

Technical Report 2002-001

Mobile Bay Data Report

MB-59 to MB-81 Cruises
(December 1997 – December 1999)

Jonathan R. Pennock

Chad Lopez

Jean L. W. Cowan

Fennel Blythe

Leslie J. Gallagher

The research was funded by the Alabama Marine Environmental Sciences Consortium and through a grant provided by Mississippi-Alabama Sea Grant (RER41PD).

Table of Contents

Table of Contents.....	2
Purpose of Study.....	4
Acknowledgements	4
Station and Field Sampling Procedures.....	4
Laboratory Methods.....	5
References	7
Map of Mobile Bay	8
MB-59 (10 December 1997).....	9
MB-60 (29 January 1998).....	13
MB-61 (27 February 1998).....	17
MB-62 (25 March 1998)	21
MB-63 (7 May 1998).....	25
MB-64 (11 June 1998).....	29
MB-65 (15 July 1998)	33
MB-66 (25 August 1998).....	37
MB-67 (23 September 1998)	41
MB-68 (20 October 1998).....	43
MB-69 (12 November 1998).....	47
MB-70 (7 December 1998).....	51
MB-71 (3 February 1999).....	55
MB-72 (1 March 1999)	59

MB-73 (25 March 1999)	61
MB-74 (21 April 1999).....	65
MB-75 (19 May 1999).....	69
MB-76 (22 June 1999).....	73
MB-77 (19 July 1999)	77
MB-78 (25 August 1999).....	79
MB-79 (13 October 1999).....	85
MB-80 (10 November 1999).....	89
MB-81 (6 December 1999).....	93

Purpose of Study

This research was designed to examine the effects of river discharge, suspended sediment dynamics and nutrient inputs on phytoplankton production in the Mobile Bay ecosystem. This report contains physical, chemical and biological data collected during a three-year series of 19 near-monthly surveys carried out in Mobile Bay between December 1997 and August 1999. Surveys consisted of 19 Bay stations (in Mobile Bay between the Mobile River delta and the mouth of Mobile Bay including Bon Secour Bay), and 12 Gulf stations (from the mouth of Mobile Bay to Mississippi Sound and out to the Gulf of Mexico from Dauphin Island east to Gulf Shores, Alabama). See page 6 for a general map with all station locations.

Acknowledgements

We would like to acknowledge Cary Burns for her efforts on numerous field surveys. In addition, the efforts of the technical support staff, in particular, Alan Gunter, Mike Dardeau, Russell Wilson, and Rodney Collier, are greatly appreciated.

Station and Field Sampling Procedures

Water samples were primarily obtained from 23' outboard research vessels, Sea Ox and Robalo. At each station, local time, Loran C and bottom depth were recorded. The following measurements were made at each station:

Hydrographic Sampling

A Hydrolab Surveyor II was used to collect hydrographic profiles of salinity, temperature and dissolved oxygen, and pH. These measurements were taken at discrete sampling depths 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 cm increments through the photic zone. The diffuse attenuation coefficient for PAR ($k; m^{-1}$) 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 20cm diameter secchi disk. Secchi measurements were 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. In addition, a sample for dissolved inorganic carbon (DIC) was collected in glass scintillation vial, capped without air contamination, and returned to the laboratory for immediate analysis. Finally, 20 ml samples for phytoplankton taxonomy were collected and fixed with 2 drops of Lugol's Solution. Upon completion of water collection, temperature and salinity were measured in all discrete samples using an Orion temperature/conductivity probe with a resolution of 0.1 °C, and 0.1 ppt. These later discrete measurements are reported in this data set.

Laboratory Methods

In the laboratory, samples were split into dissolved and particulate fractions using Whatman GF/C glass fiber filters that had been muffled (450 °C for 2 hours) to remove organic contamination. These filters have a nominal pore size of 1.2 µm. Specific processing, storage and analytical procedures are detailed below.

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), 0.02 µM (NH₄), and 0.05 µM (SiO₂). 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/C) sample water that had been ampulated in muffled (450° for 2hrs) glass vials, sealed and frozen until analysis. Once thawed, samples was acidified with HCl and sparged with zero-grade air 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 $10\mu\text{M}$ and standard error of $\pm 5\%$ at $300\mu\text{M}$.

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 the TDN to give DON. This method has a detection limit of $0.6\mu\text{M}$ with a standard error of 1% .

Dissolved Organic Phosphorus

Dissolved organic phosphorus (DOP) was determined using the high temperature combustion method of Solorzano 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 Mobile 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/C 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^{-1} 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/C 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 $1.0\mu\text{M}$ with a standard error of 5% .

Particulate Organic Phosphorus

Particulate Organic Phosphorus (POP) was determined by conversion of particulate organic phosphorous to inorganic phosphorous by high temperature combustion according to the method of Solorzano and Sharp (1980). This method has a detection limit of $1.0\mu\text{M}$ with a standard error of $\pm 1\%$.

Phytoplankton Biomass and Production

Chlorophyll-a

Chlorophyll a was collected on Whatman GF/C 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 $0.01 \mu\text{g l}^{-1}$ with a standard error of 5%.

Phytoplankton Production

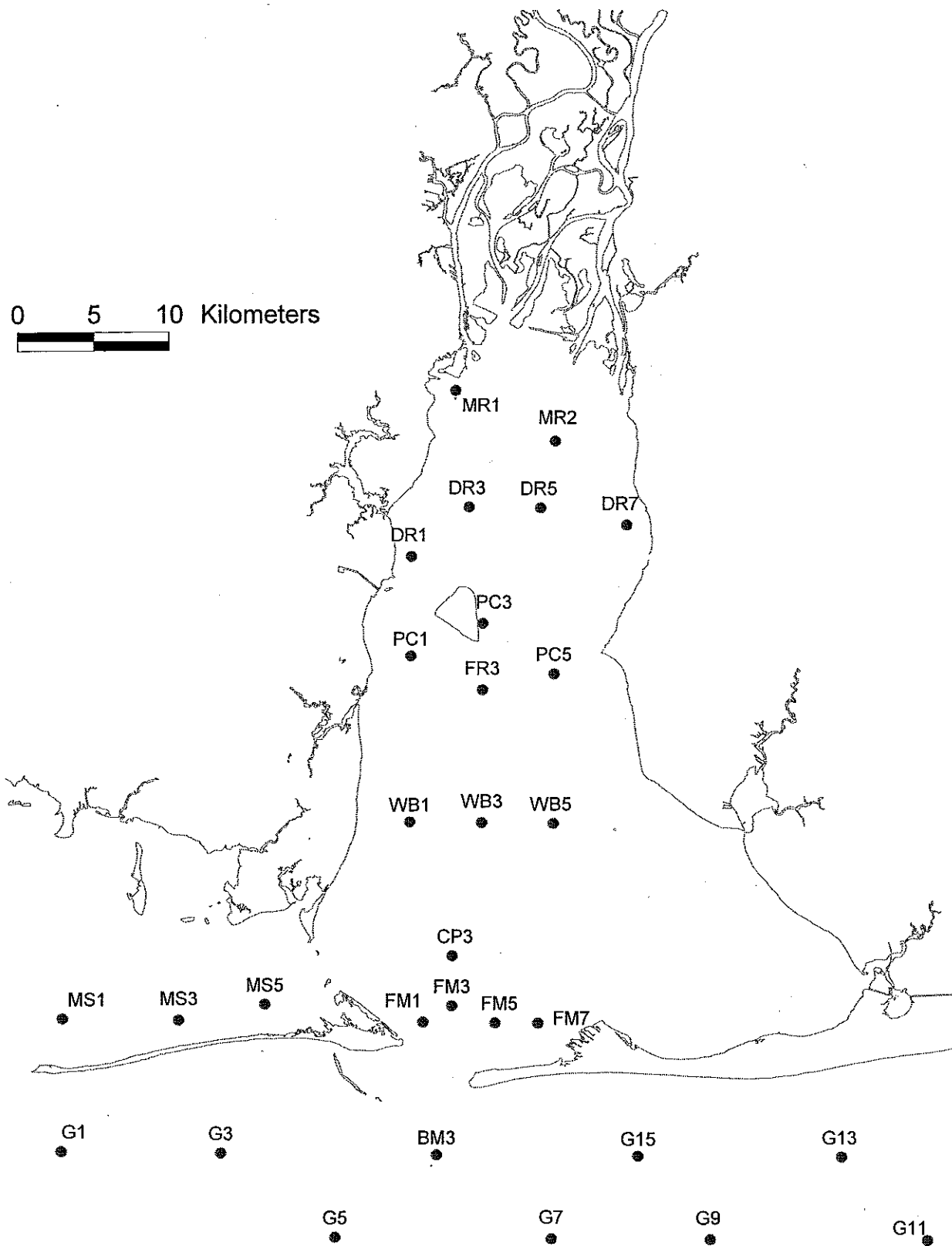
Phytoplankton production was measured using the ^{14}C method. For each sample, $2 \mu\text{Ci}$ of $\text{NaH}_2^{14}\text{CO}_3$ was spiked into 125 ml of sample and the incorporation of ^{14}C into particulate matter was quantified using 24-hour simulated in situ incubations. These incubations were carried out at six light intensities (100, 57, 26, 9, 5, 1% ambient) in a flow-through deck incubator (Pennock and Sharp, 1986). Incubations were terminated by filtering the particulate matter onto Whatman GF/C 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 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.

References

- D'Elia, C.F., P.A. Steudler, and N. Corwin. 1977. Determination of total nitrogen in aqueous samples using persulfate digestion. *Limnology & Oceanography*. 22:760-764.
- Pennock, J. P. and J. H. Sharp. 1986. Phytoplankton production in the Delaware Estuary: temporal and spatial variability. *Marine Ecology Progress Series* 34:143-155.
- Sharp, J.H. 1974. Improved analysis for "particulate" organic carbon and nitrogen from seawater. *Limnology & Oceanography*. 19:984-989.
- Shimadzu Corp. 1991. Total organic carbon analyzer instrument manual. Columbia, MD.
- Solorzano, L. and J.H. Sharp. 1980. Determination of total phosphorous and particulate phosphorous in natural water. *Limnology & Oceanography*. 25:754-760.
- Strickland, J.D.H., and T.R. Parsons. 1972. A Practical Handbook for Seawater Analysis. Fisheries Research Board of Canada pp. 121-125; 201-203.

Map of Mobile Bay



Mobile Bay Cruise MB: 59

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)
12/10/97	FM1-S	0.3		750	12748.2	47092.9	30	15.7	88	3.7	10.6	15.3	14.2			1314
12/10/97	FM1-B	3.8	4.8	750			30	15.7	88	3.7	16.9	14.9	8.0			
12/10/97	FM3-S	0.3		810	12762.5	47091.9	30	15.5	88	2.3	12.1	14.4	9.7			1371
12/10/97	FM3-B	13.7	14.7	810			30	15.5	88	2.3	32.8	17.3	6.7			
12/10/97	FM5-S	0.3		822	12778.8	47092.5	30	15.7	88	0.8	11.2	14.4	9.4			1340
12/10/97	FM5-B	3.2	4.2	822			30	15.7	88	0.8	19.4	15.1	7.9			
12/10/97	FM7-S	0.3		834	12797.9	47092.2	30	15.5	87	58.9	11.1	14.3	9.3			1344
12/10/97	FM7-B	2.9	3.9	834			30	15.5	87	58.9	22.7	15.5	7.1			
12/10/97	CP3-S	0.3		855	12768.4	47103.4	30	18.3	88	1.9	8.6	14.3	9.9			1225
12/10/97	CP3-B	12.8	13.8	855			30	18.3	88	1.9	32.6	17.4	6.5			
12/10/97	WB1-S	0.3		924	12745.1	47120.5	30	22.6	88	4.4	6.9	14.4	9.2			1157
12/10/97	WB1-B	2.6	3.6	924			30	22.6	88	4.4	7.6	14.1	9.1			
12/10/97	WB3-S	0.3		941	12777.4	47120.9	30	22.6	88	1.3	5.3	14.6	9.7			1076
12/10/97	WB3-B	12.5	13.5	941			30	22.6	88	1.3	32.4	17.7	6.3			
12/10/97	WB5-S	0.3		1000	12809.9	47122.3	30	22.7	87	58.1	7.2	14.0	9.9			1158
12/10/97	WB5-B	2.6	3.6	1000			30	22.7	87	58.1	12.8	14.4	7.8			
12/10/97	FR3-S	0.3		1027	12784.3	47140.1	30	27.4	88	1.0	2.8	15.7	9.3			971
12/10/97	FR3-B	13.7	14.7	1027			30	27.4	88	1.0	32.6	18.0	6.3			
12/10/97	PC1-S	0.3		1117	12753.4	47145.7	30	29.1	88	4.0	5.5	14.7	10.4			1071
12/10/97	PC1-B	2.0	3.0	1117			30	29.1	88	4.0	6.6	14.4	9.7			
12/10/97	PC3-S	0.3		1100	12783.4	47146.2	30	29.0	88	1.1	3.1	15.0	9.2			992
12/10/97	PC3-B	14.0	15.0	1100			30	29.0	88	1.1	32.7	17.7	6.6			
12/10/97	PC5-S	0.3		1045	12815.0	47145.4	30	28.4	87	58.1	2.8	15.4	10.2			942
12/10/97	PC5-B	2.6	3.6	1045			30	28.4	87	58.1	11.1	14.8	7.0			
12/10/97	DR1-S	0.3		1136	12755.8	47159.1	30	32.5	88	4.0	3.2	15.6	9.2			993
12/10/97	DR1-B	1.7	2.7	1136			30	32.5	88	4.0	4.2	15.1	9.2			
12/10/97	DR3-S	0.3		1153	12780.9	47165.7	30	34.0	88	1.7	3.4	15.7	8.9			1029
12/10/97	DR3-B	13.1	14.1	1153			30	34.0	88	1.7	31.8	18.1	6.0			
12/10/97	DR5-S	0.3		1212	12814.1	47165.8	30	33.8	87	58.5	0.3	16.1	9.2			854
12/10/97	DR5-B	2.6	3.6	1212			30	33.8	87	58.5	3.8	15.1	7.9			
12/10/97	DR7-S	0.3		1226	12840.2	47168.0	30	34.0	87	56.0	1.3	16.7	9.5			883
12/10/97	DR7-B	2.0	3.0	1226			30	34.0	87	56.0	4.2	15.0	9.5			

Mobile Bay Cruise MB: 59

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)	SEXTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (μ gC/m2/d)
12/10/97	FM1-S	0.3	333	56.43	7.01	0.41	1.38	16.31	7.38		0.14		63.60	1.26	6.86	110	5.91		
12/10/97	FM1-B	3.8			2.22	0.42	1.72				0.27		26.49						
12/10/97	FM3-S	0.3	299	51.40	7.96	0.47	0.64	12.19	6.44		0.19			1.09	5.26	290	6.22	0.190	0.142
12/10/97	FM3-B	13.7			0.80	0.28	2.84				0.28		1.07						
12/10/97	FM5-S	0.3	309	37.81	9.10	0.43	1.35	15.14	5.35		0.27		62.86	1.21	3.26	180	5.30		
12/10/97	FM5-B	3.2			2.96	0.39	1.88				0.39		24.66						
12/10/97	FM7-S	0.3	291	36.57	9.01	0.44	1.62	11.51	4.82		0.35		65.74	1.31	5.36	190	4.37		
12/10/97	FM7-B	2.9			4.03	0.38	4.24				0.39		30.06						
12/10/97	CP3-S	0.3	336	34.54	8.05	0.38	0.56	16.49	4.06		0.19		72.71	1.28	5.06	100	4.66	0.130	0.077
12/10/97	CP3-B	12.8			0.94	0.33	2.28				0.32		3.10						
12/10/97	WB1-S	0.3	344	73.44	9.73	0.42	2.34	16.06	10.35				84.04	1.44	6.51	150	9.96		
12/10/97	WB1-B	2.6			8.37	0.40	2.13						84.08						
12/10/97	WB3-S	0.3	376	35.03	11.67	0.44	2.31	16.63	7.81		0.62			1.51	7.51	100	2.30	0.140	0.070
12/10/97	WB3-B	12.5			0.97	0.31	2.37				0.36		3.28						
12/10/97	WB5-S	0.3	358	36.86	9.68	0.41	1.22	16.01	5.97				83.88	1.23	3.46	140	5.81		
12/10/97	WB5-B	2.6			7.29	0.55	2.59				0.44		62.50						
12/10/97	FR3-S	0.3	421	59.08	13.43	0.54	2.87	16.29	8.89		0.74			2.26	18.65	40	7.25	0.290	0.143
12/10/97	FR3-B	13.7			1.09	0.36	8.12				0.41		2.36						
12/10/97	PC1-S	0.3	376	100.28	10.73	0.46	1.70	16.68	21.45				92.16	1.57	9.32	90	13.08		
12/10/97	PC1-B	2.0			8.67	0.40	0.99						82.34						
12/10/97	PC3-S	0.3	403	71.90	13.13	0.53	3.82	19.41	6.54					2.47	15.65	50	4.50	0.130	0.050
12/10/97	PC3-B	14.0			0.84	0.32	4.13				0.35		0.95						
12/10/97	PC5-S	0.3	378	55.32	13.18	0.47	2.13	16.91	6.41		0.62			2.27	17.15	40	3.79		
12/10/97	PC5-B	2.6			7.23	0.54	3.58				0.53								
12/10/97	DR1-S	0.3	402	69.64	12.82	0.49	3.74	16.41	8.29		0.74			2.06	12.92	50	6.19		
12/10/97	DR1-B	1.7			11.80	0.43	4.18						99.39						
12/10/97	DR3-S	0.3	391	31.29	12.73	0.49	5.92	16.65	3.27		0.85			2.11	9.72	60	1.01	0.100	0.034
12/10/97	DR3-B	13.1					3.77				0.49		3.58						
12/10/97	DR5-S	0.3	411	72.30	14.49	0.56	1.15	18.20	9.15					2.17	11.43	160	8.64		
12/10/97	DR5-B	2.6			11.79	0.52	3.76				0.76								
12/10/97	DR7-S	0.3	391	71.22	13.79	0.51	2.16	16.90	9.19		0.65			1.64	17.47	50	6.96		
12/10/97	DR7-B	2.0			12.12	0.46	2.33				0.57								

Mobile Bay Cruise MB: 59

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)
12/10/97	MR1-S	0.3		1306	12780.0	47180.1	30	38.1	88	2.0	1.6	15.1	8.5			944
12/10/97	MR1-B	12.2	13.2	1306			30	38.1	88	2.0	31.4	18.0	5.6			
12/10/97	MR2-S	0.3		1244	12816.8	47176.8	30	36.6	87	58.4	0.1	14.6	8.6			878
12/10/97	MR2-B	2.3	3.3	1244			30	36.6	87	58.4	2.0	14.9	8.2			

Mobile Bay Cruise MB: 59

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)
12/10/97	MR1-S	0.3	394	42.43	13.44	0.57	4.15	14.80	4.38		0.84			2.41	14.92	50	2.32	0.150	0.080
12/10/97	MR1-B	12.2			1.63	0.48	4.25				0.52		7.35						
12/10/97	MR2-S	0.3	411	62.73	13.75	0.57	2.45	17.03	5.92		0.82			3.04	24.65	30	2.36		
12/10/97	MR2-B	2.3			14.78	0.60	1.82						111.50						

Mobile Bay Cruise MB: 60

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)
1/29/98	FM1-S	0.3		725	12748.2	47092.2	30	15.7	88	3.7	1.6	10.6	9.6	87		715
1/29/98	FM1-B	3.8	4.8	725			30	15.7	88	3.7	4.3	11.6	9.3	88		
1/29/98	FM3-S	0.3		740	12762.2	47091.5	30	15.5	88	2.3	1.4	10.9	9.5	86		717
1/29/98	FM3-B	13.4	14.4	740			30	15.5	88	2.3	29.4	14.5	6.9	81		
1/29/98	FM5-S	0.3		750	12778.7	47092.3	30	15.7	88	0.8	1.2	10.6	9.7	88		713
1/29/98	FM5-B	3.2	4.2	750			30	15.7	88	0.8	3.1	11.1	9.4	87		
1/29/98	FM7-S	0.3		805	12797.9	47092.0	30	15.5	87	58.9	1.8	11.0	9.6	88		730
1/29/98	FM7-B	2.9	3.9	805			30	15.5	87	58.9	8.6	11.9	8.8	86		
1/29/98	CP3-S	0.3		825	12768.1	47103.2	30	18.3	88	1.9	1.0	10.8	9.7	88		719
1/29/98	CP3-B	13.4	14.4	825			~ 30	18.3	88	1.9	30.3	14.7	6.9	82		
1/29/98	WB1-S	0.3		850	12745.0	47120.3	30	22.6	88	4.4	2.6	11.3	9.4	87		684
1/29/98	WB1-B	2.3	3.3	850			30	22.6	88	4.4	3.4	11.3	9.2	86		
1/29/98	WB3-S	0.3		905	12777.2	47121.0	30	22.6	88	1.3	1.0	10.7	9.6	87		720
1/29/98	WB3-B	12.5	13.5	905			30	22.6	88	1.3	29.6	14.5	6.8	80		
1/29/98	WB5-S	0.3		920	12810.0	47122.7	30	22.7	87	58.1	0.7	11.0	10.0	91		692
1/29/98	WB5-B	2.6	3.6	920			30	22.7	87	58.1	4.2	11.2	9.1	86		
1/29/98	WB7-S	0.3		935	12840.3	47123.1	30	22.6	87	55.3	1.1	11.0	9.7	89		711
1/29/98	WB7-B	2.0	3.0	935			30	22.6	87	55.3	1.8	11.0	9.5	87		
1/29/98	FR3-S	0.3		1005	12784.1	47140.3	30	27.4	88	1.0	0.5	11.0	9.0	82		735
1/29/98	FR3-B	12.5	13.5	1005			30	27.4	88	1.0	29.2	14.6	6.8	79		
1/29/98	PC1-S	0.3		1054	12753.1	47145.7	30	29.1	88	4.0	1.8	11.0	8.7	80		739
1/29/98	PC1-B	2.0	3.0	1054			30	29.1	88	4.0	2.5	11.0	8.7	81		
1/29/98	PC3-S	0.3		1038	12783.3	47146.4	30	29.0	88	1.1	1.5	11.5	8.7	80		731
1/29/98	PC3-B	13.4	14.4	1038			30	29.0	88	1.1	29.3	14.5	6.9	81		
1/29/98	PC5-S	0.3		1022	12815.3	47145.5	30	28.4	87	58.1	0.1	10.6	9.2	82		721
1/29/98	PC5-B	1.4	2.4	1022			30	28.4	87	58.1	1.3	11.0	8.9	81		
1/29/98	DR1-S	0.3		1112	12755.6	47159.2	30	32.5	88	4.0	0.7	11.5	8.6	79		682
1/29/98	DR1-B	1.4	2.4	1112			30	32.5	88	4.0	1.1	11.3	8.6	79		
1/29/98	DR3-S	0.3		1128	12780.1	47165.5	30	34.0	88	1.7	1.3	10.8	8.7	79		706
1/29/98	DR3-B	12.2	13.2	1128			30	34.0	88	1.7	27.8	14.4	6.8	79		
1/29/98	DR5-S	0.3		1150	12814.5	47165.9	30	33.8	87	58.5	0.1	10.6	8.7	78		738
1/29/98	DR5-B	2.3	3.3	1150			30	33.8	87	58.5	0.1	10.6	8.6	78		

Mobile Bay Cruise MB: 60

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)	YPRD (mgC/l/d)	APROD (gC/m2/d)
1/29/98	FM1-S	0.3	385	56.62	11.49	0.39	2.14	18.86	5.20		0.51		113.30	3.18	31.11	40	1.19		
1/29/98	FM1-B	3.8			10.11	0.33	3.75				0.42		95.92						
1/29/98	FM3-S	0.3	369	67.71	11.62	0.44	3.30	23.26	6.39		0.48		112.60	3.12	25.33		3.40	0.110	0.091
1/29/98	FM3-B	13.4			2.05	0.69	1.79				0.32		5.91						
1/29/98	FM5-S	0.3	383	73.65	11.77	0.43	2.27	23.89	5.56		0.58		112.50	3.32	24.67	40	2.13		
1/29/98	FM5-B	3.2			10.55	0.30	2.33				0.42		97.14						
1/29/98	FM7-S	0.3	382	114.37	11.16	0.40	2.85	28.84	11.36		0.41		109.40	4.01	41.33	25	2.92		
1/29/98	FM7-B	2.9			8.06	0.27	3.52				0.53		74.77						
1/29/98	CP3-S	0.3	384	64.31	11.86	0.42	2.03	25.79	6.10		0.66		113.90	3.11	20.59	35	2.34	0.150	0.114
1/29/98	CP3-B	13.4			1.71	0.66	1.47				0.34		3.88						
1/29/98	WB1-S	0.3	415	54.61	12.07	0.44	4.75	16.51	4.55		0.55		98.30	2.58	18.00	50	1.70		
1/29/98	WB1-B	2.3			11.52	0.43	4.56				0.61		95.93						
1/29/98	WB3-S	0.3	395	51.14	11.66	0.45	2.24	22.37	4.77		0.62		111.10	2.93	19.44	30	2.89	0.170	0.124
1/29/98	WB3-B	12.5			1.97	0.64	2.19				0.32		5.56						
1/29/98	WB5-S	0.3	389	87.62	12.22	0.41	1.96	21.65	8.08		0.38		117.20	3.64	30.00	35	2.77		
1/29/98	WB5-B	2.6			9.88	0.28	2.60				0.43		93.23						
1/29/98	WB7-S	0.3	373	82.75	11.86	0.53	2.80	18.65	7.62		0.64		115.10	3.65	35.00	30	2.77		
1/29/98	WB7-B	2.0			11.18	0.33	3.13				0.53		107.50						
1/29/98	FR3-S	0.3	377	60.22	11.75	0.48	2.89	18.19	6.35		0.61		111.80	2.88	18.24	40	2.41	0.160	0.140
1/29/98	FR3-B	12.5			2.13	0.54	3.07				0.52		9.20						
1/29/98	PC1-S	0.3	411	84.97	10.09	0.46	3.47	22.68	8.77		0.44		104.50	3.65	31.33	25	1.49		
1/29/98	PC1-B	2.0			11.67	0.38	3.38				0.42		102.80						
1/29/98	PC3-S	0.3	401	58.73	10.45	0.44	2.71	18.60	4.53		0.61		103.70	3.08	21.87	35	1.79	0.110	0.082
1/29/98	PC3-B	13.4			1.84	0.41	2.52				0.44		5.51						
1/29/98	PC5-S	0.3	371	193.81	12.49	0.44	1.57	20.37	9.13		0.63		114.00	2.88	21.76	35	4.43		
1/29/98	PC5-B	1.4			11.43	0.40	2.17				0.55		106.50						
1/29/98	DR1-S	0.3	420	51.10	10.88	0.49	4.51	21.55	4.29		0.31		104.80	3.05	25.79	35	0.68		
1/29/98	DR1-B	1.4			10.51	0.50	5.40				0.64		104.10						
1/29/98	DR3-S	0.3	396	75.19	10.98	0.42	3.20	21.31	7.48		0.62		102.80	2.68	34.71	25	1.46	0.080	0.079
1/29/98	DR3-B	12.2			2.31	0.40	3.62				0.59		10.18						
1/29/98	DR5-S	0.3	525	70.90	12.34	0.41	1.90	18.79	9.45		0.44		112.30	3.19	28.67	30	2.38		
1/29/98	DR5-B	2.3			12.15	0.45	1.65				0.43		112.40						

Mobile Bay Cruise MB: 60

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)
1/29/98	DR7-S	0.3		1201	12840.1	47167.5	30	34.0	87	56.0	0.1	11.8	8.6	80		740
1/29/98	DR7-B	2.0	3.0	1201			30	34.0	87	56.0	0.1	10.8	8.7	79		
1/29/98	MR1-S	0.3		1239	12779.9	47180.2	30	38.1	88	2.0	0.2	10.8	8.7	79		658
1/29/98	MR1-B	12.8	13.8	1239			30	38.1	88	2.0	23.7	14.0	6.8	77		
1/29/98	MR2-S	0.3		1218	12816.3	47176.4	30	36.6	87	58.4	0.1	11.1	8.8	80		729
1/29/98	MR2-B	2.0	3.0	1218			30	36.6	87	58.4	0.1	11.0	8.8	80		
1/30/98	MS5-S	0.3		730	12885.7	47093.8	30	16.4	88	9.8	4.1	12.3	9.4			794
1/30/98	MS5-B	4.1	5.1	730			30	16.4	88	9.8	4.1	12.2	9.4			
1/30/98	MS3-S	0.3		747	12646.4	47090.1	30	15.7	88	13.5	9.5	12.0	9.6			1032
1/30/98	MS3-B	2.0	3.0	747			~ 30	15.7	88	13.5	10.7	12.3	9.8			
1/30/98	MS1-S	0.3		807	12595.0	47088.2	30	15.4	88	18.5	12.2	12.6	9.5			1168
1/30/98	MS1-B	2.6	3.6	807			30	15.4	88	18.5	15.1	12.6	8.5			
1/30/98	G1-S	0.3		832	12595.0	47070.0	30	10.9	88	18.3	18.1	13.3	9.0			1414
1/30/98	G1-B	11.0	12.0	832			30	10.9	88	18.3	34.3	17.1	5.3			
1/30/98	G3-S	0.3		900	12660.0	47070.3	30	10.8	88	12.0	14.3	13.1	9.1			1257
1/30/98	G3-B	13.1	14.1	900			30	10.8	88	12.0	34.4	17.2	5.5			
1/30/98	G5-S	0.3		928	12710.0	47058.0	30	7.8	88	7.0	12.1	12.9	9.2			1188
1/30/98	G5-B	14.0	15.0	928			30	7.8	88	7.0	34.4	17.3	5.6			
1/30/98	G7-S	0.3		1006	12799.9	47057.5	30	7.6	87	58.2	16.7	13.6	8.4			1423
1/30/98	G7-B	12.2	13.2	1006			30	7.6	87	58.2	35.1	17.8	5.3			
1/30/98	G9-S	0.3		1037	12870.0	47058.0	30	7.6	87	51.4	26.0	14.9	7.8			1839
1/30/98	G9-B	15.5	16.5	1037			30	7.6	87	51.4	34.7	17.4	5.8			
1/30/98	G11-S	0.3		1115	12960.0	47058.0	30	7.5	87	42.5	28.5	15.9	8.0			1848
1/30/98	G11-B	13.7	14.7	1115			30	7.5	87	42.5	34.5	16.8	6.4			
1/30/98	G13-S	0.3		1142	12925.0	47074.0	30	11.0	87	46.2	32.0	16.4	7.1			2010
1/30/98	G13-B	10.1	11.1	1142			30	11.0	87	46.2	33.6	16.2	6.6			
1/30/98	G15-S	0.3		1218	12840.2	47073.0	30	11.0	87	54.5	33.1	16.8	6.6			2062
1/30/98	G15-B	9.5	10.5	1218			30	11.0	87	54.5	34.2	17.2	5.9			
1/30/98	BM3-S	0.3		1252	12755.5	47071.7	30	10.9	88	2.7	2.1	12.3	9.5			773
1/30/98	BM3-B	10.4	11.4	1252			30	10.9	88	2.7	32.3	16.5	6.1			

Mobile Bay Cruise MB: 60

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)
1/29/98	DR7-S	0.3	379	52.95	12.26	0.36	1.54	17.62	4.24		0.44		111.40	2.64	19.41	40	3.29		
1/29/98	DR7-B	2.0			12.15	0.39	1.88				0.48		114.90						
1/29/98	MR1-S	0.3	437	136.52	11.29	0.42	2.53	20.32	11.00		0.48		104.50	5.55	70.00		8.85	0.130	0.053
1/29/98	MR1-B	12.8									0.63		26.07						
1/29/98	MR2-S	0.3	370	59.78	12.04	0.36	1.58	21.56	5.25		0.47		108.70	3.06	24.71	30	3.03		
1/29/98	MR2-B	2.0			12.15	0.40	1.53				0.46		111.00						
1/30/98	MS5-S	0.3	415	49.75	11.05	0.46	4.27	16.83	4.85		0.55		92.29	2.42	17.00	50	2.23		
1/30/98	MS5-B	4.1			9.90	0.35	3.20				0.44		83.83						
1/30/98	MS3-S	0.3	276	45.38	5.83	0.60	1.90	10.10	6.34		0.49		65.25	1.44	13.83	60	8.51	0.410	0.645
1/30/98	MS3-B	2.0			4.43	0.52	0.51				0.44		54.53						
1/30/98	MS1-S	0.3	403	47.69	6.45	0.68	1.25	12.76	9.25		0.47		62.01	1.42	8.10	110	6.38		
1/30/98	MS1-B	2.6			4.50	0.61	0.78				0.35		38.48						
1/30/98	G1-S	0.3	259	32.27	3.50	0.88	0.15	7.44	5.26		0.46		39.66	1.04	8.64	140	6.81	0.130	0.352
1/30/98	G1-B	11.0			4.28	2.51	0.32				0.56		1.75						
1/30/98	G3-S	0.3	278	30.44	5.66	0.64	1.14	9.39	4.04		0.38		56.22	1.21	5.18	140	4.85		
1/30/98	G3-B	13.1			3.16	3.01	0.27				0.56		0.00						
1/30/98	G5-S	0.3	325	39.23	7.70	0.58	2.77	8.12	4.03		0.45		66.74	1.85	15.29	60	3.66	0.070	0.082
1/30/98	G5-B	14.0			2.83	2.90	0.31				0.41		0.00						
1/30/98	G7-S	0.3	248	43.41	7.42	1.07	3.17	6.83	3.53		0.54		57.69	1.72	16.17	60	2.09		
1/30/98	G7-B	12.2			4.11	1.86	0.57				0.46		0.00						
1/30/98	G9-S	0.3	157	21.93	2.86	1.31	0.84	5.45	2.65		0.50		15.12	0.40	5.93	250	3.27	0.060	0.405
1/30/98	G9-B	15.5			2.62	2.68	0.26				0.37		0.00						
1/30/98	G11-S	0.3	133	24.50	1.67	0.43	0.68	5.75	2.54		0.18		6.43	0.31	5.86	300	2.84		
1/30/98	G11-B	13.7			1.08	1.02	0.64				0.11		0.00						
1/30/98	G13-S	0.3	129	12.62	1.02	1.01	0.23	3.06	1.90		0.19		0.00	0.31	5.26	360	2.83	0.070	0.564
1/30/98	G13-B	10.1			0.98	1.51	0.49				0.16		0.00						
1/30/98	G15-S	0.3	408	6.34	1.51	1.75	0.34	3.20	0.94		0.25		0.00	0.36	5.41	250	1.36		
1/30/98	G15-B	9.5			2.27	2.64	0.52				0.41		0.00						
1/30/98	BM3-S	0.3	342	40.02	12.36	0.36	1.68	16.10	4.85		0.40		107.80	1.63	11.72	40	2.70	0.120	0.150
1/30/98	BM3-B	10.4			2.63	2.47	0.49				0.44		1.59						

Mobile Bay Cruise MB: 61

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)
2/27/98	FM1-S	0.3		722	12748.4	47092.1	30	15.7	88	3.7	2.8	15.4	9.2	94		819
2/27/98	FM1-B	3.8	4.8	722			30	15.7	88	3.7	7.3	15.6	8.6	91		
2/27/98	FM3-S	0.3		732	12762.6	47091.5	30	15.5	88	2.3	3.0	15.1	9.2	93		817
2/27/98	FM3-B	13.7	14.7	732			30	15.5	88	2.3	26.1	17.1	6.7	81		
2/27/98	FM5-S	0.3		745	12779.1	47092.4	30	15.7	88	0.8	2.7	15.1	9.1	93		797
2/27/98	FM5-B	3.2	4.2	745			30	15.7	88	0.8	20.8	16.8	7.6	88		
2/27/98	FM7-S	0.3		758	12798.0	47092.0	30	15.5	87	58.9	1.3	24.0	8.9	91		862
2/27/98	FM7-B	2.9	3.9	758			30	15.5	87	58.9	20.5	16.7	7.4	87		
2/27/98	CP3-S	0.3		817	12768.2	47103.2	30	18.3	88	1.9	2.8	15.3	9.2	93		810
2/27/98	CP3-B	13.4	14.4	817			~30	18.3	88	1.9	27.7	16.8	5.9	71		
2/27/98	WB1-S	0.3		843	12745.1	47120.3	30	22.6	88	4.4	2.0	15.1	9.1	92		774
2/27/98	WB1-B	2.6	3.6	843			30	22.6	88	4.4	2.0	15.4	9.1	91		
2/27/98	WB3-S	0.3		858	12778.0	47121.0	30	22.6	88	1.3	0.7	14.9	9.3	92		700
2/27/98	WB3-B	11.9	12.9	858			30	22.6	88	1.3	25.4	16.8	6.6	79		
2/27/98	WB5-S	0.3		915	12810.3	47122.4	30	22.7	87	58.1	1.1	15.1	9.2	92		729
2/27/98	WB5-B	2.9	3.9	915			30	22.7	87	58.1	2.0	15.1	9.0	90		
2/27/98	WB7-S	0.3		929	12840.2	47122.7	30	22.6	87	55.3	2.1	15.4	9.0	91		771
2/27/98	WB7-B	2.3	3.3	929			30	22.6	87	55.3	2.5	15.4	8.9	90		
2/27/98	FR3-S	0.3		1001	12784.1	47140.4	30	27.4	88	1.0	0.7	15.7	9.2	93		708
2/27/98	FR3-B	13.4	14.4	1001			30	27.4	88	1.0	27.2	16.8	5.6	68		
2/27/98	PC1-S	0.3		1048	12753.4	47145.8	30	29.1	88	4.0	1.6	15.4	9.1	91		750
2/27/98	PC1-B	2.0	3.0	1048			30	29.1	88	4.0	1.7	15.2	9.1	91		
2/27/98	PC3-S	0.3		1033	12783.4	47146.6	30	29.0	88	1.1	1.0	14.6	8.9	88		734
2/27/98	PC3-B	13.7	14.7	1033			30	29.0	88	1.1	27.5	16.6	5.5	67		
2/27/98	PC5-S	0.3		1018	12815.4	47145.3	30	28.4	87	58.1	0.1	15.0	9.3	92		675
2/27/98	PC5-B	2.9	3.9	1018			30	28.4	87	58.1	0.1	14.8	9.3	92		
2/27/98	DR1-S	0.3		1105	12755.4	47159.2	30	32.5	88	4.0	0.9	15.5	9.0	91		713
2/27/98	DR1-B	2.0	3.0	1105			30	32.5	88	4.0	1.2	15.7	8.8	89		
2/27/98	DR3-S	0.3		1119	12780.6	47165.7	30	34.0	88	1.7	0.7	14.8	8.6	84		725
2/27/98	DR3-B	13.7	14.7	1119			30	34.0	88	1.7	27.4	16.3	5.1	63		
2/27/98	DR5-S	0.3		1136	12814.3	47165.7	30	33.8	87	58.5	0.1	16.6	8.8	91		657
2/27/98	DR5-B	2.6	3.6	1136			30	33.8	87	58.5	0.1	14.7	8.9	87		

Mobile Bay Cruise MB: 61

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 -1/m	SEXTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/L/d)	APROD (gC/m2/d)
2/27/98	FM1-S	0.3	313	120.30	15.15	0.37	1.98	9.64	11.28		0.49		98.49	3.60	47.00	30	3.70		
2/27/98	FM1-B	3.8			8.68	0.38	2.24				0.50		71.04						
2/27/98	FM3-S	0.3	287	128.39	13.43	0.34	1.07	15.63	12.01		0.46		92.24	3.94	38.00	30	4.00	0.340	0.190
2/27/98	FM3-B	13.7			5.32	0.56	1.06				0.44		20.96						
2/27/98	FM5-S	0.3	287	133.10	14.29	0.33	0.77	11.57	10.05		0.46		94.99	4.25	49.00	20	4.88		
2/27/98	FM5-B	3.2			6.28	0.50	1.05				0.30		34.63						
2/27/98	FM7-S	0.3	255	129.41	11.66	0.32	2.32	12.47	15.13		0.69		93.81	3.93	46.00	20	8.23		
2/27/98	FM7-B	2.9			5.87	0.45	1.38				0.37		36.68						
2/27/98	CP3-S	0.3	273	96.86	15.18	0.37	1.76	12.95	8.44		0.52		97.12	3.73	41.00	20	4.31	0.330	0.185
2/27/98	CP3-B	13.4			5.97	0.86	1.83				0.56		19.16						
2/27/98	WB1-S	0.3	287	135.08	14.06	0.34	2.46	13.85	11.66		0.62		95.37	5.01	52.50	20	4.65		
2/27/98	WB1-B	2.6			13.96	0.34	2.64				0.66		98.73						
2/27/98	WB3-S	0.3	280	127.34	13.44	0.35	1.32	14.40	12.15		0.50		97.93	4.53	37.50	20	5.05	0.370	0.175
2/27/98	WB3-B	11.9			6.26	0.66	1.86				0.53		24.78						
2/27/98	WB5-S	0.3	408	151.41	12.27	0.32	1.46	17.24	13.44		0.58		98.35	4.43	36.25	20	6.69		
2/27/98	WB5-B	2.9			12.78	0.34	1.73				0.59		96.85						
2/27/98	WB7-S	0.3	267	100.92	12.53	0.27	1.65	16.65	9.92		0.58		96.91	4.04	38.75	20	5.62		
2/27/98	WB7-B	2.3			13.07	0.29	1.40				0.47		97.99						
2/27/98	FR3-S	0.3	309	112.75	12.85	0.38	1.69	10.60	10.35		0.57		97.96	4.67	38.75	20	3.63	0.290	0.140
2/27/98	FR3-B	13.4			6.86	0.82	2.45				0.67		22.71						
2/27/98	PC1-S	0.3	325	128.29	11.83	0.41	3.15	14.52	11.48		0.52		97.90	3.85	30.00	30	2.77		
2/27/98	PC1-B	2.0			12.30	0.45	3.80				0.63		97.68						
2/27/98	PC3-S	0.3	337	113.75	12.80	0.42	2.84	15.52	10.99		0.61		99.95	4.11	36.67	20	3.23	0.250	0.140
2/27/98	PC3-B	13.7			6.33	0.85	2.79				0.64		20.78						
2/27/98	PC5-S	0.3	265	111.99	13.47	0.34	0.87	14.39	10.49		0.50		99.43	4.21	33.33	20	8.17		
2/27/98	PC5-B	2.9			12.35	0.32	1.04				0.39		97.63						
2/27/98	DR1-S	0.3	329	84.36	12.63	0.46	4.60	15.33	8.76		0.59		97.85	4.92	27.00	20	2.33		
2/27/98	DR1-B	2.0			13.73	0.52	7.04				0.83		96.47						
2/27/98	DR3-S	0.3	379	71.23	12.10	0.47	2.73	17.12	8.62		0.54		105.30	3.12	17.50	30	3.36	0.240	0.166
2/27/98	DR3-B	13.7			6.75	0.85	4.12				0.79		21.36						
2/27/98	DR5-S	0.3	313	76.22	11.95	0.39	1.90	18.42	7.60		0.47		101.60	2.85	20.00	30	5.05		
2/27/98	DR5-B	2.6			11.20	0.33	1.49				0.42		103.20						

Mobile Bay Cruise MB: 61

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)
2/27/98	DR7-S	0.3		1147	12840.0	47167.6	30	34.0	87	56.0	0.1	14.9	8.9	89		681
2/27/98	DR7-B	2.0	3.0	1147			30	34.0	87	56.0	0.1	14.6	8.9	88		
2/27/98	MR1-S	0.3		1225	12780.2	47180.2	30	38.1	88	2.0	0.2	14.6	8.5	84		713
2/27/98	MR1-B	13.4	14.4	1225			30	38.1	88	2.0	27.7	16.5	5.0	60		
2/27/98	MR2-S	0.3		1205	12816.3	47176.7	30	36.6	87	58.4	0.1	16.0	8.7	89		686
2/27/98	MR2-B	2.3	3.3	1205			30	36.6	87	58.4	0.1	14.6	8.6	85		
3/2/98	MS5-S	0.3		738	12685.5	47093.4	30	16.4	88	9.8	5.0	14.6	9.2	94		928
3/2/98	MS5-B	1.4	2.4	738			30	16.4	88	9.8	5.1	14.4	9.2	92		
3/2/98	MS3-S	0.3		758	12646.7	47090.6	30	15.7	88	13.5	7.7	14.6	9.1	94		1043
3/2/98	MS3-B	2.0	3.0	758			~30	15.7	88	13.5	7.8	14.5	9.0	93		
3/2/98	MS1-S	0.3		818	12594.8	47088.4	30	15.4	88	18.5	12.3	15.5	9.0	97		1217
3/2/98	MS1-B	2.9	3.9	818			30	15.4	88	18.5	13.3	15.2	8.9	97		
3/2/98	G1-S	0.3		844	12595.3	47069.8	30	10.9	88	18.3	22.0	15.7	8.1	93		1677
3/2/98	G1-B	11.0	12.0	844			30	10.9	88	18.3	34.6	17.7	4.8	62		
3/2/98	G3-S	0.3		910	12660.2	47070.3	30	10.8	88	12.0	31.3	16.3	7.6	94		2069
3/2/98	G3-B	13.1	14.1	910			30	10.8	88	12.0	34.2	17.4	5.8	74		
3/2/98	G5-S	0.3		939	12709.5	47058.4	30	7.8	88	7.0	30.8	16.2	7.7	94		2044
3/2/98	G5-B	14.3	15.3	939			30	7.8	88	7.0	34.1	17.5	5.9	76		
3/2/98	G7-S	0.3		1015	12800.0	47057.5	30	7.6	87	58.2	23.1	15.9	7.8	91		1710
3/2/98	G7-B	12.5	13.5	1015			30	7.6	87	58.2	34.0	17.5	6.5	83		
3/2/98	G9-S	0.3		1041	12869.5	47058.4	30	7.6	87	51.4	28.2	16.4	7.6	92		1932
3/2/98	G9-B	15.5	16.5	1041			30	7.6	87	51.4	33.2	17.4	6.9	88		
3/2/98	G11-S	0.3		1118	12960.0	47058.0	30	7.5	87	42.5	31.1	16.7	7.9	98		2039
3/2/98	G11-B	14.0	15.0	1118			30	7.5	87	42.5	34.4	17.6	5.2	66		
3/2/98	G13-S	0.3		1148	12925.4	47074.4	30	11.0	87	46.2	31.8	16.9	7.0	87		2096
3/2/98	G13-B	10.4	11.4	1148			30	11.0	87	46.2	33.5	17.4	5.3	69		
3/2/98	G15-S	0.3		1234	12841.2	47073.1	30	11.0	87	54.5	31.7	16.5	7.0	87		2018
3/2/98	G15-B	8.9	9.9	1234			30	11.0	87	54.5	33.5	17.1	6.6	84		

Mobile Bay Cruise MB: 61

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)
2/27/98	DR7-S	0.3	317	45.52	11.54	0.40	1.33	17.19	5.31		0.46		102.10	2.38	9.50	50	6.03		
2/27/98	DR7-B	2.0			11.85	0.37	1.11				0.43		103.30						
2/27/98	MR1-S	0.3	339	89.01	11.79	0.47	2.14	25.33	9.24		0.49		107.80	3.72	36.67	30	4.26	0.270	0.163
2/27/98	MR1-B	13.4			7.01	0.89	5.86				0.88		20.64						
2/27/98	MR2-S	0.3	305	64.21	10.31	0.37	1.27	17.44	6.95		0.36		104.30	2.58	10.00	40	5.99		
2/27/98	MR2-B	2.3			10.89	0.35	1.75				0.38		104.40						
3/2/98	MS5-S	0.3	320	181.05	10.95	0.34	2.45	9.08	16.19		0.45		87.92	4.00	43.00	30	7.22		
3/2/98	MS5-B	1.4			12.32	0.38	1.79				0.50		87.98						
3/2/98	MS3-S	0.3	309	120.22	9.43	0.45	1.42	10.40	11.98		0.58		78.47	2.44	21.76		8.07	0.550	0.508
3/2/98	MS3-B	2.0			9.45	0.45	0.84				0.28		78.88						
3/2/98	MS1-S	0.3	279	77.98	4.67	0.30	1.04	11.21	9.79		0.22		58.41	1.50	16.90	80	7.89		
3/2/98	MS1-B	2.9			2.52	0.22	0.05				0.17		53.23						
3/2/98	G1-S	0.3	220	33.80	2.60	0.44	2.21	5.66	4.40		0.28		27.16	0.71	5.27	170	3.52	0.260	0.800
3/2/98	G1-B	11.0			6.16	0.36	0.98				0.56		2.72						
3/2/98	G3-S	0.3	155	14.59	2.17	0.47	1.10	4.68	1.97		0.27		0.71	0.29	1.90	700	1.85		
3/2/98	G3-B	13.1			5.19	0.54	0.89				0.42		0.00						
3/2/98	G5-S	0.3	155	15.16	2.13	0.51	0.55	3.34	1.98		0.25		2.88	0.29	0.70	550	1.51	0.100	0.845
3/2/98	G5-B	14.3			4.69	0.55	0.33				0.37		0.00						
3/2/98	G7-S	0.3	197	40.41	4.86	0.54	0.67	6.40	4.41		0.17		26.91	0.58	7.00	120	1.91		
3/2/98	G7-B	12.5			3.14	0.56	1.04				0.32		0.00						
3/2/98	G9-S	0.3	155	17.78	2.59	0.43	0.93	7.51	2.35		0.23		10.36	0.61	3.30	200	1.73	0.140	0.587
3/2/98	G9-B	15.5			1.97	0.39	0.78				0.17		0.00						
3/2/98	G11-S	0.3	136	31.03	0.68	0.16	0.48	4.31	4.24		0.17		0.39	0.35	1.80	325	3.29		
3/2/98	G11-B	14.0			6.49	0.22	0.24				0.47		0.02						
3/2/98	G13-S	0.3	124	31.30	2.38	0.50	1.24	2.12	3.94		0.41		0.90	0.41	3.50	200	2.52	0.160	0.972
3/2/98	G13-B	10.4			5.27	0.43	0.33				0.29		1.30						
3/2/98	G15-S	0.3	135	27.10	3.55	0.77	1.79	0.57	3.17		0.40		1.84	0.40	3.70	150	2.13		
3/2/98	G15-B	8.9			3.01	0.58	0.54				0.33		0.00						

Mobile Bay Cruise MB: 62

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)
3/25/98	FM1-S	0.3		753	12748.1	47092.8	30	15.7	88	3.7	1.3	15.8	9.5	97		555
3/25/98	FM1-B	3.5	4.5	753			30	15.7	88	3.7	3.7	15.4	8.8	90		
3/25/98	FM3-S	0.3		803	12762.7	47091.4	30	15.5	88	2.3	0.7	15.4	9.6	96		525
3/25/98	FM3-B	13.4	14.4	803			30	15.5	88	2.3	30.8	16.7	5.9	74		
3/25/98	FM5-S	0.3		823	12778.9	47092.2	30	15.7	88	0.8	0.8	15.1	9.3	93		534
3/25/98	FM5-B	3.2	4.2	823			30	15.7	88	0.8	1.4	14.8	9.1	91		
3/25/98	FM7-S	0.3		832	12798.0	47092.0	30	15.5	87	58.9	0.7	15.4	9.3	93		527
3/25/98	FM7-B	3.2	4.2	832			30	15.5	87	58.9	2.6	14.9	8.7	86		
3/25/98	CP3-S	0.3		851	12768.2	47103.1	30	18.3	88	1.9	0.7	15.5	9.5	96		537
3/25/98	CP3-B	12.8	13.8	851			30	18.3	88	1.9	30.7	16.8	6.0	75		
3/25/98	WB1-S	0.3		916	12745.0	47120.6	30	22.6	88	4.4	1.9	15.7	9.1	93		603
3/25/98	WB1-B	2.6	3.6	916			30	22.6	88	4.4	2.0	15.9	9.0	93		
3/25/98	WB3-S	0.3		930	12777.7	47120.8	30	22.6	88	1.3	0.5	15.2	9.3	92		549
3/25/98	WB3-B	12.8	13.8	930			30	22.6	88	1.3	29.0	16.7	6.2	76		
3/25/98	WB5-S	0.3		947	12810.4	47122.2	30	22.7	87	58.1	0.1	15.3	8.3	92		522
3/25/98	WB5-B	2.6	3.6	947			30	22.7	87	58.1	1.6	15.1	8.6	87		
3/25/98	WB7-S	0.3		1000	12840.2	47122.9	30	22.6	87	55.3	0.2	15.4	9.8	98		495
3/25/98	WB7-B	2.3	3.3	1000			30	22.6	87	55.3	1.1	15.2	8.7	88		
3/25/98	FR3-S	0.3		1029	12784.1	47140.3	30	27.4	88	1.0	0.3	16.9	9.1	95		539
3/25/98	FR3-B	13.7	14.7	1029			30	27.4	88	1.0	28.6	16.9	6.2	76		
3/25/98	PC1-S	0.3		1120	12753.5	47146.7	30	29.1	88	4.0	1.6	17.2	8.8	94		639
3/25/98	PC1-B	2.3	3.3	1120			30	29.1	88	4.0	1.7	15.8	8.8	90		
3/25/98	PC3-S	0.3		1101	12783.2	47146.8	30	29.0	88	1.1	0.9	16.3	9.1	94		610
3/25/98	PC3-B	13.1	14.1	1101			30	29.0	88	1.1	27.6	16.5	6.3	75		
3/25/98	PC5-S	0.3		1046	12815.5	47145.3	30	28.4	87	58.1	0.1	16.4	9.5	98		504
3/25/98	PC5-B	2.6	3.6	1046			30	28.4	87	58.1	0.1	15.6	9.3	93		
3/25/98	DR1-S	0.3		1137	12755.6	47159.5	30	32.5	88	4.0	1.0	17.1	8.4	88		625
3/25/98	DR1-B	1.7	2.7	1137			30	32.5	88	4.0	1.0	16.6	8.5	88		
3/25/98	DR3-S	0.3		1151	12780.8	47165.5	30	34.0	88	1.7	1.0	16.1	8.8	89		635
3/25/98	DR3-B	13.4	14.4	1151			30	34.0	88	1.7	27.3	16.4	5.7	69		
3/25/98	DR5-S	0.3		1240	12814.2	47165.7	30	33.8	87	58.5	0.1	16.1	9.2	94		547
3/25/98	DR5-B	2.6	3.6	1240			30	33.8	87	58.5	0.1	15.9	9.2	92		

Mobile Bay Cruise MB: 62

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)
3/25/98	FM1-S	0.3	334	79.38	10.41	0.39	1.62	15.94	7.00		0.39		100.70	2.58	19.55	40	7.02		
3/25/98	FM1-B	3.5			10.00	0.27	2.32				0.36		94.44						
3/25/98	FM3-S	0.3	364	54.38	10.51	0.37	1.66	13.81	7.38		0.40		101.40	2.75	18.95	40	7.19	0.600	0.560
3/25/98	FM3-B	13.4			4.26	0.79	2.26				0.42		2.72				3.40		
3/25/98	FM5-S	0.3	337	80.64	10.01	0.32	1.80	15.77	10.20		0.51		99.48	3.77	35.00	20	4.26		
3/25/98	FM5-B	3.2			9.91	0.27	1.68				0.44		98.23						
3/25/98	FM7-S	0.3	321	89.21	11.47	0.32	1.68	21.97	10.64		0.55		95.64	4.47	46.25	20	5.79		
3/25/98	FM7-B	3.2			10.32	0.31	5.20				0.55		86.77						
3/25/98	CP3-S	0.3	320	43.67	10.59	0.38	1.05	13.37	7.55		0.41		102.20	2.49	20.53	30	7.15	0.570	0.600
3/25/98	CP3-B	12.8			3.63	0.71	2.27				0.44		0.95						
3/25/98	WB1-S	0.3	347	50.56	9.33	0.37	2.82	21.41	12.68		0.49		99.24	2.35	18.50	50	7.15		
3/25/98	WB1-B	2.6			9.52	0.34	3.41				0.46		99.19						
3/25/98	WB3-S	0.3	299	42.74	10.50	0.39	1.83	15.43	6.63		0.35		106.00	2.69	16.67	40	5.45	0.480	0.420
3/25/98	WB3-B	12.8			3.72	0.59	1.76				0.39		5.70						
3/25/98	WB5-S	0.3	314	51.47	11.29	0.41	2.81	12.68	8.07		0.61		104.80	2.76	15.79	30	6.55		
3/25/98	WB5-B	2.6			10.68	0.34	2.12				0.47		103.40						
3/25/98	WB7-S	0.3	322	75.81	10.34	0.33	1.18	17.87	11.37		0.45		100.10	3.79	28.00	20	7.23		
3/25/98	WB7-B	2.3			10.41	0.29	1.95				0.41		99.48						
3/25/98	FR3-S	0.3	379	72.73	11.80	0.40	1.35	28.03	12.79		0.41		105.70	3.10	26.67	20	9.24	0.720	0.590
3/25/98	FR3-B	13.7			3.25	0.53	2.01				0.66		15.52						
3/25/98	PC1-S	0.3	366	61.79	11.45	0.36	2.32	12.68	8.47		0.45		107.20	2.52	15.29	40	14.04		
3/25/98	PC1-B	2.3			11.36	0.39	4.20				0.50		107.10						
3/25/98	PC3-S	0.3	401	55.00	9.54	0.36	2.22	17.83	5.97		0.44		108.80	2.63	23.53	40	6.30	0.610	0.590
3/25/98	PC3-B	13.1			3.47	0.55	2.55				0.53		8.31						
3/25/98	PC5-S	0.3	401	54.33	9.92	0.33	1.58	16.38	8.63		0.38		105.80	2.74	17.06	30	5.45		
3/25/98	PC5-B	2.6			10.48	0.32	2.99				0.31		108.90						
3/25/98	DR1-S	0.3	482	44.21	11.57	0.42	7.96	15.35	4.44		0.73		106.60	2.68	22.35	30	11.57		
3/25/98	DR1-B	1.7			10.56	0.39	7.41				0.63		110.80						
3/25/98	DR3-S	0.3	371	49.17	10.16	0.35	2.62	11.57	7.71		0.43		108.40	2.28	15.79	40	4.48	0.380	0.410
3/25/98	DR3-B	13.4			3.65	0.65	4.61				0.63		13.22				2.31		
3/25/98	DR5-S	0.3	349	30.37	11.27	0.36	1.20	13.53	5.43		0.35		108.50	2.43	17.00	40	6.13		
3/25/98	DR5-B	2.6			11.54	0.31	1.44				0.32		109.80						

Mobile Bay Cruise MB: 62

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)
3/25/98	DR7-S	0.3		1253	12840.1	47167.8	30	34.0	87	56.0	0.1	16.4	9.3	96		534
3/25/98	DR7-B	2.3	3.3	1253			30	34.0	87	56.0	0.1	16.4	9.5	97		
3/25/98	MR1-S	0.3		1332	12780.1	47180.2	30	38.1	88	2.0	0.2	15.7	9.1	92		596
3/25/98	MR1-B	13.1	14.1	1332			30	38.1	88	2.0	27.2	16.2	5.5	66		
3/25/98	MR2-S	0.3		1311	12816.7	47176.9	30	36.6	87	58.4	0.0	15.8	9.1	91		579
3/25/98	MR2-B	2.3	3.3	1311			30	36.6	87	58.4	0.0	15.8	9.1	92		
3/24/98	MS5-S	0.3		735	12686.0	47093.7	30	16.4	88	9.8	2.4	14.8	9.3	94		721
3/24/98	MS5-B	1.4	2.4	735			30	16.4	88	9.8	3.0	15.1	9.1	92		
3/24/98	MS3-S	0.3		754	12646.8	47090.1	30	15.7	88	13.5	5.4	15.3	9.5	97		879
3/24/98	MS3-B	2.3	3.3	754			~30	15.7	88	13.5	8.6	15.1	8.7	91		
3/24/98	MS1-S	0.3		815	12595.2	47088.1	30	15.4	88	18.5	12.9	15.7	9.5	104		1153
3/24/98	MS1-B	2.9	3.9	815			30	15.4	88	18.5	13.3	15.7	9.4	103		
3/24/98	G1-S	0.3		842	12595.4	47069.9	30	10.9	88	18.3	16.0	16.1	8.9	101		1223
3/24/98	G1-B	11.6	12.6	842			30	10.9	88	18.3	33.5	17.3	5.1	65		
3/24/98	G3-S	0.3		909	12660.0	47070.3	30	10.8	88	12.0	17.9	15.5	8.5	96		1431
3/24/98	G3-B	13.4	14.4	909			30	10.8	88	12.0	33.8	17.5	5.2	67		
3/24/98	G5-S	0.3		936	12710.1	47058.1	30	7.8	88	7.0	19.3	15.9	8.6	98		1442
3/24/98	G5-B	14.6	15.6	936			30	7.8	88	7.0	33.7	17.4	5.5	70		
3/24/98	G7-S	0.3		1011	12800.1	47057.5	30	7.6	87	58.2	7.6	15.5	9.1	95		934
3/24/98	G7-B	12.5	13.5	1011			30	7.6	87	58.2	34.6	18.1	5.2	68		
3/24/98	G9-S	0.3		1041	12870.0	47058.0	30	7.6	87	51.4	17.3	16.5	8.6	97		1396
3/24/98	G9-B	15.8	16.8	1041			30	7.6	87	51.4	34.0	17.6	5.6	72		
3/24/98	G11-S	0.3		1116	12960.0	47058.0	30	7.5	87	42.5	23.1	17.2	8.1	97		1672
3/24/98	G11-B	14.0	15.0	1116			30	7.5	87	42.5	33.8	17.4	6.3	80		
3/24/98	G13-S	0.3		1152	12925.4	47074.0	30	11.0	87	46.2	30.4	17.9	7.5	95		1960
3/24/98	G13-B	10.1	11.1	1152			30	11.0	87	46.2	33.3	17.3	6.7	86		
3/24/98	G15-S	0.3		1229	12840.5	47073.0	30	11.0	87	54.5	24.5	17.5	7.6	92		1777
3/24/98	G15-B	9.2	10.2	1229			30	11.0	87	54.5	33.9	17.6	5.7	73		
3/24/98	BM3-S	0.3		1306	12755.5	47071.7	30	10.9	88	2.7	6.8	16.1	9.4	99		889
3/24/98	BM3-B	10.4	11.4	1306			30	10.9	88	2.7	31.7	17.0	6.3	80		

Mobile Bay Cruise MB: 62

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)	P04 (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)
3/25/98	DR7-S	0.3	879	47.98	10.85	0.36	1.31	13.96	7.05		0.33		112.40	2.41	12.86	40	11.57		
3/25/98	DR7-B	2.3			10.00	0.30	1.62				0.31		110.10						
3/25/98	MR1-S	0.3	353	52.86	11.05	0.36	5.24	17.12	8.33		0.60		99.27	2.45	14.09	40	6.01	0.510	0.490
3/25/98	MR1-B	13.1			4.10	0.64	5.62				0.72		15.39						
3/25/98	MR2-S	0.3	302	36.02	12.12	0.38	2.78	12.25	5.18		0.66		114.50	2.14	11.25	40	6.81		
3/25/98	MR2-B	2.3			12.07	0.32	1.33				0.33		116.00						
3/24/98	MS5-S	0.3	372	76.35	13.19	0.39	2.20	12.03	10.94		0.48		94.74	3.05	28.46	30	5.74		
3/24/98	MS5-B	1.4			11.45	0.44	2.45				0.58		92.28						
3/24/98	MS3-S	0.3	326	131.13	8.39	0.33	0.10	12.14	19.04		0.33		82.02	3.63	60.00	20	15.32	0.910	0.600
3/24/98	MS3-B	2.3			7.55	0.42	1.80				0.80		67.67						
3/24/98	MS1-S	0.3	384	55.25	1.85	0.26	0.12	6.25	11.14		1.39		48.45	1.66	19.60	70	9.36		
3/24/98	MS1-B	2.9			1.67	0.34	0.34				1.72		52.41						
3/24/98	G1-S	0.3	434	40.61	2.53	0.31	0.06	6.44	6.81		4.06		42.00	0.46	6.00	200	4.77	0.880	4.300
3/24/98	G1-B	11.6			5.11	0.78	0.48				0.42		0.00						
3/24/98	G3-S	0.3	290	35.48	4.36	0.38	0.12	4.67	6.42		0.85		43.82	0.72	9.00	110	6.35		
3/24/98	G3-B	13.4			4.41	0.69	0.74				0.37		0.10						
3/24/98	G5-S	0.3	300	40.30	2.29	0.37	0.00	5.21	7.24		0.80		29.71	0.62	5.86	160	7.38	0.840	2.980
3/24/98	G5-B	14.6			3.84	0.67	0.47				0.36		0.31						
3/24/98	G7-S	0.3	493	59.97	8.97	0.30	1.33	6.23	6.76		0.45		80.77	1.27	31.33	30	3.40		
3/24/98	G7-B	12.5			4.14	0.49	0.49				0.38		3.91						
3/24/98	G9-S	0.3	284	62.07	5.94	0.41	0.35	3.35	9.96		0.64		64.86	0.60	18.86	80	6.47	0.580	2.120
3/24/98	G9-B	15.8			3.24	0.54	0.57				0.31		0.17						
3/24/98	G11-S	0.3	319	37.75	4.06	0.41	0.98	2.63	5.10		0.28		25.47	0.32	5.76	200	3.46		
3/24/98	G11-B	14.0			2.72	0.67	0.47				0.21		0.00				1.23		
3/24/98	G13-S	0.3	274	15.56	1.83	0.41	1.18	1.04	3.25		0.23		4.39	0.24	3.30	400	1.53	0.220	2.450
3/24/98	G13-B	10.1			1.50	0.48	0.64				0.25		0.00						
3/24/98	G15-S	0.3	193	39.33	3.88	0.45	1.79	2.10	5.07		0.27		22.50	0.34	11.00	180	2.85		
3/24/98	G15-B	9.2			3.01	0.56	0.65				0.27		3.34						
3/24/98	BM3-S	0.3	359	62.94	9.40	0.29	1.32	10.11	8.45		0.42		80.96	0.89	14.80	50	6.69	0.660	1.670
3/24/98	BM3-B	10.4			3.15	0.64	0.52				0.25		2.76						

Mobile Bay Cruise MB: 63

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)	O ₂ (ppm)	OSAT (%)	pH	TCO ₂ (uM)
5/7/98	FM1-S	0.3		703	12748.3	47092.5	30	15.7	88	3.7	7.6	23.1	7.7	93		1015
5/7/98	FM1-B	4.4	5.4	703			30	15.7	88	3.7	17.6	22.7	6.1	78		
5/7/98	FM3-S	0.3		714	12763.3	47091.5	30	15.5	88	2.3	7.3	22.6	7.8	94		1025
5/7/98	FM3-B	14.3	15.3	714			30	15.5	88	2.3	33.0	20.8	3.8	51		
5/7/98	FM5-S	0.3		725	12779.5	47092.7	30	15.7	88	0.8	6.0	22.8	7.8	93		965
5/7/98	FM5-B	3.8	4.8	725			30	15.7	88	0.8	17.0	22.8	6.7	87		
5/7/98	FM7-S	0.3		736	12798.3	47091.8	30	15.5	87	58.9	10.3	22.9	7.6	94		1158
5/7/98	FM7-B	3.5	4.5	736			30	15.5	87	58.9	14.4	22.9	7.1	90		
5/7/98	CP3-S	0.3		800	12768.6	47103.7	30	18.3	88	1.9	4.3	22.8	8.3	98		866
5/7/98	CP3-B	14.6	15.6	800			30	18.3	88	1.9	33.0	20.7	3.9	53		
5/7/98	WB1-S	0.3		831	12745.4	47120.6	30	22.6	88	4.4	2.8	23.3	8.2	98		783
5/7/98	WB1-B	3.2	4.2	831			30	22.6	88	4.4	2.9	23.3	8.2	97		
5/7/98	WB3-S	0.3		845	12778.4	47120.9	30	22.6	88	1.3	3.4	22.9	8.5	101		850
5/7/98	WB3-B	14.3	15.3	845			30	22.6	88	1.3	32.4	20.9	3.7	50		
5/7/98	WB5-S	0.3		901	12810.8	47122.8	30	22.7	87	58.1	1.0	22.9	8.4	99		759
5/7/98	WB5-B	3.5	4.5	901			30	22.7	87	58.1	1.1	22.8	8.3	97		
5/7/98	FR3-S	0.3		934	12783.7	47140.6	30	27.4	88	1.0	1.7	23.0	8.7	103		787
5/7/98	FR3-B	15.2	16.2	934			30	27.4	88	1.0	30.4	21.2	3.7	49		
5/7/98	PC1-S	0.3		1023	12752.9	47146.0	30	29.1	88	4.0	2.0	23.2	8.3	99		785
5/7/98	PC1-B	2.6	3.6	1023			30	29.1	88	4.0	2.0	23.2	8.2	96		
5/7/98	PC3-S	0.3		1007	12782.5	47146.4	30	29.0	88	1.1	2.3	23.1	8.6	102		812
5/7/98	PC3-B	12.5	13.5	1007			30	29.0	88	1.1	30.1	21.1	3.5	47		
5/7/98	PC5-S	0.3		952	12816.0	47145.4	30	28.4	87	58.1	0.8	23.5	7.9	94		745
5/7/98	PC5-B	3.2	4.2	952			30	28.4	87	58.1	0.8	23.5	7.7	92		
5/7/98	DR1-S	0.3		1041	12755.5	47159.4	30	32.5	88	4.0	2.2	23.5	8.1	97		788
5/7/98	DR1-B	2.3	3.3	1041			30	32.5	88	4.0	2.2	23.3	8.2	97		
5/7/98	DR3-S	0.3		1057	12780.5	47165.9	30	34.0	88	1.7	1.8	22.9	8.2	96		814
5/7/98	DR3-B	13.1	14.1	1057			30	34.0	88	1.7	28.3	21.1	3.2	43		
5/7/98	DR5-S	0.3		1114	12814.8	47165.5	30	33.8	87	58.5	1.4	22.8	8.2	97		785
5/7/98	DR5-B	3.2	4.2	1114			30	33.8	87	58.5	1.5	22.6	8.0	94		
5/7/98	DR7-S	0.3		1127	12840.6	47167.7	30	34.0	87	56.0	0.1	22.8	8.4	97		725
5/7/98	DR7-B	2.9	3.9	1127			30	34.0	87	56.0	0.1	22.7	8.3	98		

Mobile Bay Cruise MB: 63

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)	ATTN -(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
5/7/98	FM1-S	0.3	377	64.74	4.68	0.53	2.16	9.15	11.35		0.12		56.75	1.28	9.46	110	17.45		
5/7/98	FM1-B	4.4			2.40	0.45	2.57				0.08		33.03						
5/7/98	FM3-S	0.3	354	64.07	7.69	0.57	2.60	9.95	11.66		0.09		61.30	1.57	11.40	80	13.62	1.470	2.270
5/7/98	FM3-B	14.3			2.28	1.34	3.15				0.21		9.66						
5/7/98	FM5-S	0.3	358	82.11	8.08	0.58	2.70	9.36	14.52		0.07		62.50	1.44	11.46	70	15.11		
5/7/98	FM5-B	3.8			1.71	0.29	2.09				0.07		33.64						
5/7/98	FM7-S	0.3	323	56.00	4.47	0.44	2.28	8.40	9.87		0.15		49.06	1.10	9.83	120	12.34		
5/7/98	FM7-B	3.5			2.34	0.38	2.93				0.18		37.67						
5/7/98	CP3-S	0.3	328	61.64	8.56	0.53	1.06	13.10	10.69		0.10		67.70	2.00	12.39	70	17.02	1.850	2.330
5/7/98	CP3-B	14.6			2.21	1.33	2.98				0.21		9.92						
5/7/98	WB1-S	0.3	305	219.35	5.69	0.45	0.63	12.96	30.62		0.08		69.59	4.55	65.50	30	31.61		
5/7/98	WB1-B	3.2			5.62	0.43	0.71				0.10		68.48						
5/7/98	WB3-S	0.3	314	70.86	7.63	0.54	0.85	16.56	13.08		0.04		64.94	1.73	15.00		17.23	1.290	2.090
5/7/98	WB3-B	14.3			1.99	1.20	3.88				0.32		14.74						
5/7/98	WB5-S	0.3	298	51.13	9.33	0.40	1.02	15.53	9.18		0.15		77.99	2.95	13.86		11.91		
5/7/98	WB5-B	3.5			9.27	0.41	1.50				0.17		76.04						
5/7/98	FR3-S	0.3	343	68.95	8.55	0.47	1.60	14.77	11.74		0.13		74.16	2.22	10.68	70	16.59	1.910	2.120
5/7/98	FR3-B	15.2			2.05	1.05	5.84				0.60		16.14						
5/7/98	PC1-S	0.3	337	102.48	8.82	0.64	1.19	15.19	17.26		0.11		78.23	5.38	16.94	50	23.83		
5/7/98	PC1-B	2.6			8.71	0.66	1.08				0.13		76.09						
5/7/98	PC3-S	0.3	322	50.93	8.35	0.59	1.07	16.04	10.46		0.11		75.90	2.41	12.25	70	18.72	1.930	2.060
5/7/98	PC3-B	12.5			2.10	0.99	7.89				0.50		21.16						
5/7/98	PC5-S	0.3	284	142.15	0.79	0.20	0.69	12.65	20.47		0.13		66.35	6.32	41.50	30	31.06		
5/7/98	PC5-B	3.2			0.78	0.19	1.02				0.13		63.40						
5/7/98	DR1-S	0.3	360	146.22	8.08	0.57	0.83	13.03	20.94		0.09		72.89	5.62	31.00	40	27.23		
5/7/98	DR1-B	2.3			7.99	0.56	0.78				0.10		72.34						
5/7/98	DR3-S	0.3	342	84.06	13.39	0.69	2.43	17.59	12.38		0.43		82.19	5.21	22.50	50	15.89	2.170	0.920
5/7/98	DR3-B	13.1			2.49	0.95	8.51				0.66		20.67						
5/7/98	DR5-S	0.3	335	115.10	12.99	0.59	0.68	16.46	16.54		0.29		81.67	4.70	33.00	40	19.06		
5/7/98	DR5-B	3.2			13.57	0.59	1.29				0.33		80.84						
5/7/98	DR7-S	0.3	307	114.55	12.11	0.43	0.62	16.77	15.10		0.46		72.33	7.56	41.36	30	16.08		
5/7/98	DR7-B	2.9			12.22	0.42	0.53				0.39		78.37						

Mobile Bay Cruise MB: 63

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)
5/7/98	MR1-S	0.3		1208	12780.2	47176.7	30	38.1	88	2.0	0.8	21.9	7.9	91		816
5/7/98	MR1-B	14.0	15.0	1208			30	38.1	88	2.0	26.4	21.1	3.0	39		
5/7/98	MR2-S	0.3		1147	12816.2	47176.7	30	36.6	87	58.4	0.1	22.3	8.2	94		722
5/7/98	MR2-B	3.2	4.2	1147			30	36.6	87	58.4	0.1	22.2	8.1	93		
5/5/98	MS5-S	0.3		1327	12685.6	47093.8	30	16.4	88	9.8	11.7	24.6	8.2	108		1192
5/5/98	MS5-B	2.0	3.0	1327			30	16.4	88	9.8	11.8	24.5	8.2	105		
5/5/98	MS3-S	0.3		1309	12646.7	47090.1	30	15.7	88	13.5	15.6	24.3	7.6	99		1370
5/5/98	MS3-B	2.9	3.9	1309			30	15.7	88	13.5	16.3	24.3	7.7	101		
5/5/98	MS1-S	0.3		1244	12595.0	47088.6	30	15.4	88	18.5	17.4	24.0	7.3	96		1417
5/5/98	MS1-B	3.5	4.5	1244			30	15.4	88	18.5	18.4	23.5	7.0	91		
5/5/98	G1-S	0.3		1212	12595.1	47069.7	30	10.9	88	18.3	24.7	23.2	6.8	92		1787
5/5/98	G1-B	11.6	12.6	1212			30	10.9	88	18.3	34.0	20.3	3.6	49		
5/5/98	G3-S	0.3		1142	12660.0	47070.2	30	10.8	88	12.0	24.0	23.4	7.0	95		1740
5/5/98	G3-B	14.0	15.0	1142			30	10.8	88	12.0	34.6	20.4	3.4	46		
5/5/98	G5-S	0.3		1110	12710.0	47058.2	30	7.8	88	7.0	22.9	23.4	7.2	96		1708
5/5/98	G5-B	14.6	15.6	1110			30	7.8	88	7.0	34.5	20.1	3.5	48		
5/5/98	G7-S	0.3		1030	12800.2	47057.8	30	7.6	87	58.2	16.2	23.0	7.9	98		1418
5/5/98	G7-B	13.7	14.7	1030			30	7.6	87	58.2	35.0	20.3	4.3	57		
5/5/98	G9-S	0.3		954	12870.0	47057.9	30	7.6	87	51.4	23.3	22.9	7.2	98		1722
5/5/98	G9-B	16.1	17.1	954			30	7.6	87	51.4	34.8	20.3	4.2	56		
5/5/98	G11-S	0.3		911	12960.1	47057.6	30	7.5	87	42.5	23.9	22.7	7.3	96		1745
5/5/98	G11-B	14.3	15.3	911			30	7.5	87	42.5	34.6	19.7	4.1	55		
5/5/98	G13-S	0.3		842	12925.3	47073.6	30	11.0	87	46.2	24.1	22.2	7.3	97		1774
5/5/98	G13-B	11.0	12.0	842			30	11.0	87	46.2	34.0	20.3	4.5	60		
5/5/98	G15-S	0.3		802	12840.5	47073.0	30	11.0	87	54.5	20.3	21.4	7.2	91		1582
5/5/98	G15-B	10.1	11.1	802			30	11.0	87	54.5	34.6	20.2	4.4	60		
5/5/98	BM3-S	0.3		722	12755.6	47071.9	30	10.9	88	2.7	8.8	22.7	8.1	99		1060
5/5/98	BM3-B	14.0	15.0	722			30	10.9	88	2.7	33.0	20.7	4.5	61		

Mobile Bay Cruise MB: 63

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)
5/7/98	MR1-S	0.3	365	53.21	14.71	0.70	3.50	19.57	8.44		0.60		81.85	4.42	12.04	70	9.57	1.420	0.730
5/7/98	MR1-B	14.0			2.78	0.83	13.49				0.92		25.33						
5/7/98	MR2-S	0.3	308	107.15	13.68	0.49	0.86	15.90	12.80		0.50		82.65	8.63	38.75	40	15.32		
5/7/98	MR2-B	3.2			13.62	0.51	0.92				0.50		93.23						
5/5/98	MS5-S	0.3	409	90.67	0.02	0.12	1.52	7.23	12.00		0.15		45.89	0.95	10.83	110	6.89		
5/5/98	MS5-B	2.0			0.07	0.10	2.28				0.11		33.66						
5/5/98	MS3-S	0.3	399	70.55	0.06	0.04	0.00	6.86	8.52		0.05		26.95	0.84	11.13	110	4.34	0.310	0.770
5/5/98	MS3-B	2.9			0.06	0.05	0.00				0.08		29.93						
5/5/98	MS1-S	0.3	418	69.73	0.07	0.02	0.00	7.51	9.89		0.09		25.41	0.86	9.32	120	5.11		
5/5/98	MS1-B	3.5			0.11	0.03	0.38				0.07		27.81						
5/5/98	G1-S	0.3	189	27.39	0.21	0.11	0.02	5.89	4.93		0.00		6.13	0.18	2.56	50	1.13	0.220	1.850
5/5/98	G1-B	11.6			2.87	1.50	1.53				0.26		15.80						
5/5/98	G3-S	0.3	265	54.18	0.10	0.03	0.00	6.29	9.05		0.05		10.17	0.20	4.52	275	2.55		
5/5/98	G3-B	14.0			3.03	1.88	1.12				0.37		13.09						
5/5/98	G5-S	0.3	280	42.49	0.59	0.03	0.04	6.21	7.17		0.06		13.55	0.13	2.39	450	3.07	0.360	4.530
5/5/98	G5-B	14.6			2.99	1.84	1.40				0.34		15.47						
5/5/98	G7-S	0.3	261	61.65	2.81	0.35	0.00	6.99	9.85		0.08		34.42	0.35	4.73	150	9.28		
5/5/98	G7-B	13.7			2.84	1.31	0.24				0.34		8.76						
5/5/98	G9-S	0.3	328	20.92	0.31	0.11	0.00	5.91	3.66		0.15		18.43	0.24	5.12	475	2.39	0.250	1.850
5/5/98	G9-B	16.1			2.51	1.56	0.44				0.24		8.48						
5/5/98	G11-S	0.3	377	19.69	0.46	0.09	0.00	6.86	3.64		0.06		10.61	0.22	2.53	650	1.51		
5/5/98	G11-B	14.3			2.74	1.68	0.00				0.32		12.06						
5/5/98	G13-S	0.3	259	22.20	0.68	0.21	0.00	5.54	4.27		0.07		13.73	0.38	3.90	325	2.30	0.250	1.350
5/5/98	G13-B	11.0			2.24	1.34	0.57				0.21		8.11						
5/5/98	G15-S	0.3	303	33.73	2.72	0.53	0.00	5.96	5.53		0.06		29.25	0.48	6.38	190	7.74		
5/5/98	G15-B	10.1			2.71	1.39	0.93				0.32		8.29						
5/5/98	BM3-S	0.3	368	55.32	5.61	0.56	1.39	7.59	9.24		0.13		50.59	1.64	18.20	50	14.86	1.530	1.880
5/5/98	BM3-B	14.0			2.17	1.04	1.57				0.21		12.01						

Mobile Bay Cruise MB: 64

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)	O ₂ (ppm)	OSAT (%)	pH	TCO ₂ (uM)
6/11/98	FM1-S	0.3		745	12748.2	47092.3	30	15.7	88	3.7	19.1	27.6	6.6	96		1561
6/11/98	FM1-B	3.8	4.8	745			30	15.7	88	3.7	31.4	25.2	5.2	76		
6/11/98	FM3-S	0.3		800	12762.6	47091.5	30	15.5	88	2.3	24.3	27.3	6.5	95		1786
6/11/98	FM3-B	13.4	14.4	800			30	15.5	88	2.3	32.9	25.0	4.2	61		
6/11/98	FM5-S	0.3		819	12779.1	47092.3	30	15.7	88	0.8	26.3	26.9	5.9	85		1889
6/11/98	FM5-B	2.0	3.0	819			30	15.7	88	0.8	30.8	25.6	5.5	81		
6/11/98	FM7-S	0.3		832	12798.0	47092.1	30	15.5	87	58.9	26.5	26.5	6.1	91		1868
6/11/98	FM7-B	3.2	4.2	832			30	15.5	87	58.9	29.4	25.9	5.7	82		
6/11/98	CP3-S	0.3		900	12768.1	47103.1	30	18.3	88	1.9	16.0	27.9	7.0	97		1425
6/11/98	CP3-B	13.1	14.1	900			30	18.3	88	1.9	32.2	25.0	5.0	74		
6/11/98	WB1-S	0.3		927	12744.9	47120.4	30	22.6	88	4.4	12.6	27.7	5.8	80		1362
6/11/98	WB1-B	2.9	3.9	927			30	22.6	88	4.4	18.7	26.8	3.6	50		
6/11/98	WB3-S	0.3		943	12777.4	47121.0	30	22.6	88	1.3	11.7	28.5	7.1	98		1248
6/11/98	WB3-B	13.7	14.7	943			30	22.6	88	1.3	31.2	24.8	4.1	60		
6/11/98	WB5-S	0.3		1001	12810.6	47122.4	30	22.7	87	58.1	10.1	28.5	7.1	98		1171
6/11/98	WB5-B	2.9	3.9	1001			30	22.7	87	58.1	10.8	28.1	6.6	91		
6/11/98	WB7-S	0.3		1017	12840.1	47122.8	30	22.6	87	55.3	8.3	28.3	7.4	100		1113
6/11/98	WB7-B	2.6	3.6	1017			30	22.6	87	55.3	11.3	27.8	6.2	83		
6/11/98	FR3-S	0.3		1051	12783.8	47140.3	30	27.4	88	1.0	8.3	28.5	7.7	104		1098
6/11/98	FR3-B	11.9	12.9	1051			30	27.4	88	1.0	30.8	24.4	3.2	45		
6/11/98	PC1-S	0.3		1147	12753.4	47145.9	30	29.1	88	4.0	7.2	28.7	7.5	100		1066
6/11/98	PC1-B	2.6	3.6	1147			30	29.1	88	4.0	7.7	28.3	7.2	97		
6/11/98	PC3-S	0.3		1129	12783.3	47146.7	30	29.0	88	1.1	7.4	29.0	7.4	101		1065
6/11/98	PC3-B	13.4	14.4	1129			30	29.0	88	1.1	31.0	23.9	2.4	34		
6/11/98	PC5-S	0.3		1109	12815.3	47145.4	30	28.4	87	58.1	5.5	28.4	7.1	94		993
6/11/98	PC5-B	2.9	3.9	1109			30	28.4	87	58.1	6.2	27.8	5.9	79		
6/11/98	DR1-S	0.3		1207	12755.9	47159.1	30	32.5	88	4.0	5.4	29.0	7.8	105		996
6/11/98	DR1-B	2.0	3.0	1207			30	32.5	88	4.0	5.9	28.6	7.1	96		
6/11/98	DR3-S	0.3		1224	12780.5	47165.4	30	34.0	88	1.7	6.0	28.8	7.7	103		1019
6/11/98	DR3-B	12.8	13.8	1224			30	34.0	88	1.7	30.1	24.0	2.6	37		
6/11/98	DR5-S	0.3		1242	12814.6	47165.8	30	33.8	87	58.5	4.7	29.4	10.2	137		843
6/11/98	DR5-B	2.9	3.9	1242			30	33.8	87	58.5	4.9	28.8	7.8	107		

Mobile Bay Cruise MB: 64

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)	P04 (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)
6/11/98	FM1-S	0.3	328	51.16	0.09	0.07	0.00	8.41	13.47		0.09		28.13	1.17	8.11	100	3.75		
6/11/98	FM1-B	3.8			0.19	0.28	2.17				0.21		11.18						
6/11/98	FM3-S	0.3	296	53.44	0.02	0.08	0.00	7.47	8.80		0.09		17.12	1.05	8.78	130	3.88	0.530	1.350
6/11/98	FM3-B	13.4			0.20	0.48	2.12				0.16		14.23						
6/11/98	FM5-S	0.3	365	46.71	0.14	0.10	0.10	8.43	8.59		0.05		14.86	1.14	7.95	150	3.69		
6/11/98	FM5-B	2.0			0.19	0.14	0.63				0.03		10.36						
6/11/98	FM7-S	0.3	465	77.55	0.17	0.07	0.46	6.76	12.81		0.05		19.16	1.09	14.70	110	3.78		
6/11/98	FM7-B	3.2			0.13	0.16	2.28				0.08		13.41						
6/11/98	CP3-S	0.3	347	56.27	0.04	0.08	0.00	9.70	10.79		0.08		51.09	1.22	7.02	120	3.32	0.420	0.950
6/11/98	CP3-B	13.1			0.24	0.24	2.20				0.29		10.75						
6/11/98	WB1-S	0.3	471	119.34	0.00	0.09	1.22	9.75	19.50		0.14		40.92	1.40	17.96	180	10.21		
6/11/98	WB1-B	2.9			0.09	0.16	0.16				0.17		38.10						
6/11/98	WB3-S	0.3	385	68.62	0.00	0.10	1.17	9.40	13.04		0.13		43.80	0.92	12.76	150	3.40	0.510	1.370
6/11/98	WB3-B	13.7			0.23	0.45	5.86				0.47		13.70						
6/11/98	WB5-S	0.3	371	61.39	0.00	0.10	1.56	9.53	13.93		0.12		49.12	0.69	3.75	70	3.74		
6/11/98	WB5-B	2.9			0.00	0.10	1.10				0.23		40.12						
6/11/98	WB7-S	0.3	401	64.86	0.00	0.09	1.41	9.63	11.06		0.06		47.28	1.23	3.79	60	4.00		
6/11/98	WB7-B	2.6			0.00	0.14	1.69				0.34		50.38						
6/11/98	FR3-S	0.3	377	84.45	0.00	0.11	1.25	8.51	13.71		0.08		46.53	1.07	7.80	110	9.87	0.780	1.980
6/11/98	FR3-B	11.9			0.30	0.97	8.65				0.63		17.75						
6/11/98	PC1-S	0.3	367	54.53	0.19	0.09	2.20	9.98	8.98		0.00		37.95	0.88	7.00	110	5.11		
6/11/98	PC1-B	2.6			0.00	0.11	1.55				0.04		38.13						
6/11/98	PC3-S	0.3	330	63.73	0.00	0.12	1.24	10.27	10.66		0.10		34.43	1.04	7.00	100	5.87	0.680	1.920
6/11/98	PC3-B	13.4			0.47	1.34	9.41				0.74		19.87						
6/11/98	PC5-S	0.3	382	100.37	0.00	0.13	1.36	10.57	14.57		0.15		40.40	1.30	8.70	90	8.51		
6/11/98	PC5-B	2.9			0.00	0.12	1.40				0.15		47.91						
6/11/98	DR1-S	0.3	402	88.24	0.05	0.11	1.87	11.88	14.78		0.00		25.63	1.12	13.83	90	9.87		
6/11/98	DR1-B	2.0			0.46	0.19	1.71				0.04		26.41						
6/11/98	DR3-S	0.3	361	79.76	0.00	0.10	1.28	12.07	16.12		0.00		24.44	1.19	8.94	90	11.91	1.330	3.080
6/11/98	DR3-B	12.8			0.50	1.36	8.75				0.68		21.17						
6/11/98	DR5-S	0.3	358	190.74	0.15	0.08	0.70	14.27	23.75		0.08		26.81	1.68	11.25	70	30.64		
6/11/98	DR5-B	2.9			0.31	0.19	1.01				0.14		33.48						

Mobile Bay Cruise MB: 64

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)
6/11/98	DR7-S	0.3		1259	12840.2	47167.6	30	34.0	87	56.0	2.6	29.5	8.6	113		807
6/11/98	DR7-B	2.3	3.3	1259			30	34.0	87	56.0	2.8	29.1	8.0	108		
6/11/98	MR1-S	0.3		1345	12780.4	47180.4	30	38.1	88	2.0	3.1	29.8	6.6	89		1052
6/11/98	MR1-B	13.1	14.1	1345			30	38.1	88	2.0	29.9	24.0	2.1	29		
6/10/98	MS5-S	0.3		1340	12686.4	47093.7	30	16.4	88	9.8	17.3	29.1	7.3	106		1518
6/10/98	MS5-B	3.2	4.2	1340			30	16.4	88	9.8	28.8	25.5	7.5	109		
6/10/98	MS3-S	0.3		1320	12646.6	47090.2	30	15.7	88	13.5	19.9	30.0	7.3	106		1630
6/10/98	MS3-B	2.6	3.6	1320			30	15.7	88	13.5	26.4	26.7	6.7	98		
6/10/98	MS1-S	0.3		1257	12595.2	47088.4	30	15.4	88	18.5	21.8	29.1	7.3	106		1716
6/10/98	MS1-B	3.5	4.5	1257			30	15.4	88	18.5	28.2	26.0	6.0	87		
6/10/98	G1-S	0.3		1225	12595.4	47070.0	30	10.9	88	18.3	29.2	27.7	6.6	97		2056
6/10/98	G1-B	11.6	12.6	1225			30	10.9	88	18.3	35.4	21.7	1.5	22		
6/10/98	G3-S	0.3		1153	12659.9	47070.2	30	10.8	88	12.0	32.5	26.5	6.5	95		2185
6/10/98	G3-B	13.4	14.4	1153			30	10.8	88	12.0	35.8	21.8	2.0	28		
6/10/98	G5-S	0.3		1120	12710.1	47058.1	30	7.8	88	7.0	29.9	27.0	6.8	98		2080
6/10/98	G5-B	14.6	15.6	1120			30	7.8	88	7.0	35.7	21.5	3.6	50		
6/10/98	G7-S	0.3		1038	12800.2	47057.5	30	7.6	87	58.2	24.8	27.6	7.2	104		1842
6/10/98	G7-B	13.4	14.4	1038			30	7.6	87	58.2	35.4	21.5	4.5	62		
6/10/98	G9-S	0.3		1002	12870.0	47058.0	30	7.6	87	51.4	31.9	27.2	6.3	96		2142
6/10/98	G9-B	15.8	16.8	1002			30	7.6	87	51.4	35.6	21.8	4.6	64		
6/10/98	G11-S	0.3		919	12959.9	47057.9	30	7.5	87	42.5	31.2	27.2	6.5	98		2149
6/10/98	G11-B	14.0	15.0	919			30	7.5	87	42.5	35.7	22.0	4.9	69		
6/10/98	G13-S	0.3		851	12925.5	47074.0	30	11.0	87	46.2	31.9	26.7	7.0	106		2003
6/10/98	G13-B	10.7	11.7	851			30	11.0	87	46.2	35.5	22.5	5.2	73		
6/10/98	G15-S	0.3		811	12840.4	47072.9	30	11.0	87	54.5	31.2	26.5	6.3	93		2134
6/10/98	G15-B	9.8	10.8	811			30	11.0	87	54.5	35.1	22.6	4.7	65		
6/10/98	BM3-S	0.3		728	12754.6	47071.0	30	10.9	88	2.7	26.7	26.5	5.8	84		2010
6/10/98	BM3-B	10.7	11.7	728			30	10.9	88	2.7	34.4	22.6	3.8	53		

Mobile Bay Cruise MB: 64

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)
6/11/98	DR7-S	0.3	319	112.13	0.11	0.06	0.70	14.96	16.32		0.08		30.02	1.45	8.20	80	15.80		
6/11/98	DR7-B	2.3			0.27	0.08	1.39				0.04		32.24						
6/11/98	MR1-S	0.3	359	82.14	6.65	0.48	6.88	14.89	14.26		0.53		28.07	2.28	16.25	40	10.09	4.960	3.970
6/11/98	MR1-B	13.1			0.90	2.18	10.14				0.84		26.98						
6/10/98	MS5-S	0.3	295	78.83	0.01	0.07	0.00	9.42	11.17		0.07		29.96	0.55	9.57	110	3.91		
6/10/98	MS5-B	3.2			0.13	0.08	0.55				0.05		12.05						
6/10/98	MS3-S	0.3	365	89.80	0.03	0.07	0.00	9.06	13.55		0.10		14.88	0.72	8.50	120	3.53	0.450	1.640
6/10/98	MS3-B	2.6			0.11	0.05	0.35				0.03		10.75						
6/10/98	MS1-S	0.3	323	67.71	0.01	0.07	0.00	10.10	9.52		0.08		13.76	1.74	9.57	100	3.57		
6/10/98	MS1-B	3.5			0.12	0.10	0.28				0.21		11.76						
6/10/98	G1-S	0.3	254	23.65	0.07	0.11	0.27	6.06	5.03		0.03		9.80	0.27	3.77	400	1.70	0.330	3.010
6/10/98	G1-B	11.6			0.46	1.71	3.70				0.29		17.83						
6/10/98	G3-S	0.3	145	8.58	0.14	0.16	0.45	4.58	2.22		0.05		1.75	0.18	2.37	700	0.51		
6/10/98	G3-B	13.4			0.54	2.10	3.04				0.34		15.61						
6/10/98	G5-S	0.3	153	29.26	0.09	0.13	0.09	5.51	5.98		0.03		24.24	0.17	4.85	275	2.21	0.580	7.320
6/10/98	G5-B	14.6			0.40	1.80	1.37				0.21		8.58						
6/10/98	G7-S	0.3	240	50.32	0.13	0.09	0.26	7.01	9.31		0.03		27.55	0.27	5.98	300	2.72		
6/10/98	G7-B	13.4			0.21	1.16	0.46				0.16		5.68						
6/10/98	G9-S	0.3	136	2.07	0.12	0.14	0.33	4.31	0.32		0.03		11.79	0.21		450	1.33	0.260	2.640
6/10/98	G9-B	15.8			0.19	0.75	0.71				0.16		8.49						
6/10/98	G11-S	0.3	198	14.48	0.09	0.11	0.40	4.78	2.42		0.00		9.85	0.21	2.36	800	0.31		
6/10/98	G11-B	14.0			0.12	0.58	1.05				0.16		8.86						
6/10/98	G13-S	0.3		38.52	0.05	0.10	1.06	3.71	8.37		0.00		5.80	0.29	4.60	275	1.11	0.470	3.660
6/10/98	G13-B	10.7			0.09	0.13	0.76				0.08		9.75						
6/10/98	G15-S	0.3	171	17.11	0.16	0.12	0.12	5.18	3.00		0.00		9.50	0.31	3.25	525	0.88		
6/10/98	G15-B	9.8			0.08	0.17	0.58				0.05		7.82						
6/10/98	BM3-S	0.3	214	39.54	0.07	0.20	0.42	6.34	7.57		0.08		12.07	0.44	6.43	120	1.36	0.500	2.190
6/10/98	BM3-B	10.7			0.25	0.83	4.17				0.26		10.52						

Mobile Bay Cruise MB: 65

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)
7/15/98	FM1-S	0.3		730	12748.4	47092.2	30	15.7	88	3.7	21.0	28.6	6.2	90		1623
7/15/98	FM1-B	3.5	4.5	730			30	15.7	88	3.7	32.6	26.1	4.7	69		
7/15/98	FM3-S	0.3		742	12762.8	47091.6	30	15.5	88	2.3	24.3	28.2	6.2	90		1764
7/15/98	FM3-B	13.1	14.1	742			30	15.5	88	2.3	34.7	24.6	4.4	64		
7/15/98	FM5-S	0.3		755	12778.6	47092.3	30	15.7	88	0.8	21.7	28.4	6.5	94		1653
7/15/98	FM5-B	3.2	4.2	755			30	15.7	88	0.8	30.0	26.8	5.2	77		
7/15/98	FM7-S	0.3		807	12797.9	47092.1	30	15.5	87	58.9	20.6	28.6	7.0	101		1606
7/15/98	FM7-B	2.9	3.9	807			30	15.5	87	58.9	27.6	27.3	5.4	80		
7/15/98	CP3-S	0.3		830	12768.7	47103.0	30	18.3	88	1.9	17.6	28.6	6.7	96		1479
7/15/98	CP3-B	11.9	12.9	830			30	18.3	88	1.9	33.6	25.4	4.0	58		
7/15/98	WB1-S	0.3		913	12745.1	47120.7	30	22.6	88	4.4	16.8	29.1	5.8	83		1445
7/15/98	WB1-B	2.6	3.6	913			30	22.6	88	4.4	22.1	28.6	1.9	28		
7/15/98	WB3-S	0.3		930	12777.5	47120.4	30	22.6	88	1.3	16.1	28.9	6.8	98		1415
7/15/98	WB3-B	13.1	14.1	930			30	22.6	88	1.3	34.0	25.3	3.1	46		
7/15/98	WB5-S	0.3		951	12810.3	47122.3	30	22.7	87	58.1	17.5	28.8	6.8	97		1474
7/15/98	WB5-B	2.6	3.6	951			30	22.7	87	58.1	19.5	28.8	6.6	96		
7/15/98	WB7-S	0.3		1007	12840.5	47122.5	30	22.6	87	55.3	16.9	29.5	5.9	87		1449
7/15/98	WB7-B	2.3	3.3	1007			30	22.6	87	55.3	16.9	29.3	5.6	82		
7/15/98	FR3-S	0.3		1042	12784.4	47140.4	30	27.4	88	1.0	13.2	29.3	7.0	98		1292
7/15/98	FR3-B	13.4	14.4	1042			30	27.4	88	1.0	33.7	25.0	2.4	35		
7/15/98	PC1-S	0.3		1100	12753.3	47145.6	30	29.1	88	4.0	12.2	29.7	6.9	97		1249
7/15/98	PC1-B	2.0	3.0	1100			30	29.1	88	4.0	15.5	29.4	5.6	78		
7/15/98	PC3-S	0.3		1117	12783.8	47146.4	30	29.0	88	1.1	13.7	29.6	6.9	98		1313
7/15/98	PC3-B	11.6	12.6	1117			30	29.0	88	1.1	33.4	24.9	1.7	25		
7/15/98	PC5-S	0.3		1138	12815.2	47145.2	30	28.4	87	58.1	9.8	29.6	6.9	95		1147
7/15/98	PC5-B	2.6	3.6	1138			30	28.4	87	58.1	13.9	29.2	4.9	70		
7/15/98	DR1-S	0.3		1159	12755.5	47159.1	30	32.5	88	4.0	9.8	29.9	7.2	102		1147
7/15/98	DR1-B	1.7	2.7	1159			30	32.5	88	4.0	11.4	29.7	6.6	94		
7/15/98	DR3-S	0.3		1232	12780.8	47165.4	30	34.0	88	1.7	9.3	29.6	7.0	98		1126
7/15/98	DR3-B	13.1	14.1	1232			30	34.0	88	1.7	32.9	24.8	1.5	22		
7/15/98	DR5-S	0.3		1250	12814.2	47165.6	30	33.8	87	58.5	9.2	28.7	8.3	115		1121
7/15/98	DR5-B	2.6	3.6	1250			30	33.8	87	58.5	9.9	29.2	6.4	85		

Mobile Bay Cruise MB: 65

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)
7/15/98	FM1-S	0.3	290	69.02	0.04	0.03	0.62	9.41	7.92		0.13			0.89	9.47	140	4.00		
7/15/98	FM1-B	3.5			2.46	0.43	0.94				0.26		15.53						
7/15/98	FM3-S	0.3	265	62.50	0.18	0.04	0.42	7.73	7.58		0.13			0.75	8.23	130	4.08	0.940	2.250
7/15/98	FM3-B	13.1			6.01	1.30	2.08				0.36		18.03						
7/15/98	FM5-S	0.3	418	60.23	0.16	0.03	0.29	10.07	7.50		0.07			0.68	8.33	190	2.89		
7/15/98	FM5-B	3.2			1.01	0.12	0.45				0.31		15.99						
7/15/98	FM7-S	0.3	284	76.94	0.08	0.03	0.16	8.81	9.74		0.07			0.90	7.30	160	3.40		
7/15/98	FM7-B	2.9			0.57	0.04	0.33				0.36		21.54						
7/15/98	CP3-S	0.3	324	51.93	0.12	0.03	0.13	8.99	5.16		0.06			1.01	3.90	180	3.06	0.560	1.300
7/15/98	CP3-B	11.9			4.74	0.83	2.88				0.47		11.17						
7/15/98	WB1-S	0.3	326	82.87	0.06	0.04	0.10	10.23	11.26		0.20			1.06	8.87	100	7.74		
7/15/98	WB1-B	2.6			0.45	0.01	0.38				0.43		31.78						
7/15/98	WB3-S	0.3	302	61.88	0.09	0.03	0.10	10.24	6.35		0.08			0.72	3.70	200	4.00	0.490	1.650
7/15/98	WB3-B	13.1			6.83	1.28	4.86				0.54		15.90						
7/15/98	WB5-S	0.3	342	47.82	0.11	0.02	0.10	9.81	4.64		0.25			0.60	4.33	290	4.51		
7/15/98	WB5-B	2.6			0.39	0.00	0.30				0.24		32.57						
7/15/98	WB7-S	0.3	350	67.64	0.12	0.02	0.10	10.40	7.89		0.27			0.84	5.30	150	9.36		
7/15/98	WB7-B	2.3			0.34	0.00	0.49				0.28		37.33						
7/15/98	FR3-S	0.3	433	77.33	0.41	0.03	0.16	8.69	9.17		0.13			0.86	6.71	160	7.15	0.750	2.180
7/15/98	FR3-B	13.4			7.37	1.36	7.01				0.72		14.60						
7/15/98	PC1-S	0.3	341	75.74	0.04	0.03	0.13	9.36	8.99		0.09			0.92	4.88	120	4.77		
7/15/98	PC1-B	2.0			0.14	0.01	0.17				0.28		36.32						
7/15/98	PC3-S	0.3	312	82.91	0.06	0.03	0.07	9.20	7.52		0.06			0.88	6.63	130	3.91	0.640	1.880
7/15/98	PC3-B	11.6			8.34	1.49	10.56				0.90		18.83						
7/15/98	PC5-S	0.3	309	55.47	0.09	0.02	0.20	9.66	4.53		0.15			1.21	3.10	150	3.83		
7/15/98	PC5-B	2.6			0.40	0.00	0.00				0.32		47.97						
7/15/98	DR1-S	0.3	346	84.74	0.12	0.03	0.16	11.45	10.54		0.06			1.03	7.13	100	6.47		
7/15/98	DR1-B	1.7			0.45	0.00	0.11				0.18		42.71						
7/15/98	DR3-S	0.3	405	81.17	0.49	0.23	0.82	12.04	10.03		0.22			1.01	5.80	90	1.150	2.850	
7/15/98	DR3-B	13.1			8.02	1.62	10.24				0.85		16.49						
7/15/98	DR5-S	0.3	459	115.16	0.10	0.04	0.20	10.28	15.18		0.11			1.33	8.60	70	18.91		
7/15/98	DR5-B	2.6			0.99	0.08	0.77				0.24		38.90						

Mobile Bay Cruise MB: 65

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)
7/15/98	DR7-S	0.3		1305	12840.2	47167.6	30	34.0	87	56.0	7.6	29.9	8.4	116		1053
7/15/98	DR7-B	2.0	3.0	1305			30	34.0	87	56.0	7.7	29.7	8.3	114		
7/15/98	MR1-S	0.3		1356	12780.1	47180.2	30	38.1	88	2.0	4.7	30.3	7.0	96		930
7/15/98	MR1-B	13.1	14.1	1356			30	38.1	88	2.0	32.4	24.8	0.9	14		
7/15/98	MR2-S	0.3		1327	12816.3	47176.3	30	36.6	87	58.4	4.9	30.4	8.5	116		939
7/15/98	MR2-B	2.0	3.0	1327			30	36.6	87	58.4	7.4	29.8	4.1	56		
7/13/98	MS5-S	0.3		750	12685.8	47093.7	30	16.4	88	9.8	25.7	29.9	5.6	87		1823
7/13/98	MS5-B	1.4	2.4	750			30	16.4	88	9.8	25.8	29.9	5.7	87		
7/13/98	MS3-S	0.3		811	12646.3	47090.2	30	15.7	88	13.5	27.8	29.6	5.4	84		1913
7/13/98	MS3-B	2.3	3.3	811			30	15.7	88	13.5	28.0	29.4	5.0	76		
7/13/98	MS1-S	0.3		837	12595.1	47088.2	30	15.4	88	18.5	28.9	28.7	5.9	90		1959
7/13/98	MS1-B	2.9	3.9	837			30	15.4	88	18.5	31.6	26.8	4.1	62		
7/13/98	G1-S	0.3		910	12594.8	47089.9	30	10.9	88	18.3	31.6	27.6	5.9	89		2074
7/13/98	G1-B	11.6	12.6	910			30	10.9	88	18.3	36.3	22.5	3.5	50		
7/13/98	G3-S	0.3		940	12660.1	47070.3	30	10.8	88	12.0	32.7	26.9	6.1	92		2121
7/13/98	G3-B	13.4	14.4	940			30	10.8	88	12.0	36.2	22.3	3.7	53		
7/13/98	G5-S	0.3		1011	12710.1	47058.3	30	7.8	88	7.0	33.1	27.5	5.8	88		2138
7/13/98	G5-B	13.7	14.7	1011			30	7.8	88	7.0	36.3	22.7	3.8	55		
7/13/98	G7-S	0.3		1052	12799.7	47057.4	30	7.6	87	58.2	31.8	27.4	5.9	91		2083
7/13/98	G7-B	12.5	13.5	1052			30	7.6	87	58.2	36.2	22.7	4.8	69		
7/13/98	G9-S	0.3		1124	12870.0	47058.1	30	7.6	87	51.4	29.7	27.2	6.4	95		1993
7/13/98	G9-B	15.8	16.8	1124			30	7.6	87	51.4	36.3	21.9	2.1	30		
7/13/98	G11-S	0.3		1204	12960.1	47058.1	30	7.5	87	42.5	31.7	27.0	6.6	99		2078
7/13/98	G11-B	13.7	14.7	1204			30	7.5	87	42.5	36.2	21.6	2.5	35		
7/13/98	G13-S	0.3		1235	12924.9	47073.7	30	11.0	87	46.2	33.3	26.5	6.3	95		2147
7/13/98	G13-B	10.7	11.7	1235			30	11.0	87	46.2	36.3	21.8	1.8	26		
7/13/98	G15-S	0.3		1314	12839.9	47073.1	30	11.0	87	54.5	33.1	26.4	6.3	94		2138
7/13/98	G15-B	9.5	10.5	1314			30	11.0	87	54.5	36.3	23.0	4.1	59		
7/13/98	BM3-S	0.3		1355	12755.5	47072.1	30	10.9	88	2.7	33.8	26.2	5.8	87		2168
7/13/98	BM3-B	11.3	12.3	1355			30	10.9	88	2.7	35.9	23.0	3.8	54		

Mobile Bay Cruise MB: 65

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)	ATTN -/(m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
7/15/98	DR7-S	0.3	358	109.07	0.16	0.03	0.16	11.07	12.04		0.12			1.15	7.61	80	17.02		
7/15/98	DR7-B	2.0			0.34	0.03					0.06		47.37						
7/15/98	MR1-S	0.3	386	108.33	0.99	0.20	0.55	12.59	13.73		0.06			1.58	6.11	70	22.69	1.350	2.200
7/15/98	MR1-B	13.1			0.00	2.23	12.15				0.20		19.06						
7/15/98	MR2-S	0.3	361	117.08	0.17	0.03	0.26	11.54	13.06		0.09			1.90	11.75	80	17.02		
7/15/98	MR2-B	2.0			14.22	0.06					1.06		47.28						
7/13/98	MS5-S	0.3	486	169.54	0.04	0.02	0.36	8.50	18.42		0.29			2.84	41.56	40	9.36		
7/13/98	MS5-B	1.4			0.18	0.06	0.10				0.36		58.72						
7/13/98	MS3-S	0.3	391	126.89	0.05	0.02	0.16	8.10	15.08		0.39			1.77	18.60	60	10.02	1.700	2.210
7/13/98	MS3-B	2.3			0.66	0.03	0.06				0.47		25.79						
7/13/98	MS1-S	0.3	279	88.48	0.20	0.01	0.13	7.86	10.72		0.22			1.14	11.62	100	6.55		
7/13/98	MS1-B	2.9			1.50	0.35	0.87				0.38		23.96						
7/13/98	G1-S	0.3	284	55.93	0.21	0.01	0.16	6.42	4.38		0.21			0.44	4.36	200	3.57	0.440	2.500
7/13/98	G1-B	11.6			8.21	1.63	2.29				0.46		24.97						
7/13/98	G3-S	0.3	286	41.14	0.11	0.02	0.16	5.07	4.83		0.08			0.25	4.75	300	1.93		
7/13/98	G3-B	13.4			11.92	2.22	1.28				0.46		17.18						
7/13/98	G5-S	0.3	314	29.06	0.20	0.03	0.33	7.58	1.72		0.14			0.24	2.92	700	0.77	0.280	2.390
7/13/98	G5-B	13.7			10.76	1.86	0.87				0.39		26.71						
7/13/98	G7-S	0.3	298	35.59	0.23	0.04	0.29	5.15	3.59		0.11			0.26	3.72	325	2.17		
7/13/98	G7-B	12.5			7.79	1.47	0.21				0.02		12.46						
7/13/98	G9-S	0.3	270	55.13	0.23	0.05	0.13	5.15	5.60		0.05			0.21	3.75	180	3.74	0.530	6.840
7/13/98	G9-B	15.8			16.41	3.06	0.25				0.88		28.99						
7/13/98	G11-S	0.3	264	48.02	0.13	0.03	0.10	6.51	4.76		0.04			0.26	4.16	250	1.79		
7/13/98	G11-B	13.7			26.96	3.08	1.25				0.60		19.78						
7/13/98	G13-S	0.3	232	37.73	0.11	0.05	0.16	4.39	4.75		0.05			0.37	12.53	200	2.30	0.450	2.910
7/13/98	G13-B	10.7			16.47	3.02	5.59				0.84		31.08						
7/13/98	G15-S	0.3	249	45.09	0.15	0.01	0.13	4.50	4.37		0.04			0.32	5.18	225	3.74		
7/13/98	G15-B	9.5			7.61	1.24	0.21				0.33		15.71						
7/13/98	BM3-S	0.3	294	37.68	0.81	0.41	0.59	3.29	3.31		0.13			0.50	4.35	180	2.60	0.640	2.980
7/13/98	BM3-B	11.3			10.35	1.88	2.05				0.44		26.02						

Mobile Bay Cruise MB: 66

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)
8/25/98	FM1-S	0.3		725	12748.3	47092.2	30	15.7	88	3.7	19.2	29.9	6.6	97		1627
8/25/98	FM1-B	3.8	4.8	725			30	15.7	88	3.7	28.3	30.0	5.5	85		
8/25/98	FM3-S	0.3		737	12762.5	47091.6	30	15.5	88	2.3	19.5	29.9	6.8	101		1639
8/25/98	FM3-B	13.4	14.4	737			30	15.5	88	2.3	30.3	30.0	5.5	85		
8/25/98	FM5-S	0.3		751	12778.8	47092.4	30	15.7	88	0.8	19.1	29.8	6.6	97		1642
8/25/98	FM5-B	3.2	4.2	751			30	15.7	88	0.8	27.5	30.1	6.1	92		
8/25/98	FM7-S	0.3		803	12797.9	47092.1	30	15.5	87	58.9	19.8	29.6	7.2	106		1652
8/25/98	FM7-B	2.9	3.9	803			30	15.5	87	58.9	26.3	30.2	6.7	102		
8/25/98	CP3-S	0.3		824	12768.3	47103.1	30	18.3	88	1.9	16.6	29.9	6.7	97		1566
8/25/98	CP3-B	12.8	13.8	824			30	18.3	88	1.9	30.1	30.0	5.7	6		
8/25/98	WB1-S	0.3		850	12745.0	47120.2	30	22.6	88	4.4	12.7	30.3	7.0	101		1426
8/25/98	WB1-B	2.6	3.6	850			30	22.6	88	4.4	19.1	30.4	5.5	83		
8/25/98	WB3-S	0.3		906	12777.6	47121.0	30	22.6	88	1.3	14.3	30.0	7.0	99		1488
8/25/98	WB3-B	13.1	14.1	906			30	22.6	88	1.3	30.0	30.0	4.7	74		
8/25/98	WB5-S	0.3		922	12810.4	47122.4	30	22.7	87	58.1	10.5	30.2	7.3	103		1374
8/25/98	WB5-B	2.6	3.6	922			30	22.7	87	58.1	18.4	29.8	3.8	57		
8/25/98	WB7-S	0.3		939	12840.1	47122.7	30	22.6	87	55.3	11.3	30.1	7.5	105		1431
8/25/98	WB7-B	2.3	3.3	939			30	22.6	87	55.3	19.8	29.8	3.4	50		
8/25/98	FR3-S	0.3		1011	12784.0	47140.3	30	27.4	88	1.0	9.1	30.5	7.2	102		1316
8/25/98	FR3-B	13.1	14.1	1011			30	27.4	88	1.0	29.9	30.0	4.1	64		
8/25/98	PC1-S	0.3		1100	12753.5	47145.9	30	29.1	88	4.0	8.5	30.9	7.5	105		1253
8/25/98	PC1-B	2.0	3.0	1100			30	29.1	88	4.0	12.2	30.5	6.0	86		
8/25/98	PC3-S	0.3		1044	12783.4	47146.7	30	29.0	88	1.1	7.4	30.3	7.9	109		1216
8/25/98	PC3-B	13.1	14.1	1044			30	29.0	88	1.1	29.7	29.9	3.2	49		
8/25/98	PC5-S	0.3		1028	12814.9	47145.4	30	28.4	87	58.1	9.6	30.3	7.7	107		1338
8/25/98	PC5-B	2.6	3.6	1028			30	28.4	87	58.1	15.1	29.9	3.8	54		
8/25/98	DR1-S	0.3		1119	12755.5	47159.0	30	32.5	88	4.0	5.8	30.7	7.7	107		1162
8/25/98	DR1-B	1.7	2.7	1119			30	32.5	88	4.0	8.4	30.3	4.7	66		
8/25/98	DR3-S	0.3		1134	12780.9	47165.4	30	34.0	88	1.7	5.5	30.9	7.2	101		1203
8/25/98	DR3-B	12.2	13.2	1134			30	34.0	88	1.7	29.3	30.0	3.6	55		
8/25/98	DR5-S	0.3		1151	12814.1	47165.8	30	33.8	87	58.5	4.7	31.2	5.5	119		930
8/25/98	DR5-B	2.6	3.6	1151			30	33.8	87	58.5	11.5	30.2	3.6	51		

Mobile Bay Cruise MB: 66

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)
8/25/98	FM1-S	0.3	263	51.94	0.44	0.00	0.29	8.89	6.26		0.26		27.53	2.02	8.72	200	1.92		
8/25/98	FM1-B	3.8			0.78	0.05	1.20				0.42		21.92						
8/25/98	FM3-S	0.3	245	39.31	0.56	0.00	1.50	9.11	5.16		0.24		26.25	0.92	3.64	225	1.57	0.300	0.840
8/25/98	FM3-B	13.4			0.67	0.03	0.42				0.25		11.85						
8/25/98	FM5-S	0.3	245	38.72	0.37	0.03	0.02	10.31	4.34		0.26		27.63	1.30	5.90	190	1.67		
8/25/98	FM5-B	3.2			0.51	0.00	0.00				0.46		16.90						
8/25/98	FM7-S	0.3	250	56.12	0.43	0.00	0.05	9.69	6.40		0.23		25.20	1.23	6.92	200	3.83		
8/25/98	FM7-B	2.9			0.52	0.01	0.00				0.39		16.57						
8/25/98	CP3-S	0.3	256	39.46	0.84	0.01	0.31	9.46	5.38		0.24		32.43	0.88	3.79	200	2.40	0.280	0.830
8/25/98	CP3-B	12.8			0.83	0.05	0.43				0.32		36.06						
8/25/98	WB1-S	0.3	277	62.86	0.01	0.05	0.16	11.01	7.76		0.29		39.98	0.91	5.30	150	4.17		
8/25/98	WB1-B	2.6			0.61	0.05	2.91				0.43		30.72						
8/25/98	WB3-S	0.3	271	60.74	0.06	0.03	0.21	11.62	8.35		0.31		36.96	0.92	8.63	170	3.40	0.390	1.040
8/25/98	WB3-B	13.1			0.82	0.07	2.80				0.61		23.02						
8/25/98	WB5-S	0.3	306	69.35	0.00	0.02	0.20	12.51	9.13		0.34		46.39	0.89	5.50	150	4.77		
8/25/98	WB5-B	2.6			1.36	0.08	1.08				0.77		36.55						
8/25/98	WB7-S	0.3	307	100.89	0.06	0.00	0.13	12.50	12.82		0.29		48.90	0.95	11.40	140	10.55		
8/25/98	WB7-B	2.3			0.74	0.01	0.20				0.68		32.54						
8/25/98	FR3-S	0.3	307	65.34	0.05	0.02	0.57	11.36	9.06		0.25		46.68	1.10	5.10	150	5.62	0.460	1.110
8/25/98	FR3-B	13.1			0.89	0.06	5.92				0.66		15.44						
8/25/98	PC1-S	0.3	274	71.80	0.00	0.01	0.02	11.86	9.72		0.15		48.60	1.41	4.63	150	4.85		
8/25/98	PC1-B	2.0			0.62	0.03	1.08				0.41		41.89						
8/25/98	PC3-S	0.3	311	70.15	0.00	0.02			9.89		0.10		47.47	0.94	4.62	150	6.81	0.490	1.440
8/25/98	PC3-B	13.1			3.07	0.42	10.68				1.16		17.94						
8/25/98	PC5-S	0.3	275	77.74	0.07	0.03	0.04	12.05	11.42		0.26		48.12	1.40	4.12	140	8.68		
8/25/98	PC5-B	2.6			0.90	0.09	2.27				0.77		45.93						
8/25/98	DR1-S	0.3	302	86.80	0.00	0.02			11.31		0.05		50.73	1.03	4.88	130	6.89		
8/25/98	DR1-B	1.7			0.36	0.03	0.32				0.25		53.08						
8/25/98	DR3-S	0.3	291	93.20	0.00	0.05			13.53		0.17		73.87	1.24	8.83	100	15.66	0.960	2.010
8/25/98	DR3-B	12.2			1.32	0.13	7.15				0.92		18.44						
8/25/98	DR5-S	0.3	277	87.60	0.70	0.03			10.94		0.17		53.92	1.05	5.17	120	8.85		
8/25/98	DR5-B	2.6			0.56	0.12	2.25				1.00		51.74						

Mobile Bay Cruise MB: 66

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)	O ₂ (ppm)	OSAT (%)	pH	TCO ₂ (uM)
8/25/98	DR7-S	0.3		1205	12840.3	47167.8	30	34.0	87	56.0	6.7	31.0	8.0	112		1213
8/25/98	DR7-B	2.0	3.0	1205			30	34.0	87	56.0	12.6	30.2	3.1	45		
8/25/98	MR1-S	0.3		1244	12780.4	47180.4	30	38.1	88	2.0	7.4	31.8	6.5	93		1340
8/25/98	MR1-B	13.4	14.4	1244			30	38.1	88	2.0	29.0	30.1	2.5	38		
8/25/98	MR2-S	0.3		1224	12816.6	47176.5	30	36.6	87	58.4	3.2	31.6	9.0	124		1063
8/25/98	MR2-B	4.7	5.7	1224			30	36.6	87	58.4	7.3	31.0	6.0	84		
8/24/98	MS5-S	0.3		1356	12685.7	47093.7	30	16.4	88	9.8	23.7	30.5	6.7	96		1752
8/24/98	MS5-B	3.2	4.2	1356			30	16.4	88	9.8	26.8	30.2	3.7	57		
8/24/98	MS3-S	0.3		1336	12645.0	47090.1	30	15.7	88	13.5	23.6	30.5	7.6	118		1719
8/24/98	MS3-B	4.7	5.7	1336			-30	15.7	88	13.5	30.4	29.7	1.1	18		
8/24/98	MS1-S	0.3		1310	12594.9	47088.2	30	15.4	88	18.5	25.3	30.6	6.3	100		1815
8/24/98	MS1-B	3.2	4.2	1310			30	15.4	88	18.5	30.4	30.1	4.5	71		
8/24/98	G1-S	0.3		1235	12595.0	47070.0	30	10.9	88	18.3	31.7	30.2	5.2	86		2087
8/24/98	G1-B	11.9	12.9	1235			30	10.9	88	18.3	31.9	29.7	4.3	69		
8/24/98	G3-S	0.3		1205	12650.0	47070.3	30	10.8	88	12.0	31.3	30.2	5.7	91		2044
8/24/98	G3-B	13.4	14.4	1205			30	10.8	88	12.0	31.7	29.9	4.9	76		
8/24/98	G5-S	0.3		1134	12710.0	47058.0	30	7.8	88	7.0	31.5	30.2	5.9	96		2068
8/24/98	G5-B	15.5	16.5	1134			30	7.8	88	7.0	32.8	29.6	3.9	60		
8/24/98	G7-S	0.3		1053	12799.8	47057.6	30	7.6	87	58.2	31.8	30.1	5.8	90		2091
8/24/98	G7-B	12.2	13.2	1053			30	7.6	87	58.2	32.7	30.0	5.4	88		
8/24/98	G9-S	0.3		1019	12870.0	47058.0	30	7.6	87	51.4	32.4	30.0	5.8	93		2097
8/24/98	G9-B	15.2	16.2	1019			30	7.6	87	51.4	32.6	29.7	4.7	72		
8/24/98	G11-S	0.3		939	12960.2	47057.9	30	7.5	87	42.5	32.4	29.7	5.7	87		2078
8/24/98	G11-B	13.7	14.7	939			30	7.5	87	42.5	32.7	29.4	4.9	78		
8/24/98	G13-S	0.3		900	12925.0	47074.0	30	11.0	87	46.2	31.4	29.6	5.6	90		2038
8/24/98	G13-B	10.4	11.4	900			30	11.0	87	46.2	32.3	29.8	5.6	90		
8/24/98	G15-S	0.3		829	12840.3	47072.9	30	11.0	87	54.5	31.5	29.6	5.9	92		2046
8/24/98	G15-B	9.5	10.5	829			30	11.0	87	54.5	31.6	29.6	5.8	91		
8/24/98	BM3-S	0.3		746	12755.1	47071.7	30	10.9	88	2.7	30.8	29.9	5.7	90		1977
8/24/98	BM3-B	12.5	13.5	746			30	10.9	88	2.7	32.0	29.8	5.2	83		

Mobile Bay Cruise MB: 66

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)	P04 (μ M)	DOP (μ M)	SI (μ M)	ATTEN -(/m)	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/d)	APROD (gC/m2/d)
8/25/98	DR7-S	0.3	282	131.61	0.00	0.03			18.58		0.24		56.63	1.31	7.17	90	20.59		
8/25/98	DR7-B	2.0			0.35	0.04	3.64				1.12		56.13						
8/25/98	MR1-S	0.3	294	121.97	1.57	0.27			18.67		0.73		49.44	1.30	13.40	80	14.98	2.490	3.660
8/25/98	MR1-B	13.4			3.08	0.38	13.02				1.61		23.02						
8/25/98	MR2-S	0.3	303	185.84	0.00	0.05			21.56		0.34		55.23	1.66	8.93	80	35.26		
8/25/98	MR2-B	4.7			1.08	0.13					0.54		54.91						
8/24/98	MS5-S	0.3	216	82.12	0.00	0.00	0.10	8.54	9.53		0.32		24.45	0.91	8.02	130	7.32		
8/24/98	MS5-B	3.2			0.03	0.08	1.10				0.67		36.41						
8/24/98	MS3-S	0.3	239	135.74	0.00	0.01	0.08	8.29	17.47		0.26		32.81	1.02	15.00	110	14.47	0.980	2.680
8/24/98	MS3-B	4.7			0.02	0.09	2.89				0.88		32.05						
8/24/98	MS1-S	0.3	222	77.27	0.00	0.02	0.07	7.78	7.87		0.23		27.23	0.63	7.08	160	4.43		
8/24/98	MS1-B	3.2			0.05	0.19	0.31				0.39		25.25						
8/24/98	G1-S	0.3	143	26.53	0.14	0.04	0.00	5.53	3.33		0.20		9.15	0.28	3.64	275	1.49	0.190	1.770
8/24/98	G1-B	11.9			0.06	0.17	2.64				0.40		20.31						
8/24/98	G3-S	0.3	156	45.02	0.20	0.06	0.00	6.36	5.85		0.18		10.30	0.33	3.48	275	2.13		
8/24/98	G3-B	13.4			0.06	0.14	1.91				0.39		17.84						
8/24/98	G5-S	0.3	153	34.24	0.07	0.02	0.07	6.10	4.41		0.05		6.69	0.24	3.54	450	0.81	0.230	2.470
8/24/98	G5-B	15.5			0.06	0.15	2.71				0.36		29.62						
8/24/98	G7-S	0.3	145	26.82	0.10	0.06	0.24	5.17	3.55		0.06		6.37	0.22	4.05	500	1.36		
8/24/98	G7-B	12.2			0.10	0.09	0.17				0.04		4.08						
8/24/98	G9-S	0.3	155	20.74	0.08	0.04	0.00	5.55	2.65		0.03		3.19	0.18	3.05	750	0.64	0.150	1.790
8/24/98	G9-B	15.2			0.13	0.09	0.04				0.10		19.18						
8/24/98	G11-S	0.3	150	23.01	0.08	0.13	0.00	5.61	3.12		0.04		7.19	0.26	2.27	650	1.49		
8/24/98	G11-B	13.7			0.11	0.09	0.10				0.12		10.45						
8/24/98	G13-S	0.3	156	28.61	0.09	0.05	0.24	6.01	4.09		0.03		7.91	0.27	3.32	490	0.94	0.180	1.680
8/24/98	G13-B	10.4			0.14	0.05	0.00				0.06		14.08						
8/24/98	G15-S	0.3	153	33.65	0.06	0.02	0.00	6.05	5.31		0.05		7.23	0.40	4.20	410	1.45		
8/24/98	G15-B	9.5			0.11	0.08	5.94				0.21		12.03						
8/24/98	BM3-S	0.3	172	46.18	0.08	0.03	0.17	6.17	7.04		0.18		11.46	0.51	5.99	210	2.72	0.460	2.330
8/24/98	BM3-B	12.5			0.09	0.13	1.88				0.22		9.12						

Mobile Bay Cruise MB: 67

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)
9/23/98	MS5-S	0.3		1350	12685.8	47093.9	30	16.4	88	9.8	19.3	28.6	7.2	102		1595
9/23/98	MS5-B	1.4	2.4	1350			30	16.4	88	9.8	22.4	28.1	6.3	90		
9/23/98	MS3-S	0.3		1330	12646.5	47090.3	30	15.7	88	13.5	23.1	28.6	7.3	106		1720
9/23/98	MS3-B	2.3	3.3	1330			30	15.7	88	13.5	23.7	28.0	6.4	93		
9/23/98	MS1-S	0.3		1307	12595.0	47088.2	30	15.4	88	18.5	23.6	28.7	6.9	101		1734
9/23/98	MS1-B	2.9	3.9	1307			30	15.4	88	18.5	26.6	28.1	3.8	56		
9/23/98	G1-S	0.3		1237	12695.2	47070.0	30	10.9	88	18.3	31.3	28.3	6.2	96		2033
9/23/98	G1-B	11.9	12.9	1237			30	10.9	88	18.3	33.5	27.8	5.3	74		
9/23/98	G3-S	0.3		1208	12660.1	47070.4	30	10.8	88	12.0	32.1	28.1	5.7	87		2070
9/23/98	G3-B	13.1	14.1	1208			~30	10.8	88	12.0	34.1	27.8	5.3	82		
9/23/98	G5-S	0.3		1124	12710.2	47058.0	30	7.8	88	7.0	27.8	28.1	6.3	93		1917
9/23/98	G5-B	14.6	15.6	1124			30	7.8	88	7.0	34.2	27.6	5.2	80		
9/23/98	G7-S	0.3		1047	12800.1	47057.9	30	7.6	87	58.2	29.6	28.2	6.3	95		1974
9/23/98	G7-B	12.8	13.8	1047			30	7.6	87	58.2	34.3	27.6	5.4	84		
9/23/98	G9-S	0.3		1015	12870.1	47058.0	30	7.6	87	51.4	32.2	27.9	5.8	88		2102
9/23/98	G9-B	15.2	16.2	1015			30	7.6	87	51.4	34.3	27.6	5.3	81		
9/23/98	G11-S	0.3		920	12960.1	47058.0	30	7.5	87	42.5	32.3	27.5	6.1	93		2074
9/23/98	G11-B	14.0	15.0	920			30	7.5	87	42.5	34.4	27.4	5.3	81		
9/23/98	G13-S	0.3		852	12925.2	47074.0	30	11.0	87	46.2	33.9	27.4	5.8	88		2160
9/23/98	G13-B	10.4	11.4	852			30	11.0	87	46.2	34.0	27.5	5.7	87		
9/23/98	G15-S	0.3		814	12840.1	47073.0	30	11.0	87	54.5	34.0	27.3	5.3	82		2165
9/23/98	G15-B	9.5	10.5	814			30	11.0	87	54.5	34.3	27.5	5.4	83		
9/23/98	BM3-S	0.3		736	12755.4	47071.9	30	10.9	88	2.7	21.8	27.7	6.5	94		1698
9/23/98	BM3-B	11.0	12.0	736			30	10.9	88	2.7	32.8	27.6	4.5	68		

Mobile Bay Cruise MB: 67

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)	SEXTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
9/23/98	MS5-S	0.3	271	69.08	0.03	0.00	1.01	8.39	8.28		0.14		12.41	1.05	13.50	100	8.28		
9/23/98	MS5-B	1.4			0.26	0.01	0.24				0.26		-12.81						
9/23/98	MS3-S	0.3	217	67.17	0.03	0.01	0.06	7.66	8.77		0.06		8.34	1.08	8.75	110	8.62	0.720	1.210
9/23/98	MS3-B	2.3			0.40	0.05	0.28				0.05		8.69						
9/23/98	MS1-S	0.3	218	51.76	0.07	0.02	0.15	8.49	7.73		0.09		5.51	0.77	9.40	150	3.97		
9/23/98	MS1-B	2.9			0.58	0.15	3.90				0.58		25.19						
9/23/98	G1-S	0.3	166	26.46	0.04	0.00	0.21	6.09	3.35		0.06		2.54	0.29	4.50	325	2.43	0.200	1.420
9/23/98	G1-B	11.9			0.27	0.00	0.32				0.03		3.59						
9/23/98	G3-S	0.3	188	22.74	0.01	0.00	1.03	5.05	3.29		0.05		2.40	0.30	5.04	250	1.36		
9/23/98	G3-B	13.1			0.36	0.02	0.39				0.06		1.13						
9/23/98	G5-S	0.3	219	43.64	0.06	0.01	0.13	6.59	5.41		0.11		4.97	0.36	5.43	170	7.06	0.640	3.410
9/23/98	G5-B	14.6			0.54	0.02	0.32				0.04		2.11						
9/23/98	G7-S	0.3	197	27.96	0.11	0.02	0.05	6.28	4.51		0.12		2.99	0.35	4.80	250	2.85		
9/23/98	G7-B	12.8			0.51	0.00	0.74				0.07		2.26						
9/23/98	G9-S	0.3	176	21.09	0.06	0.00	0.04	4.96	3.08		0.10		2.01	0.38	4.91	250	2.20	0.290	1.450
9/23/98	G9-B	15.2			0.34	0.03	0.74				0.04		1.10						
9/23/98	G11-S	0.3	172	24.72	0.09	0.00	0.21	5.18	4.53		0.04		2.01	0.29	4.00	425	1.50		
9/23/98	G11-B	14.0			0.30	0.00	0.39				0.05		0.00						
9/23/98	G13-S	0.3	137	25.30	0.09	0.00	1.03	3.28	4.09		0.05		0.00	0.32	3.44	480	3.62	0.230	1.490
9/23/98	G13-B	10.4			0.31	0.00	0.28				0.03		0.00						
9/23/98	G15-S	0.3	136	17.66	0.28	0.02	0.53	3.87	2.63		0.09		2.81	0.32	4.48	300	2.13		
9/23/98	G15-B	9.5			0.44	0.03	0.74				0.07		0.32						
9/23/98	BM3-S	0.3	226	32.63	0.12	0.00	0.77	7.48	5.59		0.22		4.59	0.70	4.71	150	6.21	0.700	1.730
9/23/98	BM3-B	11.0			0.66	0.11	1.10				0.19		4.95						

Mobile Bay Cruise MB: 68

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)
10/20/98	FM1-S	0.3		740	12748.4	47092.3	30	15.7	88	3.7	12.1	25.1	7.3	94		1190
10/20/98	FM1-B	3.8	4.8	740			30	15.7	88	3.7	14.6	25.4	7.1	93		
10/20/98	FM3-S	0.3		751	12762.1	47091.3	30	15.5	88	2.3	11.3	25.1	7.3	95		1165
10/20/98	FM3-B	12.5	13.5	751			30	15.5	88	2.3	27.3	25.8	6.0	86		
10/20/98	FM5-S	0.3		809	12778.8	47092.4	30	15.7	88	0.8	11.8	25.1	7.0	91		1199
10/20/98	FM5-B	3.2	4.2	809			30	15.7	88	0.8	23.4	25.5	5.4	76		
10/20/98	FM7-S	0.3		818	12798.1	47092.2	30	15.5	87	58.9	13.0	25.2	7.1	93		1277
10/20/98	FM7-B	2.9	3.9	818			30	15.5	87	58.9	22.8	25.5	5.6	77		
10/20/98	CP3-S	0.3		840	12768.2	47103.3	30	18.3	88	1.9	11.9	25.4	7.7	99		1180
10/20/98	CP3-B	13.1	14.1	840			30	18.3	88	1.9	28.2	25.6	5.3	80		
10/20/98	WB1-S	0.3		907	12744.9	47120.2	30	22.6	88	4.4	13.5	25.5	7.1	94		1278
10/20/98	WB1-B	2.6	3.6	907			30	22.6	88	4.4	13.5	25.5	7.1	92		
10/20/98	WB3-S	0.3		924	12777.6	47121.0	30	22.6	88	1.3	12.2	25.5	7.6	100		1199
10/20/98	WB3-B	12.5	13.5	924			30	22.6	88	1.3	27.4	25.6	5.6	80		
10/20/98	WB5-S	0.3		949	12810.7	47122.4	30	22.7	87	58.1	9.5	25.3	7.7	100		1113
10/20/98	WB5-B	2.6	3.6	949			30	22.7	87	58.1	12.7	25.3	6.2	81		
10/20/98	WB7-S	0.3		1002	12840.1	47122.8	30	22.6	87	55.3	12.0	25.5	6.8	89		1243
10/20/98	WB7-B	2.3	3.3	1002			30	22.6	87	55.3	12.6	25.3	5.9	77		
10/20/98	FR3-S	0.3		1033	12784.2	47140.3	30	27.4	88	1.0	8.3	25.5	8.1	103		1039
10/20/98	FR3-B	12.8	13.8	1033			30	27.4	88	1.0	26.1	25.5	5.4	77		
10/20/98	PC1-S	0.3		1128	12753.6	47146.0	30	29.1	88	4.0	7.8					1043
10/20/98	PC1-B	2.0	3.0	1128			30	29.1	88	4.0	8.2					
10/20/98	PC3-S	0.3		1114	12783.2	47146.8	30	29.0	88	1.1	7.9					1057
10/20/98	PC3-B	13.1	14.1	1114			30	29.0	88	1.1	25.3					
10/20/98	PC5-S	0.3		1050	12814.9	47145.4	30	28.4	87	58.1	9.1					1146
10/20/98	PC5-B	2.3	3.3	1050			30	28.4	87	58.1	10.8					
10/20/98	DR1-S	0.3		1147	12755.7	47159.1	30	32.5	88	4.0	5.8					978
10/20/98	DR1-B	1.7	2.7	1147			30	32.5	88	4.0	5.8					
10/20/98	DR3-S	0.3		1208	12781.0	47165.5	30	34.0	88	1.7	5.1					1030
10/20/98	DR3-B	12.5	13.5	1208			30	34.0	88	1.7	25.0					
10/20/98	DR5-S	0.3		1225	12814.0	47165.7	30	33.8	87	58.5	5.3					987
10/20/98	DR5-B	2.6	3.6	1225			30	33.8	87	58.5	6.5					

Mobile Bay Cruise MB: 68

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
10/20/98	FM1-S	0.3	366	48.96	0.11	0.08	0.05	9.88	6.27		0.18		61.83	1.00	4.50	110	3.91		
10/20/98	FM1-B	3.8			0.08	0.10	0.48				0.12		82.86						
10/20/98	FM3-S	0.3	377	52.99	0.10	0.08	0.10	10.88	6.54		0.08		61.62	1.37	4.50	140	3.74	0.380	0.550
10/20/98	FM3-B	12.5			0.78	0.90	1.51				0.12		20.87						
10/20/98	FM5-S	0.3	406	51.84	0.14	0.18	0.16	10.47	6.54		0.08		60.46	1.28	5.25	100	5.11		
10/20/98	FM5-B	3.2			0.75	0.46	1.42				0.20		34.85						
10/20/98	FM7-S	0.3	375	67.99	0.37	0.82	0.58	9.75	10.85		0.15		63.38	1.17	5.00	100	5.62		
10/20/98	FM7-B	2.9			0.49	0.61	2.03				0.21		26.72						
10/20/98	CP3-S	0.3	400	55.06	0.15	0.04	0.08	10.48	6.69		0.13		59.20	1.09	5.25	110	4.08	0.380	0.700
10/20/98	CP3-B	13.1			0.77	1.21	2.34				0.19		22.43						
10/20/98	WB1-S	0.3	370	57.32	0.14	0.10	0.18	9.64	7.15		0.07		53.96	1.42	7.00	90	4.60		
10/20/98	WB1-B	2.6			0.10	0.12	0.49				0.11		54.26						
10/20/98	WB3-S	0.3	374	51.49	0.17	0.03	0.09	10.19	6.36		0.08		56.44	1.17	3.50	110	3.91	0.350	0.630
10/20/98	WB3-B	12.5			0.67	1.06	2.34				0.39		20.78						
10/20/98	WB5-S	0.3	419	67.12	0.70	1.06	0.22	11.71	8.56		0.10		70.51	1.19	3.75	100	8.51		
10/20/98	WB5-B	2.6			0.91	0.48	1.77				0.21		61.36						
10/20/98	WB7-S	0.3	369	67.98	7.96	0.46	0.27	3.20	9.37		0.14		62.72	1.17	6.75	90	6.89		
10/20/98	WB7-B	2.3			0.89	0.59	1.78				0.21		78.02						
10/20/98	FR3-S	0.3	445	70.78	0.17	0.05	0.34	12.37	9.58		0.10		75.12	1.35	4.25	100	8.51	0.510	0.740
10/20/98	FR3-B	12.8			0.85	0.64	3.89				0.66		25.13						
10/20/98	PC1-S	0.3	424	82.92	0.19	0.04	0.44	12.59	10.83		0.09		70.09	1.58	9.00	80	9.46		
10/20/98	PC1-B	2.0			0.11	0.11	0.58				0.11		75.08						
10/20/98	PC3-S	0.3	444	76.56	1.41	0.87	0.18	12.56	10.53		0.11		79.76	1.28	5.71	90	14.64	0.990	1.230
10/20/98	PC3-B	13.1			0.65	0.61	3.15				0.38		21.56						
10/20/98	PC5-S	0.3	427	75.18	2.38	2.86	0.21	12.52	10.51		0.07		75.64	1.38	3.14	100	8.85		
10/20/98	PC5-B	2.3			2.00	2.27	1.49				0.14		68.39						
10/20/98	DR1-S	0.3	474	85.41	3.05	1.02	0.21	15.25	12.04		0.10		89.18	1.67	6.00	80	15.66		
10/20/98	DR1-B	1.7			3.46	1.07	0.03				0.13		90.07						
10/20/98	DR3-S	0.3	502	107.64	0.09	1.80	0.03	22.84	14.01		0.19		104.70	1.99	6.00	80	19.23	2.110	1.500
10/20/98	DR3-B	12.5			0.59	1.09	6.78				0.73		46.21						
10/20/98	DR5-S	0.3	477	108.94	2.51	1.88	0.00	16.36	12.89		0.11		100.50	1.78	6.33	70	18.08		
10/20/98	DR5-B	2.6			4.32	2.23	1.93				0.11		96.53						

Mobile Bay Cruise MB: 68

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)
10/20/98	DR7-S	0.3		1240	12840.5	47167.9	30	34.0	87	56.0	5.9					1003
10/20/98	DR7-B	2.0	3.0	1240			30	34.0	87	56.0	7.6					
10/20/98	MR1-S	0.3		1319	12780.5	47180.6	30	38.1	88	2.0	7.3					1215
10/20/98	MR1-B	12.2	13.2	1319			30	38.1	88	2.0	25.4					
10/20/98	MR2-S	0.3		1257	12816.6	47176.6	30	36.6	87	58.4	3.8					981
10/20/98	MR2-B	1.7	2.7	1257			30	36.6	87	58.4	4.0					
10/19/98	MS5-S	0.3		1307	12685.9	47093.9	30	16.4	88	9.8	17.5	25.9	7.0	95		1400
10/19/98	MS5-B	2.6	3.6	1307			30	16.4	88	9.8	18.6	25.7	6.9	94		
10/19/98	MS3-S	0.3		1249	12646.5	47090.3	30	15.7	88	13.5	20.9	26.0	6.1	85		1554
10/19/98	MS3-B	2.6	3.6	1249			30	15.7	88	13.5	21.9	25.7	5.5	76		
10/19/98	MS1-S	0.3		1225	12594.9	47088.4	30	15.4	88	18.5	19.8	25.9	6.4	88		1518
10/19/98	MS1-B	3.2	4.2	1225			30	15.4	88	18.5	25.2	25.7	5.4	76		
10/19/98	G1-S	0.3		1154	12595.2	47070.1	30	10.9	88	18.3	29.1	26.1	6.0	88		1861
10/19/98	G1-B	11.9	12.9	1154			30	10.9	88	18.3	29.9	25.9	5.8	85		
10/19/98	G3-S	0.3		1126	12660.2	47070.0	30	10.8	88	12.0	28.7	26.2	6.0	86		1841
10/19/98	G3-B	13.7	14.7	1126			30	10.8	88	12.0	31.7	26.1	5.0	74		
10/19/98	G5-S	0.3		1056	12710.1	47058.0	30	7.8	88	7.0	26.6	26.1	6.3	90		1721
10/19/98	G5-B	14.9	15.9	1056			30	7.8	88	7.0	33.1	26.2	5.7	85		
10/19/98	G7-S	0.3		1020	12800.3	47057.5	30	7.6	87	58.2	30.1	26.0	6.0	87		1926
10/19/98	G7-B	12.8	13.8	1020			30	7.6	87	58.2	32.4	26.2	5.6	84		
10/19/98	G9-S	0.3		950	12870.3	47057.9	30	7.6	87	51.4	32.6	26.0	6.0	89		2056
10/19/98	G9-B	15.5	16.5	950			30	7.6	87	51.4	33.3	26.0	5.8	86		
10/19/98	G11-S	0.3		913	12960.2	47057.8	30	7.5	87	42.5	33.7	25.9	5.8	86		2088
10/19/98	G11-B	13.7	14.7	913			30	7.5	87	42.5	33.9	25.9	5.8	86		
10/19/98	G13-S	0.3		846	12925.2	47073.7	30	11.0	87	46.2	32.2	25.7	5.8	86		2038
10/19/98	G13-B	10.7	11.7	846			30	11.0	87	46.2	32.6	25.7	5.7	84		
10/19/98	G15-S	0.3		807	12840.3	47072.8	30	11.0	87	54.5	28.4	25.4	5.8	83		1838
10/19/98	G15-B	9.2	10.2	807			30	11.0	87	54.5	30.2	25.5	5.5	79		
10/19/98	BM3-S	0.3		729	12755.3	47071.6	30	10.9	88	2.7	24.6	25.3	6.0	83		1663
10/19/98	BM3-B	11.6	12.6	729			30	10.9	88	2.7	28.3	25.5	5.7	82		

Mobile Bay Cruise MB: 68

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
10/20/98	DR7-S	0.3	477	96.53	1.46	1.89	0.00	15.26	13.03		0.09		96.79	1.60	5.00	70	16.59		
10/20/98	DR7-B	2.0			2.42	2.87	0.61				0.09		90.11						
10/20/98	MR1-S	0.3	517	91.03	5.01	1.78	3.83	13.42	10.67		0.47		97.46	1.99	7.20	80	0.89	1.470	1.010
10/20/98	MR1-B	12.2			0.75	1.45	7.47				0.78		23.21						
10/20/98	MR2-S	0.3	485	92.36	5.63	1.74	0.00	17.43	10.61		0.16		113.70	2.01	6.40	70	14.89		
10/20/98	MR2-B	1.7			5.99	1.81	0.20				0.16		112.50						
10/19/98	MS5-S	0.3	300	71.39	0.10	0.05	0.12	8.78	7.40		0.09		42.70	1.09	7.33	120	4.54		
10/19/98	MS5-B	2.6			0.15	0.05	1.16				0.07		37.65						
10/19/98	MS3-S	0.3	260	67.10	0.23	0.15	0.58	7.47	7.65		0.06		30.11	1.11	8.67	120	5.67	0.490	0.880
10/19/98	MS3-B	2.6			0.27	0.29	3.42				0.22		28.76						
10/19/98	MS1-S	0.3	282	60.10	0.54	0.31	1.47	7.92	7.68		0.29		30.25	1.72	7.56	110	0.68		
10/19/98	MS1-B	3.2			0.42	0.51	2.72				0.35		21.58						
10/19/98	G1-S	0.3	196	25.90	0.47	1.24	0.14	5.08	1.80		0.15		13.95	0.51	2.08	225	1.74	0.230	0.830
10/19/98	G1-B	11.9			0.54	1.69	0.35				0.13		12.77						
10/19/98	G3-S	0.3	195	22.75	0.57	1.83	0.11	4.27	2.26		0.16		17.09	0.62	3.83	225	2.26		
10/19/98	G3-B	13.7			2.68	2.37	0.64				0.41		9.52						
10/19/98	G5-S	0.3	233	36.08	0.60	0.75	0.56	5.81	3.90		0.11		18.37	0.74	6.00	130	3.02	0.270	0.700
10/19/98	G5-B	14.9			0.95	1.27	0.50				0.24		5.37						
10/19/98	G7-S	0.3	176	26.34	0.72	1.55	0.14	5.23	2.53		0.09		11.53	0.56	4.93	150	2.38		
10/19/98	G7-B	12.8			1.24	2.00	0.04				0.19		6.64						
10/19/98	G9-S	0.3	115	32.51	0.00	1.04	0.60	3.53	3.75		0.16		4.46	0.51	4.20	170	2.04	0.220	0.810
10/19/98	G9-B	15.5			0.00	0.80	0.64				0.13		2.43						
10/19/98	G11-S	0.3		17.81	0.05	0.65	0.64	3.87	1.63		0.11		2.18	0.31	2.32	300	1.15		
10/19/98	G11-B	13.7			0.39	0.55	0.71				0.13		3.72						
10/19/98	G13-S	0.3	130	28.46	0.12	1.29	0.64	4.05	2.70		0.11		4.29	0.53	3.44	200	1.83	0.190	0.710
10/19/98	G13-B	10.7			0.24	1.13	0.78				0.12		5.74						
10/19/98	G15-S	0.3	193	41.44	0.82	1.16	0.55	4.87	4.26		0.10		18.50	0.95	6.67	120	2.33		
10/19/98	G15-B	9.2			0.97	1.33	0.27				0.05		11.75						
10/19/98	BM3-S	0.3	251	67.72	0.42	0.41	0.81	7.56	9.35		0.09		22.27	1.33	8.22	90	3.18		
10/19/98	BM3-B	11.6			0.60	0.79	1.63				0.26		21.47						

Mobile Bay Cruise MB: 69

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)
11/12/98	FM1-S	0.3		1525	12748.0	47092.3	30	15.7	88	3.7	24.5	18.6	7.5	94		1816
11/12/98	FM1-B	3.5	4.5	1525			30	15.7	88	3.7	27.8	18.9	7.4	94		
11/12/98	FM3-S	0.3		1510	12762.6	47092.0	30	15.5	88	2.3	25.4	18.7	7.7	96		1849
11/12/98	FM3-B	13.1	14.1	1510			30	15.5	88	2.3	34.0	20.6	6.2	85		
11/12/98	FM5-S	0.3		1500	12778.6	47092.3	30	15.7	88	0.8	25.6	18.7	7.6	94		1860
11/12/98	FM5-B	3.2	4.2	1500			30	15.7	88	0.8	27.1	18.7	7.2	90		
11/12/98	FM7-S	0.3		1447	12798.0	47092.2	30	15.5	87	58.9	25.2	19.0	8.1	101		1826
11/12/98	FM7-B	2.9	3.9	1447			30	15.5	87	58.9	28.4	18.9	7.1	90		
11/12/98	CP3-S	0.3		1424	12768.2	47103.3	30	18.3	88	1.9	20.6	18.4	8.0	96		1702
11/12/98	CP3-B	12.8	13.8	1424			30	18.3	88	1.9	33.3	20.6	6.1	83		
11/12/98	WB1-S	0.3		1359	12744.8	47120.2	30	22.6	88	4.4	16.6	18.2	8.1	95		1547
11/12/98	WB1-B	2.3	3.3	1359			30	22.6	88	4.4	16.7	18.0	7.9	93		
11/12/98	WB3-S	0.3		1341	12777.4	47121.3	30	22.6	88	1.3	17.3	18.1	8.0	94		1593
11/12/98	WB3-B	13.1	14.1	1341			30	22.6	88	1.3	33.0	20.6	5.9	80		
11/12/98	WB5-S	0.3		1324	12810.6	47122.3	30	22.7	87	58.1	20.0	18.5	8.1	97		1656
11/12/98	WB5-B	2.6	3.6	1324			30	22.7	87	58.1	20.8	18.2	7.7	93		
11/12/98	WB7-S	0.3		1307	12839.9	47122.7	30	22.6	87	55.3	19.2	18.2	8.1	97		1595
11/12/98	WB7-B	2.3	3.3	1307			30	22.6	87	55.3	20.9	17.9	7.6	91		
11/12/98	FR3-S	0.3		1234	12784.2	47140.2	30	27.4	88	1.0	15.6	18.2	8.0	93		1557
11/12/98	FR3-B	13.1	14.1	1234			30	27.4	88	1.0	32.4	20.6	5.8	78		
11/12/98	PC1-S	0.3		1145	12753.5	47145.9	30	29.1	88	4.0	14.3	17.9	8.1	93		1525
11/12/98	PC1-B	1.7	2.7	1145			30	29.1	88	4.0	14.5	17.9	8.0	92		
11/12/98	PC3-S	0.3		1200	12783.4	47146.8	30	29.0	88	1.1	13.8	18.1	8.0	92		1477
11/12/98	PC3-B	13.4	14.4	1200			30	29.0	88	1.1	32.0	20.5	6.0	80		
11/12/98	PC5-S	0.3		1218	12815.0	47145.3	30	28.4	87	58.1	16.7	18.0	8.0	93		1542
11/12/98	PC5-B	3.2	4.2	1218			30	28.4	87	58.1	17.8	17.6	7.6	88		
11/12/98	DR1-S	0.3		1125	12755.5	47159.0	30	32.5	88	4.0	12.2	18.5	7.6	87		1494
11/12/98	DR1-B	1.7	2.7	1125			30	32.5	88	4.0	12.3	18.2	7.5	86		
11/12/98	DR3-S	0.3		1105	12780.8	47165.3	30	34.0	88	1.7	11.3	18.3	8.0	90		1412
11/12/98	DR3-B	12.5	13.5	1105			30	34.0	88	1.7	29.7	20.3	6.0	79		
11/12/98	DR5-S	0.3		1045	12814.0	47165.8	30	33.8	87	58.5	12.4	18.0	7.9	89		1422
11/12/98	DR5-B	2.6	3.6	1045			30	33.8	87	58.5	12.8	17.6	7.9	89		

Mobile Bay Cruise MB: 69

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/10d)	APROD (gC/m2/d)
11/12/98	FM1-S	0.3	224	53.92	0.80	0.13	1.55	4.49	3.90		0.24		22.62	1.18	8.43	90	4.20		
11/12/98	FM1-B	3.5			0.86	0.16	1.74				0.19		15.98						
11/12/98	FM3-S	0.3	210	65.20	1.09	0.13	1.33	4.18	5.38		0.26		21.78	1.35	11.50	70	5.46	0.300	0.480
11/12/98	FM3-B	13.1			0.38	0.28	1.49				0.14		1.15						
11/12/98	FM5-S	0.3	213	84.49	2.21	0.17	1.39	2.56	8.03		0.07		21.72	1.64	18.20	60	6.88		
11/12/98	FM5-B	3.2			1.63	0.20	1.46				0.22		18.35						
11/12/98	FM7-S	0.3	213	79.54	0.51	0.02	1.27	4.48	7.11		0.24		24.83	1.23	15.80	60	11.27		
11/12/98	FM7-B	2.9			0.87	0.18	1.58				0.22		14.47						
11/12/98	CP3-S	0.3	261	72.16	0.59	0.18	0.51	7.40	6.42		0.35		33.97	1.32	11.17	70	7.09	0.500	0.810
11/12/98	CP3-B	12.8			0.21	0.30	1.45				0.21		2.75						
11/12/98	WB1-S	0.3	313	124.32	0.38	0.16	0.65	9.62	14.31		0.23		38.57	2.09	20.20	50	14.39		
11/12/98	WB1-B	2.3			0.46	0.15	0.79				0.18		38.40						
11/12/98	WB3-S	0.3	297	96.15	1.31	0.30	0.72	8.71	9.48		0.23		42.02	2.04	18.20	50	10.07	0.840	0.830
11/12/98	WB3-B	13.1			0.41	0.34	1.56				0.39		5.69						
11/12/98	WB5-S	0.3	269	126.98	0.66	0.20	0.38	7.74	13.47		0.43		36.11	2.17	20.60	50	16.79		
11/12/98	WB5-B	2.6			1.10	0.20	0.15				0.36		33.78						
11/12/98	WB7-S	0.3	271	93.31	0.58	0.09	0.51	6.88	4.06		0.23		31.90	1.64	10.60	80	9.56		
11/12/98	WB7-B	2.3			0.47	0.18	0.40				0.34		32.06						
11/12/98	FR3-S	0.3	307	86.45	2.75	0.44	1.80	8.51	8.56		0.40		50.40	1.41	14.71	90	3.36	0.920	1.220
11/12/98	FR3-B	13.1			0.27	0.31	0.81				0.29		5.85						
11/12/98	PC1-S	0.3	337	89.11	7.15	0.65	2.83	5.44	8.23		0.59		55.71	1.57	11.50	60	8.78		
11/12/98	PC1-B	1.7			7.47	0.67	2.76				0.56		53.65						
11/12/98	PC3-S	0.3	334	77.74	3.73	0.41	3.20	7.89	5.73		0.60		59.76	1.51	10.50	70	8.91	0.940	1.090
11/12/98	PC3-B	13.4			0.39	0.36	1.27				0.36		6.48						
11/12/98	PC5-S	0.3	293	79.70	1.57	0.24	0.54	7.54	7.09		0.38		46.84	1.63	9.57	80	7.49		
11/12/98	PC5-B	3.2			0.93	0.16	0.74				0.28		41.84						
11/12/98	DR1-S	0.3	372	40.11	13.96	0.88	9.61	1.89	4.10		1.07		68.15	1.36	5.25	130	2.56		
11/12/98	DR1-B	1.7			13.49	0.87	9.97				1.07		65.30						
11/12/98	DR3-S	0.3	350	72.39	8.25	0.56	4.74	7.19	6.02		0.61		66.83	1.40	11.86	90	7.75	0.640	0.900
11/12/98	DR3-B	12.5			1.26	0.37	2.23				0.34		14.79						
11/12/98	DR5-S	0.3	319	68.58	5.31	0.40	2.38	10.78	5.95		0.48		62.78	1.39	9.50	80	0.77		
11/12/98	DR5-B	2.6			6.13	0.39	1.96				0.44		62.81						

Mobile Bay Cruise MB: 69

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)
11/12/98	DR7-S	0.3		1035	12840.2	47168.0	30	34.0	87	56.0	15.7	17.8	7.7	89		1525
11/12/98	DR7-B	2.0	3.0	1035			30	34.0	87	56.0	15.8	17.7	7.7	89		
11/12/98	MR1-S	0.3		935	12780.4	47180.5	30	38.1	88	2.0	11.9	19.2	6.9	80		1510
11/12/98	MR1-B	13.1	14.1	935			30	38.1	88	2.0	29.1	20.6	4.9	65		
11/12/98	MR2-S	0.3		1010	12816.6	47176.5	30	36.6	87	58.4	7.8	17.8	7.9	88		1303
11/12/98	MR2-B	1.7	2.7	1010			30	36.6	87	58.4	8.6	17.6	7.8	86		
11/9/98	MS5-S	0.3		1323	12685.9	47094.0	30	16.4	88	9.8	21.6	19.0	8.8	108		1636
11/9/98	MS5-B			1323			30	16.4	88	9.8	21.8	18.9	8.7	107		
11/9/98	MS3-S	0.3		1304	12646.6	47090.1	30	15.7	88	13.5	25.2	18.8	7.8	97		1813
11/9/98	MS3-B			1304			30	15.7	88	13.5	25.8	18.3	7.7	95		
11/9/98	MS1-S	0.3		1241	12595.2	47088.1	30	15.4	88	18.5	27.9	20.0	8.1	105		1906
11/9/98	MS1-B			1241			30	15.4	88	18.5	30.6	20.4	6.7	89		
11/9/98	G1-S	0.3		1210	12595.0	47070.0	30	10.9	88	18.3	32.2	22.1	6.9	96		2007
11/9/98	G1-B			1210			30	10.9	88	18.3	33.4	21.9	5.8	80		
11/9/98	G3-S	0.3		1137	12660.0	47070.3	30	10.8	88	12.0	30.7	21.3	7.1	96		1979
11/9/98	G3-B			1137			30	10.8	88	12.0	34.6	23.1	5.0	72		
11/9/98	G5-S	0.3		1109	12709.9	47058.0	30	7.8	88	7.0	30.9	21.6	7.3	98		1947
11/9/98	G5-B			1109			30	7.8	88	7.0	34.7	23.2	6.0	85		
11/9/98	G7-S	0.3		1031	12799.8	47057.5	30	7.6	87	58.2	33.1	22.2	6.6	92		2065
11/9/98	G7-B			1031			30	7.6	87	58.2	34.9	22.5	6.1	86		
11/9/98	G9-S	0.3		957	12870.0	47057.9	30	7.6	87	51.4	34.1	22.3	6.5	92		2098
11/9/98	G9-B			957			30	7.6	87	51.4	35.0	21.6	6.4	88		
11/9/98	G11-S	0.3		917	12960.0	47058.0	30	7.5	87	42.5	34.6	22.5	6.4	90		2133
11/9/98	G11-B			917			30	7.5	87	42.5	35.0	22.5	6.3	89		
11/9/98	G13-S	0.3		847	12925.1	47074.0	30	11.0	87	46.2	34.7	21.6	6.6	91		2133
11/9/98	G13-B			847			30	11.0	87	46.2	34.5	21.5	6.4	89		
11/9/98	G15-S	0.3		811	12840.2	47073.0	30	11.0	87	54.5	34.3	22.3	6.5	91		2085
11/9/98	G15-B			811			30	11.0	87	54.5	34.6	22.1	6.2	88		
11/9/98	BM3-S	0.3		729	12754.5	47071.4	30	10.9	88	2.7	29.7	20.6	6.7	89		1990
11/9/98	BM3-B			729			30	10.9	88	2.7	33.7	22.0	6.1	85		

Mobile Bay Cruise MB: 69

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)
11/12/98	DR7-S	0.3	305	67.51	3.85	0.39	1.19	5.00	10.58		0.38		51.35	1.50	12.83	70	7.88		
11/12/98	DR7-B	2.0			4.35	0.38	1.29				0.43		51.43						
11/12/98	MR1-S	0.3	348	62.49	9.68	0.79	5.76	6.47	3.85		0.81		66.45	1.69	7.50	90	5.30	0.390	0.440
11/12/98	MR1-B	13.1			2.75	1.49	4.34				0.58		19.72						
11/12/98	MR2-S	0.3	348	49.53	10.09	0.47	4.76	7.66	3.81		0.55		77.87	1.27	6.43	90	5.42		
11/12/98	MR2-B	1.7			9.50	0.45	4.68				0.56		78.38						
11/9/98	MS5-S	0.3	293	114.49	0.32	0.05	0.00	6.87	13.12		0.19		30.85	1.53	18.20	80	17.63		
11/9/98	MS5-B				0.23	0.04	0.00				0.16		29.75						
11/9/98	MS3-S	0.3	240	195.39	0.60	0.02	1.27	4.71	18.48		0.24		24.68	1.07	59.67	100	8.85	0.590	0.980
11/9/98	MS3-B				0.50	0.01	1.18				0.27		24.82						
11/9/98	MS1-S	0.3	184	82.24	0.61	0.02	1.15	3.63	7.32		0.14		16.69	0.84	12.30	140	6.38		
11/9/98	MS1-B				0.08	0.36	0.96				0.27		11.06						
11/9/98	G1-S	0.3	118	38.15	0.18	0.01	0.57	2.71	2.33		0.09		5.23	0.31	2.76	400	1.18	0.100	0.670
11/9/98	G1-B				1.23	1.09	0.85				0.19		3.57						
11/9/98	G3-S	0.3	143	35.03	0.25	0.32	0.57	3.73	4.03		0.12		10.12	0.38	3.61	200	0.08		
11/9/98	G3-B				2.26	1.57	2.19				0.34		3.92						
11/9/98	G5-S	0.3	117	34.99	0.17	0.12	0.53	3.75	3.35		0.12		8.21	0.46	4.28	200	1.34	0.200	0.830
11/9/98	G5-B				0.36	0.40	1.34				0.13		1.16						
11/9/98	G7-S	0.3		22.51	0.18	0.00	0.32	3.01	1.65		0.12		3.48	0.20	2.92	700	0.04		
11/9/98	G7-B				0.45	0.11	0.96				0.22		0.56						
11/9/98	G9-S	0.3	98.7	23.48	1.73	0.00	0.88	1.18	1.98		0.33		7.01	0.19	2.36	700	0.46	0.050	0.610
11/9/98	G9-B				0.32	0.15	0.42				0.16		0.27						
11/9/98	G11-S	0.3	99.9	20.29	0.18	0.01	0.00	3.24	1.16		0.09		2.06	0.15	2.20	800	0.55		
11/9/98	G11-B				0.22	0.01	0.57				0.21		0.00						
11/9/98	G13-S	0.3	170	26.57	0.17	0.01	0.21	3.02	2.22		0.15		1.61	0.23	2.28	550	0.76	0.060	0.510
11/9/98	G13-B				0.43	0.03	0.67				0.17		0.00						
11/9/98	G15-S	0.3		23.21	0.19	0.01	0.18	2.65	2.04		0.10		2.84	0.20	1.80	500	0.80		
11/9/98	G15-B				0.22	0.10	0.35				0.15		0.14						
11/9/98	BM3-S	0.3	149	41.01	1.24	0.48	1.12	2.81	5.34		0.16		15.09	0.89	6.34	100	0.25	0.290	0.560
11/9/98	BM3-B				0.45	0.60	0.88				0.16		4.23						

Mobile Bay Cruise MB: 70

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)
12/7/98	FM1-S	0.3		705	12748.3	47092.1	30	15.7	88	3.7	23.7	22.7	6.7	89		1747
12/7/98	FM1-B	3.8	4.8	705			30	15.7	88	3.7	29.7	22.4	6.3	87		
12/7/98	FM3-S	0.3		715	12762.7	47091.6	30	15.5	88	2.3	29.0	22.4	6.5	89		1902
12/7/98	FM3-B	12.8	13.8	715			30	15.5	88	2.3	31.3	22.4	6.4	89		
12/7/98	FM5-S	0.3		730	12778.3	47092.4	30	15.7	88	0.8	28.3	22.7	6.6	90		1865
12/7/98	FM5-B	3.2	4.2	730			30	15.7	88	0.8	29.7	22.5	6.5	89		
12/7/98	FM7-S	0.3		744	12797.8	47092.1	30	15.5	87	58.9	27.9	22.6	6.3	85		1877
12/7/98	FM7-B	2.9	3.9	744			30	15.5	87	58.9	30.2	22.6	6.3	87		
12/7/98	CP3-S	0.3		803	12768.0	47103.1	30	18.3	88	1.9	25.5	22.6	6.5	87		1812
12/7/98	CP3-B	13.1	14.1	803			~30	18.3	88	1.9	31.2	22.7	6.3	88		
12/7/98	WB1-S	0.3		830	12745.1	47120.1	30	22.6	88	4.4	18.0	22.7	6.7	86		1613
12/7/98	WB1-B	2.6	3.6	830			30	22.6	88	4.4	18.5	22.8	6.0	78		
12/7/98	WB3-S	0.3		845	12778.2	47121.0	30	22.6	88	1.3	21.2	22.6	6.7	87		1693
12/7/98	WB3-B	10.4	11.4	845			30	22.6	88	1.3	31.1	22.6	6.5	90		
12/7/98	WB5-S	0.3		905	12810.3	47122.4	30	22.7	87	58.1	21.0	22.6	6.2	81		1694
12/7/98	WB5-B	2.6	3.6	905			30	22.7	87	58.1	21.5	22.5	5.5	72		
12/7/98	WB7-S	0.3		921	12840.2	47122.9	30	22.6	87	55.3	20.0	23.0	6.5	85		1656
12/7/98	WB7-B	2.3	3.3	921			30	22.6	87	55.3	20.0	23.0	6.3	83		
12/7/98	FR3-S	0.3		953	12784.8	47140.2	30	27.4	88	1.0	18.4	23.0	6.9	89		1611
12/7/98	FR3-B	8.9	9.9	953			30	27.4	88	1.0	30.1	23.0	6.0	83		
12/7/98	PC1-S	0.3		1107	12753.5	47145.9	30	29.1	88	4.0	16.1	23.2	7.6	97		1513
12/7/98	PC1-B	2.0	3.0	1107			30	29.1	88	4.0	23.2	16.0	7.6	97		
12/7/98	PC3-S	0.3		1049	12783.6	47146.4	30	29.0	88	1.1	16.5	23.0	7.7	98		1533
12/7/98	PC3-B	12.5	13.5	1049			30	29.0	88	1.1	30.1	22.2	4.6	63		
12/7/98	PC5-S	0.3		1021	12815.5	47145.7	30	28.4	87	58.1	19.8	22.8	6.6	86		1692
12/7/98	PC5-B	2.3	3.3	1021			30	28.4	87	58.1	19.9	22.9	6.5	85		
12/7/98	DR1-S	0.3		1124	12755.6	47159.0	30	32.5	88	4.0	12.5	23.4	7.7	96		1375
12/7/98	DR1-B	1.7	2.7	1124			30	32.5	88	4.0	12.6	23.7	7.7	98		
12/7/98	DR3-S	0.3		1140	12780.6	47165.4	30	34.0	88	1.7	10.1	23.4	8.3	103		1358
12/7/98	DR3-B	13.1	14.1	1140			30	34.0	88	1.7	29.4	22.3	4.9	67		
12/7/98	DR5-S	0.3		1202	12814.2	47165.9	30	33.8	87	58.5	11.1	23.1	8.2	103		1371
12/7/98	DR5-B	2.3	3.3	1202			30	33.8	87	58.5	14.9	22.7	6.2	78		

Mobile Bay Cruise MB: 70

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)	P04 (μ M)	DOP (μ M)	SI (μ M)	ATTEN -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
12/7/98	FM1-S	0.3	211	64.86	0.70	0.03	1.24	4.73	6.43		0.01		19.35	1.06	8.36	130	3.78		
12/7/98	FM1-B	3.8			0.64	0.06	1.36				0.11		6.82						
12/7/98	FM3-S	0.3	179	61.26	0.61	0.02	1.30	3.09	5.77		0.09		8.14	0.88	10.80	120	3.44	0.450	0.780
12/7/98	FM3-B	12.8			0.12	0.10	-0.02				0.64		7.72						
12/7/98	FM5-S	0.3	164	60.42	0.51	0.00	0.08	5.24	5.60		0.09		8.85	0.99	8.60	110	4.11		
12/7/98	FM5-B	3.2			0.93	0.03	0.99				0.12		9.74						
12/7/98	FM7-S	0.3	179	71.58	0.63	0.04	0.87	6.39	7.49		0.11		13.88	0.97	9.00	110	6.04		
12/7/98	FM7-B	2.9			0.52	0.03	0.90				0.10		8.05						
12/7/98	CP3-S	0.3	196	51.25	0.49	0.00	0.77	4.80	3.79		0.08		14.20	0.72	5.20	150	4.37	0.450	1.000
12/7/98	CP3-B	13.1			0.15	0.09	0.76				0.11		3.24						
12/7/98	WB1-S	0.3	260	80.70	0.54	0.00	0.07	8.17	9.27		0.11		41.20	1.40	10.67	80	6.55		
12/7/98	WB1-B	2.6			0.65	0.02	0.32				0.23		41.87						
12/7/98	WB3-S	0.3	241	55.79	0.58	0.02	0.17	7.18	5.62		0.10		31.07	0.84	3.00	170	3.19	0.320	0.650
12/7/98	WB3-B	10.4			0.04	0.07	0.76				0.11		3.46						
12/7/98	WB5-S	0.3	235	49.10	0.66	0.04	0.29	7.02	4.05		0.11		34.07	0.77	5.60	150	2.60		
12/7/98	WB5-B	2.6			0.84	0.11	0.56				0.06		37.29						
12/7/98	WB7-S	0.3	255	68.42	0.52	0.00	0.07	7.81	8.51		0.13		37.40	1.05	8.44	90	6.88		
12/7/98	WB7-B	2.3			0.55	0.00	0.20				0.18		37.98						
12/7/98	FR3-S	0.3	268	66.02	0.51	0.01	0.05	7.27	7.56		0.17		40.09	1.00	5.60	120	5.46	0.540	1.040
12/7/98	FR3-B	8.9			0.79	0.20	2.05				0.30		11.94						
12/7/98	PC1-S	0.3	296	93.29	0.49	0.00	0.10	8.43	10.25		0.85		41.55	1.20	8.50	110	6.21		
12/7/98	PC1-B	2.0			0.45	0.00	1.70				0.14		42.67						
12/7/98	PC3-S	0.3	304	74.09	0.51	0.00	0.10	7.66	8.09		0.10		43.39	1.13	6.60	140	9.74	0.770	1.280
12/7/98	PC3-B	12.5			1.01	0.27	9.73				0.42		14.83						
12/7/98	PC5-S	0.3	270	86.88	0.49	0.00	0.07	9.64	10.13		0.08		39.24	1.07	8.00	110	6.55		
12/7/98	PC5-B	2.3			0.49	0.00	0.12				0.11		39.66						
12/7/98	DR1-S	0.3	301	70.99	0.00	0.03	0.00	11.14	8.52		0.11		52.89	1.31	4.50	100	6.46		
12/7/98	DR1-B	1.7			0.06	0.03	0.00				0.09		50.66						
12/7/98	DR3-S	0.3	352	152.04	9.72	0.33	1.98	8.68	21.29		0.89		68.97	1.35	6.80	80	31.34	2.480	2.870
12/7/98	DR3-B	13.1			0.98	0.27	6.45				0.49		13.76						
12/7/98	DR5-S	0.3	320	81.71	0.61	0.07	0.00	10.88	10.26		0.13		62.07	1.02	4.00	100	11.86		
12/7/98	DR5-B	2.3			0.59	0.11	0.29				0.09		53.90						

Mobile Bay Cruise MB: 70

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LOAN X	LOAN Y	LAT DEG	LAT MIN	LON DEG	LON MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
12/7/98	DR7-S	0.3		1215	12840.3	47167.7	30	34.0	87	56.0	14.9	23.0	7.9	100		1483
12/7/98	DR7-B	2.0	3.0	1215			30	34.0	87	56.0	15.0	23.1	7.8	99		
12/7/98	MR1-S	0.3		1253	12780.4	47180.3	30	38.1	88	2.0	6.5	23.1	7.1	86		1300
12/7/98	MR1-B	12.8	13.8	1253			30	38.1	88	2.0	28.5	22.2	4.4	60		
12/7/98	MR2-S	0.3		1233	12816.6	47176.6	30	36.6	87	58.4	7.3	23.3	7.6	93		1259
12/7/98	MR2-B	1.7	2.7	1233			30	36.6	87	58.4	7.4	23.5	7.5	92		
12/10/98	MS5-S	0.3		1309	12885.9	47093.9	30	16.4	88	9.8	24.0	19.8	6.8	86		1793
12/10/98	MS5-B	1.4	2.4	1309			30	16.4	88	9.8	24.1	19.7	6.8	86		
12/10/98	MS3-S	0.3		1249	12846.5	47090.3	30	15.7	88	13.5	22.6	19.1	7.3	91		1733
12/10/98	MS3-B	2.0	3.0	1249			30	15.7	88	13.5	22.6	19.1	7.3	90		
12/10/98	MS1-S	0.3		1224	12595.1	47088.2	30	15.4	88	18.5	25.8	20.0	6.9	88		1858
12/10/98	MS1-B	2.6	3.6	1224			30	15.4	88	18.5	27.2	20.0	6.7	86		
12/10/98	G1-S	0.3		1154	12595.2	47070.1	30	10.9	88	18.3	32.9	21.0	6.3	86		2063
12/10/98	G1-B	11.6	12.6	1154			30	10.9	88	18.3	33.2	20.9	5.7	77		
12/10/98	G3-S	0.3		1126	12660.2	47070.1	30	10.8	88	12.0	32.9	21.1	6.3	85		2060
12/10/98	G3-B	13.4	14.4	1126			30	10.8	88	12.0	34.4	21.7	4.7	66		
12/10/98	G5-S	0.3		1058	12710.4	47058.1	30	7.8	88	7.0	34.0	21.7	6.3	87		2087
12/10/98	G5-B	14.0	15.0	1058			30	7.8	88	7.0	34.1	21.7	6.1	85		
12/10/98	G7-S	0.3		1023	12800.3	47057.6	30	7.6	87	58.2	34.7	21.8	6.2	87		2096
12/10/98	G7-B	12.8	13.8	1023			30	7.6	87	58.2	34.7	21.8	6.2	86		
12/10/98	G9-S	0.3		952	12870.5	47058.1	30	7.6	87	51.4	34.8	21.8	6.3	89		2103
12/10/98	G9-B	15.5	16.5	952			30	7.6	87	51.4	34.9	22.0	6.2	87		
12/10/98	G11-S	0.3		913	12960.1	47057.9	30	7.5	87	42.5	34.5	21.5	6.2	86		2092
12/10/98	G11-B	13.7	14.7	913			30	7.5	87	42.5	34.7	21.4	6.2	86		
12/10/98	G13-S	0.3		849	12925.1	47073.9	30	11.0	87	46.2	34.6	21.3	6.3	87		2091
12/10/98	G13-B	10.4	11.4	849			30	11.0	87	46.2	34.5	21.3	6.3	87		
12/10/98	G15-S	0.3		804	12840.2	47075.0	30	11.0	87	54.5	33.9	21.0	6.2	86		2062
12/10/98	G15-B	9.5	10.5	804			30	11.0	87	54.5	34.0	21.1	6.2	86		
12/10/98	BM3-S	0.3		726	12755.2	47072.0	30	10.9	88	2.7	33.1	20.5	6.2	83		2047
12/10/98	BM3-B	13.1	14.1	726			30	10.9	88	2.7	33.6	20.8	6.3	86		

Mobile Bay Cruise MB: 70

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)
12/7/98	DR7-S	0.3	282	79.81	0.01	0.04	0.00	9.37	7.08		0.11		51.76	0.86	4.50	150	6.16		
12/7/98	DR7-B	2.0			0.00	0.04	0.01				0.10		50.33						
12/7/98	MR1-S	0.3	330	75.75	10.10	0.37	4.32	10.62	7.20		0.61		91.16	2.45	11.14	80	6.94	0.900	5.070
12/7/98	MR1-B	12.8			1.34	0.34	6.60				0.70		16.32						
12/7/98	MR2-S	0.3	310	93.69	5.43	0.16	0.55	9.99	11.92		0.19		81.67	2.08	6.80	80	13.66		
12/7/98	MR2-B	1.7			4.88	0.16	0.32				0.16		82.96						
12/10/98	MS5-S	0.3	248	125.99	0.80	0.14	0.99	5.04	11.21		0.24		27.99	2.67	37.50	40	8.16		
12/10/98	MS5-B	1.4			1.56	0.12	1.30				0.25		24.71						
12/10/98	MS3-S	0.3	252	128.16	0.52	0.02	0.12	5.89	10.38		0.22		28.36	2.67	25.50	40	11.51	0.900	0.640
12/10/98	MS3-B	2.0			0.53	0.02	0.07				0.27		24.59						
12/10/98	MS1-S	0.3	206	111.31	0.52	0.08	0.71	4.78	9.43		0.19		22.35	2.20	16.80	50	10.79		
12/10/98	MS1-B	2.6			0.75	0.05	0.74				0.14		13.04						
12/10/98	G1-S	0.3	119	39.28	0.08	0.27	0.58	2.61	2.75		0.10		0.64	0.51	2.96	275	2.57	0.210	0.760
12/10/98	G1-B	11.6			1.49	1.35	0.49				0.21		3.80						
12/10/98	G3-S	0.3	122	31.70	0.07	0.29	0.76	2.75	2.37		0.14		1.83	0.47	3.84	300	2.30		
12/10/98	G3-B	13.4			1.72	1.55	1.15				0.72		3.57						
12/10/98	G5-S	0.3	132	27.63	0.13	0.13	0.82	3.42	1.64		0.14		1.31	0.41	2.96	450	0.84	0.090	0.380
12/10/98	G5-B	14.0			0.12	0.12	0.82				0.34		0.00						
12/10/98	G7-S	0.3	106	28.92	0.07	0.04	0.40	2.71	1.91		0.09		0.22	0.51	3.53	350	1.43		
12/10/98	G7-B	12.8			0.11	0.03	0.94				0.04		0.00						
12/10/98	G9-S	0.3	105	19.40	0.02	0.01	1.12	2.08	1.07		0.03		0.00	0.25	8.13	750	0.42	0.040	0.370
12/10/98	G9-B	15.5			0.07	0.01	1.03				0.06		0.00						
12/10/98	G11-S	0.3		22.68	0.11	0.05	0.85	4.52	1.49		0.02		0.50	0.34	2.52	500	0.81		
12/10/98	G11-B	13.7			0.06	0.07	0.91				0.03		0.00						
12/10/98	G13-S	0.3	97.2	25.27	0.01	0.04	0.67	2.76	1.56		0.03		0.53	0.19	7.85	525	0.59	0.050	0.540
12/10/98	G13-B	10.4			0.01	0.02	0.79				0.19		0.00						
12/10/98	G15-S	0.3	97.8	35.24	0.00	0.03	0.91	3.41	2.74		0.11		0.00	0.43	4.93	300	1.18		
12/10/98	G15-B	9.5			0.03	0.01	0.91				0.07		0.00						
12/10/98	BM3-S	0.3	114	38.62	0.08	0.13	0.94	3.35	3.33		0.17		1.45	0.52	6.47	180	1.93	0.200	0.630
12/10/98	BM3-B	13.1			0.05	0.10	1.36				0.13		0.66						

Mobile Bay Cruise MB: 71

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)
2/3/99	FM1-S	0.3		708	12748.0	47092.3	30	15.7	88	3.7	3.5	16.3	8.2	86		973
2/3/99	FM1-B	3.8	4.8	708			30	15.7	88	3.7	4.3	16.9	8.2	87		
2/3/99	FM3-S	0.3		719	12762.9	47091.6	30	15.5	88	2.3	3.0	15.9	8.1	83		940
2/3/99	FM3-B	12.5	13.5	719			30	15.5	88	2.3	31.7	17.6	6.0	78		
2/3/99	FM5-S	0.3		731	12779.0	47092.5	30	15.7	88	0.8	4.5	16.3	8.3	87		1004
2/3/99	FM5-B	3.5	4.5	731			30	15.7	88	0.8	11.9	17.2	6.6	73		
2/3/99	FM7-S	0.3		743	12797.9	47092.2	30	15.5	87	58.9	2.9	16.0	8.6	89		943
2/3/99	FM7-B	2.9	3.9	743			30	15.5	87	58.9	14.3	17.3	4.9	56		
2/3/99	CP3-S	0.3		802	12768.6	47103.2	30	18.3	88	1.9	3.4	15.8	7.8	81		953
2/3/99	CP3-B	11.9	12.9	802			30	18.3	88	1.9	32.3	17.6	6.0	78		
2/3/99	WB1-S	0.3		827	12745.1	47120.2	30	22.6	88	4.4	3.8	16.2	8.0	83		957
2/3/99	WB1-B	1.1	2.1	827			30	22.6	88	4.4	3.9	16.3	7.9	82		
2/3/99	WB3-S	0.3		844	12777.3	47121.0	30	22.6	88	1.3	3.8	15.8	6.9	72		979
2/3/99	WB3-B	13.7	14.7	844			30	22.6	88	1.3	32.3	17.5	5.9	75		
2/3/99	WB5-S	0.3		901	12810.5	47122.3	30	22.7	87	58.1	5.3	16.2	7.5	79		1048
2/3/99	WB5-B	2.6	3.6	901			30	22.7	87	58.1	17.0	17.3	2.1	25		
2/3/99	WB7-S	0.3		914	12840.2	47122.8	30	22.6	87	55.3	11.7	17.4	8.3	93		1296
2/3/99	WB7-B	2.3	3.3	914			30	22.6	87	55.3	17.1	17.8	4.5	52		
2/3/99	FR3-S	0.3		944	12784.2	47140.0	30	27.4	88	1.0	0.3	15.1	7.4	74		828
2/3/99	FR3-B	13.1	14.1	944			30	27.4	88	1.0	31.1	17.6	5.9	75		
2/3/99	PC1-S	0.3		1033	12753.4	47145.8	30	29.1	88	4.0	2.0	15.6	7.5	76		778
2/3/99	PC1-B	2.3	3.3	1033			30	29.1	88	4.0	2.8	15.6	9.2	73		
2/3/99	PC3-S	0.3		1017	12783.7	47146.9	30	29.0	88	1.1	0.7	15.2	7.4	76		803
2/3/99	PC3-B	11.6	12.6	1017			30	29.0	88	1.1	30.5	17.6	5.7	72		
2/3/99	PC5-S	0.3		1002	12814.8	47145.4	30	28.4	87	58.1	1.1	15.4	7.2	73		873
2/3/99	PC5-B	2.6	3.6	1002			30	28.4	87	58.1	12.5	17.0	3.3	37		
2/3/99	DR1-S	0.3		1050	12755.5	47159.0	30	32.5	88	4.0	2.1	16.8	7.7	80		878
2/3/99	DR1-B	1.7	2.7	1050			30	32.5	88	4.0	2.5	16.1	7.3	75		
2/3/99	DR3-S	0.3		1104	12780.8	47165.5	30	34.0	88	1.7	1.9	15.6	6.7	68		764
2/3/99	DR3-B	13.1	14.1	1104			30	34.0	88	1.7	29.5	17.6	5.1	72		
2/3/99	DR5-S	0.3		1122	12814.2	47165.8	30	33.8	87	58.5	0.1	14.9	7.0	69		810
2/3/99	DR5-B	2.6	3.6	1122			30	33.8	87	58.5	0.1	14.7	6.9	68		

Mobile Bay Cruise MB: 71

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
2/3/99	FM1-S	0.3	573	111.83	16.91	0.41	3.09	11.03	12.70		0.23		80.47	2.85	20.83	30	16.29		
2/3/99	FM1-B	3.8			15.97	0.34	2.56				0.21		83.30						
2/3/99	FM3-S	0.3	596	84.98	16.29	0.47	3.06	11.32	6.24		0.41		78.19	3.11	24.17	30	2.18	0.060	0.050
2/3/99	FM3-B	12.5			0.89	0.20	2.26				0.41		6.36						
2/3/99	FM5-S	0.3	377	83.26	14.05	0.38	2.39	10.44	6.70		0.26		72.99	3.08	18.06	50	4.60		
2/3/99	FM5-B	3.5			6.47	0.26	3.32				0.24		45.35						
2/3/99	FM7-S	0.3	345	119.10	14.92	0.40	1.84	12.36	13.10		0.27		75.73	2.66	22.50	40	16.12		
2/3/99	FM7-B	2.9			4.53	0.32	3.84				0.30		38.00						
2/3/99	CP3-S	0.3	339	73.68	16.28	0.46	3.60	9.92	5.27		0.39		77.38	2.72	18.53	40	3.06	0.070	0.060
2/3/99	CP3-B	11.9			0.74	0.21	2.44				0.41		6.87						
2/3/99	WB1-S	0.3	343	125.14	18.30	0.42	3.91	11.19	13.00		0.30		80.76	2.38	21.47	50	12.59		
2/3/99	WB1-B	1.1			18.25	0.44	4.20				0.28		85.90						
2/3/99	WB3-S	0.3	359	77.18	16.03	0.45	3.70	10.52	5.14		0.47		79.03	2.55	24.41	30	3.09	0.090	0.080
2/3/99	WB3-B	13.7			0.56	0.23	2.62				0.39		3.83						
2/3/99	WB5-S	0.3	290	109.83	12.12	0.33	2.35	9.60	11.37		0.26		76.28	2.23	24.33	40	6.72		
2/3/99	WB5-B	2.6			2.88	0.22	5.12				0.30		41.19						
2/3/99	WB7-S	0.3	295	223.20	3.25	0.17	0.74	9.13	30.41		0.20		38.91	1.03	16.33	80	32.91		
2/3/99	WB7-B	2.3			1.06	0.09	1.69				0.18		29.67						
2/3/99	FR3-S	0.3	341	100.71	17.35	0.46	2.12	16.41	8.49		0.77		87.61	3.64	34.09	30	3.59	0.130	0.070
2/3/99	FR3-B	13.1			0.97	0.26	2.83				0.29		11.01						
2/3/99	PC1-S	0.3	336	131.76	18.85	0.50	3.34	12.78	8.91		0.46		92.26	3.72	38.50	30	3.17		
2/3/99	PC1-B	2.3			19.32	0.57	5.20				0.61		93.19						
2/3/99	PC3-S	0.3	344	125.40	17.90	0.46	2.67	14.52	9.69		0.57		90.45	3.65	34.50	30	2.64	0.110	0.070
2/3/99	PC3-B	11.6			1.41	0.23	3.22				0.47		9.48						
2/3/99	PC5-S	0.3	360	97.25	16.88	0.45	2.41	14.32	7.21		0.52		85.39	2.91	27.50	30	3.57		
2/3/99	PC5-B	2.6			7.60	0.43	6.56				0.48		50.65						
2/3/99	DR1-S	0.3	314	87.94	19.13	0.59	7.09	13.09	7.05		0.51		82.75	2.20	21.92	55	4.65		
2/3/99	DR1-B	1.7			20.28	0.65	8.43				0.82		90.66						
2/3/99	DR3-S	0.3	378	137.38	17.35	0.52	2.66	13.27	12.57		0.57		96.62	4.75	55.62	20	0.43	0.090	0.040
2/3/99	DR3-B	13.1			2.11	0.21	3.13				0.41		17.01						
2/3/99	DR5-S	0.3	471	190.40	17.03	0.45	2.08	15.25	19.20		0.79		95.69	4.84	61.87	15	3.43		
2/3/99	DR5-B	2.6			17.04	0.43	2.07				0.46		94.78						

Mobile Bay Cruise MB: 71

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)
2/3/99	DR7-S	0.3		1133	12840.3	47167.9	30	34.0	87	56.0	0.1	14.9	7.1	70		808
2/3/99	DR7-B	2.0	3.0	1133			30	34.0	87	56.0	2.5	15.3	6.2	63		
2/3/99	MR1-S	0.3		1209	12780.6	47180.5	30	38.1	88	2.0	0.3	15.1	6.8	68		718
2/3/99	MR1-B	13.4	14.4	1209			30	38.1	88	2.0	26.4	17.4	5.4	66		
2/3/99	MR2-S	0.3		1150	12816.8	47178.6	30	36.6	87	58.4	0.1	14.8	7.0	70		775
2/3/99	MR2-B	2.0	3.0	1150			30	36.6	87	58.4	0.1	14.5	6.9	68		
2/2/99	MS5-S	0.3		749	12886.1	47094.0	30	16.4	88	9.8	5.2	17.1	8.8	93		1113
2/2/99	MS5-B	1.4	2.4	749			30	16.4	88	9.8	6.0	17.1	8.4	91		
2/2/99	MS3-S	0.3		808	12646.7	47090.2	30	15.7	88	13.5	7.9	17.0	9.6	103		1142
2/2/99	MS3-B	2.3	3.3	808			30	15.7	88	13.5	16.8	17.6	6.7	77		
2/2/99	MS1-S	0.3		830	12594.9	47088.1	30	15.4	88	18.5	15.2	17.5	8.1	93		1398
2/2/99	MS1-B	2.9	3.9	830			30	15.4	88	18.5	23.4	18.2	6.0	74		
2/2/99	G1-S	0.3		900	12595.8	47069.8	30	10.9	88	18.3	24.4	18.0	7.6	93		1743
2/2/99	G1-B	11.9	12.9	900			30	10.9	88	18.3	34.4	17.8	6.4	83		
2/2/99	G3-S	0.3		927	12660.3	47070.2	30	10.8	88	12.0	29.3	17.9	7.1	91		1918
2/2/99	G3-B	13.7	14.7	927			30	10.8	88	12.0	34.3	17.9	5.4	78		
2/2/99	G5-S	0.3		956	12710.2	47058.1	30	7.8	88	7.0	11.7	17.3	7.8	89		1386
2/2/99	G5-B	14.6	15.6	956			30	7.8	88	7.0	34.7	17.8	6.6	86		
2/2/99	G7-S	0.3		1033	12800.0	47057.7	30	7.6	87	58.2	18.2	17.5	8.9	104		1507
2/2/99	G7-B	12.2	13.2	1033			30	7.6	87	58.2	34.6	17.7	6.8	89		
2/2/99	G9-S	0.3		1104	12870.1	47058.2	30	7.6	87	51.4	32.4	17.4	7.3	93		2020
2/2/99	G9-B	15.8	16.8	1104			30	7.6	87	51.4	35.0	17.9	6.4	83		
2/2/99	G11-S	0.3		1145	12962.3	47058.8	30	7.5	87	42.5	31.4	17.3	7.5	94		1973
2/2/99	G11-B	13.4	14.4	1145			30	7.5	87	42.5	34.7	17.0	7.1	91		
2/2/99	G13-S	0.3		1217	12925.0	47074.1	30	11.0	87	46.2	32.1	17.3	7.5	93		2011
2/2/99	G13-B	10.4	11.4	1217			30	11.0	87	46.2	34.5	17.4	6.6	85		
2/2/99	G15-S	0.3		1254	12840.3	47073.0	30	11.0	87	54.5	31.4	17.6	7.2	92		1985
2/2/99	G15-B	9.2	10.2	1254			30	11.0	87	54.5	34.0	17.6	6.8	88		
2/2/99	BM3-S	0.3		1330	12755.7	47071.6	30	10.9	88	2.7	7.3	17.5	8.3	91		1168
2/2/99	BM3-B	8.3	9.3	1330			30	10.9	88	2.7	33.7	17.7	6.3	86		

Mobile Bay Cruise MB: 71

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)
2/3/99	DR7-S	0.3	375	163.31	16.20	0.41	1.70	15.71	12.71		0.46		94.48	4.65	44.37	25	4.84		
2/3/99	DR7-B	2.0			13.39	0.39	3.58				0.37		90.74						
2/3/99	MR1-S	0.3	399	233.69	17.92	0.51	2.35	16.22	18.77		0.51		98.01	5.98	70.71	15	7.59	0.120	0.040
2/3/99	MR1-B	13.4			3.88	0.23	5.61				0.60		20.85						
2/3/99	MR2-S	0.3	373	141.92	16.46	0.40	1.79	15.60	7.79		0.47		97.04	4.87	44.37	30	2.88		
2/3/99	MR2-B	2.0			16.53	0.40	2.14				0.36		98.10						
2/2/99	MS5-S	0.3	303	94.36	17.11	0.43	2.16	0.74	10.96		0.16		73.32	2.04	13.80	60	13.06		
2/2/99	MS5-B	1.4			16.11	0.46	1.40				0.23		71.50						
2/2/99	MS3-S	0.3	269	34.84	7.28	0.30	0.31	0.00	3.93		0.06		58.08	1.06	4.70	150	4.70	0.160	0.230
2/2/99	MS3-B	2.3			2.40	0.11	0.10				0.11		38.76						
2/2/99	MS1-S	0.3	233	44.82	0.24	0.08	0.28	2.36	4.33		0.07		38.05	0.90	5.30	150	2.43		
2/2/99	MS1-B	2.9			1.57	0.03	0.68				0.11		20.67						
2/2/99	G1-S	0.3	162	37.11	0.67	0.01	0.50	2.03	3.20		0.03		17.19	0.33	7.75	215	2.22	0.150	0.670
2/2/99	G1-B	11.9			0.23	0.20	1.06				0.16		0.00						
2/2/99	G3-S	0.3	151	29.32	0.56	0.00	0.56	2.13	2.20		0.04		7.77	0.24	3.32	400	0.92		
2/2/99	G3-B	13.7			0.64	0.22	1.27				0.24		6.57						
2/2/99	G5-S	0.3	240	65.08	14.44	0.36	1.67	0.00	6.98		0.10		50.62	1.88	10.17	170	8.67	0.420	0.340
2/2/99	G5-B	14.6			0.15	0.19	4.33				0.13		6.39						
2/2/99	G7-S	0.3	200	134.40	3.69	0.14	0.05	14.17	14.81		0.05		33.21	0.36	12.50	210	19.14		
2/2/99	G7-B	12.2			0.04	0.07	0.85				0.09		9.92						
2/2/99	G9-S	0.3	102	27.14	0.05	0.04	2.14	1.33	1.87		0.06		0.00	0.19	2.20	475	1.01	0.080	0.720
2/2/99	G9-B	15.8			0.09	0.03	1.42				0.08		5.61						
2/2/99	G11-S	0.3	127	31.77	0.00	0.07	0.64	4.44	2.01		0.06		2.31	0.16	3.08	550	1.43		
2/2/99	G11-B	13.4			0.10	0.04	0.94				0.09		0.00						
2/2/99	G13-S	0.3	95.7	32.36	0.04	0.05	0.91	7.19	2.09		0.06		0.00	0.20	1.96	400	1.09	0.370	1.340
2/2/99	G13-B	10.4			0.04	0.05	1.00				0.06		4.42						
2/2/99	G15-S	0.3	199	40.39	0.33	0.08	0.46	15.35	3.74		0.02		2.78	0.34	5.06	220	2.56		
2/2/99	G15-B	9.2			0.01	0.08	0.94				0.03		0.00						
2/2/99	BM3-S	0.3	272	142.75		0.40	1.96		15.44		0.20		67.38	1.04	18.48	140	20.15	0.580	0.740
2/2/99	BM3-B	8.3			0.16	0.13	1.00				0.09		6.49						

Mobile Bay Cruise MB: 72

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)	O ₂ (ppm)	OSAT (%)	pH	TCO ₂ (uM)
3/1/99	MS5-S	0.3		1248	12685.5	47093.8	30	16.4	88	9.8	16.3	17.3	8.5	98		1305
3/1/99	MS5-B	1.7	2.7	1248			30	16.4	88	9.8	18.7	16.6	8.5	96		
3/1/99	MS3-S	0.3		1231	12646.4	47090.2	30	15.7	88	13.5	22.6	17.1	8.3	99		1593
3/1/99	MS3-B	2.9	3.9	1231			30	15.7	88	13.5	23.1	16.6	7.8	92		
3/1/99	MS1-S	0.3		1211	12595.3	47088.1	30	15.4	88	18.5	25.5	17.7	8.1	99		1688
3/1/99	MS1-B	2.9	3.9	1211			30	15.4	88	18.5	25.7	17.4	8.2	100		
3/1/99	G1-S	0.3		1144	12595.1	47070.1	30	10.9	88	18.3	28.1	17.6	7.8	98		1782
3/1/99	G1-B	11.0	12.0	1144			30	10.9	88	18.3	35.0	18.2	5.0	64		
3/1/99	G3-S	0.3		1115	12660.0	47070.1	30	10.8	88	12.0	31.0	18.0	7.6	98		1933
3/1/99	G3-B	13.1	14.1	1115			30	10.8	88	12.0	35.1	18.3	4.9	64		
3/1/99	G5-S	0.3		1046	12710.0	47058.0	30	7.8	88	7.0	31.3	17.5	8.0	101		1918
3/1/99	G5-B			1046			30	7.8	88	7.0	35.0	18.5	5.4	71		
3/1/99	G7-S	0.3		1008	12800.0	47057.5	30	7.6	87	58.2	23.7	17.5	7.9	97		1615
3/1/99	G7-B	12.2	13.2	1008			30	7.6	87	58.2	35.2	18.5	5.7	74		
3/1/99	G9-S	0.3		935	12870.4	47057.9	30	7.6	87	51.4	32.2	17.7	7.7	98		1959
3/1/99	G9-B	15.8	16.8	935			30	7.6	87	51.4	34.7	18.5	5.2	69		
3/1/99	G11-S	0.3		856	12959.9	47057.9	30	7.5	87	42.5	33.5	17.6	7.4	95		1982
3/1/99	G11-B	13.4	14.4	856			30	7.5	87	42.5	35.4	18.3	5.6	74		
3/1/99	G13-S	0.3		829	12925.0	47074.0	30	11.0	87	46.2	34.7	17.5	6.3	83		2069
3/1/99	G13-B	10.1	11.1	829			30	11.0	87	46.2	34.9	17.6	5.6	72		
3/1/99	G15-S	0.3		755	12839.9	47073.0	30	11.0	87	54.5	34.1	17.6	6.5	85		2043
3/1/99	G15-B	9.5	10.5	755			30	11.0	87	54.5	35.3	18.1	5.2	67		
3/1/99	BM3-S	0.3		718	12755.4	47071.8	30	10.9	88	2.7	10.1	16.1	9.5	103		1016
3/1/99	BM3-B	10.4	11.4	718			30	10.9	88	2.7	32.2	17.8	5.9	75		

Mobile Bay Cruise MB: 72

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/ld)	APROD (gC/m2/d)
3/1/99	MS5-S	0.3	287	116.50	0.54	0.00	0.07	11.57	11.07		0.61		42.36	1.71	12.43	120	11.08		
3/1/99	MS5-B	1.7			0.57	0.01	0.07				0.10		31.94						
3/1/99	MS3-S	0.3	232	124.84	0.53	0.01	0.07	10.37	12.16		0.03		17.95	1.39	13.86	100	10.24	0.520	0.930
3/1/99	MS3-B	2.9			0.75	0.00	0.74				0.04		15.29						
3/1/99	MS1-S	0.3	190	79.79	0.59	0.00	0.43	8.60	7.81		0.03		17.82	0.91	9.58	140	5.09		
3/1/99	MS1-B	2.9			0.56	0.00	0.40				0.04		20.00						
3/1/99	G1-S	0.3	160	75.52	0.74	0.02	1.02	7.19	6.81		0.03		13.28	0.59	10.42	80	5.93	0.370	1.530
3/1/99	G1-B	11.0			1.31	0.62	4.69				0.08		11.51						
3/1/99	G3-S	0.3	131	56.83	0.73	0.02	2.92	4.06	4.75		0.06		7.73	0.42	8.29	225	6.16		
3/1/99	G3-B	13.1			1.86	0.63	3.18				0.17		9.98						
3/1/99	G5-S	0.3	119	30.19	0.77	0.00	9.14	0.00	2.11		0.04		9.94	0.29	7.12	425	1.18	0.070	0.590
3/1/99	G5-B				1.80	0.71	1.20				0.16		9.29						
3/1/99	G7-S	0.3	192	41.50	1.48	0.57	0.40	7.65	4.00		0.06		34.72	0.73	6.06	100	3.47		
3/1/99	G7-B	12.2			1.26	1.53	0.04				0.22		10.93						
3/1/99	G9-S	0.3	112	30.11	0.73	0.08	0.99	6.92	2.19		0.05		3.17	0.33	2.97	325	2.48	0.190	1.330
3/1/99	G9-B	15.8			3.68	0.40	0.45				0.13		6.87						
3/1/99	G11-S	0.3		41.51	0.77	0.05	0.00	7.83	4.96		0.00		5.98	0.42	2.36	325	6.46		
3/1/99	G11-B	13.4			2.67	0.57	1.49				0.05		5.86						
3/1/99	G13-S	0.3		51.54	1.18	0.21	2.50	6.66	5.79		0.01		2.45	0.65	6.95	150	9.74	0.600	2.000
3/1/99	G13-B	10.1			1.85	0.25	0.99				0.02		3.17						
3/1/99	G15-S	0.3	94.5	35.00	0.98	0.92	0.13	6.27	3.51		0.03		6.67	0.56	4.45	275	4.62		
3/1/99	G15-B	9.5			2.41	1.61	1.20				0.20		8.84						
3/1/99	BM3-S	0.3	287	46.45	3.84	0.29	0.15	9.34	6.04		0.12		73.18	1.37	3.93	150	4.81	0.220	0.420
3/1/99	BM3-B	10.4			2.02	0.87	0.75				0.09		16.03						

Mobile Bay Cruise MB: 73

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)
3/25/99	FM1-S	0.3		638	12748.3	47092.4	30	15.7	88	3.7	3.7	18.6	9.2	101		820
3/25/99	FM1-B	1.7	2.7	638			30	15.7	88	3.7	8.6	18.4	7.6	86		
3/25/99	FM3-S	0.3		647	12762.5	47091.5	30	15.5	88	2.3	3.1	18.3	9.2	99		794
3/25/99	FM3-B	13.1	14.1	647			30	15.5	88	2.3	31.6	19.2	5.4	70		
3/25/99	FM5-S	0.3		657	12778.5	47092.3	30	15.7	88	0.8	3.3	18.4	9.3	101		800
3/25/99	FM5-B	3.2	4.2	657			30	15.7	88	0.8	16.3	18.1	5.7	66		
3/25/99	FM7-S	0.3		708			30	15.5	87	58.9	2.8	18.2	9.2	98		782
3/25/99	FM7-B			708			30	15.5	87	58.9	7.4	18.9	8.8	99		
3/25/99	CP3-S	0.3		726	12768.1	47103.0	30	18.3	88	1.9	1.3	17.8	8.5	91		777
3/25/99	CP3-B	13.1	14.1	726			30	18.3	88	1.9	31.2	19.1	5.5	71		
3/25/99	WB1-S	0.3		750	12745.1	47120.3	30	22.6	88	4.4	3.7	18.7	9.7	107		805
3/25/99	WB1-B	2.6	3.6	750			30	22.6	88	4.4	4.8	18.4	7.7	84		
3/25/99	WB3-S	0.3		805	12777.0	47121.0	30	22.6	88	1.3	1.1	17.8	8.9	95		724
3/25/99	WB3-B	13.4	14.4	805			30	22.6	88	1.3	27.0	18.7	5.3	68		
3/25/99	WB5-S	0.3		820	12810.7	47122.5	30	22.7	87	58.1	2.7	18.6	9.1	99		783
3/25/99	WB5-B	2.6	3.6	820			30	22.7	87	58.1	7.8	17.6	6.5	72		
3/25/99	FR3-S	0.3		844	12784.0	47140.4	30	27.4	88	1.0	0.6	17.9	8.9	93		698
3/25/99	FR3-B	9.2	10.2	844			30	27.4	88	1.0	30.2	18.7	4.8	61		
3/25/99	PC1-S	0.3		930	12753.3	47146.0	30	29.1	88	4.0	2.7	18.3	9.0	98		765
3/25/99	PC1-B	2.3	3.3	930			30	29.1	88	4.0	3.7	18.1	8.2	89		
3/25/99	PC3-S	0.3		914	12783.1	47146.9	30	29.0	88	1.1	1.7	18.1	9.2	98		738
3/25/99	PC3-B	14.0	15.0	914			30	29.0	88	1.1	30.3	18.7	4.4	57		
3/25/99	PC5-S	0.3		900	12814.9	47145.5	30	28.4	87	58.1	1.4	18.1	8.9	96		742
3/25/99	PC5-B	2.6	3.6	900			30	28.4	87	58.1	6.2	17.0	5.7	62		
3/25/99	DR1-S	0.3		946	12755.3	47159.1	30	32.5	88	4.0	2.2	18.7	8.6	93		739
3/25/99	DR1-B	2.0	3.0	946			30	32.5	88	4.0	2.4	18.7	8.3	91		
3/25/99	DR3-S	0.3		1000	12780.5	47165.4	30	34.0	88	1.7	2.6	17.2	8.3	87		804
3/25/99	DR3-B	13.4	14.4	1000			30	34.0	88	1.7	30.1	18.4	4.1	52		
3/25/99	DR5-S	0.3		1015	12814.3	47165.8	30	33.8	87	58.5	0.1	17.6	8.7	92		705
3/25/99	DR5-B	2.6	3.6	1015			30	33.8	87	58.5	1.0	17.3	8.1	84		
3/25/99	DR7-S	0.3		1027	12840.4	47167.9	30	34.0	87	56.0	0.2	18.3	8.7	93		686
3/25/99	DR7-B	2.0	3.0	1027			30	34.0	87	56.0	0.3	18.2	8.6	91		

Mobile Bay Cruise MB: 73

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)	YPROD (mgC/l/d)	APROD (gC/m2/d)
3/25/99	FM1-S	0.3	340	76.49	11.49	0.35	0.68	15.53	18.13		0.17		80.45	1.82	9.50	80	6.13		
3/25/99	FM1-B	1.7			12.77	0.42	1.90				0.14		68.77						
3/25/99	FM3-S	0.3	361	86.52	12.35	0.33	0.39	16.89	31.55		0.14		81.28	1.87	11.00	80	6.21		0.740
3/25/99	FM3-B	13.1			2.90	0.68	2.11				0.34		11.89						
3/25/99	FM5-S	0.3	357	112.79	10.90	0.35	0.05	15.91	23.45		0.13		79.32	2.07	22.29	80	9.74		
3/25/99	FM5-B	3.2			6.19	0.56	3.58				0.47		53.61						
3/25/99	FM7-S	0.3	347	80.59	11.92	0.33	0.44	16.29	12.21		0.14		79.91	2.20	12.67	60	7.56		
3/25/99	FM7-B				5.27	0.25	0.10				0.15		64.65						
3/25/99	CP3-S	0.3	359	110.39	12.34	0.33	7.33	18.26	13.03		0.67		88.44	3.50	33.33	30	7.94		0.440
3/25/99	CP3-B	13.1			2.31	0.66	3.15				0.17		13.46						
3/25/99	WB1-S	0.3	385	152.33	8.34	0.37	0.41	16.33	34.09		0.13		80.37	1.49	11.00	90	20.15		
3/25/99	WB1-B	2.6			8.63	0.42	1.44				0.12		81.45						
3/25/99	WB3-S	0.3	403	109.61	11.72	0.34	0.25	17.03	13.62		0.31		86.54	2.96	26.00	40	11.92		0.650
3/25/99	WB3-B	13.4			4.51	0.63	5.87				0.40		30.04						
3/25/99	WB5-S	0.3	368	88.35	8.35	0.32	0.41	15.21	12.65		0.17		78.98	2.50	17.00	40	13.60		
3/25/99	WB5-B	2.6			11.08	0.36	3.59				0.34		77.39						
3/25/99	FR3-S	0.3	422	93.42	11.44	0.36	0.20	16.94	12.69		0.50		89.99	2.92	26.00	30	17.00		0.640
3/25/99	FR3-B	9.2			3.94	0.77	6.69				0.63		22.94						
3/25/99	PC1-S	0.3	410	85.53	11.37	0.37	0.36	15.80	11.12		0.14		83.58	3.31	15.45	40	10.70		
3/25/99	PC1-B	2.3			11.83	0.39	1.38				0.14		77.42						
3/25/99	PC3-S	0.3	409	182.18	11.19	0.36	0.45	16.69	27.62		0.22		85.23	2.80	33.33	25	31.18		1.190
3/25/99	PC3-B	14.0			3.75	0.83	9.98				0.71		22.69						
3/25/99	PC5-S	0.3	411	92.98	9.45	0.38	0.07	16.33	13.41		0.18		83.67	4.26	15.33	35	14.27		
3/25/99	PC5-B	2.6			10.25	0.40	7.66				0.37		80.46						
3/25/99	DR1-S	0.3	421	82.22	12.29	0.36	1.08	16.19	12.24		0.24		84.46	2.24	18.33	40	8.26		
3/25/99	DR1-B	2.0			12.57	0.38	1.20				0.30		90.18						
3/25/99	DR3-S	0.3	422	74.85	13.09	0.40	4.07	17.34	9.02		0.49		91.61	2.18	18.00	40	4.59		0.420
3/25/99	DR3-B	13.4			3.78	0.79	12.06				0.83		26.17						
3/25/99	DR5-S	0.3	413	114.66	12.11	0.33	0.93	17.31	13.97		1.16		93.51	3.51	34.38	30	10.49		
3/25/99	DR5-B	2.6			12.64	0.39	1.96				0.45		98.80						
3/25/99	DR7-S	0.3	411	92.13	10.39	0.36	0.38	17.31	11.22		0.50		89.75	3.16	25.33	30	10.28		
3/25/99	DR7-B	2.0			10.32	0.34	0.59				0.38		89.62						

Mobile Bay Cruise MB: 73

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)
3/25/99	MR1-S	0.3		1102	12780.2	47180.4	30	38.1	88	2.0	0.2	17.5	8.7	91		694
3/25/99	MR1-B	13.1	14.1	1102			30	38.1	88	2.0	29.7	18.5	4.4	56		
3/25/99	MR2-S	0.3		1044	12816.4	47176.5	30	36.6	87	58.4	0.1	16.9	8.4	87		721
3/25/99	MR2-B	2.3	3.3	1044			30	36.6	87	58.4	0.1	17.1	8.4	87		
3/23/99	MS5-S	0.3		1257	12885.8	47093.8	30	16.4	88	9.8	9.6	18.5	8.3	95		1098
3/23/99	MS5-B	1.7	2.7	1257			30	16.4	88	9.8	11.3	18.3	8.0	90		
3/23/99	MS3-S	0.3		1240	12846.5	47090.2	30	15.7	88	13.5	12.3	18.4	8.1	93		1189
3/23/99	MS3-B	2.6	3.6	1240			30	15.7	88	13.5	19.0	18.7	6.5	78		
3/23/99	MS1-S	0.3		1216	12595.3	47088.3	30	15.4	88	18.5	17.1	19.4	7.6	91		1384
3/23/99	MS1-B	3.2	4.2	1216			30	15.4	88	18.5	24.9	19.0	7.0	87		
3/23/99	G1-S	0.3		1147	12595.5	47089.9	30	10.9	88	18.3	26.3	19.6	7.4	94		1758
3/23/99	G1-B	12.2	13.2	1147			30	10.9	88	18.3	34.1	19.0	5.4	71		
3/23/99	G3-S	0.3		1117	12859.9	47070.0	30	10.8	88	12.0	27.3	19.4	7.4	94		1806
3/23/99	G3-B	13.7	14.7	1117			30	10.8	88	12.0	34.8	19.5	4.5	61		
3/23/99	G5-S	0.3		1050	12710.0	47058.1	30	7.8	88	7.0	22.4	19.2	8.0	99		1831
3/23/99	G5-B	14.9	15.9	1050			30	7.8	88	7.0	35.1	20.0	4.7	63		
3/23/99	G7-S	0.3		1012	12800.1	47057.6	30	7.6	87	58.2	20.0	19.1	7.9	97		1563
3/23/99	G7-B	12.8	13.8	1012			30	7.6	87	58.2	35.5	20.2	4.6	63		
3/23/99	G9-S	0.3		940	12870.4	47058.1	30	7.6	87	51.4	19.7	18.6	8.0	97		1518
3/23/99	G9-B	16.1	17.1	940			30	7.6	87	51.4	34.7	19.9	5.5	75		
3/23/99	G11-S	0.3		901	12960.0	47057.9	30	7.5	87	42.5	28.3	18.4	7.7	97		1823
3/23/99	G11-B			901			30	7.5	87	42.5	34.3	18.9	6.0	79		
3/23/99	G13-S	0.3		832	12925.4	47074.0	30	11.0	87	46.2	24.8	17.8	7.8	96		1715
3/23/99	G13-B	10.4	11.4	832			30	11.0	87	46.2	34.0	18.5	6.6	86		
3/23/99	G15-S	0.3		755	12840.2	47073.1	30	11.0	87	54.5	21.6	17.8	7.5	90		1648
3/23/99	G15-B	9.8	10.8	755			30	11.0	87	54.5	34.9	19.2	5.3	71		
3/23/99	BM3-S	0.3		720	12755.1	47071.5	30	10.9	88	2.7	16.6	18.0	8.2	97		1384
3/23/99	BM3-B	12.2	13.2	720			30	10.9	88	2.7	33.5	19.2	5.6	73		

Mobile Bay Cruise MB: 73

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)	YPROD (mgC/l/d)	APROD (gC/m2/d)
3/25/99	MR1-S	0.3		78.05	11.63	0.38	0.53	18.64	9.78		0.45		98.11	3.16	20.95	35	11.75		0.530
3/25/99	MR1-B	13.1			3.78	0.78	10.07				0.90		22.49						
3/25/99	MR2-S	0.3	425	60.63	11.61	0.38	1.09	18.63	6.98		0.68		91.24	3.17	14.00	35	6.51		
3/25/99	MR2-B	2.3			11.55	0.34	1.02				0.54		90.49						
3/23/99	MS5-S	0.3	328	138.57	2.60	0.27	0.18	17.30	19.90		0.11		56.49	0.94	6.86	140	14.55		
3/23/99	MS5-B	1.7			2.39	0.21	0.29				0.18		51.26						
3/23/99	MS3-S	0.3	297	94.79	1.29	0.13	0.16	13.83	15.73		0.10		48.10	0.73	5.40	140	5.82		1.900
3/23/99	MS3-B	2.6			0.88	0.08	0.29				0.12		35.23						
3/23/99	MS1-S	0.3	248	59.36	0.56	0.01	0.29	11.38	8.97		0.05		34.97	0.64	3.29	170	3.58		
3/23/99	MS1-B	3.2			0.63	0.03	0.43				0.12		20.82						
3/23/99	G1-S	0.3	170	56.54	0.52	0.01	0.46	8.72	8.29		0.07		15.53	0.35	3.20	250	2.24		1.450
3/23/99	G1-B	12.2			1.45	0.62	0.22				0.05		7.71						
3/23/99	G3-S	0.3	155	39.42	0.61	0.01	0.25	8.08	4.04		0.07		14.52	0.32	3.12	280	2.01		
3/23/99	G3-B	13.7			3.64	0.82	0.39				0.14		7.51						
3/23/99	G5-S	0.3	196	48.23	2.18	0.15	0.39	9.25	6.27		0.08		29.07	0.34	5.10	280	2.69		2.400
3/23/99	G5-B	14.9			3.91	0.71	0.12				0.14		6.71						
3/23/99	G7-S	0.3	221	63.63	3.10	0.19	0.34	11.20	7.95		0.07		36.30	0.42	6.33	120	4.81		
3/23/99	G7-B	12.8			4.37	0.46	0.09				0.17		6.06						
3/23/99	G9-S	0.3	207	74.45	3.04	0.32	0.15	11.89	10.62		0.08		39.07	0.41	7.50	140	4.70		4.180
3/23/99	G9-B	16.1			3.17	1.21	0.06				0.10		3.41						
3/23/99	G11-S	0.3	139	40.45	1.07	0.06	0.28	7.88	3.70		0.04		14.45	0.29	3.84	425	1.34		
3/23/99	G11-B				1.16	0.35	0.12				0.00		1.24						
3/23/99	G13-S	0.3	152	52.81	1.29	0.13	0.31	9.27	6.23		0.11		23.09	0.34	4.60	225	2.29		1.610
3/23/99	G13-B	10.4			0.71	0.16	0.06				0.00		0.48						
3/23/99	G15-S	0.3	188	56.01	4.29	0.43	0.42	11.04	6.98		0.05		36.35	0.56	8.22	140	3.86		
3/23/99	G15-B	9.8			1.97	1.14	0.02				0.09		5.22						
3/23/99	BM3-S	0.3	236	57.38	5.51	0.18	0.56	11.75	8.24		0.18		47.21	0.70	5.80	210	4.20		1.880
3/23/99	BM3-B	12.2			2.66	0.69	0.29				0.10		8.51						

Mobile Bay Cruise MB: 74

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)
4/21/99	FM1-S	0.3		653	12748.3	47092.2	30	15.7	88	3.7	12.4	20.1	7.3	88		1273
4/21/99	FM1-B	3.5	4.5	653			30	15.7	88	3.7	19.6	20.4	6.7	83		
4/21/99	FM3-S	0.3		704	12762.5	47091.6	30	15.5	88	2.3	11.7	20.1	7.5	90		1243
4/21/99	FM3-B	13.1	14.1	704			30	15.5	88	2.3	32.0	20.4	4.7	63		
4/21/99	FM5-S	0.3		716	12779.0	47092.5	30	15.7	88	0.8	11.4	20.2	7.6	90		1226
4/21/99	FM5-B	3.2	4.2	716			30	15.7	88	0.8	19.5	20.7	5.6	71		
4/21/99	FM7-S	0.3		726	12797.9	47092.0	30	15.5	87	58.9	12.4	20.4	7.5	90		1284
4/21/99	FM7-B	2.9	3.9	726			30	15.5	87	58.9	14.1	20.6	6.9	82		
4/21/99	CP3-S	0.3		746	12767.7	47103.2	30	18.3	88	1.9	8.4	20.4	7.9	93		1110
4/21/99	CP3-B	11.6	12.6	746			30	18.3	88	1.9	30.2	20.3	4.7	62		
4/21/99	WB1-S	0.3		811	12475.3	47120.2	30	22.6	88	4.4	8.7	20.8	7.0	83		1148
4/21/99	WB1-B	1.7	2.7	811			30	22.6	88	4.4	12.2	20.6	4.1	50		
4/21/99	WB3-S	0.3		828	12777.1	47121.0	30	22.6	88	1.3	8.0	20.5	8.0	93		1102
4/21/99	WB3-B	11.3	12.3	828			30	22.6	88	1.3	30.6	20.3	4.0	54		
4/21/99	WB5-S	0.3		846	12810.5	47122.6	30	22.7	87	58.1	6.5	20.4	7.7	89		1080
4/21/99	WB5-B	2.6	3.6	846			30	22.7	87	58.1	7.9	20.5	7.3	86		
4/21/99	WB7-S	0.3		902	12840.1	47122.8	30	22.6	87	55.3	5.6	20.3	7.8	89		1019
4/21/99	WB7-B	2.3	3.3	902			30	22.6	87	55.3	5.6	20.2	7.6	87		
4/21/99	FR3-S	0.3		931	12783.8	47140.4	30	27.4	88	1.0	5.6	20.9	7.8	91		1018
4/21/99	FR3-B	12.5	13.5	931			30	27.4	88	1.0	31.4	20.4	2.3	31		
4/21/99	PC1-S	0.3		1021	12753.2	47145.9	30	29.1	88	4.0	7.2	21.2	7.3	86		1053
4/21/99	PC1-B	2.0	3.0	1021			30	29.1	88	4.0	7.3	21.0	7.2	85		
4/21/99	PC3-S	0.3		1004	12782.7	47146.8	30	29.0	88	1.1	5.0	20.9	8.4	96		963
4/21/99	PC3-B	10.4	11.4	1004			30	29.0	88	1.1	29.0	20.5	2.3	31		
4/21/99	PC5-S	0.3		949	12815.2	47145.6	30	28.4	87	58.1	4.1	20.6	7.6	86		968
4/21/99	PC5-B	2.6	3.6	949			30	28.4	87	58.1	4.1	20.6	7.4	84		
4/21/99	DR1-S	0.3		1038	12755.6	47159.0	30	32.5	88	4.0	6.6	21.9	7.7	91		1005
4/21/99	DR1-B	1.7	2.7	1038			30	32.5	88	4.0	6.6	21.7	7.5	89		
4/21/99	DR3-S	0.3		1052	12780.3	47165.5	30	34.0	88	1.7	4.7	22.1	7.0	83		1033
4/21/99	DR3-B	13.1	14.1	1052			30	34.0	88	1.7	29.6	20.6	1.8	24		
4/21/99	DR5-S	0.3		1109	12814.2	47165.9	30	33.8	88	58.5	0.9	21.4	7.7	87		790
4/21/99	DR5-B	2.6	3.6	1109			30	33.8	88	58.5	4.3	21.1	6.2	72		

Mobile Bay Cruise MB: 74

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)
4/21/99	FM1-S	0.3	261	80.64	0.09	0.07	0.17	12.14	12.72		0.08		40.91	2.21	11.38	70	9.07		
4/21/99	FM1-B	3.5			0.68	0.06	0.39				0.16		24.33						
4/21/99	FM3-S	0.3	269	73.86	0.15	0.02	0.18	12.91	11.84		0.09		41.59	1.68	10.14	60	8.06		1.110
4/21/99	FM3-B	13.1			3.09	0.61							14.62						
4/21/99	FM5-S	0.3	281	72.55	0.28	0.01	0.72	11.63	13.01		0.14		42.88	1.59	9.57	70	6.02		
4/21/99	FM5-B	3.2			0.52	0.06	0.17				0.29		32.60						
4/21/99	FM7-S	0.3	225	95.76	0.06	0.01	0.21	13.21	14.06		0.14		45.79	1.81	15.00	50	7.39		
4/21/99	FM7-B	2.9			0.03	0.01	0.26				0.14		43.60						
4/21/99	CP3-S	0.3	288	93.92	0.13	0.04	0.16	12.96	15.92		0.06		46.26	1.69	11.00	80	10.31		1.990
4/21/99	CP3-B	11.6			3.12	0.44	1.49				0.34		16.94						
4/21/99	WB1-S	0.3	308	122.24	0.00	0.03	0.23	16.10	20.24		0.14		47.72	1.89	16.17	50	15.95		
4/21/99	WB1-B	1.7			1.88	0.40	1.19				0.17		48.40						
4/21/99	WB3-S	0.3	296	121.99	0.18	0.08	0.52	15.12	22.59		0.13		45.87	1.50	9.50	70	18.80		2.420
4/21/99	WB3-B	11.3			3.09	0.81							19.00						
4/21/99	WB5-S	0.3	306	177.42	0.12	0.04	0.36	14.91	27.36		0.14		48.67	2.76	33.67	40	18.71		
4/21/99	WB5-B	2.6			0.00	0.04	0.27				0.21		50.17						
4/21/99	WB7-S	0.3	299	282.03	0.18	0.04	0.52	13.63	33.30		0.16		58.85	6.07	63.00	20	14.44		
4/21/99	WB7-B	2.3			0.14	0.05	0.27				0.22		59.33						
4/21/99	FR3-S	0.3	305	144.99	0.89	0.22	0.77	13.62	25.65		0.12		53.01	2.09	21.80	50	20.57		1.890
4/21/99	FR3-B	12.5			5.53	1.40	7.85				0.63		26.55						
4/21/99	PC1-S	0.3	305	126.88	0.10	0.05	0.11	13.36	17.76		0.15		46.03	1.89	16.60	50	16.04		
4/21/99	PC1-B	2.0			0.10	0.04	0.17				0.12		46.42						
4/21/99	PC3-S	0.3	323	97.83	0.06	0.07	0.05	15.09	16.62		0.09		49.82	1.25	8.17	90	15.39		2.230
4/21/99	PC3-B	10.4			6.51	1.23	9.89				0.85		28.00						
4/21/99	PC5-S	0.3	310	333.21	0.15	0.07	0.28	13.49	40.02		0.19		54.31	5.74	78.33	20	26.44		
4/21/99	PC5-B	2.6			0.24	0.06	0.45				0.18		53.64						
4/21/99	DR1-S	0.3	317	144.24	0.09	0.03	0.12	13.67	19.82		0.10		43.36	1.47	12.83	70	13.43		
4/21/99	DR1-B	1.7			0.09	0.03	0.14				0.07		42.70						
4/21/99	DR3-S	0.3	342	93.59	3.82	0.40	5.62	16.33	13.37		0.19		38.01	1.59	13.50	80	14.10		3.060
4/21/99	DR3-B	13.1			8.15	1.41	15.03				1.06		31.55						
4/21/99	DR5-S	0.3	319	150.65	0.28	0.08	0.33	14.72	20.60		0.56		45.42	2.85	31.84	40	22.25		
4/21/99	DR5-B	2.6			1.56	0.23	1.79				0.09		50.65						

Mobile Bay Cruise MB: 74

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)
4/21/99	DR7-S	0.3		1122	12840.1	47167.9	30	34.0	87	56.0	2.0	21.2	7.3	84		848
4/21/99	DR7-B	2.0	3.0	1122			30	34.0	87	56.0	2.0	20.9	7.1	82		
4/21/99	MR1-S	0.3		1158	12780.6	47180.3	30	38.1	88	2.0	2.1	22.4	7.3	85		938
4/21/99	MR1-B	12.8	13.8	1158			30	38.1	88	2.0	28.9	20.7	1.9	25		
4/21/99	MR2-S	0.3		1139	12816.5	47176.6	30	36.6	87	58.4	0.9	21.9	7.6	88		808
4/21/99	MR2-B	2.0	3.0	1139			30	36.6	87	58.4	1.6	21.8	7.3	84		
4/20/99	MS5-S	0.3		720	12685.5	47093.8	30	16.4	88	9.8	21.5	19.9	8.2	102		1564
4/20/99	MS5-B	1.4	2.4	720			30	16.4	88	9.8	21.5	19.8	7.4	92		
4/20/99	MS3-S	0.3		739	12646.1	47090.3	30	15.7	88	13.5	22.2	20.1	7.9	99		1598
4/20/99	MS3-B	2.6	3.6	739			30	15.7	88	13.5	22.2	20.0	7.8	98		
4/20/99	MS1-S	0.3		802	12595.1	47088.1	30	15.4	88	18.5	23.8	20.3	8.3	105		1614
4/20/99	MS1-B	2.9	3.9	802			30	15.4	88	18.5	23.9	20.2	8.2	104		
4/20/99	G1-S	0.3		828	12595.3	47070.0	30	10.9	88	18.3	34.2	20.7	6.5	81		2063
4/20/99	G1-B	11.6	12.6	828			30	10.9	88	18.3	36.4	20.8	5.7	79		
4/20/99	G3-S	0.3		856	12660.3	47070.3	30	10.8	88	12.0	33.1	20.7	7.2	98		2010
4/20/99	G3-B	13.1	14.1	856			30	10.8	88	12.0	36.5	21.0	6.0	84		
4/20/99	G5-S	0.3		920	12710.2	47058.1	30	7.8	88	7.0	32.2	20.7	8.1	108		1972
4/20/99	G5-B	14.9	15.9	920			30	7.8	88	7.0	36.5	21.1	6.2	85		
4/20/99	G7-S	0.3		955	12800.0	47057.5	30	7.6	87	58.2	33.7	20.7	7.9	107		2032
4/20/99	G7-B	12.5	13.5	955			30	7.6	87	58.2	36.4	21.1	6.1	85		
4/20/99	G9-S	0.3		1023	12870.0	47057.9	30	7.6	87	51.4	30.5	20.8	8.5	113		1909
4/20/99	G9-B	14.3	15.3	1023			30	7.6	87	51.4	36.4	21.4	6.7	95		
4/20/99	G11-S	0.3		1101	12960.1	47057.9	30	7.5	87	42.5	32.7	21.0	8.4	114		1987
4/20/99	G11-B	13.7	14.7	1101			30	7.5	87	42.5	34.4	20.9	7.2	99		
4/20/99	G13-S	0.3		1142	12924.8	47074.1	30	11.0	87	46.2	34.2	21.0	7.8	107		2060
4/20/99	G13-B	10.4	11.4	1142			30	11.0	87	46.2	36.2	21.1	6.4	90		
4/20/99	G15-S	0.3		1222	12840.1	47073.2	30	11.0	87	54.5	33.2	21.2	7.9	108		2018
4/20/99	G15-B	9.8	10.8	1222			30	11.0	87	54.5	36.4	21.2	6.4	90		
4/20/99	BM3-S	0.3		1301	12755.0	47071.6	30	10.9	88	2.7	33.8	20.6	7.8	107		2037
4/20/99	BM3-B	11.6	12.6	1301			30	10.9	88	2.7	33.8	20.4	7.5	101		

Mobile Bay Cruise MB: 74

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
4/21/99	DR7-S	0.3	325	157.18	0.16	0.05	0.53	13.42	22.77		0.18		54.95	2.70	33.25	25	11.75		
4/21/99	DR7-B	2.0			0.09	0.06	0.32				0.22		52.48						
4/21/99	MR1-S	0.3	371	131.78	4.17	0.31	6.08	16.87	18.43		0.23		38.59	1.66	13.86	60	17.42		2.930
4/21/99	MR1-B	12.8			7.50	1.39	11.44				1.04		30.05						
4/21/99	MR2-S	0.3	314	92.22	0.52	0.16	0.39	15.53	12.31		0.20		37.81	2.83	28.33	35	15.67		
4/21/99	MR2-B	2.0			1.08	0.22	2.23				0.21		42.29						
4/20/99	MS5-S	0.3	260	447.77	0.63	0.04	0.66	11.49	47.54		0.26		17.80	7.99	128.13	15	10.07		
4/20/99	MS5-B	1.4			0.65	0.01	2.11				0.23		16.68						
4/20/99	MS3-S	0.3	226	289.97	0.62	0.01	0.20	11.68	31.06		0.24		15.52	4.25	60.62	20	9.40		0.460
4/20/99	MS3-B	2.6			0.69	0.05	0.10				0.23		14.89						
4/20/99	MS1-S	0.3	229	222.81	0.57	0.08	8.62	4.14	22.51		0.20		13.15	2.77	45.67	30	10.07		
4/20/99	MS1-B	2.9			0.59	0.01	0.31				0.13		13.92						
4/20/99	G1-S	0.3	95.3	54.58	3.26	0.49	0.00	7.09	7.35		0.15		11.01	0.61	5.71	140	2.35		1.850
4/20/99	G1-B	11.6			5.10	0.68	0.15				0.25		8.70						
4/20/99	G3-S	0.3	103	58.74	2.61	0.36	0.00	7.51	7.50		0.06		7.51	0.57	5.32	150	2.41		
4/20/99	G3-B	13.1			3.93	0.63	0.15				0.24		6.29						
4/20/99	G5-S	0.3	116	55.71	1.37	0.21	0.00	7.42	8.52		0.06		6.71	0.52	4.52	160	6.16		3.150
4/20/99	G5-B	14.9			3.69	0.67	0.29				0.24		13.49						
4/20/99	G7-S	0.3		53.24	2.27	0.34	0.00	7.37	6.72		0.09		11.62	0.55	5.23	170	5.04		
4/20/99	G7-B	12.5			3.95	0.76	0.09				0.18		7.06						
4/20/99	G9-S	0.3			1.56	0.33	0.02	7.45			0.10		16.52	0.72	7.47	130	6.72		3.100
4/20/99	G9-B	14.3			2.14	0.73	0.19				0.13		6.38						
4/20/99	G11-S	0.3	114	39.52	2.19	0.43	0.00	9.12	4.95		0.09		12.51	0.44	8.07	190	3.19		
4/20/99	G11-B	13.7			3.42	0.65	0.00				0.16		11.29						
4/20/99	G13-S	0.3	90.7	64.59	3.64	0.60	0.00	6.16	9.79		0.13		12.27	0.46	5.38	190	4.79		3.160
4/20/99	G13-B	10.4			3.08	0.79	0.25				0.18		5.67						
4/20/99	G15-S	0.3	104	48.07	3.08	0.49	0.02	8.18	5.85		0.19		13.72	0.45	6.75	170	3.61		
4/20/99	G15-B	9.8			3.26	0.72	0.09				0.19		6.67						
4/20/99	BM3-S	0.3	108	76.87	3.30	0.41	0.00	8.27	9.00		0.14		11.24	0.89	15.92	90	5.24		2.020
4/20/99	BM3-B	11.6			3.71	0.44	0.00				0.13		11.78						

Mobile Bay Cruise MB: 75

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)
5/19/99	FM1-S	0.3		1418	12748.2	47092.2	30	15.7	88	3.7	16.3	27.3	6.3	88		1448
5/19/99	FM1-B	4.4	5.4	1418			30	15.7	88	3.7	26.4	26.0	5.5	79		
5/19/99	FM3-S	0.3		1405	12762.5	47091.7	30	15.5	88	2.3	26.3	26.4	5.8	85		1832
5/19/99	FM3-B	12.8	13.8	1405			30	15.5	88	2.3	31.1	24.4	4.5	64		
5/19/99	FM5-S	0.3		1355	12778.9	47092.4	30	15.6	88	0.8	28.5	25.8	5.8	82		1900
5/19/99	FM5-B	3.2	4.2	1355			30	15.6	88	0.8	28.0	25.6	5.6	81		
5/19/99	FM7-S	0.3		1344	12797.9	42092.0	30	15.5	87	58.9	18.0	27.1	6.1	85		1491
5/19/99	FM7-B	2.9	3.9	1344			30	15.5	87	58.9	28.5	25.4	5.3	76		
5/19/99	CP3-S	0.3		1323	12768.2	47103.2	30	18.3	88	1.9	18.6	26.9	6.1	86		1495
5/19/99	CP3-B	12.8	13.8	1323			30	18.3	88	1.9	29.4	25.2	4.9	71		
5/19/99	WB1-S	0.3		1300	12745.1	47120.2	30	22.6	88	4.4	7.5	26.4	6.9	89		1112
5/19/99	WB1-B	2.3	3.3	1300			30	22.6	88	4.4	12.7	26.1	4.6	62		
5/19/99	WB3-S	0.3		1233	12777.8	47120.9	30	22.5	88	1.3	8.6	26.3	6.8	89		1127
5/19/99	WB3-B	13.1	14.1	1233			30	22.5	88	1.3	27.9	25.5	4.8	68		
5/19/99	WB5-S	0.3		1218	12810.4	47122.6	30	22.7	87	58.2	5.9	25.9	7.7	96		1053
5/19/99	WB5-B	2.6	3.6	1218			30	22.7	87	58.2	11.5	25.7	4.6	52		
5/19/99	WB7-S	0.3		1204	12840.7	47122.8	30	27.6	87	55.3	5.8	25.9	7.0	91		1106
5/19/99	WB7-B	2.1	3.1	1204			30	27.6	87	55.3	8.3	25.5	4.2	54		
5/19/99	FR3-S	0.3		1122	12783.8	47140.4	30	27.5	88	1.0	3.9	25.8	8.3	102		978
5/19/99	FR3-B	12.2	13.2	1122			30	27.5	88	1.0	26.3	25.5	4.5	62		
5/19/99	PC1-S	0.3		822	12753.6	47145.9	30	29.0	88	4.0	4.2	25.8	7.3	92		1010
5/19/99	PC1-B	1.7	2.7	822			30	29.0	88	4.0	4.3	25.8	7.3	92		
5/19/99	PC3-S	0.3		1106	12783.8	47146.9	30	29.1	88	1.1	5.3	25.9	7.4	94		1053
5/19/99	PC3-B	12.5	13.5	1106			30	29.1	88	1.1	26.4	25.2	3.8	53		
5/19/99	PC5-S	0.3		1051	12814.8	47145.6	30	28.5	87	58.1	4.6	26.0	7.4	93		1051
5/19/99	PC5-B	2.5	3.5	1051			30	28.5	87	58.1	7.5	25.6	3.8	49		
5/19/99	DR1-S	0.3		844	12755.4	47159.1	30	32.5	88	4.0	3.1	25.9	7.6	95		956
5/19/99	DR1-B	1.4	2.4	844			30	32.5	88	4.0	3.1	25.9	7.6	95		
5/19/99	DR3-S	0.3		902	12781.1	47165.5	30	34.0	88	1.7	3.9	25.2	6.7	82		1059
5/19/99	DR3-B	11.9	12.9	902			30	34.0	88	1.7	14.6	25.2	4.6	60		
5/19/99	DR5-S	0.3		1025	12814.2	47165.8	30	33.7	87	58.5	2.0	26.0	7.8	97		934
5/19/99	DR5-B	2.3	3.3	1025			30	33.7	87	58.5	2.0	25.9	7.6	95		

Mobile Bay Cruise MB: 75

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)
5/19/99	FM1-S	0.3	264	77.59	0.12	0.03	0.77	13.20	6.84		0.07		38.60	0.79	7.50	140	3.58		
5/19/99	FM1-B	4.4			0.24	0.11	0.33				0.10		17.00						
5/19/99	FM3-S	0.3	177	54.06	0.12	0.03	0.50	10.56	3.73		0.08		13.90	0.45	3.75	250	1.57		1.280
5/19/99	FM3-B	12.8			1.17	0.69	0.80				0.15		8.20						
5/19/99	FM5-S	0.3	176	86.90	0.17	0.07	0.79	10.46	5.33		0.08		9.20	0.57	18.22	195	2.18		
5/19/99	FM5-B	3.2			0.19	0.07	0.28				0.19		23.20						
5/19/99	FM7-S	0.3	254	100.97	0.12	0.03	0.25	14.11	8.40		0.06		30.70	1.00	11.94	110	3.61		
5/19/99	FM7-B	2.9			0.33	0.18	0.55				0.12		8.40						
5/19/99	CP3-S	0.3	244	63.06	0.11	0.03	0.19	12.84	5.32		0.06		25.40	0.69	4.17	160	2.80		1.090
5/19/99	CP3-B	12.8			0.90	0.47	0.58				0.14		8.73						
5/19/99	WB1-S	0.3	308	106.38	0.11	0.03	0.19	15.88	9.16		0.07		44.16	1.17	5.60	130	8.40		
5/19/99	WB1-B	2.3			0.24	0.14	0.16				0.08		42.01						
5/19/99	WB3-S	0.3	280	86.28	0.11	0.03	0.20	15.12	8.95		0.07		38.09	0.94	5.80	110	6.72		1.410
5/19/99	WB3-B	13.1			0.43	0.26	1.33				0.26		21.10						
5/19/99	WB5-S	0.3	294	112.23	0.10	0.03	0.27	16.90	13.23		0.07		40.30	0.85	4.40	100	13.43		
5/19/99	WB5-B	2.6			0.42	0.10	0.47				0.06		38.02						
5/19/99	WB7-S	0.3	273	125.38	0.10	0.03	0.27	15.64	14.32		0.07		47.24	1.39	9.76	100	4.03		
5/19/99	WB7-B	2.1			1.35	0.21	2.90				0.07		48.75						
5/19/99	FR3-S	0.3	289	129.14	3.98	0.35	0.43	16.52	13.84		0.07		42.10	1.15	9.46	80	20.39		2.710
5/19/99	FR3-B	12.2			0.28	0.27	5.83				0.54		15.90						
5/19/99	PC1-S	0.3	286	101.81	3.20	0.24	0.28	18.23	10.85		0.06		42.71	1.24	7.75	100	13.26		
5/19/99	PC1-B	1.7			3.35	0.24	0.27				0.07		43.18						
5/19/99	PC3-S	0.3	277	139.55	0.15	0.04	0.28	17.88	16.09		0.06		46.99	1.01	7.67	80	20.15		3.130
5/19/99	PC3-B	12.5			0.42	0.68	9.96				0.58		16.20						
5/19/99	PC5-S	0.3	283	182.75	0.11	0.03	0.23	16.58	20.79		0.13		49.02	1.64	16.00	50	20.15		
5/19/99	PC5-B	2.5			3.03	0.31	0.99				0.23		49.12						
5/19/99	DR1-S	0.3	310	115.64	3.43	0.32	1.00	18.49	13.62		0.07		47.15	1.91	12.29	80	11.62		
5/19/99	DR1-B	1.4			2.79	0.26	0.79				0.07		44.13						
5/19/99	DR3-S	0.3	298	152.51	15.16	0.43	5.81	16.96	7.38		0.64		57.67	2.17	15.53	65	11.11		1.910
5/19/99	DR3-B	11.9			9.40	0.50	10.20				0.71		37.16						
5/19/99	DR5-S	0.3	261	138.92	8.72	0.48	0.39	16.43	16.90		0.12		54.21	2.03	18.00	30	20.99		
5/19/99	DR5-B	2.3			9.09	0.50	0.45				0.13		53.47						

Mobile Bay Cruise MB: 75

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)
5/19/99	DR7-S	0.3		1011	12840.2	47167.8	30	34.0	87	56.1	0.5	25.6	7.4	93		898
5/19/99	DR7-B	1.7	2.7	1011			30	34.0	87	56.1	0.5	25.6	7.4	93		
5/19/99	MR1-S	0.3		927	12780.6	47180.5	30	38.1	88	2.0	2.5	25.5	6.9	86		1018
5/19/99	MR1-B	12.2	13.2	927			30	38.1	88	2.0	10.4	25.3	4.5	59		
5/19/99	MR2-S	0.3		952	12817.3	47176.4	30	36.6	87	58.4	0.1	25.8	7.3	89		850
5/19/99	MR2-B	2.0	3.0	10			30	36.6	87	58.4	0.1	25.8	7.2	89		
5/20/99	MS5-S	0.3		1230	12686.0	47093.9	30	16.4	88	9.8	14.4	26.6	6.9	99		1355
5/20/99	MS5-B	1.4	2.4	1230			30	16.4	88	9.8	20.8	26.3	5.3	75		
5/20/99	MS3-S	0.3		1213	12646.8	47090.3	30	15.7	88	13.5	17.0	26.5	7.0	96		1436
5/20/99	MS3-B	2.3	3.3	1213			30	15.7	88	13.5	23.0	26.5	5.6	78		
5/20/99	MS1-S	0.3		1152	12595.4	47088.1	30	15.4	88	18.5	21.2	26.8	6.7	94		1586
5/20/99	MS1-B	2.9	3.9	1152			30	15.4	88	18.5	26.9	26.0	5.9	85		
5/20/99	G1-S	0.3		1125	12595.1	47070.0	30	10.9	88	18.4	27.9	26.3	6.4	93		1853
5/20/99	G1-B	19.5	20.5	1125			30	10.9	88	18.4	34.2	23.0	2.8	39		
5/20/99	G3-S	0.3		1058	12660.4	47070.2	30	10.8	88	12.0	24.9	26.2	6.5	92		1740
5/20/99	G3-B	12.8	13.8	1058			30	10.8	88	12.0	34.2	23.2	4.4	63		
5/20/99	G5-S	0.3		1033	12710.0	47058.0	30	7.8	88	7.0	25.2	26.4	6.6	95		1753
5/20/99	G5-B	14.0	15.0	1033			30	7.8	88	7.0	34.6	23.5	5.2	75		
5/20/99	G7-S	0.3		1000	12800.0	47057.5	30	7.6	87	58.3	27.7	26.3	5.6	84		1843
5/20/99	G7-B	11.9	12.9	1000			30	7.6	87	58.3	35.8	22.2	1.9	27		
5/20/99	G9-S	0.3		931	12870.2	47058.0	30	2.6	87	51.4	28.7	26.1	6.5	95		1883
5/20/99	G9-B	14.9	15.9	931			30	2.6	87	51.4	35.7	22.4	2.5	36		
5/20/99	G11-S	0.3		857	12959.8	47058.1	30	7.6	87	42.6	30.3	25.2	5.9	86		1931
5/20/99	G11-B	13.1	14.1	857			30	7.6	87	42.6	35.0	22.9	5.5	79		
5/20/99	G13-S	0.3		829	12925.2	47074.0	30	11.0	87	46.3	29.9	25.2	6.4	93		1918
5/20/99	G13-B	9.8	10.8	829			30	11.0	87	46.3	34.8	22.9	5.1	73		
5/20/99	G15-S	0.3		751	12840.1	47073.1	30	11.0	87	54.5	29.6	25.2	6.7	96		1905
5/20/99	G15-B	9.2	10.2	751			30	11.0	87	54.5	34.8	22.8	4.3	62		
5/20/99	BM3-S	0.3		717	12755.2	47071.9	30	10.9	88	2.8	24.5	25.7	6.6	94		1727
5/20/99	BM3-B	11.9	12.9	717			30	10.9	88	2.8	33.8	23.4	4.2	59		

Mobile Bay Cruise MB: 76

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)
6/22/99	FM1-S	0.3		731	12748.2	47092.2	30	15.7	88	3.7	20.4	27.8	6.4	91		1627
6/22/99	FM1-B	3.6	4.6	731			30	15.7	88	3.7	29.6	28.1	5.2	79		
6/22/99	FM3-S	0.3		748	12762.5	47091.6	30	15.5	88	2.3	19.7	27.8	6.5	89		1602
6/22/99	FM3-B	12.5	13.5	748			30	15.5	88	2.3	30.7	28.2	5.4	81		
6/22/99	FM5-S	0.3		807	12778.8	47092.5	30	15.7	88	0.8	18.8	27.7	6.2	87		1593
6/22/99	FM5-B	2.9	3.9	807			30	15.7	88	0.8	29.1	28.2	5.3	83		
6/22/99	FM7-S	0.3		824	12798.0	47092.1	30	15.5	87	58.9	19.7	27.7	5.6	81		1630
6/22/99	FM7-B	2.7	3.7	824			30	15.5	87	58.9	28.2	28.2	5.5	81		
6/22/99	CP3-S	0.3		847	12768.2	47103.2	30	18.3	88	1.9	17.9	27.8	6.7	92		1515
6/22/99	CP3-B	12.5	13.5	847			30	18.3	88	1.9	30.4	28.1	5.4	81		
6/22/99	WB1-S	0.3		917	12744.9	47120.2	30	22.6	88	4.4	14.7	28.0	6.4	90		1418
6/22/99	WB1-B	2.5	3.5	917			30	22.6	88	4.4	17.1	28.0	5.8	80		
6/22/99	WB3-S	0.3		1053	12777.6	47121.0	30	22.6	88	1.3	16.5	28.9	6.8	98		1457
6/22/99	WB3-B	13.1	14.1	1053			30	22.6	88	1.3	30.2	28.3	4.7	71		
6/22/99	WB5-S	0.3		942	12810.4	47122.5	30	22.7	87	58.1	12.7	27.7	6.8	94		1357
6/22/99	WB5-B	2.5	3.5	942			30	22.7	87	58.1	16.7	27.7	6.3	87		
6/22/99	WB7-S	0.3		1016	12839.9	47122.7	30	22.6	87	55.3	13.7	28.7	6.6	92		1412
6/22/99	WB7-B	2.5	3.5	1016			30	22.6	87	55.3	17.0	28.0	4.8	70		
6/25/99	MS5-S	0.3		717	12685.6	47093.7	30	16.4	88	9.8	23.2	28.9	6.4	95		1765
6/25/99	MS5-B	2.0	3.0	717			30	16.4	88	9.8	23.2	29.0	6.2	91		
6/25/99	MS3-S	0.3		741	12646.3	47090.1	30	15.7	88	13.5	22.2	28.9	6.6	94		1707
6/25/99	MS3-B	2.6	3.6	741			30	15.7	88	13.5	23.8	29.0	5.9	88		
6/25/99	MS1-S	0.3		809	12595.1	47088.2	30	15.4	88	18.5	24.6	28.9	6.4	96		1743
6/25/99	MS1-B	2.9	3.9	809			30	15.4	88	18.5	25.7	28.7	5.5	81		
6/25/99	G1-S	0.3		843	12595.1	47070.1	30	10.9	88	18.3	30.1	28.7	6.9	105		1902
6/25/99	G1-B	10.7	11.7	843			30	10.9	88	18.3	32.2	27.9	5.4	83		
6/25/99	G3-S	0.3		917	12660.1	47070.0	30	10.8	88	12.0	28.8	28.4	6.9	105		1868
6/25/99	G3-B	12.5	13.5	917			30	10.8	88	12.0	32.1	28.0	5.5	85		
6/25/99	G5-S	0.3		947	12710.0	47058.1	30	7.8	88	7.0	30.1	28.4	6.8	103		1887
6/25/99	G5-B	14.0	15.0	947			30	7.8	88	7.0	32.6	27.6	4.6	70		
6/25/99	G7-S	0.3		1027	12799.0	47057.5	30	7.6	87	58.2	30.0	28.3	6.8	103		1909
6/25/99	G7-B	12.2	13.2	1027			30	7.6	87	58.2	33.4	27.4	6.1	93		

Mobile Bay Cruise MB: 76

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)
6/22/99	FM1-S	0.3	209	65.74	0.14	0.04	1.00	14.07	9.16		0.26		48.60	0.97	9.78	140	4.37		
6/22/99	FM1-B	3.6			0.21	0.03					0.20		7.00						
6/22/99	FM3-S	0.3	209	76.84	0.15	0.03	0.36	16.14	10.12		0.29		53.80	0.93	9.25	95	0.71		1.370
6/22/99	FM3-B	12.5			0.24	0.03					0.07		3.20						
6/22/99	FM5-S	0.3	250	109.51	0.15	0.03	0.32	17.52	14.90		0.34		56.50	0.85	10.57	110	0.94		
6/22/99	FM5-B	2.9			0.22	0.04					0.16		12.00						
6/22/99	FM7-S	0.3	242	161.95	0.15	0.03	0.32	19.00	20.95		0.50		52.00	0.87	23.20	90	1.89		
6/22/99	FM7-B	2.7			0.22	0.04					0.15		12.60						
6/22/99	CP3-S	0.3	236	128.44	0.16	0.03	0.33	15.59	14.45		0.34		46.70	0.71	12.67	100	1.53		
6/22/99	CP3-B	12.5			0.22	0.04					0.18		4.30					1.950	
6/22/99	WB1-S	0.3	257	56.63	0.16	0.03	0.33	14.46	8.94		0.16		43.21	0.61	6.77	160	1.45		
6/22/99	WB1-B	2.5			0.41	0.07					0.28		43.10						
6/22/99	WB3-S	0.3	209	50.82	0.15	0.03	0.34	14.35	7.01		0.18		49.30	0.63	7.14	140	1.96		1.250
6/22/99	WB3-B	13.1			0.21	0.04					0.29		5.50						
6/22/99	WB5-S	0.3	478	56.90	0.15	0.03	0.53	14.51	7.88		0.18		45.82	0.44	6.67	110	3.69		
6/22/99	WB5-B	2.5			0.25	0.04					0.16		43.90						
6/22/99	WB7-S	0.3	219	69.15	0.21	0.05	0.10	14.64	9.20		0.16		51.50	0.73	6.80	110	5.20		
6/22/99	WB7-B	2.5			0.20	0.05					0.10		52.80						
6/25/99	MS5-S	0.3	225	122.22	0.22	0.03			-12.91		0.23		24.00	1.40	11.00	80	4.48		
6/25/99	MS5-B	2.0			0.22	0.03					0.24		24.60						
6/25/99	MS3-S	0.3	241	40.49	0.22	0.03			4.59		0.15		29.50	0.91	6.50	130	4.20		2.050
6/25/99	MS3-B	2.6			0.22	0.03					0.27		22.60						
6/25/99	MS1-S	0.3	227	63.40	0.22	0.03			9.80		0.14		13.20	0.45	8.15	135	0.34		
6/25/99	MS1-B	2.9			0.24	0.05					0.37		13.10						
6/25/99	G1-S	0.3	144	28.01	0.20	0.03			3.20		0.03		14.90	0.17	4.50	275	1.90		3.470
6/25/99	G1-B	10.7			0.35	0.17					0.16		9.50						
6/25/99	G3-S	0.3	146	26.69	0.22	0.03			2.50		0.06		4.40	0.30	4.17	225	0.11		
6/25/99	G3-B	12.5			0.30	0.18					0.28		7.50						
6/25/99	G5-S	0.3	146	41.29	0.21	0.03			4.68		0.03		4.20		12.50	190	2.24		
6/25/99	G5-B	14.0			0.66	0.29					0.35		14.00						
6/25/99	G7-S	0.3	154	27.55	0.22	0.04			3.83		0.05		3.90	0.43	4.50	170	4.31		
6/25/99	G7-B	12.2			0.19	0.06					0.07		4.80						

Mobile Bay Cruise MB: 76

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)
6/25/99	BM3-S	0.3		1059	12755.5	47071.8	30	10.9	88	2.7	30.0	28.6	6.5	100		1916
6/25/99	BM3-B	9.8	10.8	1059			30	10.9	88	2.7	32.2	27.8	4.5	69		

Mobile Bay Cruise MB: 76

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)
6/25/99	BM3-S	0.3	126	41.63	0.19	0.05		5.23			0.07		3.50	0.56	6.89	140	6.72		3.540
6/25/99	BM3-B	9.8			0.45	0.31					0.37		11.80						

Mobile Bay Cruise MB: 77

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)
7/19/99	G7-S	0.3		1042	12799.8	47057.6	30	7.6	87	58.2	26.1	29.8	7.0	106		1443
7/19/99	G7-B	11.6	12.6	1042			30	7.6	87	58.2	32.4	27.9	2.8	30		
7/19/99	G9-S	0.3		1006	12069.9	47058.0	30	7.6	87	51.4	27.7	29.4	7.0	107		1459
7/19/99	G9-B	13.4	14.4	1006			30	7.6	87	51.4	32.5	27.7	0.7	11		
7/19/99	G11-S	0.3		926	12960.2	47058.0	30	7.5	87	42.5	27.2	29.1	6.5	98		1478
7/19/99	G11-B	12.5	13.5	926			30	7.5	87	42.5	32.8	27.5	3.7	56		
7/19/99	G13-S	0.3		853	12925.0	47074.0	30	11.0	87	46.2	26.8	28.9	6.5	91		1487
7/19/99	G13-B	10.4	11.4	853			30	11.0	87	46.2	32.0	28.0	3.4	52		
7/19/99	G15-S	0.3		810	12740.3	47073.0	30	11.0	87	54.5	26.6	29.1	6.3	96		1459
7/19/99	G15-B	8.6	9.6	810			30	11.0	87	54.5	31.7	28.2	3.4	52		
7/19/99	BM3-S	0.3		729	12755.2	47071.6	30	10.9	88	2.7	23.7	29.5	7.5	111		1387
7/19/99	BM3-B	10.7	11.7	729			30	10.9	88	2.7	28.1	28.9	4.2	64		

Mobile Bay Cruise MB: 77

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)
7/19/99	G7-S	0.3	183	24.58	0.19	0.01	0.63	10.04	2.56		0.05		9.10	0.26	2.40	500	0.71		
7/19/99	G7-B	11.6			0.25	0.41	0.60				0.26		8.90						
7/19/99	G9-S	0.3	178	28.42	0.18	0.01	0.86	9.21	2.25		0.05		6.20	0.26	3.04	600	0.63		1.060
7/19/99	G9-B	13.4			0.05	0.13	0.70				0.11		11.30						
7/19/99	G11-S	0.3	169	26.90	0.16	0.01	0.29	9.14	3.08		0.05		5.60	0.22	2.72	375	0.56		
7/19/99	G11-B	12.5			0.12	0.03	1.40				0.19		6.10						
7/19/99	G13-S	0.3	174	28.53	0.15	0.01	0.70	8.96	2.70		0.06		2.50	0.22	2.80	350	1.22		1.880
7/19/99	G13-B	10.4			0.16	0.12	0.92				0.21		6.20						
7/19/99	G15-S	0.3	223	30.60	0.17	0.01	0.51	9.73	2.69		0.07		7.90	0.33	3.52	400	2.43		
7/19/99	G15-B	8.6			0.11	0.12	0.95				0.23		10.20						
7/19/99	BM3-S	0.3	233	39.48	0.20	0.02	0.38	11.35	5.79		0.09		15.00	0.65	4.24	250	1.79		1.140
7/19/99	BM3-B	10.7			0.18	0.04	0.79				0.17		11.50						

Mobile Bay Cruise MB: 78

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)
8/25/99	FM1-S	0.3		712	12748.5	47092.2	30	15.7	88	3.7	24.5	29.9	5.5	83		1826
8/25/99	FM1-B	3.9	4.9	712			30	15.7	88	3.7	26.7	29.7	5.0	77		
8/25/99	FM3-S	0.3		730	12762.4	47091.5	30	15.5	88	2.3	29.7	29.5	5.0	77		1994
8/25/99	FM3-B	12.9	13.9	730			30	15.5	88	2.3	32.1	29.2	4.1	65		
8/25/99	FM5-S	0.3		800	12779.3	47092.5	30	15.7	88	0.8	31.7	29.5	4.9	76		2061
8/25/99	FM5-B	3.3	4.3	800			30	15.7	88	0.8	31.7	29.5	4.8	75		
8/25/99	FM7-S	0.3		815	12797.9	47092.0	30	15.5	87	58.9	31.1	29.4	5.3	82		2046
8/25/99	FM7-B	3.0	4.0	815			30	15.5	87	58.9	31.5	29.4	5.1	79		
8/25/99	CP3-S	0.3		840	12768.8	47103.2	30	18.3	88	1.9	23.4	30.2	5.3	80		1795
8/25/99	CP3-B	12.7	13.7	840			30	18.3	88	1.9	32.2	29.2	3.6	56		
8/25/99	WB1-S	0.3		915	12745.0	47120.2	30	22.6	88	4.4	20.4	29.9	4.6	69		1778
8/25/99	WB1-B	2.7	3.7	915			30	22.6	88	4.4	22.2	30.0	3.1	46		
8/25/99	WB3-S	0.3		935	12777.7	47120.6	30	22.6	88	1.3	22.5	29.9	5.0	76		1752
8/25/99	WB3-B	13.6	14.6	935			30	22.6	88	1.3	30.9	29.4	2.4	37		
8/25/99	WB5-S	0.3		955	12810.4	47122.3	30	22.7	87	58.1	20.2	30.1	5.6	83		1700
8/25/99	WB5-B	2.8	3.8	955			30	22.7	87	58.1	20.8	30.2	4.6	68		
8/31/99	FM3-S	0.3		1224	12763.0	47091.7	30	15.5	88	2.3	19.6	29.4	6.0	89		1702
8/31/99	FM3-B	12.9	13.9	1224			30	15.5	88	2.3	32.3	29.1	3.7	57		
8/31/99	CP3-S	0.3		1202	12768.8	47103.2	30	18.3	88	1.9	17.4	29.5	6.5	93		1583
8/31/99	CP3-B	13.1	14.1	1202			30	18.3	88	1.9	32.3	29.2	3.7	58		
8/31/99	WB3-S	0.3		1136	12778.1	47121.0	30	22.6	88	1.3	14.6	29.5	6.7	96		1492
8/31/99	WB3-B	12.9	13.9	1136			30	22.6	88	1.3	32.2	29.2	2.6	41		
8/31/99	FR3-S	0.3		1113	12784.5	47140.1	30	27.4	88	1.0	13.1	29.0	6.7	92		1474
8/31/99	FR3-B	12.5	13.5	1113			30	27.4	88	1.0	26.4	29.3	2.6	39		
8/31/99	PC1-S	0.3		1024	12753.5	47145.9	30	29.1	88	4.0	12.3	29.1	6.1	84		1440
8/31/99	PC1-B	1.8	2.8	1024			30	29.1	88	4.0	15.8	29.2	3.5	50		
8/31/99	PC3-S	0.3		1040	12783.9	47146.8	30	29.0	88	1.1	12.4	28.9	6.8	94		1404
8/31/99	PC3-B	12.7	13.7	1040			30	29.0	88	1.1	31.1	29.0	2.1	33		
8/31/99	PC5-S	0.3		1058	12814.6	47145.4	30	28.4	87	58.1	15.9	29.1	5.6	80		1603
8/31/99	PC5-B	2.3	3.3	1058			30	28.4	87	58.1	22.4	29.7	0.8	12		
8/31/99	DR1-S	0.3		1005	12755.4	47158.9	30	32.5	88	4.0	10.7	29.1	5.7	79		1403
8/31/99	DR1-B	1.4	2.4	1005			30	32.5	88	4.0	11.1	29.1	4.5	62		

Mobile Bay Cruise MB: 78

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/ld)	APROD (gC/m2/d)
8/25/99	FM1-S	0.3	269	82.42	0.16	0.03	0.40	16.11	11.60		0.48		30.90	1.25	10.00		5.48		
8/25/99	FM1-B	3.9			0.22	0.03	0.29				0.49		27.50						
8/25/99	FM3-S	0.3		75.69	0.14	0.05	0.41	13.42	10.03		0.42		16.40	0.91	5.69	120	4.45		2.340
8/25/99	FM3-B	12.9			0.15	0.05	1.46				0.38		11.50						
8/25/99	FM5-S	0.3		73.51	0.18	0.06	0.59	12.55	8.22		0.31		10.70	0.81	11.54	140	3.02		
8/25/99	FM5-B	3.3			0.16	0.03	2.60				0.28		10.70						
8/25/99	FM7-S	0.3		64.55	0.18	0.07	0.44	12.32	7.39		0.27		10.60	0.66	5.38	170	4.11		
8/25/99	FM7-B	3.0			0.17	0.03	0.38				0.28		11.00						
8/25/99	CP3-S	0.3	256	87.82	0.15	0.04	0.29	16.40	11.57		0.54		35.20	1.15	5.00	100	8.40		1.900
8/25/99	CP3-B	12.7			0.16	0.06	0.73				0.43		12.90						
8/25/99	WB1-S	0.3	338	104.48	0.15	0.03	0.30	16.39	15.39		0.82		52.00	1.78	8.00	75	18.56		
8/25/99	WB1-B	2.7			0.15	0.04	1.90				1.16		51.70						
8/25/99	WB3-S	0.3		102.40	0.15	0.03	0.29	17.23	14.24		0.55		37.00	1.49	9.14	80	6.51		1.730
8/25/99	WB3-B	13.6			0.13	0.09	2.16				0.75		19.60						
8/25/99	WB5-S	0.3	277	84.16	0.15	0.03	0.33	16.75	10.92		0.66		46.60	1.03	6.67	100	4.94		
8/25/99	WB5-B	2.8			0.19	0.03	1.02				0.82		49.20						
8/31/99	FM3-S	0.3	273	79.42	0.17	0.03	0.38	15.84	10.28		0.49		50.70	1.01	4.50	110	4.70		1.080
8/31/99	FM3-B	12.9			0.25	0.22	3.24				0.61		12.90						
8/31/99	CP3-S	0.3	351	79.39	0.18	0.03	0.70	15.51	10.54		0.46		56.90	0.85	4.33	130	3.86		1.250
8/31/99	CP3-B	13.1			0.26	0.20	4.03				0.67		13.70						
8/31/99	WB3-S	0.3	323	97.20	0.15	0.03	0.36	17.83	12.94		0.39		60.89	0.92	4.44	120	6.38		1.560
8/31/99	WB3-B	12.9			0.24	0.40	6.25				1.17		18.20						
8/31/99	FR3-S	0.3	300	104.80	0.15	0.03	0.35	16.74	16.30		0.32		63.74	1.23	5.11	90	9.57		1.510
8/31/99	FR3-B	12.5			0.31	0.53	4.32				1.02		35.70						
8/31/99	PC1-S	0.3	316	110.77	0.15	0.03	0.35	17.53	17.37		0.26		55.12	1.39	6.75	80	11.54		
8/31/99	PC1-B	1.8			0.16	1.00	3.94				1.00		55.20						
8/31/99	PC3-S	0.3	320	91.50	0.18	0.03	0.57	16.21	13.01		0.28		59.22	1.23	6.50	90	9.02		1.450
8/31/99	PC3-B	12.7			0.26	0.81	6.41				1.10		21.80						
8/31/99	PC5-S	0.3	268	119.15	0.20	0.03	0.73	15.81	17.25		0.50		67.60	1.23	6.43	90	9.55		
8/31/99	PC5-B	2.3			0.14	0.06	5.08				1.72		57.50						
8/31/99	DR1-S	0.3	311	116.64	0.20	0.07	0.45	17.28	19.32		0.32		62.13	1.85	12.33	60	10.91		
8/31/99	DR1-B	1.4			0.26	0.16	2.45				0.51		58.15						

Mobile Bay Cruise MB: 78

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)
8/31/99	DR3-S	0.3		945	12780.7	47165.1	30	34.0	88	1.7	10.8	28.9	6.7	93		1401
8/31/99	DR3-B	12.5	13.5	945			30	34.0	88	1.7	31.1	29.1	1.4	22		
8/31/99	DR5-S	0.3		928	12814.2	47165.5	30	33.8	87	58.5	12.1	28.7	6.5	90		1408
8/31/99	DR5-B	2.2	3.2	928			30	33.8	87	58.5	18.0	29.3	1.8	26		
8/31/99	DR7-S	0.3		912	12840.4	47167.8	30	34.0	87	56.0	15.5	28.7	5.8	82		1553
8/31/99	DR7-B	1.7	2.7	912			30	34.0	87	56.0	15.6	28.8	5.5	78		
8/31/99	MR1-S	0.3		823	12779.9	47180.0	30	38.1	88	2.0	10.5	28.7	5.5	75		1446
8/31/99	MR1-B	12.6	13.6	823			30	38.1	88	2.0	30.6	28.7	1.1	16		
8/31/99	MR2-S	0.3		851	12816.4	47176.7	30	36.6	87	58.4	11.5	28.9	5.9	81		1457
8/31/99	MR2-B	2.1	3.1	851			30	36.6	87	58.4	13.5	29.4	3.9	55		
8/26/99	MS5-S	0.3		1313	12685.8	47093.8	30	16.4	88	9.8	27.4	31.0	5.9	93		1929
8/26/99	MS5-B	1.4	2.4	1313			30	16.4	88	9.8	27.8	30.7	5.8	91		
8/26/99	MS3-S	0.3		1254	12646.4	47090.3	30	15.7	88	13.5	28.4	30.9	6.1	99		1937
8/26/99	MS3-B	2.4	3.4	1254			30	15.7	88	13.5	28.4	30.5	6.0	95		
8/26/99	MS1-S	0.3		1231	12595.3	47088.1	30	15.4	88	18.5	29.8	30.5	5.5	87		2032
8/26/99	MS1-B	2.8	3.8	1231			30	15.4	88	18.5	29.9	30.2	5.2	81		
8/26/99	G1-S	0.3		1200	12594.9	47070.1	30	10.9	88	18.3	31.0	30.5	5.6	88		2060
8/26/99	G1-B	11.5	12.5	1200			30	10.9	88	18.3	34.3	27.4	0.5	8		
8/26/99	G3-S	0.3		1127	12660.0	47070.2	30	10.8	88	12.0	31.1	30.4	5.8	92		2024
8/26/99	G3-B	13.0	14.0	1127			30	10.8	88	12.0	34.3	27.5	0.9	13		
8/26/99	G5-S	0.3		1055	12710.1	47058.1	30	7.8	88	7.0	31.6	30.4	5.5	89		2093
8/26/99	G5-B	14.0	15.0	1055			30	7.8	88	7.0	34.4	27.7	1.8	28		
8/26/99	G7-S	0.3		1010	12800.1	47057.5	30	7.6	87	58.2	28.0	29.7	5.7	90		1996
8/26/99	G7-B	12.0	13.0	1010			30	7.6	87	58.2	34.3	27.5	2.1	32		
8/26/99	G9-S	0.3		935	12870.4	47058.1	30	7.6	87	51.4	31.6	29.4	5.7	89		2102
8/26/99	G9-B	15.5	16.5	935			30	7.6	87	51.4	34.4	29.6	1.2	18		
8/26/99	G11-S	0.3		906	12960.2	47058.0	30	7.5	87	42.5	32.1	29.6	5.7	90		2117
8/26/99	G11-B	13.0	14.0	906			30	7.5	87	42.5	34.4	27.0	2.2	34		
8/26/99	G13-S	0.3		839	12924.9	47074.1	30	11.0	87	46.2	32.8	29.5	5.7	89		2112
8/26/99	G13-B	10.5	11.5	839			30	11.0	87	46.2	34.3	27.7	2.3	35		
8/26/99	G15-S	0.3		759	12840.0	47073.1	30	11.0	87	54.5	32.4	29.3	5.5	87		2114
8/26/99	G15-B	9.7	10.7	759			30	11.0	87	54.5	34.3	27.6	1.2	18		

Mobile Bay Cruise MB: 78

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	DOC (uM)	PC (uM)	NO3 (uM)	NO2 (uM)	NH4 (uM)	DON (uM)	PP (uM)	PO4 (uM)	DOP (uM)	SI (uM)	ATTEN -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (ug/l)	VPROD (mgC/d)	APROD (gC/m2/d)
8/31/99	DR3-S	0.3	311	88.43	0.20	0.06	0.43	16.35	14.09	0.30		56.71	1.39	6.50	80	11.54		1.270
8/31/99	DR3-B	12.5			0.27	0.77	8.73			1.12		28.90						
8/31/99	DR5-S	0.3	1400	105.97	0.15	0.05	0.38	17.62	16.34	0.33		54.36	1.39	5.14	80	16.58		
8/31/99	DR5-B	2.2			0.16	0.09	6.29			1.33		64.60						
8/31/99	DR7-S	0.3	290	114.68	0.18	0.04	1.24	16.04	17.15	0.39		67.40	1.59	5.50	70	15.11		
8/31/99	DR7-B	1.7			0.19	0.03	1.56			0.44		69.10						
8/31/99	MR1-S	0.3	393	110.88	1.06	0.21	3.03	17.38	14.96	0.52		54.03	1.23	19.33	90	8.63		1.520
8/31/99	MR1-B	12.6			0.29	0.76	9.33			1.49		29.20						
8/31/99	MR2-S	0.3	791	113.08	0.15	0.05	0.42	17.22	16.86	0.29		61.91	1.39	9.43	80	14.39		
8/31/99	MR2-B	2.1			0.15	0.04	0.41			0.51		69.50						
8/26/99	MS5-S	0.3	262	123.86	0.20	0.02	0.57	14.87	13.22	0.68		24.90	2.22	32.00	50	6.84		
8/26/99	MS5-B	1.4			0.18	0.02	0.41			0.76		24.50						
8/26/99	MS3-S	0.3		118.65	0.18	0.02	0.51	14.42	12.86	0.72		18.30		24.40		8.19		
8/26/99	MS3-B	2.4			0.18	0.02	0.60			0.81		19.70						
8/26/99	MS1-S	0.3	219	155.73	0.19	0.02	0.70	12.69	24.59	0.85		18.60	1.23	47.60	90	7.66		
8/26/99	MS1-B	2.8			0.18	0.03	1.59			0.86		18.80						
8/26/99	G1-S	0.3	352	47.17	0.17	0.03	0.79	12.08	5.60	0.68		13.10	0.69	5.87	160	3.02		1.350
8/26/99	G1-B	11.5			0.21	0.89	2.86			1.54		27.90						
8/26/99	G3-S	0.3	178	34.45	0.21	0.03	0.98	10.29	4.32	0.33		6.20	0.36	9.00		1.43		
8/26/99	G3-B	13.0			0.27	1.13	1.97			0.90		23.50						
8/26/99	G5-S	0.3	219	23.43	0.17	0.03	0.48	11.70	2.84	0.40		5.40	0.25	4.28		1.08		1.520
8/26/99	G5-B	14.0			0.14	0.45	1.94			0.49		15.00						
8/26/99	G7-S	0.3	242	59.91	0.20	0.03	0.48	13.49	7.55	0.36		19.10	0.62	9.47	170	4.30		
8/26/99	G7-B	12.0			0.18	0.49	2.10			0.41		12.60						
8/26/99	G9-S	0.3		53.93	0.17	0.02	1.02	11.23	7.79	0.21		8.40	0.37	6.90	300	1.64		1.580
8/26/99	G9-B	15.5			0.09	0.09	2.44			0.33		13.10						
8/26/99	G11-S	0.3		24.95	0.14	0.05	0.40	11.35	2.04	0.13		5.18	0.32	3.70	370	1.34		
8/26/99	G11-B	13.0			0.11	0.20	1.59			0.27		9.70						
8/26/99	G13-S	0.3	183	24.16	0.17	0.02	0.83	10.24	2.53	0.12		4.50	0.45	5.43	750	0.55		0.620
8/26/99	G13-B	10.5			0.07	0.11	1.52			0.24		8.80						
8/26/99	G15-S	0.3	149	37.61	0.17	0.02	0.54	10.27	4.68	0.14		5.00	0.58	11.36	260	1.54		
8/26/99	G15-B	9.7			0.07	0.11	0.60			0.33		12.00						

Mobile Bay Cruise MB: 78

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)
8/26/99	BM3-S	0.3		710	12755.3	47071.8	30	10.9	88	2.7	30.4	29.9	5.4	85		2052
8/26/99	BM3-B	11.2	12.2	710			30	10.9	88	2.7	34.1	28.2	1.4	21		

Mobile Bay Cruise MB: 78

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)
8/26/99	BW3-S	0.3	225	46.38	0.15	0.03	0.54	12.87	6.25		0.36		10.60	0.37	9.10	170	2.91		3.140
8/26/99	BW3-B	11.2			0.17	0.57	2.44				0.54		16.90						

Mobile Bay Cruise MB: 79

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)
10/13/99	FM1-S	0.3		709	12748.3	47092.2	30	15.7	88	3.7	26.1	24.2	6.9	95		1431
10/13/99	FM1-B	3.6	4.6	709			30	15.7	88	3.7	30.5	25.1	5.7	82		
10/13/99	FM3-S	0.3		719	12763.0	47091.7	30	15.5	88	2.3	24.8	24.5	6.6	92		1424
10/13/99	FM3-B	12.8	13.8	719			30	15.5	88	2.3	31.5	25.2	5.5	82		
10/13/99	FM5-S	0.3		731	12778.9	47092.3	30	15.7	88	0.8	24.6	24.7	6.9	96		1414
10/13/99	FM5-B	3.1	4.1	731			30	15.7	88	0.8	29.6	25.1	5.4	77		
10/13/99	FM7-S	0.3		743	12797.8	47092.1	30	15.5	87	58.9	22.5	24.6	6.1	86		1439
10/13/99	FM7-B	2.8	3.2	743			30	15.5	87	58.9	30.0	25.2	5.4	77		
10/13/99	CP3-S	0.3		800	12768.6	47103.0	30	18.3	88	1.9	23.0	24.6	7.0	96		1391
10/13/99	CP3-B	13.5	14.5	800			30	18.3	88	1.9	32.1	25.4	5.9	86		
10/13/99	WB1-S	0.3		826	12745.1	47120.1	30	22.6	88	4.4	15.5	24.6	8.0	104		1237
10/13/99	WB1-B	2.3	3.3	826			30	22.6	88	4.4	15.8	24.6	7.6	100		
10/13/99	WB3-S	0.3		842	12778.1	47120.9	30	22.6	88	1.3	19.2	24.6	7.2	96		1318
10/13/99	WB3-B	13.1	14.1	842			30	22.6	88	1.3	31.4	25.3	5.6	81		
10/13/99	WB5-S	0.3		858	12810.1	47122.4	30	22.7	87	58.1	20.7	24.6	6.7	90		1337
10/13/99	WB5-B	2.3	3.3	858			30	22.7	87	58.1	22.8	24.8	4.9	68		
10/13/99	WB7-S	0.3		912	12840.2	47122.8	30	22.6	87	55.3	22.2	24.8	7.0	97		1367
10/13/99	WB7-B	2.0	3.0	912			30	22.6	87	55.3	22.8	24.7	5.9	82		
10/13/99	FR3-S	0.3		942	12784.6	47140.3	30	27.4	88	1.0	15.0	24.6	7.6	100		1256
10/13/99	FR3-B	12.0	13.0	942			30	27.4	88	1.0	31.3	25.4	4.9	71		
10/13/99	PC1-S	0.3		1030	12753.5	47146.1	30	29.1	88	4.0	12.9	25.0	7.1	93		1223
10/13/99	PC1-B	1.8	2.8	1030			30	29.1	88	4.0	16.1	25.0	5.2	69		
10/13/99	PC3-S	0.3		1014	12783.6	47146.8	30	29.0	88	1.1	14.2	24.8	7.2	95		1247
10/13/99	PC3-B	13.0	14.0	1014			30	29.0	88	1.1	31.2	25.4	4.7	68		
10/13/99	PC5-S	0.3		959	12814.9	47145.5	30	28.4	87	58.1	19.1	24.7	7.3	97		1325
10/13/99	PC5-B	2.4	3.4	959			30	28.4	87	58.1	21.9	24.8	5.1	70		
10/13/99	DR1-S	0.3		1047	12755.4	47159.0	30	32.5	88	4.0	10.9	25.3	6.2	80		1174
10/13/99	DR1-B	1.5	2.5	1047			30	32.5	88	4.0	11.2	25.1	5.9	76		
10/13/99	DR3-S	0.3		1102	12780.5	47155.5	30	34.0	88	1.7	10.2	25.4	5.2	68		1207
10/13/99	DR3-B	12.5	13.5	1102			30	34.0	88	1.7	30.3	25.4	4.6	67		
10/13/99	DR5-S	0.3		1117	12814.2	47165.7	30	33.8	88 ⁰⁹	58.5	11.5	25.2	6.3	83		1224
10/13/99	DR5-B	2.3	3.3	1117			30	33.8	88 ⁰⁹	58.5	16.9	24.8	4.0	53		

Mobile Bay Cruise MB: 79

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)	FN (μ M)	PP (μ M)	P04 (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)
10/13/99	FM1-S	0.3		30.42	0.00	0.00	0.80	14.74	4.13		0.26		6.99	0.60	17.50	170	1.80		
10/13/99	FM1-B	3.6			0.00	0.14	0.93				0.21		3.54						
10/13/99	FM3-S	0.3	203	36.33	0.00	0.06	0.00	15.22	5.45		0.29		17.78	0.60	10.65	130	1.89		1.420
10/13/99	FM3-B	12.8			0.08	0.13	1.90				0.26		22.50						
10/13/99	FM5-S	0.3	218	71.66	0.02	0.00	0.94	16.16	11.06		0.35		20.92	0.57	9.13	140	6.30		
10/13/99	FM5-B	3.1			0.10	0.16	1.17				0.33		18.17						
10/13/99	FM7-S	0.3	212	52.24	0.00	0.07	0.00	15.53	6.97		0.25		18.60	1.20	7.38	90	3.42		
10/13/99	FM7-B	2.8			0.00	0.16	1.69				0.29		8.84						
10/13/99	CP3-S	0.3		26.99	0.48	0.02	0.83	13.97	3.89		0.25		5.88	0.56	10.70	110	2.07		1.540
10/13/99	CP3-B	13.5			0.04	0.15	1.66				0.13		6.68						
10/13/99	WB1-S	0.3	279	37.49	0.00	0.17	0.09	18.38	5.62		0.05		16.03	0.68	9.92	150	3.33		
10/13/99	WB1-B	2.3			0.00	0.22	0.13				0.04		13.87						
10/13/99	WB3-S	0.3	236	17.96	0.01	0.05	1.08	15.13	2.26		0.14		4.67	0.49	5.75	200	2.47		2.100
10/13/99	WB3-B	13.1			0.09	0.13	2.00				0.28		11.84						
10/13/99	WB5-S	0.3	219	21.46	0.00	0.10	1.20	15.90	2.69		0.29		4.87	0.72	10.08	180	0.99		
10/13/99	WB5-B	2.3			0.47	0.28	4.29				0.55		9.31						
10/13/99	WB7-S	0.3		52.40	0.00	0.06	0.00	13.93	7.56		0.19		5.14	0.78	5.88	120	5.96		
10/13/99	WB7-B	2.0			0.00	0.15	2.45				0.39		9.28						
10/13/99	FR3-S	0.3	268	77.14	1.79	1.45	0.82	15.67	12.52		0.03		19.43	0.91	6.38	120	9.31		2.590
10/13/99	FR3-B	12.0			0.07	0.23	5.58				0.45		9.61						
10/13/99	PC1-S	0.3	366	77.88	2.81	2.61	1.21	17.26	13.41		0.13		24.21	1.16	7.38	110	15.42		
10/13/99	PC1-B	1.8			1.96	2.04	7.31				0.52		22.51						
10/13/99	PC3-S	0.3		55.04	1.30	2.21	0.41	17.84	9.12		0.09		20.57	0.98	5.88	120	8.28		2.570
10/13/99	PC3-B	13.0			0.04	0.22	5.61				0.51		7.25						
10/13/99	PC5-S	0.3	241	49.94	0.00	0.05	0.71	15.16	8.11		0.15		7.51	0.73	6.92	140	7.20		
10/13/99	PC5-B	2.4			0.06	0.26	3.43				0.56		11.73						
10/13/99	DR1-S	0.3		57.85	4.90	2.06	11.79	17.90	7.90		0.65		32.12	1.45	10.38	110	7.20		
10/13/99	DR1-B	1.5			4.81	2.14	11.37				0.62		30.40						
10/13/99	DR3-S	0.3		63.38	3.47	1.97	8.41	16.99	7.31		0.61		38.76	1.06	11.13	100	4.24		1.680
10/13/99	DR3-B	12.5			0.06	0.20	5.34				0.60		7.85						
10/13/99	DR5-S	0.3		84.37	2.30	2.61	3.32	15.78	9.60		0.37		30.35	1.13	7.88	110	0.36		
10/13/99	DR5-B	2.3			1.00	1.80	7.04				0.70		23.90						

Mobile Bay Cruise MB: 79

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)
10/13/99	DR7-S	0.3		1129	12040.3	47167.8	30	34.0	87	56.0	16.3	25.1	6.1	81		1329
10/13/99	DR7-B	1.7	2.7	1129			30	34.0	87	56.0	18.7	24.6	5.8	78		
10/13/99	MR1-S	0.3		1206	12780.4	47180.4	30	38.1	88	2.0	9.5	25.8	4.8	62		1203
10/13/99	MR1-B	12.3	13.3	1206			30	38.1	88	2.0	29.6	25.3	3.5	51		
10/13/99	MR2-S	0.3		1147	12816.6	47176.4	30	36.6	87	58.4	8.2	25.5	5.7	73		1188
10/13/99	MR2-B	1.8	2.8	1147			30	36.6	87	58.4	16.3	24.9	2.6	34		
10/11/99	MS5-S	0.3		1313	12685.9	47093.9	30	16.4	88	9.8	25.3	25.4	7.2	102		1521
10/11/99	MS5-B	1.3	2.3	1313			30	16.4	88	9.8	25.7	25.3	7.0	98		
10/11/99	MS3-S	0.3		1252	12646.8	47090.3	30	15.7	88	13.5	26.2	25.6	7.1	101		1453
10/11/99	MS3-B	2.3	3.3	1252			30	15.7	88	13.5	28.0	24.4	6.3	92		
10/11/99	MS1-S	0.3		1225	12595.5	47088.3	30	15.4	88	18.5	29.7	25.6	7.2	102		1433
10/11/99	MS1-B	2.8	3.8	1225			30	15.4	88	18.5	29.9	25.5	6.9	100		
10/11/99	G1-S	0.3		1148	12595.1	47070.2	30	10.9	88	18.3	32.4	25.6	6.8	100		1582
10/11/99	G1-B	10.7	11.7	1148			30	10.9	88	18.3	33.1	25.6	5.5	82		
10/11/99	G3-S	0.3		1118	12659.4	47070.7	30	10.8	88	12.0	31.8	25.4	6.4	95		1568
10/11/99	G3-B	12.7	13.7	1118			30	10.8	88	12.0	33.0	25.5	5.4	80		
10/11/99	G5-S	0.3		1050	12708.9	47058.3	30	7.8	88	7.0	30.0	25.5	6.3	92		1537
10/11/99	G5-B	14.0	15.0	1050			30	7.8	88	7.0	33.5	25.8	4.8	73		
10/11/99	G7-S	0.3		1014	12800.2	47058.0	30	7.6	87	58.2	33.1	26.1	6.5	96		1602
10/11/99	G7-B	12.6	13.6	1014			30	7.6	87	58.2	33.5	26.0	5.6	85		
10/11/99	G9-S	0.3		943	12870.1	47058.1	30	7.6	87	51.4	33.4	25.9	6.2	92		1613
10/11/99	G9-B	15.3	16.3	943			30	7.6	87	51.4	33.6	25.9	5.6	84		
10/11/99	G11-S	0.3		914	12926.1	47058.2	30	7.5	87	42.5	33.7	25.8	6.3	93		1622
10/11/99	G11-B	12.5	13.5	914			30	7.5	87	42.5	33.7	25.8	6.2	92		
10/11/99	G13-S	0.3		849	12924.9	47074.2	30	11.0	87	46.2	33.3	25.5	6.3	93		1603
10/11/99	G13-B	10.1	11.1	849			30	11.0	87	46.2	33.4	25.6	5.4	80		
10/11/99	G15-S	0.3		807	12840.3	47073.1	30	11.0	87	54.5	32.4	25.3	6.3	93		1569
10/11/99	G15-B	8.9	9.9	807			30	11.0	87	54.5	33.2	25.5	5.0	74		
10/11/99	BM3-S	0.3		725	12755.1	47071.1	30	10.9	88	2.7	26.4	24.5	6.3	87		1463
10/11/99	BM3-B	10.4	11.4	725			30	10.9	88	2.7	31.9	25.2	5.7	83		

Mobile Bay Cruise MB: 79

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)	SI (μ M)	ATTEN -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	YPROD (mgC/l/d)	APROD (gC/m2/d)
10/13/99	DR7-S	0.3	269	63.73	1.57	0.96	3.31	15.38	10.57		0.35	19.66	0.98	20.78	120	6.75		
10/13/99	DR7-B	1.7			0.51	0.28	1.46				0.27	19.00						
10/13/99	MR1-S	0.3	327	55.84	4.38	0.84	9.58	16.74	6.84		0.89	36.70	1.06	12.88	100	2.31		0.860
10/13/99	MR1-B	12.3			0.08	0.30	8.70				0.85	9.74						
10/13/99	MR2-S	0.3	301	71.13	3.62	2.61	6.49	16.55	10.42		0.40	37.17	2.65	11.38	100	11.24		
10/13/99	MR2-B	1.8			1.06	1.54	-11.97				0.98	27.86						
10/11/99	MS5-S	0.3	188	48.44	0.00	0.01	0.78	13.92	5.79		0.32	5.77	0.70	21.50	150	2.79		
10/11/99	MS5-B	1.3			0.00	0.00	0.47				0.33	4.98						
10/11/99	MS3-S	0.3	199	25.42	0.08	0.03	0.85	11.95	2.53		0.32	5.73	0.56	7.50	140	3.19		1.660
10/11/99	MS3-B	2.3			0.00	0.02	0.73				0.33	5.26						
10/11/99	MS1-S	0.3	140		0.00	0.01	0.49	11.05			0.25	1.67	0.65	11.44	110	5.40		
10/11/99	MS1-B	2.8			0.00	0.02	0.64				0.27	1.95						
10/11/99	G1-S	0.3	206	32.59	0.00	0.00	0.47	9.66	3.42		0.06	0.00	0.19	10.32	330	3.15		2.410
10/11/99	G1-B	10.7			0.31	0.11	1.75				0.16	3.01						
10/11/99	G3-S	0.3	119	30.58	0.00	0.02	0.71	10.79	3.28		0.12	1.51	0.63	9.05	160	1.98		
10/11/99	G3-B	12.7			0.11	0.11	1.77				0.20	7.11						
10/11/99	G5-S	0.3	141	29.82	0.00	0.02	0.63	11.78	3.61		0.17	3.94	0.24	9.88	150	2.38		4.390
10/11/99	G5-B	14.0			0.03	0.06	1.48				0.15	3.38						
10/11/99	G7-S	0.3	122	23.34	0.00	0.01	0.50	9.22	1.98		0.07	0.05	0.18	4.85	510	0.51		
10/11/99	G7-B	12.6			0.00	0.02	0.75				0.06	1.43						
10/11/99	G9-S	0.3	108	23.28	0.01	0.02	0.62	8.55	2.06		0.04	0.00	0.19	3.77	420	2.43		2.230
10/11/99	G9-B	15.3			0.00	0.03	0.53				0.06	0.13						
10/11/99	G11-S	0.3		18.79	0.14	0.01	0.54	10.84	1.35		0.02	0.21	0.21	9.69	620	0.85		
10/11/99	G11-B	12.5			0.00	0.02	0.49				0.04	0.65						
10/11/99	G13-S	0.3	126	21.09	0.00	0.01	0.70	10.68	1.77		0.04	0.21	0.22	3.62	410	0.75		1.560
10/11/99	G13-B	10.1			0.02	0.04	0.78				0.11	1.08						
10/11/99	G15-S	0.3	135	30.41	0.00	0.02	0.52	10.38	2.99		0.05	0.45	0.31	9.08	300	0.96		
10/11/99	G15-B	8.9			0.00	0.04	0.91				0.11	3.17						
10/11/99	BM3-S	0.3	205	41.44	0.00	0.03	0.99	12.68	4.64		0.32	4.82	1.12	17.75	160	3.36		0.790
10/11/99	BM3-B	10.4			0.13	0.05	0.94				0.17	3.56						

Mobile Bay Cruise MB: 80

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)
11/10/99	FM1-S	0.3		703	12748.4	47092.1	30	15.7	88	3.7	22.9	19.3	7.9	98		1401
11/10/99	FM1-B	3.4	4.4	703			30	15.7	88	3.7	29.4	20.8	6.4	85		
11/10/99	FM3-S	0.3		711	12762.8	47091.6	30	15.5	88	2.3	25.0	19.3	7.7	98		1444
11/10/99	FM3-B	12.8	13.8	711			30	15.5	88	2.3	32.5	21.2	6.3	85		
11/10/99	FM5-S	0.3		726	12778.9	47092.4	30	15.7	88	0.8	25.1	19.2	7.6	94		1430
11/10/99	FM5-B	3.0	4.0	726			30	15.7	88	0.8	29.2	20.1	6.8	88		
11/10/99	FM7-S	0.3		739	12797.7	47092.1	30	15.5	87	58.9	26.9	19.8	6.9	89		1473
11/10/99	FM7-B	2.7	3.7	739			30	15.5	87	58.9	28.9	20.3	6.4	84		
11/10/99	CP3-S	0.3		757	12768.5	47103.1	30	18.3	88	1.9	23.1	19.2	7.8	98		1405
11/10/99	CP3-B	13.1	14.1	757			30	18.3	88	1.9	32.3	21.0	6.2	84		
11/10/99	WB1-S	0.3		823	12745.0	47120.2	30	22.6	88	4.4	17.1	19.0	8.6	103		1258
11/10/99	WB1-B	2.2	3.2	823			30	22.6	88	4.4	20.4	18.9	6.6	80		
11/10/99	WB3-S	0.3		839	12777.7	47121.0	30	22.6	88	1.3	20.2	18.9	8.4	102		1336
11/10/99	WB3-B	13.0	14.0	839			30	22.6	88	1.3	32.3	21.0	6.4	87		
11/10/99	WB5-S	0.3		856	12810.4	47122.5	30	22.7	87	58.1	23.6	19.2	7.6	95		1435
11/10/99	WB5-B	2.3	3.3	856			30	22.7	87	58.1	24.1	19.2	7.3	92		
11/10/99	WB7-S	0.3		910	12840.4	47122.7	30	22.6	87	55.3	23.1	19.3	7.4	92		1430
11/10/99	WB7-B	0.7	0.8	910			30	22.6	87	55.3	23.6	19.2	7.0	88		
11/10/99	FR3-S	0.3		940	12483.8	-47140.3	30	27.4	88	1.0	19.3	19.7	7.9	97		1338
11/10/99	FR3-B	12.8	13.8	940			30	27.4	88	1.0	31.6	20.8	5.7	76		
11/10/99	PC1-S	0.3		1026	12753.6	47145.8	30	29.1	88	4.0	18.2	20.2	8.4	103		1296
11/10/99	PC1-B	1.7	2.7	1026			30	29.1	88	4.0	19.6	19.9	7.3	89		
11/10/99	PC3-S	0.3		1010	12783.5	47146.7	30	29.0	88	1.1	17.0	20.5	8.8	108		1274
11/10/99	PC3-B	13.1	14.1	1010			30	29.0	88	1.1	31.4	20.8	5.8	78		
11/10/99	PC5-S	0.3		957	12815.1	47145.6	30	28.4	87	58.1	21.8	19.6	6.9	86		1413
11/10/99	PC5-B	2.3	3.3	957			30	28.4	87	58.1	22.2	19.5	6.5	81		
11/10/99	DR1-S	0.3		1043	12755.5	47158.9	30	32.5	88	4.0	15.5	20.6	8.8	107		1219
11/10/99	DR1-B	1.4	2.4	1043			30	32.5	88	4.0	16.0	20.3	8.2	100		
11/10/99	DR3-S	0.3		1056	12780.8	47165.5	30	34.0	88	1.7	17.2	20.8	7.9	98		1310
11/10/99	DR3-B	12.9	13.9	1056			30	34.0	88	1.7	30.4	20.6	5.6	75		
11/10/99	DR5-S	0.3		1112	12814.3	47165.7	30	33.8	88	58.9	17.4	20.1	8.6	105		1298
11/10/99	DR5-B	2.1	3.1	1112			30	33.8	88	58.9	20.4	19.5	6.3	78		

Mobile Bay Cruise MB: 80

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m ² /d)
11/10/99	FM1-S	0.3	184	35.86	0.22	0.03	0.39	13.11	4.77		0.18		13.53	0.44	13.20	130	0.88		
11/10/99	FM1-B	3.4			0.11	0.06	0.11				0.22		7.43						
11/10/99	FM3-S	0.3	184	26.42	0.05	0.03	0.08	14.02	3.69		0.13		17.11	0.89	14.75	120	1.94		0.670
11/10/99	FM3-B	12.8			0.07	0.05	0.32				0.17		5.90						
11/10/99	FM5-S	0.3	197	25.87	0.11	0.03	0.26	13.20	3.06		0.08		5.77	0.69	11.75	160	2.38		
11/10/99	FM5-B	3.0			0.06	0.06	0.20				0.23		5.34						
11/10/99	FM7-S	0.3	170	25.12	0.08	0.02	0.14	12.72	3.38		0.18		4.28	1.13	21.75	70	3.15		
11/10/99	FM7-B	2.7			0.02	0.08	0.08				0.23		4.89						
11/10/99	CP3-S	0.3	213	30.74	0.20	0.03	0.30	12.94	4.22		0.18		13.97	0.58	18.20	140	1.08		0.910
11/10/99	CP3-B	13.1			0.04	0.05	0.41				0.16		4.51						
11/10/99	WB1-S	0.3		44.89	0.00	0.02	0.17	14.97	5.92		0.07		30.88	0.60	9.83	180	2.10		
11/10/99	WB1-B	2.2			0.08	0.05	0.17				0.22		17.66						
11/10/99	WB3-S	0.3		47.32	0.09	0.02	0.33	13.87	5.36		0.08		17.29	0.45	11.20	170	1.74		1.180
11/10/99	WB3-B	13.0			0.01	0.07	0.63				0.18		2.66						
11/10/99	WB5-S	0.3	230	29.00	0.00	0.04	0.02	13.53	3.64		0.27		7.95	0.87	18.20	120	2.02		
11/10/99	WB5-B	2.3			0.23	0.04	0.00				0.28		6.60						
11/10/99	WB7-S	0.3	210	35.58	0.01	0.01	0.00	14.36	4.94		0.23		7.31	1.02	16.20	160	2.43		
11/10/99	WB7-B	0.7			0.02	0.02	0.00				0.26		7.73						
11/10/99	FR3-S	0.3	231	30.08	0.21	0.03	0.44	13.98	3.74		0.08		28.42	0.97	10.36	120	3.85		1.000
11/10/99	FR3-B	12.8			0.15	0.13	3.09				0.32		4.42						
11/10/99	PC1-S	0.3	295	51.55	0.08	0.02	0.11	16.82	7.27		0.20		23.71	0.76	15.50	130	7.68		
11/10/99	PC1-B	1.7			0.00	0.05	0.00				0.16		20.80						
11/10/99	PC3-S	0.3	315	60.07	0.08	0.09	0.17	16.02	8.98		0.14		29.79	0.84	11.56	130	7.88		1.970
11/10/99	PC3-B	13.1			0.15	0.10	2.05				0.31		3.75						
11/10/99	PC5-S	0.3	234	44.98	0.11	0.03	0.50	13.84	7.31		0.33		16.31	0.74	17.33	160	5.45		
11/10/99	PC5-B	2.3			0.01	0.03	0.05				0.33		11.00						
11/10/99	DR1-S	0.3	280	54.75	0.01	0.05	0.20	16.76	7.82		0.14		26.88	0.96	13.75	130	6.21		
11/10/99	DR1-B	1.4			0.10	0.07	1.63				0.26		32.76						
11/10/99	DR3-S	0.3	288	40.95	2.90	0.57	3.27	16.56	6.35		0.52		32.29	0.85	22.29	130	9.69		2.530
11/10/99	DR3-B	12.9			0.15	0.12	2.84				0.42		3.71						
11/10/99	DR5-S	0.3	310	61.78	0.10	0.04	0.32	15.22	8.01		0.06		29.10	0.73	3.71	200	3.64		
11/10/99	DR5-B	2.1			0.23	0.09	0.17				0.24		18.15						

Mobile Bay Cruise MB: 80

DATE (mm/dd/yy)	STATION	SAMPLE DEPTH (m)	BOTTOM DEPTH (m)	LOCAL TIME	LORAN X	LORAN Y	LAT. DEG	LON. DEG	LON. MIN	SALINITY (ppt)	TEMP (C)	O2 (ppm)	OSAT (%)	pH	TCO2 (uM)
11/10/99	DR7-S	0.3		1124	12840.3	47167.8	30	34.0	87	56.0	19.0	8.1	99		1343
11/10/99	DR7-B	1.6	2.6	1124			30	34.0	87	56.0	20.1	7.4	91		
11/10/99	MR1-S	0.3		1159	12780.7	47180.5	30	38.1	88	2.0	13.6	21.2	6.8	83	1262
11/10/99	MR1-B	11.7	12.7	1159			30	38.1	88	2.0	29.8	20.6	5.7	75	
11/10/99	MR2-S	0.3		1141	12816.5	47176.4	30	36.6	87	58.4	14.6	21.1	7.9	97	1261
11/10/99	MR2-B	1.6	2.6	1141			30	36.6	87	58.4	17.5	20.2	6.6	81	
11/8/99	MS5-S	0.3		1239	12685.6	47093.8	30	16.4	88	9.8	22.0	19.0	8.2	101	1365
11/8/99	MS5-B	1.3	2.3	1239			30	16.4	88	9.8	22.2	18.9	8.0	99	
11/8/99	MS3-S	0.3		1223	12646.6	47090.2	30	15.7	88	13.5	25.8	18.7	8.0	100	1456
11/8/99	MS3-B	2.2	3.2	1223			30	15.7	88	13.5	27.2	18.5	7.8	98	
11/8/99	MS1-S	0.3		1203	12595.2	47088.2	30	15.4	88	18.5	27.7	19.1	7.9	100	1507
11/8/99	MS1-B	2.7	3.7	1203			30	15.4	88	18.5	29.7	19.3	7.1	92	
11/8/99	G1-S	0.3		1135	12595.1	47070.1	30	10.9	88	18.3	30.6	20.7	7.1	94	1556
11/8/99	G1-B	10.9	11.9	1135			30	10.9	88	18.3	33.1	21.4	6.2	85	
11/8/99	G3-S	0.3		1107	12660.3	47070.3	30	10.8	88	12.0	30.0	20.3	7.1	94	1545
11/8/99	G3-B	12.7	13.7	1107			30	10.8	88	12.0	33.3	21.5	6.0	83	
11/8/99	G5-S	0.3		1039	12710.2	47058.0	30	7.8	88	7.0	29.4	20.7	6.8	90	1536
11/8/99	G5-B	14.1	15.1	1039			30	7.8	88	7.0	33.2	21.5	6.2	84	
11/8/99	G7-S	0.3		1001	12800.0	47057.5	30	7.6	87	58.2	32.7	21.4	6.6	90	1600
11/8/99	G7-B	11.7	12.7	1001			30	7.6	87	58.2	33.7	21.9	6.4	88	
11/8/99	G9-S	0.3		931	12870.3	47050.0	30	7.6	87	51.4	32.5	20.5	6.8	82	1585
11/8/99	G9-B	14.2	15.2	931			30	7.6	87	51.4	32.9	20.4	6.3	84	
11/8/99	G11-S	0.3		857	12960.1	47050.1	30	7.5	87	42.5	33.4	20.5	6.6	90	1591
11/8/99	G11-B	13.1	14.1	857			30	7.5	87	42.5	33.4	20.6	6.6	89	
11/8/99	G13-S	0.3		829	12925.2	47074.0	30	11.0	87	46.2	32.9	20.0	6.7	88	1588
11/8/99	G13-B	9.8	10.8	829			30	11.0	87	46.2	32.9	20.0	6.6	88	
11/8/99	G15-S	0.3		751	12840.2	47073.0	30	11.0	87	54.5	32.7	20.5	6.7	89	1606
11/8/99	G15-B	9.2	10.2	751			30	11.0	87	54.5	32.7	20.5	6.6	89	
11/8/99	BM3-S	0.3		724	12755.4	47071.8	30	10.9	88	2.7	26.3	18.9	7.5	94	1478
11/8/99	BM3-B	10.7	11.7	724			30	10.9	88	2.7	31.3	20.4	6.3	83	

Mobile Bay Cruise MB: 80

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)
11/10/99	DR7-S	0.3	299	61.00	0.04	0.03	0.00	15.14	7.99		0.15		18.71	0.56	4.67	180	3.40		
11/10/99	DR7-B	1.6			0.10	0.02	0.61				0.24		20.72						
11/10/99	MR1-S	0.3	308	78.39	8.50	1.35	5.86	13.86	9.23		0.84		58.55	0.95	12.00	120	5.40		1.410
11/10/99	MR1-B	11.7			0.17	0.13	3.82				0.53		3.46						
11/10/99	MR2-S	0.3	308	92.52	0.21	0.06	0.05	17.12	12.98		0.23		35.24	1.04	6.75	140	8.12		
11/10/99	MR2-B	1.6			0.14	0.08	0.48				0.32		26.45						
11/8/99	MS5-S	0.3	208	52.65	0.14	0.00	0.23	14.28	6.61		0.17		14.43	0.72	22.98	140	2.95		
11/8/99	MS5-B	1.3			0.10	0.00	0.19				0.18		15.10						
11/8/99	MS3-S	0.3	211	45.55	0.15	0.00	0.41	12.62	5.74		0.31		11.51	0.84	17.13	170	1.25		1.040
11/8/99	MS3-B	2.2			0.13	0.01	0.15				0.35		11.33						
11/8/99	MS1-S	0.3	193	37.55	0.11	0.00	0.51	11.59	4.85		0.32		10.73	0.65	13.60	160	2.07		
11/8/99	MS1-B	2.7			0.16	0.03	0.57				0.29		9.69						
11/8/99	G1-S	0.3	155	22.49	0.11	0.01	0.24	9.77	2.21		0.07		3.12	0.38	6.60	350	0.58		1.060
11/8/99	G1-B	10.9			0.13	0.04	0.47				0.09		7.48						
11/8/99	G3-S	0.3	145	25.11	0.12	0.01	0.20	10.35	2.83		0.09		5.55	0.56	9.33	200	0.85		
11/8/99	G3-B	12.7			0.17	0.04	0.94				0.14		5.50						
11/8/99	G5-S	0.3	179	26.43	0.12	0.02	0.31	10.32	3.68		0.13		5.64	0.27	6.53	170	0.68		2.300
11/8/99	G5-B	14.1			0.17	0.03	0.88				0.08		4.13						
11/8/99	G7-S	0.3	140	18.86	0.10	0.01	0.24	9.23	2.43		0.04		1.71	0.24	5.27	600	0.37		
11/8/99	G7-B	11.7			0.14	0.01	0.26				0.01		6.16						
11/8/99	G9-S	0.3	138	21.07	0.16	0.01	0.30	9.58	2.37		0.00		0.96	0.34	5.00	400	0.77		1.200
11/8/99	G9-B	14.2			0.13	0.01	1.01				0.03		1.86						
11/8/99	G11-S	0.3	145	17.11	0.11	0.02	0.66	8.67	1.69		0.03		2.24	0.27	6.36	575	0.10		
11/8/99	G11-B	13.1			0.07	0.02	0.28				0.02		1.43						
11/8/99	G13-S	0.3	132	18.96	0.18	0.01	0.45	9.74	2.14		0.03		1.48	0.36	6.50	375	0.76		0.890
11/8/99	G13-B	9.8			0.08	0.01	0.45				0.02		0.91						
11/8/99	G15-S	0.3	126	26.39	0.13	0.03	0.56	9.77	4.23		0.08		2.33	0.51	12.42	100	0.06		
11/8/99	G15-B	9.2			0.08	0.02	0.29				0.10		5.22						
11/8/99	BM3-S	0.3	194	30.45	0.17	0.04	0.38	12.21	4.82		0.17		4.22	0.83	5.60	130	1.17		0.690
11/8/99	BM3-B	10.7			0.34	0.07	0.80				0.19		3.75						

Mobile Bay Cruise MB: 81

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)
12/6/99	FM1-S	0.3		733	12785.0	47092.0	30	15.7	88	3.7	27.3	15.6	7.8	93		1887
12/6/99	FM1-B	3.4	4.4	733			30	15.7	88	3.7	27.5	15.9	7.6	92		
12/6/99	FM3-S	0.3		747	12762.8	47091.6	30	15.5	88	2.3	25.6	15.3	7.9	92		1848
12/6/99	FM3-B	13.2	14.2	747			30	15.5	88	2.3	26.8	15.7	7.6	89		
12/6/99	FM5-S	0.3		802	12779.6	47092.3	30	15.7	88	0.8	24.9	15.1	7.9	92		1832
12/6/99	FM5-B	2.9	3.9	802			30	15.7	88	0.8	25.0	14.8	7.8	91		
12/6/99	FM7-S	0.3		815	12798.0	47092.0	30	15.5	87	58.9	25.0	15.3	7.8	91		1837
12/6/99	FM7-B	2.6	3.6	815			30	15.5	87	58.9	25.2	15.0	7.8	91		
12/6/99	CP3-S	0.3		839	12768.1	47103.1	30	18.3	88	1.9	25.5	15.6	8.0	95		1842
12/6/99	CP3-B			839			30	18.3	88	1.9	25.8	15.6	7.9	93		
12/6/99	WB1-S	0.3		909	12745.4	47120.0	30	22.6	88	4.4	23.3	15.2	8.6	99		1770
12/6/99	WB1-B	2.3	3.3	909			30	22.6	88	4.4	23.3	15.3	8.4	96		
12/6/99	WB3-S						30	22.6	88	1.3						1770
12/6/99	WB3-B						30	22.6	88	1.3						
12/6/99	WB5-S	0.3		946	12810.0	47122.0	30	22.7	87	58.1	22.6	14.6	7.7	88		1772
12/6/99	WB5-B	2.3	3.3	946			30	22.7	87	58.1	22.5	15.0	7.9	90		
12/6/99	FR3-S	0.3		1015	12784.1	47140.3	30	27.4	88	1.0	21.2	15.0	8.5	97		1718
12/6/99	FR3-B	12.9	13.9	1015			30	27.4	88	1.0	32.1	17.3	6.8	87		
12/6/99	PC1-S	0.3		1111	12753.5	47145.9	30	29.1	88	4.0	18.2	15.2	9.4	103		1618
12/6/99	PC1-B	1.6	2.6	1111			30	29.1	88	4.0	18.4	15.3	9.2	103		
12/6/99	PC3-S	0.3		1052	12783.3	47146.9	30	29.0	88	1.1	19.4	14.8	8.8	97		1672
12/6/99	PC3-B	12.7	13.7	1052			30	29.0	88	1.1	31.6	17.1	6.9	87		
12/6/99	PC5-S	0.3		1035	12815.1	47145.7	30	28.4	87	58.1	20.9	14.9	8.7	96		1709
12/6/99	PC5-B	2.2	3.2	1035			30	28.4	87	58.1	20.9	15.1	8.6	97		
12/6/99	DR1-S	0.3		1131	12755.6	47159.1	30	32.5	88	4.0	16.7	15.1	9.4	104		1577
12/6/99	DR1-B	1.4	2.4	1131			30	32.5	88	4.0	16.6	15.1	9.4	103		
12/6/99	DR3-S	0.3		1147	12780.6	47165.6	30	34.0	88	1.7	17.8	15.6	8.5	97		1625
12/6/99	DR3-B	12.8	13.8	1147			30	34.0	88	1.7	32.6	17.3	6.8	85		
12/6/99	DR5-S	0.3		1205	12814.2	47165.7	30	33.8	88	58.9	16.6	15.5	8.3	93		1654
12/6/99	DR5-B	2.1	3.1	1205			30	33.8	88	58.9	16.6	15.6	8.3	91		
12/6/99	DR7-S	0.3		1219	12840.4	47167.5	30	34.0	87	56.0	13.3	15.1	8.9	94		1523
12/6/99	DR7-B	1.6	2.6	1219			30	34.0	87	56.0	14.8	15.1	8.8	96		

Mobile Bay Cruise MB: 81

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 -1/m	SESTON (mg/l)	SECCHI (cm)	CHLORa (μ g/l)	VPROD (mgC/l/d)	APROD (gC/m2/d)
12/6/99	FM1-S	0.3	202	60.41	0.20	0.02	0.26	21.02	7.21		0.13		3.60	2.17	53.00	30	5.61		
12/6/99	FM1-B	3.4			0.22	0.01	0.08				0.13		3.40						
12/6/99	FM3-S	0.3	284	233.96	0.20	0.02	0.30	17.82	25.13		0.22		5.70	2.26	99.76	30	4.65		1.020
12/6/99	FM3-B	13.2			0.19	0.03	0.17				0.20		4.40						
12/6/99	FM5-S	0.3	220	387.65	0.19	0.02	0.67	18.28	37.47		0.22		6.20	2.50	150.25	10	9.50		
12/6/99	FM5-B	2.9			0.20	0.02	0.08				0.23		6.00						
12/6/99	FM7-S	0.3	204	458.06	0.19	0.02	0.21	20.59	44.07		0.17		5.00	2.38	94.75	20	6.55		
12/6/99	FM7-B	2.6			0.19	0.02	0.40				0.17		5.10						
12/6/99	CP3-S	0.3	210	128.37	0.18	0.02	0.21	18.44	10.39		0.12		5.00	2.13	50.75	40	4.82		0.680
12/6/99	CP3-B				0.18	0.02	0.21				0.15		4.60						
12/6/99	WB1-S	0.3	226	58.01	0.21	0.01	0.30	20.65	5.98		0.00		7.40	1.25	15.36	100	4.86		
12/6/99	WB1-B	2.3			0.19	0.01	0.40				0.00		7.00						
12/6/99	WB3-S		222	106.83	0.21	0.01	0.30	25.18	13.33		0.01		7.00		33.17		7.03		
12/6/99	WB3-B				0.19	0.03	0.17				0.11		3.20						
12/6/99	WB5-S	0.3	212	194.91	0.21	0.01	0.30	20.98	22.66		0.15		10.10	2.38	89.25	20	9.86		
12/6/99	WB5-B	2.3			0.20	0.02	0.35				0.16		9.90						
12/6/99	FR3-S	0.3	229	99.74	0.20	0.02	0.30	23.87	12.41		0.08		11.80	1.77	21.44	70	11.62		0.850
12/6/99	FR3-B	12.9			0.17	0.04	0.72				0.14		3.30						
12/6/99	PC1-S	0.3	225	206.29	0.17	0.03	0.21	23.66	21.81		0.02		19.30	1.28	10.90	110	11.99		
12/6/99	PC1-B	1.6			0.18	0.03	0.21				0.04		19.20						
12/6/99	PC3-S	0.3	229	125.17	0.18	0.03	0.35	24.89	14.73		0.12		16.10	1.65	24.33	80	10.36		1.890
12/6/99	PC3-B	12.7			0.16	0.05	0.58				0.14		3.50						
12/6/99	PC5-S	0.3	240	125.35	0.20	0.02	0.30	27.59	14.81		0.07		8.50	2.01	45.17	50	11.69		
12/6/99	PC5-B	2.2			0.19	0.03	0.40				0.05		8.60						
12/6/99	DR1-S	0.3	270	112.26	0.20	0.03	0.03	18.89	13.78		0.06		22.90	0.91	7.93	140	16.37		
12/6/99	DR1-B	1.4			0.17	0.03	0.63				0.05		22.90						
12/6/99	DR3-S	0.3	250	134.87	1.67	0.18	2.82	32.00	16.05		0.40		21.30	1.55	9.93	90	7.16		0.970
12/6/99	DR3-B	12.8			0.21	0.06	1.13				0.21		4.30						
12/6/99	DR5-S	0.3	286	103.44	4.28	0.40	4.92	18.00	14.33		0.76		35.00	1.54	10.58	90	8.10		
12/6/99	DR5-B	2.1			4.25	0.40	5.24				0.77		35.00						
12/6/99	DR7-S	0.3		112.17	2.36	0.13	1.08	19.88	16.10		0.34		37.90	2.07	17.17	50	15.11		
12/6/99	DR7-B	1.6			1.32	0.08	0.99				0.26		30.80						

Mobile Bay Cruise MB: 81

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)
12/6/99	MR1-S	0.3		1300	12780.3	47180.4	30	38.1	88	2.0	18.4	16.9	7.3	85		1710
12/6/99	MR1-B	12.5	13.5	1300			30	38.1	88	2.0	32.3	17.3	6.3	78		
12/6/99	MR2-S	0.3		1239	12816.5	47176.5	30	36.6	87	58.4	11.5	15.3	8.6	92		1504
12/6/99	MR2-B	1.6	2.6	1239			30	36.6	87	58.4	11.5	15.3	8.5	90		
12/8/99	MS5-S	0.3		1259	12685.5	47093.8	30	16.4	88	9.8	27.9	14.9	8.0	94		1905
12/8/99	MS5-B	1.3	2.3	1259			30	16.4	88	9.8	27.9	14.9	7.9	93		
12/8/99	MS3-S	0.3		1240	12646.1	47090.3	30	15.7	88	13.5	27.9	14.2	8.1	94		1911
12/8/99	MS3-B	2.3	3.3	1240			30	15.7	88	13.5	27.9	14.2	8.0	93		
12/8/99	MS1-S	0.3		1218	12595.5	47088.2	30	15.4	88	18.5	29.7	15.1	7.7	93		1978
12/8/99	MS1-B	2.5	3.5	1218			30	15.4	88	18.5	29.8	15.0	7.8	92		
12/8/99	G1-S	0.3		1150	12595.2	47070.1	30	10.9	88	18.3	33.3	17.0	7.2	91		2029
12/8/99	G1-B	11.0	12.0	1150			30	10.9	88	18.3	33.5	17.1	6.8	89		
12/8/99	G3-S	0.3		1123	12660.0	47070.2	30	10.8	88	12.0	33.2	17.0	7.1	91		2027
12/8/99	G3-B	12.7	13.7	1123			30	10.8	88	12.0	34.1	17.8	6.7	87		
12/8/99	G5-S	0.3		1056	12710.2	47058.0	30	7.8	88	7.0	31.9	16.7	7.4	91		1988
12/8/99	G5-B	14.0	15.0	1056			30	7.8	88	7.0	34.1	18.1	6.8	86		
12/8/99	G7-S	0.3		1019	12800.1	47057.5	30	7.6	87	58.2	34.5	18.3	7.1	94		2027
12/8/99	G7-B	11.8	12.8	1019			30	7.6	87	58.2	34.5	18.3	7.2	93		
12/8/99	G9-S	0.3		947	12870.3	47057.9	30	7.6	87	51.4	34.3	18.0	7.0	93		2036
12/8/99	G9-B	15.2	16.2	947			30	7.6	87	51.4	34.2	18.1	7.1	92		
12/8/99	G11-S	0.3		910	12960.1	47058.0	30	7.5	87	42.5	34.8	19.0	6.9	92		2048
12/8/99	G11-B	13.0	14.0	910			30	7.5	87	42.5	34.8	19.1	6.8	91		
12/8/99	G13-S	0.3		842	12925.3	47074.0	30	11.0	87	46.2	34.0	17.6	7.2	93		2024
12/8/99	G13-B	9.8	10.8	842			30	11.0	87	46.2	33.8	17.6	7.2	93		
12/8/99	G15-S	0.3		805	12840.1	47072.9	30	11.0	87	54.5	33.4	16.8	7.5	95		2002
12/8/99	G15-B	9.0	10.0	805			30	11.0	87	54.5	33.4	17.1	7.5	93		
12/8/99	BM3-S	0.3		726	12755.0	47071.5	30	10.9	88	2.7	28.9	15.6	7.5	90		1923
12/8/99	BM3-B	11.7	12.7	726			30	10.9	88	2.7	29.8	15.8	7.1	88		

Mobile Bay Cruise MB: 81

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)
12/6/99	MR1-S	0.3	265	66.01	4.91	0.34	4.56	35.55	9.25		0.80		38.80	1.80	14.08	80	4.37		0.670
12/6/99	MR1-B	12.5			0.26	0.09	2.23				0.32		5.50						
12/6/99	MR2-S	0.3	312	72.51	3.62	0.26	4.51	33.48	9.86		0.54		40.10	1.65	9.38	80	8.82		
12/6/99	MR2-B	1.6			3.58	0.25	3.55				0.54		39.30						
12/8/99	MS5-S	0.3	175		0.22	0.01					0.16		3.60	2.68	34.75	40	9.35		
12/8/99	MS5-B	1.3			0.21	0.01	0.00				0.16		3.50						
12/8/99	MS3-S	0.3	174	62.46	0.21	0.02			7.52		0.24		6.80	3.37	35.31	30	8.53		0.640
12/8/99	MS3-B	2.3			0.21	0.02	0.12				0.24		6.80						
12/8/99	MS1-S	0.3	169	67.35	0.22	0.01			11.26		0.20		5.70	2.09	47.25	50	10.87		
12/8/99	MS1-B	2.5			0.22	0.01	0.44				0.22		6.20						
12/8/99	G1-S	0.3	128	34.84	0.19	0.04			4.59		0.05		2.30	0.92	7.67	120	2.77		0.690
12/8/99	G1-B	11.0			0.17	0.05	0.17				0.06		2.40						
12/8/99	G3-S	0.3	133	30.00	0.17	0.05			3.55		0.07		2.30	0.85	11.50	130	2.97		
12/8/99	G3-B	12.7			0.16	0.06	0.49				0.05		2.30						
12/8/99	G5-S	0.3	137	42.50	0.20	0.02			4.89		0.09		2.80	1.34	15.79	80	4.28		0.700
12/8/99	G5-B	14.0			0.19	0.03	0.40				0.06		2.40						
12/8/99	G7-S	0.3	115	31.72	0.20	0.01			4.46		0.00		1.30	0.42	4.50	275	0.93		
12/8/99	G7-B	11.8			0.20	0.01	0.44				0.00		1.10						
12/8/99	G9-S	0.3	114	21.43	0.19	0.01			2.14		0.00		1.00	0.46	4.46	250	0.84		0.550
12/8/99	G9-B	15.2			0.19	0.01	0.30				0.00		1.20						
12/8/99	G11-S	0.3	110	22.08	0.19	0.01			2.58		0.00		1.50	0.57	3.88	200	0.97		
12/8/99	G11-B	13.0			0.18	0.01	0.21				0.00		1.40						
12/8/99	G13-S	0.3	144	40.76	0.21	0.01			4.25		0.00		0.80	0.42	3.81	280	1.08		0.380
12/8/99	G13-B	9.8			0.20	0.01	0.30				0.00		0.90						
12/8/99	G15-S	0.3	123	57.62	0.20	0.02			5.76		0.00		1.20	0.63	10.05	180	2.24		
12/8/99	G15-B	9.0			0.21	0.02	0.30				0.00		1.10						
12/8/99	BM3-S	0.3	179	41.70	0.19	0.02			4.55		0.10		3.30	2.09	41.29	50	3.20		0.560
12/8/99	BM3-B	11.7			0.20	0.02	0.35				0.11		3.20						