903.0	47134.4	30 : 25.0	87 : 49.4	0.5	26.0	6.6	81		
6/4/96	04-B	4.1	4.3	952	12903.0	47134.4	30 : 25.0	87 : 49.4	0.8	25.7	6.6	81		
6/4/96	05-S	0.3		1053	12901.1	47130.8	30 : 24.1	87 : 49.6	3.0	28.0	8.5	113		
6/4/96	05-B	1.1	1.3	1053	12901.1	47130.8	30 : 24.1	87 : 49.6	3.4	27.7	8.5	108		
6/4/96	06-S	0.3		1137	12899.6	47128.3	30 : 23.6	87 : 49.7	2.2	28.7	9.2	118		
6/4/96	06-B	1.3	1.5	1137	12899.6	47128.3	30 : 23.6	87 : 49.7	4.8	27.9	8.9	115		
6/4/96	07-S	0.3		1223	12890.2	47128.3	30 : 23.6	87 : 50.6	3.9	28.7	10.3	137		
6/4/96	07-B	1.0	1.2	1223	12890.2	47128.3	30 : 23.6	87 : 50.6	5.2	28.1	9.6	126		
6/4/96	08-S	0.3		1311	12893.3	47123.1	30 : 22.4	87 : 50.2	7.9	28.7	7.8	105		
6/4/96	08-B	1.0	1.2	1311	12893.3	47123.1	30 : 22.4	87 : 50.2	7.8	28.7	7.9	106		

Weeks Bay Cruise WBAY: 3

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
6/4/96	01-S	0.3	238	91.28	86.32	0.40	1.47	14.51	6.73	0.09						170		0.6	
6/4/96	01-B	4.4	189	86.42	88.27	0.54	1.39	11.40	6.62		0.13							0.6	
6/4/96	02-S	0.3	249	106.23	82.45	0.48	1.30	14.04	9.11		0.09					160		5.6	
6/4/96	02-B	4.7	227	108.51	79.84	0.44	1.60	14.96	10.20		0.07							3.4	
6/4/96	03-S	0.3	223	36.16	79.65	0.55	1.27	16.55	9.41		0.08							9.5	
6/4/96	03-B	4.4	288	23.96	63.44	0.35	1.22	21.70	5.31		0.05							8.6	
6/4/96	04-S	0.3	287	286.21	45.40	0.51	1.90	20.66	37.73		0.03					90		24.8	
6/4/96	04-B	4.1	395	393.63	38.59	0.47	2.06	20.41	52.91		0.02							28.9	
6/4/96	05-S	0.3	303	492.44	20.77	0.09	0.74	21.01	70.54		0.05					80		42.9	
6/4/96	05-B	1.1	286	693.17	17.93	0.09	0.63	20.94	96.25		0.04							55.3	
6/4/96	06-S	0.3	530	474.59	7.57	0.05	0.36	34.26	54.54		0.05					60		24.8	
6/4/96	06-B	1.3	323	508.44	0.93	0.08	0.24	25.51	62.62		0.01							21.0	
6/4/96	07-S	0.3	334	605.51	0.39	0.08	0.58	18.69	76.86		0.10					50		27.6	
6/4/96	07-B	1.0	328	655.12	0.22	0.06	0.80	20.31	80.93		0.08							28.9	
6/4/96	08-S	0.3	356	393.81	0.00	0.06	0.37	16.37	36.09		0.02					170		12.9	
6/4/96	08-B	1.0	302	420.63	21.76	0.10	0.84	0.00	39.56		0.03							11.8	

Weeks Bay Cruise WBAY: 4

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LON : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
6/21/96	04-S	0.3		1535	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	30.1	7.6	101		172
6/21/96	04-B	3.8	4.0	1535	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	29.9	7.5	98		
6/21/96	05-S	0.3		1355	12901.1	47130.8	30 : 24.1	87 : 49.6	0.2	30.0	7.4	95		201
6/21/96	05-B			1355	12901.1	47130.8	30 : 24.1	87 : 49.6	0.5	29.4	8.0	104		
6/21/96	06-S	0.3		1245	12899.6	47128.3	30 : 23.6	87 : 49.7	1.2	30.2	8.6	119		296
6/21/96	06-B			1245	12899.6	47128.3	30 : 23.6	87 : 49.7	1.4	29.6	8.5	114		
6/21/96	07-S	0.3		1150	12890.2	47128.3	30 : 23.6	87 : 50.6	1.7	30.2	8.8	120		361
6/21/96	07-B	1.0	1.2	1150	12890.2	47128.3	30 : 23.6	87 : 50.6	2.1	29.1	8.3	109		
6/21/96	08-S	0.3		1000	12893.3	47123.1	30 : 22.4	87 : 50.2	3.7	29.1	7.8	101		694
6/21/96	08-B	3.8	4.0	1000	12893.3	47123.1	30 : 22.4	87 : 50.2	4.3	28.8	7.5	95		

Weeks Bay Cruise WBAY: 4

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
6/21/96	04-S	0.3	252		62.62	0.69	0.85	1.81			0.04					70	14.3		
6/21/96	04-B	3.8	246	118.56	64.01	0.75	0.67	3.02	9.29		0.06						11.4		
6/21/96	05-S	0.3	357	111.36	56.39	0.87	0.92	4.33	9.87		0.01					70	14.1		
6/21/96	06-B		263	150.40	55.36	0.91	1.17	0.00	16.43		0.02						28.9		
6/21/96	06-S	0.3	272	173.25	28.62	0.47	0.59	10.50	17.93		0.04					70	27.7		
6/21/96	06-B		370	357.85	18.22	0.25	1.79	12.88	39.92		0.13						32.2		
6/21/96	07-S	0.3	330	246.67	8.70	0.10	0.63	15.67	29.50		0.07					50	37.2		
6/21/96	07-B	1.0	288	604.45	3.65	0.09	0.55	17.78	62.17		0.03						44.9		
6/21/96	08-S	0.3	380	264.04	0.02	0.08	0.90	14.70	14.49		0.05					50	45.0		
6/21/96	08-B	3.8	292	200.25	0.03	0.09	0.19	20.94	21.38		0.06						30.0		

Weeks Bay Cruise WBAY: 5

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/2/96	01-S	0.3		906	12919.2	47148.0	30	28.2	87	48.1	0.0	24.9	6.7	80		
7/2/96	01-B	4.7	4.9	906	12919.2	47148.0	30	28.2	87	48.1	0.0	24.2	6.6	77		
7/2/96	02-S	0.3		920	12916.6	47143.6	30	27.2	87	48.3	0.0	27.2	7.2	90		
7/2/96	02-B	4.1	4.3	920	12916.6	47143.6	30	27.2	87	48.3	0.0	26.7	6.8	84		
7/2/96	03-S	0.3		934	12911.8	47138.0	30	26.1	87	48.7	0.1	28.3	6.2	81		
7/2/96	03-B	4.1	4.3	934	12911.8	47139.0	30	26.1	87	48.7	0.1	27.7	6.1	77		
7/2/96	04-S	0.3		948	12903.0	47134.4	30	25.0	87	49.4	6.0	28.8	6.3	82		
7/2/96	04-B	3.8	4.0	948	12903.0	47134.4	30	25.0	87	49.4	1.8	28.9	6.3	78		
7/2/96	05-S	0.3		1045	12901.1	47130.8	30	24.1	87	49.6	2.7	30.4	7.8	107		
7/2/96	05-B	1.0	1.2	1045	12901.1	47130.8	30	24.1	87	49.6	3.7	30.4	8.2	112		
7/2/96	06-S	0.3		1137	12899.6	47128.3	30	23.6	87	49.7	3.4	31.3	8.1	112		
7/2/96	06-B	1.3	1.5	1137	12899.6	47128.3	30	23.6	87	49.7	6.8	31.2	6.5	92		
7/2/96	07-S	0.3		1228	12890.2	47128.3	30	23.6	87	50.6	6.9	31.7	7.1	101		
7/2/96	07-B	1.0	1.2	1228	12890.2	47128.3	30	23.6	87	50.6	7.1	31.2	6.8	97		
7/2/96	08-S	0.3		1314	12893.3	47123.1	30	22.4	87	50.2	8.6	31.3	7.0	100		
7/2/96	08-B	1.6	1.8	1314	12893.3	47123.1	30	22.4	87	50.2	8.6	31.6	6.8	97		

Weeks Bay Cruise WBAY: 5

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/2/96	01-S	0.3	351	15.42	91.89	0.59	1.29	0.00	4.98	0.10	0.10					190	1.6		
7/2/96	01-B	4.7	273	52.63	91.03	0.68	1.51	0.00	4.52	0.13								0.9	
7/2/96	02-S	0.3	299	38.35	77.81	0.57	0.78	0.00	7.16	0.04						60	10.3		
7/2/96	02-B	4.1	290	25.74	79.59	0.27	0.64	0.00	5.59	0.05								9.5	
7/2/96	03-S	0.3	316	43.42	63.92	0.30	1.11	2.02	9.36	0.05								15.2	
7/2/96	03-B	4.1	331	37.93	69.47	0.61	0.93	0.00	6.53	0.07								12.4	
7/2/96	04-S	0.3	348	71.80	49.80	0.24	2.25	5.20	12.83	0.05						110	19.1		
7/2/96	04-B	3.8	350	133.11	28.22	0.21	1.21	9.18	24.52	0.07								43.5	
7/2/96	05-S	0.3	463	212.16	12.69	0.11	0.65	13.47	35.10	0.08						90	40.5		
7/2/96	05-B	1.0	1570	177.92	4.23	0.10	0.67	13.92	36.20	0.05								26.8	
7/2/96	06-S	0.3	1200	153.67	7.73	0.11	0.64	14.81	26.29	0.07								30.0	
7/2/96	06-B	1.3	1070	195.37	1.27	0.08	0.50	14.10	27.82	0.06								27.4	
7/2/96	07-S	0.3	1220	202.15	0.03	0.07	0.67	17.28	26.49	0.12						60	32.6		
7/2/96	07-B	1.0	1910	206.76	0.10	0.07	1.23	14.71	26.61	0.09								29.2	
7/2/96	08-S	0.3	617	136.96	0.01	0.07	0.52	19.68	20.48	0.10						60	15.0		
7/2/96	08-B	1.6	749	119.81	0.03	0.07	0.84	15.74	15.46	0.09								15.0	

Weeks Bay Cruise WBAY: 6

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LONG : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/18/96	01-S	0.3		820	12919.2	47148.0	30 : 28.2	87 : 48.1	0.1	24.1	6.2	74		162
7/18/96	01-B	3.8	4.0	820	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	23.8	6.3	74		
7/18/96	02-S	0.3		832	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	24.9	6.1	74		201
7/18/96	02-B	4.1	4.3	832	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	24.8	6.1	74		
7/18/96	03-S	0.3		846	12911.8	47139.0	30 : 26.1	87 : 48.7	0.1	25.8	6.1	75		216
7/18/96	03-B	4.7	4.9	846	12911.8	47139.0	30 : 26.1	87 : 48.7	1.6	26.4	4.3	54		
7/18/96	04-S	0.3		857	12903.0	47134.4	30 : 25.0	87 : 49.4	1.1	26.9	5.3	67		306
7/18/96	04-B	3.2	3.4	857	12903.0	47134.4	30 : 25.0	87 : 49.4	2.0	27.3	5.3	67		
7/18/96	05-S	0.3		955	12901.1	47130.8	30 : 24.1	87 : 49.6	5.2	29.4	7.9	107		522
7/18/96	05-B	1.0	1.2	955	12901.1	47130.8	30 : 24.1	87 : 49.6	4.7	29.4	7.0	93		
7/18/96	06-S	0.3		1052	12899.6	47128.3	30 : 23.6	87 : 49.7	5.3	29.6	9.5	119		508
7/18/96	06-B	1.0	1.2	1052	12899.6	47128.3	30 : 23.6	87 : 49.7	7.2	29.5	7.5	103		
7/18/96	07-S	0.3		1243	12890.2	47128.3	30 : 23.6	87 : 50.6	4.3	29.9	9.3	121		430
7/18/96	07-B	1.0	1.2	1243	12890.2	47128.3	30 : 23.6	87 : 50.6	4.6	30.2	9.2	124		
7/18/96	08-S	0.3		1333	12893.3	47123.1	30 : 22.4	87 : 50.2	5.5	30.0	8.6	106		448
7/18/96	08-B	1.3	1.5	1333	12893.3	47123.1	30 : 22.4	87 : 50.2	7.9	30.5	7.7	107		

Weeks Bay Cruise WBAY: 6

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/18/96	01-S	0.3	188	30.52	63.23	0.28	1.93	23.59	3.14	3.14	0.03	0.03		1.88		80	1.2	0.10	0.10
7/18/96	01-B	3.8	162	25.41	64.40	0.26	1.41	22.57	3.76		0.06						1.3		
7/18/96	02-S	0.3	201	15.30	66.35	0.26	1.65	15.36	3.21		0.03			1.80		90	4.8	0.41	0.57
7/18/96	02-B	4.1	216	12.55	65.05	0.33	1.23	17.59	2.91		0.02						4.3		
7/18/96	03-S	0.3	306	32.85	60.54	0.24	1.36	17.77	4.86		0.03			1.90		80	8.6	0.81	0.68
7/18/96	03-B	4.7	522	43.82	45.76	0.27	8.55	17.01	8.02		0.02						10.2		
7/18/96	04-S	0.3	3760	58.75	43.65	0.23	4.66	26.43	12.61		0.02			2.10		80	24.7	1.42	1.35
7/18/96	04-B	3.2	1820	75.12	35.83	0.17	4.72	19.61	13.86		0.01						23.3		
7/18/96	05-S	0.3	1150	182.22	11.66	0.00	0.33	15.57	33.18		0.05			2.89		70	34.3	2.53	2.15
7/18/96	05-B	1.0	513	150.74	15.80	0.00	1.82	16.53	27.39		0.00						37.7		
7/18/96	06-S	0.3	518	173.33	10.77	0.00	0.27	19.43	29.14		0.04			2.94		50	34.3	2.33	1.92
7/18/96	06-B	1.0	860	290.76	6.23	0.00	1.06	16.58	41.56		0.07						39.2		
7/18/96	07-S	0.3	1100	133.35	11.26	0.00	0.38	13.19	25.43		0.10			2.38		60	30.0	2.17	2.08
7/18/96	07-B	1.0	1040	116.28	9.76	0.00	0.22	16.09	29.97		0.04						31.1		
7/18/96	08-S	0.3	1140	121.75	6.12	0.00	0.26	17.78	21.71		0.08			2.76		60	27.9	1.93	1.73
7/18/96	08-B	1.3	985	123.14	7.65	0.00	0.07	19.70	23.08		0.03						30.0		

Weeks Bay Cruise WBAY: 7

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/5/96	01-S	0.3		830	12919.2	47148.0	30	28.2	87	48.1	0.0	24.0	6.4	75		225
8/5/96	01-B	4.7	4.9	830	12919.2	47148.0	30	28.2	87	48.1	0.0	24.0	6.3	75		
8/5/96	02-S	0.3		845	12916.6	47143.6	30	27.2	87	48.3	0.0	25.0	5.5	66		216
8/5/96	02-B	4.4	4.6	845	12916.6	47143.6	30	27.2	87	48.3	0.0	24.7	6.2	75		
8/5/96	03-S	0.3		900	12911.8	47139.0	30	26.1	87	48.7	0.2	25.9	5.0	62		256
8/5/96	03-B	4.4	4.6	900	12911.8	47139.0	30	26.1	87	48.7	1.4	26.5	4.4	55		
8/5/96	04-S	0.3		910	12903.0	47134.4	30	25.0	87	49.4	1.0	27.1	5.5	72		365
8/5/96	04-B	3.5	3.7	910	12903.0	47134.4	30	25.0	87	49.4	2.1	27.9	5.8	75		
8/5/96	05-S	0.3		1000	12901.1	47130.8	30	24.1	87	49.6	4.9	30.7	8.3	110		644
8/5/96	05-B	1.0	1.2	1000	12901.1	47130.8	30	24.1	87	49.6	4.8	30.5	9.7	107		
8/5/96	06-S	0.3		1050	12899.6	47128.3	30	23.6	87	49.7	5.4	31.0	8.4	122		669
8/5/96	06-B	1.0	1.2	1050	12899.6	47128.3	30	23.6	87	49.7	5.8	31.0	10.3	110		
8/5/96	07-S	0.3		1140	12890.2	47128.3	30	23.6	87	50.6	4.9	30.8	9.8	135		608
8/5/96	07-B	0.7	0.9	1140	12890.2	47128.3	30	23.6	87	50.6	5.3	30.9	8.8	122		
8/5/96	08-S	0.3		1225	12893.3	47123.1	30	22.4	87	50.2	6.9	30.9	9.5	129		709
8/5/96	08-B	1.0	1.2	1225	12893.3	47123.1	30	22.4	87	50.2	7.0	31.3	8.4	117		

Weeks Bay Cruise WBAY: 7

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
8/5/96	01-S	0.3	453	13.46	55.52	0.33	2.87	17.31	1.87	0.06	0.06			1.94		110	0.8	0.06	0.05
8/5/96	01-B	4.7	462	9.83	52.49	0.09	2.44	21.07	1.19		0.05						0.8		
8/5/96	02-S	0.3	405	23.84	51.86	0.28	2.56	20.04	3.78		0.03			1.88		100	2.1	0.29	0.20
8/5/96	02-B	4.4	382	17.42	51.66	0.28	1.02	19.35	1.95		0.06						1.5		
8/5/96	03-S	0.3	295	23.96	63.02	0.24	2.59	16.29	4.43		0.06			1.69		100	3.5	0.39	0.34
8/5/96	03-B	4.4	39.92	39.92	53.36	0.32	9.40	15.53	6.23		0.03						8.6		
8/5/96	04-S	0.3	261	31.33	65.54	0.21	3.32	17.20	6.67		0.00			2.06		100	7.7	0.66	0.57
8/5/96	04-B	3.5	287	69.73	45.48	0.17	3.27	17.60	12.21		0.02						17.2		
8/5/96	05-S	0.3	330	194.61	4.87	0.00	0.57	15.20	33.69		0.17			2.60		40	32.6	3.01	2.14
8/5/96	05-B	1.0	319	198.44	6.57	0.00	0.56	17.43	35.08		0.00						31.1		
8/5/96	06-S	0.3	327	231.46	0.18	0.00	0.26	22.20	35.62		0.00			3.06		40	37.5	2.35	1.70
8/5/96	06-B	1.0	336	254.31	0.12	0.00	0.30	17.68	37.68		0.01						38.6		
8/5/96	07-S	0.3	306	202.44	5.85	0.00	0.26	27.40	32.86		0.07			3.32		50	31.1	3.22	1.85
8/5/96	07-B	0.7	315	192.51	5.08	0.02	1.54	15.31	32.11		0.09						34.3		
8/5/96	08-S	0.3	334	218.22	0.59	0.00	1.98	18.19	34.60		0.06			2.73		40	34.3	2.17	1.77
8/5/96	08-B	1.0	372	223.76	0.34	0.01	2.11	14.72	31.95		0.13						35.4		

Weeks Bay Cruise WBAY: 8

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/14/96	01-S	0.3		1308	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	24.8	6.1	71		164
8/14/96	01-B	4.7	4.9	1308	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	25.2	6.2	74		
8/14/96	02-S	0.3		1258	12816.6	47143.6	30 : 27.2	87 : 48.3	0.0	27.1	5.7	72		200
8/14/96	02-B	4.4	4.6	1258	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	26.0	5.9	72		
8/14/96	03-S	0.3		1246	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	28.1	7.3	93		190
8/14/96	03-B	4.1	4.3	1246	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	27.1	7.0	88		
8/14/96	04-S	0.3		1205	12903.0	47134.4	30 : 25.0	87 : 49.4	0.5	28.9	6.2	83		246
8/14/96	04-B	3.2	3.4	1205	12903.0	47134.4	30 : 25.0	87 : 49.4	1.9	28.9	5.2	68		
8/14/96	05-S	0.3		1114	12901.1	47130.8	30 : 24.1	87 : 49.6	3.0	30.5	9.4	126		341
8/14/96	05-B	1.0	1.2	1114	12901.1	47130.8	30 : 24.1	87 : 49.6	3.8	29.5	8.6	115		
8/14/96	06-S	0.3		1033	12899.6	47128.3	30 : 23.6	87 : 49.7	4.5	29.2	8.3	112		536
8/14/96	06-B	1.0	1.2	1033	12899.6	47128.3	30 : 23.6	87 : 49.7	4.6	29.1	8.3	106		
8/14/96	07-S	0.3		952	12890.2	47128.3	30 : 23.6	87 : 50.6	4.0	28.2	7.8	102		509
8/14/96	07-B	1.0	1.2	952	12890.2	47128.3	30 : 23.6	87 : 50.6	4.6	28.2	7.0	93		
8/14/96	08-S	0.3		825	12893.3	47123.1	30 : 22.4	87 : 50.2	9.0	28.4	6.0	79		941
8/14/96	08-B	1.3	1.5	825	12893.3	47123.1	30 : 22.4	87 : 50.2	9.7	28.3	5.7	78		

Weeks Bay Cruise WBAY: 8

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	YPROD (mgC/d)	APROD (gC/m2/d)
8/14/96	01-S	0.3	532	70.13	38.48	0.51	2.56	24.36	5.74	0.14	0.14		4.56	26.1	20	2.0	0.19	0.06
8/14/96	01-B	4.7	522	71.43	38.65	0.23	4.09	22.16	5.82	0.11						2.1		
8/14/96	02-S	0.3	425	88.42	45.71	0.44	0.85	24.69	6.52	0.09	0.09		5.25	36.4	20	3.9	0.37	0.11
8/14/96	02-B	4.4	511	87.33	45.65	0.47	1.63	22.55	7.47	0.09						3.2		
8/14/96	03-S	0.3	503	47.28	71.60	0.30	2.92	20.20	3.90	0.02	0.02		1.29	11.8	120	11.8	0.73	0.87
8/14/96	03-B	4.1	286	38.09	70.32	0.35	1.17	21.04	3.50	0.02						8.1		
8/14/96	04-S	0.3	344	47.51	61.16	0.34	4.40	20.29	4.26	0.00	0.00		1.71	6.7	100	6.2	0.57	0.53
8/14/96	04-B	3.2	483	116.74	37.39	0.19	3.97	18.84	15.72	0.01						21.7		
8/14/96	05-S	0.3	379	212.06	17.85	0.07	2.30	21.14	28.51	0.02	0.02		3.19	13.3	50	41.2	2.28	1.42
8/14/96	05-B	1.0	380	263.36	8.86	0.03	1.30	17.24	32.95	0.04						42.9		
8/14/96	06-S	0.3	378	235.61	3.95	0.05	0.97	16.50	35.25	0.00	0.00		2.34	19.1	50	51.5	3.43	2.83
8/14/96	06-B	1.0	399	225.49	3.69	0.02	4.82	21.88	32.33	0.22						46.1		
8/14/96	07-S	0.3	378	189.35	10.72	0.04	1.46	16.79	24.81	0.08	0.08		2.85	16.0	50	39.7	3.06	1.92
8/14/96	07-B	1.0	384	253.65	7.56	0.01	1.15	15.88	34.31	0.04						49.3		
8/14/96	08-S	0.3	373	222.16	0.27	0.00	1.01	16.52	26.08	0.00	0.00		3.54	13.3	40	32.2	2.48	1.25
8/14/96	08-B	1.3	393	220.25	0.18	0.02	0.84	17.16	26.02	0.00						26.8		

Weeks Bay Cruise WBAY: 9

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/29/96	01-S	0.3		1233	12919.2	47148.0	30	28.2	87	48.1	0.0	23.8	6.0	80		214
8/29/96	01-B	4.7	4.9	1233	12919.2	47148.0	30	28.2	87	48.1	0.2	24.0	6.2	74		
8/29/96	02-S	0.3		1223	12916.6	47143.6	30	27.2	87	48.3	0.4	26.0	6.5	80		254
8/29/96	02-B	3.2	3.4	1223	12916.6	47143.6	30	27.2	87	48.3	2.3	26.3	4.4	55		
8/29/96	03-S	0.3		1208	12911.8	47139.0	30	26.1	87	48.7	1.4	27.8	7.7	99		318
8/29/96	03-B	3.8	4.0	1208	12911.8	47139.0	30	26.1	87	48.7	6.3	29.0	2.7	37		
8/29/96	04-S	0.3		1135	12903.0	47134.4	30	25.0	87	49.4	2.4	28.9	7.8	92		525
8/29/96	04-B	3.8	4.0	1135	12903.0	47134.4	30	25.0	87	49.4	5.9	29.5	5.7	77		
8/29/96	05-S	0.3		1036	12901.1	47130.8	30	24.1	87	49.6	8.0	29.0	7.7	102		858
8/29/96	05-B	1.0	1.2	1036	12901.1	47130.8	30	24.1	87	49.6	8.6	29.1	6.9	94		
8/29/96	06-S	0.3		1004	12899.6	47128.3	30	23.6	87	49.7	9.4	28.7	7.0	94		938
8/29/96	06-B	1.0	1.2	1004	12899.6	47128.3	30	23.6	87	49.7	9.4	28.6	6.4	88		
8/29/96	07-S	0.3		922	12890.2	47128.3	30	23.6	87	50.6	8.5	27.9	7.2	95		905
8/29/96	07-B	1.0	1.2	922	12890.2	47128.3	30	23.6	87	50.6	9.0	28.1	6.0	80		
8/29/96	08-S	0.3		808	12893.3	47123.1	30	22.4	87	50.2	12.3	28.4	4.9	98		1317
8/29/96	08-B	1.3	1.5	808	12893.3	47123.1	30	22.4	87	50.2	12.2	28.3	4.9	68		

Weeks Bay Cruise WBAY: 9

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
8/29/96	01-S	0.3	233	22.41	85.05	0.30	2.51	10.75	1.59	0.04	0.04	0.04	0.84	0.84	190	2.0	0.15	0.28	
8/29/96	01-B	4.7	204	22.56	78.45	0.21	4.51	15.78	1.29	0.04							1.5		
8/29/96	02-S	0.3	259	39.24	71.35	0.28	3.98	11.15	2.89	0.00	0.00	0.00	0.95	0.95	2.9	130	7.7	1.02	1.88
8/29/96	02-B	3.2	286	50.11	57.98	0.56	7.44	16.26	5.65	0.01							12.9		
8/29/96	03-S	0.3	354	47.18	58.52	0.34	3.12	13.16	4.82	0.01	0.01	0.01	1.69	1.69			9.5	0.57	0.60
8/29/96	03-B	3.8	341	131.82	17.97	0.39	8.16	12.42	19.33	0.01							27.2		
8/29/96	04-S	0.3	396	50.31	35.07	0.21	2.09	28.63	5.64	0.00	0.00	0.00	1.93	1.93		90	6.4	1.59	1.70
8/29/96	04-B	3.8	331	139.67	22.12	0.16	3.09	16.51	20.67	0.00							27.2		
8/29/96	05-S	0.3	280	234.48	3.66	0.03	1.49	15.80	31.18	0.14	0.14	0.14	3.67	3.67	9.5		44.6	3.71	2.58
8/29/96	05-B	1.0	344	303.30	2.90	0.03	1.31	16.57	40.68	0.11							46.3		
8/29/96	06-S	0.3	366	125.03	0.66	0.12	1.69	14.87	14.84	0.04	0.04	0.04	2.74	2.74	28.6	40	41.8	3.62	3.60
8/29/96	06-B	1.0	364	130.86	0.97	0.03	2.06	15.05	17.64	0.05							47.2		
8/29/96	07-S	0.3	342	180.95	3.34	0.01	1.12	16.22	19.59	0.00	0.00	0.00	2.72	2.72	8.6	40	29.4	4.39	3.80
8/29/96	07-B	1.0	327	180.65	2.62	0.02	1.58	16.83	21.16	0.08							41.5		
8/29/96	08-S	0.3	430	179.09	0.13	0.00	1.35	16.25	19.50	0.05	0.05	0.05	2.79	2.79	25.0	40	21.4	3.25	3.05
8/29/96	08-B	1.3	388	150.99	0.07	0.00	0.89	16.84	18.09	0.00							20.0		

Weeks Bay Cruise WBAY: 10

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/12/96	01-S	0.3		1351	12919.2	47148.0	30	28.2	87	48.1	0.0	25.3	6.4	78		196
9/12/96	01-B	3.8	4.0	1351	12919.2	47148.0	30	28.2	87	48.1	0.0	24.6	6.7	81		
9/12/96	02-S	0.3		1340	12916.6	47143.6	30	27.2	87	48.3	0.0	26.5	6.6	84		199
9/12/96	02-B	4.7	4.9	1340	12916.6	47143.6	30	27.2	87	48.3	0.1	25.9	6.6	82		
9/12/96	03-S	0.3		1329	12911.8	47139.0	30	26.1	87	48.7	0.4	28.3	6.0	77		241
9/12/96	03-B	4.1	4.3	1329	12911.8	47139.0	30	26.1	87	48.7	2.9	28.8	3.4	45		
9/12/96	04-S	0.3		1245	12903.0	47134.4	30	25.0	87	49.4	1.8	29.3	7.4	99		358
9/12/96	04-B	3.5	3.7	1245	12903.0	47134.4	30	25.0	87	49.4	5.8	29.8	4.7	98		
9/12/96	05-S	0.3		1143	12901.1	47130.8	30	24.1	87	49.6	6.1	30.4	7.9	109		804
9/12/96	05-B	1.0	1.2	1143	12901.1	47130.8	30	24.1	87	49.6	7.1	30.5	7.0	96		
9/12/96	06-S	0.3		1104	12899.6	47128.3	30	23.6	87	49.7	6.0	30.0	8.8	115		646
9/12/96	06-B	1.0	1.2	1104	12899.6	47128.3	30	23.6	87	49.7	6.3	29.8	8.2	112		
9/12/96	07-S	0.3		1037	12890.2	47128.3	30	23.6	87	50.6	6.7	29.6	7.7	106		687
9/12/96	07-B	1.0	1.2	1037	12890.2	47128.3	30	23.6	87	50.6	6.9	29.3	7.4	105		
9/12/96	08-S	0.3		937	12893.3	47123.1	30	22.4	87	50.2	9.0	28.9	6.8	93		855
9/12/96	08-B	1.0	1.2	937	12893.3	47123.1	30	22.4	87	50.2	11.8	28.6	6.1	84		

Weeks Bay Cruise WBAY: 10

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/ld)	APROD (gC/m2/d)
9/12/96	01-S	0.3	273	24.46	70.19	0.27	0.00	32.14	1.14	1.14	0.16	0.16	0.88	3.3	170	1.5	0.25	0.53	
9/12/96	01-B	3.8	205	25.40	84.79	0.41	1.74	19.16	1.31	1.31	0.28	0.28					1.4		
9/12/96	02-S	0.3	230	55.72	53.76	0.36	0.00	35.77	5.08	5.08	0.13	0.13	0.96	2.7	150	8.6	0.74	1.52	
9/12/96	02-B	4.7	244	42.81	77.35	0.51	1.58	18.25	3.23	3.23	0.17	0.17					5.7		
9/12/96	03-S	0.3	278	58.22	56.92	0.28	0.00	33.72	4.04	4.04	0.08	0.08	1.75	3.0	110	9.5	0.77	0.96	
9/12/96	03-B	4.1	355	141.36	25.73	0.43	10.18	12.70	18.35	18.35	0.12	0.12					26.8		
9/12/96	04-S	0.3	339	122.85	38.22	0.36	5.24	24.77	14.75	14.75	0.33	0.33	2.58	6.3	80	34.3	2.40	2.29	
9/12/96	04-B	3.5	398	209.09	10.90	0.70	4.50	19.89	29.59	29.59	0.29	0.29					41.5		
9/12/96	05-S	0.3	413	234.48	4.93	0.09	1.03	17.37	31.18	31.18	0.13	0.13	3.88	16.0	50	42.9	5.59	3.95	
9/12/96	05-B	1.0	418	303.30	1.72	0.06	1.05	18.48	40.68	40.68	0.13	0.13					55.7		
9/12/96	06-S	0.3	396	250.06	0.51	0.07	0.49	26.10	29.68	29.68	0.19	0.19	3.43	16.7	45	51.5	4.85	3.50	
9/12/96	06-B	1.0	401	261.71	0.37	0.11	1.49	20.41	35.27	35.27	0.20	0.20					57.2		
9/12/96	07-S	0.3	429	271.43	0.26	0.06	0.59	17.65	29.39	29.39	0.14	0.14	3.26	22.7	45	42.9	4.21	2.98	
9/12/96	07-B	1.0	435	270.98	0.19	0.07	1.00	17.67	31.73	31.73	0.14	0.14					50.0		
9/12/96	08-S	0.3	431	268.64	0.24	0.12	1.08	20.65	29.24	29.24	0.27	0.27	2.88	18.2	50	41.5	4.61	3.56	
9/12/96	08-B	1.0	403	226.49	0.17	0.10	0.99	16.68	27.14	27.14	0.20	0.20					37.2		

Weeks Bay Cruise WBAY: 11

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/26/96	01-S	0.3		1406	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	23.2	7.1	75		205
9/26/96	01-B	5.0	5.2	1406	12919.2	47148.0	30 : 28.2	87 : 48.1	0.8	22.3	5.7	66		
9/26/96	02-S	0.3		1355	12916.6	47143.6	30 : 27.2	87 : 48.3	0.2	24.0	6.3	78		228
9/26/96	02-B	4.4	4.6	1355	12916.6	47143.6	30 : 27.2	87 : 48.3	3.5	25.1	3.7	46		
9/26/96	03-S	0.3		1339	12911.8	47139.0	30 : 26.1	87 : 48.7	1.6	26.0	6.9	85		293
9/26/96	03-B	4.4	4.6	1339	12911.8	47139.0	30 : 26.1	87 : 48.7	5.5	26.6	3.7	48		
9/26/96	04-S	0.3		1252	12903.0	47134.4	30 : 25.0	87 : 49.4	4.5	27.4	10.0	126		496
9/26/96	04-B	4.1	4.3	1252	12903.0	47134.4	30 : 25.0	87 : 49.4	5.9	27.4	7.3	96		
9/26/96	05-S	0.3		1145	12901.1	47130.8	30 : 24.1	87 : 49.6	7.3	27.3	9.1	121		675
9/26/96	05-B	1.0	1.2	1145	12901.1	47130.8	30 : 24.1	87 : 49.6	7.2	27.4	9.4	124		
9/26/96	06-S	0.3		1058	12899.6	47128.3	30 : 23.6	87 : 49.7	9.1	27.7	7.9	114		846
9/26/96	06-B	1.3	1.5	1058	12899.6	47128.3	30 : 23.6	87 : 49.7	9.3	27.7	7.7	111		
9/26/96	07-S	0.3		1008	12890.2	47128.3	30 : 23.6	87 : 50.6	8.4	26.7	8.2	110		761
9/26/96	07-B	1.0	1.2	1008	12890.2	47128.3	30 : 23.6	87 : 50.6	8.4	26.7	8.5	111		
9/26/96	08-S	0.3		905	12893.3	47123.1	30 : 22.4	87 : 50.2	12.9	26.9	5.2	71		922
9/26/96	08-B	1.3	1.5	905	12893.3	47123.1	30 : 22.4	87 : 50.2	13.0	26.7	6.8	91		

Weeks Bay Cruise WBAY: 11

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
9/26/96	01-S	0.3	504	24.48	74.81	0.21	2.88	23.10	1.27	0.56	0.56			1.09		150	1.8	0.13	0.23
9/26/96	01-B	5.0	311	23.04	72.45	0.44	6.42	18.76	1.21		0.14						1.2		
9/26/96	02-S	0.3	700	32.57	56.55	0.29	1.87	31.43	2.32	0.14	0.14			1.42	2.9	120	6.0	0.39	0.50
9/26/96	02-B	4.4	314	54.18	38.01	0.77	12.14	21.23	5.99	0.11							9.1		
9/26/96	03-S	0.3	557	158.98	33.33	0.51	3.73	30.62	20.10	0.32	0.32			2.15	3.3	70	62.2	2.10	2.00
9/26/96	03-B	4.4	772	146.09	18.59	0.37	11.15	17.27	19.21	0.21							41.6		
9/26/96	04-S	0.3	867	214.67	9.14	0.27	0.80	25.76	29.55	0.26	0.26			2.65	6.7	50	56.6	2.74	2.44
9/26/96	04-B	4.1	461	201.89	6.17	0.15	5.11	19.01	28.85	0.21							46.1		
9/26/96	05-S	0.3	546	240.55	0.18	0.12	1.51	18.74	31.04	0.20	0.20			2.40	24.0	50	42.9	2.65	2.79
9/26/96	05-B	1.0	521	245.34	0.14	0.11	0.76	18.19	30.80	0.16							42.9		
9/26/96	06-S	0.3	485	304.61	0.23	0.11	1.13	18.52	38.63	0.20	0.20			3.67	18.2	50	38.6	2.93	1.92
9/26/96	06-B	1.3	721	232.40	0.32	0.11	0.99	19.22	29.61	0.25							35.4		
9/26/96	07-S	0.3	631	290.11	0.17	0.11	0.88	18.11	35.05	0.16				4.56	30.4	30	36.4	0.92	0.50
9/26/96	07-B	1.0	523	285.50	0.15	0.12	0.75	16.82	34.34	0.22							40.7		
9/26/96	08-S	0.3	406	209.29	0.15	0.10	0.80	17.79	23.97	0.11				3.22	8.7	50	23.6	1.68	1.26
9/26/96	08-B	1.3	489	180.47	0.22	0.09	1.51	15.46	23.91	0.11							23.6		

Weeks Bay Cruise WBAY: 12

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LONG DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
10/10/96	01-S	0.3		1254	12919.2	47148.0	30 : 28.2	87 : 48.1	0.3	19.9	6.8	80		242
10/10/96	01-B	4.4	4.6	1254	12919.2	47148.0	30 : 28.2	87 : 48.1	8.8	22.8	2.0	24		
10/10/96	02-S	0.3		1306	12916.6	47143.6	30 : 27.2	87 : 48.3	0.9	20.8	6.7	71		321
10/10/96	02-B	4.7	4.9	1306	12916.6	47143.6	30 : 27.2	87 : 48.3	5.9	20.9	4.8	56		
10/10/96	03-S	0.3		1316	12911.8	47139.0	30 : 26.1	87 : 48.7	2.1	21.5	7.3	84		405
10/10/96	03-B	4.1	4.3	1316	12911.8	47139.0	30 : 26.1	87 : 48.7	7.9	21.4	6.2	73		
10/10/96	04-S	0.3		1157	12903.0	47134.4	30 : 25.0	87 : 49.4	3.9	21.7	7.7	81		515
10/10/96	04-B	3.2	3.4	1157	12903.0	47134.4	30 : 25.0	87 : 49.4	8.7	22.2	8.3	101		
10/10/96	05-S	0.3		1057	12901.1	47130.8	30 : 24.1	87 : 49.6	10.6	21.1	9.3	108		1009
10/10/96	05-B	0.7	0.9	1057	12901.1	47130.8	30 : 24.1	87 : 49.6	10.6	21.3	9.4	112		
10/10/96	06-S	0.3		1016	12899.6	47128.3	30 : 23.6	87 : 49.7	11.8	22.4	9.0	103		1108
10/10/96	06-B	0.7	0.9	1016	12899.6	47128.3	30 : 23.6	87 : 49.7	11.7	22.1	9.0	109		
10/10/96	07-S	0.3		913	12890.2	47128.3	30 : 23.6	87 : 50.6	10.6	20.2	8.7	107		1027
10/10/96	07-B	1.0	1.2	913	12890.2	47128.3	30 : 23.6	87 : 50.6	11.4	20.9	8.0	104		
10/10/96	08-S	0.3		755	12893.3	47123.1	30 : 22.4	87 : 50.2	10.5	19.5	8.2	94		1018
10/10/96	08-B	1.0	1.2	755	12893.3	47123.1	30 : 22.4	87 : 50.2	11.0	19.8	8.8	101		

Weeks Bay Cruise WBAY: 12

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
10/10/96	01-S	0.3	400	35.11	67.86	0.00	0.00	34.64	1.85	0.52	0.52			1.96		170	0.5	0.02	0.02
10/10/96	01-B	4.4	855	63.93	26.00	1.00			6.67		0.20						1.1		
10/10/96	02-S	0.3	822	41.11	70.22	0.17	0.48	26.73	2.86		0.16			1.80	2.0	150	1.3	0.19	0.19
10/10/96	02-B	4.7	889	141.94	34.94	0.49	7.49	16.68	15.16		0.34						9.4		
10/10/96	03-S	0.3	407	48.26	62.04	0.28	4.34	22.30	3.45		0.06			1.20	2.0	110	4.3	0.54	0.95
10/10/96	03-B	4.1	486	155.91	25.89	0.50	4.99	21.81	26.41		0.20						23.1		
10/10/96	04-S	0.3	480	57.47	45.65	0.37	4.27	21.43	12.61		0.13			1.99	2.0	100	26.3	0.40	0.45
10/10/96	04-B	3.2	513	227.83	15.09	0.31	1.48	29.39	35.80		0.22						11.8		
10/10/96	05-S	0.3	410	147.17	18.12	0.12	0.92	15.98	21.71		0.13			5.61	4.0	90	12.3	0.78	0.32
10/10/96	06-B	0.7	396	206.61	17.17	0.13	1.28	14.98	29.34		0.19						12.9		
10/10/96	06-S	0.3	432	227.36	14.61	0.20	1.60	16.08	39.44		0.17			3.86	4.0	40	20.8	1.36	0.78
10/10/96	06-B	0.7	519	283.71	13.18	0.20	1.29	17.19	54.24		0.19						22.9		
10/10/96	07-S	0.3	434	130.77	18.31	0.23	1.36	13.83	19.65		0.15			3.06	6.0	50	11.4	0.74	0.56
10/10/96	07-B	1.0	405	352.82	14.02	0.20	1.79	7.75	55.65		0.18						26.6		
10/10/96	08-S	0.3	383	252.01	20.75	0.25	2.11	7.17	38.07		0.16			1.95	8.0	70	22.5	0.92	1.14
10/10/96	08-B	1.0	407	169.76	19.63	0.23	1.24	17.39	27.39		0.16						27.9		

Weeks Bay Cruise WBAY: 13

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
10/24/96	01-S	0.3		1243	12919.2	47148.0	30 : 28.2	87 : 48.1	0.3	18.2	7.9	82		225
10/24/96	01-B	4.1	4.3	1243	12919.2	47148.0	30 : 28.2	87 : 48.1	7.9	21.2	3.3	39		
10/24/96	02-S	0.3		1256	12916.6	47143.6	30 : 27.2	87 : 48.3	1.2	18.8	7.2	77		292
10/24/96	02-B	3.8	4.0	1256	12916.6	47143.6	30 : 27.2	87 : 48.3	7.2	21.0	4.1	48		
10/24/96	03-S	0.3		1308	12911.8	47139.0	30 : 26.1	87 : 48.7	2.5	19.3	7.2	79		434
10/24/96	03-B	4.1	4.3	1308	12911.8	47139.0	30 : 26.1	87 : 48.7	9.3	20.7	6.1	73		
10/24/96	04-S	0.3		1149	12903.0	47134.4	30 : 25.0	87 : 49.4	5.6	20.0	6.6	74		598
10/24/96	04-B	3.5	3.7	1149	12903.0	47134.4	30 : 25.0	87 : 49.4	13.0	20.8	6.7	81		
10/24/96	05-S	0.3		1029	12901.1	47130.8	30 : 24.1	87 : 49.6	13.4	19.5	8.3	98		1172
10/24/96	05-B	1.0	1.2	1029	12901.1	47130.8	30 : 24.1	87 : 49.6	14.2	20.3	8.2	99		
10/24/96	06-S	0.3		940	12899.6	47128.3	30 : 23.6	87 : 49.7	7.6	20.3	7.6	91		1134
10/24/96	06-B	1.0	1.2	940	12899.6	47128.3	30 : 23.6	87 : 49.7	7.9	20.1	7.9	94		
10/24/96	07-S	0.3		850	12890.2	47128.3	30 : 23.6	87 : 50.6	12.7	18.6	8.1	94		1110
10/24/96	07-B	1.0	1.2	850	12890.2	47128.3	30 : 23.6	87 : 50.6	14.1	19.4	7.1	84		
10/24/96	08-S	0.3		754	12893.3	47123.1	30 : 22.4	87 : 50.2	12.9	18.9	8.0	93		1099
10/24/96	08-B	1.0	1.2	754	12893.3	47123.1	30 : 22.4	87 : 50.2	13.1	18.5	8.0	92		

Weeks Bay Cruise WBAY: 13

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
10/24/96	01-S	0.3	252	31.92	46.06	0.00	0.00	60.84	4.03	0.00	0.00	0.00	0.00	1.45	2.0	200	1.1	0.04	0.05
10/24/96	01-B	4.1	275	69.48	32.83	1.97	14.19	16.08	8.38	0.18							2.6		
10/24/96	02-S	0.3	191	28.50	72.55	0.44	1.74	30.47	1.06	0.02	0.02			1.49	1.0	200	8.6	0.04	0.05
10/24/96	02-B	3.8	237	77.91	41.60	1.11	9.88	20.42	12.48	0.16							6.9		
10/24/96	03-S	0.3	184	50.51	68.44	0.70	4.89	16.96	9.47	0.04	0.04			1.70	1.3	210	2.9	0.18	0.20
10/24/96	03-B	4.1	265	99.99	27.03	0.53	7.26	30.66	12.60	0.15							15.3		
10/24/96	04-S	0.3	213	36.51	52.44	0.79	6.57	19.54	4.14	0.15	0.15			1.61	2.7	130	1.2	0.16	0.19
10/24/96	04-B	3.5	317	181.74	14.12	0.41	5.10	19.13	27.09	0.15							13.3		
10/24/96	05-S	0.3	312	125.81	20.47	0.38	1.94	14.40	18.44	0.13	0.13			2.41	9.3	90	8.6	0.44	0.34
10/24/96	05-B	1.0	330	188.58	16.93	0.34	2.06	12.72	25.79	0.12							16.1		
10/24/96	06-S	0.3	286	98.42	26.07	0.42	2.50	14.33	14.66	0.09	0.09			1.68	4.6	100	4.8	0.54	0.50
10/24/96	06-B	1.0	301	201.86	15.08	0.31	1.69	13.96	25.88	0.07							6.1		
10/24/96	07-S	0.3	339	109.89	19.54	0.34	2.35	15.45	15.43	0.14	0.14			1.88	6.0	100	6.1	0.41	0.39
10/24/96	07-B	1.0	305	232.84	13.65	0.31	5.17	22.54	33.75	0.20							10.0		
10/24/96	08-S	0.3	295	117.89	20.99	0.41	2.90	13.83	12.68	0.11	0.11			1.97	1.5	110	4.3	0.28	0.22
10/24/96	08-B	1.0	293	145.59	19.14	0.34	2.14	14.57	22.50	0.14							5.7		

Weeks Bay Cruise WBAY: 14

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
11/14/96	01-S	0.3		1256	12919.2	47148.0	30	28.2	87	48.1	0.4	16.8	8.3	87		243
11/14/96	01-B	3.5	3.7	1256	12919.2	47148.0	30	28.2	87	48.1	2.1	17.6	6.8	72		
11/14/96	02-S	0.3		1307	12916.6	47143.6	30	27.2	87	48.3	1.1	16.4	8.4	86		319
11/14/96	02-B	3.8	4.0	1307	12916.6	47143.6	30	27.2	87	48.3	6.1	18.7	4.1	45		
11/14/96	03-S	0.3		1318	12911.8	47139.0	30	26.1	87	48.7	1.9	17.5	8.4	89		367
11/14/96	03-B	4.1	4.3	1318	12911.8	47139.0	30	26.1	87	48.7	7.2	18.7	7.3	81		
11/14/96	04-S	0.3		1204	12903.0	47134.4	30	25.0	87	49.4	3.2	17.9	8.5	88		462
11/14/96	04-B	2.8	3.0	1204	12903.0	47134.4	30	25.0	87	49.4	4.8	17.9	8.5	92		
11/14/96	05-S	0.3		1038	12901.1	47130.8	30	24.1	87	49.6	11.1	19.0	10.0	115		1064
11/14/96	05-B	0.4	0.6	1038	12901.1	47130.8	30	24.1	87	49.6	11.3	19.0	10.5	120		
11/14/96	06-S	0.3		958	12899.6	47128.3	30	23.6	87	49.7	10.3	17.7	9.2	102		1024
11/14/96	06-B	0.7	0.9	958	12899.6	47128.3	30	23.6	87	49.7	10.8	17.6	10.1	113		
11/14/96	07-S	0.3		828	12890.2	47128.3	30	23.6	87	50.6	11.4	15.5	9.6	109		1079
11/14/96	07-B	0.7	0.9	828	12890.2	47128.3	30	23.6	87	50.6	11.5	15.4	10.4	113		
11/14/96	08-S	0.3		917	12893.3	47123.1	30	22.4	87	50.2	10.2	16.7	9.7	100		1018
11/14/96	08-B	1.0	1.2	917	12893.3	47123.1	30	22.4	87	50.2	10.2	16.8	9.9	108		

Weeks Bay Cruise WBAY: 14

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
11/14/96	01-S	0.3	116	28.23	102.91	0.19	1.21	4.09	5.51	0.08	0.08			1.00	2.5	180	0.7	0.02	0.06
11/14/96	01-B	3.5	124	48.67	80.32	0.76	3.69	0.74	4.57	0.17								5.2	
11/14/96	02-S	0.3	115	36.82	85.26	0.43	1.90	14.01	6.42		0.03			1.42	2.5	180	1.1	0.06	0.09
11/14/96	02-B	3.8	184	74.22	50.68	1.85	10.40	10.04	9.63		0.25						6.4		
11/14/96	03-S	0.3	125	42.03	74.38	0.56	2.79	17.80	1.71		0.04			1.23	1.5	170	1.4	0.05	0.11
11/14/96	03-B	4.1	291	127.45	34.44	0.62	7.44	1.31	19.92		0.21						17.6		
11/14/96	04-S	0.3	205	71.05	56.05	0.59	3.49	17.26	10.15		0.35			1.40	0.6	160	6.7	0.11	0.19
11/14/96	04-B	2.8	238	79.86	47.58	0.69	4.76	16.12	11.46		0.24						10.6		
11/14/96	05-S	0.3	269	131.72	19.77	0.44	0.63	12.76	23.24		0.08			1.47	8.7	70	17.6	0.80	1.25
11/14/96	05-B	0.4	283	168.70	15.10	0.37	0.55	12.06	25.42		0.28						23.6		
11/14/96	06-S	0.3	268	128.02	28.12	0.62	1.20	11.55	18.24		0.15			4.49	4.7	90	20.4	0.68	0.39
11/14/96	06-B	0.7	274	179.73	26.26	0.49	0.96	8.82	23.89		0.12						25.7		
11/14/96	07-S	0.3	291	126.68	10.04	0.47	1.21	15.04	21.14		0.13			1.88	4.7	70	19.3	0.80	1.17
11/14/96	07-B	0.7	276	131.62	10.50	0.49	1.72	11.25	20.28		0.13						21.4		
11/14/96	08-S	0.3	273	185.11	23.87	0.42	0.81	6.81	30.30		0.10			2.13	17.0	70	30.0	1.16	1.26
11/14/96	08-B	1.0	277	215.25	22.42	0.48	1.08	10.94	33.33		0.08						32.2		

Weeks Bay Cruise WBAY: 15

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
12/10/96	01-S	0.3		912	12919.2	47148.0	30	28.2	87	48.1	0.2	14.5	8.3	81		254
12/10/96	01-B	3.1	3.4	912	12919.2	47148.0	30	28.2	87	48.1	2.7	15.2	6.9	70		
12/10/96	02-S	0.3		926	12916.6	47143.6	30	27.2	87	48.3	0.6	14.5	7.6	76		326
12/10/96	02-B	3.8	4.0	926	12916.6	47143.6	30	27.2	87	48.3	10.2	17.2	2.9	32		
12/10/96	03-S	0.3		944	12911.8	47139.0	30	26.1	87	48.7	1.1	15.0	7.0	71		342
12/10/96	03-B	3.5	3.7	944	12911.8	47139.0	30	26.1	87	48.7	7.3	16.5	4.4	47		
12/10/96	04-S	0.3		959	12903.0	47134.4	30	25.0	87	49.4	2.0	15.1	6.9	69		385
12/10/96	04-B	2.9	3.1	959	12903.0	47134.4	30	25.0	87	49.4	4.2	15.7	6.4	66		
12/10/96	05-S	0.3		1142	12901.1	47130.8	30	24.1	87	49.6	8.7	16.6	11.4	122		686
12/10/96	05-B	0.7	0.9	1142	12901.1	47130.8	30	24.1	87	49.6	7.8	17.0	10.6	116		
12/10/96	06-S	0.3		1223	12899.6	47128.3	30	23.6	87	49.7	8.8	17.2	10.8	118		823
12/10/96	06-B	0.7	0.9	1223	12899.6	47128.3	30	23.6	87	49.7	8.9	17.5	10.8	118		
12/10/96	07-S	0.3		1300	12890.2	47128.3	30	23.6	87	50.6	8.1	17.2	11.6	125		763
12/10/96	07-B	0.6	0.8	1300	12890.2	47128.3	30	23.6	87	50.6	8.1	17.4	11.3	123		
12/10/96	08-S	0.3		1337	12893.3	47123.1	30	22.4	87	50.2	11.6	16.9	12.4	136		939
12/10/96	08-B	2.1	2.3	1337	12893.3	47123.1	30	22.4	87	50.2	13.8	16.4	11.3	125		

Weeks Bay Cruise WBAY: 15

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
12/10/96	01-S	0.3	244	32.56	82.05	0.20	0.00	17.29	3.63	0.04	0.04		1.85	47.5	130	0.6	0.04	0.05
12/10/96	01-B	3.1	218	45.63	60.48	0.61	7.33	16.37	4.99	0.21						0.6		
12/10/96	02-S	0.3	317	44.87	65.25	0.30	2.69	19.01	22.28	0.12	0.12		2.29		90	0.5	0.02	0.02
12/10/96	02-B	3.8	263	76.89	26.58	1.25	22.97	13.11	8.80	0.44						0.3		
12/10/96	03-S	0.3	344	52.43	52.71	0.39	4.15	21.83	4.40	0.07	0.07		2.61		70	0.8	0.03	0.02
12/10/96	03-B	3.5	289	110.90	32.18	0.90	17.28	15.50	13.65	0.20						14.7		
12/10/96	04-S	0.3	379	78.35	43.41	0.46	6.05	19.52	8.69	0.09	0.09		2.56	13.9	70	7.0	0.17	0.11
12/10/96	04-B	2.9	370	108.36	35.83	0.66	9.28	15.68	13.11	0.29						8.5		
12/10/96	05-S	0.3	460	272.99	18.46	0.64	1.13	22.27	42.44	0.11	0.11		3.00	6.3	70	43.6	0.73	0.59
12/10/96	05-B	0.7	402	274.58	25.62	0.66	1.44	13.73	33.99	0.09						46.9		
12/10/96	06-S	0.3	359	234.83	20.45	0.61	0.65	13.90	31.46	0.04	0.04		6.83	15.0	60	39.5	0.82	0.25
12/10/96	06-B	0.7	346	324.83	20.07	0.71	1.95	12.38	38.49	0.15						42.6		
12/10/96	07-S	0.3	368	222.54	24.03	0.64	1.17	12.47	30.77	0.06	0.06		1.98	21.9	50	38.5	0.90	0.98
12/10/96	07-B	0.6	366	245.53	23.96	0.67	1.19	10.65	29.57	0.05						38.5		
12/10/96	08-S	0.3	343	267.93	8.46	0.46	0.82	18.28	37.24	0.06			1.67	17.9	80	39.4	0.75	1.03
12/10/96	08-B	2.1	328	207.25	3.42	0.26	0.70	13.93	26.22	0.03						32.1		

Weeks Bay Cruise WBAY: 16

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
1/20/97	01-S	0.3		1341	12919.2	47148.0	30	28.2	87	48.1	0.1	11.8	9.6	89		237
1/20/97	01-B	3.1	3.4	1341	12919.2	47148.0	30	28.2	87	48.1	1.4	12.4	8.3	78		
1/20/97	02-S	0.3		1329	12916.6	47143.6	30	27.2	87	48.3	0.6	11.5	9.7	89		297
1/20/97	02-B	2.2	2.4	1329	12916.6	47143.6	30	27.2	87	48.3	2.0	11.7	9.0	84		
1/20/97	03-S	0.3		1315	12911.8	47139.0	30	26.1	87	48.7	1.0	11.8	9.5	91		312
1/20/97	03-B	4.4	4.6	1315	12911.8	47139.0	30	26.1	87	48.7	4.0	11.0	10.1	93		
1/20/97	04-S	0.3		1227	12903.0	47134.4	30	25.0	87	49.4	1.7	11.8	10.1	94		384
1/20/97	04-B	3.2	3.4	1227	12903.0	47134.4	30	25.0	87	49.4	5.5	10.5	11.9	111		
1/20/97	05-S	0.3		1149	12901.1	47130.8	30	24.1	87	49.6	7.0	10.7	14.2	134		822
1/20/97	05-B	0.7	0.9	1149	12901.1	47130.8	30	24.1	87	49.6	7.5	10.5	15.0	141		
1/20/97	06-S	0.3		1105	12899.6	47128.3	30	23.6	87	49.7	5.8	10.6	12.7	118		726
1/20/97	06-B	0.7	0.9	1105	12899.6	47128.3	30	23.6	87	49.7	6.3	10.6	12.7	119		
1/20/97	07-S	0.3		1004	12890.2	47128.3	30	23.6	87	50.6	6.5	7.8	13.8	120		859
1/20/97	07-B	0.4	0.6	1004	12890.2	47128.3	30	23.6	87	50.6	6.8	8.2	13.5	121		
1/20/97	08-S	0.3		912	12893.3	47123.1	30	22.4	87	50.2	7.1	8.6	13.7	122		831
1/20/97	08-B	0.7	0.9	912	12893.3	47123.1	30	22.4	87	50.2	7.2	8.8	13.4	106		

Weeks Bay Cruise WBAY: 16

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (µM)	PC (µM)	NO3 (µM)	NO2 (µM)	NH4 (µM)	DON (µM)	PN (µM)	PP (µM)	PO4 (µM)	DOP (µM)	SI (µM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
1/20/97	01-S	0.3	189	14.31	94.73	0.31	0.11	16.15	0.89	0.29	0.29			1.14		230	0.3	0.00	0.01
1/20/97	01-B	3.1	192	62.41	81.33	0.59	5.67	16.41	3.85	0.21							0.7		
1/20/97	02-S	0.3	202	28.69	84.94	0.39	3.81	19.26	1.50	0.17	0.17			1.40		160	0.6	0.01	0.02
1/20/97	02-B	2.2	208	39.89	75.46	0.62	6.44	15.72	2.96	0.19							3.0		
1/20/97	03-S	0.3	239	47.07	73.53	0.44	3.64	20.48	2.78	0.13	0.13			1.37		120	2.8	0.10	0.18
1/20/97	03-B	4.4	261	114.95	49.14	0.67	3.89	21.25	12.55	0.13							19.6		
1/20/97	04-S	0.3	275	61.60	58.96	0.51	3.39	24.42	5.25	0.12	0.12			1.71	1.0	90	5.5	0.16	0.22
1/20/97	04-B	3.2	295	263.67	34.02	0.65	3.61	18.14	28.43	0.28							29.4		
1/20/97	05-S	0.3	313	169.06	24.11	0.56	2.54	21.29	18.57	0.26	0.26			2.30	17.0	80	14.1	0.43	0.42
1/20/97	05-B	0.7	318	221.30	26.38	0.57	0.58	17.65	24.96	0.05							30.8		
1/20/97	06-S	0.3	304	115.66	31.14	0.59	2.01	25.76	12.42	0.00	0.00			2.24	7.0	70	13.4	0.43	0.43
1/20/97	06-B	0.7	313	161.16	31.99	0.59	1.47	23.14	17.28	0.05							9.4		
1/20/97	07-S	0.3	358	64.43	25.93	0.52	1.34	10.21	6.07	0.02	0.02			1.0	70	70	5.9	0.19	0.22
1/20/97	07-B	0.4	339	130.84	21.44	0.45	0.51	10.13	13.52	0.06							12.3		
1/20/97	08-S	0.3	316	115.51	25.46	0.59	0.47	25.58	12.34	0.04				11.0	90	90	18.1	0.62	0.80
1/20/97	08-B	0.7	347	204.07	24.05	0.60	1.21	22.97	21.68	0.03							20.1		

Weeks Bay Cruise WBAY: 17

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (µM)
2/17/97	01-S	0.3		916	12919.2	47148.0	30	28.2	87	48.1	0.0	12.6	8.4	78		223
2/17/97	01-B	3.1	3.4	916	12919.2	47148.0	30	28.2	87	48.1	0.0	12.5	9.2	86		
2/17/97	02-S	0.3		927	12916.6	47143.6	30	27.2	87	48.3	0.0	12.3	8.9	84		246
2/17/97	02-B	4.1	4.3	927	12916.6	47143.6	30	27.2	87	48.3	0.0	12.3	9.0	84		
2/17/97	03-S	0.3		1052	12911.8	47139.0	30	26.1	87	48.7	0.2	12.6	8.6	77		257
2/17/97	03-B	4.1	4.3	1052	12911.8	47139.0	30	26.1	87	48.7	1.3	13.0	7.9	76		
2/17/97	04-S	0.3		1102	12903.0	47134.4	30	25.0	87	49.4	0.7	12.8	8.2	78		313
2/17/97	04-B	2.8	3.0	1102	12903.0	47134.4	30	25.0	87	49.4	1.3	12.8	8.2	80		
2/17/97	05-S	0.3		1210	12901.1	47130.8	30	24.1	87	49.6	2.4	14.6	11.9	118		434
2/17/97	05-B	0.4	0.6	1210	12901.1	47130.8	30	24.1	87	49.6	2.8	15.4	11.8	122		
2/17/97	06-S	0.3		1303	12899.6	47128.3	30	23.6	87	49.7	3.3	14.7	11.8	118		489
2/17/97	06-B	0.7	0.9	1303	12899.6	47128.3	30	23.6	87	49.7	3.8	15.9	11.2	115		
2/17/97	07-S	0.3		1425	12890.2	47128.3	30	23.6	87	50.6	4.3	14.6	12.9	130		553
2/17/97	07-B	0.7	0.9	1425	12890.2	47128.3	30	23.6	87	50.6	4.6	15.0	12.5	131		
2/17/97	08-S	0.3		1344	12893.3	47123.1	30	22.4	87	50.2	9.1	13.9	12.9	131		983
2/17/97	08-B	1.3	1.5	1344	12893.3	47123.1	30	22.4	87	50.2	9.0	14.4	13.0	132		

Weeks Bay Cruise WBAY: 17

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
2/17/97	01-S	0.3	415	50.45	59.24	0.44	2.09	22.07	3.38	0.34	0.34			2.19	6.4	70	1.9	0.05	0.07
2/17/97	01-B	3.1	404	50.16	56.78	0.21	1.85	23.71	2.33	0.28							2.1		
2/17/97	02-S	0.3	507	57.17	45.63	0.38	1.89	21.64	3.66	0.43	0.43			2.98	7.7	60	1.5	0.08	0.08
2/17/97	02-B	4.1	499	76.15	47.85	0.43	2.06	20.84	4.96	0.52							1.7		
2/17/97	03-S	0.3	574	88.35	39.77	0.41	2.74	26.74	6.11	0.58	0.58			3.04	13.3	50	1.5	0.04	0.04
2/17/97	03-B	4.1	482	113.82	37.79	0.40	5.26	23.79	9.49	0.30							4.1		
2/17/97	04-S	0.3	514	80.80	38.87	0.41	5.23	27.38	6.85	0.35	0.35			2.79	8.0	40	4.2	0.10	0.09
2/17/97	04-B	2.8	520	144.91	41.56	0.42	4.63	21.67	14.95	0.30							13.4		
2/17/97	05-S	0.3	419	25.86	38.65	0.48	8.94	12.51	40.59	0.31	0.31			1.02	15.4	50	66.5	1.41	3.77
2/17/97	05-B	0.4	455	266.90	37.18	0.53	0.81	24.82	31.58	0.35							55.3		
2/17/97	06-S	0.3	428	247.57	30.46	0.40	1.31	27.55	27.30	0.26	0.26			2.41	16.0	60	38.4	1.10	0.86
2/17/97	06-B	0.7	452	310.58	29.60	0.47	1.34	38.24	34.54	0.38							70.8		
2/17/97	07-S	0.3	387	211.69	27.84	0.63			25.47	3.45	3.45			1.58	19.2	50	33.3	1.36	1.76
2/17/97	07-B	0.7	392	225.20	26.03	0.60	1.60	21.48	27.79	0.85							33.1		
2/17/97	08-S	0.3	399	240.00	7.66	0.47	0.61	14.15	31.10	0.26	0.26			1.73	23.1	80	46.6		
2/17/97	08-B	1.3	418	254.35	7.19	0.47	0.71	16.87	31.04	0.26							46.6		

Weeks Bay Cruise WBAY: 18

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	pH	TCO2 (uM)
3/25/97	01-S	0.3		1420	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	19.9	7.8	85	205
3/25/97	01-B	3.8	4.0	1420	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	19.4	7.6	83	
3/25/97	02-S	0.3		1408	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	20.4	7.5	82	225
3/25/97	02-B	3.4	3.6	1408	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	20.2	7.3	81	
3/25/97	03-S	0.3		1400	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	20.6	6.8	76	246
3/25/97	03-B	4.1	4.3	1400	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	19.8	6.5	71	
3/25/97	04-S	0.3		1323	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	20.9	6.6	75	256
3/25/97	04-B	3.4	3.6	1323	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	21.1	6.6	74	
3/25/97	05-S	0.3		1115	12901.1	47130.8	30 : 24.1	87 : 49.6	0.3	21.2	8.4	95	263
3/25/97	05-B	1.0	1.2	1115	12901.1	47130.8	30 : 24.1	87 : 49.6	0.3	21.3	8.3	93	
3/25/97	06-S	0.3		1030	12899.6	47128.3	30 : 23.6	87 : 49.7	0.6	21.1	9.3	105	296
3/25/97	06-B	1.0	1.2	1030	12899.6	47128.3	30 : 23.6	87 : 49.7	0.7	21.2	9.2	104	
3/25/97	07-S	0.3		955	12890.2	47128.3	30 : 23.6	87 : 50.6	0.9	20.6	9.3	104	313
3/25/97	07-B	0.9	1.1	955	12890.2	47128.3	30 : 23.6	87 : 50.6	0.9	20.9	9.1	103	
3/25/97	08-S	0.3		856	12893.3	47123.1	30 : 22.4	87 : 50.2	3.1	20.1	9.6	109	600
3/25/97	08-B	1.0	1.2	856	12893.3	47123.1	30 : 22.4	87 : 50.2	3.5	20.0	9.1	102	

Weeks Bay Cruise WBAY: 18

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
3/25/97	01-S	0.3	321	62.51	69.25	0.46	2.16	30.33	5.02	0.13					2.5	100	2.5	0.28	0.41
3/25/97	01-B	3.8	301	38.53	72.19	0.33	2.00	33.28	1.78		0.14						2.1		
3/25/97	02-S	0.3	400	61.72	69.66	0.39	1.71	15.80	4.35		0.20				1.7	80	5.6	0.61	0.82
3/25/97	02-B	3.4	349	71.73	63.24	0.35	1.56	25.54	5.52		0.22						4.8		
3/25/97	03-S	0.3	446	99.29	43.75	0.39	2.93	29.87	11.96		0.39				5.0	50	4.0	0.38	0.50
3/25/97	03-B	4.1	445	50.53	42.60	0.44	3.38	27.52	3.51		0.56						2.6		
3/25/97	04-S	0.3	476	82.77	39.17	0.54	3.45	27.92	7.74		0.24				8.3	40	11.9	0.45	0.48
3/25/97	04-B	3.4	485	219.25	39.87	0.52	3.73	27.00	17.21		0.28						9.5		
3/25/97	05-S	0.3	407	132.46	39.87	1.04	1.15	26.98	19.50		0.02			3.52	12.5		24.1	1.46	1.06
3/25/97	05-B	1.0	395	141.44	40.62	1.17	1.31	27.68	14.24		0.11						24.3		
3/25/97	06-S	0.3	362	169.61	35.32	1.92	1.04	25.49	24.34		0.14			3.88	19.6	35	48.2	2.20	1.68
3/25/97	06-B	1.0	394	201.37	35.41	1.88	1.11	25.17	25.57		0.04						44.2		
3/25/97	07-S	0.3	1020	129.05	30.75	1.82	1.39	24.02	15.15		0.05			4.63	27.5	30	56.2	2.43	1.53
3/25/97	07-B	0.9	560	205.03	31.05	1.85	1.17	24.27	24.94		0.04						59.2		
3/25/97	08-S	0.3	414	166.26	7.54	0.93	1.38	17.39	19.21		0.09			4.16	30.9	50	50.2	2.82	1.99
3/25/97	08-B	1.0	394	208.54	5.48	0.76	0.78	22.38	23.77		0.05						45.2		

Weeks Bay Cruise WBAY: 19

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
4/14/97	01-S	0.3		900	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	17.2	7.4	77		246
4/14/97	01-B	3.8	4.0	900	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	17.0	7.4	76		
4/14/97	02-S	0.3		909	12916.6	47143.6	30 : 27.2	87 : 48.3	1.4	17.5	5.9	61		253
4/14/97	02-B	4.1	4.3	909	12916.6	47143.6	30 : 27.2	87 : 48.3	0.2	17.5	6.8	71		
4/14/97	03-S	0.3		924	12911.8	47139.0	30 : 26.1	87 : 48.7	1.0	17.6	6.5	69		310
4/14/97	03-B	3.8	4.0	924	12911.8	47139.0	30 : 26.1	87 : 48.7	5.7	18.1	6.4	70		
4/14/97	04-S	0.3		933	12903.0	47134.4	30 : 25.0	87 : 49.4	1.6	17.4	7.4	78		361
4/14/97	04-B	3.1	3.4	933	12903.0	47134.4	30 : 25.0	87 : 49.4	4.1	17.3	6.9	74		
4/14/97	05-S	0.3		1014	12901.1	47130.8	30 : 24.1	87 : 49.6	7.2	16.7	8.9	96		844
4/14/97	05-B	0.7	0.9	1014	12901.1	47130.8	30 : 24.1	87 : 49.6	7.4	16.4	8.7	92		
4/14/97	06-S	0.3		1110	12899.6	47128.3	30 : 23.6	87 : 49.7	6.5	16.1	9.0	95		677
4/14/97	06-B	0.7	0.9	1110	12899.6	47128.3	30 : 23.6	87 : 49.7	6.1	15.9	8.9	96		
4/14/97	07-S	0.3		1309	12890.2	47128.3	30 : 23.6	87 : 50.6	7.9	16.6	9.6	104		789
4/14/97	07-B	0.7	0.9	1309	12890.2	47128.3	30 : 23.6	87 : 50.6	7.8	16.8	9.5	102		
4/14/97	08-S	0.3		1348	12893.3	47123.1	30 : 22.4	87 : 50.2	12.3	17.2	10.3	114		1177
4/14/97	08-B	1.3	1.5	1348	12893.3	47123.1	30 : 22.4	87 : 50.2	13.6	16.3	9.5	104		

Weeks Bay Cruise WBAY: 19

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/d)	APROD (gC/m2/d)
4/14/97	01-S	0.3	569	40.81	42.14	0.38	2.58	32.20	3.35	0.24	0.24				1.7	70	1.5	0.06	0.05
4/14/97	01-B	3.8	508	59.39	41.96	0.27	2.66	29.76	5.69	0.19							1.5		
4/14/97	02-S	0.3	515	60.62	35.04	0.27	2.80	27.59	5.79	0.60	0.60				28.8	50	1.0	0.03	0.03
4/14/97	02-B	4.1	489	56.09	34.86	0.32	5.87	26.27	4.33	0.23							1.2		
4/14/97	03-S	0.3	509	64.81	34.35	0.28	3.63	30.56	5.56	0.17	0.17			3.41	2.0	70	1.9	0.79	0.49
4/14/97	03-B	3.8	396	173.97	27.12	0.31	4.22	20.17	25.69	0.17							20.8		
4/14/97	04-S	0.3	449	201.26	34.96	0.29	3.22	32.55	30.20	0.15	0.15			3.05	1.9	60	65.8	1.57	1.34
4/14/97	04-B	3.1	409	192.93	26.81	0.34	1.25	28.26	29.06	0.45							53.5		
4/14/97	05-S	0.3	368	259.42	22.42	0.60	1.02	22.41	29.94	0.26	0.26			1.94	13.0	70	62.2	2.29	3.10
4/14/97	05-B	0.7	364	278.91	23.14	0.58	0.64	16.63	42.32	0.24							54.2		
4/14/97	06-S	0.3	368	289.76	29.61	0.35	1.71	21.46	34.51	0.10	0.10			3.57	18.0	60	34.1	1.31	1.05
4/14/97	06-B	0.7	375	200.99	29.51	0.35	1.49	17.52	26.76	0.16							32.1		
4/14/97	07-S	0.3	366	245.15	21.75	0.37	1.56	21.14	31.30	0.13	0.13			2.32	6.0	50	23.1	0.95	1.16
4/14/97	07-B	0.7	354	197.95	21.69	0.38	2.55	21.24	25.05	0.15							25.1		
4/14/97	08-S	0.3	344	159.50	2.72	0.16	0.56	16.53	20.97	0.11	0.11			2.40	1.7	60	17.7	0.66	0.80
4/14/97	08-B	1.3	350	184.61	3.99	0.17	1.03	14.53	22.52	0.08							15.3		

Weeks Bay Cruise WBAY: 20

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	pH	TCO2 (uM)
5/2/97	01-S	0.3		1149	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	19.8	7.2	79	
5/2/97	01-B	4.1	4.3	1149	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	19.7	7.3	80	
5/2/97	02-S	0.3		1138	12916.6	47143.6	30 : 27.2	87 : 48.3	0.1	20.1	6.9	77	
5/2/97	02-B	5.0	5.2	1138	12916.6	47143.6	30 : 27.2	87 : 48.3	0.6	20.4	6.5	73	
5/2/97	03-S	0.3		1128	12911.8	47139.0	30 : 26.1	87 : 48.7	0.3	21.1	7.2	77	
5/2/97	03-B	4.7	4.9	1128	12911.8	47139.0	30 : 26.1	87 : 48.7	2.2	20.9	5.2	58	
5/2/97	04-S	0.3		1053	12903.0	47134.4	30 : 25.0	87 : 49.4	0.8	21.7	7.7	87	
5/2/97	04-B	3.5	3.7	1053	12903.0	47134.4	30 : 25.0	87 : 49.4	1.9	22.2	7.5	88	
5/2/97	05-S	0.3		955	12901.1	47130.8	30 : 24.1	87 : 49.6	8.2	23.2	5.3	96	
5/2/97	05-B	0.9	1.1	955	12901.1	47130.8	30 : 24.1	87 : 49.6	5.4	23.5	8.3	103	
5/2/97	06-S	0.3		908	12899.6	47128.3	30 : 23.6	87 : 49.7	5.8	22.9	8.2	98	
5/2/97	06-B	1.0	1.2	908	12899.6	47128.3	30 : 23.6	87 : 49.7	5.7	23.2	8.5	103	
5/2/97	07-S	0.3		829	12890.2	47128.3	30 : 23.6	87 : 50.6	3.7	21.8	8.3	97	
5/2/97	07-B	1.0	1.2	829	12890.2	47128.3	30 : 23.6	87 : 50.6	3.7	21.8	8.3	97	
5/2/97	08-S	0.3		744	12893.3	47123.1	30 : 22.4	87 : 50.2	8.0	22.7	7.9	97	
5/2/97	08-B	1.0	1.2	744	12893.3	47123.1	30 : 22.4	87 : 50.2	9.1	22.8	7.4	92	

Weeks Bay Cruise WBAY: 20

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/d)	APROD (gC/m2/d)
5/2/97	01-S	0.3	240	27.14	76.19	0.36	2.61	18.76	1.99	0.12	0.12	0.12	1.26	0.1	160	1.1	0.14	0.18	
5/2/97	01-B	4.1	237	31.76	75.04	0.41	1.26	25.59	1.92	0.24						1.1			
5/2/97	02-S	0.3	313	34.09	59.19	0.32	2.18	24.00	2.90	0.10	0.10	0.10	1.40	0.1	150	1.5	0.08	0.11	
5/2/97	02-B	5.0	332	35.33	56.54	0.36	4.50	22.84	2.98	0.15						1.1			
5/2/97	03-S	0.3	394	62.15	48.77	0.32	1.38	21.75	7.21	0.10	0.10	0.10	1.36	0.1	100	11.6	2.41	1.81	
5/2/97	03-B	4.7	365	75.90	35.16	0.61	7.77	20.77	7.78	0.17						6.0			
5/2/97	04-S	0.3	453	108.89	36.67	0.45	0.99	23.72	13.43	0.10	0.10	0.10	2.05		70	21.0	1.37	1.52	
5/2/97	04-B	3.5	433	117.56	31.51	0.43	1.17	21.65	16.79	0.17						26.6			
5/2/97	05-S	0.3	385	116.70	22.78	0.25	0.66	13.53	17.52	0.06	0.06	0.06	2.44	0.4	60	15.6	1.32	1.18	
5/2/97	05-B	0.9	366	131.11	22.09	0.25	0.84	15.08	18.54	0.12						15.6			
5/2/97	06-S	0.3	359	145.42	22.67	0.39	1.19	16.79	21.22	0.08	0.08	0.08	2.47	1.2	50	17.1	1.08	0.96	
5/2/97	06-B	1.0	347	127.83	22.90	0.38	1.32	14.12	19.75	0.04						13.9			
5/2/97	07-S	0.3	374	102.86	23.45	0.34	1.30	20.45	13.65	0.25	0.25	0.25	1.32	0.1	100	12.3	0.99	1.58	
5/2/97	07-B	1.0	387	79.12	24.17	0.34	1.12	18.23	10.91	0.19						10.7			
5/2/97	08-S	0.3	351	161.63	6.55	0.11	1.19	20.73	26.72	0.20	0.20	0.20	2.33	1.2	50	21.9	1.10	1.00	
5/2/97	08-B	1.0	351	131.04	3.39	0.10	1.01	15.00	21.21	0.09						18.4			

Weeks Bay Cruise WBAY: 21

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	pH	TCO2 (uM)
5/16/97	01-S	0.3		1349	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	22.9	7.5	85	216
5/16/97	01-B	4.4	4.6	1349	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	22.5	7.3	84	
5/16/97	02-S	0.3		1337	12916.6	47143.6	30 : 27.2	87 : 48.3	0.1	23.8	8.3	98	211
5/16/97	02-B	3.8	4.0	1337	12916.6	47143.6	30 : 27.2	87 : 48.3	0.2	22.9	7.0	82	
5/16/97	03-S	0.3		1326	12911.8	47139.0	30 : 26.1	87 : 48.7	0.3	24.8	8.3	99	236
5/16/97	03-B	4.4	4.6	1326	12911.8	47139.0	30 : 26.1	87 : 48.7	0.8	23.4	5.5	64	
5/16/97	04-S	0.3		1247	12903.0	47134.4	30 : 25.0	87 : 49.4	1.0	25.2	11.4	140	248
5/16/97	04-B	3.5	3.7	1247	12903.0	47134.4	30 : 25.0	87 : 49.4	1.4	25.7	9.3	116	
5/16/97	05-S	0.3		1016	12901.1	47130.8	30 : 24.1	87 : 49.6	3.1	25.2	7.6	96	691
5/16/97	05-B	0.7	0.9	1016	12901.1	47130.8	30 : 24.1	87 : 49.6	3.1	25.2	7.4	92	
5/16/97	06-S	0.3		919	12899.6	47128.3	30 : 23.6	87 : 49.7	3.1	24.7	7.0	85	737
5/16/97	06-B	1.0	1.2	919	12899.6	47128.3	30 : 23.6	87 : 49.7	3.6	24.7	7.1	87	
5/16/97	07-S	0.3		832	12890.2	47128.3	30 : 23.6	87 : 50.6	2.7	23.9	7.2	87	629
5/16/97	07-B	0.7	0.9	832	12890.2	47128.3	30 : 23.6	87 : 50.6	2.7	24.2	7.2	88	
5/16/97	08-S	0.3		742	12893.3	47123.1	30 : 22.4	87 : 50.2	3.4	24.6	6.1	77	
5/16/97	08-B	1.6	1.8	742	12893.3	47123.1	30 : 22.4	87 : 50.2	3.5	24.5	6.1	75	

Weeks Bay Cruise WBAY: 21

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/10d)	APROD
5/16/97	01-S	0.3	163	29.55	73.21	0.42	1.58	32.79	2.06	0.14	0.14			0.98	1.6	200	3.1	0.30	0.71
5/16/97	01-B	4.4	138	24.07	76.30	0.42	1.18	30.20	2.04	0.13							1.5		
5/16/97	02-S	0.3	163	43.00	72.32	0.49	0.55	27.74	4.55	0.06	0.06			1.11	4.5	150	8.0	0.50	1.00
5/16/97	02-B	3.8	164	47.62	71.41	0.46	2.05	28.68	5.29	0.09							4.8		
5/16/97	03-S	0.3	280	46.24	66.77	0.50	0.65	24.36	5.26	0.02	0.02			1.47	1.6	160	6.4	0.57	0.83
5/16/97	03-B	4.4	338	78.92	59.61	0.84	2.94	21.08	8.73	0.07							11.2		
5/16/97	04-S	0.3	353	102.43	41.45	0.69	0.44	21.32	15.84	0.11	0.11			1.99	15.3	90	30.3	1.47	2.20
5/16/97	04-B	3.5	363	98.59	33.04	0.58	0.92	21.02	14.58	0.08							36.6		
5/16/97	05-S	0.3	385	141.12	1.80	0.22	0.31	20.41	22.78	0.11	0.11			2.98		50	40.1	2.31	1.83
5/16/97	05-B	0.7	390	231.34	1.56	0.22	0.00	23.55	36.47	0.15							25.7		
5/16/97	06-S	0.3	389	191.43	0.18	0.15	0.30	18.92	30.40	0.11	0.11			6.32	15.0	40	26.5	3.43	1.21
5/16/97	06-B	1.0	392	184.03	0.17	0.14	0.25	22.68	28.60	0.11							24.9		
5/16/97	07-S	0.3	382	171.70	5.45	0.34	0.68	18.97	27.72	0.14	0.14			3.24	8.3	50	30.5	3.08	1.90
5/16/97	07-B	0.7	381	205.44	4.56	0.40	0.56	22.05	31.11	0.11							30.5		
5/16/97	08-S	0.3	389	129.18	0.52	0.25	0.45	25.28	19.42	0.10	0.10			3.32	8.1	50	17.7	1.75	2.03
5/16/97	08-B	1.6	390	126.62	0.09	0.22	0.21	18.39	18.65	0.08							21.7		

Weeks Bay Cruise WBAY: 22

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LON : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
5/30/97	01-S	0.3		1246	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	22.1	6.5	75		208
5/30/97	01-B	4.7	4.9	1246	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	22.1	6.6	74		
5/30/97	02-S	0.3		1237	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	23.5	6.6	79		239
5/30/97	02-B	4.1	4.3	1237	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	22.7	6.4	74		
5/30/97	03-S	0.3		1228	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	24.9	6.9	84		235
5/30/97	03-B	4.1	4.3	1228	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	24.7	6.7	81		
5/30/97	04-S	0.3		1154	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	25.8	7.2	88		264
5/30/97	04-B	3.5	3.7	1154	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	25.3	6.4	79		
5/30/97	05-S	0.3		1100	12901.1	47130.8	30 : 24.1	87 : 49.6	0.1	26.0	8.6	106		263
5/30/97	05-B	1.0	1.2	1100	12901.1	47130.8	30 : 24.1	87 : 49.6	0.1	25.9	8.0	98		
5/30/97	06-S	0.3		1017	12899.6	47128.3	30 : 23.6	87 : 49.7	1.0	26.1	9.4	117		415
5/30/97	06-B	0.9	1.1	1017	12899.6	47128.3	30 : 23.6	87 : 49.7	0.9	26.3	9.2	112		
5/30/97	07-S	0.3		938	12890.2	47128.3	30 : 23.6	87 : 50.6	1.6	25.8	8.1	100		547
5/30/97	07-B	1.0	1.2	938	12890.2	47128.3	30 : 23.6	87 : 50.6	1.6	25.8	7.9	97		
5/30/97	08-S	0.3		859	12893.3	47123.1	30 : 22.4	87 : 50.2	2.3	26.1	7.5	95		651
5/30/97	08-B	1.0	1.2	859	12893.3	47123.1	30 : 22.4	87 : 50.2	2.5	26.0	7.5	94		

Weeks Bay Cruise WBAY: 22

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
5/30/97	01-S	0.3	470	137.92	23.91	0.43	0.92	27.28	9.46	0.50	0.50			4.17	20.0	30	1.5	0.05	0.03
5/30/97	01-B	4.7	470	93.39	25.00	0.40	1.22	24.86	6.83		0.42							1.1	
5/30/97	02-S	0.3	434	86.13	45.24	0.48	1.60	26.11	6.92		0.28			3.66	13.6	30	3.2	0.25	0.12
5/30/97	02-B	4.1	441	80.10	39.56	0.50	1.25	31.17	5.51		0.37						2.1		
5/30/97	03-S	0.3	384	43.28	51.26	0.47	1.52	27.98	4.07		0.06			1.52	2.9	100	8.4	0.47	1.48
5/30/97	03-B	4.1	382	83.76	56.15	0.17	1.33	25.02	9.85		0.15						6.3		
5/30/97	04-S	0.3	397	86.11	45.93	0.19	1.05	27.99	10.09		0.04			2.02	2.9	60	23.1	0.78	0.89
5/30/97	04-B	3.5	392		41.80	0.57	1.91	26.81			0.02						11.1		
5/30/97	05-S	0.3	383	106.00	40.96	0.69	0.66	29.40	11.99		0.07			2.29	8.3	60	31.4	1.57	1.67
5/30/97	05-B	1.0	380	81.60	40.70	0.65	0.68	26.94	7.37		0.04						30.5		
5/30/97	06-S	0.3	383	178.37	10.85	0.27	0.66	25.83	29.50		0.07			4.12	16.1	40	51.4	2.44	1.10
5/30/97	06-B	0.9	377	185.19	10.28	0.28	0.59	22.23	29.16		0.06						47.2		
5/30/97	07-S	0.3	377	201.90	0.12	0.14	0.52	21.31	30.43		0.06			3.29	20.0	25	33.1	1.87	1.23
5/30/97	07-B	1.0	380	235.64	0.14	0.18	1.62	20.99	33.91		0.07						34.1		
5/30/97	08-S	0.3	392	161.98	0.06	0.18	0.26	19.37	22.26		0.09			3.69	13.3	50	23.1	1.35	0.81
5/30/97	08-B	1.0	390	176.14	0.16	0.17	0.28	17.83	25.53		0.19						21.1		

Weeks Bay Cruise WBAY: 23

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LAT MIN	LONG DEG MIN	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	pH	TCO2 (uM)
6/13/97	01-S	0.3		1047	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	24.3	6.2	71			260
6/13/97	01-B			1047	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	23.7	6.2	73			
6/13/97	02-S	0.3		1039	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	24.9	6.3	76			236
6/13/97	02-B			1039	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	24.5	6.0	71			
6/13/97	03-S	0.3		1025	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	26.3	7.7	95			262
6/13/97	03-B			1025	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	24.9	6.6	80			
6/13/97	04-S	0.3		955	12903.0	47134.4	30 : 25.0	87 : 49.4	0.2	26.0	7.1	89			303
6/13/97	04-B			955	12903.0	47134.4	30 : 25.0	87 : 49.4	0.2	25.5	6.3	76			
6/13/97	05-S	0.3		906	12901.1	47130.8	30 : 24.1	87 : 49.6	1.0	26.5	7.5	91			
6/13/97	05-B			906	12901.1	47130.8	30 : 24.1	87 : 49.6	0.9	26.5	7.4	92			
6/13/97	06-S	0.3		834	12899.6	47128.3	30 : 23.6	87 : 49.7	2.0	27.5	7.3	92			579
6/13/97	06-B			834	12899.6	47128.3	30 : 23.6	87 : 49.7	2.0	27.6	7.3	96			
6/13/97	07-S	0.3		756	12890.2	47128.3	30 : 23.6	87 : 50.6	1.5	27.3	7.8	99			472
6/13/97	07-B			756	12890.2	47128.3	30 : 23.6	87 : 50.6	1.6	27.4	7.7	98			
6/13/97	08-S	0.3		721	12893.3	47123.1	30 : 22.4	87 : 50.2	3.5	27.4	6.4	82			882
6/13/97	08-B			721	12893.3	47123.1	30 : 22.4	87 : 50.2	3.7	27.3	6.6	85			

Weeks Bay Cruise WBAY: 23

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
6/13/97	01-S	0.3	448	40.06	41.92	0.20	2.48	26.39	2.68	0.17			2.24	2.5	80	1.0		
6/13/97	01-B		403	38.95	45.94	0.37	2.48	24.31	2.62	0.18						0.8		
6/13/97	02-S	0.3	554	55.27	32.10	0.50	2.34	23.71	4.76	0.19			3.61		50	4.3		
6/13/97	02-B		586	61.99	23.55	0.48	1.78	35.96	5.14	0.25						3.3		
6/13/97	03-S	0.3	385	68.98		0.63	0.82		8.51	0.03			2.08		100	5.6		
6/13/97	03-B		419	63.88	42.99	0.51	1.48	29.15	5.99	0.14						8.0		
6/13/97	04-S	0.3	315	61.77	54.21	0.56	2.11	25.29	6.28	0.04			1.86		110	8.7		
6/13/97	04-B		327	63.91		0.64	5.22		6.50	0.05						6.4		
6/13/97	05-S	0.3	365	131.29	38.19	0.50	5.08	28.24	15.87	0.07			2.70	4.4	60	32.1		
6/13/97	06-B		393	238.22	26.29	0.39	3.70	23.48	32.29	0.08						92.0		
6/13/97	06-S	0.3	431	206.86	6.01	0.25	0.30	22.93	25.78	0.07			3.02		50	29.4		
6/13/97	06-B		427	156.34	5.86	0.28	0.95	25.85	21.78	0.10						26.8		
6/13/97	07-S	0.3	463	179.90	2.78	0.21	1.66	27.68	23.57	0.12			3.06	2.3	40	23.1		
6/13/97	07-B		465	154.57	1.71	0.18	5.42	18.22	21.04	0.11						22.1		
6/13/97	08-S	0.3	435	152.82	0.12	0.15	0.60	25.89	20.46	0.15			3.11	7.3	40	22.1		
6/13/97	08-B		427	143.73	0.11	0.12	0.96	19.59	18.92	0.19						21.1		

Weeks Bay Cruise WBAY: 24

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
6/27/97	01-S	0.3		1113	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	24.8	6.9	81		209
6/27/97	01-B	3.8	4.0	1113	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	24.2	6.6	78		
6/27/97	02-S	0.3		1105	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	25.8	6.5	79		102
6/27/97	02-B	4.4	4.6	1105	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	25.4	6.3	76		
6/27/97	03-S	0.3		1049	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	26.9	6.8	86		220
6/27/97	03-B	3.8	4.0	1049	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	27.2	6.5	82		
6/27/97	04-S	0.3		1014	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	27.9	6.7	83		263
6/27/97	04-B	3.8	4.0	1014	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	27.3	6.1	77		
6/27/97	05-S	0.3		910	12901.1	47130.8	30 : 24.1	87 : 49.6	0.2	27.6	5.5	64		335
6/27/97	05-B	1.0	1.2	910	12901.1	47130.8	30 : 24.1	87 : 49.6	0.2	27.6	5.2	66		
6/27/97	06-S	0.3		840	12899.6	47128.3	30 : 23.6	87 : 49.7	0.6	28.2	8.8	114		393
6/27/97	06-B	1.0	1.2	840	12899.6	47128.3	30 : 23.6	87 : 49.7	0.6	28.3	8.3	107		
6/27/97	07-S	0.3		763	12890.2	47128.3	30 : 23.6	87 : 50.6	1.0	28.1	8.4	109		419
6/27/97	07-B	1.0	1.2	763	12890.2	47128.3	30 : 23.6	87 : 50.6	1.0	28.1	8.3	106		
6/27/97	08-S	0.3		719	12893.3	47123.1	30 : 22.4	87 : 50.2	1.8	27.9	6.8	87		729
6/27/97	08-B	1.3	1.5	719	12893.3	47123.1	30 : 22.4	87 : 50.2	1.7	27.8	6.6	86		

Weeks Bay Cruise WBAY: 24

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
6/27/97	01-S	0.3	302	30.05	58.27	0.44	1.90	24.29	3.02		0.15			1.70	2.5	130	0.8		
6/27/97	01-B	3.8	298	18.25	55.10	0.40	1.38	24.71	1.74		0.11						0.7		
6/27/97	02-S	0.3	277	32.20	65.85	0.41	0.22	21.79	3.93		0.09			1.43	2.5	140	5.3		
6/27/97	02-B	4.4	284	30.71	70.17	0.40	1.90	16.80	3.09		0.12						4.7		
6/27/97	03-S	0.3	329	48.86	56.79	0.45	0.50	18.00	5.83		0.06			1.57	5.0		10.8		
6/27/97	03-B	3.8	320		48.68	0.51	0.60	26.45			0.03						5.8		
6/27/97	04-S	0.3	331	44.42	43.91	0.47	0.80	28.78	5.51		0.05			2.20		100	8.5		
6/27/97	04-B	3.8	333	44.85	49.23	0.42	2.10	20.15	4.56		0.06						5.4		
6/27/97	05-S	0.3	333	81.38	41.40	0.62	6.55	28.53	11.86		0.06			2.71	2.7	50	17.9		
6/27/97	05-B	1.0	360	146.17	41.14	0.65	6.13	20.99	16.20		0.05						21.6		
6/27/97	06-S	0.3	365	154.57	11.68	0.48	0.63	18.45	21.84		0.37			3.65	18.5	40	41.5		
6/27/97	06-B	1.0	358	144.20	10.85	0.54	1.56	19.14	20.43		0.11						35.3		
6/27/97	07-S	0.3	393	221.29	0.16	0.11	0.23	20.65	27.34		0.14			4.75	19.2	40	41.1		
6/27/97	07-B	1.0	392	210.88	0.11	0.09	0.24	21.26	21.57		0.12						42.2		
6/27/97	08-S	0.3	411	100.59	0.14	0.09	0.00	18.00	8.16		0.14			3.48	20.0	30	23.1		
6/27/97	08-B	1.3	414	120.62	0.10	0.05	0.00	26.94	13.78		0.12						22.1		

Weeks Bay Cruise WBAY: 25

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LONG DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/10/97	01-S	0.3		1108	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	25.0	6.3	76		
7/10/97	01-B	4.1	4.3	1108	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	25.1	6.3	76		
7/10/97	02-S	0.3		1100	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	28.4	7.9	102		
7/10/97	02-B	3.8	4.0	1100	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	27.0	6.7	84		
7/10/97	03-S	0.3		1042	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	30.5	8.3	112		
7/10/97	03-B	3.8	4.0	1042	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	28.1	6.6	94		
7/10/97	04-S	0.3		1008	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	29.4	7.6	100		
7/10/97	04-B	3.1	3.4	1008	12903.0	47134.4	30 : 25.0	87 : 49.4	0.1	28.7	6.4	82		
7/10/97	05-S	0.3		905	12901.1	47130.8	30 : 24.1	87 : 49.6	0.3	30.0	7.4	96		
7/10/97	05-B	1.0	1.2	905	12901.1	47130.8	30 : 24.1	87 : 49.6	0.3	30.0	6.9	91		
7/10/97	06-S	0.3		831	12899.6	47128.3	30 : 23.6	87 : 49.7	0.5	29.6	7.3	95		
7/10/97	06-B	0.7	0.9	831	12899.6	47128.3	30 : 23.6	87 : 49.7	0.5	29.5	7.3	95		
7/10/97	07-S	0.3		755	12890.2	47128.3	30 : 23.6	87 : 50.6	0.5	29.3	7.4	97		
7/10/97	07-B	0.7	0.9	755	12890.2	47128.3	30 : 23.6	87 : 50.6	0.5	29.2	7.3	95		
7/10/97	08-S	0.3		719	12893.3	47123.1	30 : 22.4	87 : 50.2	1.5	29.6	7.0	92		
7/10/97	08-B	0.9	1.1	719	12893.3	47123.1	30 : 22.4	87 : 50.2	1.7	29.6	6.9	92		

Weeks Bay Cruise WBAY: 25

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
7/10/97	01-S	0.3	232	29.63	78.92	0.19	1.86	14.53	1.90		0.20				3.1	160	1.2	0.36	0.38
7/10/97	01-B	4.1	246	35.52	75.00	0.16	2.16	19.77	3.49		0.19						1.0		
7/10/97	02-S	0.3	365	81.93	50.22	0.15	0.67	24.74	9.25		0.07			1.73	1.7	110	1.4	1.93	2.19
7/10/97	02-B	3.8	335	60.88	53.60	0.26	2.70	24.19	6.58		0.13						4.3		
7/10/97	03-S	0.3	316	100.98	55.27	0.53	0.27	21.74	12.10		0.06			1.51	5.0	140	21.7	1.55	2.59
7/10/97	03-B	3.8	323	64.57	50.65	0.57	0.34	21.13	7.53		0.06						10.8		
7/10/97	04-S	0.3	335	86.70	48.71	0.56	0.33	21.87	9.34		0.06			1.69	7.8	130	15.6	1.61	2.20
7/10/97	04-B	3.1	341	67.35	49.42	0.54	0.94	25.78	7.47		0.05						10.5		
7/10/97	05-S	0.3	391	265.07	6.99	0.26	0.00	24.48	39.85		0.09			4.52	37.5	30	10.0	1.61	0.81
7/10/97	05-B	1.0	417	268.36	7.20	0.26	0.25	28.44	39.24		0.09						49.8		
7/10/97	06-S	0.3	402	306.41	1.68	0.18	0.16	28.03	45.89		0.14			5.16	62.5	30	50.3	2.00	0.75
7/10/97	06-B	0.7	855	268.92	0.49	0.19	0.00	25.10	42.29		0.13						51.4		
7/10/97	07-S	0.3	428	244.38	4.97	0.23	0.41	24.43	38.72		0.11			3.66	45.8	30	46.2	2.24	1.47
7/10/97	07-B	0.7	416	249.02	4.94	0.21	0.13	22.24	40.21		0.08						51.2		
7/10/97	08-S	0.3	417	316.72	0.11	0.08	0.25	17.10	44.90		0.16			27.1	40	44.4	1.00	0.85	
7/10/97	08-B	0.9	777	296.30	0.08	0.08	0.21	22.32	39.30		0.18						38.1		

Weeks Bay Cruise WBAY: 26

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LONG DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/24/97	01-S	0.3		1149	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	25.1	5.4	67		333
7/24/97	01-B			1149	12919.2	47148.0	30 : 28.2	87 : 48.1	0.0	25.4	5.2	65		
7/24/97	02-S	0.3		1112	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	25.9	4.7	59		348
7/24/97	02-B			1112	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	26.2	4.9	60		
7/24/97	03-S	0.3		1051	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	27.9	4.8	58		333
7/24/97	03-B			1051	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	26.7	4.6	58		
7/24/97	04-S	0.3		1021	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	28.1	4.7	60		356
7/24/97	04-B			1021	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	26.7	4.5	56		
7/24/97	05-S	0.3		939	12901.1	47130.8	30 : 24.1	87 : 49.6	0.0	26.7	4.6	58		292
7/24/97	05-B	3.1	3.3	939	12901.1	47130.8	30 : 24.1	87 : 49.6	0.0	27.2	5.2	62		
7/24/97	06-S	0.3		906	12899.6	47128.3	30 : 23.6	87 : 49.7	0.0	28.5	5.3	68		219
7/24/97	06-B	0.7	0.9	906	12899.6	47128.3	30 : 23.6	87 : 49.7	0.0	28.9	5.5	71		
7/24/97	07-S	0.3		833	12890.2	47128.3	30 : 23.6	87 : 50.6	0.0	28.4	5.6	73		207
7/24/97	07-B	0.7	0.9	833	12890.2	47128.3	30 : 23.6	87 : 50.6	0.0	28.4	5.4	69		
7/24/97	08-S	0.3		752	12893.3	47123.1	30 : 22.4	87 : 50.2	0.1	28.1	4.9	63		218
7/24/97	08-B			752	12893.3	47123.1	30 : 22.4	87 : 50.2	1.1	28.1	4.8	62		

Weeks Bay Cruise WBAY: 26

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PV (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/24/97	01-S	0.3	704	33.67	31.67	0.49	1.54	25.63	3.69	0.15	0.15			2.45	10.0	60	0.7	0.27	0.20
7/24/97	01-B		765	39.63	31.86	0.49	1.28	24.90	3.65	0.14							0.5		
7/24/97	02-S	0.3	619	31.71	25.43	0.18	1.50	25.44	2.76	0.17	0.17			2.56	1.7	70	1.0	0.41	0.29
7/24/97	02-B		687	33.99	23.37	0.32	2.42	29.13	2.88	0.16							0.9		
7/24/97	03-S	0.3	613	34.47	19.42	0.16	2.73	24.34	2.93	0.23	0.23			2.88	1.7	70	1.1	0.65	0.34
7/24/97	03-B		636	42.45	20.20	0.18	2.68	26.80	3.35	0.39							1.4		
7/24/97	04-S	0.3	700	30.22	13.14	0.25	2.14	28.39	2.63	0.64	0.64			3.17	8.3	60	2.1	1.03	0.54
7/24/97	04-B		651	29.33	13.90	0.36	2.97	27.78	2.33	0.61							1.3		
7/24/97	05-S	0.3	655	29.64	11.89	0.17	2.77	25.06	2.69	0.57	0.57			3.47	10.0	50	2.2	1.39	0.57
7/24/97	05-B	3.1	651	28.17	12.68	0.17	3.85	28.41	2.41	0.84							1.7		
7/24/97	06-S	0.3	610	32.80	8.42	0.19	2.30	22.43	3.71	0.89	0.89			4.10	12.9	40	2.1	1.20	0.44
7/24/97	06-B	0.7	614	36.64	7.56	0.25	1.45	28.97	3.34	0.80							2.1		
7/24/97	07-S	0.3	597	27.31	6.42	0.20	1.09	23.86	2.41	0.70	0.70			18.6	40	2.2	1.04	0.42	
7/24/97	07-B	0.7	607	33.71	6.70	0.25	1.76	23.39	3.36	0.75							3.2		
7/24/97	08-S	0.3	595	37.32	5.55	0.39	3.91	22.68	2.91	0.94	0.94			8.33	24.3	35	1.3	0.55	0.11
7/24/97	08-B		554	37.74	4.98	0.38	6.15	26.52	2.38	0.80							1.6		

Weeks Bay Cruise WBAY: 27

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/11/97	02-S	0.3			12916.6	47143.6	30	27.2	87	48.3	0.1	26.5	5.7	70		283
8/11/97	02-B	5.0	5.2		12916.6	47143.6	30	27.2	87	48.3	3.6	26.4	2.8	34		
8/11/97	03-S	0.3			12911.8	47139.0	30	26.1	87	48.7	0.3	27.5	5.5	70		338
8/11/97	03-B	5.0	5.2		12911.8	47139.0	30	26.1	87	48.7	4.1	27.2	2.4	30		
8/11/97	04-S	0.3			12903.0	47134.4	30	25.0	87	49.4	0.8	29.3	6.6	88		333
8/11/97	04-B	2.5	2.7		12903.0	47134.4	30	25.0	87	49.4	2.6	29.0	4.5	59		
8/11/97	05-S	0.3			12901.1	47130.8	30	24.1	87	49.6	2.6	29.4	6.4	86		413
8/11/97	05-B	1.0	1.2		12901.1	47130.8	30	24.1	87	49.6	2.4	30.0	6.3	86		
8/11/97	06-S	0.3		938	12899.6	47128.3	30	23.6	87	49.7	3.3	29.7	7.6	104		452
8/11/97	06-B	1.0	1.2		12899.6	47128.3	30	23.6	87	49.7	3.8	29.9	7.1	96		
8/11/97	07-S	0.3		857	12890.2	47128.3	30	23.6	87	50.6	4.1	29.7	7.7	106		461
8/11/97	07-B	0.9	1.1	857	12890.2	47128.3	30	23.6	87	50.6	4.1	29.7	7.3	98		
8/11/97	08-S	0.3		814	12893.3	47123.1	30	22.4	87	50.2	6.6	28.9	7.5	104		612
8/11/97	08-B	1.3	1.5	814	12893.3	47123.1	30	22.4	87	50.2	8.5	29.7	6.1	84		

Weeks Bay Cruise WBAY: 27

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
8/11/97	02-S	0.3	478	109.79	58.95	0.46	3.35	36.17	12.12	0.32				23.4	100	1.8	0.44	0.53
8/11/97	02-B	5.0	401	30.64	45.99	0.78	15.46	14.87	3.14	0.20						1.0		
8/11/97	03-S	0.3	451	43.01	62.56	0.52	5.61	21.73	5.57	0.41				7.0	90	3.1	0.61	0.74
8/11/97	03-B	5.0	429	30.35	44.85	0.70	17.14	15.28	4.52	0.18						1.3		
8/11/97	04-S	0.3	410	42.69	52.79	0.53	3.78	24.28	6.48	0.09				13.0	110	5.3	1.00	1.79
8/11/97	04-B	2.5	386	45.29	45.29	0.62	11.25	19.52	6.60	0.17						4.4		
8/11/97	05-S	0.3	423	69.39	41.11	0.41	3.84	12.85	10.96	0.11				13.0	90	6.5	1.31	1.71
8/11/97	05-B	1.0	406	70.60	40.13	0.40	2.68	11.77	11.50	0.08						11.2		
8/11/97	06-S	0.3	422	123.87	28.95	0.21	1.38	12.45	21.77	0.86				11.0	70	10.3	1.45	1.46
8/11/97	06-B	1.0	422	108.15	21.20	0.15	0.60	16.19	17.58	0.21						10.2		
8/11/97	07-S	0.3	448	115.16	7.66	0.09	0.30	17.70	18.83	0.23			3.79	125.0	70	19.2	1.79	1.20
8/11/97	07-B	0.9	423	124.15	7.30	0.13	0.48	18.17	18.42	0.17						16.0		
8/11/97	08-S	0.3	430	86.85	0.21	0.06	0.51	18.93	12.24	0.19			2.71	15.0	80	10.9	1.77	1.80
8/11/97	08-B	1.3	384	116.40	0.10	0.05	0.00	15.37	20.08	0.13						4.6		

Weeks Bay Cruise WBAY: 28

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/25/97	02-S	0.3		1345	12916.6	47143.6	30	27.2	87	48.3	0.0	26.6	6.7	86		238
8/25/97	02-B	4.1	4.3	1345	12916.6	47143.6	30	27.2	87	48.3	0.0	25.6	6.3	78		
8/25/97	03-S	0.3		1330	12911.8	47139.0	30	26.1	87	48.7	0.2	27.1	6.0	76		303
8/25/97	03-B	4.1	4.3	1330	12911.8	47139.0	30	26.1	87	48.7	3.8	28.4	4.8	63		
8/25/97	04-S	0.3		1000	12903.0	47134.4	30	25.0	87	49.4	0.6	27.7	6.2	80		303
8/25/97	04-B	3.5	3.7	1000	12903.0	47134.4	30	25.0	87	49.4	2.9	28.7	6.4	85		
8/25/97	05-S	0.3		1100	12901.1	47130.8	30	24.1	87	49.6	5.3	27.7	8.2	119		525
8/25/97	05-B	0.7	0.9	1100	12901.1	47130.8	30	24.1	87	49.6	5.5	27.7	7.8	102		
8/25/97	06-S	0.3		1200	12899.6	47128.3	30	23.6	87	49.7	4.7	27.1	9.3	124		510
8/25/97	06-B	1.0	1.2	1200	12899.6	47128.3	30	23.6	87	49.7	5.6	27.6	8.4	110		
8/25/97	07-S	0.3		1300	12890.2	47128.3	30	23.6	87	50.6	3.9	28.1	7.5	114		454
8/25/97	07-B	0.7	0.9	1300	12890.2	47128.3	30	23.6	87	50.6	3.9	28.4	8.7	114		
8/25/97	08-S	0.3		855	12893.3	47123.1	30	22.4	87	50.2	4.3	26.8	8.0	102		562
8/25/97	08-B	1.3	1.5	855	12893.3	47123.1	30	22.4	87	50.2	4.3	27.1	7.7	100		

Weeks Bay Cruise WBAY: 28

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
8/25/97	02-S	0.3	441	45.16	73.79	0.32	0.95	14.91	5.44	0.25	0.25				2.8	170	0.8	0.25	0.54
8/25/97	02-B	4.1	312	44.81	72.78	0.36	1.85	10.88	5.69	0.28								0.5	
8/25/97	03-S	0.3	463	65.82	57.37	0.15	2.58	14.83	8.03	0.31	0.31				2.7	130	1.8	0.35	0.66
8/25/97	03-B	4.1	332	182.65	19.23	0.18	5.79	18.25	29.34	0.18							6.7		
8/25/97	04-S	0.3	378	97.22	55.83	0.33	1.53	14.12	13.35	0.10	0.10				2.6	90	4.2	0.40	0.53
8/25/97	04-B	3.5	350	174.26	28.81	0.20	4.17	16.92	29.50	1.62							6.9		
8/25/97	05-S	0.3	404	272.23	0.38	0.07	0.06	22.28	44.84	0.31	0.31				15.4	50	17.4	3.21	2.71
8/25/97	05-B	0.7	355	322.56	0.10	0.05	0.19	18.54	51.50	0.20							18.0		
8/25/97	06-S	0.3	378	235.33	1.80	0.08	0.11	16.66	40.03	0.14	0.14				8.6	60	14.1	2.81	2.68
8/25/97	06-B	1.0	395	264.05	1.57	0.08	0.13	20.29	42.39	0.21							14.5		
8/25/97	07-S	0.3	390	273.11	4.06	0.11	0.65	23.71	41.86	0.15	0.15				17.1	60	14.3	2.98	3.03
8/25/97	07-B	0.7	384	293.96	4.36	0.11	0.38	16.04	43.77	0.15							15.3		
8/25/97	08-S	0.3	337	240.15	9.47	0.06	0.02	15.40	46.43	0.16	0.16				12.5	50	10.6	2.64	2.26
8/25/97	08-B	1.3	349	200.01	11.05	0.08	0.39	15.03	33.98	0.18							9.6		

Weeks Bay Cruise WBAY: 29

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LONG DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/9/97	02-S	0.3		1108	12916.6	47143.6	30 : 27.2	87 : 48.3	0.3	24.8	6.7	78		296
9/9/97	02-B			1108	12916.6	47143.6	30 : 27.2	87 : 48.3	2.6	25.8	4.4	55		
9/9/97	03-S	0.3		1048	12911.8	47139.0	30 : 26.1	87 : 48.7	0.9	26.1	5.6	73		407
9/9/97	03-B			1048	12911.8	47139.0	30 : 26.1	87 : 48.7	4.1	26.9	4.0	51		
9/9/97	04-S	0.3		1017	12903.0	47134.4	30 : 25.0	87 : 49.4	1.9	26.7	6.4	82		547
9/9/97	04-B			1017	12903.0	47134.4	30 : 25.0	87 : 49.4	5.6	27.8	5.7	76		
9/9/97	05-S	0.3		928	12901.1	47130.8	30 : 24.1	87 : 49.6	10.2	28.5	8.8	121		896
9/9/97	05-B			928	12901.1	47130.8	30 : 24.1	87 : 49.6	9.6	28.7	8.3	113		
9/9/97	06-S	0.3		839	12899.6	47128.3	30 : 23.6	87 : 49.7	9.4	27.3	8.9	120		836
9/9/97	06-B			839	12899.6	47128.3	30 : 23.6	87 : 49.7	9.6	27.4	8.7	116		
9/9/97	07-S	0.3		802	12890.2	47128.3	30 : 23.6	87 : 50.6	9.2	27.9	8.0	108		869
9/9/97	07-B			802	12890.2	47128.3	30 : 23.6	87 : 50.6	9.5	27.9	7.7	102		
9/9/97	08-S	0.3		726	12893.3	47123.1	30 : 22.4	87 : 50.2	8.4	27.0	8.2	105		850
9/9/97	08-B			726	12893.3	47123.1	30 : 22.4	87 : 50.2	10.7	27.2	7.4	99		

Weeks Bay Cruise WBAY: 29

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
9/9/97	02-S	0.3	303	71.70	81.72	0.42	3.72	10.25	13.11	0.23	0.23			1.51	4.5	120	0.8	0.32	0.41
9/9/97	02-B		290	96.41	53.24	0.79	7.99	15.50	13.66		0.15						2.2		
9/9/97	03-S	0.3	340	65.47	46.06	0.42	7.71	14.62	8.42	0.41				1.92	4.5	120	1.8	0.51	0.73
9/9/97	03-B		292	148.15	57.57	0.37	5.59	6.96	22.26		0.13						6.5		
9/9/97	04-S	0.3	289	81.93	55.27	0.38	4.10	12.25	12.72		0.11			2.17	1.4	100	2.2	1.23	1.30
9/9/97	04-B		334	216.38	29.18	0.29	1.17	13.83	34.12		0.14						7.8		
9/9/97	05-S	0.3	315	352.83	0.30	0.04	0.78	16.94	50.79	0.11				2.71	6.8	50	7.1	3.55	3.92
9/9/97	05-B		424	305.62	1.56	0.05	0.44	16.55	47.88		0.08						8.0		
9/9/97	06-S	0.3	480	275.81	6.88	0.05	0.27	17.54	44.62	0.20				2.09	7.8	50	8.2	3.32	4.74
9/9/97	06-B		500	389.34	4.79	0.06	1.62	14.03	60.99		0.14						7.8		
9/9/97	07-S	0.3	423	282.06	1.64	0.06	0.40	18.48	45.78	0.17				2.08	4.4	40	11.9	3.80	5.21
9/9/97	07-B		498	281.26	2.40	0.05	0.31	16.15	48.27		0.01						7.6		
9/9/97	08-S	0.3	440	284.91	0.33	0.04	0.38	17.38	46.59	0.18				2.35	4.5	50	7.6	3.36	3.94
9/9/97	08-B		529	288.80	0.04	0.05	0.57	16.86	47.81		0.01						7.4		

Weeks Bay Cruise WBAY: 30

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/22/97	02-S	0.3			12916.6	47143.6	30	27.2	87	48.3	0.5	25.6	5.7	72		335
9/22/97	02-B	4.1	4.3		12916.6	47143.6	30	27.2	87	48.3	2.9	26.6	3.9	48		
9/22/97	03-S	0.3		1211	12911.8	47139.0	30	26.1	87	48.7	1.3	27.1	5.9	75		465
9/22/97	03-B	4.1	4.3	1211	12911.8	47139.0	30	26.1	87	48.7	3.2	27.7	4.5	58		
9/22/97	04-S	0.3		1126	12903.0	47134.4	30	25.0	87	49.4	2.6	28.7	7.6	101		432
9/22/97	04-B	3.8	4.0	1126	12903.0	47134.4	30	25.0	87	49.4	5.5	29.7	6.0	82		
9/22/97	05-S	0.3		1006	12901.1	47130.8	30	24.1	87	49.6	10.3	31.1	7.1	103		965
9/22/97	05-B	0.7	0.9	1006	12901.1	47130.8	30	24.1	87	49.6	10.2	31.2	6.5	92		
9/22/97	06-S	0.3		933	12899.6	47128.3	30	23.6	87	49.7	12.5	29.9	6.1	86		1169
9/22/97	06-B	0.7	0.9	933	12899.6	47128.3	30	23.6	87	49.7	12.4	30.0	5.8	82		
9/22/97	07-S	0.3		902	12890.2	47128.3	30	23.6	87	50.6	9.8	29.9	7.6	103		986
9/22/97	07-B	0.7	0.9	902	12890.2	47128.3	30	23.6	87	50.6	10.8	29.9	6.9	96		
9/22/97	08-S	0.3		818	12893.3	47123.1	30	22.4	87	50.2	12.4	29.5	5.3	74		1207
9/22/97	08-B	1.3	1.5	818	12893.3	47123.1	30	22.4	87	50.2	12.4	29.4	5.3	74		

Weeks Bay Cruise WBAY: 30

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
9/22/97	02-S	0.3	245	40.24	73.63	0.59	4.00	24.38	5.05	0.18				1.58		140	2.3		
9/22/97	02-B	4.1	226	239.82	46.15	2.35	10.80	16.39	33.74	0.23							12.2		
9/22/97	03-S	0.3	221	93.24	68.75	0.50	3.84	15.26	13.98	0.17				1.95	3.3	90	29.4		
9/22/97	03-B	4.1	214	145.82	48.83	0.49	8.14	11.20	23.00	0.21							20.3		
9/22/97	04-S	0.3	208	120.67	54.97	0.31	0.27	7.31	18.26	0.13				2.30		80	14.9		
9/22/97	04-B	3.8	234		28.69	0.22	2.31	16.72		0.20							30.5		
9/22/97	05-S	0.3	445		0.74	0.05	0.49	16.49		0.10				2.77	18.8	40	40.2		
9/22/97	05-B	0.7	293		0.98	0.05	0.19	18.23		0.04							35.9		
9/22/97	06-S	0.3	408		0.11	0.03	0.50	17.37		0.13				4.48	16.7	40	37.5		
9/22/97	06-B	0.7	316		0.45	0.03	1.32	21.29		0.13							38.4		
9/22/97	07-S	0.3	368		0.62	0.04	0.77	20.08		0.21				4.02	5.0	50	38.3		
9/22/97	07-B	0.7	313		0.50	0.06	0.52	18.32		0.03							34.9		
9/22/97	08-S	0.3	281		0.36	0.08	0.67	16.61		0.14				3.91	5.0	40	42.4		
9/22/97	08-B	1.3	418		0.19	0.05	0.33	19.93		0.10							42.6		

Weeks Bay Cruise WBAY: 31

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
10/8/97	02-S	0.3		1538	12916.6	47143.6	30 : 27.2	87 : 48.3	1.2	24.5	7.5	91		311
10/8/97	02-B	4.4	4.6	1538	12916.6	47143.6	30 : 27.2	87 : 48.3	4.5	25.0	4.8	60		
10/8/97	03-S	0.3		1522	12911.8	47139.0	30 : 26.1	87 : 48.7	3.2	26.6	7.9	100		493
10/8/97	03-B	3.8	4.0	1522	12911.8	47139.0	30 : 26.1	87 : 48.7	6.5	26.7	5.9	76		
10/8/97	04-S	0.3		1448	12903.0	47134.4	30 : 25.0	87 : 49.4	4.4	26.6	8.2	105		587
10/8/97	04-B	3.5	3.7	1448	12903.0	47134.4	30 : 25.0	87 : 49.4	11.0	27.4	5.6	76		
10/8/97	05-S	0.3		1143	12901.1	47130.8	30 : 24.1	87 : 49.6	14.1	28.7	7.6	107		
10/8/97	05-B	1.0	1.2	1143	12901.1	47130.8	30 : 24.1	87 : 49.6	15.0	28.7	7.4	107		
10/8/97	06-S	0.3		1051	12899.6	47128.3	30 : 23.6	87 : 49.7	16.2	27.0	5.7	81		1499
10/8/97	06-B	0.9	1.1	1051	12899.6	47128.3	30 : 23.6	87 : 49.7	16.1	27.0	5.9	82		
10/8/97	07-S	0.3		1006	12890.2	47128.3	30 : 23.6	87 : 50.6	12.1	25.8	7.3	95		1147
10/8/97	07-B	0.7	0.9	1006	12890.2	47128.3	30 : 23.6	87 : 50.6	12.2	26.0	7.1	94		
10/8/97	08-S	0.3		907	12893.3	47123.1	30 : 22.4	87 : 50.2	13.2	25.3	6.5	85		1228
10/8/97	08-B	1.3	1.5	907	12893.3	47123.1	30 : 22.4	87 : 50.2	14.8	25.6	5.4	74		

Weeks Bay Cruise WBAY: 31

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
10/ 8/97	02-S	0.3	181	114.92	79.72	0.41	2.67	11.68	15.91	0.16				1.67	3.0	110		27.3	
10/ 8/97	02-B	4.4	225	179.35	50.16	0.63	6.96	15.33	22.96	0.19								24.1	
10/ 8/97	03-S	0.3	214	205.71	59.26	0.26	2.05	10.59	23.72		0.10			2.37	5.7	90		24.1	
10/ 8/97	03-B	3.8	300	307.10	35.82	0.23	4.56	13.15	42.00	0.19								27.3	
10/ 8/97	04-S	0.3	358	341.30	17.89	0.15	4.28	12.46	50.60	0.31				2.01	17.1	90		24.1	
10/ 8/97	04-B	3.5	251	263.28	48.64	0.11	0.59	10.37	32.82	0.03								25.1	
10/ 8/97	05-S	0.3	403	437.09	0.39	0.05	0.23	16.27	60.47	0.03				4.14	42.3	60		18.4	
10/ 8/97	05-B	1.0	295	382.70	0.13	0.05	0.27	19.63	52.30	0.07								23.5	
10/ 8/97	06-S	0.3	258	325.05	3.20	0.08	0.60	14.03	52.22	0.10				3.59	12.0	50		28.4	
10/ 8/97	06-B	0.9	313	320.94	2.23	0.07	0.44	15.13	51.22	0.10								29.7	
10/ 8/97	07-S	0.3	259	407.89	0.28	0.04	0.58	14.27	63.80	0.10				3.91	46.2	40		21.0	
10/ 8/97	07-B	0.7	268	470.36	0.56	0.04	0.46	15.29	69.02	0.01								32.1	
10/ 8/97	08-S	0.3	325	355.80	0.00	0.02	0.18	18.47	56.59	0.01				3.53	44.0	40		19.0	
10/ 8/97	08-B	1.3	327		0.42	0.04	1.24	16.14		0.09								9.6	

Weeks Bay Cruise WBAY: 32

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LON : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
10/22/97	02-S	0.3		1321	12916.6	47143.6	30 : 27.2	87 : 48.3	1.9	18.8	7.2	78		389
10/22/97	02-B	4.1	4.3	1321	12916.6	47143.6	30 : 27.2	87 : 48.3	7.7	19.9	5.0	58		
10/22/97	03-S	0.3		1301	12911.8	47139.0	30 : 26.1	87 : 48.7	3.0	19.5	6.9	77		534
10/22/97	03-B	4.1	4.3	1301	12911.8	47139.0	30 : 26.1	87 : 48.7	7.1	20.3	6.1	69		
10/22/97	04-S	0.3		1219	12903.0	47134.4	30 : 25.0	87 : 49.4	6.0	20.3	7.0	82		727
10/22/97	04-B	3.5	3.7	1219	12903.0	47134.4	30 : 25.0	87 : 49.4	10.6	21.4	7.1	85		
10/22/97	05-S	0.3		1108	12901.1	47130.8	30 : 24.1	87 : 49.6	16.0	22.1	8.0	99		1359
10/22/97	05-B	0.7	0.9	1108	12901.1	47130.8	30 : 24.1	87 : 49.6	15.7	22.1	7.9	100		
10/22/97	06-S	0.3		1028	12899.6	47128.3	30 : 23.6	87 : 49.7	17.0	21.1	8.3	103		
10/22/97	06-B	1.0	1.2	1028	12899.6	47128.3	30 : 23.6	87 : 49.7	16.8	21.1	8.1	106		
10/22/97	07-S	0.3		928	12890.2	47128.3	30 : 23.6	87 : 50.6	15.0	21.2	8.7	106		1272
10/22/97	07-B	0.7	0.9	928	12890.2	47128.3	30 : 23.6	87 : 50.6	15.2	21.1	8.5	104		
10/22/97	08-S	0.3		843	12893.3	47123.1	30 : 22.4	87 : 50.2	16.6	21.0	8.3	103		1393
10/22/97	08-B	1.0	1.2	843	12893.3	47123.1	30 : 22.4	87 : 50.2	17.1	20.9	8.2	102		

Weeks Bay Cruise WBAY: 32

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
10/22/97	02-S	0.3	183	47.69	84.72	0.26	5.50	2.31	8.03	0.28	0.28	0.28	0.28	1.12	3.8	200	5.4	0.51	1.05
10/22/97	02-B	4.1	243	86.95	56.59	0.31	5.88	0.00	12.84	0.30	0.30	0.30	0.30				8.4		
10/22/97	03-S	0.3	188	51.98	74.17	0.34	5.73	8.25	7.01	0.18	0.18	0.18	0.18	1.31		130	5.0	0.68	1.12
10/22/97	03-B	4.1	272	92.93	56.04	0.33	6.37	1.16	13.30	0.17	0.17	0.17	0.17				9.6		
10/22/97	04-S	0.3	252	68.37	61.39	0.34	6.00	2.66	10.38	0.32	0.32	0.32	0.32	1.58		110	4.7	0.60	0.94
10/22/97	04-B	3.5	359	128.62	31.50	0.14	5.25	0.00	21.45	0.27	0.27	0.27	0.27				10.4		
10/22/97	05-S	0.3	429	149.57	6.66	0.07	0.89	18.35	20.58	0.22	0.22	0.22	0.22	2.63	29.6	30	10.7	3.06	2.26
10/22/97	05-B	0.7	407	238.64	5.47	0.06	1.06	16.06	38.49	0.08	0.08	0.08	0.08				18.7		
10/22/97	06-S	0.3	427	325.13	2.78	0.03	0.19	14.04	46.46	0.13	0.13	0.13	0.13	3.95	36.0	60	18.7	0.00	0.00
10/22/97	06-B	1.0	286	221.04	4.28	0.04	0.40	14.28	34.29	0.06	0.06	0.06	0.06				15.1		
10/22/97	07-S	0.3	359	127.75	9.04	0.04	0.52	12.01	24.22	0.07	0.07	0.07	0.07	0.83	3.6	80	9.5	1.51	3.77
10/22/97	07-B	0.7	348	129.36	8.58	0.05	0.20	10.54	23.88	0.01	0.01	0.01	0.01				10.0		
10/22/97	08-S	0.3	407	129.62	3.74	0.04	0.02	14.40	23.91	0.01	0.01	0.01	0.01	1.49	4.0	70	4.3	1.50	2.15
10/22/97	08-B	1.0	388	144.68	3.19	0.03	0.25	10.73	21.90	0.04	0.04	0.04	0.04				7.3		

Weeks Bay Cruise WBAY: 33

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
11/19/97	02-S	0.3		1050	12916.6	47143.6	30 : 27.2	87 : 48.3	0.7	13.9	8.3	81		296
11/19/97	02-B	5.0	5.2	1050	12916.6	47143.6	30 : 27.2	87 : 48.3	5.2	15.6	5.3	55		
11/19/97	03-S	0.3		1106	12911.8	47139.0	30 : 26.1	87 : 48.7	1.4	14.3	7.8	76		382
11/19/97	03-B	3.8	4.0	1106	12911.8	47139.0	30 : 26.1	87 : 48.7	5.3	15.3	6.8	69		
11/19/97	04-S	0.3		1123	12903.0	47134.4	30 : 25.0	87 : 49.4	2.5	14.7	8.2	82		482
11/19/97	04-B	3.1	3.4	1123	12903.0	47134.4	30 : 25.0	87 : 49.4	5.6	15.0	8.5	86		
11/19/97	05-S	0.3		1233	12901.1	47130.8	30 : 24.1	87 : 49.6	9.4	15.8	11.7	125		982
11/19/97	05-B	0.4	0.6	1233	12901.1	47130.8	30 : 24.1	87 : 49.6	10.5	15.8	11.8	127		
11/19/97	06-S	0.3		1314	12899.6	47128.3	30 : 23.6	87 : 49.7	9.5	15.7	11.9	125		999
11/19/97	06-B	0.4	0.6	1314	12899.6	47128.3	30 : 23.6	87 : 49.7	10.0	15.8	11.6	124		
11/19/97	07-S	0.3		1354	12890.2	47128.3	30 : 23.6	87 : 50.6	8.4	14.7	11.0	114		880
11/19/97	07-B	0.4	0.6	1354	12890.2	47128.3	30 : 23.6	87 : 50.6	8.2	15.2	10.8	113		
11/19/97	08-S	0.3		1500	12893.3	47123.1	30 : 22.4	87 : 50.2	14.0	14.9	11.3	123		1031
11/19/97	08-B	0.7	0.9	1500	12893.3	47123.1	30 : 22.4	87 : 50.2	12.9	15.1	11.3	121		

Weeks Bay Cruise WBAY: 33

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	I/PROD (mgC/l/d)	APROD (gC/m2/d)
11/19/97	02-S	0.3	207	51.56	49.68	0.49	3.30	44.96	4.30	0.08	0.08	0.08	2.60	1.1	200	0.8		
11/19/97	02-B	5.0	260	35.31	57.82	1.13	10.85	7.40	2.33		0.10						1.4	
11/19/97	03-S	0.3	241	40.69	68.62	0.57	5.29	15.83	2.75		0.11		1.13	1.2	140	1.2		
11/19/97	03-B	3.8	330	77.48	46.85	0.69	6.91	24.59	9.16		0.14					5.9		
11/19/97	04-S	0.3	271	62.17	62.73	0.63	5.31	15.81	5.94		0.05		1.19	1.3	120	4.2		
11/19/97	04-B	3.1	331	139.97	34.82	0.59	4.32	22.58	19.56		0.13					17.2		
11/19/97	05-S	0.3	416	222.23	22.80	0.52	2.48	15.61	30.49		0.26		4.99	8.5	60	24.1		
11/19/97	05-B	0.4	465	460.77	16.98	0.50	0.74	17.94	64.01		0.35					30.8		
11/19/97	06-S	0.3	392	270.10	21.38	0.53	0.81	22.10	37.66		0.27		1.90	12.8	60	29.1		
11/19/97	06-B	0.4	412	483.42	19.61	0.51	0.75	15.92	64.10		0.16					24.1		
11/19/97	07-S	0.3	372	180.14	27.05	0.57	1.03	12.91	23.83		0.06		1.30	5.0	80	10.5		
11/19/97	07-B	0.4	393	283.27	28.73	0.55	0.49	10.13	36.92		0.03					10.3		
11/19/97	08-S	0.3		442.47	10.96	0.42	11.06	6.37	59.41		1.19		5.13	8.1	80	24.9		
11/19/97	08-B	0.7	351	533.78	14.69	0.48	3.20	23.34	72.65		0.16					19.3		

Weeks Bay Cruise WBAY: 34

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
12/11/97	02-S	0.3		936	12916.6	47143.6	30 : 27.2	87 : 48.3	0.5	15.7	7.7	79		294
12/11/97	02-B	4.1	4.3	936	12916.6	47143.6	30 : 27.2	87 : 48.3	2.1	15.7	7.0	71		
12/11/97	03-S	0.3		951	12911.8	47139.0	30 : 26.1	87 : 48.7	1.2	15.0	7.8	79		371
12/11/97	03-B	3.5	3.7	951	12911.8	47139.0	30 : 26.1	87 : 48.7	2.5	14.9	7.3	74		
12/11/97	04-S	0.3		1011	12903.0	47134.4	30 : 25.0	87 : 49.4	2.1	14.7	7.9	79		466
12/11/97	04-B	3.5	3.7	1011	12903.0	47134.4	30 : 25.0	87 : 49.4	2.8	14.6	7.8	78		
12/11/97	05-S	0.3		1120	12901.1	47130.8	30 : 24.1	87 : 49.6	7.2	14.4	9.9	102		858
12/11/97	05-B	0.7	0.9	1120	12901.1	47130.8	30 : 24.1	87 : 49.6	7.3	14.2	10.0	102		
12/11/97	06-S	0.3		1157	12899.6	47128.3	30 : 23.6	87 : 49.7	3.9	13.4	9.5	92		566
12/11/97	06-B	0.7	0.9	1157	12899.6	47128.3	30 : 23.6	87 : 49.7	4.1	13.4	9.5	93		
12/11/97	07-S	0.3		1225	12890.2	47128.3	30 : 23.6	87 : 50.6	8.8	13.3	10.6	105		743
12/11/97	07-B	0.7	0.9	1225	12890.2	47128.3	30 : 23.6	87 : 50.6	6.0	13.5	10.1	105		
12/11/97	08-S	0.3		1257	12893.3	47123.1	30 : 22.4	87 : 50.2	10.5	13.1	10.4	105		1315
12/11/97	08-B	1.0	1.2	1257	12893.3	47123.1	30 : 22.4	87 : 50.2	11.8	13.0	10.1	103		

Weeks Bay Cruise WBAY: 34

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PV (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/d)	APROD (gC/m2/d)
12/11/97	02-S	0.3		37.68	67.22	0.39	2.02	19.54	4.05		0.06			1.24	1.1	140	1.5	0.05	0.07
12/11/97	02-B	4.1		52.06	48.33	0.09	5.09	20.17	4.89		0.31						1.5		
12/11/97	03-S	0.3		39.85	76.80	0.08	4.76	0.00	4.04		0.29			1.16	2.9	130	1.6	0.05	0.05
12/11/97	03-B	3.5		48.75	55.95	0.44	6.26	12.75	5.05								1.9		
12/11/97	04-S	0.3		110.55	60.10	0.36	4.91	11.08	14.67		0.32			1.41	12.0	110	14.5	0.37	0.39
12/11/97	04-B	3.5		101.22	51.47	0.35	6.27	9.64	13.15							12.1			
12/11/97	05-S	0.3		227.55	39.15	0.81	3.47	17.50	29.58		0.11			2.40	15.2	60	21.9	1.07	0.55
12/11/97	05-B	0.7		356.77	32.13	0.73	1.78	13.97	39.70		0.22					21.6			
12/11/97	06-S	0.3		174.04	46.24	0.63	5.81	18.55	21.30		0.15			2.54	19.5	50	14.6	0.68	0.35
12/11/97	06-B	0.7		288.85	42.43	0.44	6.08	14.17	30.81		0.09					13.2			
12/11/97	07-S	0.3		398.76	36.31	0.61	2.28	15.60	55.19		0.11			2.76	19.2	60	45.9	2.32	1.03
12/11/97	07-B	0.7		297.85	33.88	0.77	2.93	14.47	39.78		0.18					36.7			
12/11/97	08-S	0.3		321.84	9.70	0.36	22.60	0.00	46.17		0.24			3.19	15.4	60	42.5	1.82	0.77
12/11/97	08-B	1.0		350.46	8.79	0.33	1.11	26.06	49.54		0.31					43.6			

Weeks Bay Cruise WBAY: 35

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
1/23/98	02-S	0.3		914	12916.6	47143.6	30	27.2	87	48.3	0.0	14.2	8.8	86		
1/23/98	02-B	4.4	4.6	914	12916.6	47143.6	30	27.2	87	48.3	0.0	14.2	8.7	85		
1/23/98	03-S	0.3		936	12911.8	47139.0	30	26.1	87	48.7	0.0	14.4	8.6	83		
1/23/98	03-B	4.4	4.6	936	12911.8	47139.0	30	26.1	87	48.7	0.0	14.3	8.6	83		
1/23/98	04-S	0.3		948	12903.0	47134.4	30	25.0	87	49.4	0.0	14.4	8.4	83		
1/23/98	04-B	3.8	4.0	948	12903.0	47134.4	30	25.0	87	49.4	0.0	14.4	8.5	80		
1/23/98	05-S	0.3		1002	12901.1	47130.8	30	24.1	87	49.6	0.0	14.6	8.2	82		
1/23/98	05-B	1.0	1.2	1002	12901.1	47130.8	30	24.1	87	49.6	0.0	14.6	8.3	82		
1/23/98	06-S	0.3		1009	12899.6	47128.3	30	23.6	87	49.7	0.0	14.6	8.3	80		
1/23/98	06-B	1.0	1.2	1009	12899.6	47128.3	30	23.6	87	49.7	0.0	14.6	8.4	84		
1/23/98	07-S	0.3		1045	12890.2	47128.3	30	23.6	87	50.6	0.0	14.6	8.5	84		
1/23/98	07-B	1.0	1.2	1045	12890.2	47128.3	30	23.6	87	50.6	0.0	14.5	8.6	85		
1/23/98	08-S	0.3		1064	12893.3	47123.1	30	22.4	87	50.2	0.5	14.8	8.1	81		
1/23/98	08-B	1.0	1.2	1064	12893.3	47123.1	30	22.4	87	50.2	0.5	14.8	8.1	80		

Weeks Bay Cruise WBAY: 35

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
1/23/98	02-S	0.3			20.00	0.27	3.46				1.32			7.04		10	1.1		
1/23/98	02-B	4.4			20.27	0.29	3.80				1.32						0.6		
1/23/98	03-S	0.3			22.74	0.22	4.17				1.67			8.16		10	1.6		
1/23/98	03-B	4.4			24.85	0.22	5.84				1.71						1.6		
1/23/98	04-S	0.3			24.98	0.22	5.84				1.78			8.45		10	0.3		
1/23/98	04-B	3.8			24.60	0.20	4.81				1.87						1.6		
1/23/98	05-S	0.3			32.80	0.19	6.38				1.53			9.33		12	1.8		
1/23/98	05-B	1.0			33.04	0.43	5.32				1.38						3.1		
1/23/98	06-S	0.3			31.30	0.22	4.85				1.40			8.41		12	4.5		
1/23/98	06-B	1.0			30.59	0.21	5.32				1.32						4.8		
1/23/98	07-S	0.3			30.51	0.20	5.36				1.40			7.62		15	6.5		
1/23/98	07-B	1.0			29.97	0.15	5.45				1.46						6.2		
1/23/98	08-S	0.3			58.84	0.62	8.40				0.62			4.01		20	4.8		
1/23/98	08-B	1.0			59.44	0.31	8.32				0.66						5.1		

Weeks Bay Cruise WBAY: 36

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
2/19/98	02-S	0.3		1150	12916.6	47143.6	30	27.2	87	48.3	0.0	16.1	7.6	78		
2/19/98	02-B	4.7	4.9	1150	12916.6	47143.6	30	27.2	87	48.3	0.0	16.4	7.7	79		
2/19/98	03-S	0.3		1106	12911.8	47139.0	30	26.1	87	48.7	0.0	16.4	7.4	75		
2/19/98	03-B	4.6	4.8	1106	12911.8	47139.0	30	26.1	87	48.7	0.0	15.9	7.4	74		
2/19/98	04-S	0.3		1054	12903.0	47134.4	30	25.0	87	49.4	0.0	16.6	7.1	73		
2/19/98	04-B	3.8	4.0	1054	12903.0	47134.4	30	25.0	87	49.4	0.0	16.0	7.0	71		
2/19/98	05-S	0.3		1040	12901.1	47130.8	30	24.1	87	49.6	0.2	16.2	7.6	78		
2/19/98	05-B	0.7	0.9	1040	12901.1	47130.8	30	24.1	87	49.6	0.2	16.3	7.6	74		
2/19/98	06-S	0.3		1004	12899.6	47128.3	30	23.6	87	49.7	0.2	15.3	8.1	80		
2/19/98	06-B	0.7	0.9	1004	12899.6	47128.3	30	23.6	87	49.7	0.6	15.4	7.8	78		
2/19/98	07-S	0.3		948	12890.2	47128.3	30	23.6	87	50.6	0.1	15.5	8.7	87		
2/19/98	07-B	0.7	0.9	948	12890.2	47128.3	30	23.6	87	50.6	0.1	15.4	8.6	85		
2/19/98	08-S	0.3		932	12893.3	47123.1	30	22.4	87	50.2	0.8	15.2	9.1	90		
2/19/98	08-B	1.0	1.2	932	12893.3	47123.1	30	22.4	87	50.2	1.4	15.3	9.0	91		

Weeks Bay Cruise WBAY: 36

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
2/19/98	02-S	0.3		57.45	40.40	0.36	1.50		5.71		0.38			4.09		50		2.6	
2/19/98	02-B	4.7		57.72	41.99	0.27	1.57		5.59		0.34							2.3	
2/19/98	03-S	0.3		102.86	31.73	0.35	1.83		10.19		0.53			3.69		25		3.9	
2/19/98	03-B	4.6		108.80	31.90	0.34	2.13		10.01		0.50							2.6	
2/19/98	04-S	0.3		135.07	28.27	0.44	2.91		13.18		0.66			5.15		20		4.9	
2/19/98	04-B	3.8		141.99	28.21	0.56	2.92		13.08		0.77							3.4	
2/19/98	05-S	0.3		130.63	27.72	0.19	2.52		12.70		0.55			4.95		20		8.7	
2/19/98	05-B	0.7		154.83	31.63	0.20	2.68		15.73		0.50							9.4	
2/19/98	06-S	0.3		136.52	35.77	0.22	2.57		14.07		0.45			5.42		20		10.6	
2/19/98	06-B	0.7		151.61	36.99	0.21	6.09		15.90		0.82							11.9	
2/19/98	07-S	0.3		145.70	38.36	0.19	4.18		15.24		0.68			4.76		25		11.1	
2/19/98	07-B	0.7		138.66	39.10	0.18	2.45		14.07		0.30							11.9	
2/19/98	08-S	0.3		131.53	44.50	0.15	2.44		13.85		0.25			2.71		30		10.2	
2/19/98	08-B	1.0		118.45	39.15	0.14	2.62		13.85		0.29							11.9	

Weeks Bay Cruise WBAY: 37

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LONG : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
3/19/98	02-S	0.3		932	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	17.2	7.9	83		
3/19/98	02-B			932	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	17.1	7.8	81		
3/19/98	03-S	0.3		953	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	16.5	8.3	84		
3/19/98	03-B			953	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	16.6	8.4	86		
3/19/98	04-S	0.3		1007	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	16.3	8.2	84		
3/19/98	04-B			1007	12903.0	47134.4	30 : 25.0	87 : 49.4	0.0	16.3	8.3	84		
3/19/98	05-S	0.3		1020	12901.1	47130.8	30 : 24.1	87 : 49.6	0.1	16.4	8.5	87		
3/19/98	05-B			1020	12901.1	47130.8	30 : 24.1	87 : 49.6	0.1	16.4	8.3	85		
3/19/98	06-S	0.3		1029	12899.6	47128.3	30 : 23.6	87 : 49.7	0.6	17.2	8.6	90		
3/19/98	06-B			1029	12899.6	47128.3	30 : 23.6	87 : 49.7	0.6	17.2	8.7	90		
3/19/98	07-S	0.3		1212	12890.2	47128.3	30 : 23.6	87 : 50.6	0.5	17.4	8.9	93		
3/19/98	07-B			1212	12890.2	47128.3	30 : 23.6	87 : 50.6	0.5	17.4	9.0	94		
3/19/98	08-S	0.3		1223	12893.3	47123.1	30 : 22.4	87 : 50.2	2.5	16.8	9.0	95		
3/19/98	08-B			1223	12893.3	47123.1	30 : 22.4	87 : 50.2	2.7	16.4	9.1	93		

Weeks Bay Cruise WBAY: 37

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/ld)	APROD (gC/m2/d)
3/19/98	02-S	0.3		37.20	77.38	0.35	3.43		6.48		0.10			1.35				2.6	
3/19/98	02-B			36.89	74.67	0.27	1.15		4.87		0.04							1.9	
3/19/98	03-S	0.3		41.87	78.21	0.28	1.67		5.52		0.13			1.41		130	2.7		
3/19/98	03-B			31.04	77.03	0.25	1.92		3.91		0.13						1.2		
3/19/98	04-S	0.3		43.68	69.48	0.11	1.92		5.76		0.17			1.95		75	2.2		
3/19/98	04-B			48.16	71.09	0.39	2.06		6.02		0.13						2.0		
3/19/98	05-S	0.3		108.25	59.37	0.18	3.10		11.45		0.28			3.89		35	0.2		
3/19/98	05-B			199.43	58.68	0.15	3.43		19.38		0.49						0.4		
3/19/98	06-S	0.3		113.97	44.84	0.55	2.87		15.47		0.58			3.52		35	1.3		
3/19/98	06-B			112.96	43.40	0.59	3.21		15.36		0.54						1.3		
3/19/98	07-S	0.3		187.71	31.18	0.66	3.01		22.44		0.56			5.24		25	1.3		
3/19/98	07-B			168.86	31.06	0.70	2.79		21.22		0.62						1.0		
3/19/98	08-S	0.3		130.84	12.24	0.35	2.88		16.22		0.65			3.06		35	1.6		
3/19/98	08-B			132.19	11.96	0.33	2.80		16.93		0.60						0.8		

Weeks Bay Cruise WBAY: 38

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LONG DEG	LONG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
4/23/98	02-S	0.3		1034	12916.6	47143.6	30	27.2	87	48.3	0.0	19.1	7.5	81		
4/23/98	02-B	4.7	4.9	1034	12916.6	47143.6	30	27.2	87	48.3	0.0	18.9	6.0	79		
4/23/98	03-S	0.3		1021	12911.8	47139.0	30	26.1	87	48.7	0.0	19.8	6.3	69		
4/23/98	03-B	4.1	4.3	1021	12911.8	47139.0	30	26.1	87	48.7	0.0	19.6	6.6	75		
4/23/98	04-S	0.3		1007	12903.0	47134.4	30	25.0	87	49.4	0.1	20.1	5.8	65		
4/23/98	04-B	3.8	4.0	1007	12903.0	47134.4	30	25.0	87	49.4	0.1	20.2	6.0	66		
4/23/98	05-S	0.3		940	12901.1	47130.8	30	24.1	87	49.6	0.5	19.3	8.6	93		
4/23/98	05-B	0.7	0.9	940	12901.1	47130.8	30	24.1	87	49.6	0.5	19.2	8.4	92		
4/23/98	06-S	0.3		910	12899.6	47128.3	30	23.6	87	49.7	0.9	18.8	8.8	96		
4/23/98	06-B	0.7	0.9	910	12899.6	47128.3	30	23.6	87	49.7	0.9	18.8	8.8	96		
4/23/98	07-S	0.3		858	12890.2	47128.3	30	23.6	87	50.6	1.4	18.7	9.0	97		
4/23/98	07-B	0.7	0.9	858	12890.2	47128.3	30	23.6	87	50.6	1.5	18.7	9.0	97		
4/23/98	08-S	0.3		841	12893.3	47123.1	30	22.4	87	50.2	1.9	18.7	8.6	94		
4/23/98	08-B	0.7	0.9	841	12893.3	47123.1	30	22.4	87	50.2	2.2	18.7	8.4	93		

Weeks Bay Cruise WBAY: 38

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
4/23/98	02-S	0.3		35.31	88.00	0.08	2.50		3.96					1.84		110	2.6		
4/23/98	02-B	4.7		40.45	77.55	0.14	1.48		3.96								2.1		
4/23/98	03-S	0.3		48.09	54.25	0.06	3.21		4.89					2.29		80	3.5		
4/23/98	03-B	4.1		52.05	55.14	0.07	3.36		5.52								3.1		
4/23/98	04-S	0.3		59.09	54.24	0.17	6.82		6.84					2.41		70	6.2		
4/23/98	04-B	3.8		85.49	53.32	0.10	3.64		9.13								6.6		
4/23/98	05-S	0.3		155.81	40.16	0.30	0.71		22.00					1.24		60	23.8		
4/23/98	05-B	0.7		171.64	46.79	0.34	0.64		22.92								24.4		
4/23/98	06-S	0.3		159.35	33.89	0.35	0.28		22.11					2.45		50	21.0		
4/23/98	06-B	0.7		176.03	31.58	0.09	1.26		24.33								23.0		
4/23/98	07-S	0.3		178.64	30.45	0.36	1.91		24.41					1.89		50	23.8		
4/23/98	07-B	0.7		212.77	28.52	0.11	0.49		28.22								26.4		
4/23/98	08-S	0.3		209.15	21.89	0.34	0.26		28.50							40	27.2		
4/23/98	08-B	0.7		204.89	26.79	0.25	0.47		28.82								26.8		

Weeks Bay Cruise WBAY: 39

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
5/21/98	02-S	0.3		1000	12916.6	47143.6	30	27.2	87	48.3	0.0	26.2	8.5	102		
5/21/98	02-B	5.9	6.1	1000	12916.6	47143.6	30	27.2	87	48.3	0.0	24.3	7.6	92		
5/21/98	03-S	0.3		954	12911.8	47139.0	30	26.1	87	48.7	0.0	27.8	7.9	101		
5/21/98	03-B	1.8	2.0	954	12911.8	47139.0	30	26.1	87	48.7	0.0	27.2	7.8	98		
5/21/98	04-S	0.3		937	12903.0	47134.4	30	25.0	87	49.4	0.1	27.7	7.5	97		
5/21/98	04-B			937	12903.0	47134.4	30	25.0	87	49.4	0.1	27.0	7.4	93		
5/21/98	05-S	0.3		845	12901.1	47130.8	30	24.1	87	49.6	0.6	28.3	7.1	90		
5/21/98	05-B	0.9	1.1	845	12901.1	47130.8	30	24.1	87	49.6	0.6	28.3	7.0	91		
5/21/98	06-S	0.3		830	12899.6	47128.3	30	23.6	87	49.7	1.0	28.4	7.4	95		
5/21/98	06-B	0.9	1.1	830	12899.6	47128.3	30	23.6	87	49.7	1.1	28.2	7.1	92		
5/21/98	07-S	0.3		816	12890.2	47128.3	30	23.6	87	50.6	1.3	28.0	6.9	91		
5/21/98	07-B	0.8	1.0	816	12890.2	47128.3	30	23.6	87	50.6	1.3	27.9	7.1	91		
5/21/98	08-S	0.3		805	12893.3	47123.1	30	22.4	87	50.2	1.2	28.7	7.3	94		
5/21/98	08-B	1.1	1.3	805	12893.3	47123.1	30	22.4	87	50.2	1.3	28.6	7.2	95		

Weeks Bay Cruise WBAY: 39

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
5/21/98	02-S	0.3			86.94	0.27	0.59				0.04			1.16				8.5	
5/21/98	02-B	5.9			94.97	0.19	0.56				0.04							5.3	
5/21/98	03-S	0.3			77.23	0.03	0.45				0.05			2.07				7.3	
5/21/98	03-B	1.8			81.01	0.28	0.49				0.05							7.5	
5/21/98	04-S	0.3			64.55	0.31	0.94				0.05			1.30				9.6	
5/21/98	04-B				68.45	0.30	1.12				0.05							9.6	
5/21/98	05-S	0.3			13.50	0.59	0.35				0.04			2.99				28.9	
5/21/98	05-B	0.9			13.60	0.59	0.67				0.05							36.2	
5/21/98	06-S	0.3			2.18	0.17	0.48				0.09			3.19				28.7	
5/21/98	06-B	0.9			1.90	0.17	0.25				0.06							29.8	
5/21/98	07-S	0.3			28.85	0.65	0.65				0.06			2.80				24.5	
5/21/98	07-B	0.8			27.30	0.47	0.47				0.05							24.5	
5/21/98	08-S	0.3			3.95	0.25	0.32				0.06			2.41				20.2	
5/21/98	08-B	1.1			3.98	0.25	0.46				0.05							21.3	

Weeks Bay Cruise WBAY: 40

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
6/18/98	02-S	0.3		1035	12916.6	47143.6	30	27.2	87	48.3	0.0	29.4	7.4	99		
6/18/98	02-B			1035	12916.6	47143.6	30	27.2	87	48.3	0.0	28.1	6.8	88		
6/18/98	03-S	0.3		1007	12911.8	47139.0	30	26.1	87	48.7	0.1	30.5	7.2	98		
6/18/98	03-B			1007	12911.8	47139.0	30	26.1	87	48.7	0.8	29.3	5.6	74		
6/18/98	04-S	0.3		949	12903.0	47134.4	30	25.0	87	49.4	0.3	30.2	6.7	89		
6/18/98	04-B			949	12903.0	47134.4	30	25.0	87	49.4	1.7	29.7	5.3	70		
6/18/98	05-S	0.3		931	12901.1	47130.8	30	24.1	87	49.6	2.0	30.2	7.5	98		
6/18/98	05-B	1.1	1.3	931	12901.1	47130.8	30	24.1	87	49.6	2.2	30.7	7.4	104		
6/18/98	06-S	0.3		835	12899.6	47128.3	30	23.6	87	49.7	5.2	30.6	6.2	86		
6/18/98	06-B	1.1	1.3	835	12899.6	47128.3	30	23.6	87	49.7	5.2	30.5	6.2	86		
6/18/98	07-S	0.3		823	12890.2	47128.3	30	23.6	87	50.6	4.9	30.4	6.4	88		
6/18/98	07-B	0.9	1.1	823	12890.2	47128.3	30	23.6	87	50.6	4.9	30.3	6.5	89		
6/18/98	08-S	0.3		809	12893.3	47123.1	30	22.4	87	50.2	6.3	30.1	6.5	90		
6/18/98	08-B	1.1	1.3	809	12893.3	47123.1	30	22.4	87	50.2	6.8	30.1	6.4	88		

Weeks Bay Cruise WBAY: 40

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	SI (uM)	ATTEN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
6/18/98	02-S	0.3		75.77	87.42	0.49	0.24		9.50		0.07		1.40		140	7.4		
6/18/98	02-B			71.89	91.84	0.23	1.79		5.51		0.07						4.9	
6/18/98	03-S	0.3		93.85	70.74	0.28	1.34		9.77		0.06		1.81		150	5.2		
6/18/98	03-B			82.70	64.24	0.22	5.30		9.05		0.06					7.7		
6/18/98	04-S	0.3		59.37	63.19	0.31	1.40		6.85				1.40		150	5.5		
6/18/98	04-B			111.78	44.62	0.15	3.97		16.11		0.06					15.1		
6/18/98	05-S	0.3		183.10	26.51	0.10	0.47		24.39		0.07		2.38		60	21.6		
6/18/98	05-B	1.1		189.93	28.56	0.12	0.54		26.74		0.07					24.7		
6/18/98	06-S	0.3		308.70	0.06	0.04	0.38		34.70				3.46		40	26.7		
6/18/98	06-B	1.1		281.93	0.52	0.03	0.39		36.02		0.07					23.8		
6/18/98	07-S	0.3		283.38	0.28	0.03	0.78		35.25		0.04		2.37		50	23.8		
6/18/98	07-B	0.9		272.56	0.28	0.03	0.20		30.15		0.06					23.0		
6/18/98	08-S	0.3		221.42	0.29	0.02	0.22		26.71		0.04		3.26		50	20.9		
6/18/98	08-B	1.1		221.18	0.28	0.03	0.23		27.98		0.04					22.5		

Weeks Bay Cruise WBAY: 41

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/20/98	02-S	0.3		950	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	28.2	7.4	95		
7/20/98	02-B			950	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	27.4	7.0	87		
7/20/98	03-S	0.3		930	12911.8	47139.0	30 : 26.1	87 : 48.7	0.0	29.6	7.0	91		
7/20/98	03-B			930	12911.8	47139.0	30 : 26.1	87 : 48.7	0.5	29.7	6.0	80		
7/20/98	04-S	0.3		910	12903.0	47134.4	30 : 25.0	87 : 49.4	0.5	30.1	5.5	76		
7/20/98	04-B			910	12903.0	47134.4	30 : 25.0	87 : 49.4	1.7	30.5	5.7	77		
7/20/98	05-S	0.3		900	12901.1	47130.8	30 : 24.1	87 : 49.6	4.6	30.8	7.4	106		
7/20/98	05-B	1.2	1.4	900	12901.1	47130.8	30 : 24.1	87 : 49.6	4.6	31.4	7.2	100		
7/20/98	06-S	0.3		820	12899.6	47128.3	30 : 23.6	87 : 49.7	7.4	31.6	7.5	107		
7/20/98	06-B	1.1	1.3	820	12899.6	47128.3	30 : 23.6	87 : 49.7	8.3	31.3	6.9	97		
7/20/98	07-S	0.3		808	12890.2	47128.3	30 : 23.6	87 : 50.6	6.6	30.5	8.0	109		
7/20/98	07-B	1.0	1.2	808	12890.2	47128.3	30 : 23.6	87 : 50.6	6.9	30.4	7.5	103		
7/20/98	08-S	0.3		750	12893.3	47123.1	30 : 22.4	87 : 50.2	9.5	30.3	7.1	100		
7/20/98	08-B	1.9	2.1	750	12893.3	47123.1	30 : 22.4	87 : 50.2	11.4	30.6	6.6	93		

Weeks Bay Cruise WBAY: 41

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/20/98	02-S	0.3		83.46	77.37	0.47	0.53		8.78					1.39		100	10.8		
7/20/98	02-B			58.12	83.58	0.18	0.84		5.96		0.03						5.1		
7/20/98	03-S	0.3		109.85	67.19	0.24	0.91		10.92		0.03			1.70		90	8.9		
7/20/98	03-B			95.04	58.97	0.21	4.56		11.02		0.03						10.1		
7/20/98	04-S	0.3		84.31	57.33	0.37	5.03		10.41					2.19		70	8.2		
7/20/98	04-B			139.90	40.00	0.19	3.53		19.66		0.03						18.7		
7/20/98	05-S	0.3		217.69	15.41	0.09	0.45		31.97		0.11			3.09		50	34.8		
7/20/98	05-B	1.2		220.45	13.22	0.08	0.23		32.30		0.05						35.4		
7/20/98	06-S	0.3		256.64	0.14	0.03	0.72		37.19		0.07			3.28		40	36.9		
7/20/98	06-B	1.1		280.80	0.11	0.03	0.22		37.66		0.05						36.6		
7/20/98	07-S	0.3		221.21	12.76	0.09	0.41		31.71		0.04			2.74		50	30.4		
7/20/98	07-B	1.0		248.82	4.94	0.08	0.93		35.84		0.16						35.1		
7/20/98	08-S	0.3		212.04	0.11	0.03	0.58		24.68		0.05			1.99		50	24.5		
7/20/98	08-B	1.9		210.53	0.11	0.03	1.25		25.83		0.27						23.4		

Weeks Bay Cruise WBAY: 42

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT : DEG MIN	LON : DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/21/98	02-S	0.3		925	12916.6	47143.6	30 : 27.2	87 : 48.3	0.9	24.8	5.7	69		
9/21/98	02-B			925	12916.6	47143.6	30 : 27.2	87 : 48.3	6.4	26.3	3.0	38		
9/21/98	03-S	0.3		940	12911.8	47139.0	30 : 26.1	87 : 48.7	2.0	26.2	5.1	64		
9/21/98	03-B			940	12911.8	47139.0	30 : 26.1	87 : 48.7	8.6	27.2	1.5	20		
9/21/98	04-S	0.3		955	12903.0	47134.4	30 : 25.0	87 : 49.4	4.7	27.5	4.9	66		
9/21/98	04-B			955	12903.0	47134.4	30 : 25.0	87 : 49.4	6.7	27.6	4.0	53		
9/21/98	05-S	0.3		1025	12901.1	47130.8	30 : 24.1	87 : 49.6	10.6	28.0	3.3	113		
9/21/98	05-B			1025	12901.1	47130.8	30 : 24.1	87 : 49.6	10.2	28.1	8.1	110		
9/21/98	06-S	0.3		1109	12899.6	47128.3	30 : 23.6	87 : 49.7	11.3	28.0	7.8	105		
9/21/98	06-B			1109	12899.6	47128.3	30 : 23.6	87 : 49.7	11.3	28.1	7.9	108		
9/21/98	07-S	0.3		1130	12890.2	47128.3	30 : 23.6	87 : 50.6	11.5	28.1	7.8	106		
9/21/98	07-B			1130	12890.2	47128.3	30 : 23.6	87 : 50.6	11.5	28.1	8.0	108		
9/21/98	08-S	0.3		1140	12893.3	47123.1	30 : 22.4	87 : 50.2	15.5	28.3	6.9	100		
9/21/98	08-B			1140	12893.3	47123.1	30 : 22.4	87 : 50.2	16.7	28.2	6.8	94		

Weeks Bay Cruise WBAY: 42

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
9/21/98	02-S	0.3		72.93	58.11	0.37	5.30		6.32		0.15			1.92		90	1.5		
9/21/98	02-B			107.92	28.85	0.22	16.67		12.52		0.12						7.0		
9/21/98	03-S	0.3		97.80	51.48	0.49	8.64		8.43		0.06			1.86		80	4.4		
9/21/98	03-B			131.28	18.17	1.63	17.41		17.09		0.12						19.6		
9/21/98	04-S	0.3		119.97	43.21	0.52	12.15		15.98		0.05			1.58			17.0		
9/21/98	04-B			131.46	31.73	0.53	14.41		18.55		0.08						22.1		
9/21/98	05-S	0.3		240.43	6.90	0.03	0.22		34.08		0.07			2.55		60	39.1		
9/21/98	05-B			226.06	8.48	0.03	0.34		35.01		0.06						37.4		
9/21/98	06-S	0.3		251.08	5.22	0.03	0.24		37.60		0.07			2.82		40	46.8		
9/21/98	06-B			321.61	5.09	0.03	0.17		44.35		0.07						51.1		
9/21/98	07-S	0.3		303.64	5.70	0.03	0.32		41.86		0.06			3.87		50	55.3		
9/21/98	07-B			295.12	5.78	0.03	0.24		37.71		0.06						53.9		
9/21/98	08-S	0.3		267.37	0.25	0.03	0.17		35.95		0.06			2.66		50	52.5		
9/21/98	08-B			271.80	0.07	0.03	0.11		34.87		0.07						44.0		

Weeks Bay Cruise WBAY: 43

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LAT DEG MIN	LON DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
11/16/98	02-S	0.3		908	12916.6	47143.6	30 : 27.2	30 : 48.3	87 : 48.3	87 : 48.3	0.5	24.4	6.3	70		
11/16/98	02-B			908	12916.6	47143.6	30 : 27.2	30 : 48.3	87 : 48.3	87 : 48.3	6.5	20.5	4.8	55		
11/16/98	03-S	0.3		928	12911.8	47139.0	30 : 26.1	30 : 48.7	87 : 48.7	87 : 48.7	1.5	20.9	6.0	68		
11/16/98	03-B			928	12911.8	47139.0	30 : 26.1	30 : 48.7	87 : 48.7	87 : 48.7	5.7	20.3	5.2	60		
11/16/98	04-S	0.3		944	12903.0	47134.4	30 : 25.0	30 : 49.4	87 : 49.4	87 : 49.4	2.2	20.7	6.0	67		
11/16/98	04-B			944	12903.0	47134.4	30 : 25.0	30 : 49.4	87 : 49.4	87 : 49.4	5.6	20.5	5.1	58		
11/16/98	05-S	0.3		1001	12901.1	47130.8	30 : 24.1	30 : 49.6	87 : 49.6	87 : 49.6	6.7	21.2	7.1	83		
11/16/98	05-B			1001	12901.1	47130.8	30 : 24.1	30 : 49.6	87 : 49.6	87 : 49.6	7.6	21.2	6.7	79		
11/16/98	06-S	0.3		1040	12899.6	47128.3	30 : 23.6	30 : 49.7	87 : 49.7	87 : 49.7	6.4	21.7	7.1	83		
11/16/98	06-B			1040	12899.6	47128.3	30 : 23.6	30 : 49.7	87 : 49.7	87 : 49.7	7.8	21.7	7.1	84		
11/16/98	07-S	0.3		1102	12890.2	47128.3	30 : 23.6	30 : 50.6	87 : 50.6	87 : 50.6	5.4	22.2	7.7	91		
11/16/98	07-B			1102	12890.2	47128.3	30 : 23.6	30 : 50.6	87 : 50.6	87 : 50.6	6.7	22.1	7.6	90		
11/16/98	08-S	0.3		1113	12893.3	47123.1	30 : 22.4	30 : 50.2	87 : 50.2	87 : 50.2	17.8	21.1	7.5	92		
11/16/98	08-B			1113	12893.3	47123.1	30 : 22.4	30 : 50.2	87 : 50.2	87 : 50.2	13.9	21.5	7.8	96		

Weeks Bay Cruise WBAY: 43

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
11/16/98	02-S	0.3		110.96	40.62	0.26	0.87		10.98		0.42			4.16		20	0.0		
11/16/98	02-B			91.71	28.88	0.57	5.70		7.28		0.63						0.1		
11/16/98	03-S	0.3		98.93	54.40	0.41	2.68		6.95		0.27			3.31		30	0.0		
11/16/98	03-B			91.97	44.27	0.72	7.38		14.94		0.29						0.2		
11/16/98	04-S	0.3		92.12	68.43	0.51	3.84		8.53		0.11			1.84		70	0.2		
11/16/98	04-B			76.19	51.48	0.63	8.15		6.49		0.10						0.5		
11/16/98	05-S	0.3		94.70	40.87	0.46	3.26		11.78		0.43			1.85			1.7		
11/16/98	05-B			133.69	30.51	0.62	5.60		15.38		0.06						2.4		
11/16/98	06-S	0.3		73.85	58.91	0.58	4.42		8.90		0.06			1.99		80	0.7		
11/16/98	06-B			131.97	32.21	0.58	3.72		19.47		0.06						2.0		
11/16/98	07-S	0.3		95.32	47.75	0.54	1.98		13.17		0.05			1.67		90	1.6		
11/16/98	07-B			104.25	42.93	0.53	2.65		12.55		0.05						1.8		
11/16/98	08-S	0.3		95.38	31.85	0.54	0.42		12.01		0.06			2.40		90	1.9		
11/16/98	08-B			97.29	28.00	0.41	0.63		13.50		0.06						1.8		

Weeks Bay Cruise WBAY: 44

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
12/16/98	02-S	0.3		952	12916.6	47143.6	30	27.2	87	48.3	0.7	15.9	7.6	77		
12/16/98	02-B			952	12916.6	47143.6	30	27.2	87	48.3	6.1	18.1	4.9	52		
12/16/98	03-S	0.3		1021	12911.8	47139.0	30	26.1	87	48.7	1.3	16.0	7.3	73		
12/16/98	03-B			1021	12911.8	47139.0	30	26.1	87	48.7	5.7	17.4	5.8	63		
12/16/98	04-S	0.3		1038	12903.0	47134.4	30	25.0	87	49.4	1.7	15.8	7.2	74		
12/16/98	04-B			1038	12903.0	47134.4	30	25.0	87	49.4	6.7	16.7	7.3	78		
12/16/98	05-S	0.3		1109	12901.1	47130.8	30	24.1	87	49.6	7.4	15.2	9.4	100		
12/16/98	05-B			1109	12901.1	47130.8	30	24.1	87	49.6	10.1	16.2	10.1	110		
12/16/98	06-S	0.3		1136	12899.6	47128.3	30	23.6	87	49.7	9.4	16.4	9.8	107		
12/16/98	06-B			1136	12899.6	47128.3	30	23.6	87	49.7	9.3	16.9	9.7	107		
12/16/98	07-S	0.3			12890.2	47128.3	30	23.6	87	50.6						
12/16/98	07-B				12890.2	47128.3	30	23.6	87	50.6						
12/16/98	08-S	0.3		1203	12893.3	47123.1	30	22.4	87	50.2	14.2	15.9	11.1	119		
12/16/98	08-B			1203	12893.3	47123.1	30	22.4	87	50.2	14.2	16.4	10.6	117		

Weeks Bay Cruise WBAY: 44

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PV (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
12/16/98	02-S	0.3		43.37	80.31	0.16	2.60		2.78		0.13			0.55		140	0.1		
12/16/98	02-B			60.09	61.51	0.31	11.66		3.21		0.23							0.5	
12/16/98	03-S	0.3		50.88	68.66	0.20	4.15		1.66		0.13			1.52		125	0.8		
12/16/98	03-B			79.17	51.36	0.30	10.19		4.14		0.15						3.4		
12/16/98	04-S	0.3		61.24	56.67	0.23	4.43		2.55		0.12			0.60		110	3.6		
12/16/98	04-B			134.16	40.02	0.20	4.43		13.87		0.12						16.8		
12/16/98	05-S	0.3		131.30	30.85	0.33	2.10		9.49		0.05			0.14		70	1.3		
12/16/98	05-B			784.99	26.69	0.31	1.35		49.17		0.07						2.5		
12/16/98	06-S	0.3		181.72	29.54	0.29	0.92		15.93		0.07			0.48			2.2		
12/16/98	06-B			220.50	27.84	0.27	1.43		20.02		0.09						2.2		
12/16/98	07-S	0.3																	
12/16/98	07-B																		
12/16/98	08-S	0.3		182.00	12.43	0.22	0.59		13.57		0.05			0.67		80	2.0		
12/16/98	08-B			166.34	10.83	0.20	0.33		14.52		0.04						2.2		

Weeks Bay Cruise WBAY: 45

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
2/24/99	02-S	0.3		907	12916.6	47143.6	30	27.2	87	48.3	0.2	14.0	8.4	85		
2/24/99	02-B			907	12916.6	47143.6	30	27.2	87	48.3	0.2	14.0	8.9	87		
2/24/99	03-S	0.3		931	12911.8	47139.0	30	26.1	87	48.7	0.6	14.9	8.1	81		
2/24/99	03-B			931	12911.8	47139.0	30	26.1	87	48.7	0.9	14.9	8.1	80		
2/24/99	04-S	0.3		954	12903.0	47134.4	30	25.0	87	49.4	1.2	14.6	8.6	85		
2/24/99	04-B			954	12903.0	47134.4	30	25.0	87	49.4	1.7	14.0	8.9	87		
2/24/99	05-S	0.3		1022	12901.1	47130.8	30	24.1	87	49.6	2.5	12.8	10.8	106		
2/24/99	05-B			1022	12901.1	47130.8	30	24.1	87	49.6	2.6	13.0	11.0	106		
2/24/99	06-S	0.3		1041	12899.6	47128.3	30	23.6	87	49.7	2.9	12.9	11.2	109		
2/24/99	06-B			1041	12899.6	47128.3	30	23.6	87	49.7	2.9	13.0	11.1	108		
2/24/99	07-S	0.3		1112	12890.2	47128.3	30	23.6	87	50.6	3.2	13.1	11.6	111		
2/24/99	07-B			1112	12890.2	47128.3	30	23.6	87	50.6	3.2	13.1	11.5	111		
2/24/99	08-S	0.3		1125	12893.3	47123.1	30	22.4	87	50.2	4.1	13.0	11.8	116		
2/24/99	08-B			1125	12893.3	47123.1	30	22.4	87	50.2	4.1	13.0	11.9	117		

Weeks Bay Cruise WBAY: 45

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
2/24/99	02-S	0.3		32.41	102.48	0.16	1.88		0.51		0.14			1.04		250		0.6	
2/24/99	02-B			48.11	102.18	0.13	1.35		0.73		0.06							2.0	
2/24/99	03-S	0.3		48.27	94.69	0.21	2.22		1.50		0.06			0.85		180		3.0	
2/24/99	03-B			80.31	90.56	0.27	2.07		5.81		0.08							7.7	
2/24/99	04-S	0.3		67.23	87.01	0.32	1.09		4.57		0.04			0.73		180		6.4	
2/24/99	04-B			110.56	74.43	0.37	0.92		10.16		0.03						14.9		
2/24/99	05-S	0.3		210.08	49.78	0.44	0.34		17.25		0.03			0.25		75		25.5	
2/24/99	05-B			255.31	47.53	0.46	0.28		22.95		0.03						28.9		
2/24/99	06-S	0.3		301.23	38.15	0.46	0.46		27.87		0.18			0.29		40		37.4	
2/24/99	06-B			297.03	38.40	0.46	0.29		27.75		0.04						37.4		
2/24/99	07-S	0.3		288.41	30.60	0.43	0.28		25.86		0.04		0.40			50		35.7	
2/24/99	07-B			331.37	30.59	0.43	0.28		29.28		0.03						35.7		
2/24/99	08-S	0.3		260.24	7.47	0.28	0.32		23.44		0.14			2.29		50		34.0	
2/24/99	08-B			246.07	7.54	0.28	0.29		24.71		0.05						35.7		

Weeks Bay Cruise WBAY: 46

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
4/ 5/99	02-S	0.3		858	12916.6	47143.6	30	27.2	87	48.3	0.0	21.2	6.6	74		
4/ 5/99	02-B			858	12916.6	47143.6	30	27.2	87	48.3	0.0	21.5	6.7	75		
4/ 5/99	03-S	0.3		917	12911.8	47139.0	30	26.1	87	48.7	0.3	21.1	6.1	66		
4/ 5/99	03-B			917	12911.8	47139.0	30	26.1	87	48.7	0.3	21.4	6.1	69		
4/ 5/99	04-S	0.3		932	12803.0	47134.4	30	25.0	87	49.4	0.6	22.2	6.5	78		
4/ 5/99	04-B			932	12803.0	47134.4	30	25.0	87	49.4	0.6	22.2	6.2	71		
4/ 5/99	05-S	0.3		951	12901.1	47130.8	30	24.1	87	49.6	1.0	22.6	6.9	81		
4/ 5/99	05-B			951	12901.1	47130.8	30	24.1	87	49.6	1.0	22.7	6.8	81		
4/ 5/99	06-S	0.3		1003	12899.6	47128.3	30	23.6	87	49.7	2.3	23.4	8.1	98		
4/ 5/99	06-B			1003	12899.6	47128.3	30	23.6	87	49.7	2.3	23.6	7.9	95		
4/ 5/99	07-S	0.3		1032	12890.2	47128.3	30	23.6	87	50.6	3.1	24.0	8.1	97		
4/ 5/99	07-B			1032	12890.2	47128.3	30	23.6	87	50.6	3.0	24.4	7.8	95		
4/ 5/99	08-S	0.3		1044	12893.3	47123.1	30	22.4	87	50.2	5.8	24.2	8.1	99		
4/ 5/99	08-B			1044	12893.3	47123.1	30	22.4	87	50.2	6.7	23.9	7.2	88		

Weeks Bay Cruise WBAY: 46

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	P04 (uM)	DOP (uM)	SI (uM)	ATTEN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
4/ 5/99	02-S	0.3		33.06	79.79	0.15	1.74		3.01		0.12			1.46		130		1.6	
4/ 5/99	02-B			42.32	79.93	0.15	1.64		3.00		0.11							1.4	
4/ 5/99	03-S	0.3		64.76	59.77	0.25	3.64		6.30		0.09			1.90		110		3.5	
4/ 5/99	03-B			72.07	60.19	0.30	4.63		6.30		0.10							3.0	
4/ 5/99	04-S	0.3		99.83	59.90	0.40	4.27		11.60		0.08			2.26		90		12.5	
4/ 5/99	04-B			106.86	58.68	0.45	4.87		11.05		0.06							10.8	
4/ 5/99	05-S	0.3		168.47	55.53	0.69	4.44		17.55		0.07			3.22		60		23.0	
4/ 5/99	05-B			169.37	55.10	0.70	4.67		18.14		0.15							22.1	
4/ 5/99	06-S	0.3		312.29	32.74	0.90	0.36		38.37		0.06			5.11		40		62.1	
4/ 5/99	06-B			301.22	32.97	0.95	0.49		37.01		0.10							66.0	
4/ 5/99	07-S	0.3		348.31	21.05	0.97	0.47		44.34		0.08			4.66		40		73.8	
4/ 5/99	07-B			319.63	21.86	1.01	0.62		38.88		0.15							68.1	
4/ 5/99	08-S	0.3		374.35	4.23	0.40	0.42		46.08		0.08			3.01		50		59.6	
4/ 5/99	08-B			339.20	2.22	0.24	0.26		41.85		0.06							56.7	

Weeks Bay Cruise WBAY: 47

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
4/27/99	02-S	0.3		903	12916.6	47143.6	30	27.2	87	48.3	0.0	24.4	7.5	90		
4/27/99	02-B			903	12916.6	47143.6	30	27.2	87	48.3	0.0	23.9	7.3	86		
4/27/99	03-S	0.3		918	12911.8	47139.0	30	26.1	87	48.7	0.1	24.9	8.0	95		
4/27/99	03-B			918	12911.8	47139.0	30	26.1	87	48.7	0.1	24.5	7.7	93		
4/27/99	04-S	0.3		934	12903.0	47134.4	30	25.0	87	49.4	1.1	25.4	7.4	91		
4/27/99	04-B			934	12903.0	47134.4	30	25.0	87	49.4	1.4	25.7	7.1	86		
4/27/99	05-S	0.3		947	12901.1	47130.8	30	24.1	87	49.6	2.5	26.0	8.1	101		
4/27/99	05-B			947	12901.1	47130.8	30	24.1	87	49.6	2.5	25.9	9.8	98		
4/27/99	06-S	0.3		1000	12899.6	47128.3	30	23.6	87	49.7	3.2	26.1	8.0	101		
4/27/99	06-B			1000	12899.6	47128.3	30	23.6	87	49.7	3.2	26.1	7.8	99		
4/27/99	07-S	0.3		1028	12890.2	47128.3	30	23.6	87	50.6	2.8	26.2	8.2	104		
4/27/99	07-B			1028	12890.2	47128.3	30	23.6	87	50.6	2.9	26.1	8.1	102		
4/27/99	08-S	0.3		1043	12893.3	47123.1	30	22.4	87	50.2	7.0	25.7	7.2	96		
4/27/99	08-B			1043	12893.3	47123.1	30	22.4	87	50.2	7.1	25.7	7.1	90		

Weeks Bay Cruise WBAY: 47

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
4/27/99	02-S	0.3		43.67	91.87	0.22	0.64		4.74		0.04			0.99		250		4.0	
4/27/99	02-B			54.68	94.91	0.20	0.85		3.93		0.04							2.9	
4/27/99	03-S	0.3		51.89	86.64	0.27	0.68		6.63		0.04			1.22		170		4.8	
4/27/99	03-B			57.34	88.66	0.25	1.05		6.56		0.05							4.3	
4/27/99	04-S	0.3		218.62	35.04	0.31	1.81		29.57		0.05			2.80		60		40.0	
4/27/99	04-B			242.12	28.48	0.24	1.29		30.37		0.06						34.0		
4/27/99	05-S	0.3		322.37	7.20	0.08	0.31		39.36		0.05			6.40		50		37.2	
4/27/99	05-B			315.94	7.40	0.09	0.28		37.66		0.04						36.2		
4/27/99	06-S	0.3		340.64	0.47	0.03	0.26		41.49		0.05			5.37		50		37.2	
4/27/99	06-B			411.69	0.34	0.03	0.26		46.98		0.04							37.2	
4/27/99	07-S	0.3		351.11	1.90	0.06	0.30		42.73		0.09			6.62		50		41.1	
4/27/99	07-B				1.95	0.05	0.30				0.05							42.6	
4/27/99	08-S	0.3			0.45	0.03	0.12				0.05			2.54		50		22.7	
4/27/99	08-B			398.94	0.11	0.03	0.11		40.79		0.05							21.3	

Weeks Bay Cruise WBAY: 48

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
6/8/99	02-S	0.3		830	12916.6	47143.6	30	27.2	87	48.3	0.0	25.7	8.6	108		
6/8/99	02-B			830	12916.6	47143.6	30	27.2	87	48.3	0.0	25.2	7.6	92		
6/8/99	03-S	0.3		846	12911.8	47139.0	30	26.1	87	48.7	0.1	26.3	7.7	95		
6/8/99	03-B			846	12911.8	47139.0	30	26.1	87	48.7	1.1	26.8	5.3	68		
6/8/99	04-S	0.3		901	12903.0	47134.4	30	25.0	87	49.4	0.5	27.5	7.2	90		
6/8/99	04-B			901	12903.0	47134.4	30	25.0	87	49.4	3.3	28.3	5.0	65		
6/8/99	05-S	0.3		920	12901.1	47130.8	30	24.1	87	49.6	3.3	28.6	10.6	141		
6/8/99	05-B			920	12901.1	47130.8	30	24.1	87	49.6	5.5	29.0	8.3	112		
6/8/99	06-S	0.3		931	12899.6	47128.3	30	23.6	87	49.7	5.7	28.6	10.2	128		
6/8/99	06-B			931	12899.6	47128.3	30	23.6	87	49.7	6.9	28.7	8.2	110		
6/8/99	07-S	0.3		950	12890.2	47128.3	30	23.6	87	50.6	3.9	28.2	9.2	129		
6/8/99	07-B			950	12890.2	47128.3	30	23.6	87	50.6	4.2	28.3	9.0	118		
6/8/99	08-S	0.3		1005	12893.3	47123.1	30	22.4	87	50.2	5.2	28.7	10.0	130		
6/8/99	08-B			1005	12893.3	47123.1	30	22.4	87	50.2	6.0	28.5	9.7	128		

Weeks Bay Cruise WBAY: 48

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
6/8/99	02-S	0.3			81.09	0.26	0.85				0.05					160	11.9		
6/8/99	02-B				86.92	0.24	1.20				0.05							5.1	
6/8/99	03-S	0.3			67.93	0.28	1.35				0.03					150	6.8		
6/8/99	03-B				46.99	0.29	7.09				0.04						6.8		
6/8/99	04-S	0.3			49.08	0.31	3.81				0.03					100	10.2		
6/8/99	04-B				20.11	0.23	1.62				0.11						31.5		
6/8/99	05-S	0.3			2.56	0.45	0.51				0.17					60	51.1		
6/8/99	05-B				0.83	0.25	0.58				0.62						65.7		
6/8/99	06-S	0.3			1.70	0.09	0.75				0.13					70	26.8		
6/8/99	06-B				1.09	0.08	0.32				0.22						32.6		
6/8/99	07-S	0.3			5.14	0.17	0.50				0.12					80	25.5		
6/8/99	07-B				4.49	0.17	0.48				0.17						29.8		
6/8/99	08-S	0.3			0.48	0.03	0.55				0.08					80	19.9		
6/8/99	08-B				0.42	0.03	0.32				0.07						19.9		

Weeks Bay Cruise WBAY: 49

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
7/6/99	02-S	0.3		953	12916.6	47143.6	30 : 27.2	87 : 48.3	0.0	27.0	8.4	107		
7/6/99	02-B			953	12916.6	47143.6	30 : 27.2	87 : 48.3	0.8	27.0	~ 5.9	86		
7/6/99	03-S	0.3		1017	12911.8	47139.0	30 : 26.1	87 : 48.7	0.4	28.4	7.8	102		
7/6/99	03-B			1017	12911.8	47139.0	30 : 26.1	87 : 48.7	1.6	28.5	6.4	82		
7/6/99	04-S	0.3		1041	12903.0	47134.4	30 : 25.0	87 : 49.4	1.4	30.0	7.5	103		
7/6/99	04-B			1041	12903.0	47134.4	30 : 25.0	87 : 49.4	2.2	30.3	6.7	89		
7/6/99	05-S	0.3		1215	12901.1	47130.8	30 : 24.1	87 : 49.6	3.6	32.0	11.5	160		
7/6/99	05-B			1215	12901.1	47130.8	30 : 24.1	87 : 49.6	3.8	31.5	11.3	162		
7/6/99	06-S	0.3		1152	12899.6	47128.3	30 : 23.6	87 : 49.7	5.1	31.9	9.7	136		
7/6/99	06-B			1152	12899.6	47128.3	30 : 23.6	87 : 49.7	5.1	31.5	9.6	136		
7/6/99	07-S	0.3		1139	12890.2	47128.3	30 : 23.6	87 : 50.6	4.0	31.7	8.9	131		
7/6/99	07-B			1139	12890.2	47128.3	30 : 23.6	87 : 50.6	4.2	30.9	9.7	135		
7/6/99	08-S	0.3		1124	12893.3	47123.1	30 : 22.4	87 : 50.2	5.7	31.5	9.3	131		
7/6/99	08-B			1124	12893.3	47123.1	30 : 22.4	87 : 50.2	5.7	31.8	9.4	136		

Weeks Bay Cruise WBAY: 49

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/6/99	02-S	0.3			87.20	0.26	0.58				0.09			1.40		140	6.8		
7/6/99	02-B				72.34	0.44	7.25				0.09							4.5	
7/6/99	03-S	0.3			73.33	0.35	3.93				0.09			1.89		160	4.3		
7/6/99	03-B				51.48	0.36	9.81				0.09						6.7		
7/6/99	04-S	0.3			44.73	0.34	5.95				0.08			2.24		105	5.3		
7/6/99	04-B				31.58	0.28	5.52				0.08						23.3		
7/6/99	05-S	0.3			1.25	0.03	0.56				0.15			2.87		55	38.0		
7/6/99	05-B				0.62	0.03	0.40				0.20						47.5		
7/6/99	06-S	0.3			0.58	0.03	0.49				0.12			3.81		35	38.5		
7/6/99	06-B				0.58	0.03	0.37				0.12						35.4		
7/6/99	07-S	0.3			0.57	0.03	0.29				0.11			4.30		50	15.1		
7/6/99	07-B				0.58	0.03	0.33				0.11						31.6		
7/6/99	08-S	0.3			0.57	0.03	0.35				0.11			3.76		50	14.8		
7/6/99	08-B				0.57	0.03	0.24				0.10						26.2		

Weeks Bay Cruise WBAY: 50

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
8/3/99	02-S	0.3		1026	12916.6	47143.6	30	27.2	87	48.3	0.0	28.5	6.0	80		
8/3/99	02-B			1026	12916.6	47143.6	30	27.2	87	48.3	0.0	27.0	5.8	74		
8/3/99	03-S	0.3		1000	12911.8	47139.0	30	26.1	87	48.7	0.0	28.5	6.8	86		
8/3/99	03-B			1000	12911.8	47139.0	30	26.1	87	48.7	0.0	28.4	6.0	78		
8/3/99	04-S	0.3		945	12903.0	47134.4	30	25.0	87	49.4	0.1	29.1	6.7	88		
8/3/99	04-B			945	12903.0	47134.4	30	25.0	87	49.4	0.6	29.5	5.5	71		
8/3/99	05-S	0.3		840	12901.1	47130.8	30	24.1	87	49.6	2.0	30.6	7.3	98		
8/3/99	05-B			840	12901.1	47130.8	30	24.1	87	49.6	2.2	30.6	7.3	98		
8/3/99	06-S	0.3		829	12899.6	47128.3	30	23.6	87	49.7	2.9	30.8	7.4	101		
8/3/99	06-B			829	12899.6	47128.3	30	23.6	87	49.7	3.1	30.8	6.5	90		
8/3/99	07-S	0.3		819	12890.2	47128.3	30	23.6	87	50.6	2.6	30.1	7.6	104		
8/3/99	07-B			819	12890.2	47128.3	30	23.6	87	50.6	2.9	30.1	7.4	99		
8/3/99	08-S	0.3		804	12893.3	47123.1	30	22.4	87	50.2	3.9	30.2	8.1	111		
8/3/99	08-B			804	12893.3	47123.1	30	22.4	87	50.2	4.5	30.4	6.7	88		

Weeks Bay Cruise WBAY: 50

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
8/3/99	02-S	0.3			60.83	0.20	1.51				0.15			1.95		60			
8/3/99	02-B				64.50	0.19	1.91				0.20								
8/3/99	03-S	0.3			45.19	0.37	0.65				0.14			2.71		50			
8/3/99	03-B				43.72	0.30	1.66				0.17								
8/3/99	04-S	0.3			54.74	0.32	2.91				0.15			2.06		70			
8/3/99	04-B				46.23	0.29	5.80				0.13								
8/3/99	05-S	0.3			19.37	0.14	0.42				0.12			2.73		50			
8/3/99	05-B				14.13	0.13	0.57				0.08								
8/3/99	06-S	0.3			7.67	0.10	0.64				0.08			2.88		40			
8/3/99	06-B				6.99	0.10	0.64				0.07								
8/3/99	07-S	0.3			16.16	0.12	0.72				0.07			5.63		35			
8/3/99	07-B				14.90	0.12	0.80				0.07								
8/3/99	08-S	0.3			2.69	0.05	0.26				0.07			2.28		40			
8/3/99	08-B				2.06	0.06	0.19				0.07								

Weeks Bay Cruise WBAY: 51

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
9/9/99	02-S	0.3		903	12916.6	47143.6	30 : 27.2	87 : 48.3	1.9	26.0	5.7	71		
9/9/99	02-B			903	12916.6	47143.6	30 : 27.2	87 : 48.3	7.0	27.1	2.7	36		
9/9/99	03-S	0.3		912	12911.8	47139.0	30 : 26.1	87 : 48.7	3.9	27.6	5.8	77		
9/9/99	03-B			912	12911.8	47139.0	30 : 26.1	87 : 48.7	3.4	28.3	3.4	45		
9/9/99	04-S	0.3		920	12903.0	47134.4	30 : 25.0	87 : 49.4	6.0	28.7	6.1	82		
9/9/99	04-B			920	12903.0	47134.4	30 : 25.0	87 : 49.4	9.3	29.2	4.9	67		
9/9/99	05-S	0.3		927	12901.1	47130.8	30 : 24.1	87 : 49.6	12.0	28.6	6.2	83		
9/9/99	05-B			927	12901.1	47130.8	30 : 24.1	87 : 49.6	11.9	28.6	5.9	81		
9/9/99	06-S	0.3		935	12899.6	47128.3	30 : 23.6	87 : 49.7	13.4	28.6	5.5	78		
9/9/99	06-B			935	12899.6	47128.3	30 : 23.6	87 : 49.7	13.5	28.6	5.5	76		
9/9/99	07-S	0.3		940	12890.2	47128.3	30 : 23.6	87 : 50.6	13.2	28.2	5.8	80		
9/9/99	07-B			940	12890.2	47128.3	30 : 23.6	87 : 50.6	13.6	28.0	5.7	79		
9/9/99	08-S	0.3		825	12893.3	47123.1	30 : 22.4	87 : 50.2	18.1	28.9	3.9	54		
9/9/99	08-B			825	12893.3	47123.1	30 : 22.4	87 : 50.2	18.0	28.3	4.1	58		

Weeks Bay Cruise WBAY: 51

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
9/9/99	02-S	0.3			78.36	0.38	5.22				0.08					170	0.0		
9/9/99	02-B				32.43	0.93	17.23				0.06						0.3		
9/9/99	03-S	0.3			57.06	0.32	5.27				0.08					150	0.0		
9/9/99	03-B				29.92	0.22	9.71				0.13						0.4		
9/9/99	04-S	0.3			40.29	0.22	4.72				0.13					100	0.3		
9/9/99	04-B				19.21	0.13	4.43				0.10						0.7		
9/9/99	05-S	0.3			3.31	0.03	0.35				0.10					40	1.0		
9/9/99	05-B				3.05	0.03	0.17				0.07						1.2		
9/9/99	06-S	0.3			0.98	0.03	0.13				0.14					60	0.8		
9/9/99	06-B				1.00	0.03	0.27				0.11					70	1.1		
9/9/99	07-S	0.3			1.35	0.04	0.25				0.10						1.1		
9/9/99	07-B				0.90	0.04	0.17				0.09						0.8		
9/9/99	08-S	0.3			0.13	0.03	2.57				0.18					40	0.8		
9/9/99	08-B				0.07	0.03	1.39				0.16						0.8		

Weeks Bay Cruise WBAY: 52

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
12/16/99	02-S	0.3		1121	12916.6	47143.6	30	27.2	87	48.3	1.2	14.4	7.8	77		
12/16/99	02-B			1121	12916.6	47143.6	30	27.2	87	48.3	7.8	16.1	4.3	48		
12/16/99	03-S	0.3		1141	12911.8	47139.0	30	26.1	87	48.7	2.2	14.4	7.3	72		
12/16/99	03-B			1141	12911.8	47139.0	30	26.1	87	48.7	10.3	16.5	4.4	48		
12/16/99	04-S	0.3		1201	12903.0	47134.4	30	25.0	87	49.4	4.4	15.1	7.1	72		
12/16/99	04-B			1201	12903.0	47134.4	30	25.0	87	49.4	14.8	16.3	7.8	87		
12/16/99	05-S	0.3		1304	12901.1	47130.8	30	24.1	87	49.6	14.8	15.7	10.1	111		
12/16/99	05-B			1304	12901.1	47130.8	30	24.1	87	49.6	14.5	16.4	10.1	112		
12/16/99	06-S	0.3		1308	12899.6	47128.3	30	23.6	87	49.7	14.4	14.1	9.6	103		
12/16/99	06-B			1308	12899.6	47128.3	30	23.6	87	49.7	14.3	13.7	9.6	102		
12/16/99	07-S	0.3			12890.2	47128.3	30	23.6	87	50.6						
12/16/99	07-B				12890.2	47128.3	30	23.6	87	50.6						
12/16/99	08-S	0.3		1319	12893.3	47123.1	30	22.4	87	50.2	15.1	14.0	9.4	104		
12/16/99	08-B			1319	12893.3	47123.1	30	22.4	87	50.2	16.3	13.9	9.6	103		

Weeks Bay Cruise WBAY: 52

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
12/16/99	02-S	0.3			87.38	0.80	3.84				0.12			0.90		200		0.5	
12/16/99	02-B				45.80	0.72	19.35				0.15							1.4	
12/16/99	03-S	0.3			79.10	0.32	5.91				0.12			1.25		200		0.6	
12/16/99	03-B				38.72	0.45	15.27				0.12							7.6	
12/16/99	04-S	0.3			68.52	0.36	7.71				0.12			1.47		160		1.9	
12/16/99	04-B				18.01	0.20	4.52				0.07							28.1	
12/16/99	05-S	0.3			19.01	0.44	1.41				0.08					60		33.3	
12/16/99	05-B				18.97	0.44	0.92				0.07							34.2	
12/16/99	06-S	0.3			23.79	0.41	1.30				0.06			1.52		60		19.8	
12/16/99	06-B				23.46	0.42	1.13				0.05					60		23.4	
12/16/99	07-S	0.3																	
12/16/99	07-B																		
12/16/99	08-S	0.3			15.89	0.32	0.56				0.01			1.66		100		18.0	
12/16/99	08-B				12.96	0.29	0.27				0.02							18.9	

Weeks Bay Cruise WBAY: 53

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
2/16/00	02-S	0.3		850	12917.0	47143.6	30 :	:	1.0	17.8	7.5	80		
2/16/00	02-B			850			30 :	:	8.8	16.5	5.7	62		
2/16/00	03-S	0.3		834	12911.7	47139.0	30 :	:	1.9	17.9	7.9	84		
2/16/00	03-B		3.5	834			30 :	:	8.0	17.3	7.2	76		
2/16/00	04-S	0.3		818	12903.2	47134.3	30 :	:	2.7	17.8	8.3	89		
2/16/00	04-B		2.6	818			30 :	:	4.9	18.0	8.2	89		
2/16/00	05-S	0.3		757	12901.0	47130.9	30 :	:	10.2	18.8	9.2	105		
2/16/00	05-B		0.9	757			30 :	:	11.9	18.8	8.8	103		
2/16/00	06-S	0.3		743	12899.7	47128.2	30 :	:	7.6	18.3	10.0	111		
2/16/00	06-B		0.8	743			30 :	:	10.1	18.4	9.6	108		
2/16/00	07-S	0.3		918	12890.2	47128.3	30 :	:	7.7	18.2	10.5	118		
2/16/00	07-B		0.7	918			30 :	:	8.7	18.4	10.5	115		
2/16/00	08-S	0.3		726	12893.1	47123.2	30 :	:	9.6	18.4	10.0	111		
2/16/00	08-B			726			30 :	:	12.1	18.5	9.1	104		

Weeks Bay Cruise WBAY: 53

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
2/16/00	02-S	0.3			96.05	0.22	1.81				0.13					190	2.1		
2/16/00	02-B				38.55	0.46	8.08				0.02						42.9		
2/16/00	03-S	0.3			91.73	0.28	1.47				0.12					150	5.6		
2/16/00	03-B				47.54	0.38	4.03				0.02						46.2		
2/16/00	04-S	0.3			79.73	0.30	1.03				0.11					120	13.0		
2/16/00	04-B				67.24	0.32	1.80				0.11						27.8		
2/16/00	05-S	0.3			22.27	0.36	0.20				0.02					60	63.0		
2/16/00	05-B				13.12	0.31	0.19				0.02						66.6		
2/16/00	06-S	0.3			47.70	0.40	0.17				0.02					60	32.6		
2/16/00	06-B				35.05	0.34	0.23				0.02						49.3		
2/16/00	07-S	0.3			2.19	0.17	0.21				0.07					60	23.8		
2/16/00	07-B				31.22	0.40	0.39				0.03						27.9		
2/16/00	08-S	0.3			32.80	0.33	0.24				0.02					70	35.0		
2/16/00	08-B				16.94	0.25	0.31				0.02						46.0		

Weeks Bay Cruise WBAY: 54

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG MIN	LON DEG MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
3/14/00	02-S	0.3		823	12916.7	47143.9	30 :	:	0.9	16.0	7.3	74		
3/14/00	02-B			823			30 :	:	5.6	18.8	3.1	34		
3/14/00	03-S	0.3		844	12911.8	47139.0	30 :	:	2.2	17.0	7.3	77		
3/14/00	03-B			844			30 :	:	6.5	18.4	5.1	57		
3/14/00	04-S	0.3		905	12902.8	47135.0	30 :	:	3.9	18.0	6.6	74		
3/14/00	04-B			905			30 :	:	6.8	18.2	6.9	76		
3/14/00	05-S	0.3		918	12901.2	47131.1	30 :	:	8.9	17.1	9.5	105		
3/14/00	05-B			918			30 :	:	9.0	17.3	9.5	105		
3/14/00	06-S	0.3		933	12899.7	47128.3	30 :	:	9.3	16.8	9.6	104		
3/14/00	06-B			933			30 :	:	9.9	17.0	9.0	99		
3/14/00	07-S	0.3		955	12892.9	47128.4	30 :	:	9.3	17.4	9.0	100		
3/14/00	07-B			955			30 :	:	9.3	17.4	8.8	98		
3/14/00	08-S	0.3		1022	12893.3	47123.2	30 :	:	13.6	17.8	8.3	95		
3/14/00	08-B			1022			30 :	:	14.8	18.0	7.0	81		

Weeks Bay Cruise WBAY: 54

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PN (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
3/14/00	02-S	0.3			91.92	0.47	5.00				0.11			1.29		170	2.1		
3/14/00	02-B				51.81	3.44	22.33				0.12						7.2		
3/14/00	03-S	0.3			80.31	0.73	6.70				0.12			0.94		140	3.9		
3/14/00	03-B				45.52	0.72	11.52				0.08						19.1		
3/14/00	04-S	0.3			63.32	0.74	8.12				0.08			1.74		100	6.0		
3/14/00	04-B				39.41	0.60	6.76				0.08						24.1		
3/14/00	05-S	0.3			28.55	0.51	0.33				0.02			3.26		40	20.9		
3/14/00	05-B																		
3/14/00	06-S	0.3			25.79	0.48	0.39				0.02			2.74		50	22.7		
3/14/00	06-B																		
3/14/00	07-S	0.3			21.65	0.44	1.86				0.08			2.31		30	31.1		
3/14/00	07-B																		
3/14/00	08-S	0.3			33.93	0.40	0.24				0.04			1.36		50	17.7		
3/14/00	08-B				1.06	0.12	0.22				0.06						15.8		

Weeks Bay Cruise WBAY: 55

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
4/19/00	02-S			844	12916.9	47143.8	30	:	:	:	0.1	21.0	7.0	79		
4/19/00	02-B			844	12916.9	47143.8	30	:	:	:	0.1	20.8	6.5	73		
4/19/00	03-S			829	12912.0	47139.1	30	:	:	:	0.3	21.5	6.7	76		
4/19/00	03-B	4.5	4.5	829	12912.0	47139.1	30	:	:	:	0.6	21.3	5.6	64		
4/19/00	04-S			816	12903.3	47134.3	30	:	:	:	0.9	21.7	6.7	77		
4/19/00	04-B	2.3	2.3	816	12903.3	47134.3	30	:	:	:	1.0	21.7	6.7	77		
4/19/00	05-S			803	12901.1	47130.8	30	:	:	:	2.7	22.5	8.2	95		
4/19/00	05-B	1.0	1.0	803	12901.1	47130.8	30	:	:	:	2.6	22.4	7.9	93		
4/19/00	06-S			752	12899.7	47128.3	30	:	:	:	2.7	22.2	7.6	89		
4/19/00	06-B	1.3	1.3	752	12899.7	47128.3	30	:	:	:	2.6	22.1	7.7	90		
4/19/00	07-S			740	12890.6	47128.1	30	:	:	:	2.7	22.5	8.9	105		
4/19/00	07-B	1.0	1.0	740	12890.6	47128.1	30	:	:	:	2.7	22.4	9.0	105		
4/19/00	08-S			725	12894.0	47123.8		:	:	:	2.7	22.4	6.9	80		
4/19/00	08-B	6.0	6.0	725	12894.0	47123.8		:	:	:	2.7	22.3	6.8	80		

Weeks Bay Cruise WBAY: 55

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (μ M)	PC (μ M)	NO3 (μ M)	NO2 (μ M)	NH4 (μ M)	DON (μ M)	PN (μ M)	PP (μ M)	PO4 (μ M)	DOP (μ M)	SI (μ M)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m ² /d)
4/19/00	02-S		93.72	0.23	1.16						0.08			1.39		150	4.0		
4/19/00	02-B		92.37	0.27	2.31					0.10								3.1	
4/19/00	03-S		86.85	0.37	1.45					0.10				1.65		100	8.6		
4/19/00	03-B	4.5	77.58	0.39	4.37					0.09							11.3		
4/19/00	04-S		64.59	0.39	1.55					0.09				2.05		100	10.4		
4/19/00	04-B	2.3	60.44	0.36	1.87					0.08							14.3		
4/19/00	05-S		4.50	0.03	0.24					0.08				4.11		30	45.9		
4/19/00	05-B	1.0																	
4/19/00	06-S		1.29	0.03	0.36					0.07				3.76		30	57.9		
4/19/00	06-B	1.3																	
4/19/00	07-S		0.64	0.03	0.18					0.07				3.74		30	51.4		
4/19/00	07-B	1.0																	
4/19/00	08-S		0.64	0.03	0.26					0.09				4.42		20	48.8		
4/19/00	08-B	6.0	0.69	0.03	0.23					0.09							43.2		

Weeks Bay Cruise WBAY: 56

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (μ M)
5/16/00	02-S			937	12916.8	47143.9					0.1	25.2	6.6	80		
5/16/00	02-B	4.0	4.0	937			30				0.1	24.9	6.4	77		
5/16/00	03-S			920	12911.8	47139.2	30				0.5	25.5	6.7	81		
5/16/00	03-B	4.0	4.0	920	12911.8	47139.2	30				1.2	25.8	5.5	68		
5/16/00	04-S			901	12902.9	47135.0	30				1.2	25.8	7.7	96		
5/16/00	04-B			901			30				1.5	25.5	7.6	93		
5/16/00	05-S			847	12901.0	47130.9	30				2.7	24.4	8.3	100		
5/16/00	05-B	1.0	1.0	847			30				2.7	24.4	8.1	98		
5/16/00	06-S			834	12899.6	47126.2	30				3.4	23.7	8.7	104		
5/16/00	06-B	1.3	1.3	834			30				3.6	23.6	8.3	100		
5/16/00	07-S			822	12891.3	47128.1	30				3.5	23.6	8.4	101		
5/16/00	07-B	1.0	1.0	822			30				3.5	23.5	8.2	98		
5/16/00	08-S			808	12893.3	47123.2	30				8.1	23.7	7.0	87		
5/16/00	08-B	3.0	3.0	808			30				8.2	23.7	6.9	87		

Weeks Bay Cruise WBAY: 56

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (μ M)	PC (μ M)	NO3 (μ M)	NO2 (μ M)	NH4 (μ M)	DON (μ M)	PN (μ M)	PP (μ M)	PO4 (μ M)	DOP (μ M)	SI (μ M)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
5/16/00	02-S				88.59	0.30	1.93				0.09			1.31		130	6.3		
5/16/00	02-B	4.0			89.16	0.29	2.34				0.09								4.5
5/16/00	03-S				72.50	0.34	3.54				0.09			1.54		60	9.4		
5/16/00	03-B	4.0			52.01	0.30	5.70				0.09						14.7		
5/16/00	04-S				48.12	0.30	0.70				0.09			2.17		90	15.3		
5/16/00	04-B				37.86	0.27	0.71				0.10						21.8		
5/16/00	05-S				1.48	0.03	0.30				0.10			3.49		30	30.8		
5/16/00	05-B	1.0			0.67	0.03	0.20				0.10						31.8		
5/16/00	06-S				0.62	0.03	0.23				0.10			3.23		30	30.0		
5/16/00	06-B	1.3			0.62	0.03	0.19				0.10						32.1		
5/16/00	07-S				2.39	0.06	0.22				0.10			2.90		30	22.8		
5/16/00	07-B	1.0			2.11	0.06	0.25				0.10						24.6		
5/16/00	08-S				0.21	0.02	0.45				0.07			2.12		50	12.3		
5/16/00	08-B	3.0			0.17	0.03	0.29				0.09						14.2		